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**University of Mumbai**  
**DEPARTMENT OF SPORTS AND PHYSICAL EDUCATION**  
**&**  
**PHYSICAL EDUCATION FOUNDATION OF INDIA (PEFI)**  
**&**  
**DHIRAJLAL TALAKCHAND SANKALCHAND SHAH COLLEGE OF**  
**COMMERCE (AUTONOMOUS)**  
**JOINTLY ORGANIZE**  
**International Conference**

**Strength in Motion: A Multi-disciplinary Approach to Physical  
Well-being, Business, Philosophy and Jurisprudence**

**22<sup>nd</sup> April, 2025**  
**10 am onwards**

**Address for Correspondence:**  
**D. T. S. S. COLLEGE OF COMMERCE (AUTONOMOUS)**  
**Kurar Village, Malad (East), Mumbai – 400097, Maharashtra, India.**  
**Phone: 8591377595 / 8591376800**  
**Email Id: [conference@sanskarsarjan.org](mailto:conference@sanskarsarjan.org)**  
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**PROGRAMME SCHEDULE**  
**INTERNATIONAL CONFERENCE**

**Strength in Motion: A Multi-disciplinary Approach to Physical Well-being,  
Business, Philosophy and Jurisprudence**

**Date: 22nd April, 2025**

| <b>Time</b> | <b>Programme</b>           | <b>Details</b>   |
|-------------|----------------------------|--|
| 8.30 am     | Registration and Breakfast |  |
| 10 am       | Inauguration Ceremony      | <ul style="list-style-type: none"> <li>• Welcome</li> <li>• Lighting of the lamp</li> <li>• Felicitation of Chief Guest<br/><b>Shri. Uday Deshpande</b><br/>Padma Shree Awardee,<br/>Director &amp; Hon. Gen. Secretary,<br/>Vishwa Mallakhamb Federation.</li> <li>• Felicitation of dignitaries</li> <li>• Address by Chief Guest and Inauguration of the Conference</li> <li>• Address by Dr. Manoj Reddy,<br/>Director. Dept. of Sports and Physical Education, University of Mumbai</li> <li>• Online address by Dr. Piyush Jain,<br/>President, PEFI</li> <li>• Presidential Address by the Campus Director, Dr. M.S. Kurhade</li> </ul> |
| 11.15 am    | Technical Session- I       | <ul style="list-style-type: none"> <li>• <b><u>Keynote Speaker:</u></b><br/><b>Dr. Garry Kuan</b><br/>Associate Professor,<br/>Exercise and Sports Science Programme,<br/>School of Health Sciences, University Sains Malaysia</li> <li>• <b><u>Keynote Speaker:</u></b><br/><b>Dr. Aijaz Ashai,</b><br/>Physiotherapist.</li> </ul>   |
| 1.30 pm     | Lunch Break                |  |
| 2.30 pm     | Technical Session- II      | Subject wise Research Paper presentations: <ul style="list-style-type: none"> <li>• Sports and Physical Well-Being: Auditorium, First Floor, Law Building</li> <li>• Business: I.T. Lab, First Floor, Old Building</li> <li>• Philosophy &amp; Jurisprudence: I.T. Lab, Fourth Floor, Law Building</li> </ul>  |
| 5 pm        | Valedictory Session        |  |



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## **UNIVERSITY OF MUMBAI:**

The University of Mumbai (known earlier as University of Bombay) is one of the oldest and premier Universities in India. It was established in 1857 consequent upon "Wood's Education Dispatch", and it is one amongst the first three Universities in India. It is abbreviated as MU for Mumbai University. The University was accorded 5-star status in 2001 & 'A' grade status in April 2012 by the National Assessment and Accreditation Council (NAAC) and re-accredited with Grade A++ (3.65 CGPA) in the year 2022. It has been granted University with Potential for Excellence (UPE) status by UGC and PURSE Scheme by DST. The University of Mumbai offers Bachelor's, Master's and Doctoral courses apart from diplomas and certificates in many disciplines. More than 904 colleges in and around Mumbai are affiliated to MU and the campus located in Fort carries out administrative work only. Several institutes in Mumbai previously affiliated to the university are now autonomous institutes or Deemed Universities. The University of Mumbai is one of the largest universities in the world in terms of the number of students and has recently completed 168 years.

## **ABOUT DEPARTMENT OF SPORTS & PHYSICAL EDUCATION:**

The Department of Physical Education was established under University of Mumbai, in the year 2005-2006. The Department of Physical Education is established in order to create resourceful and eminent Teachers and Masters in the field of Physical Education. Since its inception, this Department has successfully produced more than 1000 Teachers, Masters and PhD holders who are currently serving in various fields of Physical Education. Many students have cleared SET/NET examinations. The Department of Physical Education is located in Kalina Campus of University of Mumbai and it is aptly situated in the Sports Complex, which caters to all the training needs of the students.

## **ABOUT D.T.S.S. COLLEGE:**

The Dhirajlal Talakchand Sankalchand Shah College of Commerce (Autonomous) (D.T.S.S. College) was established in 1984. The College is permanently affiliated to the University of Mumbai and enlisted under section 2(f) & 12B of UGC Act, 1956. The College in its third cycle of NAAC Re-accreditation was awarded with "A" Grade. The College has its origins in the tireless efforts of its founder, Late Shri. Dhirubhai Shah, who worked for social and philanthropic causes through the charitable trust, Sanskar Sarjan Education Society, which he established along with a few like-minded friends. The mission of the members of the Society was to provide quality education to the underprivileged children of Kurar Village, an economically backward area in Malad (East), suburb of Mumbai.

The College has numerous academic, co-curricular and charitable processes in place for the betterment of the students. Keeping in mind its founding vision of providing higher education, opportunities to the widest possible section of students, the College offers courses from U.G. level to Post P.G. level in Commerce & Science, and Ph.D. in the subject of Accountancy, Business Policy & Administration, Business Economics and in Philosophy.

### **ABOUT THE CONFERENCE:**

The International Conference cum Workshop on “**Strength in Motion: A Multi-disciplinary Approach to Physical Well-being, Business and Philosophy**” aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research findings about all aspects of Physiotherapy and Sports Sciences and their connection to commerce, business, law, economics, philosophy and jurisprudence. The conference will focus on current sports and health related issues confronting the different sections of the community and how these issues are entangled with commercial, economical, legal and philosophical perspectives. The conference will provide a multi-disciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends, concerns, markets, opportunities, legal aspects and practical challenges encountered and the solutions adopted in the field of Physiotherapy and Sports Sciences.

## SUB-THEMES OF THE CONFERENCE ARE

| Physical Education  |                                  |   |                               | Accountancy   | Business Policy and Administration                              |
|---|----------------------------------|---|-------------------------------|---|---|
| Sports Injuries (Prevention and Management)                         | Exercise Physiology              | Physical Fitness                                | Sports Law                    | Emerging Trends in Accounting Standards and Financial Reporting | Strategic Management in a Dynamic Business Environment          |
| Sports training and coaching  | Games                            | Physiotherapy                                   | Sports Engineering            |   |   |
| Sports Physiotherapy  | Health Education                 | Political Science of Sport                      | Sports Nutrition              |   |   |
| Exercise physiology   | Individual Sports                | Sports Facilities                               | Sports Psychology             | Role of Forensic Accounting in Corporate Governance             | Corporate Social Responsibility and Sustainable Business Models |
| Sports Psychology (mental skills for performance)                   | Anthropometry                    | Sports History                                  | Sports Science                |   |   |
| Sports Nutrition  | Kinesiology                      | Sports Information                              | Sports Sociology              |   |   |
| Doping Control  | Market trends in Sports          | Sports Medicine                                 | Sports Statistics             |   |   |
| Sports Management and Economic Contributions of the Sports Industry | Military Sports                  | Sports Therapy                                  | Sports Tourism                | Digital Transformation in Accounting Practices                  | Leadership and Organizational Behavior in the Digital Age       |
| Role of Physical Fitness in Workplace Productivity                  | Movement Science                 | Sports Injuries, Prevention, and Rehabilitation | Sports Training               |   |   |
| Innovations in Sports Science and Performance Enhancement           | Nutrition in Sports and Exercise | Sports Management                               | Strength and Conditioning     |   |   |
| Psychological and Philosophical Aspects of Sports Training          | Philosophy of Sport              | Sports Pedagogy                                 | Stress Management             | Taxation Policies and Economic Growth                           | Entrepreneurship and Start-up Ecosystems                        |
| Impact of Physical Education on Holistic Development                | Physical Education               | Sports Biomechanics                             | Training and Judgments        |   |   |
| Sports Biomechanics   | Physical Exercise and Health     | Sports Business & Sports Development            | Trekking & Bouldering         |   |   |
| Adapted Physical Activity   | Yoga                             | Sports in the public/private sector             | Meditation & Yogic Psychology |   |   |

| Business Economics   | Philosophy   | Law  |
|--|--|--|
| <ul style="list-style-type: none"><li>• Impact of Government Policies on Business Growth</li><li>• Global Economic Trends and Their Influence on Local Markets</li><li>• Economic Theories in the Digital Economy</li><li>• Financial Inclusion and Economic Development</li><li>• Sustainable Finance and Investment Strategies</li></ul> | <ul style="list-style-type: none"><li>• Ethics in Business and Corporate Decision-Making</li><li>• Philosophical Perspectives on Leadership and Governance</li><li>• The Role of Mindfulness and Well-Being in Professional Success</li><li>• Rationality and Decision-Making in Economic Policies</li><li>• Philosophy of Education in Modern Learning Environments</li></ul> | <ul style="list-style-type: none"><li>• Financial Crimes and Regulatory Compliance</li><li>• Block chain and Legal Challenges in Financial Auditing</li><li>• Tax Law and its Impact on Financial Reporting</li><li>• CSR and Legal Obligations</li><li>• Ethical and Legal Challenges in Corporation Governance</li></ul> |

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### CONTENTS

---

#### ***Research Papers***

- IMPACT OF MARKET CONDITIONS ON CONVENTIONAL AND SYSTEMATIC INVESTMENT STRATEGIES: EVIDENCE FROM MUMBAI** 1 – 5

*Mr. Alpesh M. Bhesania and Dr. Anil Matkar*

- ELECTORAL BONDS IN INDIA: TRANSPARENCY, ACCOUNTABILITY, AND CONTROVERSY** 6 – 12

*Dr. Shaikh Taufiq Khalil*

- A STUDY ON THE EXPECTATIONS OF COMMERCE STUDENTS FROM ACCOUNTING EDUCATION IN TODAY'S DIGITAL AGE (WITH REFERENCE TO MUMBAI SUBURBAN)** 13 – 21

*Ms. Kiran Satkori Hati*

- THE CONSCIOUS INVESTOR: APPLYING MIND- BODY WISDOM TO ETHICAL PORTFOLIO MANAGEMENT IN INDIAN WELLNESS MARKETS** 22 – 25

*Ms. Yogita Mahimkar*

- A STUDY ON AWARENESS ABOUT GREENWASHING: AN ETHICAL DILEMMA FACED BY CONSUMERS..** 26 – 34

*Dr. Neha Goel and Ms. Farheen Qureshi*

- STUDY ON THE INFLUENCE OF CELEBRITY ENDORSEMENT OVER THE PERCEPTION AND PURCHASE INTENTION OF COLLEGE STUDENT IN MUMBAI** 35 – 40

*Mrs. Manisha Waghela*

- A STUDY ON PUBLIC PRIVATE PARTNERSHIP MODEL IN SPORTS: A MODEL FOR SUSTAINABLE DEVELOPMENT IN INDIA** 41 – 44

*Mr. Sunder Singh*

- EFFECT OF BEACH TRAINING PROGRAMME ON SPEED OF KHO-KHO PLAYERS** 45 – 47

*Aman Gupta and Dr. J. M. Hotkar*

- PHILOSOPHY OF EDUCATION IN MODERN LEARNING ENVIRONMENT** 48 – 52

*Dr. Kiran J. Save and Anagha A. Padhye*

- A COMPARATIVE STUDY OF ACADEMIC RELATED RISK TAKING AND GAMES AND SPORTS RELATED RISK TAKING BETWEEN STATE LEVEL KHO-KHO PLAYERS AND KABADDI PLAYERS OF 18 TO 25 YEARS OF MAHARASHTRA STATE** 53 – 55

*Mr. Anil Ramesh Pisal and Dr. Chandrashekhar B. Kadu*

|   |           |
|---|-----------|
| <b>A STUDY OF INFLUENCE OF EFFECTIVE FUNCTIONING OF ENTREPRENEURSHIP DEVELOPMENT CELL ON DEVELOPING ENTREPRENEURSHIP SKILLS AMONG DEGREE COLLEGE STUDENTS IN MUMBAI WESTERN SUBURBAN REGION</b> | 56 – 64   |
| <i>Anuja Sameer Narvankar and Dr. Vijetha Shetty</i>  |           |
| <b>THE ROLE OF PROTEIN IN ENHANCING ATHLETIC PERFORMANCE AND POST-EXERCISE RECOVERY</b>   | 65 – 68   |
| <i>Anusha C. Shetty and Dr. Sushma N. Chougule</i>  |           |
| <b>THE IMPACT OF EMOTIONAL STABILITY ON PRODUCTIVITY AT WORKPLACE</b>   | 69 – 76   |
| <i>Archana Ashok Bhartiya</i>   |           |
| <b>IMPACT OF HIGH-INTENSITY INTERVAL TRAINING ON CARDIOVASCULAR PERFORMANCE IN YOUTH ATHLETES</b>   | 77 – 81   |
| <i>Dr. Archana B.</i>   |           |
| <b>STUDY OF EFFECT OF YOGIC PRACTICES ON SELECTED HEALTH- RELATED PHYSICAL FITNESS COMPONENTS OF NATIONAL CADET CORPS AGED 17 TO 19 YEARS OF MUMBAI</b>   | 82 – 84   |
| <i>Mr. Avinash Vasant Mandake and Dr. Sandipraj S. Autade</i>   |           |
| <b>SREE NĀRĀYAṆA GURU’S VALUES, VISION, AND MISSION FOR SELF AND SOCIAL LIBERATION THROUGH EDUCATION</b>  | 85 – 88   |
| <i>Dr. Kiran Save and Ms. Beena Jaiprakash More</i>   |           |
| <b>WINNING THE MENTAL BATTLE: TECHNIQUES TO TACKLE ANXIETY FOR ENHANCING ATHLETIC PERFORMANCE</b>   | 89 – 92   |
| <i>Bhaskar Kashyap and Dr. Rajendra N. Shelke</i>   |           |
| <b>YOGA AND HEALTHY LIFESTYLE</b>   | 93 – 96   |
| <i>Chandan Mishra</i>   |           |
| <b>NURTURING YOUNG MINDS THROUGH “YOGA”: A STUDY IN EDUCATIONAL CONTEXT</b>   | 97 – 101  |
| <i>Mrs. Chetana Raju Nandkar</i>  |           |
| <b>AN INVESTIGATION OF WORKING CONDITIONS OF OCCUPATIONAL STRESS OF KHO-KHO OFFICIALS OF MUMBAI CITY</b>  | 102 – 104 |
| <i>Danish Pathan and Dr. Neetu Omprakash Joshi</i>  |           |
| <b>ETHICS BEYOND THE BOUNDARIES: EXISTING AI ETHICS AND THE SPIRIT OF VASUDHAIVA KUTUMBAKAM IN T20 SPORTS BUSINESS</b>  | 105 – 110 |
| <i>Gupta Dinesh Kumar NP and Dr. Kiran Save</i>   |           |
| <b>TECHNOLOGIES IN PHYSICAL EDUCATION: AN EVALUATION OF MERITS AND DEMERITS</b>   | 111 – 115 |
| <i>Dr. Mohammad Kaleem Ali Rizvi and Dr. Nisar Hussain</i>  |           |

|  |           |
|--|-----------|
| <b>21ST CENTURY SOCIETIES NEW APPROACH TOWARDS OPEN SEA SWIMMING FOR PHYSICAL FITNESS, MENTAL FITNESS AND LIFE SKILL</b> | 116 – 122 |
|--|-----------|

*Dr. Sumit Damodar Kamble and Dr. Sachin Shinde*

|   |           |
|---|-----------|
| <b>“SPORTS PEDAGOGY” UNDERSTANDING ITS IMPORTANCE IN MODERN EDUCATION</b> | 123 – 125 |
|---|-----------|

*Dr. Nisar Hussain and Mr. Gaurav Pandey*

|   |           |
|---|-----------|
| <b>RELATIONSHIP OF STRESS AND OBESITY</b> | 126 – 129 |
|---|-----------|

*Gulshankumar Priyabrat Chaurasiya and Dr. Neetu Omprakash Joshi*

|   |           |
|---|-----------|
| <b>INTEGRATED EDUCATION OF ONENESS’: A MODEL FOR SOCIAL TRANSFORMATION SREE NARAYANA GURU AND PANDURANG SHASTRI ATHAVALA (DADAJI)</b> | 130 – 133 |
|---|-----------|

*Dr. Kiran Save and Jyoti ONeill Shahapurkar*

|                             |           |
|-----------------------------|-----------|
| <b>AGGRESSION IN SPORTS</b> | 134 – 136 |
|-----------------------------|-----------|

*Jyoti Shahapurkar, Kamlesh Singh and Dr. Neetu Omprakash Joshi*

|   |           |
|---|-----------|
| <b>PHILOSOPHICAL VIEWS OF THE SANTS OF VARKARI SAMPRADAYA ON LEADERSHIP AND GOOD GOVERNANCE</b> | 137 – 139 |
|---|-----------|

*Kirti Narayanrao Mardikar.*

|  |           |
|--|-----------|
| <b>ASSESSING CLOTHING BEHAVIOUR FOR APPAREL AND DEVELOPING GUIDELINES FOR ONLINE SHOPPING IN THE AREA OF MUMBAI SUBURBAN</b> | 140 – 149 |
|--|-----------|

*Dr. Meeta Pathade and Komal Pawar*

|  |           |
|--|-----------|
| <b>A STUDY ON HOW EMPLOYMENT STRESS DISRUPTS THE HARMONY BETWEEN PROFESSIONAL RESPONSIBILITIES AND FAMILY LIFE FOR MIDDLE-CLASS FAMILIES</b> | 150 – 153 |
|--|-----------|

*Ms. Laxmidevi R. Gupta and Dr. Ashok S. Luhar*

|  |           |
|--|-----------|
| <b>A STUDY ON INTRODUCTION OF THE MODULE ON ‘PHYSICAL FITNESS ASSESSMENT FOR YOUTH’ DEVELOPED BY THE MINISTRY OF YOUTH AFFAIRS &amp; SPORTS, GOVERNMENT OF INDIA AND BUDS.</b> | 154 – 158 |
|--|-----------|

*Prof. Mayur M. Shah*

|  |           |
|--|-----------|
| <b>TO STUDY EFFECT OF FENCING TRAINING ON AGILITY DEVELOPMENT IN BOYS AGED 13-15 YEARS</b> | 159 – 162 |
|--|-----------|

*Mr. Milind P. Thakur*

|  |           |
|--|-----------|
| <b>ORGANIC IS THE NEW NORMAL? INVESTIGATING CONSUMER BEHAVIOUR IN THE GREEN PRODUCT MARKET</b> | 163 - 170 |
|--|-----------|

*Dr.Surekha Mishra and Ms. Puja Prempal Ahuja*

|   |           |
|---|-----------|
| <b>A STUDY ON VARIOUS CSR ACTIVITIES UNDERTAKEN IN PRAYAGRAJ DURING KUMBH MELA 2025</b>   | 171 – 174 |
| <i>Ms. Nirali Pancholi</i>  |           |
| <b>CONSUMERS' DECISION-MAKING FACTORS IN MOBILE PHONE PURCHASES</b>   | 175 – 180 |
| <i>Dr. Meeta.Pathade and Nita shankarlal Sonpal</i>   |           |
| <b>EFFECT OF SPECIFIC TRAINING PROGRAMME ON REACTION TIME OF ARCHERY PLAYERS OF MUMBAI CITY</b>   | 181 – 184 |
| <i>Prafull Yashwant Singh and Dr. Nisar Husain<sup>2</sup></i>  |           |
| <b>TO ANALYZE THE ROLE OF CORPORATE SOCIAL RESPONSIBILITY IN FOSTERING STARTUPS &amp; SELF-EMPLOYMENT IN INDIA</b>                            | 185 – 194 |
| <i>Dr. Prof. Shaji. K. Joseph and Asst. Professor. Priyanka Yadav</i>   |           |
| <b>IMPACT OF PHYSICAL EDUCATION AND SPORTS ON HOLISTIC DEVELOPMENT UNDER NEW EDUCATION POLICY (NEP) 2020 AND NEW SPORTS POLICY (NSP) 2024</b> | 195 – 199 |
| <i>Punam Dastagir Mujawar</i>   |           |
| <b>EFFECT OF JUDO KATA TRAINING ON EYE-HAND COORDINATION OF JUDO PLAYERS AGED 17 TO 19 YEARS BOYS</b>   | 200 – 204 |
| <i>Rajkumar C. Gupta and Dr. Sayyed Asma Pravin</i>   |           |
| <b>THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE (EI) IN LEADERS AND ORGANIZATIONAL CITIZENSHIP BEHAVIOUR (OCB) AMONG EMPLOYEES</b>         | 205 – 208 |
| <i>Dr. Bageshree P. Bangera Bandekar and Mr. Rishabh Rajan Desai</i>  |           |
| <b>EFFECT OF UP AND DOWN HILL RUNNING TRAINING PROGRAMME ON THE PERFORMANCE OF 100M RUN FOR BOYS AGED 12 TO 14 YEARS</b>                      | 209 – 215 |
| <i>Mr. Rizwan Bashir Shah</i>   |           |
| <b>FORENSIC SCIENCE IN TRANSITION: LEGAL CHALLENGES AND THE EVOLVING CRIMINAL JUSTICE LANDSCAPE IN INDIA</b>                                  | 216 – 221 |
| <i>Shivani Goyal and Dr. Suneeta Bhadoo</i>   |           |
| <b>UTILITARIANISM VS. DEONTOLOGY IN HR DECISION-MAKING: A COMPARATIVE ANALYSIS OF ETHICAL FRAMEWORKS</b>                                      | 222 – 229 |
| <i>Dr. Hiresh Luhar and Mr. Shivprasad M. Kurhade</i>   |           |
| <b>DIGITAL LEADERSHIP AND ORGANIZATIONAL BEHAVIOR: ELEVATING CUSTOMER SERVICE QUALITY IN AIR INDIA.</b>                                       | 230 – 235 |
| <i>Shunaza Khan</i>   |           |
| <b>THE ROLE OF CARBOHYDRATES (CHO) IN ATHLETES</b>  | 236 – 238 |
| <i>Sonali Sanjay Jadhav and Dr.J.M. Hotkar</i>  |           |

**EFFECTIVENESS OF ROPE SKIPPING AND LADDER TRAINING ON SPEED OF SPRINTERS OF SCHOOL CHILDREN OF MUMBAI** 239 – 242

*Vaibhav Balaji Phad and Dr. Kailas Asai*

**PHYSICAL EXERCISE AND HEALTH: ROLE OF YOGA IN WELLNESS** 243 – 245

*Varsha Vipul Gala and Dr. Kiran Save*

**DRAW LOTS- MOBILE APPLICATION** 246 – 249

*Mr. Vilas V. Kotian and Guide Dr. Nisar Hussain*

**व्यवसाय आणि कॉर्पोरेट मधील नैतिकता** 250 – 256

डॉ. सुनीलदत्त सोपान गवरे

**आधुनिक शैक्षणिक वातावरणात स्वामी विवेकानंदांचे शिक्षणावरील तत्वज्ञान** 257 – 263

*Uday Umakant Rawool and Dr. Sunildatt Sopan Gavare*

**यश निर्मितीचे द्वार उघडते ,क्रिडा मानसशास्त्राच्या तात्विक अध्ययनाने** 264 - 267

प्रा. वैशाली चंद्रशेखर पाटील, डॉ. राधिका पाठक

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**IMPACT OF MARKET CONDITIONS ON CONVENTIONAL AND SYSTEMATIC INVESTMENT STRATEGIES: EVIDENCE FROM MUMBAI**

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<sup>1</sup>Mr. Alpesh M. Bhesania and <sup>2</sup>Dr. Anil Matkar

**ABSTRACT**

*The investment landscape in Mumbai, a financial hub of India, provides a unique perspective on the interplay between market conditions and investor returns in conventional and systematic investment strategies. Mumbai accounts for approximately 30% of India's total market capitalization, with the Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) serving as critical data sources for analyzing investment trends. Conventional investments such as fixed deposits, real estate, and gold have demonstrated an average annual return of 5-8% over the past decade, while systematic investment plans (SIPs) linked to equity mutual funds have averaged returns of 12-15% over the same period.*

*This study leverages secondary data, including historical NAV (Net Asset Value) trends of mutual funds and price indices for gold and real estate, to analyze the correlation between market volatility and investment performance. For instance, during the 2020 COVID-19 pandemic, gold prices surged by 25% as a safe haven, whereas SIPs in equity funds showed a temporary dip followed by a recovery in 2021. The findings reveal how market trends, such as global economic downturns and local fiscal policies, influence the relative attractiveness and performance of these investment strategies.*

*By examining archival data, the study provides actionable insights for investors and policymakers in optimizing investment portfolios under varying market conditions.*

**Keywords:** Market Volatility, Systematic Investment Plans, Conventional Investments, Mumbai Investors

**INTRODUCTION**

Investors in Mumbai employ various strategies to optimize their returns, primarily falling into two categories: conventional investments and systematic investment plans (SIPs). Conventional investments include fixed deposits, real estate, gold, and other traditional avenues, while SIPs represent a disciplined approach to investing in mutual funds. This study investigates how market fluctuations and economic events impact the performance of these strategies.

Secondary data reveals that between 2018 and 2023, real estate prices in Mumbai grew by an average of 6% annually, while gold prices increased by 8% per year, with notable spikes during periods of economic uncertainty. SIPs in equity mutual funds, on the other hand, delivered annualized returns of 12-15% over the same period, demonstrating resilience to short-term market volatility. For instance, during the 2020 market crash, SIPs experienced a temporary 10% decline in NAV but recovered fully within a year, highlighting the benefits of rupee cost averaging.

The study also considers the impact of specific economic events, such as the implementation of GST in 2017, which led to a temporary dip in real estate investments, and the 2022 interest rate hikes, which affected fixed deposit rates positively but increased volatility in equity markets. By analyzing these trends, this research aims to provide a comprehensive understanding of the factors driving investment performance in Mumbai.

**LITERATURE REVIEW**

Numerous studies have examined the impact of market conditions on investment returns. However, few provide a comparative perspective on conventional and systematic investments in Mumbai. Existing literature highlights that:

**Baker, H. K., Kumar, S., & Pattnaik, D. (2017).** Study on “The impact of financial literacy and investment experience on mutual fund investment decisions. This study explored how financial literacy and prior investment experience influence mutual fund investment decisions, focusing on SIPs. Findings showed that financially literate investors are more likely to opt for SIPs due to their understanding of rupee cost averaging and the benefits of long-term investing. Recommendations included enhancing financial literacy programs and providing transparent information about SIP benefits to encourage participation among novice investors.

**Chawla, D., & Sondhi, N. (2016).** Study on “Assessing investor preferences for conventional and systematic investment strategies: A behavioral perspective”. This research examined the behavioral biases affecting investor preferences between conventional investments and SIPs. Results indicated that risk-averse investors preferred conventional avenues like fixed deposits and gold during volatile markets, while younger, tech-savvy investors leaned toward SIPs for wealth creation.

The authors suggested financial planners consider these biases while recommending investment portfolios and emphasized the importance of creating awareness about the long-term advantages of SIPs.

**Sarkar, S., & Sahu, T. (2018).** Study on “The effect of macroeconomic variables on gold and equity returns: An Indian perspective.” This paper investigated how macroeconomic variables, including inflation, interest rates, and GDP growth, influence returns on gold and equity investments. Gold was found to outperform during periods of high inflation and economic uncertainty, while equity investments, including SIPs, performed better during stable economic conditions. The study recommended diversifying portfolios to balance risks and returns in varying macroeconomic scenarios.

**Gupta, M., & Mehta, R. (2019).** Systematic investment plans versus traditional investments: An analysis of long-term returns. This study compared the long-term performance of SIPs and conventional investments, using data from Indian financial markets over 15 years. SIPs showed superior returns due to compounding and regular investments, especially in equity mutual funds. In contrast, conventional investments like fixed deposits provided stable but lower returns. The authors recommended SIPs for investors seeking growth and suggested integrating tax-saving SIP options to attract more participants.

### RESEARCH GAP

The selected research topic, *"Impact of Market Conditions on Conventional and Systematic Investment Strategies: Evidence from Mumbai,"* is grounded in insights from the reviewed literature. Studies by Baker et al. (2017) and Chawla & Sondhi (2016) highlight the growing preference for SIPs among financially literate and younger investors, emphasizing the benefits of rupee cost averaging and behavioral influences on investment choices. Sarkar & Sahu (2018) underline the impact of macroeconomic variables on investment returns, demonstrating gold's resilience during inflationary periods and SIPs' growth in stable markets. Gupta & Mehta (2019) further validate the long-term advantages of SIPs over conventional investments. These findings collectively underscore the need to explore how market trends and economic events uniquely shape the performance and decision-making processes of investors in Mumbai.

### OBJECTIVES OF THE STUDY

1. To examine the impact of market volatility on returns from conventional investments and SIPs.
2. To analyze the influence of major economic events (e.g., budget announcements, global financial crises) on investment strategies.
3. To identify trends and patterns in investment performance based on secondary data from the Mumbai market.

### DATA COLLECTION

The data collection process is structured to include comprehensive performance metrics and contextual insights:

#### 1. Conventional Investments:

**Gold Prices:** Historical trends in gold prices are obtained from BSE and leading bullion market reports, covering a decade (2013–2023) to observe safe-haven performance during economic downturns.

**Real Estate Indices:** Data on property price trends from industry reports such as Knight Frank and JLL, focusing on Mumbai's real estate market.

**Fixed Deposit Rates:** Fixed deposit interest rate trends sourced from reports by the Reserve Bank of India (RBI) and individual banking institutions, emphasizing stability and risk-free returns.

### SYSTEMATIC INVESTMENT PLANS (SIPS)

**NAV Data:** NAV trends of equity mutual funds analyzed over ten years, reflecting how SIP investments react to market conditions.

**Market Performance:** Comparative analysis of SIP returns during bull and bear markets, supported by data from mutual fund companies such as HDFC, SBI, and ICICI Prudential.

#### 2. Contextual Economic Events:

Archival data on events like the 2008 financial crisis, 2020 COVID-19 pandemic, and policy changes like GST implementation and demonetization.

Analysis of how these events influenced both conventional investments and SIP-linked mutual funds. By synthesizing data from these diverse sources, the study aims to draw a clear picture of investment performance in Mumbai under varying market conditions, offering actionable insights for investors and policymakers.



**DATA ANALYSIS TECHNIQUES**

The study employs correlation and regression analysis to explore the relationship between market trends, such as volatility and economic indicators, and the returns on conventional investments and SIPs. A comparative analysis is conducted to evaluate the performance of these investment strategies during stable and volatile market conditions, highlighting their resilience and risk profiles. Additionally, the event study methodology is applied to assess the impact of significant economic events, like the COVID-19 pandemic and policy changes, on the returns and investor behavior, providing a comprehensive understanding of market dynamics.

**ANALYSIS AND FINDINGS****1. MARKET VOLATILITY****Performance of Investments During High Volatility (2020 - COVID-19 Pandemic)**

| Investment Type      | Average Return (2019) | Average Return (2020) | Change (%) | Remarks                                |
|----------------------|-----------------------|-----------------------|------------|--|
| Gold                 | 12%                   | 25%                   | +13%       | Gold surged as a safe-haven asset.     |
| Equity SIPs          | 14%                   | 8%                    | -6%        | Temporary dip followed by recovery.    |
| Fixed Deposits (FDs) | 6.5%                  | 6.2%                  | -0.3%      | Minimal impact from market volatility. |

(Source: AMFI, BSE, NSC)

**Explanation:**

The first table examines how conventional and systematic investment strategies performed during the COVID-19 pandemic in 2020, a period of high market volatility. Gold demonstrated an exceptional performance with a 25% return in 2020, up from 12% in 2019. This aligns with gold's historical role as a "safe haven" during times of economic uncertainty, as investors moved their assets to less volatile and more reliable investments. SIPs linked to equity mutual funds experienced a decline in returns, dropping from 14% in 2019 to 8% in 2020. The short-term dip was caused by the market's initial reaction to the pandemic, but SIPs benefited from rupee-cost averaging and recovered in 2021. This highlights the resilience of SIPs over the long term. Fixed deposit returns saw a negligible decline, from 6.5% in 2019 to 6.2% in 2020. This stability underscores their low-risk nature, making them an attractive option for risk-averse investors during volatile periods. Gold prices surged during the pandemic due to investor flight to safety, while equity SIPs experienced a short-term dip caused by market volatility but recovered as markets stabilized in 2021. Fixed deposits demonstrated minimal change due to their low-risk nature.

**2. ECONOMIC EVENTS****Impact of Budget Announcements on Investment Returns (2021)**

| Investment Type      | Pre-Budget Return (Jan 2021) | Post-Budget Return (Feb 2021) | Change (%) | Remarks                                 |
|----------------------|------------------------------|-------------------------------|------------|---|
| Equity SIPs          | 10%                          | 15%                           | +5%        | Positive budget led to market optimism. |
| Gold                 | 20%                          | 18%                           | -2%        | Gold corrected as markets stabilized.   |
| Fixed Deposits (FDs) | 5.9%                         | 5.9%                          | 0%         | Unaffected by economic announcements.   |

(Source: AMFI, BSE, NSC)

**Explanation:**

The second table focuses on the impact of budget announcements in early 2021 on different investment types. SIP returns increased significantly post-budget, from 10% in January to 15% in February 2021, reflecting market optimism fueled by government policies favoring growth and infrastructure development. Investors in equity-linked SIPs benefited from this rally. Gold returns slightly decreased post-budget, from 20% in January to 18% in February. As market sentiment improved, investors shifted funds away from gold toward higher-return options like equities. Fixed deposit returns remained unchanged at 5.9%, unaffected by budget announcements. This emphasizes their stability and lack of sensitivity to short-term economic changes.

Budget announcements focusing on infrastructure and growth bolstered equity markets, enhancing SIP returns linked to mutual funds. Conversely, gold corrected slightly due to reduced uncertainty, while fixed deposits remained stable.

3. INVESTMENT PATTERNS

| Investor Preferences by Age Group (2023) |                           |                         |                                    |
|--|---------------------------|-------------------------|------------------------------------|
| Age Group                                | Preferred Investment Type | Percentage of Investors | Remarks                            |
| 18-35 years                              | SIPs                      | 65%                     | Young investors focused on growth. |
| 36-50 years                              | Mix of SIPs and FDs       | 50%                     | Balanced approach to risk.         |
| 51+ years                                | Conventional Investments  | 70%                     | Preference for low-risk assets.    |

(Source: AMFI, BSE, NSC)

Explanation:

The third table highlights the preferences of investors in Mumbai, segmented by age group, reflecting differences in risk tolerance and financial goals. Around 65% of young investors preferred SIPs, which offer a disciplined approach to equity investments and higher returns over the long term. Their focus on wealth creation aligns with their longer investment horizons and willingness to take risks. A balanced approach was observed among this group, with 50% of investors opting for a mix of SIPs and fixed deposits. This group seeks growth while maintaining some stability to safeguard against unexpected financial needs. A significant 70% of older investors favored conventional investments like fixed deposits and gold. Their preference reflects a lower risk tolerance and a focus on preserving capital during retirement or late-career stages. Data reveals a strong preference for SIPs among younger investors due to their potential for long-term wealth creation. Older investors leaned toward fixed deposits and gold, valuing stability over growth during economic uncertainties.

CONCLUSION

The analysis of market conditions and economic events reveals their profound impact on investment outcomes in Mumbai, a dynamic financial hub. Conventional investments, such as gold and fixed deposits, emerge as stable options during periods of economic uncertainty, providing a safeguard for risk-averse investors. Gold, in particular, shines as a safe haven during market volatility, while fixed deposits offer consistent returns regardless of external economic changes.

On the other hand, systematic investment plans (SIPs) demonstrate resilience and potential for long-term growth. Despite temporary setbacks during volatile periods, SIPs benefit from rupee-cost averaging and market recoveries, making them an attractive option for younger, growth-oriented investors. Budget announcements and economic policies further highlight how market sentiment drives the performance of equity-linked investments, amplifying the returns for SIP holders.

Investment preferences in Mumbai reflect a clear demographic trend: younger investors favor SIPs for their growth potential, middle-aged investors adopt a balanced strategy, and older investors prioritize stability through conventional investments. These findings underline the importance of a diversified portfolio. By combining the stability of conventional investments with the growth potential of SIPs, investors can navigate market fluctuations effectively and optimize their returns over time.

This study emphasizes the need for financial literacy and tailored investment strategies to address varying risk appetites and goals among investors, ensuring sustainable financial growth in Mumbai’s ever-evolving market landscape.

RECOMMENDATIONS

- Investors are advised to adopt a diversified portfolio strategy by integrating conventional investments like fixed deposits and gold with systematic investment plans (SIPs). This balance can help mitigate risks during volatile periods while capturing the growth potential of equity-linked instruments over the long term.
- Policymakers, financial institutions, and advisory firms should implement targeted financial literacy programs to educate investors about the risks, benefits, and market dynamics of various investment options. This will empower investors to make informed decisions tailored to their financial goals and risk tolerance.

3. Financial advisors should consider demographic variations in risk appetite and investment preferences when designing investment strategies. Young investors can benefit from SIPs for long-term growth, while older, risk-averse individuals may prioritize stability with conventional investments.
4. Future research should delve into the psychological factors influencing investor behavior under different market conditions. Understanding behavioral biases, such as risk aversion during downturns or overconfidence during market rallies, can lead to better advisory practices and policy-making for investor protection and market stability.

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**ELECTORAL BONDS IN INDIA: TRANSPARENCY, ACCOUNTABILITY, AND CONTROVERSY**

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**Dr. Shaikh Taufiq Khalil**

Assistant Professor D.T.S.S. College of Commerce, Malad (E), Mumbai-97, Maharashtra, India

**ABSTRACT**

*This research paper examines the electoral bond system in India, focusing on its mechanisms, regulations, controversies, and impact on democratic processes. Electoral bonds were introduced with the objective of promoting transparency and accountability in political funding by providing a legal framework for donations through formal banking channels. However, our analysis reveals significant shortcomings, including anonymity of donors, lack of disclosure, and potential for misuse. Case studies and empirical data illustrate the substantial role electoral bonds play in political party financing, with top donors influencing party coffers and electoral outcomes. Despite aiming to curb black money, electoral bonds raise concerns about undue influence and corruption, highlighting the need for ongoing scrutiny and reform efforts.*

**Keywords:** electoral bonds, political funding, transparency, accountability, democracy.

**1. INTRODUCTION**

Electoral bonds, introduced in India in 2018, represent a unique approach to political funding aimed at promoting transparency and accountability within the democratic process. The key objectives behind the introduction of electoral bonds include reducing the influence of black money in politics, enhancing transparency in political funding, and providing a legal mechanism for individuals and corporations to contribute to political parties. In the context of Indian democracy, where concerns over opaque political financing have been longstanding, electoral bonds have emerged as a significant policy tool with the potential to reshape the landscape of political funding. The main argument of this research paper is to critically evaluate the effectiveness of electoral bonds in achieving their stated objectives of transparency and accountability, while also addressing the controversies and challenges associated with their implementation.

**Legal Framework and Implementation:**

The legal framework governing electoral bonds, including the relevant provisions of the Finance Act, 2017, establishes the groundwork for the issuance, purchase, and redemption of these financial instruments. The process for purchasing and redeeming electoral bonds, as well as the anonymity afforded to donors and recipients, is crucial to understanding the mechanics of the system. Furthermore, the roles of the Reserve Bank of India (RBI) and the Election Commission of India (ECI) in regulating electoral bonds and ensuring compliance with legal requirements are pivotal in maintaining the integrity of the electoral financing process.

**Impact on Political Funding:**

Assessment of the impact of electoral bonds on the overall landscape of political funding in India reveals significant insights into party financing and election campaigning. Analysis of the amounts received by political parties through electoral bonds and their implications for political competition and democracy sheds light on the evolving dynamics of political finance. The dominance of certain political parties in electoral bond receipts raises questions about the equity and fairness of the electoral process, underscoring the need for a comprehensive evaluation of the system's effectiveness in promoting transparency and accountability in political funding.

**2. BACKGROUND AND EVOLUTION OF POLITICAL FUNDING IN INDIA**

Before the introduction of electoral bonds, political funding in India was largely characterized by opacity and a lack of accountability. Traditional methods of political financing relied heavily on cash donations from individuals, corporations, and other entities, which often led to concerns regarding the influence of black money and corruption in the electoral process. This historical context underscores the need for reform in the realm of political funding to address longstanding challenges and shortcomings.

**Challenges and Shortcomings of Traditional Methods:**

The reliance on cash donations and corporate contributions posed several challenges to the integrity of the democratic process. Cash donations, often made anonymously, made it difficult to trace the sources of funding for political parties, thereby raising questions about transparency and accountability. Moreover, the influence of corporate donations on policy decisions and electoral outcomes fueled perceptions of crony capitalism and undue influence of special interests in politics. These challenges underscored the imperative for a more transparent and accountable system of political financing.

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**Rationale behind the Introduction of Electoral Bonds:**

The government's decision to introduce electoral bonds stemmed from a recognition of the need to reform political funding practices in India. Electoral bonds were conceived as a mechanism to address the shortcomings of traditional methods by providing a legal framework for transparent and accountable political contributions. By facilitating contributions through banking channels and mandating disclosure requirements for both donors and recipients, electoral bonds were intended to reduce the influence of black money in politics and enhance the transparency of political funding. Furthermore, the introduction of electoral bonds was seen as a step towards levelling the playing field for political parties and promoting fair competition in elections. However, the effectiveness of electoral bonds in achieving these objectives remains subject to scrutiny and debate, highlighting the complexity of reforming political funding in a diverse and dynamic democracy like India.

**3. ELECTORAL BOND SYSTEM: MECHANISMS AND REGULATIONS**

The electoral bond system in India operates through a structured process encompassing issuance, purchase, donation, and redemption. Authorized banks periodically issue electoral bonds in fixed denominations, ranging from Rs. 1,000 to over Rs. 1 crore. These bonds are procured by individuals, entities, and political parties from designated bank branches through digital platforms or in-person transactions. Once acquired, the electoral bonds are donated to registered political parties of the donor's choice, serving as a legal means of contributing to political funding. Political parties then encash the electoral bonds within a specified timeframe, typically 15 days, with the funds being credited to the party's designated bank account under the scrutiny of the Election Commission of India (ECI).

The electoral bond system operates within a comprehensive legal framework aimed at regulating political contributions and ensuring transparency. Introduced in 2018 through amendments to various legislations, including the Reserve Bank of India Act, Representation of the People Act, and Income Tax Act, electoral bonds are governed by regulations prescribed by the Reserve Bank of India (RBI) and other relevant authorities. Political parties are obligated to disclose the total amount of funds received through electoral bonds in their financial statements submitted to the ECI. The regulatory framework surrounding electoral bonds has witnessed amendments and revisions over time to address emerging concerns and enhance transparency in political funding.

Despite criticism, the electoral bond system incorporates mechanisms aimed at promoting transparency and accountability. While the identity of individual donors remains anonymous, the transactions involving electoral bonds are recorded by issuing banks and subject to regulatory oversight. Political parties are required to disclose the total funds received through electoral bonds, thereby enabling public scrutiny and accountability. By formalizing political donations through banking channels, electoral bonds reduce the reliance on cash contributions, fostering transparency and accountability. The Election Commission of India monitors the electoral bond system to ensure compliance with regulations and mitigate the risk of misuse or circumvention. In conclusion, the electoral bond system in India operates through a structured process governed by a robust legal framework aimed at enhancing transparency and accountability in political funding. Despite criticisms and challenges, the system continues to evolve, reflecting ongoing efforts to strengthen democratic principles and integrity in electoral financing.

**4. TRANSPARENCY AND ACCOUNTABILITY ISSUES**

Electoral bonds in India were introduced with the noble objectives of promoting transparency and accountability in political funding. However, the extent to which these objectives have been achieved remains a subject of debate. While electoral bonds have introduced some degree of transparency by formalizing political donations through banking channels and requiring parties to disclose the total funds received, significant loopholes and shortcomings persist.

One of the primary concerns surrounding electoral bonds is the anonymity they afford to donors. While the transactions involving electoral bonds are recorded by issuing banks and monitored by regulatory authorities, the identities of individual donors remain undisclosed. This lack of transparency opens the door to potential influence peddling and quid pro quo arrangements between donors and political parties, undermining the spirit of transparency and accountability.

Moreover, the absence of disclosure requirements regarding the identities of individual donors has been a contentious issue. While political parties are mandated to disclose the total amount of funds received through electoral bonds, they are not obligated to reveal the identities of donors. This opacity creates opportunities for clandestine donations and raises questions about the integrity of the electoral process.

Instances of alleged misuse or abuse of electoral bonds have further exacerbated concerns regarding transparency and accountability. Critics have pointed to cases where electoral bonds were purportedly used for illicit purposes, such as money laundering or circumventing legal restrictions on political contributions. The lack of stringent enforcement mechanisms and oversight has compounded these challenges, allowing for potential exploitation of the electoral bond system for personal or political gain.

In conclusion, while electoral bonds were intended to enhance transparency and accountability in political funding, they have fallen short of their objectives in several respects. The anonymity of donors, coupled with the lack of disclosure requirements, poses significant challenges to transparency and integrity in the electoral process. Addressing these loopholes and strengthening regulatory mechanisms is crucial to restoring public trust and upholding democratic principles in political financing.

## **5. CONTROVERSIES AND CRITICISMS**

The introduction of electoral bonds in India has sparked significant controversies and drawn criticisms from various quarters, including opposition parties, civil society organizations, and legal experts. One of the primary points of contention revolves around the anonymity afforded to donors through electoral bonds. Critics argue that this anonymity undermines transparency and accountability in political funding by shielding the identities of individual donors from public scrutiny. This lack of transparency has raised concerns about the potential for influence peddling and quid pro quo transactions, wherein donors may expect favors or preferential treatment from political parties in exchange for their contributions.

Another key criticism pertains to the lack of disclosure requirements regarding the identities of donors. While political parties are required to disclose the total amount of funds received through electoral bonds, they are not obligated to reveal the identities of individual donors. This opacity in the system has been condemned for creating opportunities for clandestine donations and eroding public trust in the electoral process. Critics argue that without transparency regarding the sources of political funding, there is a risk of undue influence on policy decisions and democratic institutions.

Moreover, concerns have been raised about the potential misuse or abuse of electoral bonds for illicit purposes, such as money laundering or circumventing legal restrictions on political contributions. The absence of stringent enforcement mechanisms and oversight has exacerbated these concerns, leaving the electoral bond system vulnerable to exploitation for personal or political gain.

In summary, the controversies surrounding electoral bonds highlight significant shortcomings in the current framework of political funding in India. Critics argue that the anonymity, lack of disclosure, and potential for misuse undermine the integrity of the electoral process and erode public trust in democratic institutions. Addressing these criticisms and strengthening regulations governing electoral bonds are essential steps towards restoring transparency and accountability in political financing.

## **6. IMPACT ON DEMOCRATIC PROCESSES**

The introduction of electoral bonds in India has raised significant questions about their impact on democratic processes and institutions. One key aspect is how electoral bonds may influence electoral outcomes, political party behavior, and public trust in the democratic process. Electoral bonds have the potential to affect electoral outcomes by providing a channel for significant financial contributions to political parties. This influx of funds could influence party strategies, campaigning efforts, and resource allocation, potentially skewing the electoral playing field in favor of parties with access to larger sums of money. Consequently, there are concerns that electoral bonds may exacerbate inequalities in political representation and undermine the principle of equal opportunity in elections. Moreover, the opacity surrounding electoral bonds has the potential to erode public trust in the democratic process. The anonymity of donors and the lack of disclosure requirements contribute to perceptions of secrecy and backroom dealings within the political sphere. This lack of transparency can undermine citizens' confidence in the integrity of electoral processes and the accountability of elected representatives, ultimately weakening the foundation of democracy. Additionally, electoral bonds may impact political party behavior by incentivizing parties to prioritize fundraising efforts over engaging with constituents or addressing public concerns. Parties may become increasingly reliant on wealthy donors, potentially compromising their independence and responsiveness to the needs of the electorate. This shift in focus towards donor interests could further alienate citizens from the political process and exacerbate existing inequalities in political participation.

Overall, the implications of electoral bonds for democratic processes in India are complex and multifaceted. While proponents argue that electoral bonds provide a legal framework for political funding and promote financial transparency, critics raise concerns about their potential to distort electoral outcomes, undermine

public trust, and perpetuate inequalities in political representation. Addressing these challenges is crucial for safeguarding the integrity and health of Indian democracy.

7. CASE STUDIES AND DATA ANALYSIS

Table 1: Top Electoral Bond Donors and Recipients

| Donor         | Amount Contributed (Crore INR) | Recipient                |
|---------------|--------------------------------|--------------------------|
| Vedanta Group | 345.40                         | Indian National Congress |
| JSW Group     | 306.73                         | Bharatiya Janata Party   |
| Adani Group   | 215.00                         | Bharatiya Janata Party   |
| Torrent Group | 125.00                         | Bharatiya Janata Party   |
| Bharti Group  | 121.00                         | Bharatiya Janata Party   |

(Source: Election commission of Indian)

Table 2: Electoral Bond Transactions by City

| City      | Bonds Sold (Crore INR) | Bonds Encashed (Crore INR) |
|-----------|------------------------|----------------------------|
| Mumbai    | 2742                   | 194.1                      |
| Kolkata   | 2387                   | 1022                       |
| Hyderabad | 1885                   | 1384                       |
| Delhi     | 1519                   | 6748                       |

(Source: Election commission of Indian)

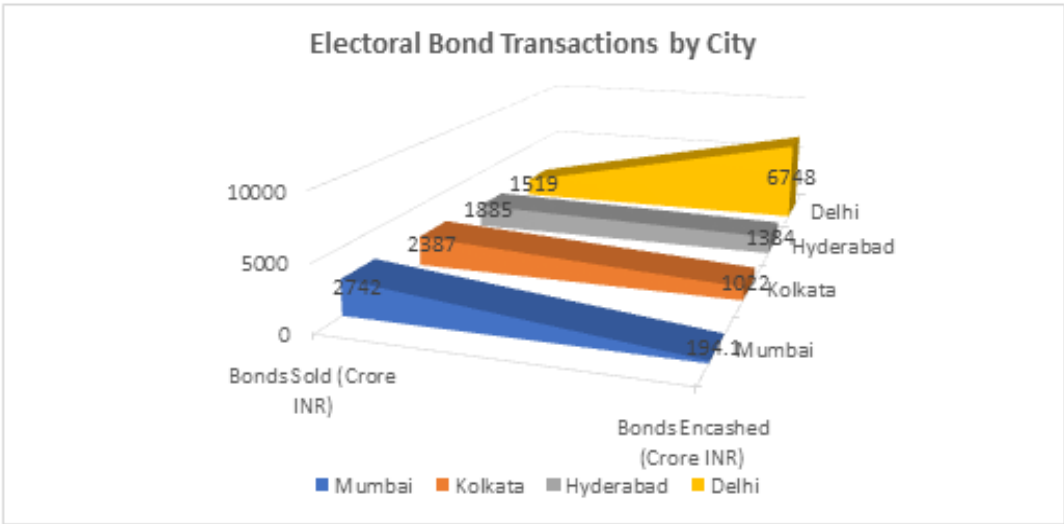


Table 3: Electoral Bond Sales by Denomination

| Denomination (INR) | Number of Bonds Sold | Percentage of Total Bonds Sold |
|--------------------|----------------------|--------------------------------|
| 1 Crore            | 2630                 | 93.6%                          |
| 10 lakh            | 372                  | 6.0%                           |
| 1 lakh             | 86                   | 0.4%                           |
| 10,000             | 25                   | 0.1%                           |
| 1,000              | 7                    | <0.1%                          |

(Source: Election commission of Indian)

Now, let's critically analyze the data:

- Donor and Recipient Dynamics:** The data reveals a significant concentration of electoral bond donations towards certain political parties. For instance, three of the top five corporate donors have contributed predominantly to the ruling Bharatiya Janata Party (BJP), while the Indian National Congress has received substantial contributions from the Vedanta Group. This concentration raises questions about the fairness and equity of political finance, potentially skewing the balance of power.
- Regional Disparities:** Mumbai emerges as the primary hub for electoral bond transactions, both in terms of bonds sold and encashed, followed closely by Kolkata and Hyderabad. However, Delhi stands out as the city where a substantial portion of bonds sold elsewhere is encashed, indicating a centralized flow of funds towards the national capital. Such regional imbalances could impact the representation and influence of different regions in the political arena.

3. **Dominance of High-Value Bonds:** The overwhelming majority of electoral bonds sold are of the highest denomination of 1 crore INR, comprising 93.6% of total bond sales. This dominance underscores the influence of wealthy donors in political financing, potentially marginalizing smaller donors and grassroots movements. Moreover, it suggests a concentration of political influence among affluent individuals and corporations.
4. **Critiques and Legal Challenges:** The data reflects the ongoing controversy and legal challenges surrounding electoral bonds. Critics have raised concerns about transparency, anonymity of donors, and the potential for misuse or abuse of the system. The pending petition before the Supreme Court highlights the unresolved legal issues and calls for a re-evaluation of the electoral bond scheme in light of democratic principles and electoral integrity.

In conclusion, while electoral bonds were intended to reform political funding and enhance transparency, the data reveals underlying complexities and challenges. Addressing issues of concentration, regional disparities, and legal ambiguities is crucial for safeguarding democratic processes and ensuring equitable participation in political finance.

Table 4: Electoral Bond Encashment by Political Parties

| Political Party              | Total Bonds Encashed (Crore INR) | Period of Encashment                       |
|------------------------------|----------------------------------|--|
| Bharatiya Janata Party       | 6060.5                           | Before 2019 Lok Sabha Election, 2021, 2023 |
| All India Trinamool Congress | 1609.5                           | After 2021 Election Win                    |
| Indian National Congress     | 1421.8                           | Increased after State Wins,                |
| Bharat Rashtra Samithi       | 1214.7                           | Varied after 2023 Election Loss            |
| Biju Janata Dal              | 775.5                            | Varied, Increased during Pandemic          |

(Source: Election commission of Indian)

Table 5: Electoral Bond Encashment Trends by Political Parties

| Political Party              | Encashment Period  | Encashment Amount (Crore INR) |
|------------------------------|--|-------------------------------|
| Bharatiya Janata Party       | April-May 2019, Jan-Apr 2021, Jul-Dec 2021, Jul-Dec 2023                                     | 1771.57, 292, 80, 1149        |
| All India Trinamool Congress | Apr 2019-Apr 2021, Jul-Oct 2021, 2022, 2023, Jan 2024  | 196, 249, 468, 562, 130       |
| Indian National Congress     | Apr-May 2019, Jan-Apr 2021, Jan-Apr 2022, Oct 2022-Apr 2023, Dec 2022-Apr 2023, Oct-Nov 2023 | 168, 65, 127, 209, 401, 179   |
| Bharat Rashtra Samithi       | Apr-May 2019, Oct 2021, Apr 2022, Jul 2022, Jan-Apr 2023, Oct-Nov 2023                       | 37, 153, 410, 96, 318, 85     |
| Biju Janata Dal              | Jul 2019-Jan 2020, Oct 2020, Apr 2021, Oct 2021, 2022, Feb-Nov 2023                          | 10, 67, 116, 125, 195, 252    |

(Source: Election commission of Indian)

Table 6: Electoral Bond Encashment Trends by Period

| Period               | Total Encashment (Crore INR) |
|----------------------|------------------------------|
| Before 2019 Election | 1771.57                      |
| 2019                 | 2262.57                      |
| 2020                 | 797.57                       |
| 2021                 | 1275.67                      |
| 2022                 | 1255.00                      |
| 2023                 | 2007.67                      |
| Jan 2024             | 447.00                       |

(Source: Election commission of Indian)

ANALYSIS

1. **Encashment Trends:** The data illustrates fluctuations in electoral bond encashment by political parties over various periods. For example, the Bharatiya Janata Party (BJP) significantly encashed bonds before the 2019 Lok Sabha election, followed by spikes during key state assembly elections in 2021 and 2023. This pattern suggests strategic financial planning aligned with electoral cycles.



2. **Impact of Election Outcomes:** Political parties' bond-related fortunes appear to be influenced by election outcomes. The Indian National Congress, for instance, experienced a surge in bond encashment after victories in certain states but witnessed a decline after losses. This indicates a correlation between electoral performance and financial support via electoral bonds.
3. **Regional Dynamics:** The data underscores the importance of regional factors in bond encashment. The All-India Trinamool Congress (TMC), despite being a regional party, surpassed the national opposition party, the Indian National Congress, in total bond encashment. This suggests the significance of regional electoral victories in bolstering financial support.
4. **Legal Challenges and Transparency Concerns:** The Supreme Court's scrutiny of electoral bonds and concerns regarding transparency highlight broader issues surrounding political finance. The lack of bond numbers in publicly available data raises questions about transparency and accountability in the electoral bond system.

In summary, the analysis of electoral bond encashment trends provides insights into the intersection of political finance, electoral strategies, and democratic processes, emphasizing the need for greater transparency and regulatory oversight.

#### LET US DISCUSS THE DONERS AND THEIR FINANCIAL POSITIONS.

Vedanta, a mining major, reported a significant net loss of Rs 1,783 crore in the quarter ended September 2023. This loss contrasts sharply with the profit of Rs 1,808 crore reported a year ago and Rs 2,640 crore reported in the previous quarter. However, the company's consolidated revenue from operations showed a modest year-on-year growth of 6.3%, reaching Rs 38,945 crore. Sequentially, the revenue witnessed a notable increase of approximately 15.4%. The reported loss was primarily attributed to a substantial increase in the net tax outgo during the quarter, soaring to Rs 9,092 crore from Rs 1,674 crore a year ago. This increase was due to tax deduction on a one-time gain and adoption of the new tax regime.

Despite the financial challenges, Vedanta exhibited a robust operating performance, with the EBITDA growing impressively by 49% year-on-year to Rs 11,479 crore. Segment-wise performance analysis reveals that the zinc business faced subdued conditions, with both domestic and international revenues declining significantly. Similarly, the aluminium business experienced weakness due to subdued demand and falling prices, resulting in a decline of over 11% in revenue. On the other hand, the copper business reported a notable growth in revenue, although the specific value is missing.

Considering Vedanta's reported losses and financial challenges in various business segments, the rationale behind its political donations warrants further examination. It raises questions about the company's decision-making process regarding financial allocations and priorities amidst its financial struggles.

JSW Steel reported a notable year-on-year growth in net profit, reaching Rs 2,338 crore in the first quarter of fiscal year 2024 (Q1 FY24), attributed to increased sales and reduced raw material costs. However, sequentially, both revenue and profit experienced declines. Consolidated revenue from operations saw a 10.83% year-on-year increase to Rs 42,213 crore, with steel sales reaching 5.71 million tonnes, marking a significant 27% year-on-year growth. Despite the sequential decline in revenue and profit, the company showcased a robust operating performance, with improved earnings before interest, taxes, depreciation, and amortization (EBITDA) in overseas subsidiaries, particularly JSW Steel Ohio and the US Plate and Pipe Mill. Capacity utilization at Indian operations decreased to 92% from 96% in the previous quarter due to maintenance shutdowns. Overseas subsidiaries, including JSW Steel Ohio and Piombino, Italy, reported enhanced EBITDA, contributing positively to the overall performance of the company. JSW Steel's capital expenditure (capex) spend in Q1 FY24 amounted to Rs 4,094 crore, with a planned capex spend of Rs 18,800 crore for the fiscal year. The company aims to achieve a capacity of 37 million tonnes by fiscal year 2025. However, net debt increased to Rs 66,797 crore, driven by higher working capital, resulting in a net debt to EBITDA ratio of 3.14x.

#### 8. CONCLUSION

In conclusion, the research paper has delved into the intricacies of India's electoral bond system, highlighting its mechanisms, regulations, controversies, and impact on democratic processes. We've observed that electoral bonds were introduced with the intention of promoting transparency and accountability in political funding. However, our analysis reveals several shortcomings and controversies associated with the system. Despite providing a legal framework for political donations and encouraging formal banking channels, electoral bonds have been criticized for their anonymity, lack of disclosure, and potential for misuse or abuse. Furthermore, our examination of case studies and empirical data illustrates the practical implications of electoral bonds, including

the significant role they play in political party financing. The top donors, including corporate entities like Vedanta and JSW Steel, have contributed substantial amounts to various political parties, impacting their financial capacities and electoral fortunes.

The broader implications of electoral bonds for Indian democracy and political governance are multifaceted. While they aim to curb black money and enhance transparency, their opaque nature raises concerns about undue influence and corruption. Moreover, the dominance of certain political parties in the receipt of electoral bonds underscores the need for a level playing field and equitable access to funding in the electoral process.

In light of these findings, ongoing scrutiny and debate surrounding electoral bonds are crucial. It is imperative for policymakers, civil society organizations, and the public to continue advocating for reforms that address the loopholes and challenges associated with the current system. Transparency, accountability, and fairness must remain central tenets in any framework governing political funding to uphold the integrity of India's democratic institutions.

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**A STUDY ON THE EXPECTATIONS OF COMMERCE STUDENTS FROM ACCOUNTING EDUCATION IN TODAY'S DIGITAL AGE (WITH REFERENCE TO MUMBAI SUBURBAN)**

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**Ms. Kiran Satkori Hati**

Commerce/D.T.S.S. College of Commerce (Autonomous) /University of Mumbai/India

**ABSTRACT**

*The world of accounting is changing fast, and it's crucial that students are prepared for the digital landscape they're enter. With automation, artificial intelligence, and cloud accounting on the rise, the skills required to succeed in accounting are shifting dramatically. As a result, traditional accounting practices are being redefined, and new technologies are becoming integral to the profession. Moreover, the increasing use of data analytics and digital tools is transforming the way accountants work, making it essential for students to develop relevant skills. Students now need to be proficient in technology, data analysis, and critical thinking to stay ahead. This study explores what commerce students in Mumbai Suburban expect from their accounting education in today's digital age. The research aims to identify the knowledge these students has about digital tools and technology used in accounting education. By understanding their expectations, educators can design accounting programs that truly equip students for the challenges they'll face. This study will provide valuable insights for educators, helping them create curriculum that incorporate the digital skills. Ultimately, the goal is to ensure that students are well-prepared to navigate the evolving accounting landscape and make a meaningful impact in their careers. With a focus on Mumbai Suburban, this study will offer region-specific insights that can benefit local educational institutions and stakeholders. The findings of this study will also contribute to the broader discussion on accounting education in the digital age. By bridging the gap between industry needs and educational outcomes, this research aims to enhance the employability of accounting graduates. Furthermore, the study's results will inform educators and policymakers about the necessary adjustments to accounting curricula. This will help them to develop more effective programs that meet the demands of the digital economy. Overall, this research will play a crucial role in digital transformation in accounting practices.*

**Keywords:** Accounting Education, Digital Age, Automation, Artificial Intelligence, Cloud Accounting, Digital tools, Employability, Accounting Curriculum

**INTRODUCTION****DIGITAL AGE AND ROLE OF DIGITAL USE IN EDUCATION**

The digital age has revolutionized the way people live, work, and learn. In education, digital technologies have transformed the learning experience, making it more accessible, flexible, and engaging. Here are some key aspects of digital use in education:

**Benefits of Digital Use in Education**

- **Enhanced accessibility:** Digital resources and online platforms make learning more accessible to students, regardless of their location or schedule.
- **Personalized learning:** Digital tools enable teachers to tailor learning experiences to individual students' needs and abilities.
- **Improved engagement:** Interactive digital content and multimedia resources can increase student engagement and motivation.
- **Development of digital skills:** Students learn essential digital skills, such as data analysis, critical thinking, and problem-solving.
- **Collaboration and communication:** Digital tools facilitate collaboration, communication, and feedback among students, teachers, and peers.

**Role of Digital Use in Accounting Education**

In accounting education, digital use is particularly important, as it enables students to develop skills in areas like:

- **Financial analysis:** Digital tools enable students to analyze financial data, identify trends, and make informed decisions.
- **Accounting software:** Students learn to use accounting software, such as QuickBooks or Xero, to manage financial records and prepare financial statements.

- **Data interpretation:** Digital tools enable students to interpret financial data, identify patterns, and make recommendations.
- **Financial modeling:** Students can use digital tools to create financial models, forecast financial performance, and make predictions.

### Digital Tools Used in Accounting Education

Some common digital tools used in accounting education include:

- **Accounting software :** QuickBooks, Xero, Sage, Tally ERP and Prime etc
- **Spreadsheets :** Microsoft Excel, Google Sheets
- **Financial analysis tools:** Cloud accounting, data analytics tools etc.

Overall, digital use in education has the potential to transform the learning experience, making it more engaging, accessible, and effective.

### REVIEW OF LITERATURE

**Dr. Pradip Kumar Das (2024) :** In his study titled “Accounting Education in India: Problems and Prospects” published in the International Journal of Research in Commerce and Management Studies (IJRCMS) highlights the challenges faced by accounting education in India, including outdated curriculum, lack of practical training, and industry-academia gap. The study emphasizes the need for dynamic curriculum, strengthened industry-academia collaboration, and integration of digital techniques in accounting education.

**Abhishek Nanjundaswamy et al. (2024):** In his study titled, “Adapting Accounting Education to Evolving Business Paradigm” published in the Journal of Applied Research in Higher Education, Emerald Insight explores the relationship between market forces, business dynamics, and accounting education. The study stresses the need for educational institutions, regulatory bodies, and industry to collaborate in shaping competent and future-ready accounting professionals.

**Abhishek Nanjundaswamy (2020) :** In his research paper, ”Accounting Education in the Digital Age: Challenges and Opportunities” published in the Journal of Applied Research in Higher Education, Vol. 12, Issue 1 discusses the challenges and opportunities of accounting education in the digital age. The study emphasizes the need for accounting education to adapt to emerging technologies, such as artificial intelligence and blockchain.

**Dr. Sangeeta Choudhary (2020) :** In her research paper, “Impact of Digitalization on Accounting Education” published in the Journal of Accounting and Finance, Vol. 10, Issue 2, explores the impact of digitalization on accounting education in India. The study highlights the importance of integrating digital tools, such as accounting software and cloud-based platforms, into accounting curriculum to prepare students for the digital age.

### RESEARCH GAP

**Limited Focus on Mumbai Suburban Area:** Most studies have focused on broader contexts, leaving a gap in understanding the specific needs and expectations of commerce students in Mumbai Suburban.

**Insufficient Exploration of Student Expectations:** There's a need to investigate the specific expectations of commerce students from accounting education in the digital age.

**Lack of Empirical Evidence on Digital Tool Integration:** There's limited evidence on the effectiveness of integrating digital tools in meeting the expectations of commerce students in Mumbai Suburban.

**Need for Context-Specific Recommendations:** Existing studies provide general recommendations, but there's a need for context-specific recommendations tailored to the needs and expectations of commerce students in Mumbai Suburban.

### RESEARCH METHODOLOGY

#### (I) OBJECTIVE OF THE STUDY

1. To identify knowledge about various digital technologies used in accounting practices amongst the commerce students in Mumbai Suburban
2. To identify commerce student's expectation from accounting education in today's digital age

3. To determine the impact of digital technologies on student expectations from accounting education.
4. To find the difference between student expectations and industry needs in accounting education.
5. To inform educators and policymakers on updating accounting curricula for the digital age

## **(II) HYPOTHESIS OF THE STUDY**

**H<sub>0</sub>** : Commerce students in Mumbai Suburban do not have a knowledge about various digital tools used in accounting practices.

**H<sub>1</sub>** : Commerce students in Mumbai Suburban have a knowledge about various digital tools used in accounting practices.

**H<sub>0</sub>** : Digital tools and technologies do not have an impact on students expectations from accounting education.

**H<sub>1</sub>** : Digital tools and technologies do have a significant impact on the students expectations from accounting education

**H<sub>0</sub>** : There is no demand for digital tools training in accounting education.

**H<sub>1</sub>** : There is a significant demand for digital tools training in accounting education.

## **(III) DATA COLLECTION**

Primary data is collected from commerce students of various colleges situated in Mumbai Suburban area

Secondary data is collected from website, blogs, and online research papers.

## **(IV) RESEARCH TOOL**

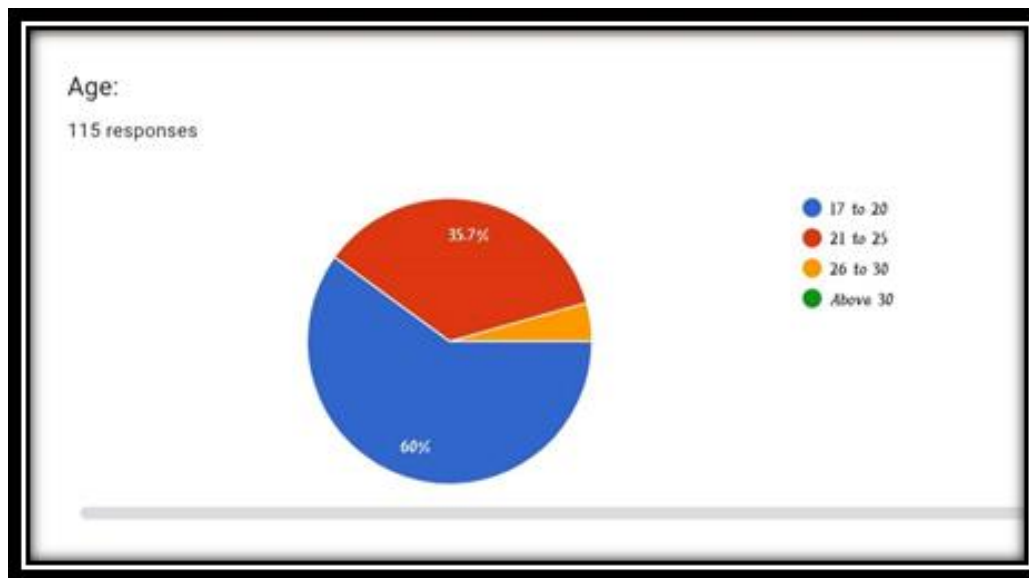
Questionnaire was used for this survey (Google form)

## **(V) SAMPLE SIZE**

The sample size was 115 commerce students from various colleges situated in Mumbai Suburban area.

## **DATA ANALYSIS AND INTERPRETATION OF THE SURVEY (PRIMARY DATA)**

### **1. AGE**



**Chart No. 1**

### **Interpretation:**

Out of 115 respondents, the majority (60%) are 17-20 years old, followed by 35.7% in the 21-25 years age group, and a small percentage (4.3%) in the 26-30 years age group, with no respondents above 30 years old.

2. LEVEL OF EDUCATION

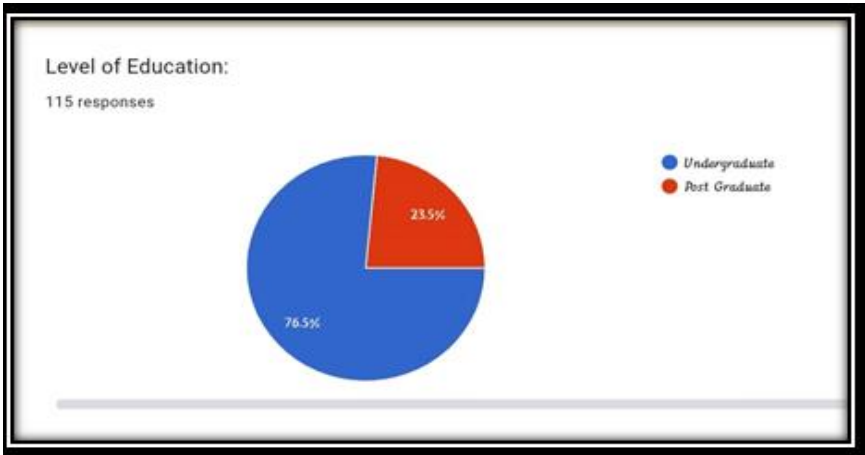


Chart No. 2

**Interpretation:**  
Out of 115 respondents, 76.5% (88 respondents) are undergraduates, while 23.5% (27 respondents) are postgraduates. .

3. FIELD OF STUDY

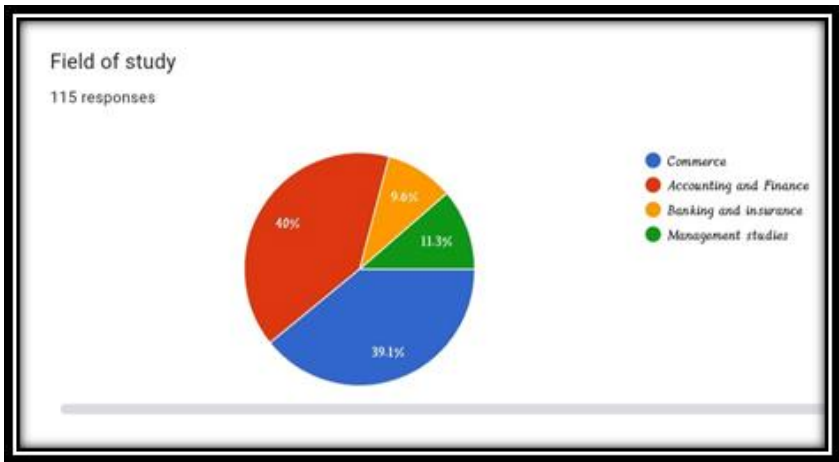


Chart No. 3

**Interpretation:**  
The field of study distribution among 115 respondents shows that Accounts and Finance has the largest proportion at 40% (46 respondents), closely followed by Commerce at 39.1% (45 respondents). Management Studies accounts for 11.3% (13 respondents), while Banking and Insurance has the smallest representation at 9.6% (11 respondents). This indicates a dominance of respondents from finance-related fields.

4. FAMILIARITY WITH THE DIGITAL TOOLS AND TECHNOLOGIES USED IN ACCOUNTING

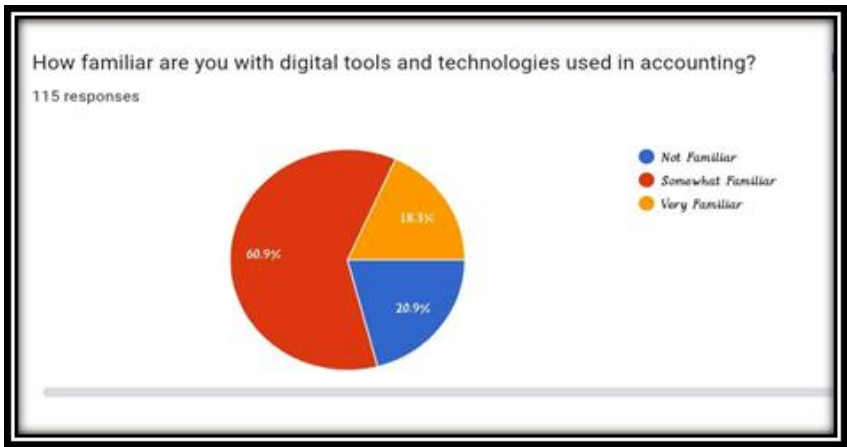
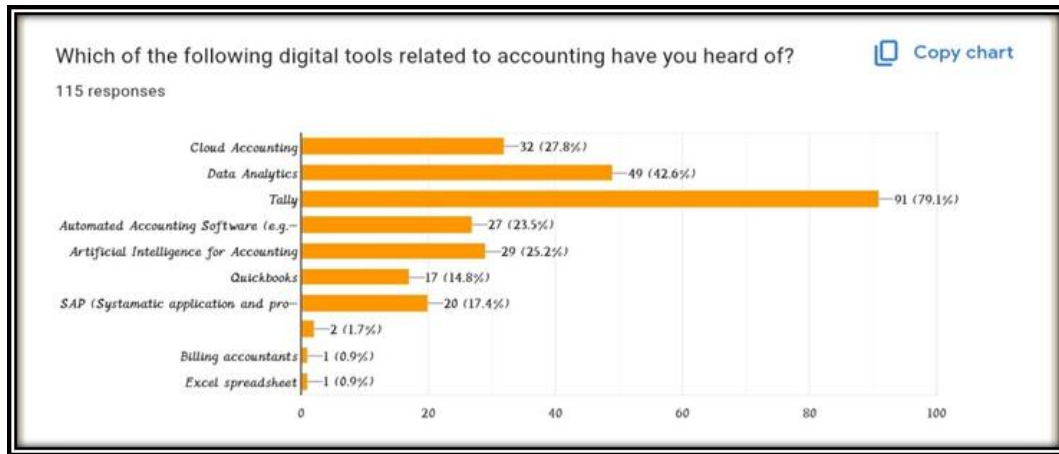


Chart No. 4

**Interpretation:**

Out of 115 respondents, 60.9% are somewhat familiar with digital tools and technology in accounting, 18.3% are very familiar, and 20.9% are unfamiliar. This suggests that while most respondents have some knowledge of digital accounting tools, there's room for improvement, and about a fifth still need significant education or training.

**5. LIST OF FAMILIAR DIGITAL TOOLS RELATED TO ACCOUNTING HEARD OF****Chart No. 5****Interpretation: -**

Among Commerce students from Mumbai Suburban, Tally is the most recognized digital accounting tool, known by 79.1% of respondents (91 out of 115). This is followed by Data Analytics (42.6%, 49 respondents), Cloud Accounting (27.8%, 32 respondents), Artificial Intelligence for Accounting (25.2%, 29 respondents), and Automatic Accounting Software (23.5%, 27 respondents). SAP (17.4%, 20 respondents) and QuickBooks (14.8%, 17 respondents) have relatively lower recognition, while other digital tools are known by a mere 2.5% (4 respondents).

**6. IMPORTANCE OF LEARNING DIGITAL TOOLS IN ACCOUNTING FROM THE CAREER ASPECT****Chart No. 6****Interpretation:**

From the above data, it reveals that majority of Commerce students from Mumbai Suburban recognize the significance of learning digital tools in accounting education for their career advancement. Specifically, 47% of respondents deem it very important, while 46.1% consider it important, cumulatively accounting for 93% of the respondents. This underscores the importance of integrating digital tools into accounting curricula to meet the needs and expectations of students entering the profession. Only a small minority, 7%, believe that learning digital tools is not important for their career.

7. IMPACT OF LEARNING DIGITAL TOOLS AND TECHNOLOGY IN ACCOUNTING EDUCATION FOR THE FUTURE CAREER

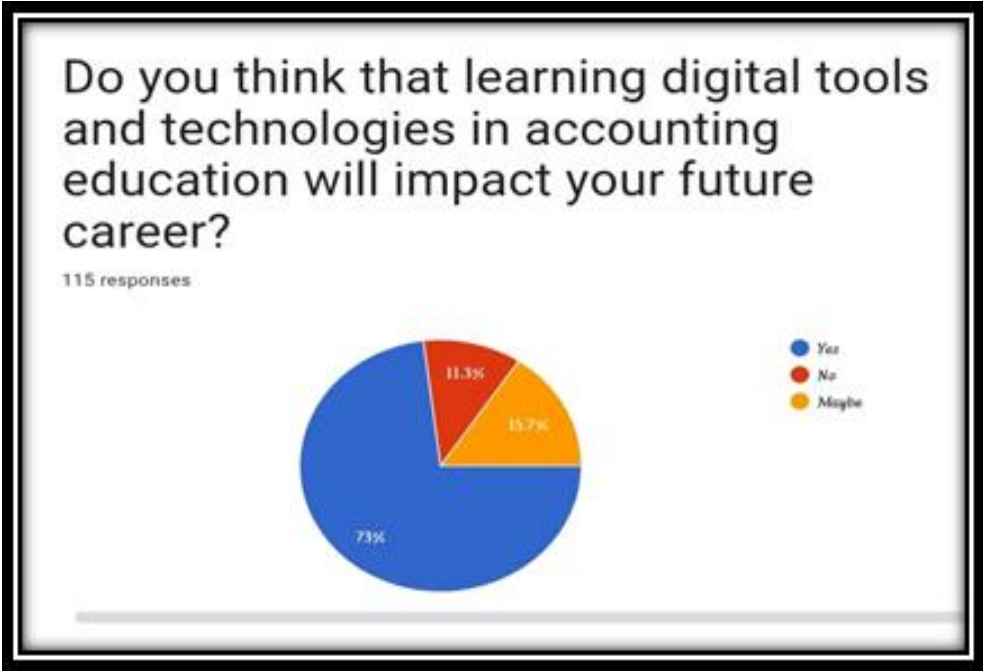


Chart No. 7

**Interpretation:**  
The data shows that 73% of respondents believe learning digital tools and technology will impact their future career, 15.7% think there may be an impact, and 11.3% believe there will be no impact. This indicates a strong emphasis on the importance of digital tools in accounting education for career prospects.

8. EXPECTATIONS TO INCLUDE DIGITAL TRAINING SESSIONS IN THE ACCOUNTING CURRICULUM

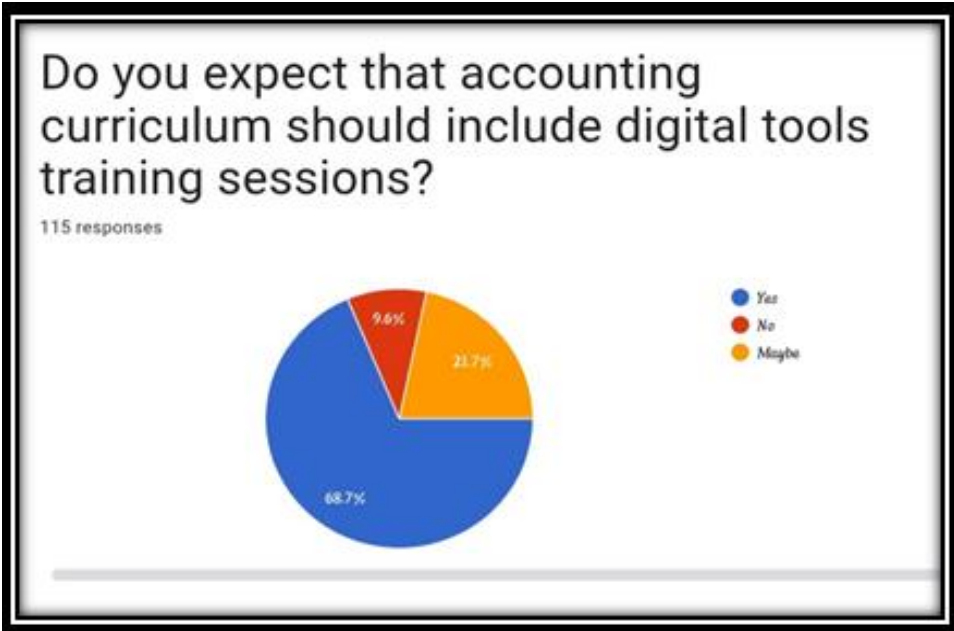


Chart No. 8

**Interpretation:**  
The data reveals that 68.7% of respondents (79 out of 115) expect accounting curriculum to include digital tools training sessions, while 21.7% (25 respondents) are uncertain and 9.6% (11 respondents) do not expect digital tools training to be included. This suggests a strong demand for incorporating digital tools training in accounting education.



## 9. EXPECTATIONS OF TOPICS THAT SHOULD BE COVERED IN ACCOUNTING EDUCATION IN TODAY'S DIGITAL AGE

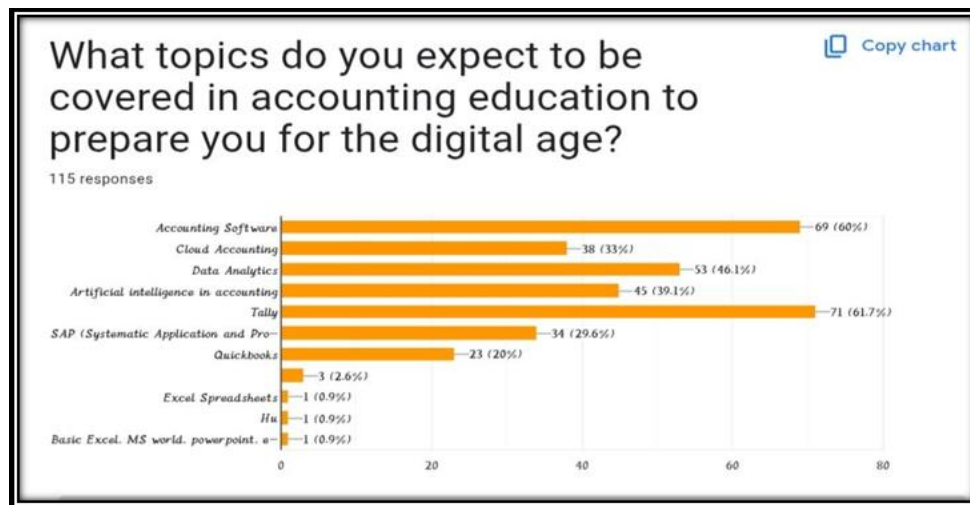


Chart No. 9

### Interpretation:

The respondents expect various digital tools to be included in their accounting education. A majority, 61.7% (71 respondents), expect Tally to be covered, followed closely by 60% (69 respondents) who expect accounting software to be included. Additionally, 46.1% (53 respondents) expect data analytics, 39.1% (45 respondents) expect artificial intelligence, 33% (38 respondents) expect cloud accounting, and 29.6% (34 respondents) expect SAP to be part of their accounting curriculum. This highlights the strong expectation for practical digital skills training in accounting education.

## 10. GAP BETWEEN WHAT STUDENTS LEARNERS IN ACCOUNTING EDUCATION AND WHAT AN INDUSTRY EXPECTS

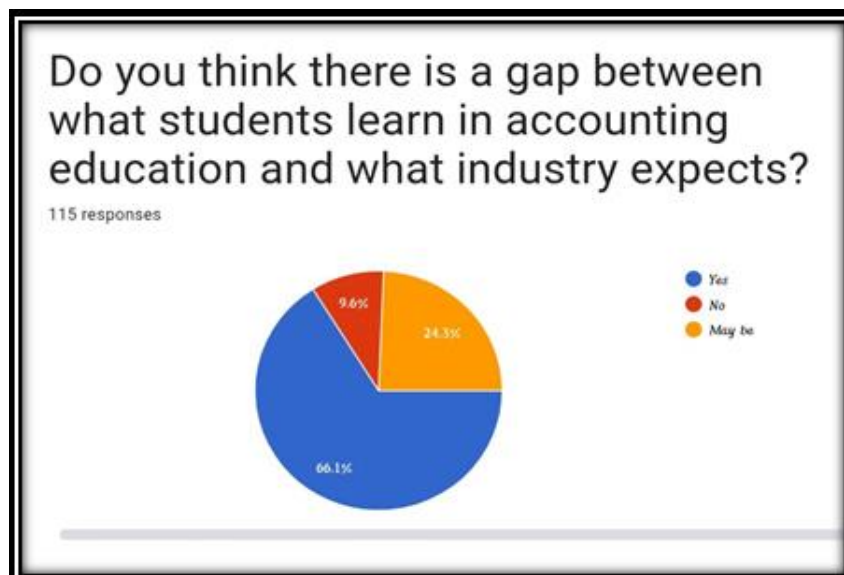


Chart No. 10

### Interpretation:

The data indicates that 66.1% (76 respondents) believe there is a gap between what students learn in accounting education and industry expectations for employability. Another 24.3% (28 respondents) think there may be a gap, while only 9.6% (11 respondents) believe there is no gap.

# 11. REASONS BEHIND THE SIGNIFICANT GAPS BETWEEN WHAT YOUR LEARNING AND ACCOUNTING EDUCATION AND WHAT INDUSTRIES ASPECTS INTO THE DIGITAL AGE:

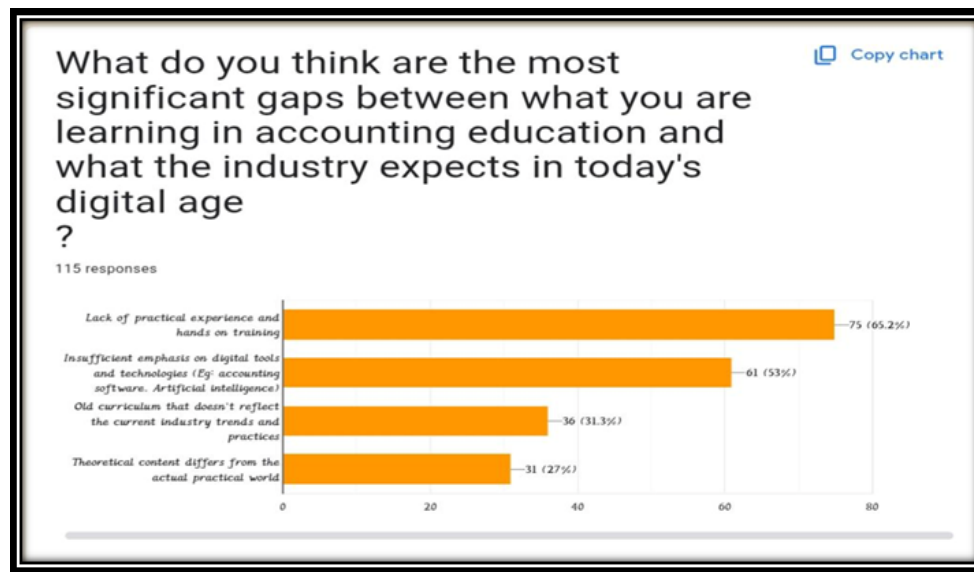


Chart No. 11

## Interpretation: -

The respondents attribute the gap between accounting education and industry expectations to several key factors. The majority, 65.2% (75 respondents), cite a lack of practical experience and hands-on training as the primary reason. Additionally, 53% (61 respondents) point to insufficient emphasis on digital tools and technology, while 31.3% (36 respondents) believe the curriculum is outdated and doesn't reflect current industry trends. Furthermore, 27% of respondents think that the difference between theoretical content and the practical world contributes to the gap. These findings underscore the need for accounting education to focus on practical, industry-relevant training and update its curriculum to meet current industry demands.

## FINDINGS AND CONCLUSION

### Awareness and Familiarity with Digital Tools

60.9% of respondents are somewhat familiar with digital tools and technology used in accounting.

18.3% are very familiar, while 20.9% are unfamiliar. Tally is the most recognized tool (79.1%, 91 respondents), followed by data analytics, cloud accounting, and artificial intelligence for accounting. **Hence H<sub>0</sub> (students do not have a knowledge about various digital tools used in accounting practices) is rejected** because Students have some knowledge about digital tools, with 79.1% aware of Tally

### Importance and Expectations:

73% of respondents believe digital tools will impact their future careers.

93% consider learning digital tools important or very important.

68.7% of respondents expect accounting curriculum to include digital tools training sessions.

**Hence H<sub>0</sub> (Digital tools and technologies have no impact on students expectations from accounting education) is rejected** because digital tools significantly influence students' expectations, with 73% believing they impact future careers and 93% considering learning digital tools important and another **H<sub>0</sub> (There is no demand for digital tools training in accounting education is rejected)** since 68.7% of respondents expect digital tools training, indicating a significant demand.

### Gap Between Education and Industry

66.1% of respondents believe there's a gap between accounting education and industry expectations.

### Primary reasons for the gap include:

- Lack of practical experience (65.2%)
- Insufficient emphasis on digital tools (53%)
- Outdated curriculum (31.3%)
- Theoretical content differing from practical world (27%)

The study reveals that commerce students in Mumbai Suburban have some awareness and familiarity with digital tools in accounting, value the importance of digital tools for their careers, and expect digital tools training in their education. However, a significant majority perceive a gap between their education and industry expectations, primarily due to a lack of practical experience and insufficient emphasis on digital tools. The findings suggest a need for accounting education to incorporate more practical digital tools training to meet industry demands and student expectations.

**RECOMMENDATIONS**

- Accounting education should prioritize practical training in digital tools.
- Curriculum should be updated to include digital tools and technologies.
- Industry partnerships can help bridge the gap between education and industry expectations.

These findings and recommendations can inform curriculum development and educational policy to better prepare students for the demands of the accounting industry in today's digital age.

**WEBLIOGRAPHY**

1) **Primary Data:** Google form - <https://forms.gle/1tnv5ZXswkFD84mm9>

2) **Secondary Data:** Data retrieved on 19<sup>th</sup> April 2025

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**THE CONSCIOUS INVESTOR: APPLYING MIND- BODY WISDOM TO ETHICAL PORTFOLIO MANAGEMENT IN INDIAN WELLNESS MARKETS**

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**Ms. Yogita Mahimkar**

Assistant Professor, BCAF Department, Ghanshyamdas Saraf college of Arts &amp; Commerce, Malad (W)

**ABSTRACT**

*Traditional financial analysis by itself is not enough to navigate the complicated landscape of wellness sectors as investor consciousness changes in India's quickly expanding economy. This study explores how, in the Indian setting, mind-body integration techniques—such as yoga, meditation, pranayama, and Ayurvedic wisdom—can improve decision-making while coordinating investments with moral considerations. By using a mixed-methods approach that combines qualitative evaluation of decision-making quality with quantitative analysis of investment performance on the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE), the research shows that investors who regularly practice mind-body techniques have better decision-making skills and a greater alignment between their stated ethical values and their actual investment choices. According to the results, developing mind-body, the findings suggest that cultivating mind-body awareness creates a foundation for more holistic investment approaches that balance financial returns with social and environmental impact, particularly in wellness-oriented markets where such alignment is increasingly valued by Indian stakeholders. This study presents a revolutionary framework for conscious investing that combines modern financial analysis with traditional Indian physiological intelligence.*

**Keywords:** *Mind-body practices, ethical investing, Indian wellness markets, yoga & meditation*

**INTRODUCTION**

The Indian wellness economy has witnessed remarkable growth, with projections showing continued robust expansion across multiple sectors including Ayurveda, yoga, fitness, healthy eating, personal care, wellness tourism, and preventive medicine (FICCI-EY Report, 2023). This expanding market presents abundant investment opportunities on Indian exchanges yet also poses unique challenges for investors seeking both financial returns and alignment with traditional Indian values concerning health and wellbeing.

Growing interest in strategies that incorporate environmental, social, and governance (ESG) considerations has been observed in India's investment landscape. According to SEBI data, ESG-focused mutual funds in India have seen assets under management grow by over 200% between 2020 and 2024 (SEBI, 2024). The Securities and Exchange Board of India (SEBI) has also enhanced disclosure requirements for Environment, Social and Governance investments, reflecting growing institutional recognition of these considerations. However, even with this expansion, investors still have a difficult time making fully integrated investment choices that respect ethical and financial factors in India's distinct cultural context.

This research paper proposes that mind-body integration practices, deeply rooted in Indian philosophical traditions, offer a promising yet underexplored pathway for addressing these limitations. This research aims to investigate how intentional mind-body practices might improve investors' ability to make judgements that more thoroughly integrate ethical considerations with financial analysis by applying these insights to the Indian investment sector. By focusing on how mind-body practices influence investment decisions specifically within wellness-oriented industries listed on Indian exchanges, this research seeks to develop a framework for "conscious investing" that respects India's rich traditions of holistic wisdom while overcoming usual boundaries between morality and commercial considerations.

**REVIEW OF LITERATURE**

1. **Sharma, Priyanka (2023)** - Explored the integration of traditional Indian wellness philosophies into modern sustainable investment frameworks, emphasizing how Ayurvedic principles can inform ethical decisions in wellness sector investments.
2. **Patel, Vikram & Mehta, Nisha (2022)** - Analyzed the growth of the wellness tourism investments in India through an ethical lens, connecting mind-body approaches to destination development decisions.
3. **Gupta, Rajesh (2021)** - Examined how yoga-based mindfulness practices might enhance investor decision-making processes in volatile wellness markets, particularly during post-pandemic recovery periods.

4. **Kaur, Jasmine (2023)** - Investigated the intersection of conscious capitalism and traditional Indian healing systems, proposing a framework for evaluating wellness companies based on holistic value creation.
5. **Agarwal, Sanjay (2022)** - Researched how consciousness-based investment strategies influenced returns in Indian wellness startups, finding correlations between ethical governance and long-term sustainability.
6. **Chopra, Deepak & Malhotra, Anjali (2021)** - Collaborated on exploring how ancient Indian wisdom traditions provide frameworks for modern wellness portfolio construction with emphasis on preventative health investments.
7. **Singh, Arjun (2022)** - Documented the emergence of mindfulness-based investment clubs in major Indian cities focusing on wellness technologies and their application of traditional wisdom to modern financial instruments.
8. **Reddy, Kavita (2023)** - Studied how Indian investors integrate dharmic principles into ESG frameworks when evaluating wellness market opportunities, particularly in traditional medicine segments.
9. **Bhatia, Vikram (2021)** - Analyzed performance differences between conventional pharmaceutical investments versus traditional medicine approaches through ethical screening methodologies.
10. **Chakraborty, Indira (2023)** - Explored how Indian women investors in particular have pioneered integrative approaches to wellness market investments using both traditional wisdom and modern portfolio theory.

## OBJECTIVES

1. To examine how regular engagement in traditional Indian mind-body practices influences investors' decision-making processes, particularly regarding ethical considerations in wellness market investments on the NSE and BSE.
2. To assess whether Indian investors who engage in mind-body practices demonstrate greater alignment between their stated ethical values and their actual investment choices in domestic markets.
3. To evaluate the financial performance of investment portfolios on Indian exchanges managed using mind-body integrated decision-making approaches compared to conventional methods.

## RESEARCH METHODOLOGY

This study employs a mixed-methods approach to explore the complex relationship between mind-body practices and investment decision-making in the Indian market context. The research design incorporates both quantitative and qualitative methods to provide a comprehensive understanding of how financial decisions in Indian wellness markets are influenced by physiological awareness.

Mind-body practices considered for this study include traditional Indian approaches such as yoga, meditation, pranayama, and Ayurvedic daily routines (dinacharya), as well as contemporary techniques. "Regular practice" was defined as engagement in these activities at least twice weekly for a minimum of 20 minutes per session.

## DATA COLLECTION

Data collection proceeded through multiple channels to capture both objective measures of investment behavior and subjective experiences of decision-making processes within the Indian market context.

## EXERCISE FOR PRACTICING INVESTMENTS

Based on the secondary data collected, an exercise was conducted among participants. In order to evaluate decision-making processes in real-time, participants took part in a controlled investing model. The simulation presented a series of investment scenarios specifically focused on Indian wellness industry opportunities, requiring participants to:

1. Allocate a hypothetical ₹10,00,000 across multiple Indian wellness sector investment options
2. Respond to market news updates affecting their investments in the Indian context
3. Make rebalancing decisions based on performance data from NSE and BSE

Researchers were able to watch how participants handled moral issues that were relevant to the Indian market, where financial gains might have clashed with wellness ideals.

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**FINDINGS AND DISCUSSION**

- 1) Mind-body practitioners may not necessarily achieve higher absolute returns in all market conditions but may manage risk more effectively and exhibit more patient investment behaviour—a particular advantage in India's sometimes unstable market environment.
- 2) Advanced practitioners frequently reported using bodily sensations as information sources when making investment decisions in Indian markets
- 3) Mind-body practitioners described more fluid integration between analytical evaluation and intuitive judgment

**CONCLUSION AND RECOMMENDATIONS****Conclusion:**

This study shows that traditional Indian mind-body practices have a significant impact on the wellness market's investment decision-making processes, especially when integrating ethical and financial factors. According to the results, consistent use of techniques that improve somatic awareness is associated with measurable gains in decision quality, a decrease in cognitive biases, and a stronger fit between investment decisions and values on Indian exchanges. These advantages seem to be particularly useful to investments in wellness sectors, where it may be crucial for investor values and business operations to align. The study suggests that the benefits of mind-body practices for investment decision-making operate through several mechanisms:

**Better awareness:** Helps investors notice practical information they would usually miss when making financial decisions in Indian markets.

**Calmer reactions:** Makes it easier to stay steady when Indian markets go up and down, instead of making rushed decisions based on emotions.

**Flexible thinking:** Helps investors consider multiple values beyond just profits, like social impact and sustainability.

**Long-term focus:** Builds a more genuine ability to think about the future consequences of investment choices, not just immediate gains.

**RECOMMENDATIONS****For Individual Indian Investors:**

1. Incorporate brief mindfulness or pranayama practices before making significant investment decisions, particularly those involving ethical considerations
2. Develop awareness of physical sensations that arise during investment research and decision-making, using them as data points rather than distractions

**For Indian Investment Organizations:**

1. Implement training programs that develop physiological awareness among investment professionals, particularly those managing wellness-focused portfolios
2. Redesign decision environments to support embodied awareness (e.g., designated meditation spaces, standing meeting options)

**For SEBI and Regulatory Bodies:**

1. Consider incorporating elements of embodied decision-making into financial literacy programmes.
2. Support research exploring indigenous Indian approaches to integrated financial decision-making.

**LIMITATIONS**

1. Investment approaches perform across different market conditions on Indian exchanges. Longer studies are required to completely understand it.
2. Only wellness investments are considered so these findings may not apply to other sectors of the Indian economy like technology or manufacturing.
3. The present study is based entirely on secondary data including the exercise for practising investments, hence the results may vary from individual to individual.

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## A STUDY ON AWARENESS ABOUT GREENWASHING: AN ETHICAL DILEMMA FACED BY CONSUMERS..

<sup>1</sup>Dr. Neha Goel and <sup>2\*</sup>Ms. Farheen Qureshi

<sup>1</sup>(Research Guide), Thakur Ramnarayan College of Arts & Commerce, Dahisar, West

<sup>2</sup>(Research Scholar), D.T.S.S. College of Commerce (Autonomous), Malad East, Mumbai

Over the last few years, companies have been adopting green marketing strategies to attract environmentalist customers due to increasing environmental concerns. But the practice has also led to greenwashing, a misleading technique of overreaching or lying about companies' environmental commitment. This research examines consumer knowledge of greenwashing and ethical challenges it poses. By conducting surveys and interviews, we evaluate how well consumers can recognize greenwashing and its impact on their shopping behaviour. Results indicate a wide knowledge gap in consumers, which causes confusion and distrust towards brands. Furthermore, ethical issues are created since consumers are torn between being in favor of sustainability and not being manipulated. The research emphasizes the imperative to improve regulatory measures, corporate disclosure, and consumer awareness in order to curb the effects of greenwashing and enable ethical consumption.

**Keywords:** *Greenwashing, Ethical, Dilemma.*

### INTRODUCTION

**Greenwashing** is the act of generating a deceptive perception or disseminating inaccurate information about the environmental benefits of a company's products. It involves making unverified claims that mislead consumers into believing that a company's offerings are more environmentally friendly or beneficial to the ecosystem than they actually are.

#### Examples of Greenwashing: Recent Cases

- **Innocent:** insincere TV adverts
- **Keurig:** misleading recycling claims
- **Ikea:** accredited illegal logging
- **Windex:** misleading plastic packing claims
- **H&M:** insincere sustainable fashion claims
- **Hefty:** false representation of the product
- **Ryanair:** false low-emissions claims
- **Luton airport:** airport expansion deception
- **Quorn:** unverifiable carbon-footprint claims
- **Shell:** gaslighting of the general public
- **Unilever:** unclear environmental claims
- **HSBC:** misleading climate ads
- **Lloyds:** misleading LinkedIn ads
- **Delta:** false carbon-neutrality claims
- **Active Super:** misrepresented investment strategy
- **Anglian Water:** concealing pollution
- **Danish Crown:** misleading climate claim
- **TotalEnergies:** deceptive social media competition.

**Ethical** originates from the Greek term *ethos*, which means "moral character." It pertains to individuals or actions that are considered right in an ethical context—characterized by honesty, justice, and truthfulness. Occasionally the term is applied to individuals who adhere to the ethical norms of their profession.



E.g.: An ethical doctor or lawyer does not attempt to exploit the client or patient's bad luck. If something has occurred and you don't know what the right thing to do is, you are experiencing an **ethical dilemma**.

**Dilemma** is a choosing is difficult in a dilemma is when you're faced with a challenging scenario and every possible course of action appears equally unfavourable.

In recent years, the global shift toward sustainability has redefined consumer expectations and corporate responsibilities. As environmental consciousness grows, businesses are under increasing pressure to present themselves as environmentally responsible. In response, many organizations have embraced "green" marketing strategies to appeal to eco-conscious consumers. However, this surge in sustainability claims has also led to the proliferation of *greenwashing*—a practice where companies deceptively promote their products, services, or policies as environmentally friendly without substantiating these claims with genuine efforts or outcomes.

Greenwashing poses a significant ethical dilemma for consumers who strive to make responsible purchasing decisions. While consumers seek to support brands that align with their environmental values, misleading marketing tactics compromise informed decision-making and erode trust. The line between legitimate environmental stewardship and manipulative branding is often blurred, creating confusion and skepticism in the marketplace. Moreover, greenwashing undermines the efforts of genuinely sustainable businesses, distorting competition and potentially slowing progress toward environmental goals.

This study aims to explore the level of consumer awareness regarding greenwashing and examine how this awareness influences their ethical decision-making processes. By investigating consumer perceptions, recognition of greenwashing tactics, and behavioral responses, this research seeks to contribute to a deeper understanding of the challenges posed by deceptive environmental marketing. It also emphasizes the need for clearer regulations, transparency in advertising, and increased consumer education to navigate the ethical complexities surrounding green marketing practices.

## LITERATURE REVIEW

As stated by **Shamdasani, Ong Chon-Lin, G., and Richmond, D. (1993)**, environmentally friendly or green products are typically characterized as those that, in comparison to conventional alternatives, result in reduced environmental damage regarding earth contamination or the exhaustion of natural resources, and/or possess the capability to be preserved or recycled.

From the perspective of consumers, embracing a sustainable lifestyle entails minimizing environmental impact or, preferably, making decisions that contribute positively to the environment. In their efforts to lessen ecological damage, consumers face a variety of options (**Banerjee, S., Gulas, C.S., & Iyer, E., 1995**). Environmental awareness requires ongoing commitment, regardless of the magnitude, to reduce one's ecological footprint.

Greenwashing, according to Greenpeace, is when a business misleads a customer about its environmental policies or the advantages of a product or service for the environment (**Chen & Chang, 2013; Delmas & Burbano, 2011**).

According to the **Manavi, Ashok Sharma & Vinamra Jain (2019)** consumers are aware of the greenwashing strategies employed by businesses, such as the use of terms like "herbal," "organic," and "natural," but they frequently make poor purchasing decisions and become greenwashed as a result. "Green" labels, images, language, and packaging all seem appealing to the modern consumer who is likely to purchase the goods.

Corporate social responsibility, according to **Kadyan (2014)**, requires that businesses answer to all parties involved, including customers, investors, the environment, staff, the community, the government, and the general public. They ought to perform in a way that falls short of the participants' expectations. The "go green" approach is becoming more and more popular among businesses looking to outperform their rivals. Consequently, the ideas of sustainability reporting and green marketing are crucial.

## RESEARCH METHODOLOGY

### (I) Objectives of the Study:

- 1) To study about Greenwashing.
- 2) To find out consumers' level of awareness related to greenwashing.
- 3) To analyze how greenwashing affects the sales of environmentally friendly products.

II) Hypothesis of the Study:

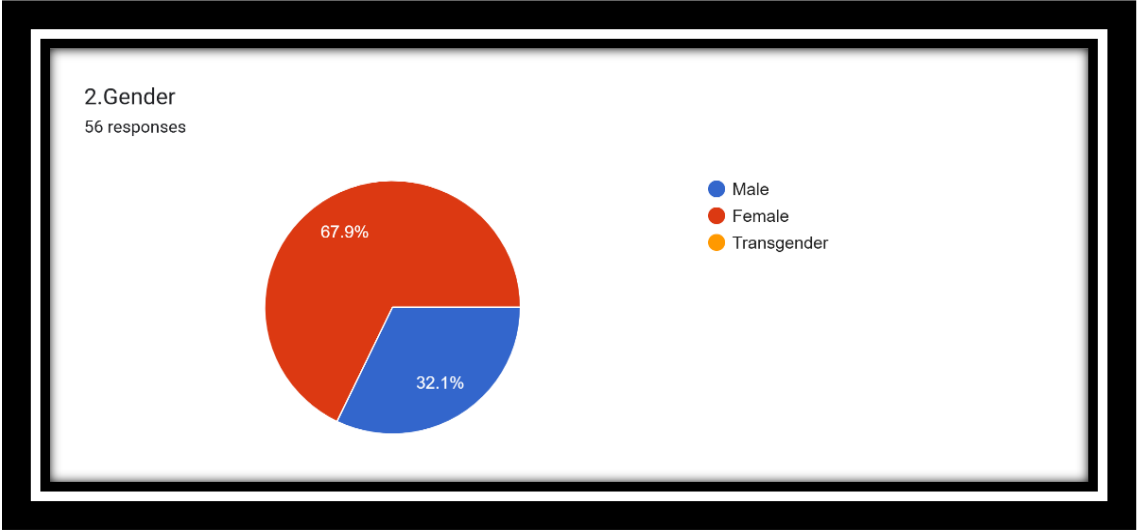
- H0- There is low level of awareness about the concept of greenwashing among consumers.
- H1- There is high level of awareness about the concept of greenwashing among consumers.
- H0- There is no significant impact of greenwashing on the sales of green products.
- H1- There is a significant impact of greenwashing on the sales of green products.

(III) Data Collection:

The primary data used in the study was gathered using Google Forms to administer a survey and questionnaire. People from the Mumbai suburbs provide it. This also contains secondary data that is gathered from online research papers, blogs, websites, e-books, and e-news reports.

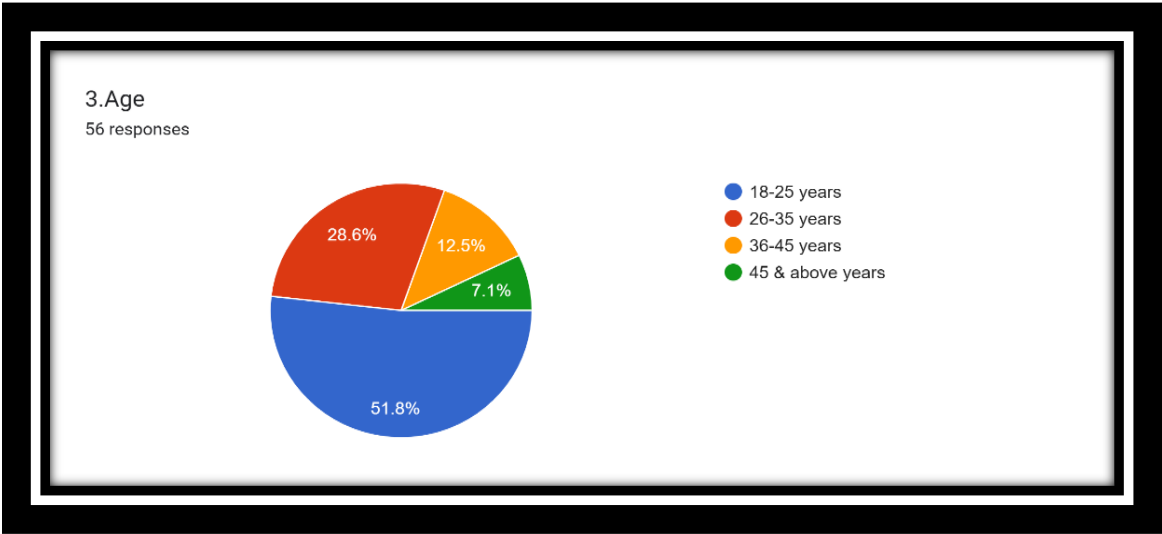
(IV) DATA INTERPRATATION OF THE STUDY

Chart 1: Gender of Respondents



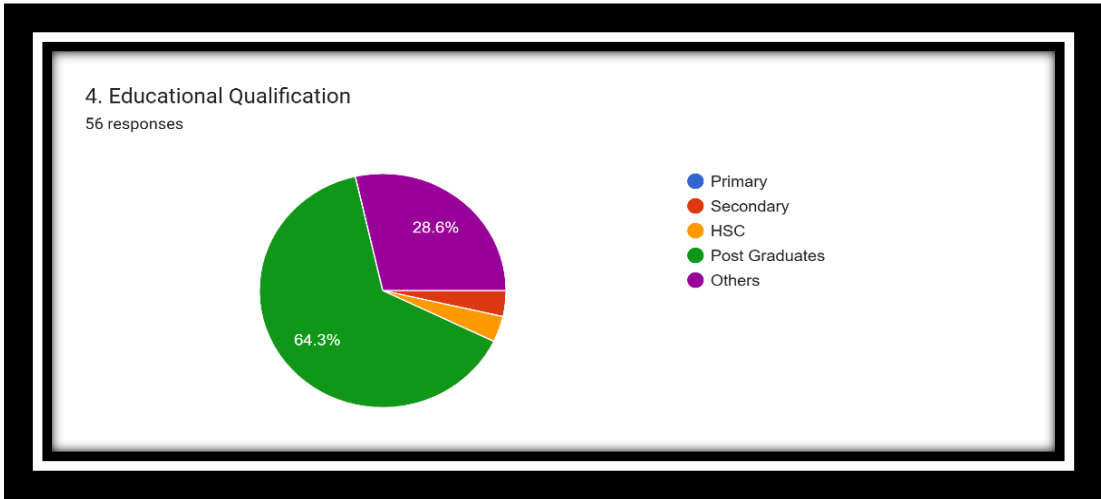
**Interpretation :** As chart number 1 shows, the study has total 56 responses out of which 38 responses is of female and 18 responses of male. The chart shows that majority i.e. 65.2% responses are from females and 34.8% responses are from males.

Chart 2 – Age of Respondents



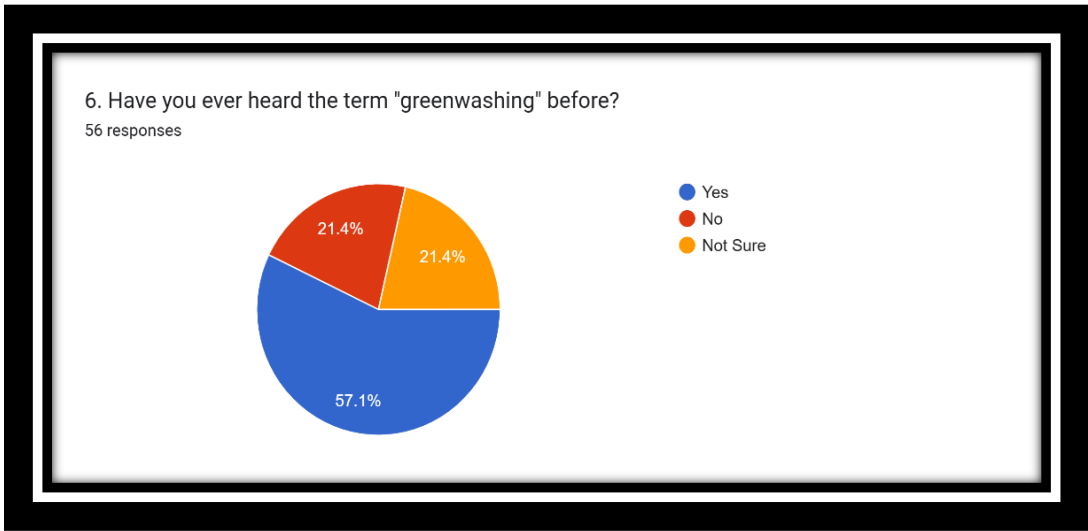
**Interpretation:** Chart 2 indicates that 51.8% of the respondents are aged between 18 and 25 years, while 28.6% fall within the 26 to 35-year age range. Additionally, 12.5% of respondents are aged 36 to 45 years, and 7.1% are 45 years or older. The data reveals that the largest proportion of responses comes from the 18-25 age group, totaling 29 respondents, followed by 16 respondents in the 26-35 age group, 7 respondents in the 36-45 age group, and 4 respondents aged 45 and above.

Chart 3 – Educational Qualification of Respondents



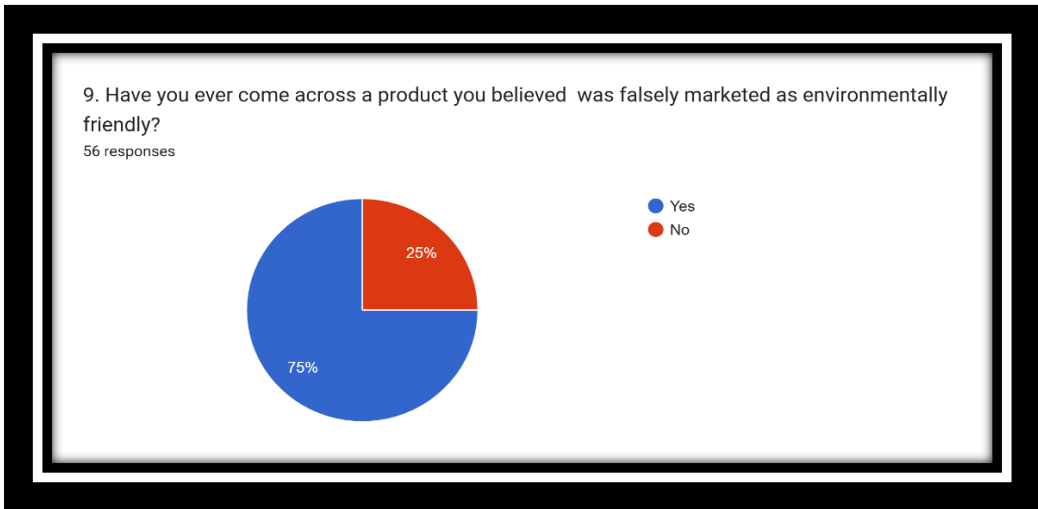
**Interpretation :** Chart 3 shows, Out of all responses, 64.3% respondents are of post graduates followed by 28.6% respondents are of Others, 3.6% respondents are of Secondary and HSC. The chart shows that majority of responses has been received from the post graduates i.e. 36 Respondents.

Chart 4 – Awareness of Green washing



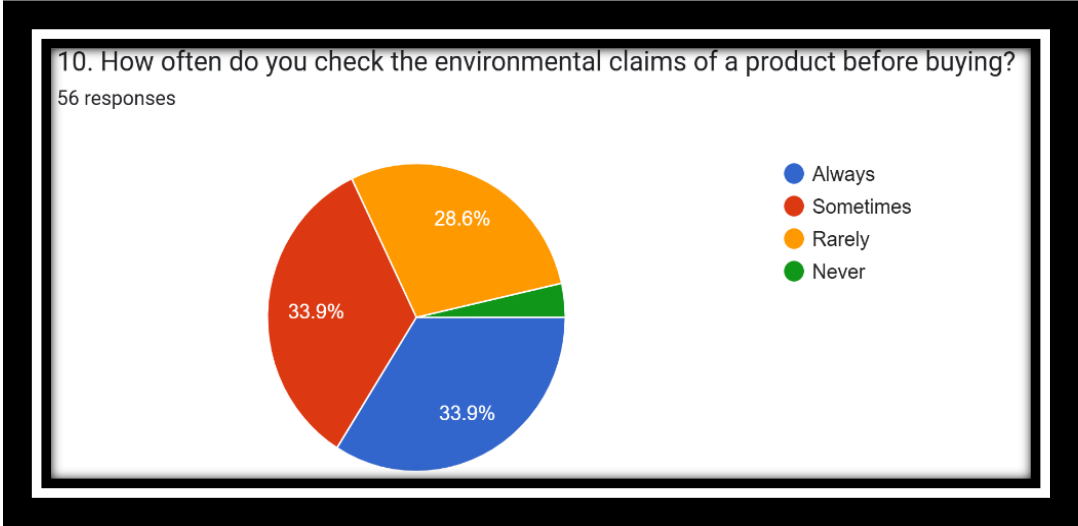
**Interpretation:** As chart number 4 shows, that 32 respondents are aware of Green washing, 12 respondents are not aware of Green washing, 12 respondents are not sure about Green washing. The chart shows that majority of respondents are **aware** of Green washing.

Chart 5 – Experience about falsely marketed environmentally friendly products



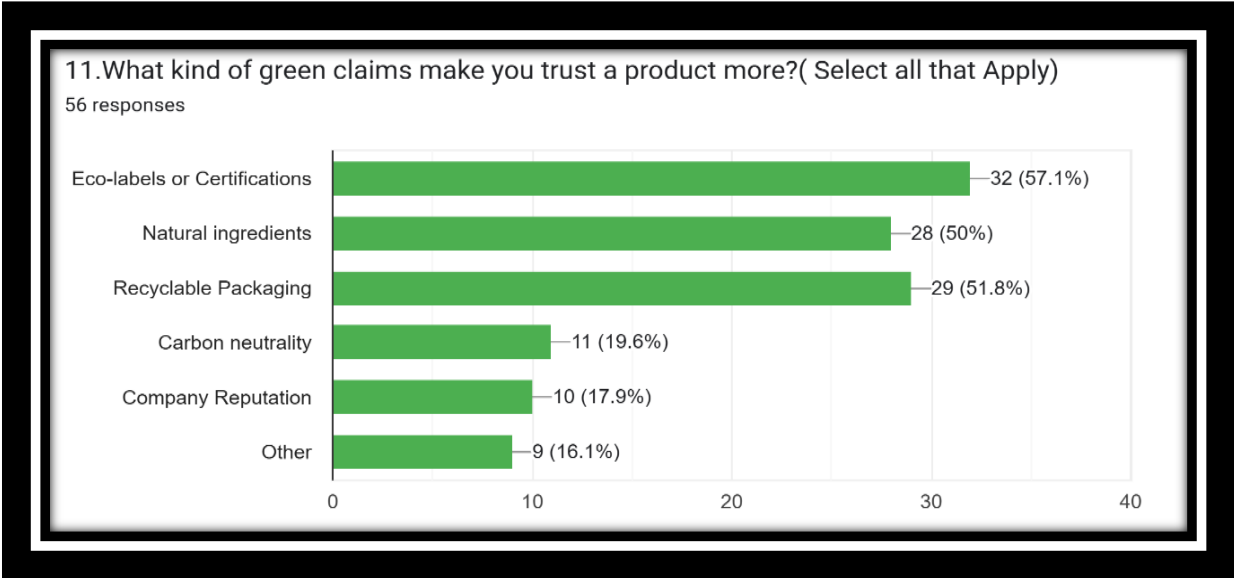
**Interpretation :** Chart number 5 shows that 75% respondents said that Yes they have come across falsely marketed environmentally friendly products and 25% respondents said that No they have not come across falsely marketed environmentally friendly products .The chart shows that majority of respondents have experienced green washing.

**Chart 6- Checking environmental claims before buying the products.**



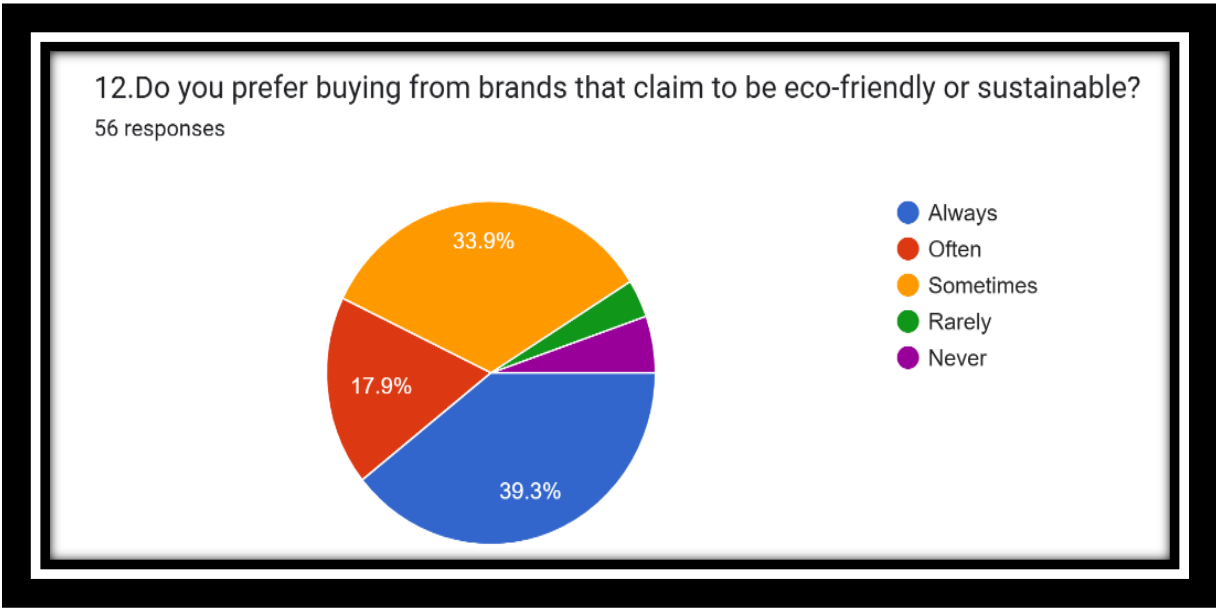
**Interpretation:** Chart 6 shows, that out of 56 respondents,33.9% respondents both always and sometimes check the environmental claims of product before buying it. 28.6% respondents rarely check the environmental claims of product before buying it and 3.6% respondents never check the environmental claims of product before buying it.

**Chart no.7 – Green claims that make you trust more on products.**



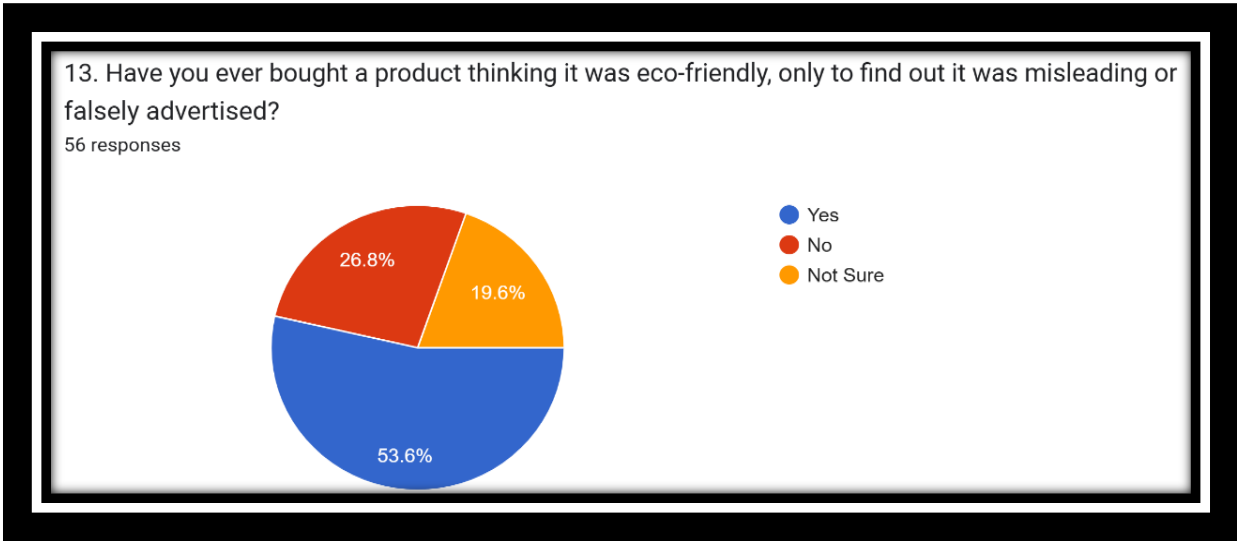
**Interpretation-** Chart 7 shows that 57.1% respondents trust more on green claims like Eco-labels and Certification. 50% respondents trust more on green claims like natural ingredients. 51.8% respondents trust more on green claims like recyclable packaging,19.6% respondents trust more on green claims like carbon neutrality. 17.9% respondents trust more on green claims like company reputation and 16.1% respondents trust more on green claims like others.

Chart 8 – Purchasing from companies that assert their commitment to environmental sustainability.



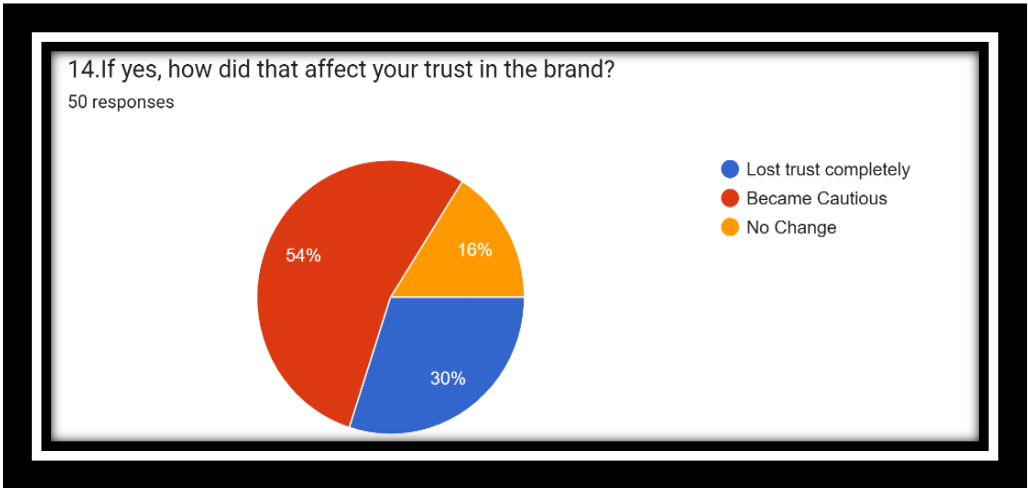
**Interpretation :** Chart no 8 shows that 22 respondents always prefer to buy from brands that claim to be eco-friendly.19 respondents sometimes prefer to buy from brands that claim to be eco-friendly.10 respondents often prefer to buy from brands that claim to be eco-friendly. 2 respondents rarely prefer to buy from brands that claim to be eco-friendly.3 respondents never prefer to buy from brands that claim to be eco-friendly.

Chart 9- Ever purchased a product thinking it was eco-friendly only to find out it was misleading or falsely advertised.



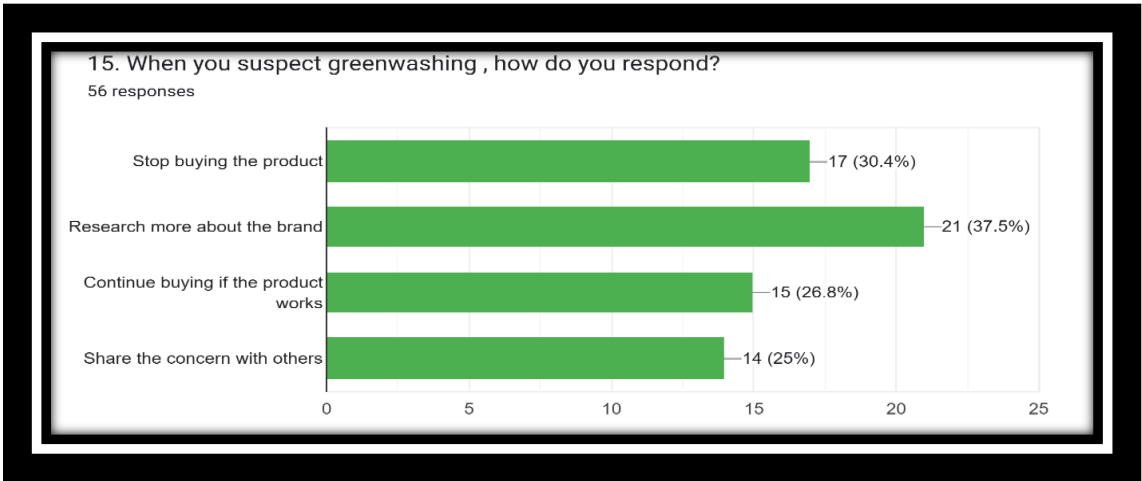
**Interpretation :** Chart 9 shows that,53.6% respondents said Yes they buy a product thinking it was eco-friendly only to find out it was misleading or falsely advertised.26.8% respondents said No they don't buy a product thinking it was eco-friendly only to find out it was misleading or falsely advertised.19.6% respondents says that they are not sure to buy a product thinking it was eco-friendly only to find out it was misleading or falsely advertised.

Chart 10: If Yes, how it affect your trust.



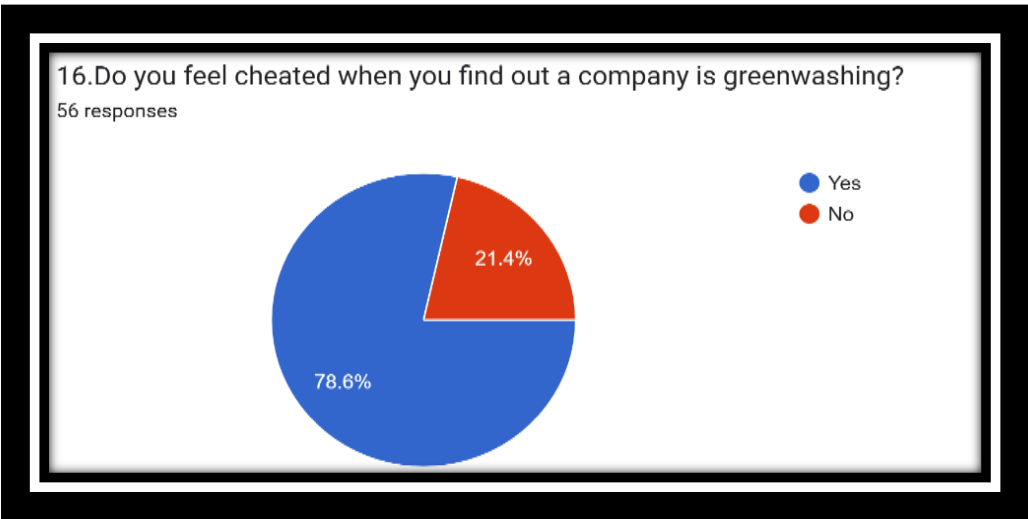
**Interpretation :** Chart 10 shows that 54% respondents says that they became cautious in trusting brand. 30% respondents says that they lost trust completely in trusting brand. 8 % respondents says that no change in their trust in trusting brand.

Chart 11: How do you address concerns regarding potential greenwashing?



**Interpretation :** Chart 11 shows, 37.5% respondents' research more about brand when suspect to Green washing. 30.4% respondents stop buying the product when suspect to Green washing. 26.8% respondents continue buying if product works when suspect to Green washing. 25% respondents share concern with others when suspect to Green washing.

Chart 12: Feel cheated when you find out company is Green washing.



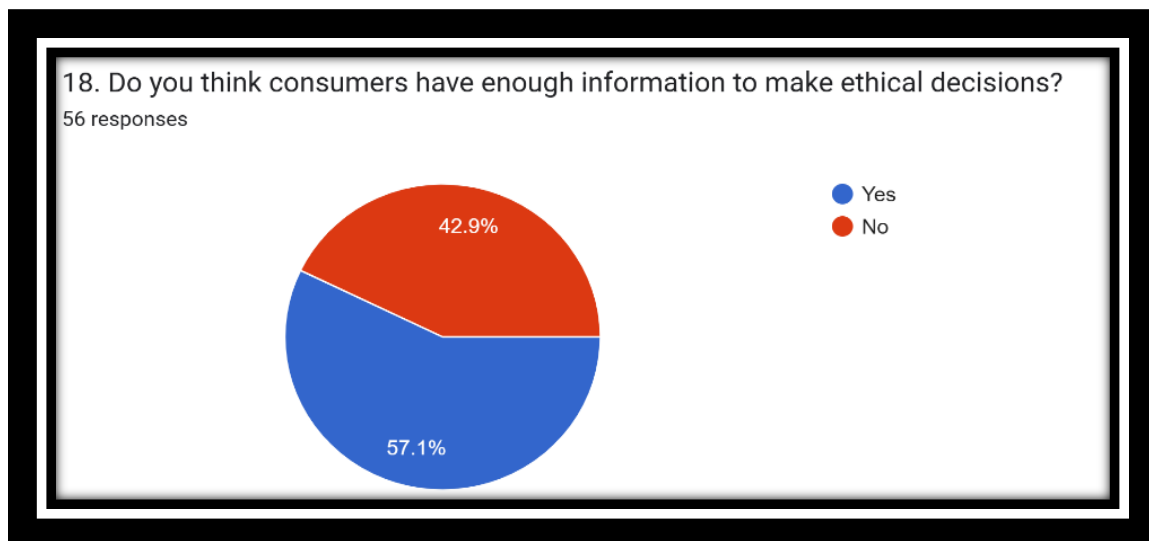
**Interpretation:** Chart 12 shows that, 78.6% respondents says Yes they feel cheated when they find company is Green washing. 21,4% respondents says No they don't feel cheated when they find company is Green washing.

**Chart 13- Stop purchasing from a brand found guilty of Green washing.**



**Interpretation :** Chart 13 shows 44 respondents said Yes they stop purchasing from a brand found a guilty of Green washing. 12 respondents said No they don't stop purchasing from a brand found a guilty of Green washing.

**Chart 14- Our opinion about consumers have enough information to make ethical decision.**



**Interpretation:** Chart 14 shows, out of 56 respondents 57.1% respondents said Yes to they have enough information to make ethical decisions and 42.9% respondents said No to they have enough information to make ethical decisions

## CONCLUSION OF THE STUDY

The study highlights the increasing alarm about greenwashing and its influence on consumer behavior and ethical choice. While there is increasing environmental consciousness, many consumers remain incapable of separating sustainably responsible practices from false marketing.. The ethical dilemma posed by greenwashing lies in the exploitation of consumer trust, as companies capitalize on the growing interest in sustainability to project a misleading image of environmental accountability. As the research finds, while a large majority of respondents are aware of sustainability principles, many are not equipped with the critical awareness necessary to detect greenwashing strategies effectively .From the study it is observed that **Hypothesis (H1) is accepted.** **There is high level of awareness about the concept of greenwashing among consumers. There is a significant impact of greenwashing on the sales of green products. Null hypothesis (H0)is rejected.** There is low level of awareness about the concept of greenwashing among consumers.

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There is no significant impact of greenwashing on the sales of green products.

To counteract this problem, there is a critical need for better consumer education, more rigid advertising standards, and increased corporate transparency. Providing consumers with the ability to analyze environmental claims in a critical light can limit the impact of greenwashing and drive more responsible consumption habits. Fighting greenwashing, however, is not merely a consumer imperative but one that must be undertaken as a group—requiring effort from businesses, regulators, and society at large.

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**STUDY ON THE INFLUENCE OF CELEBRITY ENDORSEMENT OVER THE PERCEPTION AND PURCHASE INTENTION OF COLLEGE STUDENT IN MUMBAI**

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**Mrs. Manisha Waghela**

DTSS College of Commerce, Malad East, Mumbai- 400097

**ABSTRACT**

*Celebrity endorsements have become a powerful marketing strategy, influencing consumer perceptions and purchase intentions across various demographics. This study examines the impact of celebrity endorsements on college students in Mumbai, exploring how these endorsements shape their attitudes towards brands and affect their purchasing decisions. Using a mixed-methods approach, the research collects primary data through questionnaire to analysis their responses to celebrity-endorsed advertisements. The findings suggest that students are more likely to develop positive brand associations and exhibit higher purchase intentions when a brand is endorsed by a celebrity they admire. Factors such as credibility, attractiveness, and the relatability of the celebrity play a crucial role in shaping consumer attitudes. However, the study also highlights potential limitations, including skepticism towards endorsements and the influence of peer opinions. Understanding these dynamics can help marketers refine endorsement strategies to better engage young consumers in Mumbai's dynamic market landscape.*

*Currently the use of famous stars or cricketers advertising for different companies has become a trend and also become a compulsory for corporate image building and product marketing It can create link with the actors or stars appeal thereby adding new to the brand image The celebrity endorsement business has become a more successful industry. Companies spend lot of money in hiring celebrities from film industry and sports for endorsing products Competition for hiring high notched celebrity increasing among the companies and so also the remuneration paid for the celebrities for endorsement is The economic benefits and other benefits associated with the celebrity endorsements have to be gauged Since the attitude of the students towards celebrity endorsement is quite different from that of those who belong to the developed countries like U.S.A,U.K etc view of college students about celebrity endorsement is a concern for the firms targeting new generation market Hence this study s objectives were to find the association between demographic attributes and buying behaviour of consumers and to analysis the consumers view of cricket and film industry celebrity endorsement and to determine the influence of Cricket and film celebrities on purchase intention of costumers.*

**Keywords:** celebrity endorsement, consumer behavior.

**INTRODUCTION**

In today's highly competitive and dynamic market, brands continuously seek innovative strategies to capture consumer attention and influence purchasing behaviour. One of the most prominent and widely used marketing techniques is **celebrity endorsement**. Celebrities, owing to their popularity, credibility, and aspirational appeal, can significantly impact consumer attitudes toward a brand or product. Particularly among the youth demographic, celebrities often serve as role models whose preferences and endorsements can sway opinions and drive purchase intentions.

Mumbai, being one of India's most vibrant metropolitan cities and a hub of media and entertainment, presents a unique and diverse sample of college students who are constantly exposed to celebrity culture. This demographic is not only tech-savvy and brand-conscious but also highly susceptible to the influence of popular culture, including endorsements by film stars, sports icons, and social media influencers.

This study aims to explore how celebrity endorsements affect brand perception and purchase intention among college students in Mumbai. It will investigate factors such as the credibility of the celebrity, the relevance of the celebrity to the product, and the emotional and psychological impact endorsements have on young consumers. Understanding these dynamics can provide valuable insights for marketers in crafting effective advertising campaigns targeting this segment.

**REVIEW OF LITERATURE**

MCCRACKEN (1989) PROPOSED THE MEANING TRANSFER MODEL, WHICH SUGGESTS THAT CELEBRITIES CARRY SPECIFIC CULTURAL MEANINGS AND PERSONAL TRAITS THAT ARE TRANSFERRED TO THE PRODUCT THROUGH ENDORSEMENT. WHEN CONSUMERS ADMIRE OR RELATE TO A CELEBRITY, THEY ARE MORE LIKELY TO ASSOCIATE THOSE POSITIVE TRAITS WITH THE BRAND BEING ENDORSED.

OHANIAN (1990) DEVELOPED THE CELEBRITY ENDORSER'S CREDIBILITY MODEL, IDENTIFYING THREE KEY DIMENSIONS THAT AFFECT ENDORSEMENT EFFECTIVENESS: ATTRACTIVENESS, TRUSTWORTHINESS, AND

EXPERTISE. THESE FACTORS HEAVILY INFLUENCE HOW THE MESSAGE IS PERCEIVED BY THE TARGET AUDIENCE, PARTICULARLY AMONG IMPRESSIONABLE CONSUMERS SUCH AS COLLEGE STUDENTS.

ERDOGAN (1999) EMPHASIZED THE CONCEPT OF SOURCE CREDIBILITY AND ITS DIRECT INFLUENCE ON CONSUMER ATTITUDES. HIS STUDY SHOWED THAT A CELEBRITY WHO IS PERCEIVED AS CREDIBLE AND TRUSTWORTHY CAN SIGNIFICANTLY ENHANCE A BRAND'S IMAGE AND ENCOURAGE PURCHASE BEHAVIOUR.

ROY AND BAGDARE (2015) CONDUCTED RESEARCH IN THE INDIAN CONTEXT, HIGHLIGHTING HOW THE EMOTIONAL CONNECTION BETWEEN CELEBRITIES AND INDIAN YOUTH PLAYS A CRITICAL ROLE IN FORMING BRAND PERCEPTIONS. IN CITIES LIKE MUMBAI, WHERE YOUTH ARE HIGHLY EXPOSED TO MEDIA AND CELEBRITY CULTURE, THIS EFFECT IS PARTICULARLY PRONOUNCED.

## RESEARCH METHODOLOGY

### 1. Objectives of the Study

- To examine the impact of celebrity endorsement on brand perception among college students in Mumbai.
- To analysis how different attributes of a celebrity (e.g., trustworthiness, attractiveness, expertise) influence students' purchase intentions.
- To understand the psychological and emotional connection between college students and their favourite celebrities and how this affects consumer behaviour.

### 2. Hypothesis

**H0:** Celebrity endorsement has no significant impact on brand perception among college students in Mumbai.

**H1:** Celebrity endorsement has a significant impact on brand perception among college students in Mumbai

**H0:** Celebrity attributes has no significant influence on students purchase intention.

**H1:** Celebrity attributes has significant influence on students purchase intention.

**H0:** There is no significant relationship between the psychological and emotional connection college students have with their favourite celebrities and their consumer behaviour.

**H1:** There is a significant relationship between the psychological and emotional connection college students have with their favorite celebrities and their consumer behavior.

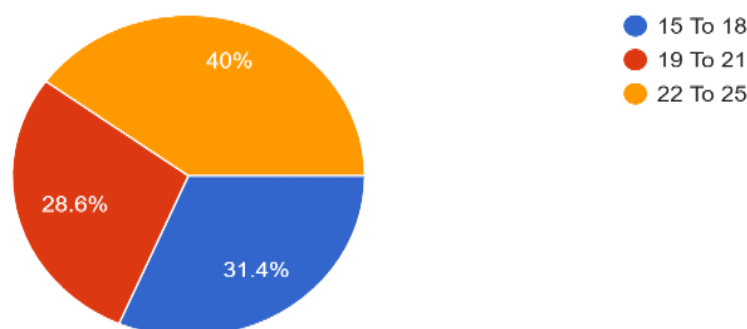
**3. Data collections:** The primary data used in the study was gathered using Google Forms to administer a survey and questionnaire. students from the Mumbai suburbs provide it. This also contains secondary data that is gathered from online research papers, blogs, websites, e-books, and e-news reports.

## 4. DATA INTERPRETATION OF THE STUDY:

**Chart 1:** It contains name of respondent list.

**Chart 2:** Age of respondent

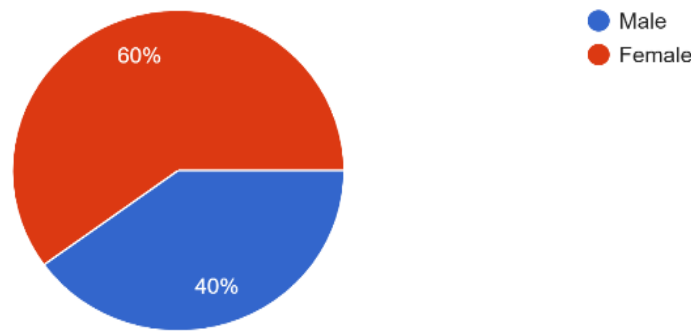
2.Age of student  
35 responses



**Interpretation:** Chart 2 shows, the study has 40% respondents between the age of 15-18 years, 28.6 respondents between the age of 19-21 years, 31.4% respondents between the age of 22-25 years. The chart shows that majority of responses are from the age group of 15-18 years.

Chart 3: Gender

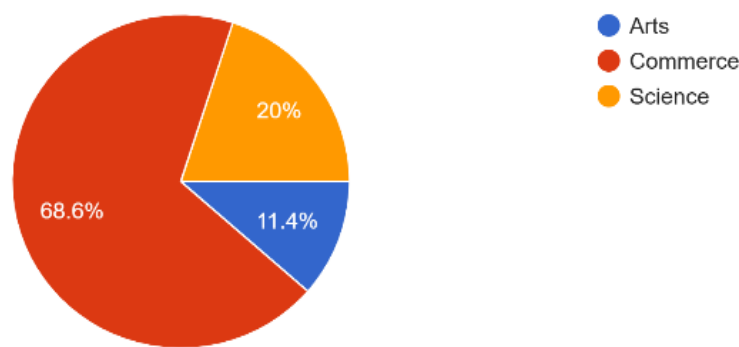
3. Gender  
35 responses



**Interpretation:** As chart number 3 shows, the study has total 35 responses out of which 21 responses is of female and 14 responses of male. The chart shows that majority i.e. 60% responses are from females and 40% responses are from males.

Chart 4: Stream

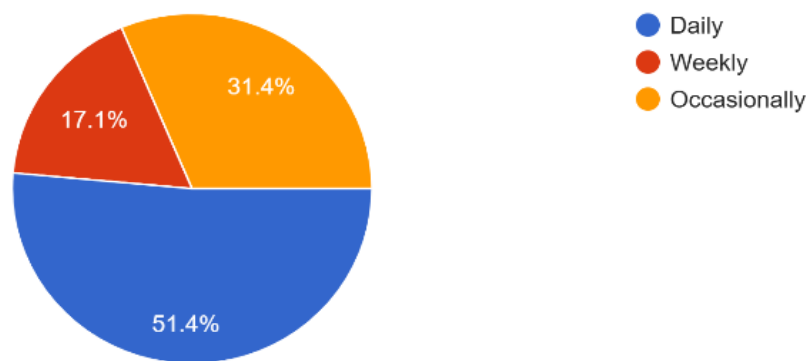
4.Stream  
35 responses



**Interpretation :** As chart number 4 shows, the study has total 35 responses out of which 68.6% responses is of Commerce, 20% responses of science and 11.4% is of Art.

Chart 5: Do you watch advertisements or promotional content

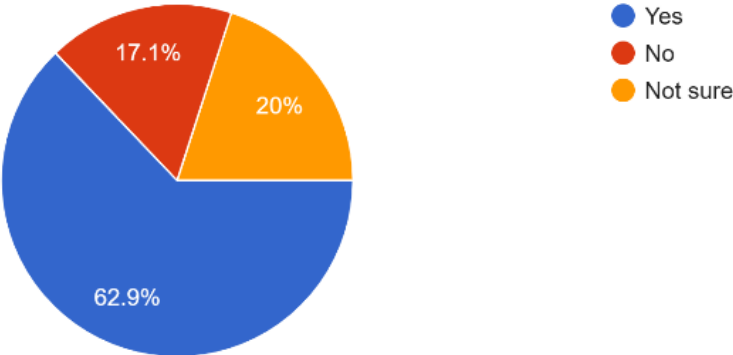
5. How often do you watch advertisements or promotional content?  
35 responses



**Interpretation :** As chart number 5 shows, the study has total 35 responses out of which 51.4% responses shows daily advertisement and promotional content, 31.4% is weekly and 17.1 shows occasionally.

**Chart no: 6** Celebrity endorsements used to make products or brands more attractive

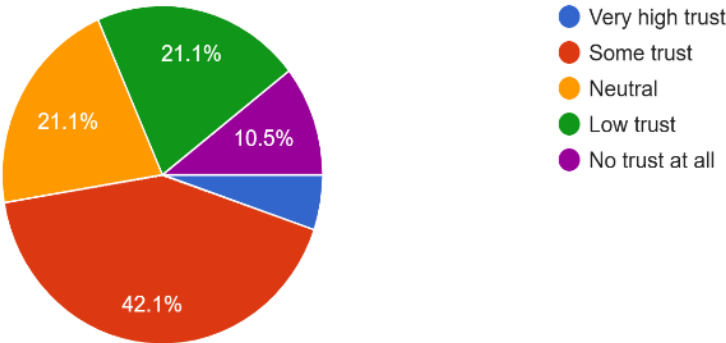
6.Do you think celebrity endorsements make products or brands more attractive?  
35 responses



**Interpretation :** As chart number 6 shows, the study has total 35 responses out of which 62.9% responses shows Yes responses and 20% is Not sure and 17.1% is given responses No

**Chart no.7** trust do you place in a product or brand when a celebrity endorses it

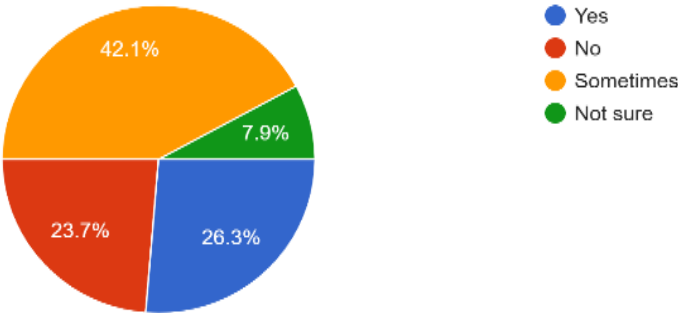
7.How much trust do you place in a product or brand when a celebrity endorses it?  
38 responses



**Interpretation :** As chart number 7 shows, the study has total 42.1% respondent have some trust, 21.1% has low trust and 21.1% has neutral, 10.5% respondent has no trust at all and 5.2% respondent has no trust at all.

**Chart no.8** celebrity endorsements correctly represent the quality of the products which they promote

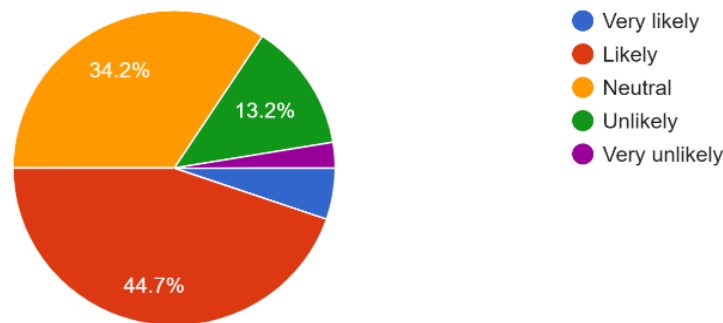
8.Do you believe that celebrity endorsements accurately represent the quality of the products they promote?  
38 responses



**Interpretation :** As chart number 8 shows, the study has total 42.1% respondent have some trust, 21.1% has low trust and 21.1% has neutral, 10.5% respondent has no trust at all and 5.2% respondent has no trust at all.

Chart no 9 buy a product based on a celebrity endorsement

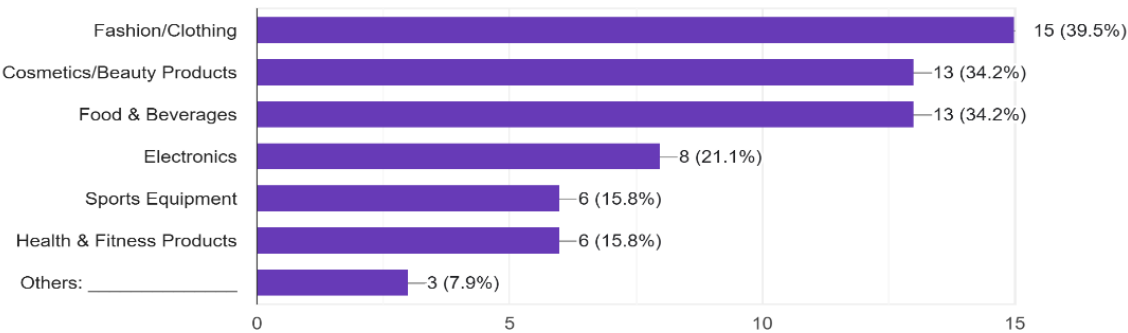
10.How likely are you to buy a product based on a celebrity endorsement?  
38 responses



**Interpretation :** As chart number 9 shows, the study has total 44.7% respondent have likely to buy product based on celebrity endorsement 34.2% are neutral and 13.2% are unlikely buy a product on a celebrity endorsement.

Chart no 10: product buying depends on a celebrity endorsement

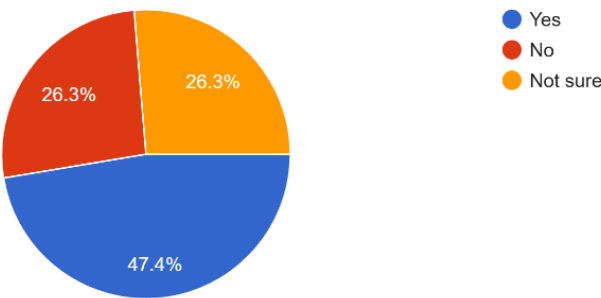
12.What type of products are you most likely to purchase based on a celebrity endorsement?  
38 responses



**Interpretation:** As chart number 10 shows, the study has total 39.5% respondent are likely to purchase Fashion/clothing product,34.2 % are cosmetics/beauty product,34.2 also has the same percentage like cosmetics/beauty product, 21.1% are electronics and sports equipment and health and fitness product a is same that is 15.8 and other product is 7.9 %.

Chart no: 11 Celebrity endorsements should be regulated more strictly to prevent misleading advertising?

18.Do you think celebrity endorsements should be regulated more strictly to prevent misleading advertising?  
38 responses



**Interpretation :** As chart number 11 shows, the study has total 47.4% respondent are likely to regulate more strictly to prevent misleading advertising and 26.3 % are same percentage for misleading and non-misleading advertisement.

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**CONCLUSION OF THE STUDY**

This study set out to explore how celebrity endorsements impact brand perception and purchase intention among college students in Mumbai — a demographic that is youthful, digitally active, and heavily influenced by media and popular culture. The findings clearly indicate that **celebrity endorsements do play a significant role** in shaping consumer attitudes and buying behavior within this segment.

It was observed that **celebrity attributes such as trustworthiness and expertise** have a strong influence on students' purchase decisions, more so than mere physical attractiveness. The effectiveness of an endorsement was further enhanced when there was a **clear and logical match between the celebrity and the product**, reinforcing the concept of celebrity-product congruence.

The emotional and psychological connection between students and their favorite celebrities also emerged as a key driver of purchase intention. Brands that tap into these emotional associations tend to have better recall and engagement among youth consumers.

In conclusion, celebrity endorsement — when done strategically and authentically — is an effective marketing tool for influencing the **perceptions and buying decisions of college students in Mumbai**. However, marketers must be mindful of relevance, overexposure, and the evolving influence of digital platforms in order to maintain credibility and effectiveness.

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  - c. **Key Concept:** Meaning Transfer Model – celebrities transfer meaning to brands.
3. **Kotler, P., & Keller, K. L. (2016)**
  - o **Book:** *Marketing Management* (15th Edition)
  - o **Publisher:** Pearson Education
  - o **Key Concept:** Branding strategies, consumer behavior, celebrity influence in advertising.

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**A STUDY ON PUBLIC PRIVATE PARTNERSHIP MODEL IN SPORTS: A MODEL FOR SUSTAINABLE DEVELOPMENT IN INDIA**

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**Mr. Sunder Singh**

DTSS College of Commerce (Autonomous) University of Mumbai/India

**ABSTRACT**

*India's dream of becoming a sports nation in coming years is a significant challenge due to inadequate infrastructure, insufficient funding, and limited access to quality training facilities, especially at the grassroots level. These challenges call for innovative and collaborative approaches as compare to traditional root of led-government model. However, the recent success of Indian athletes who performed remarkable at olympics, Paralympic and ICC tournament has been attributed to the collaboration of government and private companies in the sports ecosystem. India is a fast developing country in the world because of this feature the private companies are ready to works with government in Indian sports sector like JSW, Indian Oil, Reliance Co. and ONGC. The Public private partnership model in sports have great contribution to creates economic growth and social development in India. This Public Private Partnership (PPP) model has emerged as a strategic approach to bridge the gap between public goals and private efficiency. This study focus on the potential of the PPP model as a transformative framework for encouraging and promoting sustainable development in the Indian sports sector. This paper is also study the policy frameworks such as the National Sports Development Code and the role of organizations like the Sports Authority of India (SAI) in facilitating such partnerships.*

**Keywords:** Indian Sports, Public Private Partnership (PPP) model, Economic growth, Policy Implementation, Social development

**INTRODUCTION**

Sports is one of the crucial sector to encourage and motivate our youth. Actively carrying out sports activities can helps to maintain and improve the quality of life, improve public health, prevent diseases and unite the people in our society. Sports is one the important area becoming a priority direction of national policy. In 21<sup>st</sup> century when government have limited resources and the public demand are increasing today than government should tie up and cooperate with private sector to produce goods and services and uses Public Private Partnership model in sports. Public Private Partnership is the cooperation and collaboration of public and private sector come together to create more opportunity in our ecosystem. This Public Private Partnership (PPP) model need as a viable solution to revolutionize the sports ecosystem in India. PPP model are strengthening to both public and private sector functions. Due to collaborative model lots of an opportunities can be open in our ecosystem like build new infrastructure and redevelopment of stadium (Indira Gandhi stadium), training academy and sports complex. Also the number of participants can be increase from every regions and good quality of infrastructure or fitness can be improves through this PPP approach. It ensure better resources allocation, timely project delivery and work on good quality of service. This PPP model can promote sustainable development in the Indian sports sector. To ensure the operational efficiency of PPP project is not a matter of a one party but the collective of all the stakeholders in the PPP model. However the implementation of PPP model is not possible without challenges in our ecosystem. Issues like lack of long term plan, policy gap in execution and inefficiencies in works Therefore, it is required to study the dynamics of Public Private Partnership approach in Indian sports.

**LITERATURE REVIEW**

- ❖ **Vijay Krishnamurthy (2021):** This paper analysis the recent achievements of Indian athletes at the Paris and Tokyo Olympics & Paralympic in has great achievement to the collaboration of various stakeholders. Under this research paper the three aspects covered like global perspective Indian context and Odisha PPP model. In this paper the researcher special focus on Odisha state growth and development through PPP model in sports sector. According to this paper the PPP model have completed 7600 projects under National Infrastructure Pipeline (NIP) across the country in Indian states. Recent success story of Odisha state related to good number of sports facilities are provided to athletes with the help of this PPP model.
- ❖ **Parvez Shamim (2020):** This research paper analysis of sports management model in India which accepted by the both sectors under the Public Private Partnership model and these respective models are public, private and non profit. In this pap Some case study covered based on these three distinct model by the author also covered achievement and challenges faced by PPP model in India. This is study evaluate the governance, performance and financial framework of these sectors .

- ❖ **Yin fang, Pengfei He** (2020) : This paper studied the cooperation of public and private sector and it mainly emphasis on stakeholder analysis. In this paper the assumptions of stakeholder is to compare the interest of different levels of stakeholder to understand stakeholder problem and the role of development in the sports field.
- ❖ **Mindaugas Gobikas** ( 2021) : This paper analysis the Public Private Partnership model in youth sports delivery and through this article contributes to the growing body of academic understanding about how partnerships in youth sport programs work by providing the perceptions of public institutions towards PPP. In this paper one of the important written by author that is to construct local government's comprehension regarding their partnerships with private sport program providers. Also revealed that the Indian athletes delivery system government should consider private sector representative as partners with whom they share mutual goals.
- ❖ **Economics Times Bureau** (2022) This article revealed the development in sports complex and infrastructure facilities to athletes because recently our PM Narendra Modi laid the foundation stone of Major Dhyan Chand sports University in Meerut, UP and Birsa Munda hockey men's stadium foundation stone laid by Naveen Patnaik. Also the rewards to be gained in having real professionally-minded stakeholders in Indian sports running India's sporting ecosystem, through public-private partnership (PPPs) model, should be the road ahead.
- ❖ **NITI AAYOG** – This report highlighted the works with cooperation between public and private sector and reveals the significant role of PPP model towards redevelopment of Indira Gandhi complex in Delhi. Also laid the foundations of new sports complex in respective states of India for instance in Uttar Pradesh, Odisha, Haryana, Maharashtra and in other states too.

## RESEARCH METHODOLOGY

### Objective of the Study

1. To study the role of Public Private Partnership in development of sports infrastructure in India.
2. To examine government policies and framework that facilitate Public Private Partnership in Indian sports sector.
3. To analyze the effectiveness of Public Private Partnership in promoting grassroots sports and talent development
4. To study some recent policy and case studies of PPP model initiatives in Indian sports ( e.g. league, like IPL, sports academy and ICC tournament)

### DATA COLLECTION

The study is based on Secondary Data which is collected from websites, article, online research papers and reports.

| Policy related to sports                             | Year & Organization   | Impact & benefits   |
|--|---|---|
| 1. Corporate sponsorship & athletes adoption program | <ul style="list-style-type: none"> <li>• 2014- Target Olympics podium scheme &amp; Ministry of youth affairs and sports</li> </ul>        | <ul style="list-style-type: none"> <li>• To provide Financial support</li> <li>• To create better infrastructure</li> <li>• To provide Professional management</li> <li>• To Improve performance of players/ athletes</li> </ul>  |
| 2. High performance training Centre                  | <ul style="list-style-type: none"> <li>• 2018- Sports Authority of India &amp; Khelo India &amp; Target Olympics podium scheme</li> </ul> | <ul style="list-style-type: none"> <li>• To providing Scientific and advanced training to our Indian athletes</li> <li>• To encourage access to expert support staff for better performance of our sports participants</li> </ul> |



|                                    |   |  |
|------------------------------------|---|--|
| 3. Sports league development       | <ul style="list-style-type: none"> <li>2008- BCCI &amp; Private Companies ( includes TATA, Pepsi, Vivo)</li> </ul>          | <ul style="list-style-type: none"> <li>To create professionalization sports in our ecosystem</li> <li>To easily access of financial growth and investment like in Indian Premier League (IPL of men's and women in India)</li> </ul> |
| 4. Integration of PPP Models       | <ul style="list-style-type: none"> <li>2010 – 2012 ONGC , India Railway, Air India, Reliance , JSW, Adani, TATA</li> </ul>  | <ul style="list-style-type: none"> <li>The National sports policy has emphasized the Public Private Partnership (PPP) framework to increases the funding and boost the sports activities for our Indian athletes.</li> </ul>         |
| 5. Khelo India Scheme Enhancements | <ul style="list-style-type: none"> <li>2021-2026 Sports Authority of India &amp; Reliance foundation, JSW , TATA</li> </ul> | <ul style="list-style-type: none"> <li>This scheme incorporates the PPP model to creates sustainable sports infrastructure to our participation. Khelo India are providing great opportunity to our Indian youth.</li> </ul>         |

Recently India has targeted advanced commitment to improve or boost the sports infrastructure and these developments through Public Private Partnership (PPP) model as revealed in the draft National sports policy 2024. NSP work in alignment with New Education Policy is good for upcoming youth in India.

#### Key objective

- To Organize sports competitions and leagues at various levels also creating a robust competitive structure.
- To Establish sports as a viable career option for youth.
- To Provide athlete-centric support systems for the holistic development of sportspersons.
- To Encourage huge number of participation in sports and fitness activities for a healthier nation.

#### There are various initiatives has taken under Public Private Partnership (PPP) model like:

- 1) Sports Authority of India ( SAI's ) Scheme- Under this scheme, private companies and PSU's can adopt academies, sports facilities and athletes. For instance JSW, Indian Oil , ONGC are providing sponsorship to all athletes and supporting smart training through PPP approach.
- 2) State level PPP initiative – Recently Odisha is a good exam to consider as a model state using PPP model. This model helps to collaborated Odisha government with Tata steel, JSW and hockey India to set up world class facilities in Birsa Munda Stadium and others too.
- 3) Corporate sponsorship and leagues- The PPP approach is playing vital role not only as fitness of athletes but proper training towards participation. Indian premier league (cricket), India super league ( football), Pro Kabaddi and ultimate table tennis (table tennis) are franchised sports league based on Public Private Partnership model.
- 4) FIT India Movement ( CSR & Private Participation ) – This initiative are encouraging companies to use CSR funds for sports growth and development. Companies be part as partners with colleges and schools to build sports infrastructure and organize events time to time.
- 5) Target olympics podium scheme (TOPS) Corporate involvement -TOPS is a government led initiative but it includes private partnership with foundation like Go sports foundation , JSW and Olympic gold quest ( OGQ). These organizations provide physical support to athletes, coaching and international exposure in. Partnership with youth affairs and sports.

Thus the Public Private Partnership model in Indian sports is helping to increases the number of grassroots participation, bridge the infrastructure gap and can revolutionize the sports sector to sports country like Australia and other developed nations in upcoming time.

#### CONCLUSION

This is clearly depict the collaborative and cooperation of two organization as a transformative force in the Indian Sports. This corporation of public private partnership has been contributing significantly to the creation of world class facilities, talent identification system as well as superior training facility is providing across the

country. In Indian Sports initiative such as Khel MahaKumbh in Gujarat, mission youth Olympics in Maharashtra, Amrutha sports adoption policy in Karnataka, chief minister trophy in Tamilnadu and play Punjab in Punjab. Also recently held 44<sup>th</sup> chess Olympiad and women's Asian championship trophy 2024 held in Rajgir Sports complex in Nalanda are highlighting the effectiveness of PPP model. Achieving the ambitious goals outline by the PPP model in 21st century will require a unified effort from all relevant stakeholders because different stakeholders have a different challenges in PPP project. There should be balance interaction of both sectors to achieve economic and social goal.

The above study has its limitation especially from the Indian context because still we are developing country and highest populous country in the world. So We need to require this PPP model to boots our infrastructure facilities and development in our Indian sports. India's dream of sports nation can be fulfill if we will work with cooperation and collaboration through PPP approach. Therefore the government should finding from infrastructure PPP project as a portfolio rather than considering opportunity only on the basis of individual project.

## **WEBLIOGRAPHY**

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**EFFECT OF BEACH TRAINING PROGRAMME ON SPEED OF KHO-KHO PLAYERS****<sup>1</sup>Aman Gupta and <sup>2</sup>Dr. J. M. Hotkar**<sup>1</sup>Scholar, M.P.Ed, Student of B.P.C.A's College Of Physical Education Wadala, Mumbai<sup>2</sup>Research Guide, Assistant Professor in B.P.C.A's College Of Physical Education, Wadala, Mumbai**ABSTRACT**

*This research examines the effects of a beach training program on the speed of male Kho Kho athletes, a sport characterized by its demand for agility and swift movements. A cohort of fifty male participants was divided into two groups: an experimental group that engaged in a systematic beach training program and a control group that did not receive any training. The study utilized a pre-test and post-test framework to evaluate speed performance prior to and following the training intervention. One-way ANCOVA was employed for statistical analysis to determine the effectiveness of the training. The results revealed a notable enhancement in speed within the experimental group when compared to the control group, yielding an F-value of 14.869 at a significance level of 0.01. These findings indicate that the implemented beach training program significantly improves speed and overall physical fitness, which are crucial for enhanced performance in Kho Kho. The conclusions drawn from this study underscore the potential benefits of beach training in augmenting the athletic performance of Kho Kho players*

**Keywords:** Beach Training Program, Speed, Kho Kho Athletes, Agility, Experimental Group, Control Group, , Statistical Analysis, One-Way Ancova, Athletic Performance,, Significance Level.

**IMPORTANCE OF STUDY**

Speed is a crucial attribute in the sport of Kho Kho. Kho Kho is a traditional Indian sport that emphasizes agility, quick decision-making, and rapid movements. Speed plays a significant role in various aspects of the game:

Speed is integral to the success of a Kho Kho player. It influences a player's ability to chase, evade, strategize, make quick decisions, coordinate with teammates, and maintain physical fitness. Developing and honing speed skills can significantly enhance a player's performance in the game.

**Objective of the Study**

To study the effect of beach training programme on speed of boys.

**METHODOLOGY****Selection of the Sample**

A sample of fifty (n=50) male students belonging to selected was be randomly from divided into two equal groups. Which is:-

Group 'A' - Experimental group (n=25)

Group 'B' - control group (n=25)

**DETAILS OF TRAINING PROGRAMME**

| Training program        | Times     |
|-------------------------|-----------|
| Warm up                 | 15 minute |
| Beach training          | 35 minute |
| Limbering down exercise | 10 minute |
| Total                   | 60 minute |

**DESIGN OF THE STUDY****Experimental Method**

The present study was conducted by adopting pre test and post test and controlled group design. the experimental method of research design.

**Statistical Analysis of Speed**

Since, there were two groups for this Experimental study viz. Beach Training Group and control group, wherein the researcher has decided to compare the change in mean scores of pre-test and post-test of Judo Training Group and control group in order to see the efficacy of Experimental treatment, One way ANCOVA test was appropriately used for the data analysis.

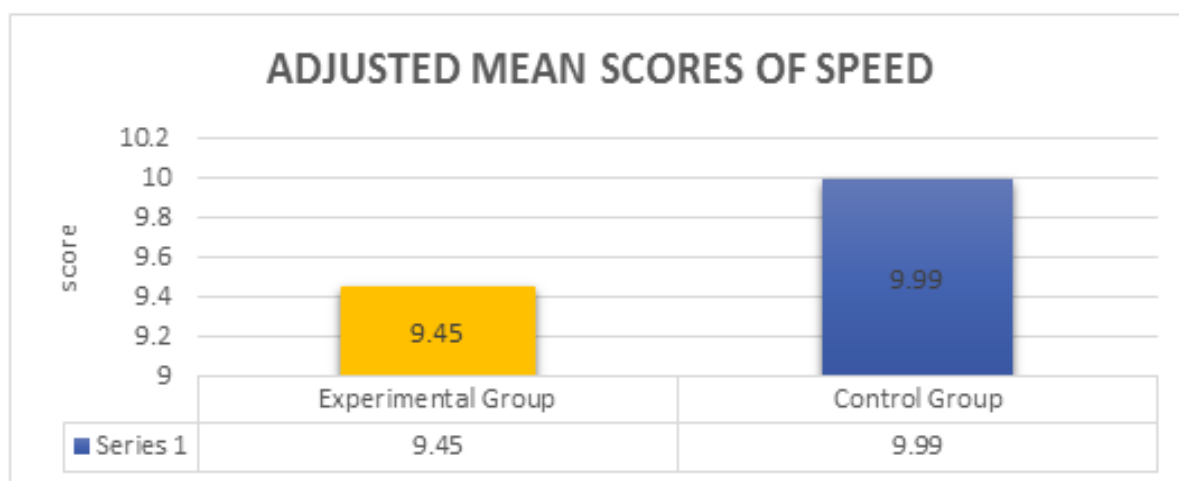
The analysis of the data collected by the researcher, before and after the training intervention has been presented in this chapter. The data is analyzed by ANCOVA. Change in mean scores of pre and post-test of Judo Training Group and control groups comparison was done by one way ANCOVA. The data is presented, analyzed and interpreted in the following manner.

| Source of variance | Df | SS    | MSS  | Fy     | Reamark |
|--------------------|----|-------|------|--------|---------|
| Treatment          | 1  | 3.75  | 3.75 | 14.869 | P<0.01  |
| Error              | 47 | 11.85 | 0.25 |        |         |
| Total              | 49 |       |      |        |         |

Summary of One way ANCOVA of Speed by taking Pre Speed as covariate

It can be seen that the F-value is 14.869 which is significant at 0.01 level with  $df = 1/49$  when Pre-Speed was taken as covariate. It shows that adjusted mean scores of beach Training Group and Control Groups differ significantly

Significantly when Pre- Speed was taken as covariate. Thus, the Null Hypothesis that there is no significant difference in adjusted mean scores of Speed of kho kho players of beach Training Group and Control Group by taking Pre- Speed as covariate is rejected. Further, the adjusted mean score of speed of beach Training Group is 9.42 which is significantly higher than that of Control Group where adjusted mean score of Power is 9.99. It may, therefore, be said that Beach Training was found to be effective in improving Speed of kho kho players than Control Group where Pre- speed was taken as covariate.



Comparison of adjusted mean scores of speed between beach training experimental group and control group

## DISCUSSION ON FINDINGS

### Discussion on skill related physical fitness

The objective of the study was to compare the Effect of Beach Training Programme on the basis of Skill Related Physical Fitness Components and Achievement Motivation of kho kho players. On the basis of above findings the following discussion can be drawn.

In case of Speed of Beach Training Group, it is found that there was significant difference as compared to Control Group hence the hypothesis sought that H02.

## CONCLUSION

From the result it can be concluded that

- Selected Beach training program for a period of six weak could help to improve the physical fitness as required in Kho-Kho.
- Beach training contributed to improve playing ability in Kho-Kho of the boys

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**PHILOSOPHY OF EDUCATION IN MODERN LEARNING ENVIRONMENT**

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**<sup>1</sup>Dr. Kiran J. Save and <sup>2</sup>Anagha A. Padhye**<sup>1</sup>Principal, Head and <sup>2</sup>Assistant Professor, Department of Philosophy, Sonopant Dandekar College, Palghar**AIMS**

This research paper explores how educational philosophies adapt to contemporary learning environments, examining how philosophical viewpoints influence curriculum development, pedagogical strategies, technology integration, and teacher roles.

**OBJECTIVES**

- To assess the fundamental ideas of classical and modern educational philosophies and their application to current teaching methods.
- To look into how teaching-learning dynamics and academic results are affected by the digital transformation.
- To investigate how inclusive and student-centered pedagogies function in contemporary educational systems.
- To evaluate the democratic and ethical ramifications of education in a technologically sophisticated, globalized world.
- To consider curriculum reform and the role of the teacher in encouraging creativity, critical thinking, and lifelong learning.

**RESEARCH METHOD**

This study employs a qualitative, descriptive research methodology, analyzing literature, comparative analysis, and contextual evaluation to understand development of educational theory, its relevance, and contemporary issues.

**ABSTRACT**

*Learning processes, pedagogical strategies, and educational objectives are all shaped by the philosophy of education. This ideology needs to change in the current educational setting to meet the various demands of 21st-century learners, globalization, and the quickening pace of technological innovation. In the framework of digital learning, inclusive education, and student-centered pedagogies, this essay examines the ways in which traditional and modern educational philosophies—including pragmatism, constructivism, progressivism, and existentialism—are reinterpreted. It highlights how critical thinking, teamwork, and creativity have replaced rote memorization as crucial learning objectives.*

*It also talks about how ethical standards, democratic engagement, and lifelong learning are all in line with contemporary educational paradigms. Technology integration, including blended learning, AI-driven content, and virtual classrooms, upends conventional teacher-student relationships and reinterprets the educator's function as a mentor and facilitator. Philosophical issues pertaining to educational justice, access, and purpose in the linked world of today are also reflected in this study. The paper's conclusion makes the claim that creating meaningful, pertinent, and flexible learning settings that enable students to grow personally and contribute to society requires a dynamic and reflective educational philosophy.*

**Keywords:** Educational philosophy, Modern learning environment, Constructivism, Student-centered learning, educational technology

**1. INTRODUCTION**

Education has always been an act rooted in philosophy, not just a method of imparting knowledge. Every choice made in the educational system is supported by philosophical principles, ranging from curriculum design and evaluation techniques to teacher-student interactions and educational objectives. In the current period, which is characterized by social changes, technological advancements, and global interconnectedness, the conventional paradigms of education are being challenged, reinterpreted, and changed.

The adaptation and operation of educational philosophy in the setting of the contemporary learning environment are examined in this research. Through an analysis of both traditional theories and contemporary advancements, the paper offers a comprehensive perspective on how education adapts to the needs of the twenty-first century while staying rooted in timeless philosophical ideas.

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**2. CLASSICAL AND CONTEMPORARY PHILOSOPHIES OF EDUCATION**

The way that societies view the goal of education has traditionally been influenced by educational philosophy. Some of the more important ones are:

**2.1 Pragmatism:**

John Dewey's pragmatic philosophy emphasizes experience-based learning, problem-solving, project work, and experiential education in modern classrooms. This approach encourages adaptability, democratic principles, and ongoing development, making it an essential quality for 21st-century students.

**2.2 Constructivism:**

Constructivism, rooted in Vygotsky and Piaget theories, promotes active student engagement, fostering collaborative projects, inquiry-based learning, and technology use to create dynamic, engaging learning environments in the digital age.

**2.3 Progressivism:**

Dewey's progressive education emphasizes student needs, interests, and democratic participation. It promotes problem-solving, critical thinking, teamwork, and experiential learning. Contemporary reforms include flexible curricula, interdisciplinary learning, and high student participation, fostering innovative classroom designs.

**2.4 Existentialism:**

Existentialism emphasizes personal accountability, freedom, and choice, encouraging students to seek meaning and self-discovery through a learner-centered approach. Teachers facilitate students' educational trajectories, aligning with flexible curriculum, personalized learning models, and alternative learning environments like self-directed learning and homeschooling.

**2.5 Behaviorism:**

Behaviorism, a theory influenced by B.F. Skinner and Ivan Pavlov, focuses on observable behavior and the impact of external stimuli on learning. It influences traditional classroom methods like drills, rewards, and repetition. Despite criticism for promoting memorization, behaviorism is still used in classroom management, skill-based learning, and gamified settings where reinforcement is crucial. Despite criticism, behaviorism remains a valuable approach in educational settings.

**2.6 Pedagogy of critical thinking:**

Critical pedagogy, rooted in Paulo Freire's work, views education as a political act, aiming to empower students to address social injustices and change the world through critical awareness, discussion, and introspection.

**3. MODERN LEARNING ENVIRONMENT: CHALLENGES AND IMPERATIVES**

Modern educational systems face complex demands, necessitating a philosophical reevaluation of learning styles, environments, and objectives, while promoting individual and societal growth.

**3.1 Changes in Technology**

Digital technology is transforming education, transforming classrooms into virtual spaces using tools like LMS, AI, and VR. This raises pedagogical and ethical issues, necessitating teachers to enhance competencies like critical thinking, digital literacy, media appraisal, and tool adaptation.

**3.2 Personalized versus Standardized**

Advancements in AI and data analytics challenge the balance between uniform standards and personalized education, requiring rethinking of assessment methods to maintain academic integrity and individual learning paths.

**3.3 Both Diversity and Inclusion**

Schools today are diverse, enhancing the learning environment but also posing challenges for equity and inclusion. Teachers must adapt teaching methods, use critical pedagogy to address structural barriers, and prioritize justice, empathy, and human dignity. Inclusive materials, accessible technology, and universal design are essential for effective education.

**3.4 The Changing Role of An Educator**

In the modern learning environment, teachers are mentors, co-learners, and facilitators, focusing on experiential, student-centered learning. They require proficiency in technology, emotional intelligence, flexibility, and cross-cultural communication. This challenging role requires lifelong learning, managing workloads, and providing training and mental health resources.

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**3.5 Future-Readiness and Lifelong Learning**

Traditional schooling prioritizes quick mastery, while the new paradigm emphasizes flexibility, lifelong learning, and ongoing upskilling. Education should equip students with skills for changing job markets and societal demands, promoting resilience, critical consciousness, and incorporating digital fluency, civic engagement, emotional intelligence, and multidisciplinary abilities.

**3.6. Using Technology and Data Ethically**

The rise of EdTech platforms raises concerns about privacy, consent, and surveillance, necessitating ethical considerations in education. This includes digital ethics, informed consent, transparent policies, data rights awareness, and responsible digital citizenship.

**4. CHANGING LEARNING OUTCOMES: FROM ROTE TO REASON**

Modern education is transitioning from standardized tests to meaningful, reflective learning experiences, emphasizing critical thinking, creative problem-solving, collaboration, and adaptability in a constantly changing world. This philosophy adopts constructivist, progressivist, and existentialist perspectives, focusing on self-directed development and relevance.

**4.1 Thinking Critically and Being Creative**

Critical thinking and creativity are essential for academic success, with constructivist philosophy promoting active learning through Socratic questioning, open-ended inquiry, and problem-based learning. Creativity is valued across disciplines, including science and entrepreneurial thinking. Existentialism promotes authenticity, self-expression, and autonomy, while teachers aim to foster imagination and curiosity in students.

**4.2 Cooperation as well as Communication**

In 21st-century education, effective communication and teamwork are crucial for academic and professional success. John Dewey's pragmatist philosophy emphasizes social engagement and shared inquiry, building interpersonal skills and respect for different viewpoints. Collaborative learning promotes moral development, civic engagement, empathy, and problem-solving, empowering individuals through meaningful relationships and civil conversations.

**4.3 Continual Education and Flexibility**

Education is now a lifelong process, emphasizing personal autonomy, knowledge pursuit, and metacognitive skills. Institutions are incorporating portfolio-based evaluations, transdisciplinary curricula, and practical projects to foster flexibility and problem-solving. Inclusive teaching strategies consider students' cultural backgrounds and individual needs. Modern education prepares students for lifelong inquiry, significant contribution, and ongoing evolution, a shift in learning outcomes crucial in today's rapidly changing world.

**5. EDUCATIONAL TECHNOLOGY & CHANGING ROLE OF AN EDUCATOR**

The rapid advancement of educational technology has transformed teaching, evaluation, and knowledge internalization, transforming educators into facilitators, mentors, and co-learners, promoting a shift from transmission-based to transformation-based models.

**5.1 Teacher as Facilitator**

The "guide on the side" model is replacing traditional teacher roles, focusing on coaching students to become independent, reflective learners, facilitating inquiry, and providing mentorship. This aligns with constructivist philosophy, emphasizing active engagement in knowledge creation. Contemporary education emphasizes holistic development, emotional intelligence, ethical reasoning, and individual interaction. Teachers play a crucial role in digital literacy, fostering agency, confidence, and ownership in students.

**5.2 Models of Flipped & Blended Learning**

The modern learning environment should be rooted in ethical and democratic values, focusing on moral education, empathy, student voice, and digital citizenship. Democratic education encourages students to participate in shaping their learning, aligning with progressivism and pragmatism. With digital expansion, responsible online behavior and data ethics are emerging as a focus in educational philosophy.

**5.3 Personalized Learning & Artificial Intelligence**

AI is revolutionizing education by enhancing personalization through chatbots, automated feedback systems, adaptive learning platforms, and predictive analytics. These technologies align with constructivist principles and existentialist philosophy, enhancing student understanding and retention. Teachers can differentiate instruction and create interventions using AI-generated insights. However, ethical concerns like algorithmic bias, data privacy, and equitable access must be addressed to promote transparency and inclusivity.



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## 6. ETHICAL & DEMOCRATIC ASPECTS IN EDUCATION

Education's ethical and democratic aspects are increasingly crucial in modern educational systems, shaping moral compass, civic duties, and social consciousness, as emphasized by philosophers like Socrates and Dewey.

### 6.1 Education of Ethics & Compassion

Moral education, rooted in Socratic principles, promotes self-examination and truth pursuit through critical questioning and reasoned discussion. It helps students handle moral dilemmas and social complexities with tact and understanding, fostering empathy, compassion, fairness, and integrity.

### 6.2 Student's voice & Participation

Democratic education emphasizes student voice, promoting progressivism and pragmatism. It encourages learner-centered pedagogies, curriculum co-construction, and self-reflection. This participatory model empowers students, promotes agency, and fosters responsibility. It also promotes inclusivity by valuing diverse needs, cultures, and voices.

### 6.3 Accountability and Digital Citizenship

Digital citizenship requires ethical education, addressing risks like screen addiction and cyberbullying. Teachers must teach digital literacy and critical thinking, ensuring equitable access to resources. Incorporating democratic and ethical elements promotes responsible, accountable, and skilled professionals, promoting personal development and social harmony.

## 7. DIVERSE & INCLUSIVE LEARNING ENVIRONMENT

Inclusive education promotes social justice, dignity, and everyone's right to learn, challenging established conventions and encouraging systemic change to accommodate all students' needs.

### 7.1 Language, Gender, and Ability-Inclusive Behaviors

Inclusive education acknowledges and supports the unique needs of every learner, using frameworks like Universal Design for Learning (UDL) and multiple intelligences. It promotes differentiated instruction, addresses gender and language biases, and supports students with disabilities. Policies like the UN Convention on the Rights of Persons with Disabilities support inclusive education.

### 7.2 Culturally sensitive teaching

Culturally relevant teaching, which supports students' cultural identities while promoting critical consciousness and academic success, has been highlighted by academics like Gloria Ladson-Billings. According to CRT, ignoring the ways in which culture influences students' learning, thinking, and interactions leads to further inequality and marginalization.

Culturally sensitive teachers adapt curricula, assessment methods, and communication to students' diverse backgrounds, promoting bilingualism and intersectionality to address complex cultural identities and overlapping disadvantages.

## 8. OBSERVATIONS REGARDING CURRICULUM DESIGN

Designing a curriculum is a philosophical endeavor rather than merely a technical or administrative one. A curriculum's design, content, and delivery all reflect underlying assumptions about the nature of knowledge, the goal of education, and the growth of the learner. Curriculum needs to be redesigned to promote holistic, moral, and pertinent learning as the educational landscape changes in response to societal, technological, and cultural shifts. Through the prisms of interdisciplinarity, value orientation, and customization, this section examines how contemporary philosophical ideas influence curriculum design.

### 8.1 Interdisciplinary Approaches

Interdisciplinary curriculum design aims to address real-world issues like climate change, public health, and technological ethics by integrating knowledge across domains, aligning with pragmatist philosophy and progressivism, fostering critical thinking and social responsibility.

### 8.2 Value-based Education

Value-based subjects are gaining prominence in modern education, aiming to develop intellectually strong, morally and socially conscious citizens. These subjects include environmental education, gender equality, human rights, peace studies, and civic engagement. These values encourage empathy, introspection, and action, supporting UNESCO's Education for Sustainable Development objectives. The integration of these subjects challenges the traditional utilitarian view of education as primarily economic preparation.

### 8.3 Adaptability & Customization

Contemporary curricula are embracing flexibility and customization, focusing on project-based learning models, modular systems, and elective options. This trend aligns with the existentialist educational philosophy, emphasizing personal autonomy and authenticity. The workforce demands adaptability, requiring responsive curricula for lifelong learning in various fields. Technology is crucial for enabling this flexibility, allowing learning experiences to be tailored to individual progress and preferences.

## CONCLUSION

### Moving Ahead with an Introspective and Adaptive Educational Philosophy:

In the contemporary learning environment, educational philosophy is a dynamic fusion of classic principles and new developments. The frameworks by which we conceptualize and carry out education must change along with societies. Education cannot just be about imparting knowledge in the fast-paced, diverse, and interconnected world of today. It must focus on developing complete people—thinkers, artists, citizens, and agents of change—who are able to handle complexity with discernment, morality, and flexibility.

Modern educational philosophy must continue to be highly introspective, incorporating ideas from modern constructivism, progressivism, and existentialism as well as classical thinkers like Socrates, Dewey, and Rousseau. It has to face the demands of lifelong learning, the realities of technological change, and the difficulties of equity and inclusion. This necessitates learner-centered environments, flexible curricula, and value-centered pedagogy that empower students on a personal, social, and academic level.

In order to promote meaningful learning, educators must also change from being content providers to facilitators, mentors, and co-learners. They can do this by utilizing digital tools, moral theories, and culturally sensitive teaching methods. AI, blended learning, and customized pathways give the role of the teacher and the student's journey a new dimension.

The philosophy of education must, in the end, be a living philosophy that continuously rethinks, modifies, and questions what it means to teach and learn. In order to ensure that education continues to be a force for empowerment, justice, and collective progress, it must aim for both academic excellence and human flourishing.

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**A COMPARATIVE STUDY OF ACADEMIC RELATED RISK TAKING AND GAMES AND SPORTS RELATED RISK TAKING BETWEEN STATE LEVEL KHO-KHO PLAYERS AND KABADDI PLAYERS OF 18 TO 25 YEARS OF MAHARASHTRA STATE**

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<sup>1</sup>Mr. Anil Ramesh Pisal and <sup>2</sup>Dr. Chandrashekhar B. Kadu

<sup>1</sup>Research Scholar, Shankarlal Khandelwal College, Akola- Maharashtra, India,  
Sant Gadge Baba Amravati University, Maharashtra, India.

Reg. No. - SGBAU/Ph. D./phy. Edu./ 2252/2023,

<sup>2</sup>Director of Physical Education & Sports, Centre No. 229, Shankarlal Khandelwal College, Akola- Maharashtra, India

**ABSTRACT**

*The main purpose of this paper is to find out and compare Academic Related Risk Taking and Games and Sports Related Risk Taking as measure of Risk Taking Ability between state level Kho Kho and Kabaddi players aged 18 to 25 years of Maharashtra State. The study was delimited to male Kho-Kho and Kabaddi players only. 250 Kho Kho and 250 Kabaddi player/subjects (Total 500) were selected randomly from the Maharashtra State. For the purpose of establishing reliability of data the standard questionnaire of Risk Taking was used very carefully and the responses were recorded, as a final data. Mean score of Academic Related Risk Taking and Games and Sports Related Risk Taking of Kho Kho players was  $\pm 6.74$  and  $\pm 5.51$  respectively, mean score of Academic Related Risk Taking and Games and Sports Related Risk Taking of Kabaddi players was  $\pm 7.42$  and  $\pm 7.06$  respectively. Result revealed that there was significant difference in the Academic Related Risk Taking and Games and Sports Related Risk Taking between Kho Kho and Kabaddi players aged 18 to 25 years of Maharashtra state. Independent sample- 't' test was implemented for the analysis of data. Mean score of Academic Related Risk Taking Level and Games and Sports Related Risk Taking Level of Kabaddi players was significantly higher than those of Kho Kho players. It may, therefore, be said that Kabaddi players were found to have significantly higher Academic Related Risk Taking and Games and Sports Related Risk Taking as compared to Kho Kho players.*

**Keywords:** Kho Kho, Kabaddi, Academic Related Risk taking and Games and Sports Related Risk-Taking, Risk Taking.

**INTRODUCTION**

In India, Physical Education has been accepted as an integral part of general education. It has been proved that Psychological Variables contributes significantly to the development of Sports Performances. Risk taking is the tendency to engage in behaviors that have the potential for significant gains or losses. In the context of Kho Kho and Kabaddi, Risk taking involves planned decisions such as when to make an aggressive move, how to avoid opponents, or when to defend continuously. These decisions can change the course of a game, making the ability to take calculated risks an essential skill for athletes. Understanding the balance between defensive and attacking is very important for optimizing performance and achieving success in these sports. In competitive sports, Risk Taking can be the game changer between success and failure. The study was conducted with a view of collecting the evidence about "A Comparative Study of Academic Related Risk Taking and Games and Sports Related Risk taking between state level Kho-Kho players and Kabaddi players of 18 to 25 years of Maharashtra State" It is hoped that the findings and results of this study may be helpful to those who are interested in study of Academic Related Risk taking and Games and Sports Related Risk taking of state level Kho Kho and Kabaddi players of Maharashtra state.

**DELIMITATIONS OF THE STUDY**

Delimitation of this study was as under -

- The study was delimited to male state level Kho-Kho and Kabaddi players of Maharashtra State only.

**OBJECTIVES OF THE STUDY**

The objectives of the study was as under:

- To compare the mean scores of Academic Related Risk Taking of state level Kho Kho and Kabaddi players of Maharashtra State.
- To compare the mean scores of Games Related Risk Taking of state level Kho Kho and Kabaddi players of Maharashtra State

**HYPOTHESES OF THE STUDY**

The hypothesis sought to be tested was as follows:

**H01:-** There will be no significant difference between the mean scores of Academic Related Risk Taking of state level Kho Kho and Kabaddi players of Maharashtra State.

**H02:-** There will be no significant difference between the mean scores of Games Related Risk Taking of state level Kho Kho and Kabaddi players of Maharashtra State.

**Selected Variables**

(A) Academic Related Risk Taking

(B) Games and Sports Related Risk Taking

**METHODOLOGY**

This study was confined to Academic Related Risk Taking and Games and Sports Related Risk Taking between state level Kho Kho and Kabaddi players aged 18 to 25 years of Maharashtra state. 250 Kho Kho and 250 Kabaddi state level players/subjects (Total 500) age group with age of 18 to 25 years were selected to form the sample of the study. The random sampling procedure has been adopted to make the sample. Risk Taking scale questionnaire by Dr. Subhash Sarkar was used to collect the data.

The data were analysed by using descriptive statistics and 't' test procedure of the techniques, for the same purpose the Statistical Package for Social Sciences (SPSS) software was used.

**Methods of measurement of variable**

Academic Related Risk Taking and Games and Sports Related Risk Taking as measure of Risk Taking Ability was considered as a psychological variable for this study. Investigator visited the physical education teachers, coaches, state level competitions of Kho Kho and Kabaddi and introduced his topic and also discussed the procedure of filling up the questionnaire from the players.

Risk Taking Scale questionnaire by Dr. Subhash Sarkar, was given to the players to fill it up with mutual consultation in the presence of the investigator. Questionnaire comprises 15 situations, out of these 15 statements. Each statement is set against a 6 point scale.

**(A) Data of Academic Related Risk Taking by using Independent sample 't' test:-**

| Game    | M    | SD   | N   | t-value |
|---------|------|------|-----|---------|
| Kho Kho | 6.74 | 2.18 | 250 | 4.34    |
| Kabaddi | 7.42 | 1.18 | 250 |         |

Level of significance=0.01, df =1/498.

**(B) Data of Games and Sports Related Risk Taking by using Independent sample 't' test:-**

| Game    | M    | SD   | N   | t-value |
|---------|------|------|-----|---------|
| Kho Kho | 5.51 | 2.06 | 250 | 9.28    |
| Kabaddi | 7.06 | 1.64 | 250 |         |

Level of significance=0.01, df =1/498.

**DISCUSSION AND CONCLUSION**

On the basis of findings and within limitations imposed; the following conclusions may be drawn:

- \* There was statistically significant difference in Academic Related Risk Taking of state level Kho Kho and Kabaddi players aged 18 to 25 years of Maharashtra State.
- \* There was statistically significant difference in Games and Sports Related Risk Taking of state level Kho Kho and Kabaddi players aged 18 to 25 years of Maharashtra State.
- \* It was observed that Academic Related Risk Taking and Games and Sports Related Risk Taking of state level Kabaddi players was higher than those of Kho Kho players.
- \* That's why stated hypothesis "(H01) There will be no significant difference between the mean scores of Academic Related Risk Taking and Games of state level Kho Kho and Kabaddi players of Maharashtra State. (H02) There will be no significant difference between the mean scores of Games and Sports Related Risk Taking of state level Kho Kho and Kabaddi players of Maharashtra State." is rejected in this study.

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**A STUDY OF INFLUENCE OF EFFECTIVE FUNCTIONING OF ENTREPRENEURSHIP  
DEVELOPMENT CELL ON DEVELOPING ENTREPRENEURSHIP SKILLS AMONG DEGREE  
COLLEGE STUDENTS IN MUMBAI WESTERN SUBURBAN REGION**

<sup>1</sup>Anuja Sameer Narvankar and <sup>2</sup>Dr. Vijetha Shetty

<sup>1</sup>Assistant professor and <sup>2</sup>Principal, (Vivek College of Commerce (Autonomous))

## INTRODUCTION

### Evolution of Entrepreneurship Environment in India:

The Indian economy and culture have undergone numerous changes over the course of history. Entrepreneurship has played an indispensable role in the growth of our economy, and the concept has been ingrained in our society for centuries.

Entrepreneurship in India faced turbulent times due to insufficient backing from economic policies. Nonetheless, the entrepreneurial realm underwent a remarkable transition from 1990 onwards. The credit can be traced back to the "Economic Policy Reform" enforced in 1991 and later reinforced in 2022.

### Period of Inception:

The major steps for promoting Startups were taken in 2016 in India. The key aspects of these startup initiatives were to provide essential support for entrepreneurship development in India. Some of the important features of these Startup initiative are as follows:

| Name of the policy/initiative                 | Objective  |
|---|--|
| <b>Make in India</b>                          | Supports new entrepreneurs to develop and grow.  |
| <b>National Startup and Innovation Policy</b> | To establish an environment that cultivates entrepreneurship and innovation within higher education institutions (HEIs).                       |
| <b>The New Education Policy (NEP)</b>         | Specifically targets the promotion of innovation and entrepreneurship among students.  |
| <b>The Smart India Hackathon</b>              | The competition that motivates students to devise inventive solutions to practical predicaments.   |
| <b>ARIIA (National I&amp;E ranking)</b>       | National initiative that assesses Higher Education institutions HEIs according to their engagement in innovative and entrepreneurial pursuits. |

“India retains 40th rank out of 132 economies in the Global Innovation Index 2023 rankings published by the World Intellectual Property Organization. India has been on a rising trajectory, over the past several years in the Global Innovation Index (GII), from a rank of 81 in 2015 to 40 in 2023.”

The GEM Report 2022–2023 throws light on entrepreneurial activities in India. The APS (Adult Population Survey) was conducted among 2610 samples and provided information regarding the level of entrepreneurial activity in the country based on the conditions of the national framework.

### The important highlights of the report are:

1. The GEM survey 2022 says that economy of India is one of the best economies out of the best worldwide economies to start business.
2. The report also says that in India it is easy to start the business
3. It is easy to start the business in India within 6 month which is also agreed by Adult Population of India, as per the report.

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**FIVE BEST ECONOMIES IN WHICH TO START A BUSINESS**

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The above figure shows that India is rated among the best five economies where the ecosystem is conducive to start a business. This statistical data helps to prove that India favours entrepreneurship which would attract foreign direct investments and foster entrepreneurship in the country.

**Entrepreneurship and Innovation in Sports tech is gaining momentum:**

With growing **entrepreneurial intention**, **Indian youth** are recognizing the urgent **need for startups in sports tech and innovation** to transform the country's sporting ecosystem and unlock its full potential.

In a big step towards boosting innovation in sports technology, **IIT Madras hosted its first-ever Sports Tech Start-Up Conclave on July 12, 2024**. The event wasn't just about discussions—it laid out an ambitious plan to support **200 sports tech startups over the next five years**, aiming to strengthen India's position in the global sports ecosystem.

According to recent data, **India's sports-tech industry is on track to grow at a healthy 13% CAGR**, expanding from **INR 26,700 crore in FY24 to a projected INR 49,500 crore by 2029**. That's a massive leap and a clear sign of where the sector is headed.

Interestingly, between 2014 and November 2022, Indian sports tech startups raised a modest **\$139 million across 29 funding deals**. While that might seem underwhelming, the reality is that this space is still wide open. There's a lot of room for disruption—think smarter tools for booking sports venues, performance-tracking apps for athletes, advanced analytics, and more. In many ways, we're just scratching the surface.

And despite a general slowdown in funding across sectors, **momentum in Indian sports tech is quietly building**. High-profile moves are fuelling this surge—**Shikhar Dhawan** has launched a sports tech fund, **IIT Madras is taking the lead with its conclave**, and **Centre Court Capital has rolled out a ₹350 crore fund** dedicated to sports tech.

Adding to this wave, in **January 2025**, **Swiggy received the green light from the Ministry of Corporate Affairs** to launch its own sports venture—**Swiggy Sports Private Limited**—showing that even non-sports giants are starting to see the potential.

**Entrepreneurship Education in India**

In India, higher education institutions have the capability to support aspiring student entrepreneurs by offering them the necessary infrastructure and resources to establish and operate their startups. This includes providing classroom setups which enhance creativity, science labs for innovation, computer facilities, skilled technicians, access to reference materials, and subscriptions to renowned research journals. Additionally, teachers play a vital role in guiding students, fostering a sense of self-assurance in their entrepreneurial abilities, and offering mentorship throughout the process. By offering entrepreneurship education, these institutions play an important role in raising awareness about entrepreneurship as a viable career path. Moreover, the support provided through incubation programs can assist student entrepreneurs in overcoming challenges and successfully establishing and developing their businesses.

As a result, the impact of higher education institutions in India extends beyond mere instruction and degree-granting, as they actively contribute to the overall economic growth of the nation.

## REVIEW OF LITERATURE

The Entrepreneurship Development cell is established in higher educational institutes for identifying the budding entrepreneurs and helping them in achieving their goals of becoming entrepreneurs. This effectiveness can be measured on various parameters but this research is to examine that whether the EDC could build the intention of becoming the entrepreneur among the youth.

1. Sylvia Nabila Azwa Ambad, Dayang Haryani Dana Ag Damita (2016) : This paper helps to identify the determinants of entrepreneurial intention among undergraduate students in Malaysia. The study found that personal attitude, perceived behavioral control and perceived relational support are the key factors to decide the entrepreneurial intention among undergraduate students.
2. Mrs D .Mythili, Ms. R, Nithya, Ms. Sneha Jaiswal (2020): The study focuses on the relationship between educational impact on personal attitude and student's intention toward entrepreneurship. It found that **personal attitude** has the strongest influence on a student's intent to pursue entrepreneurship. It also highlights that **leadership qualities**, crucial for entrepreneurship, can be nurtured through group activities and teamwork.
3. Prof . Nandini N. Doddamani (2022): The researcher highlights the significant role of higher education institution in developing the entrepreneur ecosystem. Entrepreneurship education and incubation centers, start up infrastructure and facilities, including classrooms, arrangements, science laboratories, computer facilities, technicians, reference reading material, etc, can be provided by the educational institutions.
4. Dr Uday Kumar(2010): This paper highlights the international education offered in higher education institution. It is well defined both the concept of entrepreneurship and higher education. It also identifies the need of information technology in entrepreneurship.
5. Dr. Ranpreet Kaur and Mrs. Sonali Khurjekar (2022) : In this research the respondents were the individuals learning management studies in institutions from Pune region . The researcher has tried to find out the ED cell as the prospect for research, consultancy and business. They have shown the benefits of ED cell for all the stake holders specifically to students , institute and society.
6. Shashank Shekhar (2021): The article tells us about the rise of entrepreneurship in India. It gives the factors responsible for the emergence, transformation and growth of Entrepreneurship in India. It is well explained with the facts and examples of the growth of startups in India.
7. Forbes, Mario Peshev (2017): The industry expert has highlighted a significant skills that every kind of entrepreneur should possess. The notable skills like resilience, strategic thinking, communication, time management, networking, etc are explained well in this article.

## RESEARCH METHODOLOGY

### Objective of the Study.

- 1) To examine the influence of activities of Entrepreneurship Development Cell on development of Entrepreneurial skills among students

### Hypotheses:

H0: There is no significant influence of effective conduct of EDC activities on development of Entrepreneurship skills

H : There is significant influence of effective conduct of EDC activities on development of Entrepreneurship skills.

## METHODS OF COLLECTION OF DATA:

### Sources of Data

**Primary data:** Primary Source of Data: The study relies on primary data collected directly from respondents to ensure accuracy and relevance to the research objectives.



**Description of sample size:**

Data is collected from 118 undergraduate students from degree colleges of Mumbai having Entrepreneurship Development Cell functional in their college. Area selected for study is from North Mumbai district i.e. from Bandra to Dahisar. Convenient random sampling method has been used for collecting data

**Research Instrument:** A structured questionnaire was designed to collect primary data. Likert scale questions were used in the questionnaire. The online survey was conducted with the help of google forms.

**Method of data analysis and interpretation:**

For the purpose of data analysis various statistical techniques were used. Such as frequency. Mean and correlation Data is resisted. In the form of graphs and tables. Hypotheses were tested using correlation. The study being a social research of an exploratory nature researcher has tested the hypothesis at 5% level of significance. So following criteria was applied to the test the hypotheses.

If p value is less than 0.05 -null hypothesis is rejected and alternate hypotheses is rejected. If p value is greater than 0.05. hypothesis is accepted, and alternate hypotheses is rejected.

**Scope of study:** This study tries to analyse the influence of Entrepreneurship Development Cell activities on developing entrepreneurship skills among degree college students in Mumbai western suburban.

**LIMITATIONS OF THE STUDY**

- 1) The researchers confined to the Mumbai suburban city from Bandra to Dahisar.
- 2) Present study covers only undergraduates of Commerce colleges of both aided and self financing section.
- 3) The study covers only the colleges having well established Entrepreneurship development cell and also active in functioning.

**PRESENTATION AND DATA ANALYSIS****Section A: Descriptive Analysis.****Sample composition based on demographic factors .**

The factors include:

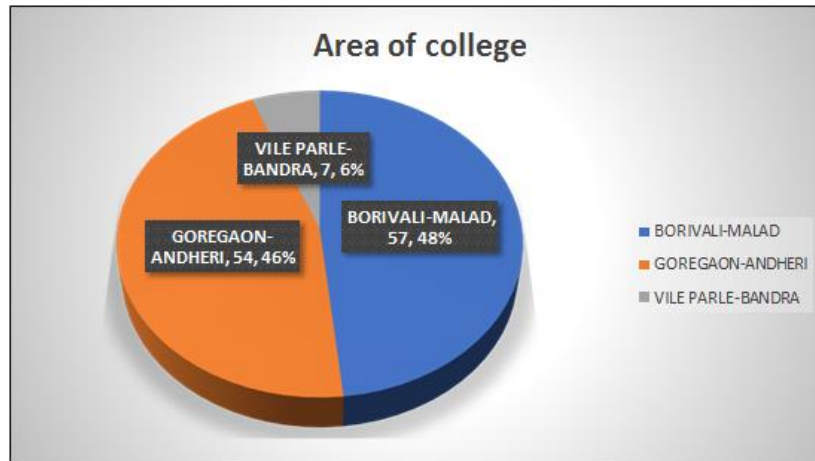
1. Location of the college
2. Year of the student. 3. Gender

**1) THE SAMPLE COMPOSITION OF THE STUDENTS SHOWING THE LOCATION OF THE COLLEGE .**

**Table 1:** Location of the College

| Location in Mumbai Suburban district | Frequency | Percent |
|--------------------------------------|-----------|---------|
| BORIVALI-MALAD                       | 57        | 48.3    |
| GOREGAON-ANDHERI                     | 54        | 45.8    |
| VILE PARLE-BANDRA                    | 7         | 5.9     |
| Total                                | 118       | 100.0   |

*Source:* Compiled primary data


**Chart 1**

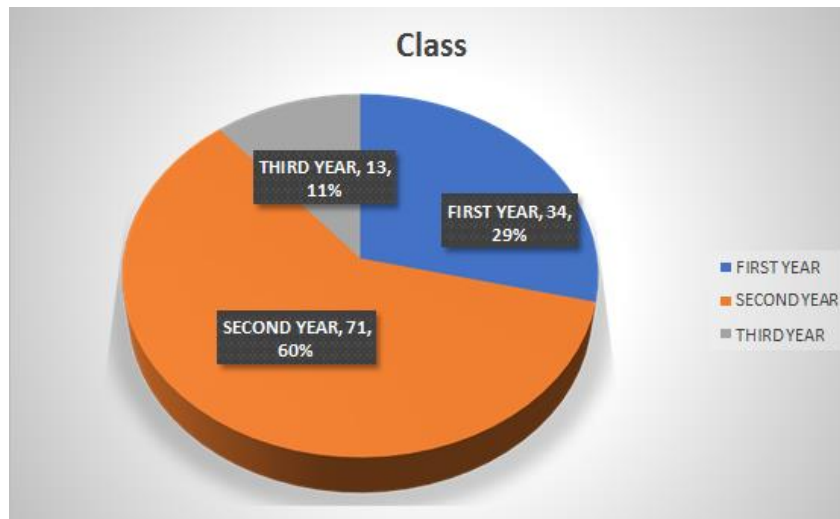
As per table 1 and chart 1 we infer that we received maximum responses from colleges in Borivali to Malad followed by colleges from Goregaon to Andheri. Only 6% of response is from colleges in Vile - Parle to Bandra.

## 2) THE SAMPLE COMPOSITION OF THE STUDENTS STUDYING IN FIRST, SECOND AND THIRD YEAR OF DEGREE COLLEGE.

**Table 2** Class Table

| Class       | Frequency | Percent |
|-------------|-----------|---------|
| FIRST YEAR  | 34        | 28.8    |
| SECOND YEAR | 71        | 60.2    |
| THIRD YEAR  | 13        | 11.0    |
| Total       | 118       | 100.0   |

*Source:* Compiled primary data


**Chart 2**

### Interpretation:

As per table 2 and chart 2 we see that compare to third year and first year students , second year degree students are more inclined towards entrepreneurship activities .Out of 118 responses collected we found that 60% of responses are of second year students which shows more engagement of these students in EDC activities .

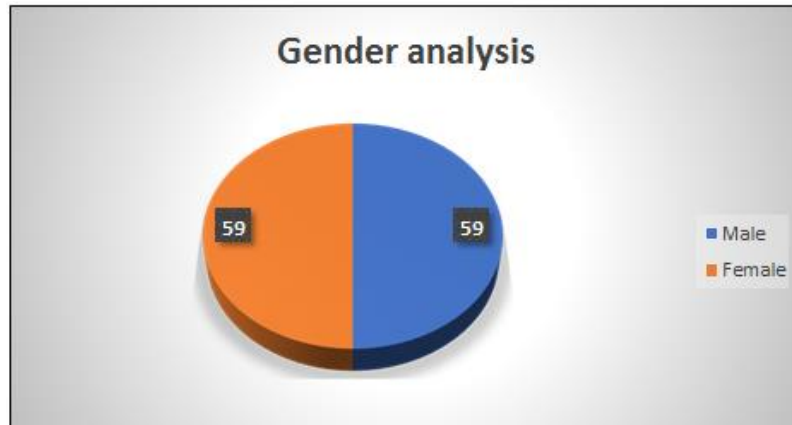
## 3) THE SAMPLE COMPOSITION OF THE STUDENTS SHOWING THE GENDER -WISE ANALYSIS.

**Table 3** Gender Analysis

| Gender | Frequency | Percent |
|--------|-----------|---------|
| MALE   | 59        | 50.0    |

|        |     |       |
|--------|-----|-------|
| FEMALE | 59  | 50.0  |
| Total  | 118 | 100.0 |

*Source:* Compiled primary data Chart 3



*Source:* Compiled primary data

Interpretation: As per table 3 and chart 3 we infer that equal percentage of contribution is given by male and female students.

## SECTION B. OBJECTIVEWISE ANALYSIS

### RESEARCH OBJECTIVE

To Examine the influence of activities of Entrepreneurship Development Cell on development of entrepreneurial skills among students

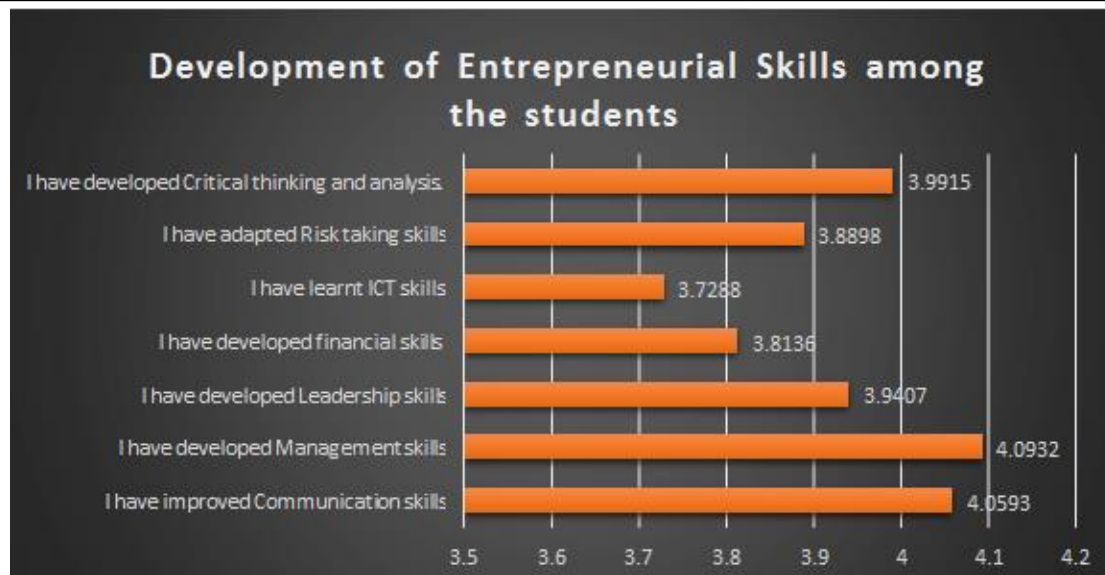
- 1) We analysed influence of EDC activities on developing entrepreneur skills among the students. This was measured by using Likert scale method.

**Table.4** Development of Entrepreneurial Skills among the students.

| Statements                                       | Mean   |
|--|--------|
| I have improved Communication skills             | 4.0593 |
| I have developed Management skills               | 4.0932 |
| I have developed Leadership skills               | 3.9407 |
| I have developed Financial skills                | 3.8136 |
| I have learnt ICT skills                         | 3.7288 |
| I have adapted Risk taking skills                | 3.8898 |
| I have developed Critical thinking and analysis. | 3.9915 |

*Source:* Compiled Primary Data

### Chart 4 Development of Entrepreneurial Skills among the students



**Source:** Compiled primary data

**Interpretation:** As per table 4 and chart 4 showing Descriptive Analysis of Responses to examine the influence of activities of Entrepreneurship Development Cell on development of entrepreneurial skills among students, it was observed that:

1. The highest weighted average mean as 4.0593 is for the statement, I have improved Communication skills and I have developed Management skills.
2. The statement 'I have developed Critical thinking and analysis' is weighted as 3.9915.
3. This shows that the EDC activities help students to improve their communication skills, management skills, and also helps to develop critical thinking and analysis, which plays a major part in developing entrepreneurship thinking.

### SECTION C: Testing of Hypotheses

**HYPOTHESIS:** – There is significant influence of effective conduct of EDC activities on development of entrepreneurship skills.

#### a. Assessing the Normal Distribution of Data

**Table 4.** Result of One-Sample Kolmogorov-Smirnov Test

| One-Sample Kolmogorov-Smirnov Test |                |                                     |  |
|------------------------------------|----------------|-------------------------------------|--|
|                                    |                | Effective conduct of EDC activities | Development of Entrepreneurship Skills |
| N                                  |                | 118                                 | 118                                    |
| Normal Parameters <sup>ab</sup>    | Mean           | 4.0927                              | 3.9310                                 |
|                                    | Std. Deviation | .72759                              | .80183                                 |
|                                    |                |                                     |  |
| Most Extreme Differences           | Absolute       | .144                                | .144                                   |
|                                    | Positive       | .106                                | .091                                   |
|                                    | Negative       | -.144                               | -.144                                  |
| Test Statistic                     |                | .144                                | .144                                   |
| Asymp. Sig. (2-tailed)             |                | .000 <sup>c</sup>                   | .000 <sup>c</sup>                      |

**Source** – Primary Data

Before applying the statistical technique to test the hypothesis, normal distribution of data was checked. One sample **Kolmogorov-Smirnov Test (K-S test)** was used to assess the normal distribution of data. As the **P value 0.00** is less than **0.05**, **Null Hypothesis is not accepted. It shows that the data is not normally distributed.** Hence to analyse the influence of effective conduct of EDC activities on development of entrepreneurial skills, **Non-Parametric test Spearman's rank correlation** was applied.

#### b. Influence of EDC activities on Development of Entrepreneurial skills Table 4. Result of Spearman's rank correlation

| Correlations   |  |                         |                                     |  |
|----------------|--|-------------------------|-------------------------------------|--|
| Spearman's rho |  |                         | Effective conduct of EDC activities | Development of Entrepreneurship Skills |
|                | Effective conduct of EDC activities    | Correlation Coefficient | 1.000                               | .605**                                 |
|                |  | Sig. (2-tailed)         | .                                   | .000                                   |
|                |  | N                       | 118                                 | 118                                    |
|                | Development of Entrepreneurship Skills | Correlation Coefficient | .605**                              | 1.000                                  |
|                |  | Sig. (2-tailed)         | .000                                | .                                      |
|                |  | N                       | 118                                 | 118                                    |

*Source* – Primary Data

As per Table 4. The p value (0.00) is less than 0.05 so Null Hypothesis is not accepted. It justifies that there is significant influence of EDC activities on development of entrepreneurial skills. **The correlation value 0.605, indicates that there is positive moderate correlation between effective conduct of EDC activities on development of entrepreneurship skills.**

## FINDINGS

The researcher after analyzing the primary data has highlighted the important finding as given below

1. It was found that the college from Borivali to Malad have maximum responses indicating that a college in this area are having effective functioning E-Cell and the second year undergraduate students have given maximum responses as compared to first year and third year degree college students. This shows second year students of the age group 19 to 21 are more engaged in EDC activities of the college
2. The highest weighted average mean as 4.0593 is for the statement, “I have improved Communication skills and I have developed Management skills.” This shows that the EDC activities help students to improve their communication skills, management skills, and also helps to develop critical thinking and analysis, which plays a major part in developing entrepreneurship thinking.
3. The highest weighted average mean as 4.2881 is for the statement, Our EDC encourages to start our business, shows that students are highly motivated to start their business after participating in conduct of EDC activities.
4. The statement, the college EDC has stimulated my interest in internship is weighted as 4.1864 and college EDC has helped to improve my entrepreneurial interest is weighted as 4.1525. This shows that the EDC activities has not only improved their skills, but also cultivated the behavioral intention towards entrepreneurship and also made them identify their ideas for startup and boosted their confidence in developing entrepreneurial thinking.

## RECOMMENDATIONS

1. Education institutions should establish Entrepreneurship Development Centers/Clubs that will serve as a platform where students with entrepreneurial intentions can start expressing their intentions. Entrepreneurship Development department and club should work hand in hand to network with National Institute for Micro, Small, Medium Enterprises (ni-msme), industries department, banks, R&D institutions, entrepreneurs to ensure regular interaction for the benefit of students
2. Globally acceptable courses should be designed by the industry experts, BootCamps, Certificate courses on Entrepreneurship Development, fundamentals of Startups, Mentorship should be introduced and offline lectures of experts, startup founders, entrepreneurs etc should be made available.
3. Regular campaigns and smart innovation hackathons should be organised to bring out the innovative and creative solution for the pre determined problems, leading to Start ups.
4. The alumni of education institutions who are established entrepreneurs should be tapped and called in for expert guidance on regular basis for the interested students and should give the students handholding.
5. Entrepreneurship education should be imparted to students at curricular/co-curricular/extracurricular level through elective/short term or long-term courses on innovation, research papers, entrepreneurship and venture development.
6. The students should be encouraged to do market survey in professional way and prepare the report of the survey to empower them in understanding the market trends, marketing challenges, demands and minimise the chances of failure of venture.

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**CONCLUSIONS**

The objective of this research was to assess the effectiveness of activities conducted by Entrepreneurship Development Cells (EDC)s in various colleges and extend to which these activities influence students in pursuing entrepreneurship. This goal can only be accomplished with the support of all stakeholders involved. The findings of the studies have implications for all parties involved in the academic sector but recommendation were directed towards the University and college. Collaboration between higher education institutions and government is crucial in taking the necessary measures to promote the growth of aspiring entrepreneurs by integrating entrepreneurship methodologies into the curriculum. With this development of Entrepreneurial mindset, the youth could revolutionise the sports industry through creativity and problem solving.

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**THE ROLE OF PROTEIN IN ENHANCING ATHLETIC PERFORMANCE AND POST-EXERCISE RECOVERY**

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**<sup>1</sup>Anusha C. Shetty and <sup>2</sup>Dr. Sushma N. Chougule**<sup>1</sup>Scholar, M.P.Ed, Student of BPCA'S College of Physical Education, Wadala, Mumbai<sup>2</sup>Research Guide, Assistant Professor in BPCA'S College of Physical Education, Wadala, Mumbai**ABSTRACT**

*Protein plays an indispensable role in the nutrition strategies of athletes by supporting athletic performance and accelerating post-exercise recovery. As a fundamental macronutrient composed of amino acids, protein is responsible for the structural repair and functional regulation of muscle tissues, enzymes, and hormones. This paper explores the multifaceted contributions of protein at the cellular and systemic levels, emphasizing its impact on muscle protein synthesis (MPS), enzymatic activity, hormonal balance, and immune function. At the cellular level, protein initiates key physiological processes such as muscle repair through MPS and regulates biochemical pathways through enzyme production and hormone synthesis. Adequate protein intake prevents muscle breakdown, enhances muscle growth, and aids in neurotransmitter function—contributing to improved strength, power, mental clarity, and resilience in athletes. The paper further outlines protein's role in reducing delayed onset muscle soreness (DOMS), replenishing vital enzymes and hormones, and restoring immune health following intense training.*

*The significance of protein timing is also highlighted, including the benefits of pre- and post-exercise intake, even distribution throughout the day, and the consumption of slow-digesting proteins like casein before sleep. These strategies ensure continuous muscle recovery and adaptation, especially when personalized based on sport-specific demands.*

*This study underscores protein's vital role in maximizing athletic potential. As emerging evidence and technology continue to shape sports nutrition, tailoring protein strategies to individual athlete needs will remain central to enhancing performance, minimizing injury, and optimizing long-term recovery.*

**Keywords:** Protein, Amino-acids, Recovery, MPS, Enzymes.

**INTRODUCTION**

Modern Education gives much more importance to physical education as all round development which emphasizes on physical fitness, motor fitness with this most importantly psychological well being.

Cricket as a popular game and volleyball has also got recent entry in world sports during past few decades with in a very limited period this games has achieved an international status as one of the popular games and being played by the people of worldwide nations Both volleyball and cricket are ball games but still they required skills, techniques and the tactics are different. Training only the body or mind will not ensure results and to reach a higher level of performance, both mind and body have to be trained to achieve positive results.

**1.1 Need and Background**

Volleyball is a team sport in which two teams of six players are separated by a net. Each team tries to score points by grounding a ball on the other team's court under organized rules. It has been a part of the official program of the Summer Olympic Games since 1964.

The sport of cricket has a *known* history beginning in the late 16th century. Having originated in south-east England, it became the country's national sport in the 18th century and has developed globally in the 19th and 20th centuries. International matches have been played since 1844 and Test cricket began, retrospectively recognized, in 1877. Cricket is the world's second most popular spectator sport after association football. Governance is by the International Cricket Council (ICC) which has over one hundred members although only twelve play Test cricket.

**1.2 Statement Of Problem**

Basically this study is a comparative study and it will provide knowledge regarding the Health Related Physical Fitness and Mental Health between volleyball and cricket boy's players.

**“A comparative study of health related physical fitness and mental health between Volleyball and cricket boy's players aged 12 to 14 years.”**

### 1.3 Significance Of The Study

The results obtained from this study will be helpful to know the status of Health Related Physical Fitness and Mental Health of boy's players Volleyball and Cricket. The result will be helpful for the further studies conducted on various games.

## II. OBJECTIVES OF STUDY

The objective of the present study will as under

- To compare means score of the muscular strength of volleyball players and cricket players as Covariate
- To compare means score of the muscular endurance of volleyball players and cricket players as Covariate
- To compare means score of the cardio vascular endurance of volleyball players and cricket players as Covariate
- To compare means score of the flexibility of volleyball players and cricket players as Covariate
- To compare means score of the body composition of volleyball players and cricket players as Covariate

## III. HYPOTHESIS OF THE STUDY

The null hypothesis is sought to be tested are as follows:-

**H<sub>01</sub>**:- There is no Significant Difference between muscular strength of volleyball players and cricket players as Covariate.

**H<sub>02</sub>**:- There is no Significant Difference between muscular endurance of volleyball players and cricket players as Covariate.

**H<sub>03</sub>**:- There is no Significant Difference between cardio vascular endurance of volleyball players and cricket players as Covariate.

**H<sub>04</sub>**:- There is no Significant Difference between flexibility of volleyball players and cricket players as Covariate.

**H<sub>05</sub>**:- There is no Significant Difference between body composition of volleyball players and cricket players as Covariate.

## IV. LIMITATIONS

- 1) There would be no control on the diet of subjects.
- 2) The research scholars will have no control on day to day activities of the subjects.
- 3) The research scholars will have no control on Medicine, standard of living of the subjects.

## V. DELIMITATIONS

- 1) The study will delimited to the students of 12 to 14 years age.
- 2) The study will delimited to develop selected Health Related Physical Fitness components.
- 3) The study will delimited to Only for Volleyball and Cricket players.
- 4) The study will delimited to Thane City

## VI. OPERATIONAL DEFINITIONS OF THE TERMS USED

- **Fitness**: -physical fitness is the ability to carry out daily tasks with vigour and alertness, without undue fatigue and meet with the ample energy to engage in leisure time pursuit and to meet the above physical stress encountered in emergency situations.
- **Health Related Physical Fitness**
  1. **Muscle strength** is the ability to exert a maximal amount of force for a short period of time. In the gym, that may be bench pressing a heavy barbell 5-8 repetitions. Think about lifting that heavy box when moving – that requires **strength**
  2. Muscular endurance is the ability of a muscle or group of muscles to repeatedly exert force against resistance. Performing multiple repetitions of an exercise is a form of muscular endurance, as is running or swimming



3. **Cardiovascular endurance** is the ability of the heart, lungs and blood vessels to deliver oxygen to your body tissues. The more efficiently your body delivers oxygen to its tissues, the lower your breathing rate is.
4. Flexibility or limberness refers to the range of movement in a joint or series of joints, and length in muscles that cross the joints to induce a bending movement or motion. Flexibility varies between individuals, particularly in terms of differences in muscle length of multi-joint muscles.
5. **Body composition** is used to describe the percentages of fat, bone, water and muscle in human bodies. Because muscular tissue takes up less space in our **body** than fat tissue, our **body composition**, as well as our weight, determines leanness.

## II. METHODOLOGY

### 2.1. Sample/Subject

A sample of 500 students of volleyball and 500 students of cricket will be of aged 12 to 14 years randomly selected from Thane City

The Purpose of study is to compare Health Related Physical Fitness and Mental Health between Volleyball and Cricket players. The details of the methodology for collecting data have presented in this chapter.

### 2.2 Research Design

The present study is conducted by adopting the comparative method of research. The researcher will personally go to the school and collect the data on Health Related Physical Fitness between Volleyball and Cricket players.

### 2.4 Dependent variables

| Health Related Physical Fitness |  |
|---------------------------------|--|
| ➤ Muscular Strength             |  |
| ➤ Muscular Endurance            |  |
| ➤ Cardio Vascular Endurance     |  |
| ➤ Flexibility                   |  |
| ➤ Body Composition              |  |

### 2.5 Criterion Measures

| Sr.no | Dependent variable        | Test               | Criterion measures |
|-------|---------------------------|--------------------|--------------------|
| 1     | Muscular Strength         | Push Up            | Time               |
| 2     | Muscular Endurance        | Bend Knee Sit ups  | Time               |
| 3     | Cardio Vascular Endurance | 9 min Run and Walk | Distance           |
| 4     | Flexibility               | Sit and Reach      | Cm                 |
| 5     | Body Composition          | BMI                | Cms, kgs           |

### 2.6 Statistical Analysis

The data will analysed by using t test

## III) FACILITIES REQUIRED

### 3.1 Subjects/Population

Fifty, n=500 boys students for volleyball and n=500 boys students for Cricket aged from 12 to 14 years , from MES Crescent School were selected for this study.

### 3.2 Equipment / Tools to Be Used

- Volleyball
- Cricket ball & bat
- Stop watch
- Weighing machine
- Measuring tape

ALL EQUIPMENTS ARE AVAILABLE IN B.P.C.A's COLLEGE OF PHYSICAL EDUCATION.

### 3.3 Man Power

There will be need of one assistant

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**3.4 Financial Requirement**

The approximate cost will be: -

|                       |       |
|-----------------------|-------|
| Equipment             | 1000  |
| Field work and travel | 1000  |
| Printing              | 1000  |
| Stationary            | 4000  |
| Binding               | 5000  |
| Other expenses        | 3000  |
| Total                 | 15000 |

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**THE IMPACT OF EMOTIONAL STABILITY ON PRODUCTIVITY AT WORKPLACE**

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**Archana Ashok Bhartiya**

DTSS College of commerce (Autonomous)

**ABSTRACT**

*Emotional stability plays a vital role in helping individuals remain calm, composed, and positive, especially when faced with workplace stress or challenges. Employees with high emotional stability are generally better at managing stress, communicating clearly, and making sound decisions in high-pressure environments. These qualities contribute to fewer conflicts, improved collaboration, and the development of a more supportive and productive workplace culture.*

*This study explores the link between emotional stability and key workplace factors such as job satisfaction, employee behaviour, stress management, and performance outcomes. Data will be collected through structured questionnaires and interviews to understand how employees with different levels of emotional stability function within professional settings. The findings aim to highlight the importance of emotional well-being in organizations and to recommend strategies such as training programs, counselling services, and emotional intelligence development. Such initiatives can foster a healthier, more effective work atmosphere. The study's insights may assist managers and policymakers in improving work conditions and promoting overall organizational well-being.*

**Keywords:** Emotional Stability, Workplace Productivity, Stress Management, Employee Performance, Emotional Intelligence

**INTRODUCTION**

Emotional stability refers to the capacity to remain calm, confident, and balanced when confronted with stress, uncertainty, or adversity. In contrast, emotional instability often manifests as frequent anxiety, irritability, or low self-confidence. In the context of today's demanding work environments, emotional stability has emerged as a significant determinant of individual and organizational success.

Productivity, broadly defined, measures the efficiency with which inputs are converted into outputs—whether by individuals, teams, or entire systems. As emphasized by the Bureau of Labour Statistics, productivity reflects the output generated over a specific time frame relative to the effort invested. In modern workplaces, productivity is often seen as both a personal benchmark of success and a collective measure of organizational health.

The workplace itself, traditionally a physical location such as an office, factory, or retail space, has evolved with the rise of digital technologies. It now encompasses virtual environments where remote and hybrid work models thrive. Regardless of the form it takes, the workplace serves as the central setting for employees to fulfil their professional responsibilities.

This study emphasizes the importance of emotional stability in influencing employee behaviour and organizational productivity. It aims to provide actionable insights into how emotional well-being contributes to improved work performance and a more harmonious workplace culture.

**REVIEW OF LITERATURE**

1. Dr. R. K. Mishra (2018) - In his study titled "Workplace Stress and Coping Mechanism in a Cohort of Indian Service Industry", Dr. Mishra explored how emotional stability plays a critical role in managing workplace stress and increasing productivity. The study concluded that emotionally stable employees tend to show better decision-making skills and handle work pressure more effectively.
2. Bhavana R. & Shilpa D. (2020)- Their research, "How Does Emotional Intelligence Impact Employee Performance?", focused that emotional stability as a core component of emotional intelligence. The study found that emotionally stable employees displayed higher motivation and commitment, leading to better individual and team productivity.
3. Dr. Anjali Sharma (2019)- In the paper "Examining the Relationship Between the Role of Personality Traits and Work-Life Balance", Dr. Sharma identified emotional stability as a significant predictor of positive workplace behaviour. The research showed that emotionally stable individuals were less prone to conflict and more likely to contribute positively to team goals.

4. John D. Mayer & Peter Salovey (1997)- These pioneers of emotional intelligence discussed the importance of emotional regulation and stability in their foundational work. They suggested that emotional stability improves interpersonal relationships at work and boosts productivity through better focus and resilience.
5. Daniel Goleman (2006)- In his book “Emotional Intelligence: Why It Can Matter More Than IQ”, Goleman emphasized emotional stability as a core element of workplace success. He found that emotionally intelligent (and stable) employees are more adaptable, efficient, and cooperative, thus enhancing overall productivity.

## RESEARCH METHODOLOGY

### Objectives

- 2) To identify the role of organizational support in promoting mindfulness and well-being.
- 3) To recommend strategies for integrating mindfulness practices in professional environments.
- 4) To assess the impact of employee well-being on job performance and productivity

### Hypothesis

- H1 – Greater levels of emotional stability tends to enhance job performance
- H2 - There is a significant difference in productivity between employees with high and low levels of emotional stability

**Data Collection** – Both the data

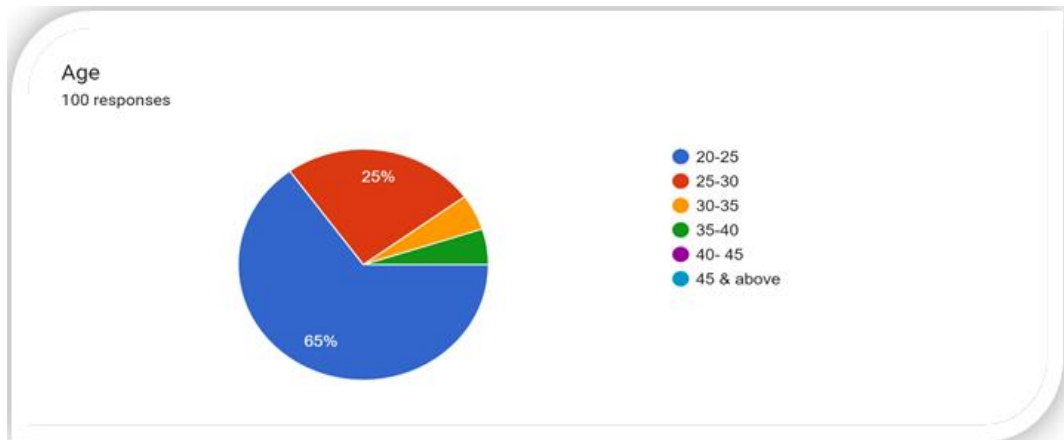
**Tool:** google form ( <https://forms.gle/SVnAza8FW3LAPLQa6> )

**Area of Collection:** Mumbai suburban

**Simple size** - 100 responses

**Limitations:** Area of collection, Time, and availability of respondents

## DATA COLLECTION AND INTERPRETATION



**Interpretation:** Age Distribution (100 responses)

65% of the participants are aged 20–25.

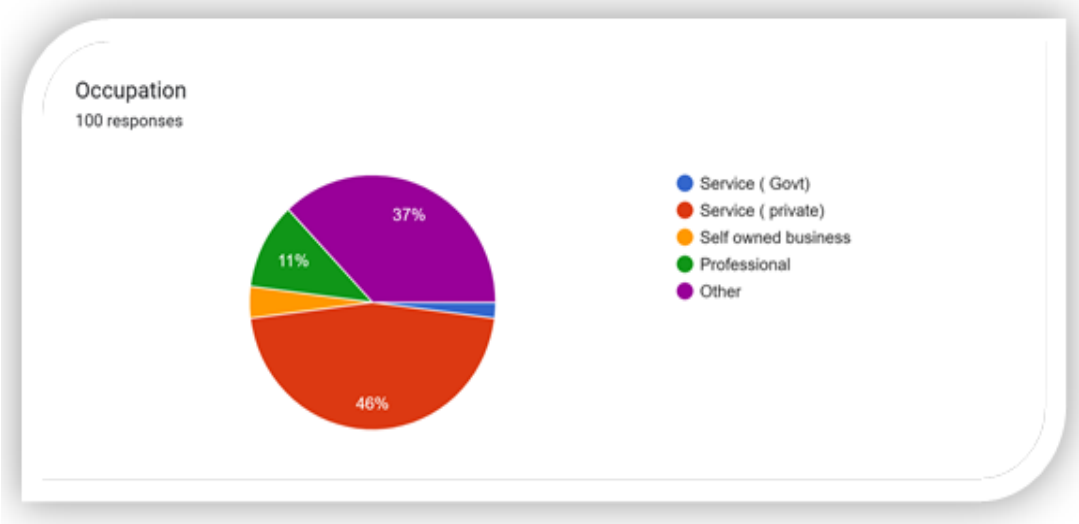
25% are between 25–30 years old.

5% are between 30–35 years old.

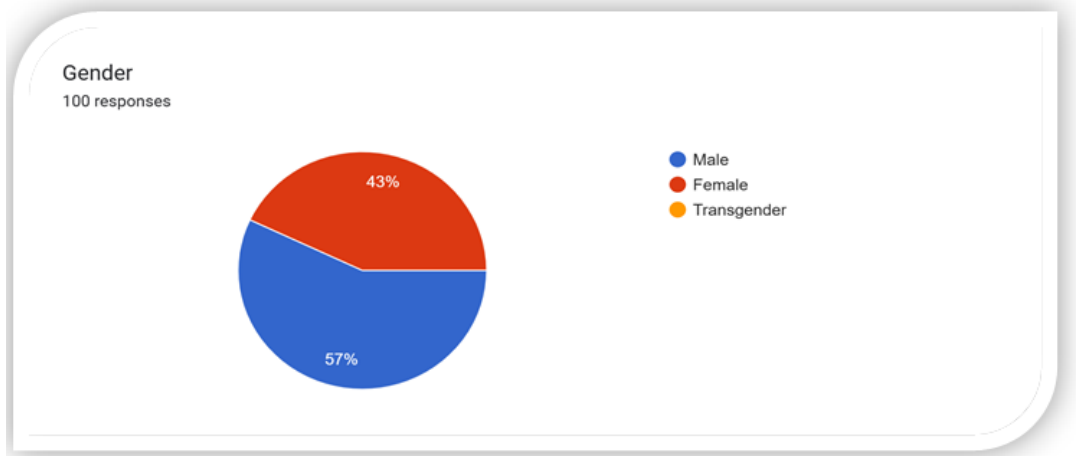
5% are aged 35–40.

No participants are in the 40–45 or 45 & above age groups.

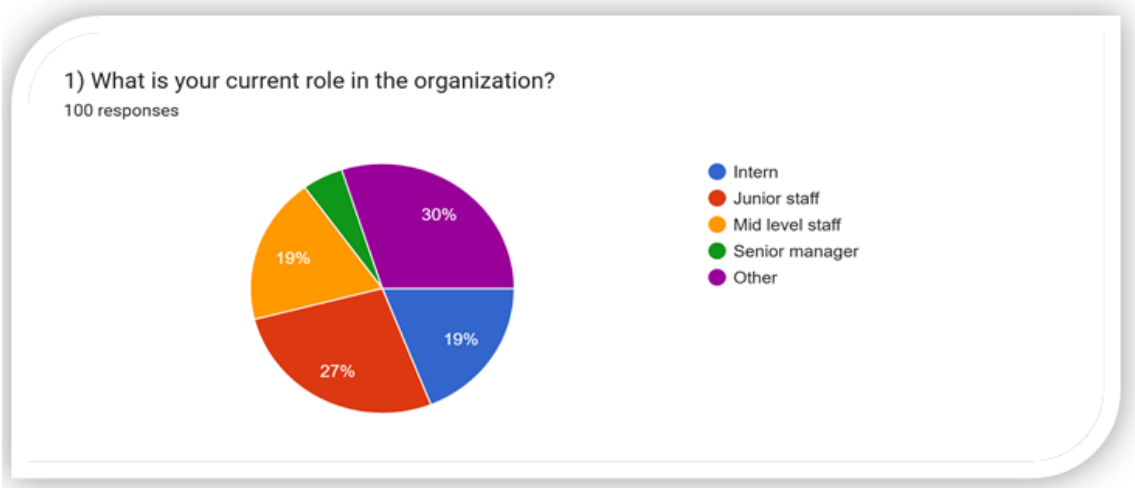
Most participants in the 20–25 age group represent younger population.



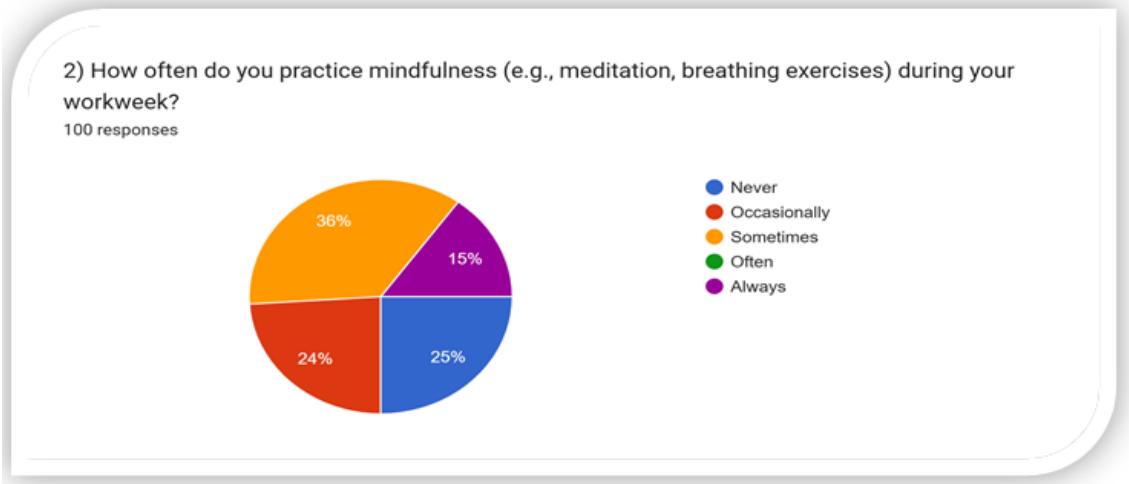
**Interpretation:** In the given chart 46% of the respondents are working in the private sector and 37% are from other occupations not listed in the options. 11% are professionals (e.g. Teacher, doctors, lawyers, consultants), 4% are running a self-owned business and Only 2% are working in the government sector.



**Interpretation:** The pie Chart represent that 43% of the respondents are females and 57% are males.



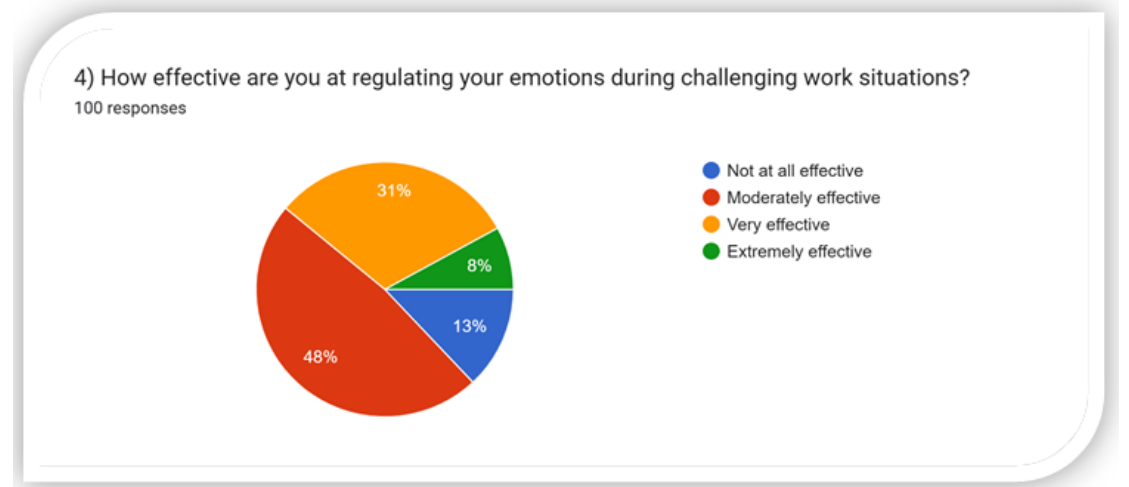
**Interpretation:** 30% of respondents selected “Other” roles not mentioned in the list and 27% are junior staff in their organizations, 19% are working as interns. Around 19% hold mid-level staff and Only 5% are senior managers.



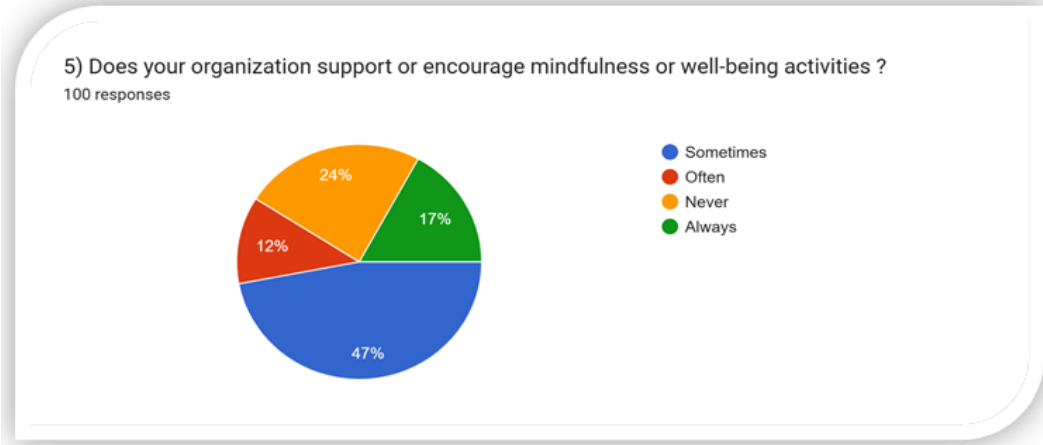
**Interpretation:** 36% of people practice mindfulness sometimes, 25% said they never practice mindfulness, 24% practice it occasionally, 15% practice mindfulness always.



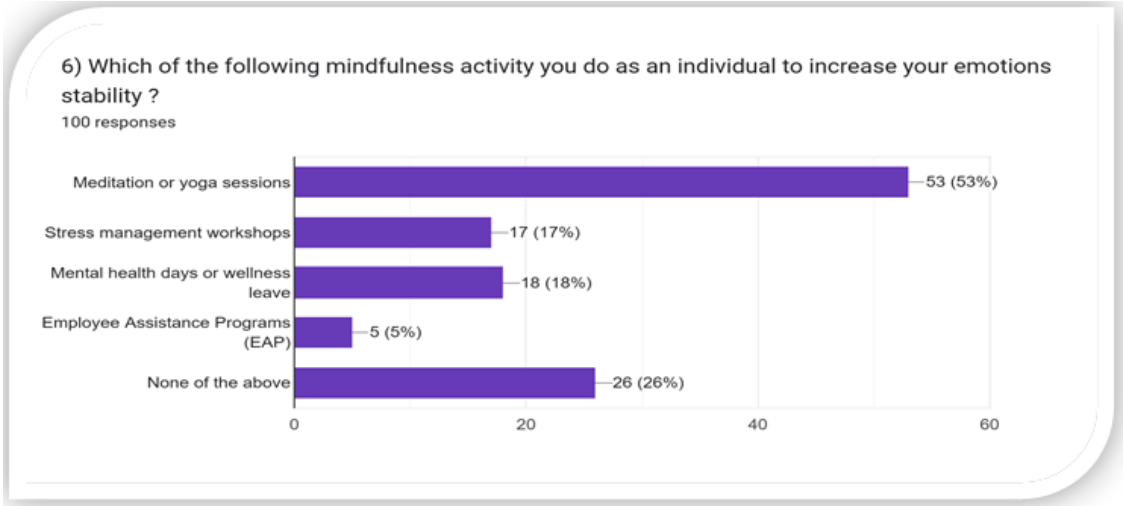
**Interpretation:** This pie chart represents that for 47% of respondents mindfulness sometimes helps them to manage their stress whereas 19% of respondents says that mindfulness often help them to manage their stress at work. For 6% of the respondents IT never help them and lastly 28% of the respondents says that mindfulness always help them to manage their stress at work.



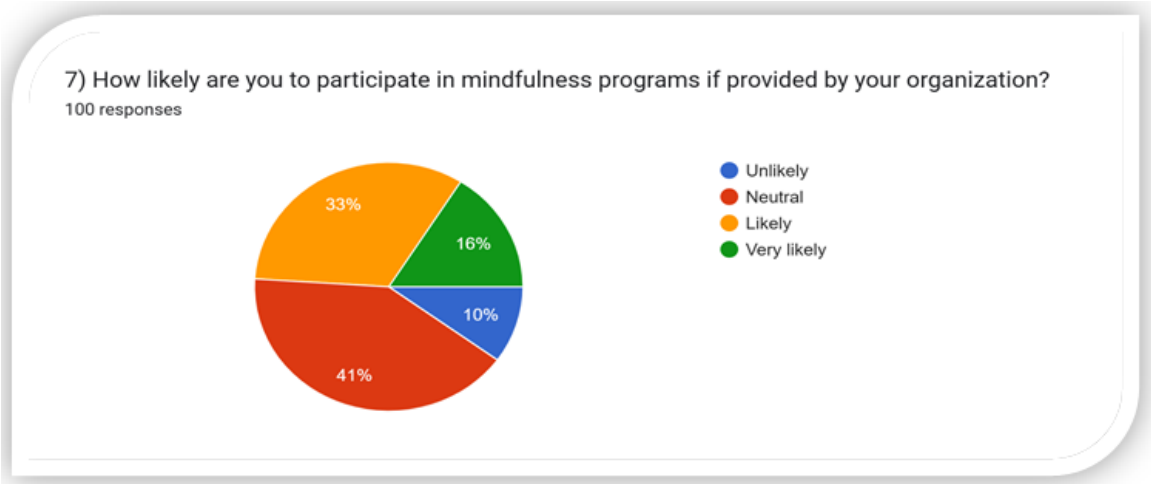
**Interpretation:** The pie chart represents that 48% of respondents are moderately effective at regulating their emotions during challenging work situations whereas 31% of them are very effective at it and only 8% of respondents are extremely effective at regulating emotions during challenging work situations, lastly 13% of them are not at all effective at regulating their emotions during challenging work situation.



**Interpretation:** The pie chart represents that 17% of the respondents always get organizational support as well as encouragement in form of well-being activities.47% of the respondents sometimes get support and 12% of the respondents often get encouragement and 24% of the them do not get any support or encouragement from their organisation for mindfulness.

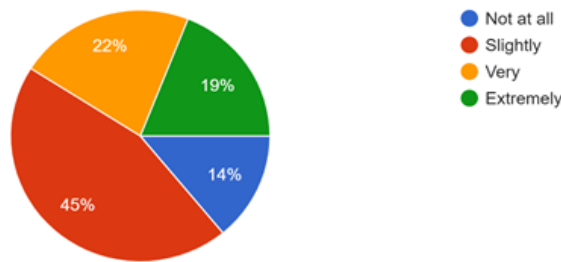


**Interpretation:** the above pie chat shows that 53% of respondents do meditation or yoga to increase their emotional stability. stress management workshops attained by 17% of the respondents and 18% of them take wellness leave.5% of them enrolled for employee assistance programs and 26% of the respondents do nothing to increase their emotional stability.



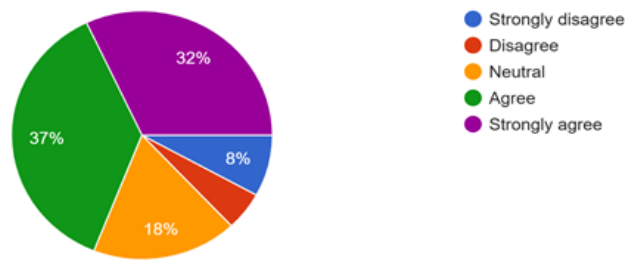
**Interpretation:** the above pie chart represents that 16% of the respondents are very likely and 33% of the respondents are likely to participate in mindfulness programs if provided by their organisation.10% of the respondents are unlikely to participate in any program whereas 41% of them are neutral about participating in mindfulness programs if provided by their organisation.

8) To what extent do you feel that your emotional stability impacts your work performance?  
100 responses



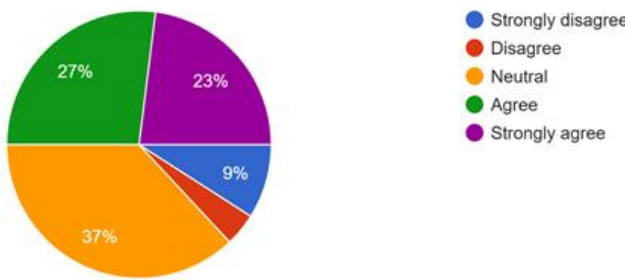
**Interpretation:** the given pie chat shows that 19% of the respondents extremely feel and 22% of them feel that their emotional stability impacts their work performance whereas 45% of them slightly feel the same.14% of the respondents do not feel that their emotional stability impacts their work performance.

9) Do you agree with the statement: "Emotionally stable employees perform better in their roles"? ?  
100 responses



**Interpretation:** The following pie chart shows that 37% of the respondents are agree and 32% of them are strongly agree with the given statement that emotionally stable employees perform better in their roles.18% of the respondents are neutral about the statement,6% of them are disagree with the statement and 8% of the respondents are strongly disagree with the given statement.

10) Do you think employees with higher emotional stability experience less stress and burnout?  
100 responses



**Interpretation:** The above pie chart represents that 27% of the respondents are agree, while 23% of them are strongly agree that higher emotional stability experience less stress and burnout. about 4% of them are disagree and 9% of them are strongly disagree with the statement. A neutral response is given by 37% of the respondents.



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**FINDINGS AND CONCLUSIONS**

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**1. Age Group**

- Most of the participants are young adults in the 20–25 age group. Very few are above 30, and none are above 40.

**2. Type of Work**

- A large number of people work in the private sector.
- Many respondents belong to occupations that were not listed in the options.
- Only a small number are professionals like teachers, doctors, or lawyers.
- Very few run their own business or work in government jobs.

**3. Gender**

- There are more male respondents than female respondents.

**4. Job Role**

- Many respondents have roles not listed in the survey.
- Some are working as junior staff or interns.
- A few are at mid-level positions.
- Only a handful are senior managers.

**5. Mindfulness Practice**

- Some people practice mindfulness sometimes or occasionally.
- A few always practice it.
- Many do not practice mindfulness at all.

**6. Mindfulness and Stress**

- For most people, mindfulness helps to manage stress sometimes or always.
- A few find it helpful often.
- Only a small number said mindfulness never helps them with stress.

**7. Handling Emotions at Work**

- Many people are fairly good at managing their emotions during tough work situations.
- Some are very good at it.
- A few are excellent, while a small group struggles with emotional control.

**8. Support from Organization**

- Only a few people always receive support for well-being from their organization.
- Many get support only sometimes.
- Some get it often.
- A good number do not get any support at all.

**9. Ways to Improve Emotional Stability**

- Most people do yoga or meditation to stay emotionally balanced.
- Some take wellness leave or attend stress management workshops.
- A few use employee assistance programs.
- Some do not take any steps for emotional stability.

**10. Interest in Mindfulness Programs**

- Many people are interested in joining such programs if their organization offers them.
- Some are not sure.
- A few are not interested at all.

**11. Impact of Emotions on Work Performance**

- Some feel that emotional stability strongly affects their work performance.
- Others feel it has a slight effect.
- A few think it has no impact.

**12. Belief About Emotionally Stable Employees**

- Most people agree that emotionally stable employees perform better.
- Some are unsure.
- A small number disagrees with this idea.

**13. Belief About Reducing Stress Through Stability**

- Many believe that emotionally stable people experience less stress and burnout.
- Some are neutral about it.
- Only a few disagree with this idea.

**CONCLUSION**

The findings show that most participants are young professionals, mainly in the private sector or in roles not clearly listed. Senior-level employees and government workers are very few. This suggests that mindfulness and emotional well-being are more relevant to younger or early-career individuals. While some people practice mindfulness occasionally or sometimes, very few do it regularly. Many find it helpful in managing stress, but there is still a group that does not practice it at all. Emotional regulation is fairly good among most, though some still struggle in challenging situations.

Support from organizations for emotional well-being is inconsistent. Some employees receive it, but many do not. Despite this, there is clear interest in mindfulness programs if offered by the workplace.

Most respondents believe emotional stability improves performance and helps reduce stress and burnout. Overall, while the attitude is positive, there is a need for better awareness, regular practice, and stronger organizational support for emotional and mental well-being at work.

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- 6) [https://nobaproject.com/modules/emotional-intelligence?utm\\_source=chatgpt.com](https://nobaproject.com/modules/emotional-intelligence?utm_source=chatgpt.com)
- 7) [https://www.researchgate.net/publication/328633925\\_It's\\_Really\\_Matter\\_Review\\_of\\_the\\_book\\_Emotional\\_Intelligence\\_Why\\_it\\_can\\_matter\\_more\\_than\\_IQ'\\_by\\_Daniel\\_Goleman](https://www.researchgate.net/publication/328633925_It's_Really_Matter_Review_of_the_book_Emotional_Intelligence_Why_it_can_matter_more_than_IQ'_by_Daniel_Goleman)
- 8) <https://einsteinmed.edu/faculty/13659/anjali-sharma>

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**IMPACT OF HIGH-INTENSITY INTERVAL TRAINING ON CARDIOVASCULAR PERFORMANCE  
IN YOUTH ATHLETES**

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**Dr. Archana B.**

Uikey Chetana's College of Arts and Commerce, Bandra East Mumbai 400051

**ABSTRACT**

*High-Intensity Interval Training (HIIT) has gained substantial attention as an efficient exercise modality for improving cardiovascular health, particularly among athletes. This study investigates the effects of an 8-week HIIT program on various cardiovascular health indicators in young athletes aged 18 to 25. Participants (n = 60) were divided into control and experimental groups, with the latter undergoing supervised HIIT sessions thrice weekly. Baseline and post-intervention measurements included resting heart rate, VO<sub>2</sub> max, systolic and diastolic blood pressure, and heart rate recovery (HRR). Data were analyzed using paired t-tests and ANOVA to assess within-group and between-group differences. Results demonstrated significant improvements in the HIIT group: VO<sub>2</sub> max increased by 6.0 ml/kg/min ( $p < 0.01$ ), resting heart rate decreased by 6.0 bpm ( $p < 0.01$ ), and HRR improved by 7.5 bpm ( $p < 0.01$ ). Additionally, reductions were observed in systolic (-5.1 mmHg,  $p < 0.05$ ) and diastolic (-4.4 mmHg,  $p < 0.05$ ) blood pressure. No significant changes were found in the control group. These findings suggest that HIIT is an effective strategy for enhancing cardiovascular fitness in young athletes, potentially reducing long-term cardiovascular risk. Further research with longer durations and diverse populations is recommended to generalize these findings.*

**Keywords:** *Young Athletes; High-Intensity Interval Training; Evaluation of Results of Preventive Actions*

**INTRODUCTION**

Cardiovascular health is a critical component of overall athletic performance and long-term well-being, particularly in young athletes who are in their prime developmental stages. As the demands of competitive sports increase, so does the need for efficient training methods that not only enhance performance but also promote cardiovascular resilience. Among the various exercise modalities, High-Intensity Interval Training (HIIT) has emerged as a time-efficient and potent approach for improving aerobic and anaerobic capacities. HIIT typically involves repeated short bursts of intense exercise alternated with recovery periods. Unlike traditional moderate-intensity continuous training (MICT), HIIT has been shown to elicit comparable or superior improvements in cardiovascular fitness in shorter time frames. Numerous studies have explored the benefits of HIIT in clinical populations and general fitness enthusiasts; however, there is limited data focusing on its specific impact on trained young athletes, a demographic with unique physiological adaptations and training responses. The rationale for this study stems from the need to evaluate whether HIIT can offer measurable cardiovascular advantages in young athletic populations without compromising performance or recovery. Key cardiovascular markers such as VO<sub>2</sub> max, resting heart rate, systolic and diastolic blood pressure, and heart rate recovery (HRR) provide valuable insight into the effectiveness of HIIT in this context.

This study aims to fill the existing research gap by systematically analyzing the effects of an 8-week HIIT protocol on cardiovascular health parameters in young athletes aged 18 to 25. By employing a controlled experimental design and data-driven analysis, the research intends to contribute to the optimization of training regimens in youth athletic programs and inform evidence-based practices in sports science.

**LITERATURE REVIEW**

High-Intensity Interval Training (HIIT) has been widely recognized as a time-efficient and physiologically effective exercise strategy to enhance cardiovascular health. Over the past decade, several studies have

documented the positive effects of HIIT on both healthy individuals and clinical populations. However, the exploration of HIIT's impact on **young athletes**, who typically possess higher baseline fitness levels, remains comparatively limited.

**HIIT vs. Traditional Training Methods:**

According to Gibala et al. (2022), short-term HIIT protocols can produce similar improvements in mitochondrial capacity and VO<sub>2</sub> max as traditional endurance training, despite requiring less total exercise volume. This finding has sparked interest in the application of HIIT in athletic settings, especially where time efficiency is critical. Milanović et al. (2024) conducted a meta-analysis and concluded that HIIT significantly improves aerobic capacity across different populations, including trained individuals, suggesting its utility beyond general health and fitness.

**Cardiovascular Adaptations:**

Several physiological adaptations contribute to HIIT's effectiveness. Helgerud et al. (2022) observed significant improvements in stroke volume and maximal oxygen uptake in athletes following a HIIT regimen. Additionally, studies such as Tjønnå et al. (2008) demonstrated reductions in systolic and diastolic blood pressure, along with enhanced endothelial function after regular HIIT sessions. These outcomes highlight HIIT's role in supporting both performance enhancement and cardiovascular risk reduction.

**Application in Young Athletes:**

Despite the growing body of evidence, studies focusing specifically on young, trained athletes are relatively scarce. Buchheit and Laursen (2023) reviewed the use of interval training in team sports and noted that while HIIT is effective in improving aerobic performance, careful programming is needed to avoid overtraining in youth athletes. Furthermore, Kemi and Wisloff (2010) emphasized that the responsiveness of cardiovascular markers to HIIT may vary depending on age, sex, and baseline fitness, underlining the importance of tailored interventions.

**Heart Rate Recovery and VO<sub>2</sub> Max:**

Heart Rate Recovery (HRR) is a recognized indicator of autonomic function and cardiovascular efficiency. Studies by Imai et al. (1994) and later by Buchheit et al. (2019) reported that HIIT improves HRR, suggesting enhanced parasympathetic reactivation. Similarly, HIIT has been consistently shown to improve VO<sub>2</sub> max—a critical determinant of endurance capacity. In a youth athletic context, enhanced VO<sub>2</sub> max can translate into better performance and faster recovery during high-intensity sport-specific tasks.

**Gaps in Current Research:**

While much is known about the general efficacy of HIIT, there is a notable gap in literature specifically addressing its longitudinal impact on cardiovascular parameters in young athletes—a group already engaged in regular physical training. This creates an opportunity to examine whether HIIT offers additional or superior benefits compared to existing training regimens in this subgroup.

**RESEARCH OBJECTIVES**

The primary objectives of this study are:

1. To evaluate the impact of an 8-week HIIT program on key cardiovascular health indicators in young athletes.
2. To compare the cardiovascular changes between a HIIT intervention group and a control group following traditional training protocols.
3. To determine the effectiveness of HIIT in enhancing VO<sub>2</sub> max, reducing resting heart rate, improving heart rate recovery (HRR), and lowering systolic and diastolic blood pressure.

**RESEARCH HYPOTHESES**

- **H1:** HIIT will lead to a statistically significant increase in VO<sub>2</sub> max in young athletes.
- **H2:** HIIT will result in a significant reduction in resting heart rate compared to the control group.
- **H3:** HIIT will significantly improve heart rate recovery (HRR) post-exercise.
- **H4:** HIIT will lead to greater reductions in systolic and diastolic blood pressure compared to the control group.

**METHODOLOGY****Study Design**

This study adopts a quasi-experimental pre-test/post-test control group design. Participants were randomly assigned to either an experimental (HIIT) group or a control group continuing their regular training routine.

**Participants**

- **Sample Size:** 60 young athletes (aged 18–25), both male and female.
- **Inclusion Criteria:** Engaged in regular sports training for at least 2 years; no known cardiovascular conditions.
- **Exclusion Criteria:** Injuries, chronic illnesses, or current involvement in any form of HIIT.

**Intervention**

- **HIIT Group:** Participated in an 8-week supervised HIIT program, 3 sessions per week.

Each session included:

- **Warm-up:** 5 minutes (light jogging, mobility drills)
- **HIIT protocol:** 6–10 cycles of 30 seconds of maximum effort (sprints or cycling) followed by 1-minute active recovery
- **Cool down:** 5 minutes stretching and breathing exercises
- **Control Group:** Continued their usual training (standard endurance or sport-specific training), without any HIIT elements.

Measurements

Pre- and post-intervention assessments were conducted using standardized protocols:

- **VO<sub>2</sub> max:** Measured via the Cooper 12-minute run test or treadmill-based indirect calorimetry.
- **Resting Heart Rate:** Taken in the morning after waking up for consistency.
- **Blood Pressure:** Measured using an automated sphygmomanometer (3 readings averaged).
- **Heart Rate Recovery (HRR):** Measured as the difference between peak heart rate during exercise and heart rate one minute post-exercise.

Data Collection Tools

- Polar heart rate monitors for heart-related measurements
- Omron blood pressure monitor
- Treadmill/track-based VO<sub>2</sub> max test
- Participant compliance tracked using training logs and attendance sheets

Data Analysis

- Statistical analysis performed using **SPSS (Version 25)**.
- **Paired t-tests** to analyze within-group changes pre- and post-intervention.
- **Independent samples t-tests** and **ANOVA** for between-group comparisons.
- **Significance level:**  $p < 0.05$

RESULTS

The data collected from both groups before and after the 8-week intervention were analyzed to evaluate changes in key cardiovascular indicators. The results are summarized in the tables and figures below.

1. Participant Overview

A total of 60 participants (30 in the HIIT group, 30 in the Control group) completed the study. There were no dropouts, and compliance in the HIIT group exceeded 90%.

Table 1: Descriptive Statistics of Cardiovascular Variables (Pre vs. Post)

| Variable                        | Group   | Pre-Test Mean ± SD | Post-Test Mean ± SD | Mean Change | p-value |
|---------------------------------|---------|--------------------|---------------------|-------------|---------|
| VO <sub>2</sub> max (ml/kg/min) | HIIT    | 48.5 ± 4.2         | 54.5 ± 4.6          | +6.0        | <0.01   |
|                                 | Control | 49.1 ± 4.1         | 49.8 ± 4.3          | +0.7        | 0.21    |
| Resting HR (bpm)                | HIIT    | 68.3 ± 5.1         | 62.3 ± 4.8          | -6.0        | <0.01   |
|                                 | Control | 67.9 ± 5.0         | 67.2 ± 5.3          | -0.7        | 0.33    |
| HR Recovery (bpm)               | HIIT    | 18.2 ± 3.5         | 25.7 ± 4.2          | +7.5        | <0.01   |
|                                 | Control | 18.6 ± 3.2         | 19.4 ± 3.6          | +0.8        | 0.18    |
| Systolic BP (mmHg)              | HIIT    | 122.4 ± 6.1        | 117.3 ± 5.4         | -5.1        | <0.05   |
|                                 | Control | 121.9 ± 5.9        | 120.5 ± 6.2         | -1.4        | 0.19    |
| Diastolic BP (mmHg)             | HIIT    | 78.6 ± 4.8         | 74.2 ± 4.2          | -4.4        | <0.05   |
|                                 | Control | 78.2 ± 4.6         | 77.3 ± 4.4          | -0.9        | 0.22    |

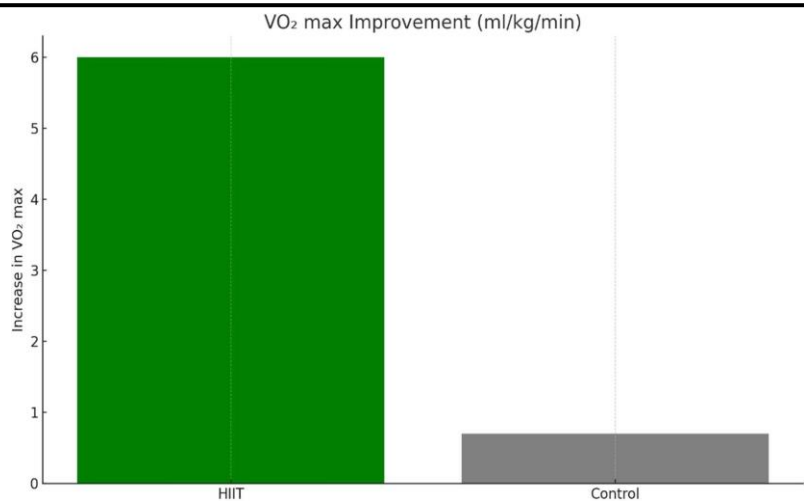


Figure 1: Comparison of VO<sub>2</sub> max Improvement



Figure 2: Resting Heart Rate Reduction

STATISTICAL ANALYSIS SUMMARY

- **VO<sub>2</sub> max** increased significantly in the HIIT group ( $p<0.01$ ), indicating enhanced aerobic capacity.
- **Resting heart rate** decreased significantly in the HIIT group ( $p<0.01$ ), while the control group showed no significant change.
- **Heart rate recovery** improved markedly in the HIIT group ( $p<0.01$ ), suggesting improved autonomic regulation.
- Both **systolic** and **diastolic blood pressure** showed significant reductions in the HIIT group ( $p<0.05$ ), while changes in the control group were minimal and statistically insignificant.

Interpretation

The data strongly support the hypotheses that HIIT leads to significant improvements in cardiovascular health markers among young athletes. Improvements in VO<sub>2</sub> max, heart rate measures, and blood pressure suggest enhanced cardiorespiratory efficiency and autonomic function after just 8 weeks of HIIT.

CONCLUSION

The findings of this study demonstrate that High-Intensity Interval Training (HIIT) is a highly effective training modality for improving cardiovascular health in young athletes. Over the course of an 8-week intervention, significant enhancements were observed in key cardiovascular parameters including VO<sub>2</sub> max, resting heart rate, heart rate recovery (HRR), and both systolic and diastolic blood pressure among participants in the HIIT group. These improvements were statistically significant and notably greater than those observed in the control group, which continued with traditional endurance or sport-specific training.

The observed increase in VO<sub>2</sub> max highlights HIIT's potential to enhance aerobic performance, while reductions in resting heart rate and improvements in HRR indicate better autonomic regulation and recovery capacity. Furthermore, the reductions in blood pressure suggest that HIIT may contribute to long-term cardiovascular protection, even in a young and already active population.

Overall, this study supports the integration of structured HIIT protocols into training programs for young athletes. Not only does HIIT provide time-efficient conditioning, but it also delivers substantial health benefits that may enhance both performance and longevity in sport. Future research may expand upon these findings by exploring sport- specific adaptations, long-term retention of cardiovascular gains, and the psychological impacts of HIIT in youth athletics.

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**STUDY OF EFFECT OF YOGIC PRACTICES ON SELECTED HEALTH- RELATED PHYSICAL FITNESS COMPONENTS OF NATIONAL CADET CORPS AGED 17 TO 19 YEARS OF MUMBAI**

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<sup>1</sup>Mr. Avinash Vasant Mandake and <sup>2</sup>Dr. Sandipraj S. Autade

<sup>1</sup>Ph.D. Scholar and <sup>2</sup>Associate Professor, Bharati Vidyapeeth (Deemed to be University), College of Physical Education, Dhankawadi Pune (Maharashtra), India

**ABSTRACT****Context:**

*Yoga brings control over breathing and that works in effectively increasing the psycho-motor coordination. Yoga can also play a significant role in the effective education of students. Yoga is found to provide strategies for successfully coping with various kinds of life stresses.*

**Settings and design:** *A sample of Fifty (N = 50) age range from 17 to 19 years, NCC College Girls were selected for this study. Further they were randomly selected in to equal groups*

**Material and Method:**

*At the baseline and after training intervention were used to assess the levels of Yogic Performance. Data were analyzed by using One Way ANCOVA test.*

**Statistical Analysis Used:**

*The results revealed that the Yogic Practices was found helpful to improve the Muscular Strength and Muscular Endurance of the players.*

**Conclusion:**

*The findings help to conclude that the Yogic practices was found helpful to improve the Muscular Strength and Muscular Endurance of the players.*

**Keywords:** *Yogic Practices, Muscular Strength, Muscular Endurance*

**INTRODUCTION**

This aspect can contribute much to the life-long education of students of all age-groups to confront stressful situation in life. Everyday stress & anxiety zaps energy and decreases motivation & concentration. Long practice of Asanas, Mudras, Bandhas, kriyas and Pranayama leads to concentration of the mind and self-realization. Improve the Physical and Mental Health. Pranayama means control of respiration including holding of breath. Control in respiration is applicable in all the three stages, 1) controlled inspiration- puraka, 2) controlled retention of breath –kumbhaka and 3) controlled expiration- rechaka. The usual recommended time ratio between Puraka, Kumbhaka and Rechaka is 1:4:2 and is accompanied by three Bandhas, namely, Mulabandha, Jalandhar Bandha and uddiyana Bandha. But this varies according to individual capacity and number of rounds one is practicing. Rechaka should always take longer time than Puraka. Ratio between Puraka and Rechaka should be 1:2. Every Puraka must end quietly.

**OBJECTIVES OF THE STUDY**

The objectives of the study were as under:

- To compare adjusted means, score of **Muscular Strength** of college girl's yogic training group and control group by taking pre-Muscular Strength taken co-variate.
- To compare adjusted means, score of **Muscular Endurance** of college girl's yogic training group and control group by taking pre-Muscular Endurance taken co-variate.

**HYPOTHESES OF THE STUDY**

The hypothesis sought to be tested are as follows:

- **H<sub>01</sub>**: There was no significant difference in the adjusted mean score of Muscular strength of NCC college girls of yogic practices group and control practices group by taking pre-Muscular strength as co-variate.
- **H<sub>01</sub>**: There was no significant difference in the adjusted mean score of Muscular endurance of NCC college girls of yogic practices group and control group by taking pre-Muscular endurance as co-variate.



## MATERIALS AND METHOD

**Selection of Sample:** A sample of Fifty (n= 50) age range from 17 to 19 years girl's were selected for this study. Further they were randomly selected in to equal groups (Training Group / Experimental Group and Control Group).

### RESEARCH DESIGN: (PRE-TEST AND POST-TEST CONTROL GROUP DESIGN)

The design of the experiment had been planned in three phase's viz., **Phase – I: Pre-test**, **Phase – II: Training or Treatment**, and **Phase – III: Post-test**. The subjects in the experiment were divided into two groups, i.e. Group 'A' Experimental group and Group 'B' Control group; each group consisted of 25 subjects. Experimental group was given Yogic Practices program for the period of twelve weeks.

**Selected Variables:** Muscular Strength and Muscular Endurance

### Tools / Instruments:

The following criterion measures were included to record the reading of various test items:

| Variable           | Test              | Unit  |
|--------------------|-------------------|-------|
| Muscular Strength  | Modified Push Ups | Count |
| Muscular Endurance | Bent Knee Sit Ups | Count |

The Integrated training was considered as independent variable for the present study which includes following aspects:

|                          |                   |            |             |
|--------------------------|-------------------|------------|-------------|
| Seating Position Asanas  | Padmasana         | Kriya      | Kapalabhati |
|                          | Vajrasana         |            |             |
|                          | AkarnaDhanurasana |            |             |
|                          | Paschimottanasana |            |             |
|                          | Padmasana         |            |             |
| Prone Position Asanas    | Bhujangasana      | Pranayama  | AnulomVilom |
|                          | Ardhashalbhasana  |            | Ujjae       |
|                          | Shalbhasana       | Meditation | Om Chanting |
| Supine Position Asanas   | Shavasana         |            |             |
|                          | Pawanmukhasan     |            |             |
|                          | Halasana          |            |             |
|                          | Naukasana         |            |             |
| Standing Position Asanas | Vrikshasana       |            |             |
|                          | Tadasana          |            |             |
|                          | Chakrasana        |            |             |

### Statistics:

Comparison of group was done with the help of One Way Analysis of Covariance ANCOVA.

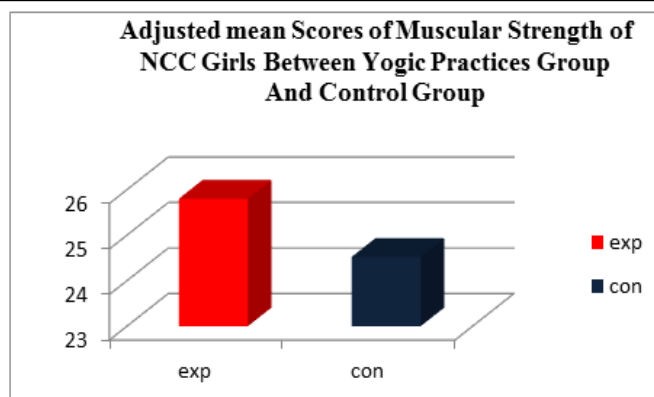
## RESULTS AND DISCUSSION

### • Effect of Yogic Practices on the Basis of Muscular Strength

The mean achievement in *Muscular Strength* due to *Yogic Practices*, as obtained from ANCOVA test, revealed that -

There is significant difference between adjusted mean scores of Muscular Strength of Yogic Practices Group and Control Group by Muscular Strength taking Pre Muscular Strength as covariate ( $F_{y.x} = 8.81$ ,  $df=49$ ,  $p>0.01$ ). The adjusted mean scores of Muscular Strength of NCC Girls of Yogic Practices Group was 25.80 and Control Group was 24.52. Thus, the overall performance scores in adjusted mean scores of both the groups Yogic Practices Group and Control Group of Muscular Strength of NCC Girls did not differ significantly.

These results help to interpret that the effect of Yogic Practices were useful in improving Muscular Strength.



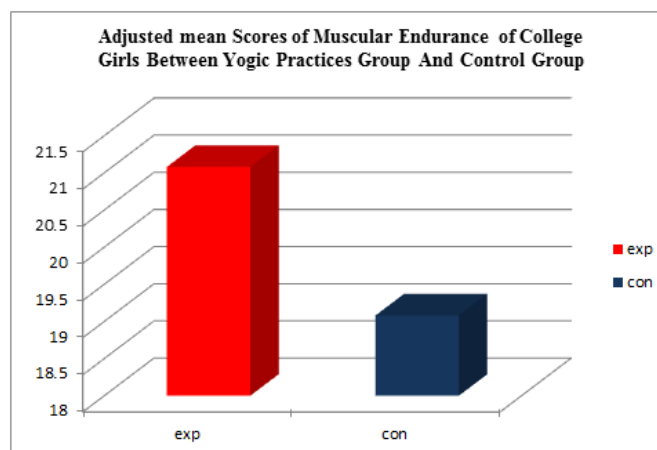
Comparison of Adjusted Mean Scores of Muscular Strength of NCC Girls between Yogic Practices Group and Control Group

• **Effect of Yogic Practices on the Basis of Muscular Endurance :**

The mean achievement in **Muscular Endurance** due to **Yogic Practices**, as obtained from ANCOVA test, revealed that -

There is significant difference between adjusted mean scores of Muscular Endurance of Yogic Practices Group and Control Group by Muscular Endurance taking Pre Muscular Endurance as covariate ( $F_{y.x} = 22.19$ ,  $df=49$ ,  $p>0.01$ ). The adjusted mean scores of Muscular Endurance of NCC Girls of Yogic Practices Group was 21.08 and Control Group was 19.08. Thus, the overall performance scores in adjusted mean scores of both the groups Yogic Practices Group and Control Group of Muscular Endurance of NCC Girls did not differ significantly.

These results help to interpret that the effect of Yogic Practices were useful in improving Muscular Endurance.



Comparison of Adjusted Mean Scores of Muscular Endurance of NCC Girls Between Yogic Practices Group and Control Group

## CONCLUSION

The result of the study helps to conclude that the Yogic Practices was found helpful to improve Muscular Strength and Muscular Endurance of NCC Girls

## ACKNOWLEDGEMENT

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**SREE NĀRĀYAṆA GURU'S VALUES, VISION, AND MISSION FOR SELF AND SOCIAL LIBERATION THROUGH EDUCATION****<sup>1</sup>Dr. Kiran Save and <sup>2</sup>Ms. Beena Jaiprakash More**<sup>1</sup>Research Guide and <sup>2</sup>Research Scholar, D.T.S.S College of Commerce, Malad (E), Mumbai-400097  
Maharashtra, India**ABSTRACT**

*Sree Nārāyaṇa Guru demonstrated through his life and teachings how fusing conventional wisdom with cutting-edge technology might lead to a well-rounded kind of human growth. It entailed values introducing the concept of "oneness" into the setting of education, to put it another way. Inter-subjective ethics was his primary subject of instruction. He has expressed to him his feelings of justice and generosity and acknowledged him. Any effort to stop the cultural decay must start by re-framing the fundamental tenets of education because the superstructure of modern education is based on theories of education that only place a premium on pragmatism. Once such a concept has been created, concrete steps planned to put it into practice by Guru's philosophy as his mission to make India free from the clutches of evil thoughts. The essay concludes with a suggestion on the entire process of education and liberation.*

**Keywords:** Social Liberalism, Education, Narayana Guru, Social equality, Philosophy

**Aim and Objectives**

- *To reduced conflicts by promoting equality and democracy. Guru's mission of egalitarian concept to eradicate communism from entire world.*
- *To aim at nurturing a vibrant society.*
- *To act as a driving force behind the global dissemination of Sree Narayana Guru's doctrine*
- *To create a dynamic environment for excelling in the educational field.*
- *Reform movement against the injustice in the caste-ridden society in order to promote spiritual enlightenment and social equality*
- *To provide a stimulating educational experience that promotes their social, emotional and cognitive development*
- *'Enlightenment through Education' espoused by the great sage, seer and philosopher, Sree Narayana Guru.*
- *To make country self reliant*

**Methods**

*This paper uses conceptual analytical research method. Where the concept of education is analyses keeping modern education in mind to be practiced. Mainly secondary data is used to designed the paper. The sources are books, journals, and websites.*

**INTRODUCTION**

Kerala's strict caste system, many social ills, like the denial of equal opportunity and exploitation, were prevalent. Clothing, occupation, housing, language, and even names showed discrimination. Equal opportunities were not given to women. Due to this societal situation, Swami Vivekananda called Kerala a "lunatic asylum." Anyone who wants to see the world grow has to have an education. It must therefore be distributed to everyone. Women should be educated the same as men, advancement through education.

**SREE NARAYANA GURU**

Narayana Guru, who was born into an Ezhava caste family, spearheaded a reform movement against injustice in the caste-divided society of India. His native Kerala saw severe caste and community divisions as well. As a social reformer and spiritual guide, Narayana Guru made a significant contribution to the advancement of spirituality. The father of Narayana Guru was also a guy who valued education and thought that it was the way to social change, equality, enlightenment, and wealth. Narayana picked up his father's principles. He received his early instruction in a Gurukula setting from Chempazhanthi Mootha Pillai. His mother passed away when he was only 15 years old and enrolled in a gurukula.

He travelled to central Travancore at the age of 21 to study with Raman Pillai Asan, a scholar of Sanskrit who taught him the Vedas and Upanishads, as well as the literature and logical rhetoric of Sanskrit.

In 1881, he eventually went back to his village and began instructing the local kids, who eventually started referring to him as Nanu Asan out of reverence. After that, he proceeded through Tamil Nadu and Kerala.

**At birth, Sree Narayana Guru belonged to the Keralan Ezhava caste. When his mother passed away, he was only 15 years old. In order to further his education, Sri Narayana Guru went to a gurukul, which is the home of a dedicated teacher who is in charge of an ashram. He pursued studies in Sanskrit and literature. Indulging in spirituality, Shri Narayana Guru used what he discovered to dispel superstitions, to promote equality. Sree Narayana Guru is a revered name throughout India and Sri Lanka, not just in Kerala. Being born on August 28, 1855, he was a man well-versed in theology and spirituality, and he used that knowledge to unite society's various strata into a harmonious whole.**

#### **SREE NARAYANA GURU'S VALUES ON VISION OF LIBERALISM**

Guru-hood is regarded as a high human value in the context of contemplative partnerships. The yogic or dialectic contemplative eye must be able to identify and accept the great ideals that Guru-hood embodies without distortion, unilateral exaggeration, or confusion. Guru tried to establish control in situations where disagreements were likely to arise and reaffirmed and revalued educational, social, and religious perspectives. For the purposes of social liberation is defined as any efforts to bring about genuine and long-lasting change in the social institutions that limit and constrict all of our lives through systemic and institutional oppression. Despite having differing meanings, the phrases "liberation" and "education" both play significant roles in the advancement of humankind's knowledge and freedom. In this book, the freedom and growth of education are identified as making the most significant contributions to educational practices. He was very impressed by Sri Lanka. He was drawn to Buddhism for its emphasis on equality and the orderly behavior of its adherents. Naryana Guru also underlined the need for society to adopt numerous advancement strategies upon his return to India, including universal access to education, village industries, local craftsmanship, trade, and handicrafts.

People from all communities and castes realized how sophisticated Narayana Guru's teachings were. Although he advocated for equality, he believed that inequities shouldn't be used as a pretext for conversions and other forms of social unrest.

#### **LIBERATION THROUGH MISSION – ‘Educate and be free’**

The key to a good future for all of us is education. None of us can deny the significance of education in all facets of life. We become better informed and more civilized through education. People from all castes were unable to receive education in accordance with their own wishes in the past since the educational system was so strict. Kerala achieved the highest literacy rate in the world thanks to the Guru's exhortations, "Educate and be free" and "Organize and get strong." This was especially true in the Ambalapuzha and Cherthala talukas. According to Swami Vivekananda, man already possesses the manifestation of perfection. One Education must be a human endeavor rather than a collection of data. By fortifying one's intellect, a genuine education aids in the resolution of both personal and societal issues. An education that incorporates moral studies seeks to develop character, impart knowledge of a holistic perspective on life, and bring about societal reformation and elevation. An individual's self-esteem is boosted, which contributes to the development of a progressive nation. It was imperative that new values be adopted. Brahminical casteism and the traditional belief in reincarnation and karma have caused the fundamental human characteristics of compassion and love to vanish from social life. In this case, Sree Narayana Guru returned to this desolate community in order to rebuild the lost values. The Liberation Philosophy of wiping out the tears of the ignorant, the ill, and the suffering was first preached by the Guru in 1887. That perspective was very different from Hindu society's established views. According to Guru, "Castes like Brahmin do not exist. There exists only one caste-the Humanity"<sup>1</sup>. This was the Guru's attack on the foundation of Brahminical society – Chaturvarnya system.

Liberation and education are two concepts that are seen to occur chronologically. This is evident in all facets of life, including politics, economics, and social interactions. Education must liberate a person's mind and body, transforming him or her into a more human being who is conscious of their potential in the human race and in developing constructive relationships with their surroundings. Therefore, education has made it possible for man to think past freedom restrictions that limit his complete physical and developmental potential. Liberation is considered as an action and a process that occurs on both an individual and societal level. There are various perspectives and explanations about education and liberation. Education aids economic progress, societal advancement, and individual empowerment. It gives people the information, abilities, and comprehension they need to face obstacles in life, seize opportunities, and positively impact a more just and successful society.

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**A closer look at education as a tool is provided here:**

- It promotes career advancement, personal development, and empowerment for individuals.
- For society, it provides social progress, global citizenship, and economic development.
- Learning as a Tool: Improving health, advancing gender equality, and cultivating peace are ways to reduce poverty. To sum up, education is a versatile instrument that can change people, groups, and entire society. We can build a more fair, just, and prosperous future for everybody if we invest in education and make it available to everyone

**RESULTS AND DISCUSSION OF STUDY:**

To sum up, Sree Nārāyana Guru's teachings are still applicable in the modern world. Values, Vision, and Mission form the foundation of Guru's philosophy, which aims to liberate people from the grip of personal or societal problems. The idea of Guru's educational philosophy reflected the moral and ethical values of our nation since it was based on Indian culture and heritage. Guru included a range of social life-focused educational ideas into his educational planning process. The impact philosophy was created to deal with the turbulence of positive and negative values, vision, and mission. to successfully free a person and community from the fundamental sensations of injustice, hunger, and societal destitution by putting good ideals, vision, as well as mission into action. The brilliance of the Guru is therefore self-luminous, self-of-all, and perpetually victorious. Guru taught the way to live in harmony with 'Self' and the world.

The 'Enlightenment via Education' ideology of Sree Narayana sees education as a tool for material progression, socioeconomic advancement, and the political, moral, and ethical growth of individuals within society. It aims to shape a generation of young people who are compassionate, intelligent, morally aware of myself, and socially engaged. Developing a holistic outlook on life that embodies a harmonious fusion of the material and spiritual realms was the goal of the Guru. A fundamental component of Indian culture and ethos, respect for all religions is fostered by the college, which is cognizant of its conceptual duty to embody and spread the revolutionary ideal of "One Caste, One Religion, One God."

Education must be a human-made process that serves as a tool for transformation. It ought to be a key instrument for resolving societal ills. In addition to serving as traditional hubs for knowledge transfer, classrooms ought to be hubs for character development, covering topics such as values, interests, and attitudes which are important for improving comprehension and communication with others in society. Additionally, we think that the goal of education should be to create morally upright people. We firmly believe that moral principles should be promoted in education. Students should learn to discriminate between right and bad as a result of it. Times

**IN CONCLUSION**

The idea of liberation and the development of education is so crucially important in any human development because education must liberate a man's mind and body, it must make him/her more of a human being because he/she is aware of his/her potentials as a human being and is in a positive relationship that improves his/her life and that of his/her neighbor and environment. A man who has achieved freedom will therefore be able to apply his ideas to a variety of life circumstances for both his own personal growth and the advancement of his country. Education increases a person's capacity for perceiving their environment and helps them understand that reality is moving rather than static. People become more completely aware, dedicated, and prepared to act to change their circumstances as they ponder more about reality and their specific position. Therefore, it is advised that the liberation for growth of education, which seems to be the foundation of human life,

A moral and intellectual manifesto for the entire world to witness, Guru has profoundly and compassionately altered the path of history. In order to prevent Guru from being appropriated by irrational forces and connected with those who advocated majoritarian, hegemonic nationalism and the Veda and Gītā, it is necessary to emphasize his secular and pluralistic legacies in Kerala and beyond. Since education can significantly influence how young people behave by providing them with a greater understanding of what it means to live. Since profound impressions or seed habits (saṃskāra) are the source of deeds or karma, saṃskāra can be redefined to alter actions.

The cultural and moral values upheld by a nation's citizens have an impact on its future. There are hints that an ideals and life of young people are beginning to place more emphasis on fleeting pleasures. Guru always advocated social equality, education for all, and spiritual enlightenment the processes of human development in all spheres of life, including politically, politically, and economically, relate to education and liberation. 'Act that one performs, for one's own sake should also aim the good of other Men.'

As a result, the declaration spearheaded the Sree Narayana Guru's teachings and the general public's mental revolution. Being an active sage, the guru asked others to let go of their ignorance and follow the true path, which opened their eyes.

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**WINNING THE MENTAL BATTLE: TECHNIQUES TO TACKLE ANXIETY FOR ENHANCING ATHLETIC PERFORMANCE**

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**<sup>1</sup>Bhaskar Kashyap and <sup>2</sup>Dr. Rajendra N. Shelke**<sup>1</sup>Scholar, M.P.Ed, Student of BPCA'S College of Physical Education, Wadala, Mumbai<sup>2</sup>Research Guide, Assistant Professor in BPCA'S College of Physical Education, Wadala, Mumbai.**ABSTRACT**

*In the world of competitive sports, anxiety often stands as a significant psychological hurdle that can really affect how athletes perform. This paper dives into what competitive anxiety is all about, how it shows up both mentally and physically, and the negative impact it can have on focus, motor skills, and self-esteem. By referencing well-known psychological theories like the Inverted-U Hypothesis, the study explains how finding the right balance of arousal can boost performance, while too much anxiety can actually hinder it. To tackle these issues, the paper points out two proven techniques for managing anxiety: Cognitive Behavioral Therapy (CBT) and Progressive Muscle Relaxation (PMR). CBT aids athletes in reshaping negative thoughts through strategies like positive self-talk and visualization, whereas PMR emphasizes physical relaxation to alleviate bodily symptoms. Research from Craft et al. (2003), Wadey and Hanton (2008), and Humara (1999) backs up the effectiveness of these methods in enhancing focus, confidence, and consistent performance under pressure. In conclusion, the paper stresses that recognizing and managing anxiety is crucial for athletes who want to reach their peak performance. By incorporating psychological skills training into their routines, athletes can develop mental toughness and perform better in high-stress situations.*

**Keywords:** Anxiety, CBT, PMR, Pressure, Therapy.

**INTRODUCTION**

Athletes frequently suffer from anxiety, especially before and during competitions. Peak performance requires a certain level of arousal, but too much anxiety can impair concentration, cause bad decisions, and reduce physical efficiency. Effective anxiety management is crucial for athletes to perform at their peak in the high-stakes world of sports..

In the extremely competitive sports environment of today, sportsmen are not just required to drive their bodies to the limit but also ensure that they are mentally strong and unfazed. Strength, speed, and skill are a necessity, but more and more, it is being realized that \*mental resilience\* is also a key determinant of success or failure. Of all the psychological issues facing sportsmen, competitive anxiety is a significant hurdle that can seriously impede training as well as performance.

**What is Competitive Anxiety?**

Competitive anxiety is the tension, nervousness, and concern that competitors experience before or during a sports competition. It is the normal reaction to the pressure of performing in front of other people, fulfilling expectations, and attaining goals. Excessive anxiety, however, can disrupt concentration, timing, and body coordination. Sportspeople can experience "choking" when faced with pressure or the making of unprecedented mistakes despite meticulous practice. A highly trained sprinter might, for instance, false-start due to nerves, or an accomplished football player can miss a penalty kick under undue pressure.

**The Rising Psychological Challenges of Sports**

Today's athletes play in an overly competitive sports landscape that transcends the stadium. The pressure of social media, endorsement contracts, international viewership, and the constant peer comparison increases the mental burden. Even younger athletes experience pressure from coaches, parents, and academies that can cause premature burnout and loss of self-esteem. Moreover, interruptions like the COVID-19 pandemic have resulted in increased anxiety levels due to unpredictable training, solitude, and uncertainty surrounding sports careers.

**Physical and Mental Effect of Anxiety**

Physiologically, anxiety is experienced through symptoms such as tachycardia, tension of muscles, sweating, shakiness, and shortness of breath. Such symptoms slow down the efficiency of motor activity and can even cause injuries. Psychologically, anxiety obscures the mind with negative ruminations like fear of failure, self-doubt for performance, or imagining the worst regarding future performance. The congestion of the mind results in faulty decision-making and decreased reaction time under competition. Chronic anxiety, if left unchecked over time, can decrease motivation, lead to emotional exhaustion, and inhibit athletic development.

### Need for Psychological Interventions

To address these issues, athletes need not only to condition their bodies but also train their minds. Sports psychologists and mental conditioning coaches have introduced evidence-based methods to enable athletes to learn coping skills. Two of these tools are Cognitive Behavioral Therapy (CBT) and Progressive Muscle Relaxation (PMR). CBT involves restructuring destructive thinking habits and creating confidence with mind tools such as goal-setting, visualization, and affirmations. PMR enables sports people to be aware and manage tension from their body and consequently enhance the response of the body to tension.

This research investigates the connection between sporting performance and anxiety, specifically under pressure of competition. It looks to analyze the origin and symptoms of anxiety and assess the adequacy of CBT and PMR as therapeutic methods. Through knowing and controlling anxiety, athletes are able to establish mental toughness, stay focused, and, ultimately, improve their performance under high-pressure.

### TYPES OF ANXIETY

Anxiety in sports psychology typically falls into two categories:

**1. Characteristic Anxiety:** An athlete is typically more likely to see situations as threatening due to trait anxiety, which is a personality trait.

◦ In both competitive and non-competitive contexts, athletes with elevated trait anxiety are more likely to feel stressed.

**2. State Anxiety:** State anxiety is a transient emotional state that fluctuates from one instant to the next and is frequently brought on by particular circumstances, like a crucial competition moment or a major game.

#### It is further divided into:

**Cognitive Anxiety:** Characterized by worry, fear of failure, and negative thoughts.

**Somatic Anxiety:** Involves physical symptoms such as increased heart rate, sweating, nausea, and muscle tension.

### REASONS FOR ANXIETY

Numerous factors, including the level of competition, individual personality traits, and environmental factors, can contribute to sports anxiety.

#### Typical explanations include:

**1. Fear of failure:** Athletes may worry about disappointing their families, teammates, coaches, or themselves.

**High standards:** The pressure to perform up to these standards can lead to mental strain.

**2. Low confidence and negative self-talk:** Anxiety is frequently made worse by a lack of self-confidence.

**Environmental factors:** media coverage, big crowds, and new locations can exacerbate anxiety.

**Insufficient preparation:** Stress levels may rise in athletes who feel unprepared. These elements have the potential to cause physiological reactions that impair peak performance, including elevated heart rate, tense muscles, and irregular breathing patterns.

### Theoretical Background

#### a) Inverted-U Hypothesis

**Concept:** This theory suggests that there is an optimal level of arousal (which includes anxiety) for peak performance. Too little arousal leads to underperformance due to lack of motivation, and too much arousal (or anxiety) causes performance to decline due to stress and tension.

**In Sports Context:** Imagine a basketball player. If they're too relaxed before a game, they might not perform with energy or focus. If they're too anxious—overthinking every shot or pass—their performance suffers due to tension and mental overload. The best performance occurs at a moderate level of anxiety, where the athlete is alert but in control.

#### b) Multidimensional Anxiety Theory

**Concept:** This theory breaks anxiety into two components:

**Cognitive anxiety:** Mental symptoms like worry and negative thoughts.



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**Somatic anxiety:** Physical symptoms like sweating, shaking, or increased heart rate.

**In Sports Context:** Consider a sprinter at the starting line. If they experience high cognitive anxiety (e.g., “I’m going to lose”), their focus and confidence may drop, impairing reaction time. However, somatic anxiety might peak just before the race but then stabilize once the race starts. According to the theory, cognitive anxiety always negatively affects performance, while somatic anxiety follows a curvilinear relationship (like the Inverted-U).

### c) Catastrophe Model

**Concept:** This model builds on the Inverted-U but adds a twist: when cognitive anxiety is high, a slight increase in physiological arousal can cause a sudden and dramatic drop in performance—a “catastrophe”.

**In Sports Context:** Imagine a gymnast in a final round. They’re already mentally anxious (cognitive anxiety), and then their heart starts racing (somatic arousal spikes). This combination might cause them to “choke,” completely breaking down in performance. Unlike the gradual curve in the Inverted-U, the Catastrophe Model shows a sharp performance crash under the pressure of both high mental and physical anxiety.

### Current scenario of pre-competitive anxiety in sports

Pre-competitive anxiety is becoming more widely acknowledged as a significant performance-affecting factor in today's sports environment. Athletes frequently experience anxiety even before taking the pitch because of the increased pressure from sponsors, fans, and social media. Both professional and young athletes deal with performance-related stress, which is frequently made worse by anxiety about getting hurt or receiving negative feedback from others.

Athletes' anxiety levels have increased since COVID-19 because of interrupted training schedules and uncertainty about their careers. More than 65% of athletes have reported having high levels of anxiety before a competition, per recent studies. There has been a positive change, though, as well: prominent athletes are now speaking out about mental health and supporting psychological support, which has led to a greater integration of mental training with physical preparation.

## TECHNIQUES OF COPING WITH ANXIETY: CBT AND PMR

### 1. CBT (Cognitive Behavioral Therapy)

Cognitive Behavioral Therapy CBT is about recognizing negative thinking patterns that lead to performance anxiety and changing them. It provides athletes with resources to deal with mental stress, improve focus and increase confidence. Key CBT techniques include:

#### a) Cognitive Restructuring:

Helps athletes identify irrational or disempowering thoughts (e.g. “I’m going to fail,” or “I’m not enough”) and replace them with rational beliefs and empowering beliefs.

#### b) Thought Stopping:

When anxious, athletes practice interrupting negative self-talk — a cue could be snapping a rubber band around their wrist or telling themselves out loud to “stop” when unwanted thoughts creep in.

#### c) Positive Self-Talk:

Developing a consistent inner dialogue, one that replaces negative and doubtful thoughts with affirmations such as “I’ve trained hard for this” or “I know what to do, and I’m focused and ready,” which serve not only to build confidence but also to reduce fear.

#### d) Goal Setting:

In this way, establishing realistic short and long term goals helps underlined athletes see what to focus on during tasks and outcomes rather than worry about results, avoiding anxiety.

#### e) Visualization or Mental Imagery:

Athletes use managed-imagery mental practice to instill familiarization, [reduce the] fear of the unknown/nervousness and maximize confidence right before the actual competition, as will they play the game perfectly through active recall of specific scenarios where they succeed.

### 2. Progressive Muscle Relaxation (PMR)

Progressive muscle relaxation (PMR) is a physical relaxation exercise used to reduce the somatic symptoms of anxiety. Progressive muscle relaxation involves tensing and then relaxing different muscle groups to become familiarised with and control physical tension. Key steps in PMR include:

- a) **Muscle Group Isolation:** Athletes work one muscle group at a time (by, say, balling their fists, tensing their shoulders, or tightening their legs)—holding the tension for 5–10 seconds and then relaxing it for 20–30 seconds.
- b) **Deep Breathing Integration:** PMR is almost always combined with slow, diaphragmatic breathing to maximize its calming effect and to help regulate the body's response to stress.
- c) **Guided Relaxation Scripts:** Often athletes across sports use audio recordings or guided scripts to implement a standard relaxation routine with greater frequency, especially in the lead up to training or competition.
- d) **Daily Practice:** In contrast, regular PMR has resulted in lower overall baseline stress states and will help an athlete pinpoint and dispense tension quickly when anxiety hits during competition.

Combining CBT for cognitive alteration and PMR for physical calm can help athletes create a fundamental wall against cognitive and somatic symptoms of anxiety.

### FINDINGS

The majority over sixty five percent of athletes experience anxiety before a competition, particularly heightened during the post COVID-19 period. The post covid anxiety is attributed to failure, external pressure, and lack of preparation. The results validate that anxiety in sports is both cognitive – (worry and negative self-talk) and somatic (muscle tension and elevated heart rate). Some of the prominent techniques used to manage the symptoms are CBT and PMR. CBT aids in positive thinking in athletes through cognitive restructuring, self-talk, and visualization. PMR allows the athletes to have more control over their physiological responses by muscle relaxation and breathing exercises. Craft et al (2003), and Wadey and Hanton (2008) argue in the secondary literature that these techniques enhance focus, confidence, and consistency in performance.

### ANALYSIS

From the analysis of the data, if not dealt with properly, anxiety has a distinctly negative impact on athletic performance. Theoretical models like the Inverted-U Hypothesis and Catastrophe Model articulate the phenomenon of moderate arousal enhancing performance deviation with crippling cognitive and somatic anxiety breakdowns. CBT addresses cognitive anxiety by transforming negative ruminations and enhancing mental toughness, while PMR allows athletes to remain physically relaxed during high stress situations, addressing somatic anxiety. When used together administered frequently, they create a dual-action strategy that optimizes mental and physical preparedness. The growing application of psychological skills training in athletic programs reveals a shift in sports culture where mental care is now considered a fundamental aspect of achieving success. This paradigm shift enhances performance but more importantly, fosters enduring health in athletes.

### CONCLUSION

Anxiety is an inevitable part of competitive sports, but when left unmanaged, it can severely hinder an athlete's potential. Understanding the causes of sports anxiety and addressing them through scientifically validated techniques like CBT and PMR can lead to significant improvements in performance and overall mental well-being. As the sporting world continues to embrace mental health as a core aspect of training, these techniques are becoming vital tools in every athlete's preparation toolkit.

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## YOGA AND HEALTHY LIFESTYLE

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**Chandan Mishra**

Thakur College of Science and Commerce, Kandivali East

### INTRODUCTION

Yoga vidya guides an individual about how to live a healthy lifestyle and achieve the higher perfection of life & with the help of Vedic scholars. Maharshi Vyas Dev mentioned Yoga in Rig ved for the first time, Yoga word derived from Sanskrit word Yuj which stand for connect or unite and throughout the ancient time many scholars have given different opinion about it but when they talk about the ultimate goal of Yoga it always ends in the ultimate connection between soul and super-soul. Even at the battleground of Kurukshetra Bhagwan Shri Krishna instructed many Yoga philosophy to motivate him.

Yoga vidya is an ancient way of exercise to achieve higher perfection in life and after life. Now a days, many practitioners who practice Yoga vidya will see a changes in a life. The three pillars of Yoga is Asan, Pranayam & Kriya. Whoever practice this can surely achieve the highest form in Karma Yoga, Bhakti Yoga, Gyan Yoga, Raj Yoga, Hath Yoga or Mantra Yoga. Many Vedic scholars has given different types of method to achieve the highest form in Yoga. Whereas Ashtang Yoga was given by Rishi Patanjali, is one of the very smooth practice method to achieve the highest perfection of Yoga which starts from Yam (Basic principal) & end or complete with Samadhi (Moksh).

### THE UNKNOWN PILLAR OF YOGA

Many yoga teachers/coaches/instructor is not focusing on all the three pillars of yoga that is Asan, Pranayam & Kriya. These three pillars are very important factors in Yoga for advancement. Why these three pillars are important in practitioners' life? How these pillar helps in a practitioners' life? If we try to understand the sequence of healthy life style of individuals is that it requires nutrition, digestion and excretion. So, here nutrition stands for strength, digestion stands for calmness/relaxation and excretion stands for cleanliness; In the same method our body requires a Asan, Pranayam & Kriya; where Asan stands for strength, Pranayam stands for calmness/relaxation and Kriya stands for cleanliness of the internal organs. Practitioner will surely see the inter-related benefits from every pillar. With help of these pillars a practitioner will notice the pranayam is helping in asan & kriya, asan is helping in pranayama & kriya and pranayama is helping in asan and kriya. This realisation will help a practitioner to control the senses and achieve the ultimate benefits from yoga. This is my opinion as I'm practicing all these three pillars of yoga from decade and many students are participating in the Asan, Pranayam & Kriya and they are getting the benefits from this.

### TYPES OF YOGA

**Astang Yoga:** An individual who is suffering disturbance in personal and work life thinks that he/she can manage it but at a certain point person starts to back down upon things for them starting Yoga practice is very important in life. They will start seeing the changes from early days, those persons can participate in Astang Yoga. The process of Astang Yoga starts from Yam, Niyam, Asan, Pranayam, Pratyahar, Dhyan, Dharna & Samadhi. The practice of the eightfold Yoga system is very important in the life to achieve fitness, mind control, stay focused and many more things. The details of Asthang yoga is as follow:

**Yam:** Yam includes 5 social aspects i.e Ahimsa (Non-violence), Satya (truth speaking), Asteya(Non-stealing), Brahmacharya(Chastity) & Aparigraha(Non-possessiveness). In the beginning practitioners' need to start this process and needs to become vegetarian because Ahimsa and Aparigraha is a representative of Non-voilence. These 5 social aspects represent your duty to make better social environment.

**Niyam:** Niyam includes 5 moral aspects i.e. Sauch (Purity), Santosh (Contentment), Tapas (Self discipline), Svadhyaya(Study of Scripture) & Ishvarpranidhan(Surrender to God). Now a days I've seen that many Yoga teacher says that "you need to practice astang Yoga and don't believe in Scriptures, God and Purity" So my personal question to them is that "Astang Yoga was not found by any academic scholars it was found by the Vedic scholars they have written the rules and left many examples of it" So how can you change the basic requirement of Yoga? If you really wants to achieve these benefits so you must need to follow the rules mentioned by them, only then you can achieve the perfection or else in early stage you'll get the benefit of practice but later on you'll never see the advancement.

**Asan:** Making body fit with the help of different-different postures that will going to help an individual to achieve Samadhi.

**Pranayam:** Breathing technique to control mind and make a movement of the soul with the help of Pranavyau.

**Pratyahar:** Withdrawal from the sense object. A practitioner need to control the senses from the sense object.

**Dharna:** When you practice Dharna you are binding the mind at one place. Practicing Yoga is very easy process but for that practitioner needs to practice the process with full dedication.

**Dhyan:** To live in the present is the only process to control the mind. Dhyan is integrally related to Dharana, one leads to another thing. Dharana is a state of mind, Dhyan the process of mind. Dhyan is distinct from Dharana in that the meditator becomes actively engaged with focus.

**Samadhi:** The ultimate goal of practitioner's life is to achieve Samadhi in life so that practitioner can fully connect with the divine power or super soul or God. For Samadhi an practitioner need to follow all the precautions and rules mentioned under the Astang Yoga. While practicing Astang Yoga a practitioner will see the advancement in the process of Samadhi like activation of the Chakra and Kundalini. All these process is inter connected with each other and that will help practitioner to achieve Samadhi.

So practicing Astang Yoga is very much related to every aspect of Yoga. Some practitioner will follow the Astang Yoga to achieve the goal, while some of them follow the Karma Yoga or Bhakti Yoga or Gyana Yoga or Raj Yoga or Mantra Yoga or Hath Yoga. In the beginning the individual can practice any of them as per individuals need.

**Karma Yoga:** Karma means fruitive action and Yoga means to connect. Every individual is working in this world to get results of the action or work. Somebody is working in business, earning millions of dollars yearly. Why is he earning? For sense gratification. As soon as he gets money, he changes his car, apartment, standard of living only for sense gratification. Karma Yoga means without thinking of the results a practitioner will do the activity.

"On the other hand, if a sincere person tries to control the active senses by the mind and begins Karma Yoga [in Krsna consciousness] without attachment, he is by far superior." (Bg. Ch.3 Text.7) So Lord Krishna says that do whatever your dharma says but in the mind always thinks of him.

Action or work is important in individuals life and adding yoga will surely empower the individual to get the results.

**Bhakti Yoga:** In the Bhagvad Gita Bhagwan Shri Krishna says that whatever you do do it for me, always think of me in that way you will come to me. So in the life an practitioner is required to practice Yoga for the health & mental benefit in that way practitioners' can achieve the highest goal of life. In the Bhagavad-Gita it is clearly stated that Yoga means to get into touch with the Supreme Lord.

yat karosi yad asnati

yaj juhosi dadasi yat

yat tapasyasi kaunteya

tat kurusva mad-arpanam

"O son of Kunti, all that you do, all that you eat, all that you offer and give away, as well as all austerities that you may perform, should be done as an offering unto Me." [Bg. Ch.9 Text.27].

The process includes several bodily features such as Asan, Dhyan, Pranayam and Dharna. The word Yoga means "link." Any system of Yoga is an attempt to reconnect our broken relationship with the Supreme Personality of Godhead. There are different types of Yoga, of which bhakti-Yoga is the best. The culmination of all kinds of Yoga practices lies in bhakti-Yoga. Yoga actually means bhakti-Yoga; all other Yoga practice are progressions toward the destination of bhakti-Yoga. When **Karma-Yoga** increases in knowledge, the stage is called Gyan-Yoga. When **Gyan-Yoga** increases in meditation on the Super soul by different physical processes, and the mind is on Him, it is called **Astang-Yoga**. And, when one surpasses the aṣṭāṅga-Yoga and comes to the point of the Supreme Personality of Godhead Kṛṣṇa, it is called bhakti-Yoga, the culmination. Factually, bhakti-Yoga is the ultimate goal, but to analyse bhakti-Yoga minutely one has to understand these other Yoga process. One who sticks to a particular point and does not make further progress is called by that particular name: Karma-Yogai, Gyan-Yogai or Dhyan-Yogai, Raja-Yogai, Haṭha-Yogai, etc. If one is fortunate enough to come to the point of bhakti-Yoga, it is to be understood that he has surpassed all the other Yoga process.

As far as I have known the process is actively related to each other, the benefits come along with the help of any yoga practice. An individual who wants to practice Yoga is mandatory to start from the very beginning & practitioners' need to follow exactly the same steps for the advancement of the process of achievement. Like a

Astang Yoga practitioner needs to follow the rules prescribed by the Maharshri Patanjali, even though practitioners' wants to skip the process the of the prescribed flow will surely will not achieve the goal there will be slightly benefits but later-on the payback is very dangerous, like while practicing Yoga an practitioner will surely focus on the specific body part for an example on head so the near chakra is Gyana chakra & Sashstrar chakra the initial activation of any chakra will starts when an practitioner starts focusing on the particular point and begin meditation on the particular body part, now if practitioner is not following the particular process of the final achievement the downfall is mandatory because while activating the chakra practitioner also activate 'Kundalini'(the shape is like Snake and it stays in between centre of the upper trunk and in between chest and spine). Even though a person is not trying to activate kundalini but activation of the chakra will surely slowly and gradually activate the Kundalini. So even though a practitioner has surpassed the stage of Dhyana still he/she needs to follow the precautions till the last stage of the achievement i.e. Samadhi. Even my topic is Karma Yoga still I'm talking about bhakti yoga, gyan yoga, astang yoga, raj Yoga & etc. It clearly says that every steps are inter related to each other even though you follow any Saint or Vedic Practitioner like Adi Guru Shankaracharya, Madhvendrapuri, Maharshi Patanjali, Swami Vivekanand, Swami Rama, BKS Iyenger the ultimate goal of the practitioner is to re-establish connection with super soul/Lord Krishna/Nirakarbhrahma/Idol God. Under any circumstance the practitioner needs to strictly follow the rule and regulation. It is like if someone has planted a seed it will turn into a sprout then it will turn into plant and after the couple of years it will turn into Tree. The practitioner can start Yoga with the help of a guru or scriptures will surely see improvements. Karma Yoga is as important as feeding a child not with food but with milk.

### CASE STUDY

Question: How Asan, Pranayam & Kriya is helping in daily life?

**Practitioner 1:** My personal experience!

- Improved digestion
- Fewer injuries during workouts
- Faster recovery and healing
- Clear mind with no stress
- More energy throughout the day
- Better sleep cycle and deeper rest

**Practitioner 2:** Asan, Pranayam, and Kriya have become essential parts of my daily routine, bringing balance to my body and mind. Regular practice of Asan (yoga postures) has improved my flexibility, strength, and posture, while also helping me stay calm and composed throughout the day. Pranayam (breath control) has enhanced my breathing, increased my energy levels, and brought mental clarity and emotional stability. Kriya, with its cleansing techniques, has helped detoxify my body and clear mental blockages, making me feel lighter and more focused. Together, these practices support my overall well-being and inner peace.

**Practitioner 3:** Asan create balance in your body and it creates confidence among ourselves. Yoga helps me to understand myself better and accept myself and create confidence for the stage. Pranayam helps me to balance my emotions and improve my concentration level. There are many Pranayam which help me to hold my breath for a longer period of time, there are some Pranayam just help me to concentrate on some level. Kriya help me for internal cleaning of my body and and improving my practice of some asans. Kriya helps to lose muscles and improve the flexibility of my body. Yoga has helped me in the last 3 years. To understand my body and mental health yoga creates confidence on myself which leads me to be confident wherever I am going.

**Practitioner 4:** Asan, Kriya, and Pranayam have enabled me to reconnect with my inner self on a profound level, with Asan grounding me physically, Kriya clearing emotional and mental turmoil, and Pranayam fostering calm, focus, and clarity, ultimately guiding me back to my true self amidst the chaos of daily life.

**Practitioner 5:** Asan has been a valuable tool in helping me stay organized and manage my tasks efficiently. It provides a clear overview of my projects, deadlines, and to-do lists, allowing me to prioritize work and stay on track. With its user-friendly interface and reminders, Asan ensures that I don't miss important tasks and helps me collaborate smoothly with others. Overall, it has significantly improved my productivity and time management.

**Practitioner 6:** Asan helps me to improve flexibility and stability in the body. This has a very positive impact on my life, making me stronger and more disciplined. It also improves my concentration and mental focus.

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Pranayam helps me to reduce tension and stress. It keeps my mind calm and peaceful, promoting spiritual growth. It helps me make better decisions and improves my focusing power.

Kriya helps me to improve breathing, cleansing the nasal passages and improving the sense of smell. It reduces sinus problems and is easy to practice.

**Practitioner 7:** It helped me to get flexible. Gave me stability and strength. Got more knowledge about it and it is fun.

### **CONCLUSION**

As per my finding two types of individual practice yoga; one who wants to cure/prevent illness & the other who wants to find internal/eternal peace. The basic principle for the practitioner is: start the practice at the beginning stage without following any kinds of rules & regulations. Slowly and gradually the advancement will happen and a practitioner will notice the changes. But many practitioner after achieving small benefits of yoga they discontinue there regular practice.

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3. Case study (Age range: 16 years to 55 years)

## NURTURING YOUNG MINDS THROUGH “YOGA”: A STUDY IN EDUCATIONAL CONTEXT

Mrs. Chetana Raju Nandkar

Researcher, M.A.Yoga (SPPU), PhD Scholar BPCA, Mumbai University

## ABSTRACT

As per the Vedīc culture the four prominent goals (i.e. *Puṛshārthas*) of every human being are DHARMA (righteous living), ARTHA (prosperity), KĀMA (pleasure) and MOKSHA (spiritual liberation) (*Suryopaniṣada II.1*). These ethical goals are to be pursued throughout one's life, right from birth till death. When human is born, he has to pass through four crucial stages of his life, which are also termed as *āśramas*, the *Brahmacaryāśrama*, *Grihasthāśrama*, *Sanyāsāśrama* and the *Vānaprasthāśrama* (*Āśrama Upaniṣada*, *Vaikhāṇsā Dharmasūtra*, *Manusmṛitī* and *Dharmashāstra*). The *Brahmacaryāśrama* is the beginning or learning stage which lays the foundation of one's life. It is the celibate student stage, learning period extending to the age of 25 years, in today's scenario the educational stage. Education involves the transmission of true knowledge, values, and skills in the students through formal and informal ways. In ancient era the *Gurūkulas* served this purpose where the *Guru* taught to *śiṣya* about various *śhāstras*. During this stage one has to perform his duties, gain knowledge (TRUE KNOWLEDGE), develop intelligence, engage into learning the skills for life, dedicatedly serve his *GURŪ*, lay foundation for his future life, as well as for one's family and society. This stage can be considered very crucial in one's life, as one undergoes through many physical, psychological, mental, emotional, intellectual and social changes within. One keeps on struggling with unending and exhaustive challenges along with tremendous ups and downs. Hence one needs a holistic guideline which overlifts one from every aspect of his growth stage, reveals the true meaning, goal and path of one's life. Yoga has the potential to serve one in every stage and aspect of life if followed in its true form. This fact is also accepted and implemented by the government in today's scenario (NEP 2020). The present research article takes a deep insight into the true essence of YOGA in every stage, level and arena of student's life (primary to university level). The article focuses the essence of YOGA, its implementation in right way in a very genuine perspective.

**Keywords:** Yoga, true knowledge, (physical, psychological, mental, emotional, social, intellectual, social) growth.

**Aims and Objectives:** To take a detailed review of importance of yoga in attaining holistic health in context of educational phases (3-25 years) of the students.

**Research Question:** Up to what extent will yoga suffice the need of holistic health of students during their educational journey?

## INTRODUCTION

As per the Vedīc culture the four prominent goals (i.e. *Puṛshārthas*) of every human being are DHARMA (righteous living), ARTHA (Prosperity), KĀMA (pleasure) and MOKSHA (Spiritual liberation) (*Suryopaniṣada II.1*). These ethical goals are to be pursued throughout one's life, right from birth till death. When the human is born, he has to pass through four crucial stages of his life, which are also termed as *āśramas*, the *Brahmacaryāśrama*, *Grihasthāśrama*, *Sanyāsāśrama* and the *Vānaprasthāśrama* (*Āśrama Upaniṣada*, *Vaikhāṇsā Dharmasūtra*, *Manusmṛitī* and *Dharmashāstra*). The *Brahmacaryāśrama* is the beginning or learning stage which lays the foundation of one's life. It is the celibate student stage, learning period extending to the age of 25 years, in today's scenario the educational stage. Education involves the transmission of true knowledge, values, and skills in the students through formal and informal ways. In ancient era the *Gurūkulas* served this purpose where the *Guru* taught to *śiṣya* about various *śhāstras*. During this stage one has to perform his duties, gain knowledge (TRUE KNOWLEDGE), develop intelligence, engage into learning the skills for life, dedicatedly serve his *GURŪ*, lay foundation for his future life, as well as for one's family and society. This stage can be considered very crucial in one's life, as one undergoes through many physical, physio-psychological, mental, emotional, intellectual and social changes within. One keeps on struggling with unending and exhaustive challenges along with tremendous ups and downs. Hence one needs a holistic guideline which overlifts one from every aspect of his growth stage, reveals the true meaning, goal and path of one's life. Yoga has never been separated from the Indian traditional roots when it comes to the ethical, moral, physical, mental, spiritual context. It has always stood apart in its superiority in all aspects of life sciences. Yoga has the potential to serve one in every stage and aspect of life if followed in its true form. This fact is also accepted and implemented by the government in today's scenario (NEP 2020).

The present research article takes a deep insight into the true essence of *YOGA* in every stage, level and arena of student's life (primary to university level). The article focuses the essence of *YOGA*, its implementation in right way in a very genuine perspective.

**The Four Purusharthas:** As per the *Vedīc* culture the four prominent goals (i.e. *Puṛshārthas*) of every human being are *DHARMA* (righteous living), *ARTHA* (Prosperity), *KĀMA* (pleasure) and *MOKSHA* (Spiritual liberation) (*Suryopaniṣada* II.1). *Dharma* as per the *veda* are the ethical duties, moral principles, adopting right way of living, persuading one's responsibility and maintaining obligations towards one's family, society and the universe. *Dharma* is the *param Ishvara*, father, mother, guru, one and only truth, soul, action, teerth, dhana, are few synonyms of *dharma* (*Bṛihadā Dharma Purana*, 37). Every human has to follow his *swadharma*. *Artha* is not just materialistic accumulation, but perseverance of livelihood, economic security and fulfilling one's material desires with ethical and moral boundaries (*Kautilya's Arthaśāstra*). *Kāma* signifies the pursuit of sensory and emotional desires related to love relationships, art, music and all forms of aesthetic enjoyment. It should be pursued within the boundaries of ethical and morals without harming anyone and in harmony with *Dharma* (*Kāmasutra*). *Moksha* (liberation) is the breakdown of freedom from birth-death cycle which in other terms is the final goal of every soul. It can be attained through self-realization, dissolution of ego (*Vivekacudāmanī*, *Patanjala Yoga sutra*, *Bhagvadgeeta*). It is a state of prolonged inner freedom and unity with the divine. These four goals have to be pursued ethically and morally throughout one's life, right from the birth till death.

**The Four Āsramas:** When the human is born, he has to pass through four crucial stages of his life, which are also termed as *āsramas*, the *Brahmacaryāśrama*, *Grihasthāśrama*, *Sanyāsāśrama* and the *Vānaprasthāśrama* (*Āśrama Upaniṣada*, *Vaikhāṇsā Dharmasutra*, *Manusmṛitī* and *Dharmashāstra*). *Āśrama* can also be termed as a specific stage of life. The *Brahmacaryāśrama* is the beginning or learning stage which lays the foundation of one's life. It is the celibate student stage, learning period extending to the age of 25 years, in today's scenario the educational stage. *Grihasthāśrama* is the stage that commences when you begin a family life, get married, raise children, take care of elderly people in the family, become the bread earner of entire family, contribute in the societal upliftment. *Vānaprasthāśrama* is the stage when you are free from your *dharma* towards your family and handover your responsibilities to the next generation. You take a step towards your spiritual journey, which is a crucial point in self-realization. You start getting detached from the materialistic worldly pleasures and search the true goal of your life. *Sanyāsāśrama* is the final stage where you have gained true knowledge and are following the path which leads to self-realization.

The four goals and stages are interlinked with each other, sometimes over passing each other. One has to compulsorily pass through these stages while attaining the goals. The main problem is that while doing so there are many ups and downs which makes the journey and goals very difficult to attain. So then how one can get out or rather tackle these issues wisely. The answer is by just following the path of *YOGA* you can make your journey easier and goals within your reach. But today the concept of *YOGA* is totally being manipulated that you get confused. It's very true that *YOGA* can be followed in any stage of life (*Haṭhapradīpikā* I.66-69). The present article focuses on the role and importance *YOGA* plays at the first stage i.e., *sanyāsāśrama* or student stage.

### THE TRADITIONAL INDIAN 16 SANSKĀRAS

In India since the *Vedic* era 16 *sanskāras* (rituals) are considered important events in every human right from birth till death (*Garbhadhana* to *Antyesthi*) (*Grihya Sutra*). The *sanyāsāśrama*/ educational phase marks the most important *sanskāras* as it lays the foundation of the future life. It consists of *Vidyārambha* or the learning of alphabets, *Upanayana* or investiture of the sacred thread, *Vedārambha* or beginning of *Vedic* study, *Keshānta* or shaving of beard, *Samavartana* or end of studentship. The *Vidyārambha* *sanskāra* marks to be one among the important *sanskāra*. It consists of *Vidyārambha* (initiation of education), *Upanayana* (sacred thread ceremony), and *Samavartana* (completion of studies) are three important *sanskāras* during this stage. These *sanskāras* even performed today within the boundary of modernization, has some deep rooted values, purposes which cannot be overlooked.

**Educational scenario in today's context:** Today's scenario regarding education differs vividly, but the stages resemble much likely. Off course now students no longer go to the *Gurukulas* to gain knowledge, but they attend schools, colleges, universities to procure knowledge. The students who attended *gurukulas* and those who go to educational institutions have a common thread, the problems they faced then are existing even today. Excuse the materialistic issues, but if you focus on the psychological and physical issues, they remained the same. Technology has simplified life but it also has created a mess at certain ends.



If we focus on the educational aspects only then we can categorize the age as pre-primary, primary, high school, college, university levels.

In today's scenario a child attends school when he attains 3 years of age, i.e. he is aware of himself a bit about the surrounding world. It is the pre-primary (3-6 years) and primary (6-12 years) age which play a crucial role to introduce him to himself as well as the world around. The child is like a lump of clay which has to be given a shape. Here the institution plays a pivotal role. It inculcates the values, ethics, morals, basic intelligence of the child. But have you ever thought from where have these values come? Like, truthfulness, non-violence, non-stealing, satisfaction, cleanliness, austerity, etc. If you trace the trails, you can understand that, the *YAMA* and *NIYAMA* as stated by *Maharishi Patanjali* are none other than these same rule, moral ethics and social restrains.

It is not so that yoga was invented by *Maharishi Patanjali* (*Patanjala Yoga Sutra I.1*), but yoga is known as *apourusheya* i.e. existing from the very beginning. The *vedas* has immense references of *yoga*, but the credit of organizing *yoga* into a systematic manner and precisely presenting it in a concise form into '*Patanjala Yogadarsana*'. This resulted into *Yoga* being credited as one of the six Indian *Darśhana* or Philosophies.

The *yama* like non-violence (*ahimsā*), truth (*satya*), non-stealing (*asteya*), non-collection of things (*aparigraha*) and celibacy (*brahmacharya*) and *niyamas* like cleanliness (*śauca*), austerity (*tapas*), satisfaction (*santosha*), self-study (*swadhyāya*), surrendering towards the supreme (*isvarapranidhāna*) can be inculcated right in this stage (*Patanjala Yogadarshana* II.29-45). *Patanjali's* the eightfold royal path of yoga (*ashtāṅga yoga*) consisting of eight limbs namely *yama*, *niyama*, *āsana*, *prāṇāyāma*, *pratyāhāra*, *dhārnā*, *dhyāna* and *samādhi*. These limbs are so systematically explained that they interrelate each other and have to be followed accordingly or simultaneously.

When you want to construct a good enclave, you have to raise a good foundation. The educational institutions are the masons which play a vital role of creating the foundation. If the kids are raised with good morale, the race of good humans will be in progress. If each unit of the society (human) is strong in ethics and morals then the society will be a heaven to live in. It is doubtful at which age to begin *yoga* with? But if you go into the true essence of *yoga*, it begins in the mother's womb itself where the mother's mental condition reflects over the child. Our *vedas* have mentioned it long back and modern science has given it recognition. The *garbhasanskara* has *yoga* in it in form of *yama* and *niyama*. Please note not to restrict *yoga* only to *āsana*, *prāṇāyāma* and meditation. Other limbs are equally important to get its holistic effect. People often misunderstand *yoga* and restrict its benefits. There is hence no specific age to begin *yoga* (*Haṭhapradipikā* I:66-67).

The child if raised on yogic principles will be morally and ethically sound ready for further life journey. These values should be inculcated right when the child starts his educational journey and continue throughout his entire educational phase. When he becomes self and sound the *asana* can be introduced. This doesn't mean that you have to follow them at a specific age only and in that particular sequence, but this one is ideal. The *āsana* makes one mentally and physically balanced with no space for duality (*Patanjala Yogaadarshana* II.46-48). The mind is connected directly with your breath (*Haṭhapradipikā* II.2). So, when by practice of the *āsana* your mind gets stability you can move towards *prāṇāyāma*. *Pranayama* helps one to be calm and stable in any challenging situation (*Patanjala Yogadarshana* II.49-53). The educational phase of adolescent is the most vulnerable phase. The child undergoes through many physical, mental, psychological changes. It's very crucial stage of life, and the contribution of a teacher, parent and society plays a key role to facilitate this phase. The *yama*, *niyama*, *āsana*, *prāṇāyāma* are also called as *Bahiranga yoga* i.e. those limbs which are to be implemented externally whereas the *dhāranā*, *dhyāna* and *samādhi* are called *Antaranga yoga*.

The fifth limb *pratyāhāra* can be a transitional phase between *Bahiranga* and *Antaranga yoga*. *Pratyāhāra* teaches us how to control our senses and withdraw them from the external world and divert it inwardly (*Patanjala Yogadarshana* II.54-55). This doesn't mean to isolate from the world and become introvert. But just a tortoise when gets sensation of any danger withdraws its limbs internally and protects itself from the danger and again becomes normal. Similarly, when any situation of mental conflict arises *pratyāhāra* helps you to withdraw your senses and become introvert and again become normal once the situation gets normal. To explain it further your sense organs are the main culprit of your sorrow, because they collect knowledge from the external world and creates greed to fulfill which your mind strives to every extent forgetting all the morals and ethics. The mind runs haphazardly to satisfy the greed of the senses and puts you into trouble. Once you satisfy your greed another is standing before you and the number goes on increasing. So, when you teach a child in his/her school days to be satisfied with what you have he/she can lead a satisfied life. Because the materialistic joy is short, it cannot make you happy forever.

The further internal journey then needs no guideline, it goes with the flow, i.e. once the first five limbs are developed strongly the child will lead his path on its own. Once the critical stage of adolescent is crossed with proper guidance the youth will be responsible. This stage is a bit matured and gets diverted less than adolescent. But this doesn't mean to neglect it totally. Here the final three limbs play a vital role. Passing through the fire of adolescent through the tools of yogic limbs, the youth can tackle his issues at the mental level on his own. The *dhāranā* teaches how to be focused on your goal one centered (*Patanjala Yoga Darshana* III.1). The youth of today's generation have many career options as compared to that of older times. But the challenges faced, the competitive nature, the pressure generated makes the situation of the youth vulnerable. Those youth which are not strong internally succumb to these pressure as they cannot withhold it, and are dragged into faulty paths. The drug-alcohol addiction, criminal mind, ill practices, suicide attempts make the situations even worst. The phase of youth (18-25 years) is most important national asset which need to be protected, and channelized into proper path of nation building. The youth can choose any career option he wishes but combine it with yogic practices to enhance his bright future.

The Yoga has never faded its glory as time has elapsed into centuries, but proven to be relevant in every time lap. But it's pitiful that people today misunderstand *yoga* in its fractional essence. Only *āsana*, *prāṇāyāma* and meditation, that to in entirely wrong manner are being propagated today who boastfully call them *yogi*. But they are unaware of the other essential limbs of *yoga*, *yama*, *niyama*, *pratyāhāra*, *dhārnā* and *samādhi*. This doesn't mean to blame them and make them the culprit, but a humble request to understand the true essence of all aspects of *yoga*, imply it in their lives and then preach to the society. *Yoga* is a treasure of our ancestors which can never be given up for anything, it was, it is and it will always remain precious, no matter how old it grows.

**The National Education Policy 2020:** The government has also been trying to preserve the essence of yoga in its every aspect, it has always been promoting people to adopt yogic lifestyle. The National Education Policy 2020 has been a revolution in the educational scenario as it has prominently given emphasis to those arenas which were sidetracked in the trail of times. Irrespective of the form of education, professional or non-professional, there are certain subjects which are being inducted in the curriculum of almost all programs and courses. Yoga is one of them, it also has some common threads with Indian Knowledge System, Ethics and Moral Values and Mindfulness and Well-Being. The NEP has a multi-disciplinary, holistic approach.

**Yoga and Indian Knowledge System:** Yoga is considered a vital part of *Bhāratiya Jnyāna Paramparā* (Indian Knowledge Tradition). NEP 2020 encourages integrating **IKS** into curricula. *Yoga* is not just physical exercise but a spiritual and philosophical discipline, as explained in *Patanjali's Yoga Sutras*. Students are introduced to *Yoga* as part of a holistic education, which includes *Ayurveda*, meditation, *Sanskrit*, philosophy, and traditional arts.

**Yoga and Ethics & Moral Values:** Yoga cultivates *yamas* and *niyamas* (ethical precepts) which align with universal human values: *Ahimsā* (non-violence), *Satya* (truthfulness), *Asteya* (non-stealing), *Brahmacharya* (self-discipline), *Aparigraha* (non-possessiveness), *Śauca* (cleanliness), *Santoṣa* (contentment), etc. These foster character building, empathy, and social responsibility which are major goals of NEP 2020.

**Yoga and Mindfulness and Wellbeing:** Practices like *prāṇayama* (breathing), *dhyāna* (meditation), and *āsanas* promote mindfulness—a key element in modern pedagogical strategies. Mindfulness improves attention, emotional regulation, and stress management, aiding both academic and emotional development.

NEP 2020 supports mindfulness as part of life skills education and mental wellness. *Yoga*, under NEP 2020, is not just an exercise routine but an integral part of value-based, mindful, and holistic education rooted in India's ancient wisdom. It connects deeply with the Indian Knowledge System, instills ethics and values, enhances mindfulness, and supports lifelong wellbeing.

## RESULT AND CONCLUSION

Yoga supports physical, mental, emotional, and spiritual wellbeing, aligning with NEP's vision of education for the holistic development child throughout his educational journey.

It nurtures the minds in all growth years (toddler to youth). Schools are encouraged to include daily Yoga sessions, especially during physical education, to foster overall health and wellness.

Yoga contributes to a balanced lifestyle, which is emphasized under Health and Wellness Clubs promoted in the school curriculum.

Every educational program can be effectively run if they go hand in hand with *YOGA*. *Yoga* has to be a vital part of your day to day living, which has to be inculcated in the early years of life, nurtured throughout the educational phase and carried on till the end, in every phase of life.

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*Manusmriti*

NEP 2020

Patanjala Yoga sutra

Patanjala Yogaadarshana II.46-48,, II.49-53, II.54-55, III.1

*Suryopaniṣada* II.1

*Vaikhansā Dharmasutra*

Vivekacudamani

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**AN INVESTIGATION OF WORKING CONDITIONS OF OCCUPATIONAL STRESS OF KHO-KHO OFFICIALS OF MUMBAI CITY**

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**<sup>1</sup>Danish Pathan and <sup>2</sup>Dr. Neetu Omprakash Joshi**<sup>1</sup>Ph.D Scholar, BPCA's College of Physical Education, Wadala, Mumbai-31<sup>2</sup>Research Guide, Associate Professor, BPCA's College of Physical Education, Wadala, Mumbai-31**ABSTRACT**

*Occupational stress refers to the physiological, psychological, and behavioural responses that are associated with the demands and pressures arising from one's job or occupation. Professional individuals experience when faced with work-related demands that exceed their ability to cope effectively. Working Condition is one of the components of Occupational Stress. It means the factors such as the physical workspace, safety measures, equipment availability, workload, work hours, flexibility, relationships with colleagues and supervisors, and overall work environment. Positive working conditions contribute to employee's overall job satisfaction, performance, and overall well-being. In this piece of research, the researcher studied the topic entitled, "An Investigation of Working Conditions of Occupational Stress of Kho-Kho Officials of Mumbai City". The objective of the study is to Study the Status of Working Conditions of Occupational Stress of Kho-Kho officials of Mumbai city. 73 Kho-Kho officials from different Kho-Kho Club/Institutions of Mumbai City were selected as sample for the study by using Convenience Sampling Technique. Custom Made Questionnaire was used for the Study. In order to see the status of Working Conditions of Occupational Stress, Standardization of Scores & Percentage of Scores were taken. From the findings, we can say that, maximum officials have below average Working Condition while officiating and very few Officials have Extremely low Working Condition.*

**Key Words:** Working Condition, Occupational Stress

**INTRODUCTION**

Occupational stress refers to the physiological, psychological, and behavioural responses that are associated with the demands and pressures arising from one's job or occupation. Professional individuals experience when faced with work-related demands that exceed their ability to cope effectively. Working Condition is one of the components of Occupational Stress. A misunderstanding belief that people may have about a certain situation of a profession. It means the factors such as the physical workspace, safety measures, equipment availability, workload, work hours, flexibility, relationships with colleagues and supervisors, and overall work environment. Positive working conditions contribute to employee's overall job satisfaction, performance, and overall well-being. In this piece of research, the researcher studied the topic entitled, "An Investigation of Working Conditions of Occupational Stress of Kho-Kho Officials of Mumbai City".

**Aim:**

This study is conducted to Investigate Working Conditions of Occupational Stress of Kho-Kho Officials of Mumbai City

**Objective:**

To study the status of Working Conditions of Occupational Stress of Kho-Kho officials of Mumbai city.

**Assumption:**

**A1:** It assumed that there is high level of Working Conditions of Occupational Stress of Kho-Kho officials of Mumbai city

**METHODOLOGY****Selection of Sample**

73 Kho-Kho officials from different Kho-Kho Club/Institution of Mumbai City were selected as sample for the study by using Convenience Sampling Technique.

**Research Design**

This is Survey Study under the heading of Descriptive Research.

### Variable: Working Condition (Occupational Stress)

Tools/Instruments

| Sr. No. | Variable          | Tools                     | Score  |
|---------|-------------------|---------------------------|--------|
| 1       | Working Condition | Custom Made Questionnaire | Scores |

### PROCEDURE OF THE STUDY

The researcher visited the selected Clubs and Institutions to get the questionnaires filled by the officials and when it was not possible in the Club and Institution then visited them personally, of selected Kho-Kho Officials with self-explanatory instructions to fill and submit the questionnaire.

**Table 1** Scoring System

| Sr. No | Type of Items | Strongly Disagree | Disagree | Undecided | Agree | Strongly Agree |
|--------|---------------|-------------------|----------|-----------|-------|----------------|
| 1      | True          | 1                 | 2        | 3         | 4     | 5              |
| 2      | False         | 5                 | 4        | 3         | 2     | 1              |

### Statistics

In order to see the status of Working Conditions of Occupational Stress, Standardization of Scores & Percentage of Scores were taken.

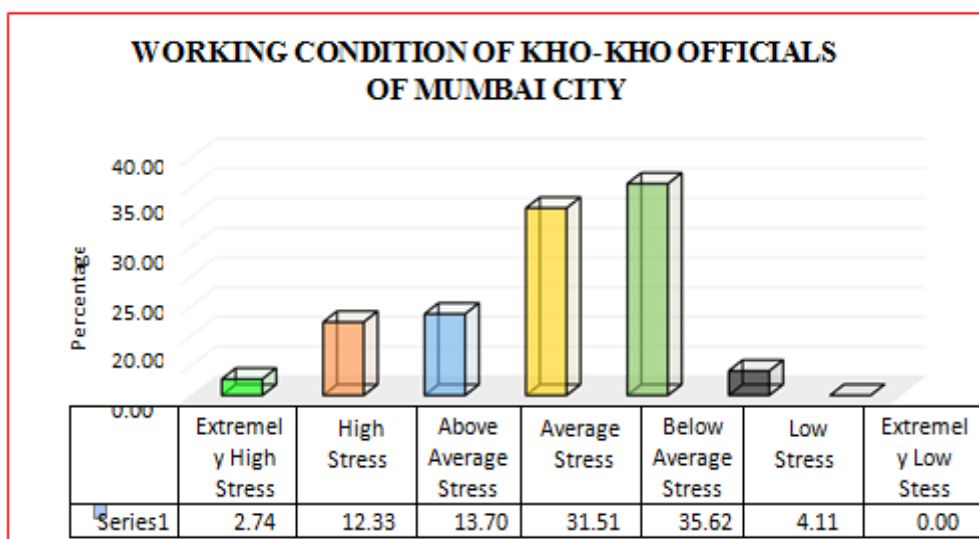
### RESULT AND DISCUSSION OF THE STUDY

#### Results of Working Conditions of Occupational Stress Score Wise, Percentage Wise Status of Working Condition of Occupational Stress of Kho-Kho Officials of Mumbai City

Table 1 shows the Score wise, Percentage wise status of Working Conditions Occupational Stress of Kho-Kho Officials of Mumbai City

| Level of Working Condition | Scores | Percentage |
|----------------------------|--------|------------|
| Extremely High             | 2      | 2.74       |
| High                       | 9      | 12.33      |
| Above Average              | 10     | 13.70      |
| Average                    | 23     | 31.51      |
| Below Average              | 26     | 35.62      |
| Low                        | 3      | 4.11       |
| Extremely Low              | 2      | 2.74       |

From Table 1, It can be seen that 2.74% Kho-Kho Officials have Extremely Working Condition, 12.33% have high Working Condition, 13.70% have above average stress, 31.51% have above Working Condition, 35.62% have below average Working Condition, 4.11% have low Working Condition and 2.74% have Extremely Low Working Condition. Hence it can be seen that maximum officials have Below average.



**Figure 1:** Score Wise, Percentage Wise Status of Working Conditions of Occupational Stress Of Kho-Kho Officials Of Mumbai City

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**CONCLUSION**

It can be seen that maximum officials have Below average Working Condition while officiating and very few Officials have Extremely High Working Condition.

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ETHICS BEYOND THE BOUNDARIES: EXISTING AI ETHICS AND THE SPIRIT OF VASUDHAIVA KUTUMBAKAM IN T20 SPORTS BUSINESS

<sup>1</sup>Gupta Dinesh Kumar NP and <sup>2</sup>Dr. Kiran Save

<sup>1</sup>PhD Research Scholar in Philosophy

<sup>2</sup>DTSS College of Commerce and Research Center (Affiliated to Mumbai University)

ABSTRACT

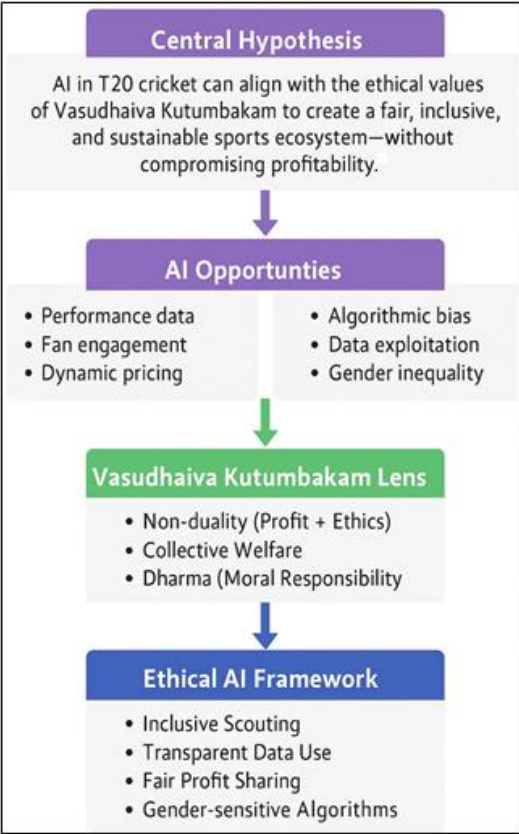
*This paper explores how T20 cricket, transformed into a global business by Artificial Intelligence (AI), can integrate the ethical values of the ancient Indian philosophy Vasudhaiva Kutumbakam ("the world is one family"). While AI tools enhance performance, profitability, and fan engagement, they also raise ethical concerns such as exclusion, bias, and inequality. This study critically examines whether AI in sports aligns with human-centered values and proposes a framework where ethical principles and commercial success coexist. By applying Vasudhaiva Kutumbakam, we argue that AI can foster fairness, inclusivity, and collective well-being without compromising financial sustainability. The paper bridges ancient wisdom and modern technology, advocating for a sports ecosystem that prioritizes humanity alongside innovation.*

**Keywords:** AI Ethics in Sports, Vasudhaiva Kutumbakam, T20 Cricket, Inclusive Sports Business, Ethical AI in Decision-Making, Algorithmic Bias

1. INTRODUCTION

The exponential growth and popularity of T20 cricket has transformed sports into a fast-paced, high-revenue global industry. Many Leagues such as the Indian Premier League (IPL), Big Bash League (BBL), and Caribbean Premier League (CPL) use Artificial Intelligence (AI) for match analytics, ticket pricing, sponsorship decisions, and personalized fan engagement. AI brings greater efficiency, accuracy, and profit, but it also raises important ethical questions. Does it truly democratize the game, or does it widen existing gaps in opportunity and access?

This paper explores the role of AI in T20 cricket through the ethical lens of *Vasudhaiva Kutumbakam* an ancient Indian ideal that means “the world is one family.” Unlike many Western frameworks that focus on individual rights or profit-maximization, *Vasudhaiva Kutumbakam* emphasizes interconnectedness, mutual respect, and collective well-being. The core question we ask is: Can AI in T20 cricket be guided by the spirit of *Vasudhaiva Kutumbakam* to create a sports ecosystem that balances profits with fairness and inclusion?



### 1.1 Research aim and Objectives

- To identify ethical concerns arising from the use of AI in T20 cricket.
- To examine whether current AI applications follow inclusive and human-centered values.
- To suggest a framework inspired by *Vasudhaiva Kutumbakam* that promotes ethical and sustainable business practices in sports.

### 1.2 Hypothesis Statement

**This study hypothesizes that:** Artificial Intelligence, when guided by the ethical philosophy of Vasudhaiva Kutumbakam, can reduce exclusion, bias, and inequality in T20 cricket while maintaining profitability and fan engagement.

The paper argues that profit and ethics are not mutually exclusive and that ancient Indian wisdom offers practical pathways to create a more inclusive and sustainable sports ecosystem in the age of intelligent technologies.

## 2. PHILOSOPHICAL FOUNDATION OF VASUDHAIVA KUTUMBAKAM

Vasudhaiva Kutumbakam, a timeless idea from the ancient Indian text Maha Upanishad Ref: chapter 6. Verse 71, means “the world is one family.” It teaches us to act ethically, with care for others, knowing that all life is interconnected. It promotes harmony, compassion, and collective progress over selfish ambition. Its key values include:

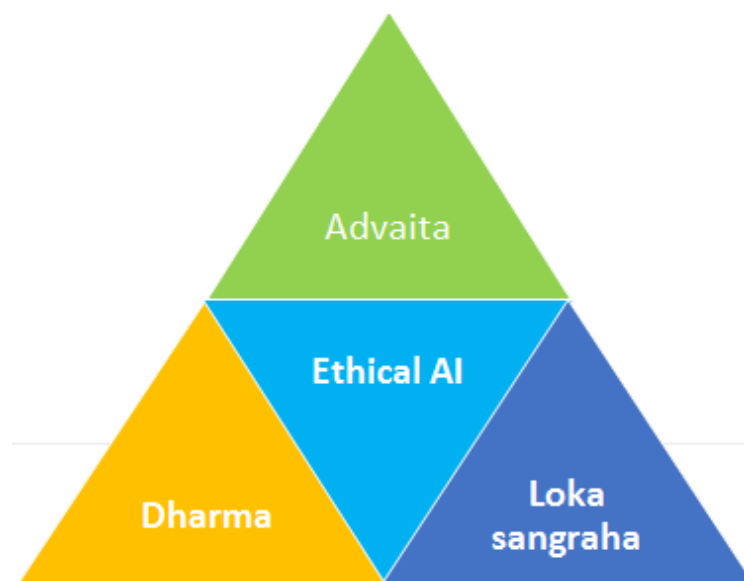
- **Non-Duality (Advaita):** Rejects binaries like profit vs. ethics, seeing them as interdependent.
- **Lokasangraha (Collective Welfare):** Prioritizes societal good over individual gain.
- **Dharma (Righteous Duty):** Encourages actions that sustain cosmic and social order.

When applied to AI in sports, *Vasudhaiva Kutumbakam* says that technology should benefit everyone. Fans, players, teams, and communities and not just the wealthy owners or big data companies. It calls for a fair and caring use of technology.

### 2.1 Relevance to AI in Sports

*Vasudhaiva Kutumbakam* questions today’s profit-first sports models by offering a more humane approach:

- **Profit should be appropriately shared:** Money made from AI tools should help local communities and budding players, not just increase franchise wealth.
- **Technology must close the existing gaps:** AI should help discover talent from villages and small towns, not only focus on elite players from big cities.



Before we delve into the biasness of AI integration in T20, Let us be very clear that Pre-AI cricket was rife with biases rooted in **colonialism, classism, and cronyism**. Though AI integration was primarily aimed to fix these biasness.



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### 3. AI IN T20 CRICKET: BENEFITS AND ETHICAL ISSUES

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#### 3.1 Benefits of AI

**Player Performance Analytics:** AI-powered tools like Catapult Sports wearables monitor a player's fitness, movements, and fatigue levels. These tools help prevent injuries and improve training routines. Technologies like Hawk-Eye have made umpiring decisions more accurate, thus significantly reduced human error and making the game fairer and more transparent.

**Fan Engagement:** AI helps deliver personalized experiences by analyzing user behavior. Fans receive custom match highlights, trivia, and even regional-language commentary, which increases their emotional connection with the game. This has helped platforms like Jio Cinema retain more viewers and attract new ones, especially in rural and regional markets.

**Business Optimization:** Franchises use AI for smarter ticket pricing and targeted advertising. Prices adjust in real time based on demand, helping fill more seats. AI also supports better sponsorship deals by analyzing audience behavior. Some teams have reported drastic increase in match-day attendance and improved fan satisfaction.

#### 3.2 Ethical Concerns

**Algorithmic Bias in Scouting:** AI scouting systems are mostly trained on data from urban academies. As a result, players from rural, tribal, and small-town backgrounds are often ignored. Many Indians live in such areas. This creates unfair advantages for city-based athletes and reduces the diversity of talent.

**Exclusionary Pricing:** AI-driven surge pricing during high-demand matches pushes ticket costs beyond the reach of low-income groups. Many slum residents in Mumbai could not afford IPL tickets, making the game feel exclusive rather than inclusive.

**Data Exploitation:** AI collects large amounts of personal data from fans and players, often without clear consent. Fantasy sports apps and marketing platforms use this data to generate profits, but users are not always aware of how their information is used, raising serious privacy concerns.

**Gender Inequality:** Women's cricket receives very little AI-generated media attention. This lack of visibility leads to fewer sponsors, reduced fan interest, and slower growth for women's sports overall.

### 4. CASE STUDIES: AI'S ETHICAL FAILURES IN T20

#### 4.1 Talent Scouting: The Metro Bias

**Problem:** Current AI scouting systems mostly use data from well-funded urban cricket academies. This results in small-town and rural talent being overlooked, even though many successful players like **Jasprit Bumrah** and **Mohammed Shami** came from humble backgrounds. The algorithms fail to recognize potential outside the elite training centers.

**Vasudhaiva Kutumbakam Solution:** To make scouting more inclusive, algorithms should be redesigned to value traits like adaptability, resilience, and performance in low-resource environments. This ensures a fairer representation of India's vast talent pool.

#### 4.2 Dynamic Pricing: Exclusion of Common Fans

**Problem:** AI-based ticket pricing often increases costs during high-demand matches. This makes it difficult for true fans, especially those from middle- and lower-income groups to attend matches.

**VASUDHAIVA KUTUMBAKAM Solution:** Here's a solution

- **Blockchain Ticketing System:** Use blockchain or NFT-based digital tickets linked to personal IDs to make tickets non-transferable and thus reduce black-market sales.
- **Sliding-Swap Pricing:** Introduce income-based ticket pricing using verified IDs like Aadhaar. By doing this economically weaker sections can also enjoy live matches at affordable rates to them.

#### 4.3 Gender Inequality in AI Coverage

**Problem:** AI-generated content heavily favors men's cricket. In the 2023 Women's Premier League. This lack of digital presence results in fewer sponsorships, less public interest, and slower progress for women's cricket.

**Vasudhaiva Kutumbakam Solution:**

- Reserve at least 30% of AI-generated media content for women’s matches.
- Use generative AI to create engaging match summaries, highlights, and commentaries in multiple Indian languages. This helps expand the reach of women’s cricket, especially to non-English-speaking audiences.

**5. VASUDHAIVA KUTUMBAKAM PROPOSED FRAMEWORK FOR ETHICAL AI IN T20**

This section proposes a practical and neo framework based on *Vasudhaiva Kutumbakam* to guide AI Ethics use in T20 cricket. The aim is to ensure that technology is accessed and benefits everyone - players, fans, and communities not just business owners or elite corporates and institutions.

**5.1 Principles for Implementation**

**Inclusive Talent Development:** AI models should not only rely on urban academy data. By working with NGOs, local cricket bodies, and school associations, training datasets can become more diverse. This ensures that talented players from rural, tribal, and underrepresented regions are noticed and given equal chances.

**Transparent Data Use:** Fans and players often don’t know how their data is collected or used. Adopting decentralized, block chain based platforms can give individuals control over their data. People can choose whether they want to share their information and even earn if it's used commercially.

**Equitable (appropriate) Profit Distribution:** AI brings big profits, but those earnings should be shared fairly. A fixed percentage say, 5% of AI-related revenue can go back to the community. This can support youth leagues, free coaching camps, school tournaments, and better infrastructure for women's cricket.

**5.2 Practical Strategies**

| Issue             | Current AI Practice                    | Vasudhaiva Kutumbakam Aligned Solution                     |
|-------------------|--|--|
| Scouting Bias     | Focus on city-based academies          | AI audits and mandates for rural talent scouting           |
| Ticket Scalping   | Open resale markets                    | Use NFT-based, identity-linked digital tickets             |
| Gender Inequality | AI models trained mostly on men’s data | Balance datasets and use generative AI for women’s content |

**6. CRITICISMS AND COUNTERARGUMENTS**

**6.1 Vasudhaiva Kutumbakam is Utopian in a Profit-Driven Industry:**

**Response:** Critics argue that values like *Vasudhaiva Kutumbakam* are idealistic in the high-stakes world of commercial sports. However, ethical outreach builds long-term fan loyalty and trust. For example, the Rajasthan Royals Foundation has invested in rural talent and education through its grassroots programs and collaborations with NGOs like the GoSports Foundation. While exact figures on loyalty increase are unavailable, such efforts contribute to inclusive brand value, long-term engagement, and social equity, proving that ethics and business success can go hand in hand.

**Source:** Rajasthan Royals fan engagement data: Business Standard Article on RR’s rural outreach and fan base growth.

- <https://www.rajasthanroyals.com/foundation>
- <https://www.thehindubusinessline.com/news/sports/rajasthan-royals-launch-grassroots-cricket-programme/article65439688.ece>

**6.2 AI Cannot Represent Kinship:**

**Response:** Some believe that AI, being a machine, cannot reflect human emotions like kinship. However, post humanist thinkers such as Karen Barad argue that technology is part of our relational world. AI tools like chatbots resolving fan issues or narrative generators promoting women's cricket coverage can embody *Vasudhaiva Kutumbakam* principles of empathy and inclusion when designed thoughtfully.

## 7. COMPARATIVE PHILOSOPHIES: VASUDHAIVA KUTUMBAKAM VS. UBUNTU VS. CONFUCIAN ETHICS

**7.1 Ubuntu (Africa):** “I am because we are”: Ubuntu promotes harmony and collective identity.

**Application:** Use AI to facilitate consensus-building (e.g., fan input on rules).

**7.2 Confucian Ethics (East Asia):** Harmony and righteousness stress moral obligation.

**Application:** AI should maintain the spirit of the game while enhancing accuracy.

**7.3 Why Vasudhaiva Kutumbakam stands out?**

- **Non-Dualistic Thinking:** It does not frame profit and ethics as binary.
- **Action-Oriented Dharma:** *Vasudhaiva Kutumbakam* offers clear moral guidelines compatible with modern governance models (e.g., the arthashastras economic-ethical balance).

## 8. POLICY RECOMMENDATIONS FOR GOVERNING BODIES

### 8.1 For ICC & National Boards

**Mandate AI Ethics Audits:** Cricket governing bodies like the ICC and national boards should require independent audits (e.g., by global firms like KPMG) to review the fairness and transparency of AI systems used in team selection, ticket pricing, and media coverage. These audits would help uncover algorithmic biases and support more inclusive policies.

**Data Sovereignty Laws:** Similar to Europe’s GDPR (General Data Protection Regulation), cricket organizations should adopt policies that give fans and players control over their personal data. This includes clear consent forms, opt-outs, and fair compensation if their data is monetized.

KPMG AI Ethics & Governance Services: <https://advisory.kpmg.us/services/trusted-ai.html>

GDPR Official Website: <https://gdpr.eu>

### 8.2 For Franchises

**Vasudhaiva Kutumbakam Scorecards:** Franchises can develop “VK Scorecards” to track their ethical and social performance. This includes rural talent engagement, equal media coverage for women’s cricket, income-sensitive ticket pricing, and fan satisfaction.

**Community Profit-Sharing:** Teams should reinvest 02 to 05% of profits earned from AI-enhanced tools into grassroots programs, such as school leagues, women’s cricket training, and rural cricket infrastructure.

**For example:** Mumbai Indians Education through Cricket initiative demonstrates how franchises can drive social impact while building loyalty.

**Mumbai Indians Grassroots Initiative – Education Through Cricket:**

- <https://www.mumbaiindians.com/community>
- <https://www.rfyouthsports.com>

## 9. CONCLUSION AND FUTURE DIRECTIONS

T20 cricket is not just a sport, it’s a global business and now powered by technology, especially in current and future also by Artificial Intelligence. While AI improves performance, fan experience, and profits, it also creates ethical concerns like bias, exclusion, and inequality. This paper explored whether it is possible to balance the power of AI with the human values of *Vasudhaiva Kutumbakam*, philosophy of the world is one family. By applying this ancient Indian philosophy, we can create a more inclusive, ethical, and sustainable model for T20 cricket. AI can be designed to discover rural talent, make ticket pricing fair, and ensure equal media coverage for women’s cricket. Data usage can become more transparent and respectful of privacy.

*Vasudhaiva Kutumbakam* does not reject profits, it asks us to achieve them without harming others. If franchises, boards, and tech developers adopt this mindset. The future of AI in sports depends on the choices we make today. If we choose ethics along with innovation, cricket can truly become a global family where technology supports fairness, diversity, and shared success.

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### 9.1 Future Research

- Develop AI audit tools specific to sports.
- **Comparative philosophy research:** *Vasudhaiva Kutumbakam* vs Ubuntu, Shinto, Islamic ethics.
- **Fieldwork:** interviews with players and fans on AI experiences.

### 9.2 Limitations

- Focused on cricket; broader validation needed across sports ecosystems.
- Largely theoretical; pilot programs and partnerships must test its feasibility.

### TERMS AND ITS RELATIVE MEANING:

**AI (Artificial Intelligence):** There is no specific definition for AI. It can be understood as the use of computers / software / systems which simulate human intelligence such as learning, and / or decision-making, also sometimes prediction can be defined as AI. In T20 cricket, it includes player analytics, ticket pricing algorithms, and personalized fan engagement.

**Technorapid:** A coined term that refers to the fast-paced, technology-driven transformation of industries. In sports, it reflects the rapid adoption of digital tools like AI to boost performance and profits.

**Scouting:** The process of identifying and evaluating cricket talent, traditionally by coaches, but now increasingly enhanced by AI and data analytics.

**Ticket Scalping:** The illegal resale of tickets at much higher prices than their original value. AI-based ticketing can unintentionally enable this during high-demand matches if not regulated.

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**TECHNOLOGIES IN PHYSICAL EDUCATION: AN EVALUATION OF MERITS AND DEMERITS**

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**<sup>1</sup>Dr. Mohammad Kaleem Ali Rizvi and <sup>2</sup>Dr. Nisar Hussain**

Sports Director at Thakur College of Science and Commerce, Shyamnarayan Thakur Marg, Thakur Village, Kandivali East, Mumbai – 400101.

**ABSTRACT**

*This study evaluates the integration of technology in Physical Education (PE) within Indian educational institutions, focusing on its merits, challenges, and socio-economic implications. The primary aim is to assess how technology impacts the teaching and effectiveness of PE and to explore its accessibility across diverse regions and communities. The objectives include examining the benefits and drawbacks of tech-enabled PE and understanding user perspectives and institutional readiness. Employing a descriptive and analytical research methodology, the study draws upon secondary data from academic literature, government policies, and case studies. Qualitative content analysis was applied to synthesize findings. Results indicate that technology significantly enhances student engagement, personalized learning, and fitness monitoring, especially in urban schools. However, a digital divide persists, with rural and underprivileged institutions facing limited access to devices and connectivity. Additionally, a perceptual gap between students and teachers regarding the use of technology and inadequate digital training for PE instructors were identified as key barriers. Government initiatives like the Fit India Movement and Khelo India show promise but require consistent execution. Economically, the adoption of technology in PE supports the fitness tech industry, promotes public health, and creates employment opportunities. The study concludes that inclusive, well-managed integration of technology can transform PE into a more effective and equitable component of holistic education.*

**Keywords:** Digital Divide, Educational Technology, Physical Education, Student Engagement and Wearable Devices.

**INTRODUCTION****A. The Physical Education in India:**

Physical Education (PE) in India has deep roots in traditional practices like yoga and Kalarippayattu, promoting a balance of physical, mental, and moral development. Modern education integrated PE to foster health, discipline, and teamwork. Policies like the National Education Policy (NEP) of 1986 and its updates have stressed its importance across all education levels. However, PE still faces challenges, including inadequate infrastructure, a shortage of trained teachers, and limited recognition in the academic framework. In many schools, PE is viewed more as leisure than a structured subject. Rural and underprivileged institutions often lack basic sports facilities, widening the urban-rural gap. Despite these issues, increasing awareness of fitness and wellness is helping to reshape perceptions. Initiatives and policy support, coupled with societal change, are vital for strengthening PE and making it a core component of holistic education in India.

**B. Technologies Impacting Physical Education in India:**

The integration of technology into Physical Education (PE) in India is transforming how it is delivered, especially in urban schools. Tools like fitness trackers, mobile apps, virtual sessions, and video analysis are helping monitor physical activity, track health metrics, and personalize fitness plans. Apps such as the Fit India Movement App, StepSetGo, and HealthifyMe encourage students to stay active beyond school hours. During the COVID-19 pandemic, schools embraced digital platforms to conduct virtual yoga and aerobics sessions. For aspiring athletes, smart equipment and data analytics enhance skill development and performance evaluation. However, the digital divide remains a major challenge. Many rural and underfunded schools lack access to internet connectivity, smart devices, and digital literacy, limiting the reach of tech-based PE. Bridging this gap is crucial to ensure equitable access to modern PE tools and foster a culture of fitness among all students, regardless of their socio-economic background.

**C. A Relation Between Physical Education and Technologies:**

The fusion of physical education and technology is reshaping how fitness and sports are taught and experienced. Traditionally centered on motor skills and physical development, PE now benefits from tools like wearables, which offer real-time data on performance, heart rate, and calories burned—enabling personalized fitness plans. Video analysis software aids in skill assessment and technique correction, while VR and AR provide immersive, interactive experiences that boost engagement. Technology also supports differentiated instruction, helping educators address varied student needs and learning styles. Gamified fitness apps and interactive tools make physical activity more appealing, especially for digitally inclined learners. This integration goes beyond functionality—it enhances pedagogy, motivation, and inclusivity.

In a tech-driven world, merging PE with digital tools isn't just a trend but a necessary step toward a holistic, accessible, and engaging approach to student well-being and physical literacy.

#### **D. The Merits & Demerits Related to Physical Education:**

Physical education (PE) offers vital benefits beyond physical fitness, including improved coordination, immunity, stress relief, self-esteem, teamwork, and academic performance. Regular physical activity is linked to better concentration and cognitive function in students. However, several challenges hinder PE's effectiveness in India. Many schools lack trained PE teachers, leading to unengaging or unsafe sessions. Overemphasis on competitive sports can alienate less athletic students, while PE periods are often neglected or misused. Gender disparities remain, especially in areas where cultural norms limit girls' participation. Inclusivity for students with disabilities is also insufficiently addressed. These issues highlight the need for a well-structured, inclusive PE curriculum, along with better teacher training and awareness. A balanced approach that values participation, skill development, and inclusivity is crucial to ensuring all students benefit from physical education.

#### **E. The Merits & Demerits Related to Physical Education Technologies:**

Technology in physical education offers several benefits, including personalized learning through data analytics, increased motivation via gamification, and flexible access to fitness resources through apps and video tutorials. These tools support continuous engagement, especially for students in remote or underserved areas. Digital progress tracking also allows for better monitoring of individual fitness development. However, challenges persist. Over-reliance on devices may reduce actual physical activity, and not all users are tech-savvy, leading to ineffective utilization. Privacy concerns regarding health data and the risk of exposure to commercial content in fitness apps raise ethical issues. The digital divide is another critical barrier, with unequal access to technology potentially widening educational disparities. Moreover, some platforms may prioritize monetization over genuine learning. Thus, while technology holds transformative promise for PE, its integration must be thoughtful, inclusive, and ethically grounded to ensure it enhances rather than detracts from physical education's core goals.

#### **F. An Initiative by Indian Government related to Physical Education and Technologies:**

The Government of India has launched initiatives like the **Fit India Movement** and **Khelo India Programme** to promote physical education and integrate technology into fitness and sports. These programs encourage regular physical activity, talent identification, and use of digital tools for training. Platforms like **DIKSHA** provide e-content for health education, while the **NEP 2020** advocates tech integration across education, including PE. These efforts highlight a national commitment to holistic development through fitness. However, their success relies on effective implementation, skilled teacher training, and ensuring equal access to technological resources, especially in rural and underserved regions.

### **REVIEW OF LITERATURE**

#### **1. Tangriev Abdikarim Tovashevich (2024):**

Existing literature underscores the growing role of technology in enhancing physical education by improving engagement, monitoring progress, and enabling personalized learning. Studies highlight the use of fitness apps, wearables, and virtual platforms to support physical activity and health education. While positive outcomes include improved student motivation and data-driven instruction, researchers also note challenges such as limited access, teacher training needs, and digital inequality. Overall, literature emphasizes technology's potential when integrated thoughtfully into PE programs.

#### **2. Mohd Firdaus Abdullah, Asiah Mohd Pilus, Mohd Radzani Abdul Razak, Abu Yazid Abu Bakar, Denise Koh Choon Lian, Mohamad Nizam Nazarudin (2021):**

A study conducted at Universiti Teknikal Malaysia Melaka (UTeM) assessed students' perceptions of the benefits and barriers to physical exercise using the EBBS scale. Findings revealed that physical fitness, cognitive enhancement, and preventive health were the most recognized advantages, while time constraints and lack of motivation were key barriers. The research highlighted the need to promote awareness of exercise benefits, especially among women, to improve participation and reduce misconceptions associated with physical activity.

#### **3. Matheu Pérez, Alexis; Pérez, Matheu; Cortés Cortés, Manuel; Díaz Contreras, Luis; Muñoz Sepúlveda, Sergio; Juica Martínez, Paola; Dehnhardt, Macarena:**

A study conducted in Santiago, Chile, explored teacher and student perceptions of ICT use in Physical Education, highlighting limited application focused mainly on physical exercises and folklore. Using qualitative methods and thematic analysis via ATLAS.ti, the study revealed differing views: teachers emphasized exercise-related technologies, while students valued ICT for information access and communication.

The findings underscored a generational gap and the need for institutional support to enhance digital skills and effectively integrate ICT into Physical Education in developing digital societies.

### OBJECTIVES

1. To study how technology affects the teaching and impact of physical education in Indian schools and colleges.
2. To explore the benefits and drawbacks of using technology in physical education.
3. To check how easily technology for physical education is available and usable across different regions and communities in India.

### RESEARCH METHODOLOGY

This study is based on a descriptive and analytical research design, utilizing secondary data sources to explore the integration of technology in physical education. Relevant information has been gathered from academic journals, government reports, policy documents, online articles, and case studies. A qualitative content analysis approach has been applied to evaluate the merits and demerits of technology in PE, as well as its accessibility across different regions in India. The study also examines initiatives undertaken by the Indian government. This methodology allows for a comprehensive understanding without conducting primary surveys or field investigations.

### FINDINGS: AS PER THE RESEARCHER'S FINDINGS

1. **Improved Engagement through Technology:** Integration of technology in physical education, such as fitness apps, wearables, and online platforms, significantly enhances student motivation, personalized learning, and participation in fitness activities, especially in urban institutions.
2. **Teacher and Student Perception Gap:** Teachers often prioritize technology for physical performance monitoring, while students view it as a tool for communication and information. This perception gap impacts the effectiveness of technology integration in PE programs.
3. **Need for Teacher Training:** Lack of adequate digital training for PE instructors limits the effective use of available technologies, emphasizing the necessity of skill development and institutional support.

### CONCLUSION

The integration of technology in Physical Education offers promising opportunities to enhance student engagement, personalize fitness plans, and improve learning outcomes. However, challenges like the digital divide, lack of teacher training, and data privacy concerns must be addressed. Government initiatives such as Fit India and Khelo India are steps in the right direction. For sustainable impact, equitable access, inclusive design, and continuous support are essential to ensure that technology enriches rather than complicates physical education in India.

### ECONOMIC RELEVANCE

1. **Boost to Fitness Tech Industry:** The integration of technology in Physical Education stimulates demand for wearables, fitness apps, and smart equipment, fostering growth in the Indian health-tech sector.
2. **Employment and Skill Development:** Government initiatives and increased tech adoption in education create employment opportunities for trained PE instructors, app developers, and health educators, contributing to the economy through skill enhancement and job creation.

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**21ST CENTURY SOCIETIES NEW APPROACH TOWARDS OPEN SEA SWIMMING FOR  
PHYSICAL FITNESS, MENTAL FITNESS AND LIFE SKILL**

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**<sup>1</sup>Dr. Sumit Damodar Kamble and <sup>2</sup>Dr. Sachin Shinde**<sup>1</sup>SVDD School, Teacher for Physical Education and Sports<sup>2</sup>Director of Global Sports and Fitness Academy**ABSTRACT**

*The present study was informative types of study. The Primary data was collected to know the interests and participation by male and females' swimmers during open water sea swimming competitions. The data was collected from open water Sea swimming at Malvan Chivla Beach from last two years participation from male and female swimmers age categories 6 years to 56 and above as well as Divyang Swimmers. The 2 years data was collected. In the year 2023 in 13<sup>th</sup> open water sea swimming competition total 513 male swimmers and 251 females participated. In year 2024 in 14<sup>th</sup> open water sea swimming total 668 males and 330 females participated. The collected data was easily analysed with the difference in the numbers. Both male and females' swimmers were actively participated in the both years competitions male were more compare to females. The conclusion of the collective data was swimming in open water is not so easy but still male and female swimmers took part and shows their interest and complete their own ambition to swim in the open Sea.*

**Keywords:** Open Water, Sea, Chivla Beach, Interest, Ambitions

**INTRODUCTION**

Swimming is one of the sports required high quality physical fitness which developed in the swimmers through regular practice. Normal swimming and competitive swimming are totally different. Most of the swimmers motivated for competitive swimming after learning normal swimming without any supports. Swimming is whole body coordination sports. The hands, legs, hip shoulders and neck performing unexpected balance and coordination showing the betterment in the performance daily as per the intensity of practice. There are two types of swimming performed by swimmers one is pool swimming and other is open water sea swimming. Swimmers who swam daily they do both. In the mentioned both the types swimmers showing their strength and endurance by giving the best time for every trails of competitions. Swimming helps to do whole body movements for swimmers. Floating on water it is skill which is thought during learning process in swimming by the swimming trainers with various supportive tools like kickboards, floats, live jackets, bullyboy etc. Swimmers are doing high quality training under train coaches who understand the level of every swimmers' destinations. They also know the styles of swimmers accordingly they take practice to get the good results from swimmers.

The swimming can be done in two ways one is in the normal swimming pool and other is in sea called as open water. The coaches can introduce swimmers as per the capacity in Pool Swimming or Sea Swimming. Within a competitive sense particularly, swim stroke techniques are continuously changing to become either easier or more efficient as more people explore the activity. Front crawl, Dolphin Crawl, animal paddles some styles which is done by humans and animals. Open water swimming is Mostly freestyle stroke. Difference is that due to swimming in open water visibility will be an issue and every 4th or 6th stroke the head is slightly lifted upwards for visibility. [https://en.wikipedia.org/wiki/Swimming\\_stroke](https://en.wikipedia.org/wiki/Swimming_stroke), n.d

**Swimming and Physical and Mental Fitness**

Physical fitness is mainly representing the 2 types of fitness one is physical and other is mental fitness. Swimming is the life saving skills so mental readiness is more needed compare to physical readiness. To jump in the water swimmers should mentally prepared for the practice in all seasons as well as for competitions. It's very difficult to normal peoples to do swimming in winter and rainy seasons, but these all swimmers they swam whole years in all the seasons. Due to swimming swimmers developed the physical aspects like strength, endurance, cardio vascular endurance, flexibility and body compositions as well as motor aspects speed, agility, balance, coordination, reaction time, power and strength. The regular practice of swimming will help swimmers to boost the physically which help them to increased the rate of motor fitness which already present in the body by birth. After a long practice swimmer may get readiness by their mind for challenges know as competitions slowly gradually. Every competitions swimmer will be more prepared and firmer with his mindset for achieved the goals what he or she had decided.

Swimming is really helping a normal individual to became the extra ordinary personality by doing regular practice and dedication by self-discipline way attending all the scheduled done by the coaches. Swimmers can

swim in pool as well as in open water, in the open water swimmers required higher motivation from coaches. It is not easy to jump in the sea and swim in the waves which may support or not.

This all fitness is boosting the swimmers to performed the swimming in the open sea too. In the open water swimmers performed 1km, 2km, 3km, 5km and 10km during the competitions in state and national. Swimming Federation of India conducted 5km and 10km events for trail selections of swimmers to send them the various levels up to Olympics.

### Open water Swimming competitions

Maharashtra State Amateur Aquatic Association (MSAAA) is affiliated by Swimming Federation of India conduct open water events in different categories from age 6 to 56 and above swimmers. From last 14 years this organized Malvan Chivla Beach Open Water events in Sindhudurg District.

### Key Highlights:

- **Participation:** Over 1,300 swimmers from across India and abroad.
- **Recognition:** Widely regarded as the biggest open-sea swimming event in the country.
- **Awards:** Top 10 merit swimmers were honored, with a total cash prize pool of ₹6.5 lakhs.
- **Global Reach:** The event drew significant attention from international swimmers, enhancing its prestige.

The competition continues to solidify India's presence in the global open-water swimming circuit while celebrating endurance, skill, and the spirit of sportsmanship. This year 2024 also participants took part as per the age category wise the chart as under

| Category     | Distance   | Male | Female |
|--------------|------------|------|--------|
| Age 6 to 7   | 500 meters | 38   | 25     |
| Age 8 to 10  | 1 KM       | 134  | 84     |
| Age 11 to 12 | 2 KM       | 110  | 71     |
| Age 13 to 15 | 3 KM       | 139  | 61     |
| Age 16 to 18 | 5 KM       | 33   | 16     |
| AGE 19 TO 25 | 5 KM       | 24   | 05     |
| AGE 26 TO 35 | 3KM        | 39   | 13     |
| AGE 36 TO 45 | 3 KM       | 73   | 25     |
| AGE 46 TO 55 | 3 KM       | 45   | 13     |
| AGE 56 PLUS  | 2 KM       | 14   | 05     |
| DIVYANG      | 1 KM       | 19   | 11     |

The below table was showing the participation of swimmers in year 2023 that is 13<sup>th</sup> Open water sea swimming at same place.

| Category     | Distance   | Male | Female |
|--------------|------------|------|--------|
| Age 6 to 7   | 500 meters | 42   | 19     |
| Age 8 to 10  | 1 KM       | 87   | 68     |
| Age 11 to 12 | 2 KM       | 85   | 55     |
| Age 13 to 15 | 3 KM       | 81   | 54     |
| Age 16 to 18 | 5 KM       | 20   | 10     |
| AGE 19 TO 25 | 5 KM       | 23   | 11     |
| AGE 26 TO 35 | 3KM        | 25   | 05     |
| AGE 36 TO 45 | 3 KM       | 43   | 10     |
| AGE 46 TO 55 | 3 KM       | 52   | 09     |
| AGE 56 PLUS  | 2 KM       | 34   | 04     |
| DIVYANG      | 1 KM       | 21   | 06     |

The sea open water is adventures sports for swimmers. In open water to make themselves continued floating and swim toward to reaching arena is challenge for them. To overcome from fear and obstacles like jelly fishes, other fishes, and other unwanted waste swimmers always trying to reach towards to goal of success as decided ambition in the mind. By comparing both this years of swimming by swimmers the numbers of participants were more in age categories from 6 to 15 in various Kilometer races. Males was more in numbers after age categories 16 to 56 plus compare to women.

### Open Water Sea Swimming Malvan Chivla Beach

The 2nd 10km and 14th Sindhudurg Open Sea Swimming Competition held at Chivla Beach, Malvan, Maharashtra, has garnered global recognition as a premier open-sea swimming event. This year's competition witnessed record-breaking participation, with over 1,300 swimmers across all categories, representing 28 districts, 8 states, and 1 international competitor.

### OBJECTIVE OF THE STUDY

1. To study the open water sea swimming participation interest by male swimmers.
2. To study the open water sea swimming participation interest by female swimmers.
3. To collect the data of open water swimmer's male and female.

### HYPOTHESIS OF THE STUDY

1. There is no interest for participation in open water sea swimming in male swimmers.
2. There is no interest for participation in open water sea swimming in female swimmers.
3. There is no difference in the participation by male and female swimmers in open water tournaments

**Methods of collection data:** The information gathered from Maharashtra State Amateur Aquatic Association (MSAAA) is affiliated by Swimming Federation of India with their official website ([www.msaaa.com](http://www.msaaa.com)) and also, they provided the prospectus to all participants at time of bib collection. All the data was available on the website for all.

**Subject and Sample:** The sample was male and female swimmers who were came to Malvan to swim the competition. The 2 years data was collected. In the year 2023 in 13<sup>th</sup> open water sea swimming competition total 513 male swimmers and 251 females participated. In year 2024 in 14<sup>th</sup> open water sea swimming total 668 males and 330 females participated. All the participation has been from all over the Maharashtra, Karnataka and Gujrat. One international women swimmer also took part in the competition.

### RESULTS

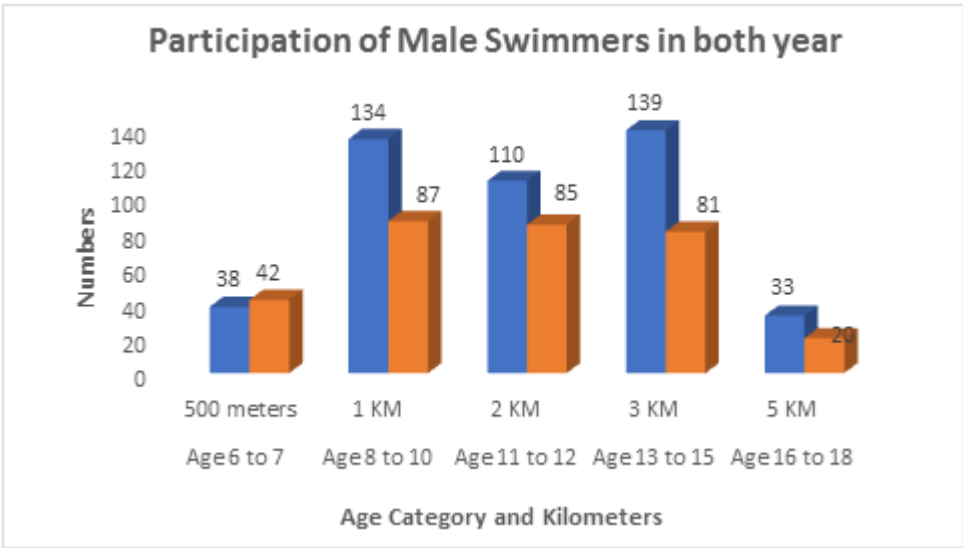
**Table 1.** Summary of Primary collective data for participation of male swimmers in both years. (Association M. S., 2010)

| Group | Age and category male | Distance | 2024 | 2023 |
|-------|-----------------------|----------|------|------|
| 1     | Age 6 year to 7       | 500mt    | 38   | 42   |
| 2     | Age 8 year to 10      | 1 km     | 134  | 87   |
| 3     | Age 11 year to 12     | 2 km     | 110  | 85   |
| 4     | Age 13 years to 15    | 3 km     | 139  | 81   |
| 5     | Age 16 years to 18    | 5 km     | 33   | 20   |

**Table 1**

In the table 1: it can see that, in the participation of swimmers in the group 1 to 5 showing good number of participations compare to 2023. It can be easily expressed by the numbers of participation by swimmers, so that hypothesis that there is no interest for participation in open water sea swimming in male swimmers had been not accepted. A good number of participations has been increased from 2023 to 2024. The interest of the open water sea swimming is high in the male age groups 6 to 18 years.

Graph 1. Open water swimmers Participation in 13<sup>th</sup> and 14<sup>th</sup> Malvan Chivla Beach competition.



Graph 1

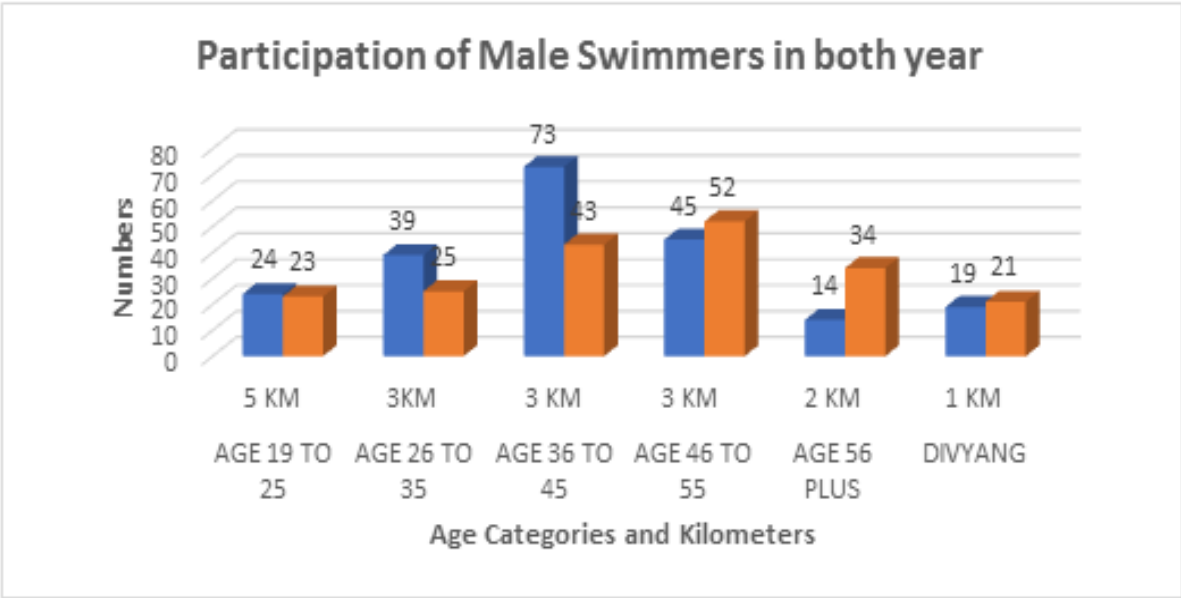
Table 2. Summary of collective data for participation of male swimmers in both years. (Association S. D., 2024)

| Group | Age and category male | Distance | 2024 | 2023 |
|-------|-----------------------|----------|------|------|
| 6     | AGE 19 YAERS TO 25    | 5 KM     | 24   | 23   |
| 7     | AGE 26 YEARS TO 35    | 3KM      | 39   | 25   |
| 8     | AGE 36 YAERS TO 45    | 3 KM     | 73   | 43   |
| 9     | AGE 46 YEARS TO 55    | 3 KM     | 45   | 52   |
| 10    | AGE 56 YEARS PLUS     | 2 KM     | 14   | 34   |
| 11    | DIVYANG               | 1 KM     | 19   | 21   |

Table 2

In the table 2: it can see that, in the participation of swimmers in the group 6 to 11 showing good number of participations in year 2024 compare to 2023. It can be easily expressed by the numbers of participation by swimmers, so that hypothesis that There is no interest for participation in open water sea swimming in male swimmers had been not accepted. A good number of participations has been increased from 2023 to 2024. The interest of the open water sea swimming is high in the male age groups 19 to 56 plus years.

Graph 2. Open water swimmers Participation in 13<sup>th</sup> and 14<sup>th</sup> Malvan Chival Beach competition.



Graph 2

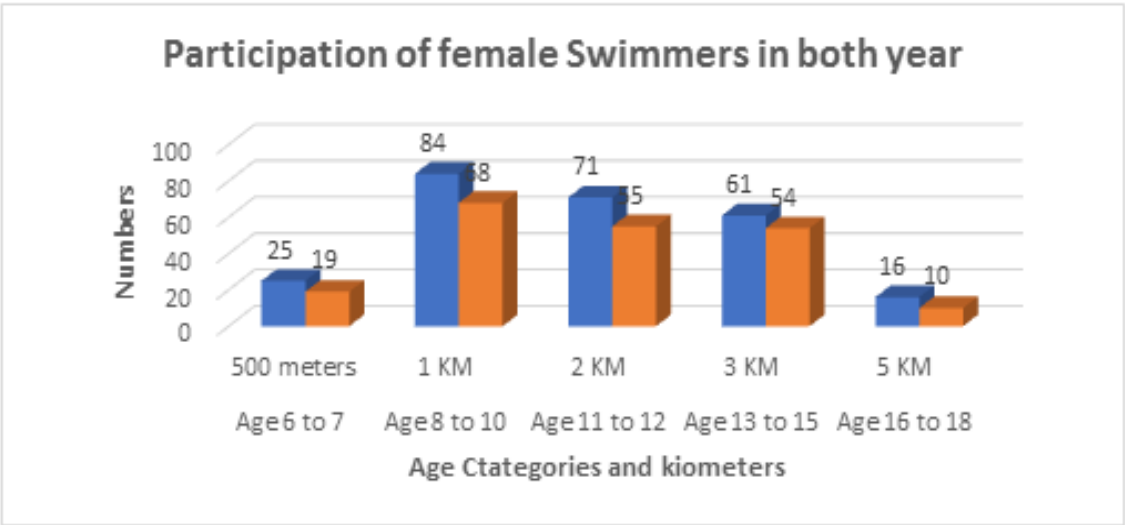
Table 3. Summary of collective data for participation of femal swimmers in both years. (Association S. D., 2024)

| Group | Age and category  | Distance | 2024 | 2023 |
|-------|-------------------|----------|------|------|
| 1     | Age 6 year to 7   | 500mt    | 25   | 19   |
| 2     | Age 8 year to 10  | 1 km     | 84   | 68   |
| 3     | Age 11 year to 12 | 2 km     | 71   | 55   |
| 4     | Age 13 year to 15 | 3 km     | 61   | 54   |
| 5     | Age 16 year to 18 | 5 km     | 16   | 10   |

Table 3

In the table 3: it can see that, in the participation of female swimmers in the group 1 to 5 showing good number of participations in year 2024 compare to 2023. It can be easily expressed by the numbers of participation by swimmers, so that hypothesis that there is no interest for participation in open water sea swimming in female swimmers had been not accepted. A good number of participations has been increased from 2023 to 2024. The interest of the open water sea swimming is high in the female age groups 6 to 18 years.

Graph 3. Open water swimmers Participation in 13<sup>th</sup> and 14<sup>th</sup> Malvan Chival Beach competition.



Graph 3

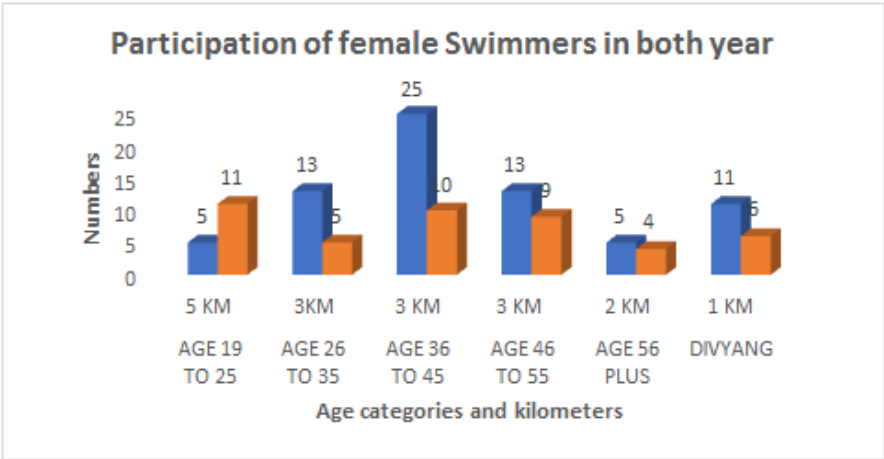
**Table 4.** Summary of collective data for participation of female swimmers in both years. (Association S. D., 2024)

| Group | Age and category   | Distance | 2024 | 2023 |
|-------|--------------------|----------|------|------|
| 6     | AGE 19 YAERS TO 25 | 5 KM     | 05   | 11   |
| 7     | AGE 26 YEARS TO 35 | 3KM      | 13   | 05   |
| 8     | AGE 36 YAERS TO 45 | 3 KM     | 25   | 10   |
| 9     | AGE 46 YEARS TO 55 | 3 KM     | 13   | 09   |
| 10    | AGE 56 YEARS PLUS  | 2 KM     | 05   | 0    |
| 11    | DIVYANG            | 1 KM     | 11   | 06   |

**Table 4**

In the table 4: it can see that, in the participation of swimmers in the group 6 to 11showing good number of participations in year 2024 compare to 2023. It can be easily expressed by the numbers of participation by swimmers, so that hypothesis that there is no interest for participation in open water sea swimming in female swimmers had been not accepted. A good number of participations has been increased from 2023 to 2024. The interest of the open water sea swimming is high in the female age groups 19 to 56 plus year.

**Graph 4.** Open water swimmers Participation in 13<sup>th</sup> and 14<sup>th</sup> Malvan Chival Beach competition.



**Graph 4**

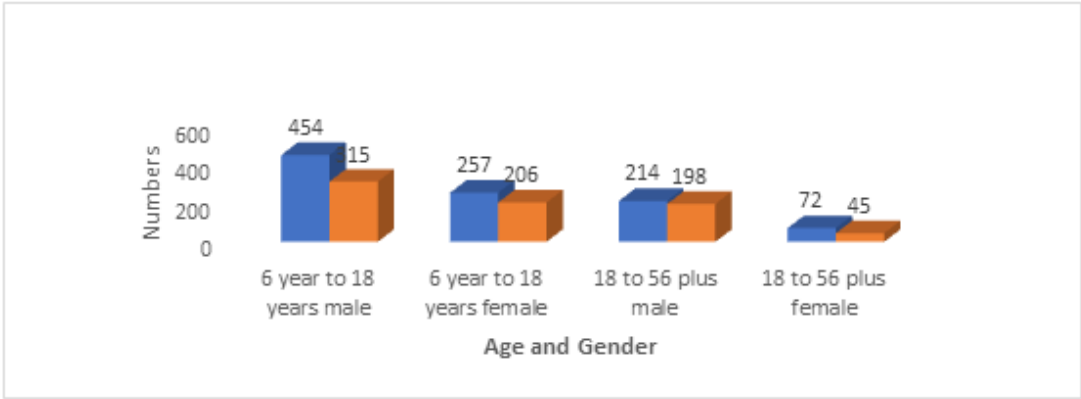
**Table 5.** Comparison of interest of participation between male and female swimmers (Association S. D., 2024)

| CATEGORIES                | 2024 | 2023 |
|---------------------------|------|------|
| 6 year to 18 years male   | 454  | 315  |
| 6 year to 18 years female | 257  | 206  |
| 18 to 56 plus male        | 214  | 198  |
| 18 to 56 plus female      | 72   | 45   |

**Table 5**

It can bee see from table 5 that the participation between male and female both increased in year 2024 compare to year 2023 in all the age categories of male and female swimmers. In age 6 to 18 male participation has been increased as well as in female age 6 to 18 years also increased. From age categories 18 to 56 plus group in male and females also the participation has been increased. But number of participations is more for male compare to female there for the hypothesis that there is no difference in the participation by male and female swimmers in open water tournaments is rejected. Male swimmers participated more in numbers compared to female in year 2024.

**Graph 5.** Graphical Comparison of interest of participation between male and female swimmers



Graph 5

CONCLUSIONS

1. The interest of the swimmers is more than 2024 in all the age categories for male swimmers.
2. In females' categories also, participation rate is increased compare to 2023 in 2024.
3. Age 6 to 18 years boys and girls participated more by accepting the challenges comes across during the swimming in Sea.
4. Specially the **Divyang** swimmers also take part and accept all the challenges while swimming.
5. Parents and coaches motivated swimmers and make them ready to take the part in open water swimming by guiding and motivating, it may help to boost the self confidence among the swimmers.

RECOMMENDATIONS

1. Swimming is life saving skills so you can learn at any age.
2. Motivated the youth and children to learn swimming.
3. Both male and female can learn at any age without any shyness.
4. For sports person after your workout need stretching for major groups of muscles, so at least once in the week go for swimming or learn the swimming for muscle relaxation.
5. Swimming helps to maintain good health and healthy life style.
6. It can be helpful to save our self from critical conditions due to flood.
7. Every school have to make compulsory to all students to learn swimming or make avail the swimming pool to them or keep swimming lecture.

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**“SPORTS PEDAGOGY” UNDERSTANDING ITS IMPORTANCE IN MODERN EDUCATION**

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**<sup>1</sup>Dr. Nisar Hussain and <sup>2</sup>Mr. Gaurav Pandey**<sup>1</sup>Sports Director (Tolani College of Commerce), Andheri, Mumbai, Maharashtra<sup>2</sup>Research Scholar, Director Let's Play Academy & Let's Play Foundation, Sports Coach & Professor, Thakur College of Science and Commerce, Kandivali Mumbai**ABSTRACT**

*This research is presented by Mr. Gaurav Pandey, Director of Let's Play Academy & Let's Play Foundation. I am also working as a Basketball & Handball Coach, as well as a Professor of Sports Science at Thakur College of Science and Commerce, Kandivali East, Mumbai.*

*Sports Pedagogy is about teaching sports in a way that helps students learn better. It connects sports science with teaching methods so that coaches and teachers can train students effectively. This research paper explains what Sports Pedagogy is, how it is used, and why it is important in education and sports training.*

*This study looks at different ways of teaching sports by reviewing past studies and real-life examples. It discusses coaching techniques, how technology is used in sports training, and how motivation helps athletes improve.*

*The findings show that structured sports education helps students develop discipline, teamwork, and problem-solving skills. Schools that include well-planned sports programs see students perform better in both academics and extracurricular activities.*

*The discussion highlights the role of teachers and coaches in shaping young athletes. It also explains how Sports Pedagogy helps students grow physically, mentally, and socially, preparing them for both professional and recreational sports.*

*In conclusion, Sports Pedagogy is very important in education. It helps students learn lifelong skills and promotes a healthy lifestyle. Schools and sports organizations should focus on proper sports education to give students the best opportunities to grow and succeed.*

**Keywords:** *Sports Pedagogy, Physical Education, Coaching Techniques, Student Development, Teaching Methods, Sports Training, Holistic Development, Educational Sports Programs*

**INTRODUCTION**

Sports Pedagogy is the study of how sports and physical education are taught. It combines ideas from teaching, psychology, and sports science to create better coaching and training methods. It helps students and athletes improve their skills, stay fit, and develop teamwork. Sports Pedagogy plays a crucial role in shaping how physical education is delivered in schools, universities, and professional training environments.

Understanding how to teach sports effectively is important because every student learns differently. Some may need visual demonstrations, while others may benefit from detailed verbal explanations or hands-on practice. A well-trained coach or teacher knows how to use different teaching methods to ensure that all students can understand and enjoy learning sports.

**DEFINITION AND CORE CONCEPTS OF SPORTS PEDAGOGY**

Sports Pedagogy is about teaching and learning in sports and physical education. It includes different teaching styles, coaching techniques, and how psychological and social factors affect sports learning. Kirk (2010) defines it as "the practice and theory of teaching and learning in physical education, sport, and related fields." It ensures that sports education is well-organized and suited to different learners.

A structured approach to teaching sports helps students develop not only athletic skills but also qualities like teamwork, discipline, and perseverance. In schools, for example, a sports teacher might follow a weekly schedule with goals for fitness, skills, and fair play. This planned approach helps every student improve at their own pace.

**UNDERSTANDING HOW STUDENTS LEARN SPORTS**

Not all students learn the same way. Some students learn better by seeing an activity demonstrated, others by doing it themselves. Some like group practice, while others prefer one-on-one instruction. Sports Pedagogy helps teachers and coaches understand these differences and use methods that suit each student.

For example, in a school setting, a physical education teacher teaching football may show a video of professional players, then break down skills like passing or dribbling into small drills. After that, students can practice in pairs or teams. The goal is to keep students engaged and learning step-by-step.

### **Examples of Sports Pedagogy in Practice**

- In a basketball session, the coach first shows students how to shoot a ball, then gives them time to practice in groups. Feedback is given individually so each student knows how to improve.
- In professional cricket, coaches use data and video analysis to track a player's batting and bowling. This helps coaches give advice based on real performance data, not just observation.
- For students with disabilities, Sports Pedagogy adapts games. For example, sitting volleyball allows students in wheelchairs to enjoy and compete in sports using adjusted rules and equipment.

### **How Sports Pedagogy Helps Different Groups**

- **Children and Teens:** Builds physical fitness and teaches life skills like teamwork.
- **College Athletes:** Helps them balance academics and sports.
- **Professional Players:** Focuses on performance improvement and injury prevention.
- **People in Rehabilitation:** Physical activity is used for recovery, with custom plans.
- **Special Needs Students:** Modifies games and uses special teaching methods.

### **Key Areas in Sports Pedagogy**

- **Teaching Methods** – How skills are explained, demonstrated, and practiced.
- **Motivation and Psychology** – How to keep students interested and confident.
- **Use of Technology** – Video replay, fitness trackers, apps that support learning.
- **Safety and Inclusion** – Making sure everyone participates safely.
- **Assessment and Feedback** – Tracking progress and giving useful advice.

### **Uses of Sports Pedagogy**

- **In Schools:** Helps physical education teachers train students effectively.
- **For Coaches:** Provides structured methods to teach sports techniques.
- **In Professional Sports:** Enhances performance through scientific training.
- **In Rehabilitation:** Used in physical therapy to aid recovery.
- **In Inclusive Programs:** Encourages participation of children with disabilities.

### **Benefits of Sports Pedagogy**

- **Improves Learning:** Makes sports easier to understand and practice.
- **Boosts Confidence:** Encourages students to keep trying.
- **Supports Physical and Mental Health:** Encourages regular activity, reduces stress.
- **Develops Social Skills:** Teaches cooperation, communication, and respect.
- **Promotes Discipline and Focus:** Students follow rules and work towards goals.
- **Encourages Lifelong Activity:** Makes sports a regular part of life.

### **Challenges in Sports Pedagogy**

- **Lack of Trained Teachers:** Some schools don't have skilled coaches.
- **Limited Facilities:** Small spaces or lack of equipment make teaching harder.
- **Different Skill Levels:** It's tough to teach when students learn at different speeds.
- **Motivating All Students:** Some students may feel shy or left out.

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**How to Improve Sports Pedagogy**

- Provide training for teachers and coaches.
- Use fun and flexible activities.
- Include all students, regardless of skill or ability.
- Mix sports with games and stories to make it enjoyable.
- Use feedback to support and guide students.

**CONCLUSION**

Sports Pedagogy plays a key role in shaping well-rounded individuals. It combines effective teaching with sports training to help students grow physically, mentally, and socially. It promotes discipline, teamwork, and healthy habits. Educators and coaches who apply the right teaching techniques can help learners enjoy and benefit from sports. As a result, students not only become better athletes but also better individuals.

To make Sports Pedagogy successful, schools, teachers, and sports institutions must work together. They should create programs that are inclusive, fun, and educational. Whether it's in schools, clubs, or professional sports, using good teaching methods makes a big difference in every learner's journey.

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## RELATIONSHIP OF STRESS AND OBESITY

<sup>1</sup>Gulshankumar Priyabrat Chaurasiya and <sup>2</sup>Dr. Neetu Omprakash Joshi<sup>1</sup>MPED Student, BPCA's College of Physical Education, Wadala, Mumbai 31<sup>2</sup>Research Guide, Associate Professor, BPCA's College of Physical Education, Wadala, Mumbai-31

## ABSTRACT

*The impact of stress on glucose metabolism and body composition. The stress response triggers the release of cortisol and adrenaline, leading to elevated blood glucose levels through increased hepatic glucose release and gluconeogenesis, even in the absence of carbohydrate intake. Chronic stress and sustained cortisol elevation decrease insulin sensitivity, promoting insulin resistance, increased fat storage (particularly visceral and abdominal), and a slower metabolism. Furthermore, cortisol-induced protein catabolism can contribute to muscle loss, potentially explaining the observed phenotype of central adiposity with reduced peripheral muscle mass in individuals experiencing chronic stress. These findings highlight the significant role of stress in driving metabolic dysfunction and shaping body composition.*

**Key Words:** Stress, Cortisol and Obesity

## INTRODUCTION

The compelling and increasingly recognized link between stress and obesity. While diet and exercise are traditionally considered the primary drivers of weight gain, mounting evidence suggests that chronic stress plays a significant and multifaceted role in the development and maintenance of obesity. This paper will explore the physiological, behavioral, and psychological pathways through which stress can contribute to excess weight.

"In today's fast-paced world, stress has become an almost ubiquitous companion. While acute stress can serve as a vital 'fight-or-flight' mechanism, chronic exposure paints a far more complex picture, particularly when it comes to our metabolic health. Emerging research continues to illuminate the profound influence of stress on weight regulation, with the stress hormone cortisol often playing a central, and somewhat villainous, role. This introduction delves into the intricate relationship between stress and obesity, exploring how the body's physiological response to prolonged pressure can inadvertently pave the way for weight gain and its associated health risks."

**A brief overview of the points intends to cover in the main body, such as:**

- The physiological mechanisms through which stress triggers cortisol release.
- How elevated cortisol levels can influence appetite, particularly cravings for energy-dense foods.
- The impact of cortisol on fat storage and distribution in the body.
- The potential interplay between stress, sleep disruption, and weight gain.

## DEFINING STRESS, OBESITY AND CORTISOL

- \* **Stress:** Stress, differentiating between acute and chronic stress, and briefly discussing the body's physiological stress response, primarily involving the hypothalamic-pituitary-adrenal (HPA) axis and the sympathetic nervous system.
- \* **Obesity:** Obesity as a state of excessive fat accumulation that may impair health, typically measured by Body Mass Index (BMI) and other anthropometric measures.
- \* **Cortisol:** Cortisol is a steroid hormone, classified as a glucocorticoid, produced by the adrenal glands, which are located on top of each kidney. Often referred to as the "stress hormone"

## PHYSIOLOGICAL MECHANISMS LINKING STRESS, CORTISOL AND OBESITY

**Cortisol and the Stress Response:**

1. **The "Fight or Flight" Response:** When the body perceives a stressful situation, the hypothalamus in the brain triggers the release of corticotropin-releasing hormone (CRH). CRH then signals the pituitary gland to release adrenocorticotrophic hormone (ACTH). ACTH travels to the adrenal glands, prompting them to produce and release cortisol.
2. **Energy Mobilization:** Cortisol's primary role during stress is to ensure the body has enough energy to cope with the perceived threat. It does this by:

- Increasing blood sugar (glucose) levels by stimulating gluconeogenesis (glucose production in the liver) and inhibiting glucose uptake by tissues.
- Promoting the breakdown of fats (lipolysis) and proteins (proteolysis) to provide additional energy sources.

**3. Other Immediate Effects:** Alongside energy mobilization, cortisol also:

- Enhances the brain's use of glucose.
- Increases the availability of substances that help repair tissues.
- Temporarily suppresses non-essential functions like digestion, reproduction, and growth.
- Modulates the immune system.
- Helps control blood pressure.

**The Body's Response to Stress: A Cascade of Hormones**

When the body perceives a stressful situation – whether it's a looming deadline, a difficult relationship, or even intense physical exertion – it initiates a complex physiological response known as the **stress response** or the **"fight-or-flight" response**. This response is primarily orchestrated by the **hypothalamic-pituitary-adrenal (HPA) axis**.

1. **Activation of the HPA Axis:** The hypothalamus, a region in the brain, detects the stressor and releases **corticotropin-releasing hormone (CRH)**.
2. **Pituitary Gland Activation:** CRH travels to the anterior pituitary gland, stimulating it to release **adrenocorticotrophic hormone (ACTH)**.
3. **Adrenal Gland Activation and Cortisol Release:** ACTH then journeys through the bloodstream to the adrenal glands, located atop the kidneys. Here, it triggers the adrenal cortex to synthesize and release **cortisol**, a steroid hormone belonging to the class of glucocorticoids.

**The Sympathetic Nervous System and Adrenaline (Epinephrine): The Initial Surge**

Alongside the HPA axis, the **sympathetic nervous system (SNS)** is also rapidly activated during stress. This leads to the release of **adrenaline (epinephrine)** and **noradrenaline (norepinephrine)** from the adrenal medulla (the inner part of the adrenal glands). These catecholamines are responsible for the immediate effects of stress, such as increased heart rate, blood pressure, and alertness. While adrenaline's direct impact on long-term obesity is less direct than cortisol's, it plays a role in mobilizing energy stores in the short term.

**CORTISOL: THE GLUCOCORTICOID WITH A SIGNIFICANT IMPACT ON BLOOD GLUCOSE**

You're absolutely right to highlight cortisol's role in elevating blood glucose. As a glucocorticoid, one of its primary functions is to ensure the body has an adequate supply of glucose, the brain's primary fuel source, during stressful situations. This is achieved through several mechanisms:

1. **Increased Hepatic Gluconeogenesis:** Cortisol stimulates **gluconeogenesis** in the liver. This is the process of creating new glucose molecules from non-carbohydrate sources, such as amino acids, lactate, and glycerol. Even in the absence of dietary carbohydrates, as in a ketogenic diet or during fasting, elevated cortisol can drive the liver to produce and release glucose into the bloodstream. This explains the interesting phenomenon you mentioned where blood glucose levels can rise despite carbohydrate restriction. Trauma, being a significant physiological stressor, can also trigger this response.
2. **Release of Stored Glucose (Glycogenolysis):** The liver also stores glucose in the form of glycogen. Cortisol, along with adrenaline, promotes **glycogenolysis**, the breakdown of glycogen into glucose, which is then released into the bloodstream, further contributing to elevated blood sugar levels.
3. **Deamination and Gluconeogenesis from Amino Acids:** As you correctly pointed out, cortisol promotes the **deamination** of amino acids. Deamination is the removal of the amino group ( $\text{NH}_2$ ) from an amino acid. The remaining carbon skeleton can then be converted into glucose through gluconeogenesis. This means that under chronic stress, the body can start breaking down proteins, including muscle tissue, to generate glucose. This process is indeed catabolic and contributes to muscle atrophy, particularly noticeable in conditions of prolonged stress or aging. The glucose produced further elevates blood sugar.

### Insulin's Role and the Development of Insulin Resistance

The rise in blood glucose triggered by cortisol necessitates the action of **insulin**, a hormone produced by the pancreas. Insulin's job is to facilitate the uptake of glucose from the bloodstream into cells for energy or storage (as glycogen in the liver and muscles, or as fat in adipose tissue).

However, chronically elevated cortisol levels can lead to **decreased insulin sensitivity**. This means that the body's cells become less responsive to insulin's signals. To compensate for this reduced sensitivity and maintain blood glucose within a normal range, the pancreas has to produce even more insulin – a state known as **hyperinsulinemia**. Over time, this can progress to **insulin resistance**, a key feature of metabolic syndrome and a significant risk factor for type 2 diabetes and obesity. The persistently high insulin levels also promote fat storage, contributing to weight gain. This creates a vicious cycle where insulin resistance further exacerbates metabolic dysfunction.

### Cortisol and Fat Storage: The Midsection Connection

Cortisol doesn't just affect glucose metabolism; it also has a significant impact on fat storage and distribution:

1. **Increased Lipoprotein Lipase (LPL) Activity in Visceral Fat:** Cortisol has been shown to increase the activity of **lipoprotein lipase (LPL)**, an enzyme that promotes the uptake of triglycerides (fats) from the bloodstream into fat cells. Interestingly, studies suggest that cortisol may have a greater stimulatory effect on LPL activity in **visceral fat** (the fat stored deep within the abdomen around the organs) compared to **subcutaneous fat** (the fat stored just beneath the skin). This preferential fat storage in the abdominal region is strongly linked to increased metabolic risks, including insulin resistance, heart disease, and type 2 diabetes.
2. **Inhibition of Lipolysis:** While cortisol can indirectly lead to fat breakdown for gluconeogenesis in the long run (by breaking down muscle protein), acutely and chronically elevated cortisol can also inhibit **lipolysis**, the breakdown of stored triglycerides into fatty acids for energy release, particularly in subcutaneous fat.
3. **Appetite and Cravings:** Stress and elevated cortisol levels can significantly influence appetite and food cravings. They often lead to an increased desire for energy-dense, palatable foods that are high in sugar and fat – often referred to as "comfort foods." These foods can provide a temporary sense of pleasure and may even dampen the stress response in the short term. However, chronic consumption of these calorie-rich foods contributes to weight gain.

### The Lean Limbs and Central Obesity Pattern

The observation of individuals under chronic stress developing a pattern of **midsection weight gain with seemingly leaner limbs** can be explained by the combined effects of cortisol:

- **Visceral Fat Deposition:** The preferential storage of fat in the abdominal region due to increased LPL activity in visceral fat.
- **Muscle Protein Breakdown (Catabolism):** The breakdown of muscle tissue, particularly in the limbs (thighs, glutes), to provide amino acids for gluconeogenesis, leading to muscle atrophy and a reduction in lean mass.
- **Stress activates**

**The HPA axis:** The hypothalamus releases CRH, leading to ACTH release from the pituitary gland.

- **ACTH stimulates cortisol release:** The adrenal glands produce and secrete cortisol.
- **Cortisol increases appetite and cravings:** It particularly promotes cravings for high-calorie, palatable foods (comfort foods).
- **Cortisol promotes visceral fat storage:** It favors the accumulation of fat around the abdominal organs (visceral fat), which is metabolically active and linked to greater health risks.
- **Cortisol can lead to insulin resistance:** This can further promote fat storage and increase the risk of type 2 diabetes, often associated with obesity.
- **Chronic stress disrupts healthy behaviors:** It can lead to poor sleep, reduced physical activity, and unhealthy eating patterns, all contributing to weight gain.
- **Stress can directly influence fat cell development:** Some research suggests stress hormones might directly promote the maturation of fat cells.
- **Emotional eating as a coping mechanism:** Stress can trigger emotional eating, where food is used to cope with negative feelings, often leading to overconsumption of unhealthy foods.

**Stress and elevated cortisol can manifest physically in the body, particularly in relation to obesity:**

- **Central Obesity (Belly Fat):** Increased cortisol promotes fat storage deep in the abdomen around organs (visceral fat), leading to a larger waist circumference and an "apple-shaped" physique.
- **Relatively Lean Limbs:** Cortisol-driven muscle protein breakdown (catabolism) can result in a loss of muscle mass, particularly in the arms and legs, making them appear thinner in comparison to the midsection.
- **Potentially Rounder Face ("Moon Face"):** In cases of Cushing's syndrome (characterized by very high cortisol levels), fat deposits can increase in the face, giving it a rounded appearance. While less common in typical stress-related obesity, it's a visual indicator of chronic high cortisol.
- **Fat Deposits at the Base of the Neck ("Buffalo Hump"):** Similar to the moon face, this is more characteristic of Cushing's syndrome but highlights how excess cortisol can influence fat distribution in specific areas.
- **Stretch Marks (Striae):** Elevated cortisol can weaken the skin's connective tissues, making it more prone to stretch marks, which may appear purplish or reddish, particularly on the abdomen, thighs, and breasts.
- **Skin Changes:** Cortisol can also contribute to thinner skin and easy bruising in some cases of chronic high levels.
- **Overall Appearance of Weight Gain:** Despite potentially leaner limbs, the overall increase in body fat, especially around the midsection, contributes to a general appearance of being overweight or obese.
- **Possible Fluid Retention:** Cortisol can influence fluid balance, potentially leading to some degree of fluid retention and a slightly puffy appearance.

Essentially, the body under chronic stress and elevated cortisol often exhibits a pattern of centralized fat accumulation with a disproportionately smaller muscle mass in the extremities.

**CONCLUSION**

The intricate relationship between stress, cortisol, and obesity involves a cascade of hormonal and metabolic changes. Chronic stress leads to sustained elevation of cortisol, which in turn disrupts glucose metabolism, promotes insulin resistance, alters fat storage patterns (favoring visceral fat accumulation), and influences appetite towards unhealthy food choices. This creates a detrimental cycle that not only leads to weight gain and obesity but also significantly increases the risk of various metabolic diseases. Understanding these mechanisms is crucial for developing effective strategies to manage stress and mitigate its negative impact on our metabolic health.

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## INTEGRATED EDUCATION OF ONENESS': A MODEL FOR SOCIAL TRANSFORMATION SREE NARAYANA GURU AND PANDURANG SHASTRI ATHAVALE (DADAJI)

<sup>1</sup>Dr. Kiran Save and <sup>2</sup>Jyoti O'Neill Shahapurkar

<sup>1</sup>Research Guide and <sup>2</sup>Research Scholar, Philosophy Department, D.T.S.S. College of Commerce, Malad (East), Mumbai-40009, Maharashtra, India

### ABSTRACT

*"Education is the only path to Liberation from the clutches of inequality in the society"*

- **Swami Vivekananda.**

World over the struggle for liberation is lack of proper guidance in terms of education on all fronts of Social, Cultural, Economic and Political. Sree Narayana Gurus value based integrated approach to education in the beginning of 20th century in Kerala, was primordial to liberation from bonded mindsets. Kerala was facing major backlash on the fronts of societal injustice dealing with severe crisis of casteism. Guru conjugated renaissance by educating people by non-violent pathways to justice, setting up temples and giving access to the forbidden was the beginning of the historical change in Kerala. Guru developed temple premises as the basic ground for Community meetings and turning the premises into huge library and informational centres. This was the highlight of Guru's approach of free access to education to all strata of society. Developed and streamlined focusing on the youth, for the society would get a stronger base to dwell deeper in handling the crisis based on socio-economic status was the significant futuristic work. Kerala once addressed as a Lunatic asylum by Swami Vivekananda, today; State of Kerala is a fully literate state by the efforts of the foundations laid by Sree Narayana Guru through integrated approach to education. On similar grounds in Maharashtra in the mid 20<sup>th</sup> century, Pandurang Shastri Athavale - popularly known as Dadaji, envisioned 'Swadhyaya' as a catalyst for individual and social transformation. Dadaji emphasised "We must educate the self to serve the world". Guru and Dadaji centered their teachings around the essence of Advaitic traditions, they both brought integrated approach of the practical application based Civic-centered education for the overall growth of humanness and humanity as the foundation of 'Oneness'.

**Keywords:** Education, Oneness, Practical Applications, Societal Transformation.

*"Bhākri che nahvē, Jeevan shikshan haāve"* -

(Not just to earn bread but we need education for life) - Dadaji.

Social reformer, Pandurang Shastri Athavale (1920 - 2003), lovingly known as *Dadaji* among his followers redefined education through the socio-cultural movement 'Swadhyaya' - Self-study an introspective education with a focus on 'Lokāśangrahā' - community living, leading to individual and social transformation alongside. Giving importance to 'Jeevan Shikshan' - 'Education for life' - A concept to instil character, moral values, purpose, and spiritual strength. Dadaji advocated for an education system that nourishes - Self-dignity, Empathy, Cooperation and a sense of divine presence at work in everyday life. Dadaji highlighted that education must shape the inner life of a person to face the outer world with dignity and not just prepare them for a livelihood. A paradigm shift was required to move from materialistic, utility based education. Dadaji built a decentralized, participatory and human values grounded education system that engaged the individual as both learner and change-maker. The concept of Oneness was the seed of education in Dadaji's outlook. 'Oneness' in studies and in practice was the major crux of Dadaji's philosophy spreading it through Swadhyaya Parivar. Dadaji's basic philosophy was on oneness through spiritual connection of recognizing every being as Divine. This tenant was his foundation of social equity. Swadhyaya - Self-study was the foundation stone to promote this. Keeping in mind the Indianness of the approach, Dadaji prepared a model to practice Bhagvad Gita in all aspects of life - family, work and society. Imparting collective knowledge for upliftment for individual and society by implementing collective efforts in learning at villages, temples, farms and at individual homes. Dadaji's self-evaluation was the decentralised model for community living which was Value based ethical education needed to build a healthy society. This project was experimental as well experiential on all fronts of various subjects included in day to day living this he called as 'Kruti-yoga', *Yogeshwar Krishi*, *Matsyagandha project*, *Loknath Amiritalayam*, *Vruksha mandir* and many such other projects for ethical living. Dadaji started core initiatives like:

- **Kruti-yoga** - Action based selfless service, every work under taken should be for the good of the others.
- **Yogeshwar Krishi** - Divine cooperative farming - Collective community cultivate on to serve the needy.



- ***Matsyagandha project*** - An activity for the fishing community with common purpose to serve all.
- ***Loknath Amritalayams*** - Community centers - Community centers to serve the needs of down trodden.
- ***Vruksha mandir*** - Temples to nurture a common ground to meet and greet, for healthy dialogues with in community and mainly a place within nature - Tree as a common place no formal temple required.
- ***Scriptural introspection and village self-governance*** - Application of scriptures like Bhagvad Geeta and Upanishads for practical use in daily life, for personal as well societal growth.

On similar grounds, Sree Narayana Guru (1856 - 1928), Philosopher, Social reformer and Spiritual teacher, envisioned an education as deeply rooted in Oneness, Equality, and Liberation for all. Narayana Gurus concept of '*Integrated Education of Oneness*' was not confined to only the transmission of academic knowledge but was aimed at harmony among all by bringing social transformation at all community levels socio-politico, socio-economic and socio-cultural levels. Education as empowerment and not just literacy was the ignite that lead to equanimity in the society in Kerala which was struggling with the major setback of Casteism. Guru stressed that real education should liberate the bonded minds and empower an individuals to raise voice against social injustice. Sree Narayana Guru of Kerala envisioned a transformative model of education rooted in the concept of Oneness for social transformation in the early 20<sup>th</sup> century while India was still struggling for freedom. Narayana Gurus revolutionary idea of integrated education went beyond conventional classroom education, focused mainly to awaken ethical, moral values as a community responsibility. Gurus greatest contribution to education was an unique concept of transforming temples into spaces for dialogue, learning, and social upliftment by providing libraries and learning platforms for as educational set up. "Temples must serve the purpose of enlightening the minds" - Narayana Guru. This was one of the Guru's most innovative contributions as transformation of temples into centers of education and use of the premises for community dialogue. The consecration of the Aruvippuram Shiva Temple by Guru in 1888 symbolized this shift. This consecration came into light when temple entries was a privilege of the handful from the society. Guru mainly challenged the orthodoxy that denied the oppressed from having access to temples. Later, many temples initiated by Guru processed libraries, reading rooms and gave spaces to forums for public discussion in the rural and marginalized areas of Kerala. This was a silent educational revolution, laying the groundwork for grassroots intellectual and social awakening. Guru democratized power of learning for marginalized communities by giving access first to temples and then temple premises for education. His integrated approach continues to resonate in the legacy of Kerala's full literacy success of today. Gurus progressive reforms and inclusive educational practices of not only providing formal education by opening it to all including women, by providing technical education for the development of skills added by imbibing moral and ethical values lead to holistic development of an individual and society. Guru introduced eight key areas for transformation and ethical society living - Education, Cleanliness, Devotion to God, Organisation, Agriculture, Handicrafts, Trade and Commerce, Science and Technology. Guru gave Education utmost importance above all fields, for he believed in the power of education to empower individuals in turn to empower the society. Guru equally felt the urge for character building besides developing various skills to earn a lively hood. Need for Liberation from injustice was the strongest need to develop value based education system. Even today with the unrest all around the globe this need has grown even stronger.

When we study both thinkers and visionary through one lens of essence, keeping aside the timeline and historical backgrounds we realize that their core philosophy of Oneness was deeply rooted in their work on integrated ethical education beyond textual learning at classrooms. The work of social transition by both philosophers is impactful to this day, for us to include their core principles of Oneness to harmonize and elevate humanity beyond caste, creed and economic disparity. Entrusting global values for compassion, inclusivity, and service-oriented leadership in the education system. Both practiced and promoted value-based education, even today they are functional as models of transformation. Dadaji emphasized character over credentials, while Narayana Guru promoted oneness on equal paradigm by localizing learning on ethical grounds. Gurus goal was to create a morally thinking and practising citizens than bookishly literate individuals. This concept of education for social empowerment was an epitome in the then caste ridden social structure. Guru revolutionised approach to education in a way to reorganise the social structure. Guru founded schools and vocational centers where education was a tool for liberation. Sree Narayana Guru said "Deprived must be educated not just to read and write, but to lead, organize, and reform society". Gurus basic approach was Oneness of Humanity. Education must lead to the dissolution of caste, creed, and religious divisions according to Guru. Guru through his writings and work emphasised that human being is one in essence and education must reflect this. Gurus dictum was "Ask not, Say not, Think not caste" as he believed that this bifurcation of humanity led to all troubles in the environment around the globe.

Guru believed education was the primary tool to break the chains of casteism and social inequality. His vision was *education should awaken self-respect and social responsibility. By providing youth centric education Guru envisioned long term social reform which mainly focused on character building alongwith intellectual development.* In the book '*Brahmarshi Sree Narayana Guru*' (*Makers of Indian Literature*) by T. Baskaran, it is noted that Guru's efforts in promoting education and social equality laid the groundwork for Kerala's progressive society. The book states: "As the force behind a social reform movement that sought to sweep away caste differences and untouchability, Guru is undoubtedly the pioneer who levelled the ground for a progressive society with high levels of human development we see in Kerala today." This clarifies Guru's profound influence on Kerala's emphasis on literacy and inclusive educational practices.

Today at the onset of National Education policy - NEP 2020 - Value education has taken a centre place again. Advocating an holistic development with integration of ethical dimension is considered in NEP today. Multilinguistic approach to make education reach every home in rural and urban areas has been the criteria for NEP. Here when one draws a horizontal line between NEP, Sree Narayana Guru and Pandurang Shastri Athavale imprint on education one realises that all the pointers are in similar direction -

- Holistic learning
- Ethical Foundation
- Vernacular and Culture
- Experiential approach
- Community as base
- Learning for self-reliance

NEP 2020 will greatly benefit by inculcating the multifaceted approach that integrates Moral, Ethical and also spiritual aspect of mutual give and take while being highly Value based in the coming years setting an example for the whole world. The tried and tested approach by both Guru and Dadaji as social reformers onsets that integrated education of 'Oneness' is the perfect model to approach in withstanding the current crisis in our surroundings.

## CONCLUSION

Knowledge that does not divide but unites, leads one to reimagine education in the light of 'Oneness' as a service to Humanity. In the era where globally, human race is grappling with Climate change, War, Pandemic, Digital influx, Moral discontent, educating not only the mind but the conscience becomes the need of the time. Sree Narayana Guru and Pandurang Shastri Athavale both provide a pathway to holistic education where learning as an act of serving humanity becomes the driving force for education. Integrated approach of Oneness unifies various human dimensions of development like Civics in moral, ethical, social, emotional and intellectual level. This comprehensive educational experience can lead to a harmonized environment which fosters growth and equal status to all. It was very clear that education was a tool to bring the community together in parlance to hold deep relevance in promoting ethical conduct, impacting individuals, Society, Nation and the World at large. Dalai Lama's introspection "Compassion as a key component of education" mirrors Gurus efforts of ethical education for harmonious coexistence. While Nelson Mandela's vision of "Education is the most powerful weapon which you can use to change the world" aligns with both Guru and Dadaji's work. Swami Vivekananda argued "We want education by which character is formed, strength of mind is increased, the intellect is expanded and by which one can stand on one's own feet", all these pointers as community empowerment, literacy and self-reliance where well operationalized, practiced and implemented by Guru and Dadaji.

Sree Narayana Guru and Pandurang Shastri Athavale (Dadaji), framed education within a global discourse that incorporates reflections from leaders like Swami Vivekananda, Nelson Mandela, the Dalai Lama and other educationist and thinkers. Rooted in the principle of 'Oneness' and 'Ethical humanism', their educational visions provides transformative models for India and beyond borders. The convergence of their efforts - Guru's community based moral education and Dadaji's empowering Swadhyaya movement for self-growth, offers a profound base for modern education system in the face of rising inequality, social fragmentation and moral degeneration of values. This study connects their legacies with the thoughts of global educational thinkers, highlighting how their philosophies remain relevant even today in creating socially rooted learners. Guru envisioned education as a means to reinstate peace, harmony and equanimity, a pathway to unity of individual and societal awakening. Leading to universal love and social harmony.

Education is the key driving force for the advancement of society especially the youth for any Nation. Reforms set within the educational approach lead to improvement within the individual and his surroundings on all aspects of life.

*“Vidyayaavine shaktiyum,*

*sanghatanaay shaktiyum,*

*navodhanatthaal swatantryavum”.*

Sree Narayana Guru.

Progress through education. Strength through organization. Freedom through reform.

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## AGGRESSION IN SPORTS

<sup>1</sup>Jyoti Shahapurkar, <sup>2</sup>Kamlesh Singh and <sup>3</sup>Dr. Neetu Omprakash Joshi<sup>1</sup>Research Scholar, D.T.S.S College, Malad – East<sup>2</sup>MPEd Semester IV Student, BPCA's College of Physical Education, Wadala, Mumbai-31<sup>3</sup>Guide, Associate Professor, BPCA's College of Physical Education, Wadala, Mumbai-31

## ABSTRACT

Aggression in sports refers to behavior that is intended to harm another individual who is motivated to avoid that harm. Hostile Aggression is driven by anger and aims to cause pain or injury. An example might be a player deliberately kicking an opponent to inflict harm. Instrumental Aggression is task-oriented and used as a means to achieve a goal, such as using force to win possession of the ball. There are various internal and external factors causing aggression. Social Learning Theory by Albert Bandura suggests that aggression is learned through observation and imitation. This means athletes can pick up aggressive behaviors by watching others, especially those they view as role models. Frustration-Aggression Hypothesis shows blocked goals which leads to frustration and aggression. Aggression can both positively and negatively affect performance, enhancing focus and intensity or leading to penalties and conflicts. Managing aggression is essential for maintaining a healthy and competitive sports environment. Some techniques that athletes and coaches can use are **Mindfulness Training**: Mindfulness exercises can help athletes stay focused on the present moment and manage their emotional responses. **Behavioral Contracts**: Setting clear rules and expectations for behavior can help athletes understand acceptable conduct. **Cognitive Restructuring**: A psychological technique aimed at changing negative thought patterns in order to alter emotional responses and behavior. **Anger Management**: Techniques such as deep breathing, and visualization can help control the physiological responses associated with anger.

**Keywords:** Hostile Aggression, Instrumental Aggression, Mindfulness Training, Behavioral Contracts, Cognitive Restructuring, Anger Management

## INTRODUCTION

Aggression in sports refers to hostile or violent behavior among players, which can stem from intense competition and the desire to win. This behavior can be verbal or physical and is often influenced by factors like crowd behavior, sporting culture, and individual temperament. Managing aggression is crucial to ensuring fair play, sportsmanship, and the safety of all participants. Aggression in sports can be understood through different contexts. It is essential to grasp what aggression means specifically within the realm of athletics.

## What is Aggression?

Aggression in sports refers to behavior that is intended to harm another individual who is motivated to avoid that harm. This can manifest physically or verbally and is often directed toward opponents, teammates, or officials.

## Types of Aggression in Sports

There are two primary types of aggression in sports:

**Hostile Aggression:** This type of aggression is driven by anger and aims to cause pain or injury. An example might be a player deliberately kicking an opponent to inflict harm.

**Instrumental Aggression:** This form of aggression is task-oriented and used as a means to achieve a goal, such as using force to win possession of the ball.

**Example:** In a soccer match, a player who slides tackles an opponent not just to gain control of the ball, but also to make a statement of dominance, demonstrates instrumental aggression.

## Causes of Aggression in Sport

Aggression in sports can stem from various sources, which can be broadly categorized into internal and external factors.

## Internal Factors Leading to Aggression

Internal factors are those originating within the athlete's mind or body. These factors can have a significant impact on behavior during sports activities.

**Psychological State:** Emotions such as anger, frustration, or anxiety can lead to aggressive actions.

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**Personality Traits:** Certain traits like competitiveness, high levels of impulsivity, and low levels of empathy can predispose athletes to aggressive behavior.

**Previous Experiences:** Past experiences of success or failure in sports can influence current attitudes and responses, sometimes resulting in aggression.

**Example:** A basketball player with a naturally competitive personality may react aggressively when fouled, even if the foul was accidental.

**Deep Dive:** Psychological theories, such as the frustration-aggression hypothesis, suggest that aggression is often a direct result of blocked goals and the resulting frustration. This is particularly common in highly competitive sports where the stakes are high. The theory posits that when athletes are prevented from reaching their objectives, the resulting frustration can cause aggressive behavior as an emotional release.

### **External Influences on Aggressive Behavior in Sports**

External factors also play a crucial role in influencing aggression in sports. These can include environmental and social influences outside of the athlete's personal control.

**Coaching Style:** Coaches who emphasize winning at all costs or who use aggression themselves can promote similar behavior in their athletes.

**Peer Influence:** Teammates and opponents can impact aggression. Competition between rivals can heighten aggressive responses.

**Media Portrayal:** Media often glorifies aggressive behavior in sports, which can lead athletes to replicate these actions in hopes of gaining similar recognition.

**Pressure from Spectators:** The expectations and reactions of spectators can lead to increased stress and aggression in athletes.

**Hint:** Incorporating a strong code of conduct and regular sportsmanship training can help mitigate the influence of external factors on aggression.

### **Psychological Theories of Aggression in Sports**

Psychological theories provide insights into why aggression appears in sports. By understanding these theories, you can better grasp the roots of aggressive behavior and find ways to manage it.

### **Social Learning Theory and Aggression**

The Social Learning Theory suggests that aggression is learned through observation and imitation. This means athletes can pick up aggressive behaviors by watching others, especially those they view as role models.

**Deep Dive:** According to Albert Bandura's Social Learning Theory, not only do individuals learn behaviors by observing others, but they also form judgments about when and how these behaviors are acceptable. In sports, if an athlete sees that aggression leads to success or is rewarded, they are likely to adopt such behavior as part of their competitive strategy.

**Example:** A young football player might imitate the aggressive techniques of a professional player they admire, believing it will bring them the same level of success and recognition.

**Hint:** Coaches can act as positive role models by demonstrating and rewarding sportsmanlike behavior, thereby reducing the occurrence of aggression in sports.

### **Frustration-Aggression Hypothesis**

The Frustration-Aggression Hypothesis posits that aggression is often the result of frustration. When an athlete's goal is blocked, it can lead to feelings of frustration, which may then trigger aggressive behavior.

**Deep Dive:** This theory was first proposed by John Dollard and his colleagues in 1939. They suggested that aggression is a natural response to frustration. In sports, this can be seen when a player is constantly thwarted by opponents or experiences repeated failures, leading to aggressive outbursts as an emotional release.

**Example:** In a basketball game, a player who misses several shots in a row might become frustrated and more likely to shove an opponent during a rebound, displaying aggressive behavior.

**Hint:** Developing coping mechanisms for dealing with frustration, such as relaxation techniques and positive self-talk, can help athletes manage their emotions and reduce aggression.

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**Impact of Aggression on Sports Performance**

Aggression in sports can significantly affect an athlete's performance, both positively and negatively. Understanding these impacts is crucial for managing aggression in a way that benefits overall sportsmanship.

**Positive and Negative Effects**

Aggression can have various effects, which may either enhance or impair sports performance.

**Positive Effects:** In some cases, aggression can be channeled productively to enhance performance. It can increase intensity, improve focus, and showcase a strong competitive spirit.

**Negative Effects:** On the flip side, uncontrolled aggression can lead to penalties, injuries, and conflicts with teammates and opponents, ultimately hurting the performance and reputation of the athlete.

**Deep Dive:** The Yerkes-Dodson Law states that there is an optimal level of arousal for peak performance. This suggests that a moderate level of aggression can be beneficial, pushing athletes to perform better. However, too much aggression can push arousal levels beyond this optimal point, causing stress and decreased performance.

**Example:** A hockey player using controlled aggression to win a puck battle can boost their team's chances of scoring. Conversely, if the same player lets aggression spiral out of control, it may result in a penalty that disadvantages their team.

**Hint:** Coaches can help athletes channel aggression positively by setting clear behavioral expectations and encouraging emotional control during practice and games.

**Aggression Management Techniques**

Managing aggression is essential for maintaining a healthy and competitive sports environment. Here are some techniques that athletes and coaches can use:

**Mindfulness Training:** Mindfulness exercises can help athletes stay focused on the present moment and manage their emotional responses.

**Behavioral Contracts:** Setting clear rules and expectations for behavior can help athletes understand acceptable conduct.

**Cognitive Restructuring:** A psychological technique aimed at changing negative thought patterns in order to alter emotional responses and behavior. This involves changing negative thought patterns that can lead to aggression, helping athletes view situations more positively.

**Anger Management:** Techniques such as deep breathing, and visualization can help control the physiological responses associated with anger.

**Example:** An athlete practicing mindfulness might take a few deep breaths on the sideline to center themselves before returning to play, effectively reducing their aggression.

**Hint:** Regular team meetings to discuss emotional management strategies can foster a supportive and cohesive team environment.

**CONCLUSION**

Aggression in sports refers to behavior intended to harm another individual who is motivated to avoid that harm. Hostile Aggression is driven by anger to cause pain and Instrumental Aggression is task-oriented to achieve a goal. Aggression can stem from competitive nature, frustration, external pressures, and social learning influences. Social Learning Theory i.e behaviors learned through observation and Frustration-Aggression Hypothesis shows blocked goals which leads to frustration and aggression. Aggression can both positively and negatively affect performance, enhancing focus and intensity or leading to penalties and conflicts.

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## PHILOSOPHICAL VIEWS OF THE SANTIS OF VARKARI SAMPRADAYA ON LEADERSHIP AND GOOD GOVERNANCE

Kirti Narayanrao Mardikar.  
D.T.S.S. College Malad (East). Mumbai

### ABSTRACT

*Varkari Sampradaya has always guided the people of society on all walks of life. Sants like Tukaram Maharaj, Swami Ramdas, and Ekanath Maharaj used to guide the kings and leaders on good governance and the well-being of all the people in society. Varkari Sampradaya has always contributed to prosperity and harmony in people's lives. Every discourse of Sants of Varkari Sampradaya threw light on spiritual as well as social growth. This paper will explain how Sants of Varkari Sampradaya guided people as well as leaders to establish harmony in society and to achieve good governance goals.*

### Leadership and Governance:

Leadership and governance are interconnected yet separate concepts and are important parts of any institution and society. Leadership inspires and influences people to achieve goals, while governance establishes structures and processes to ensure accountability and effective decision-making within an organization. The governance is called effective only when it has strong leadership with good vision and strong strategies. A well-defined governance framework gives a strong base of accountability and oversight to strong leadership. Both are integrated this way.

If only leadership is good and the governance framework is not effective, then the organization or society can not achieve its goal. When leadership and governance work hand in hand, the organisation or society can flourish. To work them in synchronisation, there must be some principles or rules that are decided after trying and testing. The ethical leadership practices bring just governance and spirituality in governance, integrate spiritual values and principles in the decision-making processes of the government and the society. Spirituality should be at the base of any leadership to establish trust, mercy, forgiveness, dignity, respect, and honor in society.

### Contribution of Varkari Sampradaya in leadership and governance:

Sant Ramdas has contributed immensely to protecting the Hindu religion from foreign invaders. He was not from the Varkari sect but from his own sect called Ramdasi, who worship God Ram and his qualities. He used to do a pilgrimage across India and had a fair idea of every movement of foreign invaders. He used to warn Chhatrapati Shivaji Maharaj from time to time about Mughals, Nizams, and other invaders. His vigilance helped Maharaj to plan his strategies many times. Ramdas Swami's teachings played a key role in shaping Chhatrapati Shivaji Maharaj's vision of Hindavi Swarajya (self-rule), rooted in political independence and moral governance. He encouraged Shivaji Maharaj to uphold righteousness, protect the people, and unite society under a just and ethical rule. Together, they formed a powerful blend of spiritual wisdom and political leadership, inspiring not just the Bhakti movement but also a broader sense of national responsibility. Their relationship was built on mutual respect—Ramdas Swami provided Shivaji Maharaj with spiritual guidance, while Shivaji Maharaj supported Ramdas Swami's mission by offering land and resources to build temples and institutions for religious and social growth.

Ramdas Swami, through his philosophy, inspired many to lead lives of Moral integrity, discipline, and devotion. These same values, he insisted, should be included in politics to have a harmonious society. He had fair and just views on politics and governance. He said in one of his shlokas,

“Rajkaran bahut karave | Parantu kalo cha nedaave ||

Parpidevari nasaave | antakaran ||”

Here in this verse, he said that even if one has to do politics for the betterment of the people, he should not let others know. That politics should not harm others in any way. Politics and social deeds should be used for only the betterment of society and not for personal interests. He was very clear about political affairs and their uses. Such a visionary guide Shivaji Maharaj had for his Swaraj.

Varkari Sampradaya is fulfilling this need of integrating spiritual values in the leadership to achieve just governance and a harmonious society. Varkari sampradaya guided leaders and kings to build sustainable and strong institutions based on grace. This can be achieved with pure minds, charitable hearts, and neutralized greed and corruption.

Incorporating spirituality in leadership and governance is not about just applying religious rules and regulations, but it is about applying the rules of the greater Creator and sustenance of the greater creation. It is always about setting a big perspective to look at things. The saint-poets of Maharashtra offered a deep and immediate critique of their contemporary social order. Over five centuries, the varkari critique evolved and was politically appropriated, culminating in the rise of Shivaji Maharaj. This evolution illustrates how the Warkari saint-poets reshaped the core of tradition and challenged the dominant ideology of Hinduism.

The saint-poets established a distinct yet thoroughly integrated perspective on social order. For Dnyanadeva, the Dnyaneshwari was a critical re-interpretation of the tradition embodied in the Bhagavad Gita. As Dnyanadeva himself noted, 'Even though the Vedas have spoken extensively and offered many paths, one should follow only that which ensures one's well-being.'

The Bhakti Saints, while respecting the infallibility of the *shastras* and the existing caste system, paved the way for the self-development of all Shudras, including women. They argued that one need not remain helpless or frustrated, as spiritual growth could be attained through Bhakti. One of the so-called shudra Saint Tukaram is a revolutionary Saint of Maharashtra in the 17<sup>th</sup> century, who brought transformational changes in the entire social system. Coming from an ordinary background, he put his life on the open book. He put forth anxieties, sufferings, and weaknesses in the simple tongue of the common people. Tukaram Maharaj was accepted as a saint by the masses; they regard him as one of themselves. He is the first saint who has taken extreme steps to criticise the orthodox, old-fashioned system, which has been dominated by a specific class. God does not exist in the temple; it lives in the human being, therefore, humanism should be worshipped for the better prospects of society. Many hypocritical worshipers try to show they are real worshipers of God, but in their practical life, they behave in complete contrast. Through the poem, Sant Tukaram Maharaj bitterly criticises superstitions and injustice.

Chhatrapati Shivaji Maharaj used to seek spiritual and ethical guidance from Tukaram Maharaj. Sant Tukaram suggested that Shivaji Maharaj carry out his duties as a Kshatriya. Shivaji Maharaj understood the meaning of the message and worked for the Hindu cause, administration, and cultural ethos of the country. Sant Tukaram created a much-needed spiritual background for Shivaji Maharaj's political work. Many scholars believe that Sant Tukaram was instrumental in creating the atmosphere that was needed for Shivaji Maharaj's work. Sant Tukaram Maharaj never discriminated on any ground. He advocated gender equality. His followers belong to all the castes and women as well.

He always preached that the true Vaishnav is the one who worships God and tries to adore his qualities. In one of his Abhangas, he said,

“Vishnumay jag vaishnavancha dharm | Bhedabhedbhram amangal ||

Aaika ji tumhi bhakt bhagawat | Karal te heet satya karaa ||

Konahi jeevacha na ghadavaa matsar | Varm sarveshwar pujanache || Tuka mhane eka dehaache avayav | sukhdukh jeev bhog paave ||”

This is how he advocated equality for all strata of society. He was of the strong view that caste never makes anybody holy. He insisted that the Vedas had categorically stated that caste was immaterial for God. The greatest contribution of Sant Tukaram is the reality that he kept the eternal Bhartiya ideology alive by connecting people with Vitthal. It is because of him that the Varkari sect became a mass movement in Maharashtra. The same piece of advice was followed by Shivaji Maharaj in his Swaraj. Where everyone was treated equally and had equal opportunities. The advice given by Tukaram Maharaj was at the base of Shivaji Maharaj's Swaraj, which is one of the best kingdoms we know. The leadership and governance-related pieces of advice were rightly followed by Maharaj for the betterment of the people. This way, saints can guide the leaders to instill values in governance.

Eknāth Maharaj was born to a prominent Brahman family in Paithan in the early 16th century. Eknāth maharaj married and settled in Paithan, establishing what is frequently seen by Vārkarīs as the ideal model for incorporating bhakti into one's life as a householder (grhastha) rather than becoming a homeless renunciant (samnyasi). Eknath Maharaj is also remembered for being a popular Kirtan performer who was especially interested in conveying his message to people of all castes in a simple language that they could easily understand. Several stories about him highlight how Eknath Maharaj's free interactions with “untouchables” outraged his Brahman community, but he stood firm on what he believed, equality. He always spoke, wrote, and preached against caste hierarchy in social life, and the modern leaders who want equality in society accept Ekanath Maharaj as their guide.



He has written vast literature, including Abhangas, commentaries, poems on different scriptures and subjects, but he is especially well known for his socially observant Bharuds (metaphorical drama-poems) that convey spiritual lessons through everyday characters and events. He was a social reformer, political guide, and a devotee whose philosophy and life are proving a guiding light for many social workers, political leaders, and many.

There was one more genuinely radical saint from the Varkari tradition, Sant Gadge Maharaj. He was from a poor *parit* family in the Vidarbha region of Maharashtra. He became a Sanyasi, renouncing everything to travel across Maharashtra for the next fifty years, preaching a message of devotion and social reform. Gadge Maharaj used the metaphors and idioms that were familiar and stirring to rural Maharashtrians in his *kirtans* to preach abstention from alcohol, anti-untouchability, and brotherhood. Gadge Mahārāj—whose name derives from his single possession, the *gāḍge* (an earthen pot)—is regarded by many as a Sant who possessed the spirit of Nāṁdev and Tukārām and who assured people that Maharashtra will continue to produce saints in keeping with the Varkari sampradaya.

Many female saints of Varkari Sampradaya struggled with patriarchal rules and regulations, orthodox societal setups, and prejudices while devoting their lives to God Vitthal. So-called upper caste ladies like Muktabai, Bahinabai, etc. had the privilege of studying scriptures but didn't have the right to express love for God. whereas the lower-class ladies like Soyarabai, Janabai struggled for their existence, devotion, and basic social rights. Dnyaneshwar and his siblings were probably outcast Brahmins living as sannyasis, even if they could not take formal vows of renunciation. The siblings and Eknāth, with his unconventional attitudes towards low-caste persons, can be taken to represent the unorthodox Brahmin leadership. Namdev, Chokhameḷa, Tukaram, and numerous other saints are examples of shudra leadership. This classification is done in modern times for the sake of studying their work, but they have done their devotion and social work without discrimination. They had always put equality and brotherhood in their hearts while working for society.

#### **Perspective of Varkari sampradaya on leadership and governance:**

Nowadays, many Varkari education institutes are coming up to inculcate the values of Varkari sampradaya. They are working towards preserving, studying, and fostering all aspects of the Varkari Sampradaya, like literature, linguistics, history, music, dance, philosophy, and comparative study in the next generation. They are also trying to make people aware of Varkari Sampradaya's past, present, and future. They are trying to rejuvenate Sanatan Dharma through these movements by preserving ancient scriptural knowledge of Indian culture. The most important goal of such institutions is to employ technology to maximise the impact, understanding, and research of the philosophy and showcase its relevance to solving problems of the modern world.

The dynamism and high energy of youth, if conserved and channelized toward the positive direction, benefit the well-being of the entire cosmos. Such types of institutes are training the youth in matters of social awareness, patriotism, and the overall well-being of the nation using educating them about the ancient scriptures of India.

This approach emphasises the belief that spiritual well-being is inseparable from economic and social prosperity. We can say that the principles and philosophy of the Varkari Sampradaya are proving as a guiding light for effective leadership and good governance, which can lead the society to prosperity and harmony.

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**ASSESSING CLOTHING BEHAVIOUR FOR APPAREL AND DEVELOPING GUIDELINES FOR  
ONLINE SHOPPING IN THE AREA OF MUMBAI SUBURBAN**

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**<sup>1</sup>Dr. Meeta Pathade and <sup>2</sup>Komal Pawar**<sup>1</sup>Patuck Gala College of Commerce & Management<sup>2</sup>Assistant Professor, D.T.S.S. College of Commerce (Autonomous)**ABSTRACT**

*The rapid growth of online apparel shopping has created new opportunities and challenges for both consumers and retailers, particularly in culturally diverse and high-density regions like Mumbai Suburban. This study aims to assess clothing behaviour in this area and develop user-friendly guidelines for online apparel platforms, with a special focus on international trends in humanization of e-commerce. The primary objectives are to identify psychological, cultural, and social factors that influence online clothing choices; to explore consumer challenges in evaluating fit, size, and fabric quality and to propose solutions that align with human centred digital retail practices.*

*A quantitative approach will be used for collecting primary data from respondents using survey method with close ended questions. Consumers in the Mumbai suburban area value the convenience and variety offered by online apparel shopping, yet they face key challenges such as trust issues, sizing discrepancies, and the absence of a tactile experience. Social influences, brand perception, and personalized communication significantly impact their clothing behaviour and purchase decisions. Humanization strategies like AI-driven size recommendations, virtual try-ons, and culturally relevant styling cues have proven effective in enhancing the online shopping experience. By integrating global research with local consumer insights, the study offers practical guidelines to improve user engagement and satisfaction in Mumbai's emerging urban markets.*

**Keywords:** Online Apparel Shopping, Consumer Behaviour, Human-Centered E-Commerce, Fit and Size Challenges.

**INTRODUCTION****Shopping Behaviour**

Shopping behaviour in Mumbai's suburban areas is shifting due to rising internet access, higher disposable incomes, and evolving fashion preferences. Modern consumers are increasingly integrating traditional in-store shopping behaviours with the convenience and wide selection offered by online platforms, reflecting a shift in shopping preferences and habits. Key influences on apparel purchases include brand reputation, peer influence, seasonal trends, and price sensitivity. Youth show a strong preference for fast fashion and mobile-first platforms, though trust concerns around sizing, quality, and delivery persist. Local clothing preferences vary across casual, ethnic, and formal wear. Online shoppers rely heavily on reviews, return policies, and app-based experiences. Festive seasons and sales significantly boost online apparel purchases. To succeed, e-retailers must offer clear product information, customization, strong customer support, and culturally relevant experiences to build trust and drive sales in Mumbai's suburban market.

**Online Shopping Behaviour**

In Mumbai's suburban areas, online shopping for apparel has become increasingly popular due to widespread mobile internet access and the convenience it offers to busy residents. Key users include working professionals, students, and homemakers, who value flexibility, promotional deals, and access to diverse clothing options. Shopping behaviour is shaped by factors like clothing preferences, brand trust, and ease of use. Consumers use both multi-brand platforms (e.g., Amazon, Flipkart, Myntra) for variety and price comparison, and brand-specific websites (e.g., Zara, H&M, Nike) for consistent quality and fit. Understanding these behaviours is essential for developing tailored online shopping guidelines that enhance user experience and build long-term customer engagement in Mumbai's suburban market.

**Websites for Apparel Shopping**

Popular shopping websites such as Myntra, Amazon, Flipkart, and others are frequently accessed by consumers in this region, not only for their variety but also for ease of use and reliable delivery services.

Given the increasing reliance on digital platforms for clothing purchases, it becomes essential to assess the behaviour and preferences of apparel shoppers in Mumbai's suburbs. This will help in developing practical guidelines that enhance the online shopping experience making it more user-friendly, trustworthy, and relevant for this diverse and dynamic population.

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**Online Buying Behaviour and Apparel Quality**

In Mumbai's suburban areas, online apparel shopping is increasingly popular across various demographics, including students, professionals, and homemakers. Online buying behaviour is influenced by factors such as age, income, lifestyle, and digital literacy. Key decision drivers include website usability, product variety, brand trust, and clarity of product information (e.g., fabric details, sizing, reviews). A smooth user experience and reliable product presentation increase purchase likelihood, while poor fit or quality can lead to dissatisfaction and reduce repeat purchases. Understanding these behaviours is crucial for creating effective, consumer-focused online shopping guidelines in this region.

**Online shopping satisfaction largely depends on two things**

In suburban Mumbai, online clothing purchases are shaped by limited physical interaction with products, making trust in the platform and product presentation (photos, sizing charts, descriptions, and reviews) critical. Assessing apparel quality online is challenging, as most consumers lack technical knowledge of fabrics or construction. Instead, they rely on cues like price, brand reputation, and website design. Discrepancies between expectations and actual product quality lead to dissatisfaction and reduced trust. For e-commerce platforms targeting value-sensitive and fashion-conscious suburban shoppers, understanding local buying behaviour is essential. This can help create personalized shopping experiences, boosting trust, repeat purchases, and brand loyalty.

**REVIEW OF LITERATURE**

Chaturvedi and Gupta (2014) explored how social media influences the online apparel shopping behaviour of young consumers in Jaipur, highlighting the growing role of digital platforms in shaping purchase decisions. The study found that social media promotions significantly influenced consumers' purchase decisions. This research offers valuable insights into the role of social media in shaping online shopping behaviour, which can be applied to understand similar trends among Mumbai suburban consumers.

Kaur and Kochar (2018) reviewed various factors affecting consumer behaviour towards online shopping, including trust, privacy concerns, and promotional offers. The study emphasized that effectively addressing these factors is crucial for improving customer satisfaction and fostering long-term loyalty. These insights are valuable for online apparel retailers aiming to build trust and attract consumers in Mumbai's suburban areas.

Rashmi Soni (2019) conducted an in-depth study focusing on the online shopping behaviour of working and non-working women in suburban Mumbai. The research revealed that women are increasingly becoming key drivers in the online apparel market, with factors such as convenience, competitive pricing, accessibility, and the availability of wider product choices being major motivators. Soni's findings also emphasized that demographic variables like age, marital status, family size, and income have a significant impact on shopping behaviour. Furthermore, the study highlights the importance of personalized services and user-friendly digital interfaces for attracting and retaining female consumers. The insights drawn from this study offer valuable guidance for online retailers seeking to align their offerings with the needs of female consumers in suburban regions of Mumbai.

Mokha and Kaur (2022) conducted an empirical study to identify the driving factors affecting online buying behaviour. They found that convenience, impulse buying behaviour, and shopping enjoyment significantly influence online purchasing intentions. This study sheds light on the psychological factors that drive online apparel purchases, providing valuable insights for retailers targeting Mumbai suburban consumers.

Singh (2022) investigated the key factors influencing online clothing shopping behaviour during the COVID-19 pandemic in Maharashtra. The study highlighted the impact of product quality, pricing, promotions, and COVID-19-related concerns on consumer attitudes and intentions. Demographic variables also played a crucial role in shaping online shopping behaviour, offering insights into the evolving preferences of Mumbai suburban consumers.

Sandeep Bhanot explored the buying behaviour of consumers within the apparel industry in Mumbai and Navi Mumbai, bringing attention to significant shifts in consumer preferences. The study found that a large segment of consumers prefers branded and private label apparel due to a perceived balance between quality and affordability. Another key observation was customer dissatisfaction regarding after-sales services, particularly in terms of return and exchange policies, which directly affects customer retention. The study also identified a preference for ready-made garments over stitched apparel, suggesting a shift towards instant fashion consumption. Income level and exchange convenience emerged as critical factors affecting purchasing decisions. These findings underline the importance of logistical ease, brand trust, and service reliability in crafting effective online shopping frameworks for the region.

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**STATEMENT OF THE PROBLEM**

In the rapidly evolving retail landscape of Mumbai Suburban, online apparel shopping has gained significant popularity due to its convenience and variety. However, this shift from physical to digital retail environments has introduced new challenges that hinder consumer satisfaction. Key among these are difficulties in accurately assessing clothing fit, fabric quality, and size without physical interaction. Moreover, consumers' clothing behaviour is influenced by a complex interplay of psychological, cultural, and social factors unique to the diverse demographic profile of the region.

Despite the growth in e-commerce platforms, many online clothing retailers have not fully adapted to the nuanced needs and behaviours of consumers in Mumbai Suburban. There is a clear gap in understanding how local consumers perceive and engage with online apparel shopping, leading to frequent product returns, dissatisfaction, and a lack of trust in the online shopping process.

This study aims to explore the underlying consumer behaviours and challenges, and to develop practical, human-centered guidelines that online clothing retailers can implement to enhance user satisfaction, minimize ambiguity in product presentation, and align with the expectations and preferences of suburban Mumbai's shoppers.

**OBJECTIVES**

- To identify and analyze key psychological, cultural, and social factors that impact consumer choices in online apparel shopping.
- To investigate the challenges consumers face when evaluating clothing fit, fabric quality and size while shopping online.
- To provide a comprehensive set of user-friendly guidelines for online clothing stores based on consumer preferences and behaviour.

**HYPOTHESIS****Hypothesis 1:**

**H0:** Psychological, cultural, and social factors do not significantly influence consumer choices in online apparel shopping.

**H<sub>1</sub>:** Psychological, cultural, and social factors significantly influence consumer choices in online

**Hypothesis 2:**

**H0:** Consumers generally do not experience major difficulties in assessing clothing fit, fabric quality, or sizing when shopping online.

**H2:** Consumers commonly encounter challenges in evaluating clothing fit, fabric quality, and sizing during the online shopping experience.

**Hypothesis 3:**

**H0:** Consumer preferences and behaviour do not significantly contribute to the development of effective guidelines for online clothing stores.

**H3:** Consumer preferences and behaviour significantly contribute to the development of effective guidelines for online clothing stores.

**CONCEPTUAL FRAMEWORK**

Psychological factors such as self-image, brand perception, and risk aversion significantly influence online apparel choices. Cultural factors, including traditional versus modern preferences, community norms, and religious clothing practices, further shape consumer behaviour, especially in the diverse context of Mumbai's suburban population. Social dynamics such as peer influence, family preferences, and the impact of social media also play a critical role in clothing decisions. The framework addresses key challenges in the online shopping experience, including sizing discrepancies, the inability to try on clothes, and unclear information about fabric and fit. These factors directly affect consumer outcomes like purchase decisions, satisfaction, and return behaviour. To address these, the study aims to develop data-driven, user-friendly guidelines tailored to suburban Mumbai consumers, focusing on accurate size charts (potentially with virtual try-on), detailed product descriptions, personalized recommendations, and trust-building practices like customer reviews and flexible return policies.

RESEARCH METHODOLOGY

This study adopts a **mixed-method research approach**, combining both qualitative and quantitative methods to gain a well-rounded understanding of consumer behaviour in online apparel shopping in Mumbai Suburban. Primary data will be collected through **structured surveys and in-depth interviews** with online shoppers from various socio-economic backgrounds, age groups, and cultural communities in the region. Quantitative surveys will help identify broad behavioural patterns, while qualitative interviews will capture deeper insights into psychological, cultural, and social influences.

Secondary data will be sourced from existing literature on consumer behaviour, fashion psychology, and e-commerce trends in India. Additionally, online platforms will be observed for customer reviews, interface usability, and product presentation standards. The research will then culminate in the development of user-centric guidelines for online clothing retailers, rooted in real consumer experiences.

SIGNIFICANCE OF THE STUDY

The significance of this research lies in its ability to **bridge the gap between consumer expectations and online retail practices**, specifically within the unique socio-cultural landscape of Mumbai Suburban. By humanizing the shopping experience understanding not just what people buy, but *why* and *how* they make those choices this study will empower e-commerce platforms to create more intuitive, inclusive, and satisfying online apparel experiences.

For brands, the insights can help reduce product return rates, build customer trust, and enhance personalization. For consumers, especially those who are still adapting to online shopping, the study offers a voice that reflects their frustrations and aspirations. For academia, it contributes valuable data on digital consumer behaviour in a fast-growing metropolitan zone.

SCOPE OF THE STUDY

This research focuses on online apparel shoppers residing in **Mumbai Suburban**, a region known for its diverse population and dynamic fashion preferences. It specifically examines **psychological, cultural, and social dimensions of consumer behaviour**, and investigates the **challenges of evaluating fit, fabric quality, and sizing** in digital platforms. The study emphasizes **user behaviour and expectations**, aiming to recommend guidelines that enhance the usability, trustworthiness, and emotional satisfaction of the online clothing shopping experience.

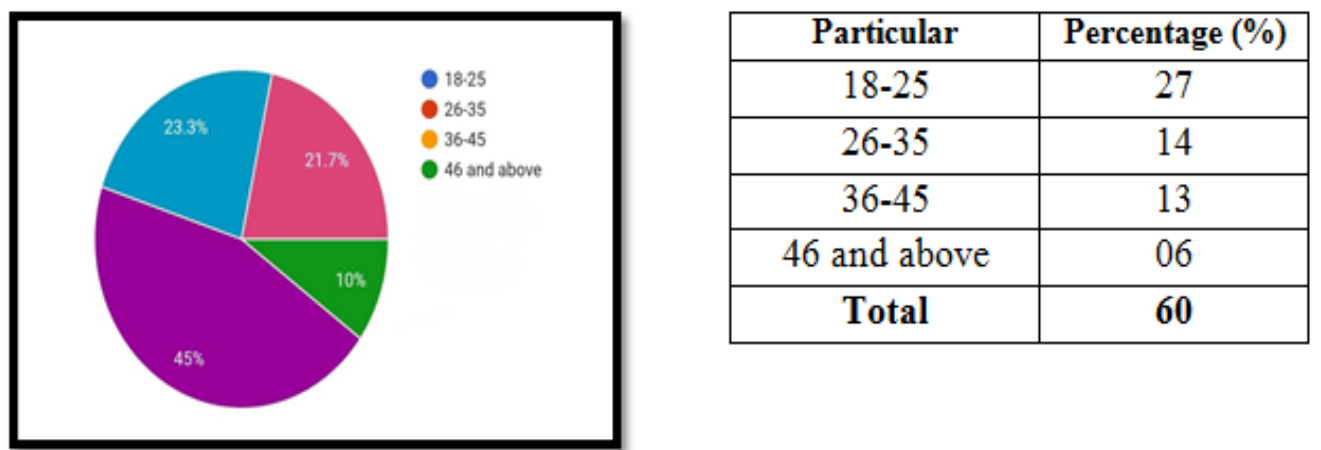
It does not focus on other categories like footwear or accessories, nor does it cover offline retail behaviour. The guidelines developed will be specifically tailored to apparel-focused e-commerce platforms.

LIMITATIONS OF THE STUDY

While the study aims to be inclusive, several limitations are acknowledged. Firstly, **the geographic focus on Mumbai Suburban** may limit the generalizability of findings to other regions. Secondly, **consumer behaviour is highly dynamic** influenced by trends, technology, and economic factors which means that insights may evolve over time. Thirdly, **self-reported data from surveys and interviews may be subject to personal bias** or memory recall issues. Lastly, the scope is confined to apparel, and may not reflect behaviour in other fashion or lifestyle categories.

DATA ANALYSIS AND FINDINGS OF THE STUDY

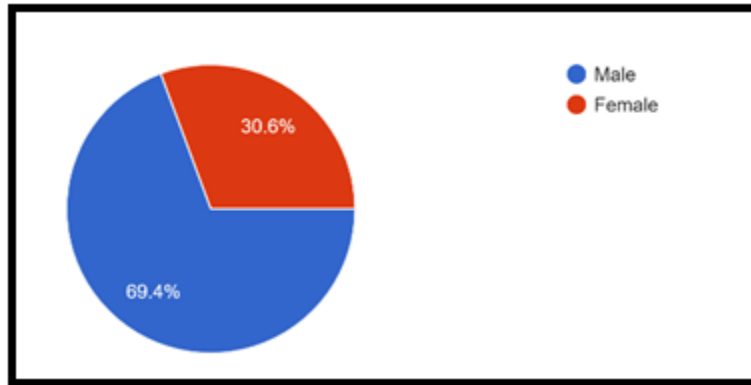
1. Age:



### Interpretation:

From the above chart and table, we can interpret that 45% of respondents are between 18-25 year of age, 23.3% of respondents are between 26-35 year of age, 21.7% of respondents are between 36-45 year of age and 10% of respondents are above 46 years of age.

### 2. Gender:

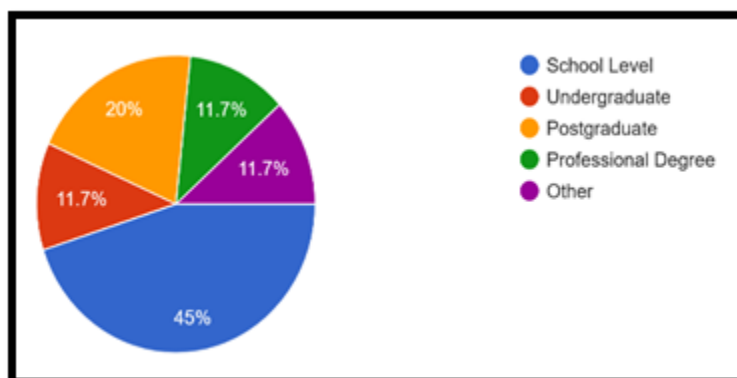


| Particular   | Percentage (%) |
|--------------|----------------|
| Male         | 43             |
| Female       | 17             |
| <b>Total</b> | <b>60</b>      |

### Interpretation:

From the above chart and table, we can observe that is a 69.4% of the respondent are male and 30.6% of the respondent are female.

### 3. Educational Qualification:

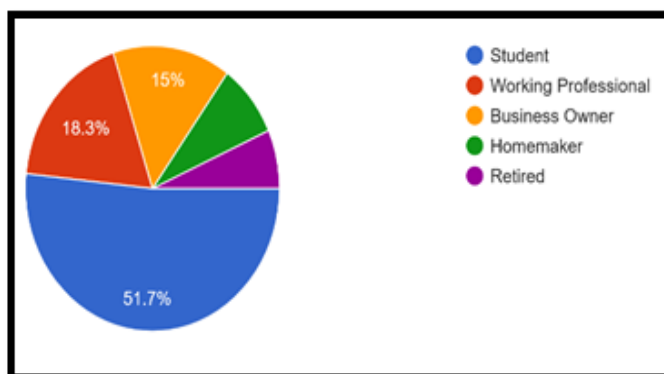


| Particular          | Percentage (%) |
|---------------------|----------------|
| School Level        | 27             |
| Undergraduate       | 07             |
| Postgraduate        | 12             |
| Professional Degree | 07             |
| Other               | 07             |
| <b>Total</b>        | <b>60</b>      |

### Interpretation:

From the above chart and table, we can observe that out of 60 respondent 45% of the respondent are from school level, 20% of the respondents are from postgraduate 11.7% of the respondents are from undergraduate, having Professional degree as well as other.

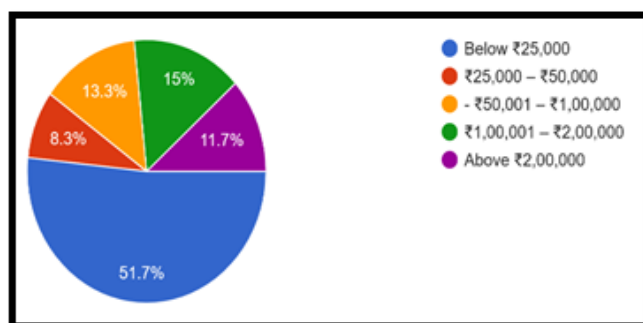
### 4. Occupation:



| Particular           | Percentage (%) |
|----------------------|----------------|
| Student              | 31             |
| Working Professional | 11             |
| Business Owner       | 09             |
| Homemaker            | 05             |
| Retired              | 04             |
| <b>Total</b>         | <b>60</b>      |

**Interpretation:**

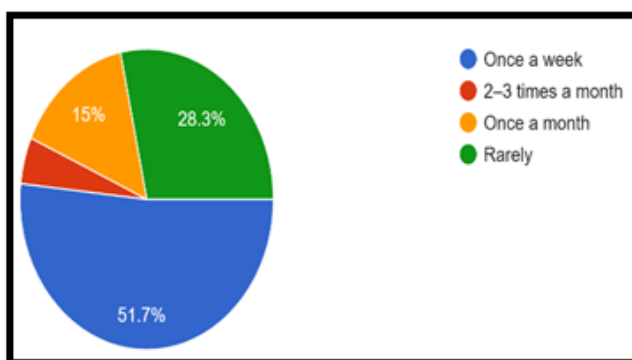
From the above chart and table, we can observe that out of 60 respondents, 51.7% respondents are students, 18.3% are working professionals, 15% are business owners, 8.3% are homemaker, 6.7% are retired.

**5. Monthly Household Income (INR):**

| Particular             | Percentage (%) |
|------------------------|----------------|
| Below Rs.25,000        | 31             |
| Rs.25,000- Rs.50,000   | 05             |
| Rs.50,001-Rs.1,00,000  | 08             |
| Rs.1,00,001-s.2,00,000 | 09             |
| Above Rs.2,00,000      | 07             |
| <b>Total</b>           | <b>60</b>      |

**Interpretation:**

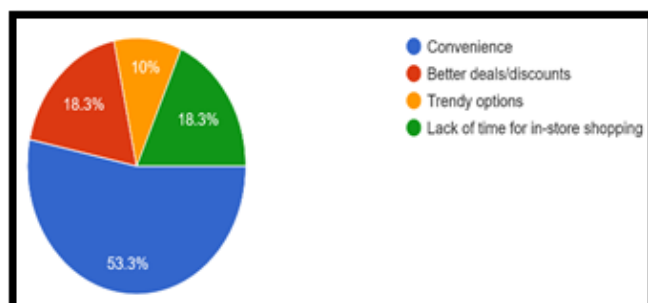
From the above chart and table, we can observe that out of 60 respondents, 51.7% are earning below Rs. 25,000, 13.3% are earning between Rs.50,001-Rs.1,00,000, 15% are earning between Rs.1,00,001-Rs.2,00,000 and 11.7% are earning above Rs.2,00,000, 8.3% are earning between Rs.25,000-Rs.50,000.

**6. How often do you shop for clothes online?**

| Particular        | Percentage (%) |
|-------------------|----------------|
| Once a week       | 31             |
| 2-3 times a month | 03             |
| Once a month      | 09             |
| Rarely            | 17             |
| <b>Total</b>      | <b>60</b>      |

**Interpretation:**

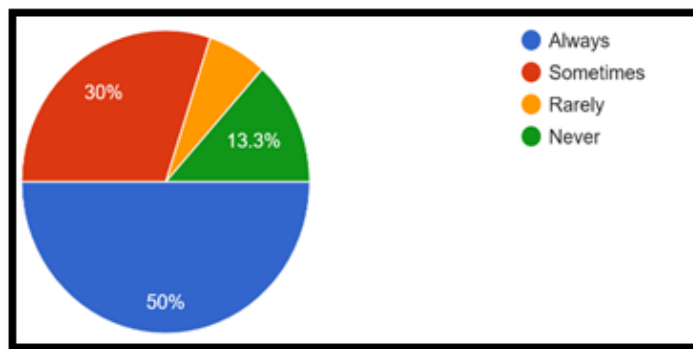
From the above chart and table, we can observe that out of 60 respondents, 51.7% respondents shop clothes online, 28.3% respondents shop rarely, 15% respondents shop once a month, 5% respondents shop 2-3 times a month.

**7. What mainly motivates you to buy clothes online?**

| Particular                         | Percentage (%) |
|------------------------------------|----------------|
| Convenience                        | 32             |
| Better deals discounts             | 11             |
| Trendy options                     | 06             |
| Lack of time for in-store shopping | 11             |
| <b>Total</b>                       | <b>60</b>      |

**Interpretation:**

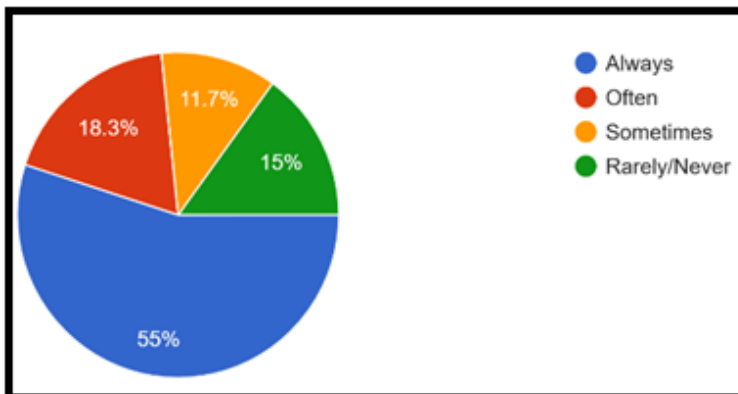
From the above chart and table, we can observe that out of 60 respondents, 53.3% respondents motivated by convenience, 18.3% respondents motivated through better deals/ discounts and lack of time for in-store shopping and only 10% of respondents motivates by trendy options.

**8. Do you feel that online clothing options reflect your local (Mumbai Suburban) fashion style?**

| Particular   | Percentage (%) |
|--------------|----------------|
| Always       | 30             |
| Sometimes    | 18             |
| Rarely       | 04             |
| Never        | 08             |
| <b>Total</b> | <b>60</b>      |

**Interpretation:**

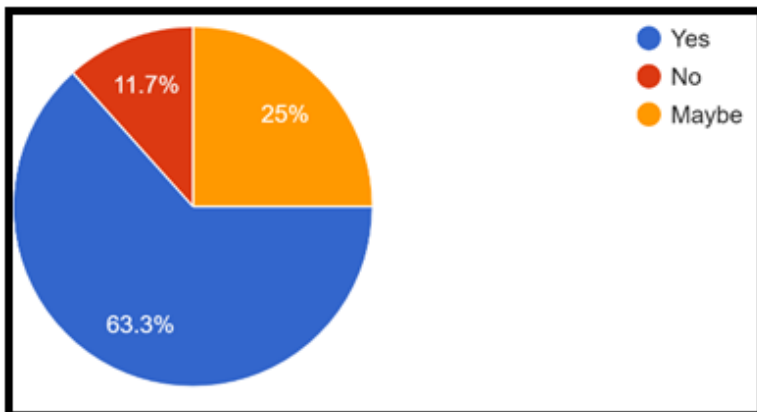
From the above chart and table, we can observe that out of 60 respondents, 50% respondents always feel that online clothing options always reflect their local fashion style, 30% respondents sometimes feel that online clothing options reflect their local fashion style, 13.3% respondents never feel that online clothing options reflect their local fashion style and only 6.7% respondents rarely feel that online clothing options reflect their local fashion style.

**9. How often do you face size or fit issues when shopping online for clothes?**

| Particular   | Percentage (%) |
|--------------|----------------|
| Always       | 33             |
| Often        | 11             |
| Sometimes    | 07             |
| Rarely/Never | 09             |
| <b>Total</b> | <b>60</b>      |

**Interpretation:**

From the above chart and table, we can observe that out of 60 respondents, 55% respondents always face size or fit issues when shopping online for clothes, 18.3% respondents often face size or fit issues when shopping online for clothes, 15% respondents rarely/never face size or fit issues when shopping online for clothes, 11.7% respondents sometimes face size or fit issues when shopping online for clothes.

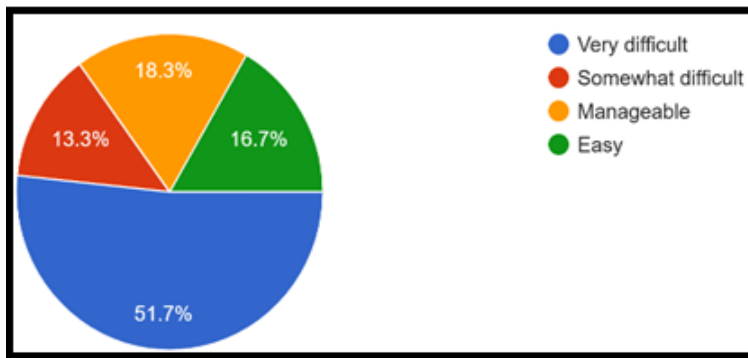
**10. Do you trust the size charts provided on online stores?**

| Particular   | Percentage (%) |
|--------------|----------------|
| Yes          | 38             |
| No           | 07             |
| Maybe        | 15             |
| <b>Total</b> | <b>60</b>      |

**Interpretation:**

From the above chart and table, we can observe that out of 60 respondents, 63.3% respondents having trust the size charts provided on online stores, 25% of respondents may not be having trust the size charts provided on online stores and 11.7% of respondents do not have trust the size charts provided on online stores.

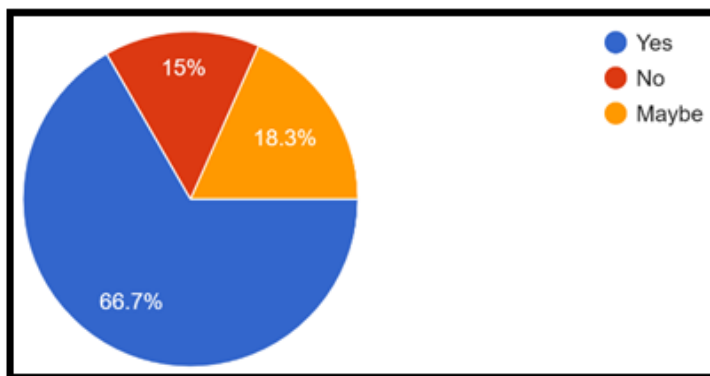


**11. How difficult is it to judge fabric quality online (based on images or descriptions)?**

| Particular         | Percentage (%) |
|--------------------|----------------|
| Very difficult     | 31             |
| Somewhat difficult | 08             |
| Manageable         | 11             |
| Easy               | 10             |
| <b>Total</b>       | <b>60</b>      |

**Interpretation:**

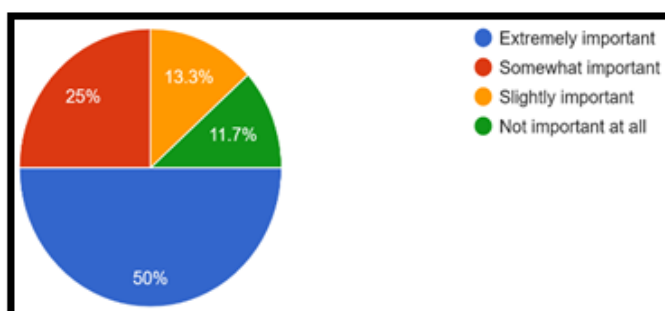
From the above chart and table, we can observe that out of 60 respondents, 51.7% respondents feel very difficult to judge fabric quality online, 18.3% of respondents can manage to judge fabric quality online, 16.7% of respondents feels easy to judge fabric quality online and 13.3% of respondents feels somewhat difficult to judge fabric quality online.

**12. Have you ever returned clothes due to poor fabric or mismatch with expectations?**

| Particular   | Percentage (%) |
|--------------|----------------|
| Yes          | 40             |
| No           | 09             |
| Maybe        | 11             |
| <b>Total</b> | <b>60</b>      |

**Interpretation:**

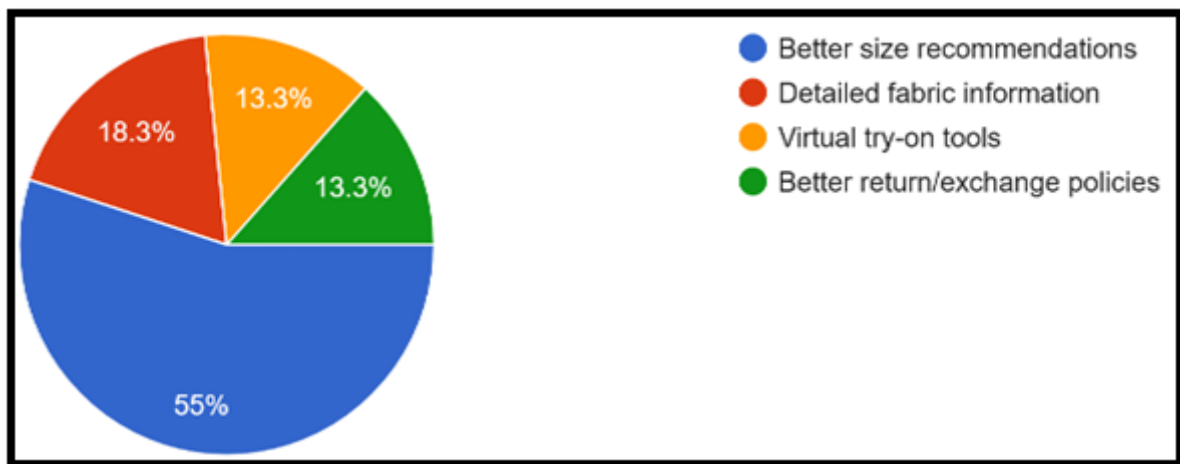
From the above chart and table, we can observe that out of 60 respondents, 66.7% respondents returned clothes due to poor fabric or mismatch with expectations, 18.3% respondents do not returned clothes due to poor fabric or mismatch with expectations and 15% respondents may be returned clothes due to poor fabric or mismatch with expectations.

**13. How important are product reviews (written or photos) to your purchase decision?**

| Particular           | Percentage (%) |
|----------------------|----------------|
| Extremely important  | 30             |
| Somewhat important   | 15             |
| Sightly important    | 08             |
| Not important at all | 07             |
| <b>Total</b>         | <b>60</b>      |

**Interpretation:**

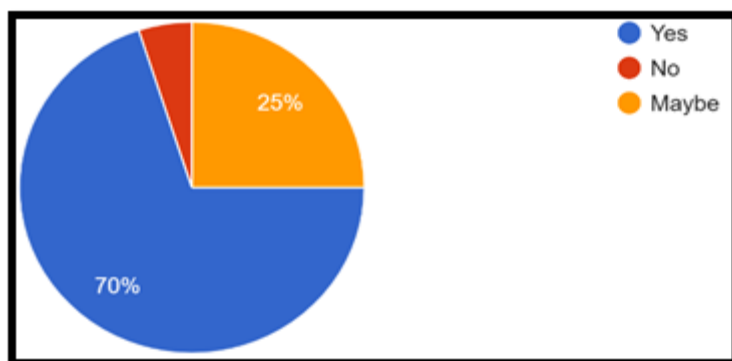
From the above chart and table, we can observe that out of 60 respondents, 50% respondents feeling extremely important having product reviews for buying decisions, 25% respondents feeling somewhat important having product reviews for buying decisions, 13.3% respondents feeling slightly important having product reviews for buying decisions and 11.7% respondents not feeling important at all while checking product reviews for buying decisions.

**14. Which feature would you most like to see improved in online clothing stores?**

| Particular                      | Percentage (%) |
|---------------------------------|----------------|
| Better size recommendations     | 33             |
| Detailed fabric information     | 11             |
| Virtual try-on tools            | 08             |
| Better return/exchange policies | 08             |
| <b>Total</b>                    | <b>60</b>      |

**Interpretation:**

From the above chart and table, we can observe that out of 60 respondents, 55% respondents need better size recommendations feature would they like most to see improved in online clothing stores, 18.3% respondents need detailed fabric information feature would they like most to see improved in online clothing stores and 13.3% respondents need virtual try-on tools as well as better return/ exchange policies feature would they like most to see improved in online clothing stores.

**15. Do you think guidelines or a “smart shopping checklist” would improve your online shopping experience?**

| Particular   | Percentage (%) |
|--------------|----------------|
| Yes          | 42             |
| No           | 03             |
| Maybe        | 15             |
| <b>Total</b> | <b>60</b>      |

**Interpretation:**

From the above chart and table, we can observe that out of 60 respondents, 70% respondents positively thinking guidelines or a smart shopping checklist would improve their online shopping experience, 25% respondents may be thinking guidelines or a smart shopping checklist would improve their online shopping experience and 5% respondents not thinking guidelines or a smart shopping checklist would improve their online shopping experience.

**FINDINGS OF THE STUDY**

The study on online clothing behaviour in Mumbai Suburban reveals that young males (18–25 years, 69.4%) dominate online apparel shopping, with students (51.7%) and school-level educated individuals (45%) forming the core demographic. Most earn below Rs. 25,000, making affordability crucial. Convenience is the top motivation (53.3%), though issues like size/fit (55%) and judging fabric quality (51.7%) persist.

While 50% feel online fashion reflects local style, many seek better regional relevance. Trust in size charts is moderate, and high return rates (66.7%) reflect unmet expectations. A strong demand exists for smart shopping guidelines (70%) and improved features like size recommendations (55%) and detailed fabric info (18.3%).

## CONCLUSION

This study provides a window into the evolving clothing behaviour of suburban Mumbai consumers and sheds light on their preferences, challenges, and expectations when it comes to online apparel shopping. The findings reveal that a significant portion of online shoppers are young (aged 18–25), predominantly male, and many are students, indicating that the youth population plays a key role in driving the digital apparel market. At the same time, a growing number of women both working and non-working are emerging as influential consumers, motivated by convenience, wider choices, and competitive pricing.

However, while the appeal of online shopping is strong, several practical concerns still affect user satisfaction. Many respondents struggle with issues such as sizing, fabric quality judgment, and return policies. The data shows that over half face regular fit issues, and a large number have returned clothing due to poor fabric or unmet expectations. Despite this, the majority still place trust in size charts and are highly influenced by product reviews when making purchase decisions.

What also stands out is a clear demand for improvement. Shoppers are calling for smarter size recommendation tools, more detailed fabric descriptions, virtual try-ons, and easier return and exchange processes. Encouragingly, 70% of respondents believe that having access to smart shopping checklists or guidelines would significantly improve their online shopping experience.

Still, the study is not without its limitations. Since it focuses only on the Mumbai Suburban region, the findings may not reflect consumer behaviour in other locations. Additionally, as consumer preferences are continually shaped by new trends and technologies, these insights may evolve over time. The reliance on self-reported data also introduces the possibility of personal bias.

Overall, the research highlights the urgent need to bridge the gap between online and offline apparel shopping by addressing trust, fit, and personalization concerns. The insights gathered here pave the way for developing user-centered guidelines that can not only improve the shopping experience but also build lasting trust with suburban Mumbai's diverse and dynamic consumer base.

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**A STUDY ON HOW EMPLOYMENT STRESS DISRUPTS THE HARMONY BETWEEN PROFESSIONAL RESPONSIBILITIES AND FAMILY LIFE FOR MIDDLE-CLASS FAMILIES**

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**<sup>1</sup>Ms. Laxmidevi R. Gupta and <sup>2</sup>Dr. Ashok S. Luhar**<sup>1</sup>PhD Research Scholar, <sup>2</sup>Research Guide, D.T.S.S College of Commerce, University of Mumbai, Mumbai, Maharashtra, India**ABSTRACT**

*This study examines the work-life balance issues that middle-class families in the Mumbai area confront, with an emphasis on the demands of the workplace and how these affect the wellbeing of the family. The study looks at the stress that middle-class families face at work, including long hours, job uncertainty, and the difficulty of finding time for their families. The coping strategies families employ to deal with these demands are also examined. 100 respondents' answers were gathered using a standardized questionnaire, and a 5-point Likert scale was used to analyze the data. The results show that there are insufficient support networks, little time for family, and significant levels of stress related to work. The report highlights that in order to promote a better work-life balance for middle-class families, company rules and community assistance must be enhanced.*

**Keywords:** Middle-class families, work-life balance, employment pressures, family well-being, Mumbai

**INTRODUCTION**

Mumbai, one of India's most vibrant and fast-paced cities, has a sizable middle class. Mumbai's middle-class families are having a harder time juggling their personal and work life. A healthy work-life balance is a challenge for many middle-class families due to the increasing demands of the office, lengthy workdays, and the ongoing need to pay bills. Stress on both an emotional and physical level results from not spending enough time with family members, particularly youngsters. This study intends to investigate the magnitude of these difficulties, with a particular emphasis on the demands of work, job instability, and coping mechanisms used by middle-class families in the Mumbai area.

**Problems of the Study:****1. Long Working Hours and Job Insecurity**

Employees experience high levels of stress as a result of many industries' extended workdays and their worry of losing their jobs owing to unpredictable economic conditions. It's become harder for middle-class families to juggle these demands with their family obligations.

**2. Lack of Time for Family and Personal Activities**

There is little time for personal interests and family bonding because of the rigorous nature of occupations and lengthy commutes. The mental and emotional health of family members is adversely affected by this imbalance.

**OBJECTIVES OF THE STUDY**

1. To examine the impact of long working hours and job insecurity on the work-life balance of middle-class families in Mumbai.
2. To identify the coping mechanisms and strategies employed by middle-class families to manage work-life balance.
3. To understand review of literature in the related area.

**METHODOLOGY**

This study collected data from 100 middle-class households in Mumbai using a quantitative research methodology and a structured questionnaire. Respondents' opinions regarding work-related stress, job instability, and work-life balance were evaluated using a 5-point Likert scale. The survey was split into two sections: one on family well-being and the other on work-related stressors.

**REVIEW OF LITERATURE**

1. **Work-Life Balance in Urban India:** According to Singh and Reddy (2020), in metropolitan India, especially in places like Mumbai, striking a balance between work and personal life has grown in importance. Maintaining family well-being has become extremely difficult due to long workdays and the rise in working mothers.

2. **Employment Stress and Family Dynamics:** Sharma and Soni (2019) discovered that stress at work frequently causes family disputes and has a detrimental effect on children's emotional development, particularly in urban middle-class homes. The study highlights how crucial it is to control work-related stress in order to maintain family harmony.
3. **Impact of Job Insecurity on Family Well-being:** Kapoor (2021) demonstrates how work uncertainty has a detrimental effect on family well-being. Middle-class families frequently suffer from increased stress and worry, which strains relationships and lowers quality of life, especially when the primary wage earners have precarious jobs.
4. **Coping Mechanisms in Family Life:** A study by Joshi and Mehta (2018) examined the coping mechanisms used by Mumbai's working parents. It was discovered that some families employ professional assistance, such hiring domestic help or going to counselling, to cope with the stresses of juggling job and family, while others rely on support from extended family.
5. **Role of Employer Support in Work-Life Balance:** According to the study by Gupta and Sharma (2020), Employers play a critical role in assisting workers in managing work-life balance by providing flexible work schedules, work-from-home opportunities, and family-friendly regulations. When these support networks are absent, stress levels rise and productivity falls.

## FINDINGS

### Objective 1: Impact of Long Working Hours and Job Insecurity

#### 1. Impact of Working Hours on Family Life

A sizable percentage of respondents stated that their family life is hampered by long work hours. In particular, 31% agreed and 22% strongly agreed that their extended work hours had a detrimental impact on their capacity to spend time with their families. In contrast, 23% of respondents expressed no opinion, indicating that their experiences were ambiguous or inconsistent. Conversely, 6% strongly disagreed and 18% disagreed. These results highlight how difficult it is for middle-class working people to balance their professional obligations without sacrificing their family bonds.

#### 2. Stress Due to Job Insecurity

Regarding the psychological effects of work insecurity, 36% of respondents agreed and 29% strongly agreed that they frequently experience stress or anxiety as a result of their employment's unpredictability. A sizable 21% selected the neutral option, suggesting either a lack of first-hand knowledge of job insecurity or a modest level of concern. Conversely, 6% strongly disagreed and 8% disagreed. According to the findings, many people experience a great deal of psychological stress due to their worry of losing their jobs or their uncertainty about finding new ones, which makes it harder for them to be emotionally and physically present in their families.

#### 3. Commuting Time and Work-Life Balance

According to the findings, 34% of respondents agreed and 26% strongly agreed that long commutes had an adverse impact on their work-life balance and significant barrier to family involvement and general life satisfaction. A further 21% of respondents expressed no opinion on the matter, which may be a reflection of their varied commute experiences or flexible coping mechanisms. Just 9% strongly disagreed and 10% disagreed. These findings highlight the hardship of travel time, particularly for those who commute for more than two hours every day, which leaves little time or energy for personal and family well-being.

#### 4. Workplace Expectations and Family Time

A significant invasion of professional expectations into personal and family time was demonstrated by the overwhelming 45% who strongly agreed and another 31% who agreed that their workplaces frequently expect them to work overtime or on weekends. Only 7% disagreed and 5% strongly disagreed, indicating that this is a major source of stress for middle-class families, many of whom must frequently sacrifice family time to meet employer expectations, which may have an adverse effect on relationships and parenting quality.

#### 5. Health Impacts of Work-Related Stress

In terms of physical health, 33% agreed and 28% strongly agreed that stress at work has resulted in problems including headaches, exhaustion, and irregular sleep patterns. These signs are in line with long-term stress brought on by work-related demands. Conversely, 19% were neutral, which could be a sign of sporadic symptoms or differing degrees of stress resilience. However, 8% strongly disagreed and 12% disagreed. According to the data, some employees are managing well, but a sizable portion is suffering from obvious physical side effects as a result of the demands of their jobs.

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**Objective 2: Coping Mechanisms and Strategies****1. Family Support**

37% of respondents agreed and 22% strongly agreed that family members (such as grandparents or extended relatives) were an essential coping mechanism when asked if they relied on them for assistance with childcare and domestic duties.

21% of respondents selected the neutral option, which may suggest that familial assistance is seldom or non-existent. 7% strongly disagreed, while 13% disagreed.

In middle-class households whose dual-income workers rely on others to efficiently handle family obligations; this finding emphasizes the on-going significance of extended family networks.

**2. Hiring Domestic Help**

When asked whether hiring domestic help would help with household duties, 33% agreed and 18% strongly agreed, indicating that this coping mechanism was used.

Perhaps because of personal preferences, the availability of reliable assistance, or financial constraints, 27% were neutral. 10% disagreed, and 12% disagreed severely.

The results of this study indicate that, while not always available or desired, employing domestic help is a popular and practical choice for many working families.

**3. Using Technology to Manage Time**

38% strongly agreed and 31% agreed that digital tools and smartphone apps can be used to manage schedules and home chores. 10% were neutral, which can be a sign of low digital literacy or infrequent use. In contrast, 3% strongly disagreed and 18% disagreed. Particularly among younger or more tech-savvy respondents, the data points to a growing but not yet dominating tendency of embracing technology as a coping mechanism.

**4. Flexible Work Arrangements**

Only 22% of respondents agreed that they had access to flexible work arrangements including staggered shifts, remote work, or flexible hours, and only 12% strongly agreed. A sizable 23% chose neutral, suggesting either mixed views on flexibility or restricted access. However, 16% strongly disagreed and 27% disagreed. The lack of supporting workplace rules and the on-going requirement for companies to implement more flexible and inclusive work practices in order to promote work-life balance are highlighted by this restricted access.

**5. Stress-Relief Activities**

Regarding the use of stress-reduction practices such as exercise, meditation, or social gatherings, 28% of respondents agreed and 12% strongly agreed.

33% stayed neutral, possibly because they were inconsistent or thought these activities weren't very effective. However, 16% disagreed, and 11% disagreed strongly. These findings highlight how crucial mental and emotional health is for people who work and imply that although some people have developed constructive coping mechanisms, others still find it difficult to find the time or space for self-care.

**CONCLUSION**

According to the study's findings, middle-class families in Mumbai face a major obstacle in striking a work-life balance. Family well-being is negatively impacted by long commutes, employment insecurity, and long working hours. To deal with these demands, many families, however, turn to coping strategies like domestic assistance, family support, and stress-relieving pursuits. The study emphasizes that in order to enhance middle-class families' work-life balance, employers must adopt more flexible work rules and the government must offer stronger support networks.

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**A STUDY ON INTRODUCTION OF THE MODULE ON ‘PHYSICAL FITNESS ASSESSMENT FOR YOUTH’ DEVELOPED BY THE MINISTRY OF YOUTH AFFAIRS & SPORTS, GOVERNMENT OF INDIA AND BUDS.**

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**Prof. Mayur M. Shah**

Vivek Education Society's, Vivek College of Commerce (Autonomous), Goregaon (West), Mumbai – 400104.

**1. ABSTRACT**

*In an effort to promote holistic development and well-being among young individuals, the Ministry of Youth Affairs & Sports, Government of India, in collaboration with BUDS (Bal Umang Drishya Sanstha), has introduced the 'Physical Fitness Assessment for Youth' module. This initiative aims to instil a culture of fitness & wellness among the youth by assessing and encouraging physical activity as a part of everyday life. The module is aligned with the National Fitness Mission and seeks to identify fitness levels across various age groups while also guiding them toward healthy lifestyles. This physical fitness assessment is more than a series of tests and measurements to understand body's strengths and limitations.*

**Keywords:** Physical Fitness, Youth, BUDS, Physical Fitness Components.

**2. OBJECTIVES OF THE STUDY**

1. To understand the structure and framework of the Physical Fitness Assessment for Youth module.
2. To assess the implementation and outreach strategies adopted by the Ministry and BUDS.
3. To evaluate the potential impact of the module on youth health and physical education systems.
4. To suggest recommendations for improving the module's effectiveness and inclusivity.

**3. LIMITATIONS OF THE STUDY**

1. Limited availability of time to conduct assessments.
2. Unequal access to sports infrastructure in different regions.
3. Need for consistent monitoring and follow-up on recommended fitness plans.

**4. SAMPLE SIZE OF THE STUDY**

About 141 young students were part of this physical fitness assessment module for conducting tests.

**5. DATA COLLECTION METHOD**

Data is gathered from both primary and secondary sources. The secondary data was gathered from publications, websites, and reports on related subjects.

**6. ABOUT THE TOPIC**

**Physical fitness for youth** refers to the ability to perform daily activities with energy, reduce health risks, and develop foundational skills for lifelong well-being.

**Key Components of Physical Fitness for Youth:**

1. **Cardiovascular Endurance** – The ability of the heart and lungs to work efficiently during physical activity (e.g., running, swimming, cycling).
2. **Muscular Strength** – The ability of muscles to exert force (e.g., lifting, climbing, push-ups).
3. **Muscular Endurance** – The ability to perform repetitive movements without getting tired (e.g., sit-ups, planks).
4. **Flexibility** – The ability to move joints and muscles through a full range of motion (e.g., stretching, yoga).
5. **Body Composition** – The ratio of fat to lean mass in the body.

**Why Physical Fitness is Important for Youth?:**

- Improves mental health (reduces stress, anxiety, and depression)
- Boosts self-confidence and body image
- Enhances academic performance
- Supports healthy growth and development



- Prevents lifestyle diseases like obesity, diabetes, and heart conditions
- Promotes better sleep and energy levels

The **Ministry of Youth Affairs and Sports & BUDS** introduced **Physical Fitness Assessment for Youth** module as part of a national initiative to promote a healthier, stronger, and more active generation. Here's a simple explanation of **why this was introduced**:

#### **To Promote a Healthy Lifestyle:**

- With increasing screen time, unhealthy eating, and sedentary habits, many young people are facing health issues early in life. The fitness assessment encourages them to stay active and fit.

#### **To Identify Fitness Levels Across the Country:**

- The government wanted to know how fit the youth of India are. This helps in planning programs and policies to improve overall youth health.

#### **To Instil the Importance of Fitness in schools & colleges:**

- By making assessments part of school & college activities, students learn that physical fitness is just as important as academic performance.

#### **To Reduce Future Health Risks:**

- Promoting fitness at a young age can prevent lifestyle diseases like obesity, diabetes, and heart conditions later in life.

#### **To Support the Fit India Movement:**

- It aligns with the **Fit India Movement**, which encourages people to make fitness a part of daily life.

The Physical Fitness Assessment module is designed to cover youth. It includes list of fitness tests appropriate for different age categories and is divided into the following components:

**1. Body Mass Index:** It is a helpful screening tool to test body fat percentage.

#### **2. Muscular Strength and Endurance:**

- Handgrip Strength Test: An effective way to measure the strength of the hand and forearm muscles.
- Push-Ups & Modified Push-Ups Test: It is used to assess upper body muscular endurance & strength.
- Partial Curl-Up Test: It is used to measure abdominal muscular endurance.
- Standing Long Jump Test: It measures lower body strength and explosive power.

#### **3. Cardiorespiratory Endurance:**

- Fitness Index: This involves running progressively.
- 1-Mile Run Test: A Simple way to estimate cardiovascular fitness.

#### **4. Flexibility:**

- Sit and Reach Test: It measures the hamstring & lower back muscles
- Flamingo Balance Test: This assesses the strength of the leg, pelvic and trunk muscle as well as static balance.

### **7. DATA ANALYSIS & INTERPRETATION.**

**The following are the various tests conducted and their scores:**

#### **1) BODY MASS INDEX (BMI)**

| Score       | Male | Female | Total |
|-------------|------|--------|-------|
| Underweight | 20   | 28     | 48    |
| Normal      | 28   | 43     | 71    |
| Overweight  | 10   | 08     | 18    |
| Obese       | 02   | 02     | 4     |
| Total       | 60   | 81     | 141   |

**Body Mass Index (BMI):**

The BMI results indicate that a significant portion of the participants (48 out of 141) were underweight, while 71 fell into the normal range. Overweight and obese categories accounted for 18 and 4 participants, respectively. This suggests a need for targeted nutritional and fitness interventions, especially for underweight and overweight youth, to promote healthier body composition.

**2) HANDGRIP STRENGTH TEST**

| Score  | Male | Female | Total |
|--------|------|--------|-------|
| Strong | 01   | 01     | 02    |
| Normal | 38   | 56     | 94    |
| Weak   | 21   | 24     | 45    |
| Total  | 60   | 81     | 141   |

**Handgrip Strength Test:**

The majority of participants (94 out of 141) demonstrated normal handgrip strength, while 45 were classified as weak and only 2 as strong. This highlights a potential area for improvement in muscular strength training, particularly among females, where 24 out of 81 were weak compared to 21 out of 60 males.

**3) PUSH-UPS TEST**

| Score         | Male | Female | Total |
|---------------|------|--------|-------|
| Work Harder   | 33   | 52     | 85    |
| Must Improve  | 01   | 06     | 07    |
| Can do Better | 09   | 07     | 16    |
| Good          | 04   | 0      | 4     |
| Very Good     | 04   | 02     | 6     |
| Athletic      | 04   | 06     | 10    |
| Sports Fit    | 05   | 08     | 13    |
| Total         | 60   | 81     | 141   |

**Push-Ups Test:**

Most participants (85 out of 141) were categorized as needing to "Work Harder," indicating limited upper body endurance. Only 10 participants achieved "Athletic" or "Sports Fit" levels, suggesting a gap in muscular endurance training, especially among females, where none scored "Good" or higher.

**4) PARTIAL CURL-UP TEST**

| Score         | Male | Female | Total |
|---------------|------|--------|-------|
| Work Harder   | 28   | 52     | 80    |
| Must Improve  | 0    | 02     | 02    |
| Can do Better | 14   | 10     | 24    |
| Good          | 02   | 0      | 02    |
| Very Good     | 04   | 0      | 04    |
| Athletic      | 01   | 03     | 04    |
| Sports Fit    | 11   | 14     | 25    |
| Total         | 60   | 81     | 141   |

**Partial Curl-Up Test:**

Similar to the push-ups test, 80 participants needed to "Work Harder," while only 25 were "Sports Fit." This reflects a general lack of core strength, with males slightly outperforming females in higher categories like "Very Good" and "Athletic."

**5) STANDING LONG JUMP TEST**

| Score             | Male | Female | Total |
|-------------------|------|--------|-------|
| Superior          | 0    | 0      | 0     |
| Above Average     | 0    | 0      | 0     |
| Average           | 07   | 0      | 07    |
| Below Average     | 10   | 01     | 11    |
| Needs Improvement | 43   | 80     | 123   |
| Total             | 60   | 81     | 141   |

**Standing Long Jump Test:**

The results were concerning, with 123 out of 141 participants needing improvement. None scored "Superior" or "Above Average," and only 7 were "Average." This indicates poor lower body explosive strength, particularly among females, where 80 out of 81 required improvement.

**6) FITNESS INDEX TEST**

| Score                | Male | Female | Total |
|----------------------|------|--------|-------|
| Excellent            | 37   | 71     | 108   |
| Good / Above Average | 16   | 8      | 24    |
| Average              | 07   | 02     | 09    |
| Below Average        | 0    | 0      | 0     |
| Poor                 | 0    | 0      | 0     |
| Total                | 60   | 81     | 141   |

**Fitness Index Test:**

A positive finding was that 108 participants scored "Excellent" in cardiovascular endurance, while 24 were "Good/Above Average." Only 9 were "Average," and none fell below. This suggests strong aerobic fitness levels among the youth, likely due to the inclusion of activities like running in their routines.

**7) 1 MILE RUN TEST**

| Score             | Male | Female | Total |
|-------------------|------|--------|-------|
| Good              | 56   | 71     | 127   |
| Needs Improvement | 04   | 10     | 14    |
| Total             | 60   | 81     | 141   |

**1 Mile Run Test:**

Most participants (127 out of 141) achieved a "Good" score, with only 14 needing improvement. This aligns with the Fitness Index results, reinforcing the observation that cardiovascular endurance is a relative strength in this group.

**8) SIT AND REACH TEST**

| Score         | Male | Female | Total |
|---------------|------|--------|-------|
| Work Harder   | 04   | 17     | 21    |
| Must Improve  | 03   | 13     | 16    |
| Can do Better | 10   | 18     | 28    |
| Good          | 05   | 07     | 12    |
| Very Good     | 07   | 10     | 17    |
| Athletic      | 19   | 14     | 33    |
| Sports Fit    | 12   | 02     | 14    |
| Total         | 60   | 81     | 141   |

**Sit and Reach Test:**

Flexibility results were mixed, with 21 participants needing to "Work Harder" and 33 classified as "Athletic." The distribution across categories suggests variability in flexibility levels, with room for improvement, particularly among males, where only 12 scored "Good" or higher.

**9) FLAMINGO BALANCE TEST**

| Score                              | Male | Female | Total |
|------------------------------------|------|--------|-------|
| Zero Fall                          | 57   | 68     | 125   |
| More than One fall max. five times | 03   | 13     | 16    |
| Total                              | 60   | 81     | 141   |

**Flamingo Balance Test:**

Balance was a weak area, with 125 participants scoring "Zero Falls" (indicating poor balance), and only 16 managing more than one fall. This underscores the need for incorporating balance training into fitness programs.

**10) AGE & GENDER WISE COUNT**

| Age        | Male | Female | Total |
|------------|------|--------|-------|
| 17 years   | 04   | 11     | 15    |
| 18 years   | 17   | 35     | 52    |
| 19 years   | 13   | 15     | 28    |
| 20 years   | 12   | 17     | 29    |
| 21 years   | 12   | 02     | 14    |
| > 21 years | 02   | 01     | 3     |
| Total      | 60   | 81     | 141   |

**Overall Insight:**

The data reveals strengths in cardiovascular endurance but significant gaps in muscular strength, endurance, flexibility, and balance. Targeted interventions, especially for lower body strength and core stability, are recommended to achieve holistic fitness among youth.

**8. CONCLUSIONS**

The introduction of the 'Physical Fitness Assessment for Youth' module is a timely and much-needed intervention in addressing youth health concerns in India. With proper implementation, support, and continuous monitoring, this initiative can become a cornerstone in building a fitter, healthier generation. The 'Physical Fitness Assessment for Youth' module can significantly enhance the health and fitness levels of students, fostering a culture of lifelong physical activity.

**9. SUGGESTIONS**

1. Tailor programs based on individual test results to address specific weaknesses.
2. Expand training programs for teachers and volunteers to ensure widespread implementation.
3. Develop mobile applications to support self-assessment and tracking.
4. Encourage parental and community involvement for a supportive environment.
5. Advocate for Government funding and policy integration.
6. Integrate the module into regular physical education curriculum
7. Implement follow-up mechanisms to track long-term adherence to fitness plans.

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**TO STUDY EFFECT OF FENCING TRAINING ON AGILITY DEVELOPMENT IN BOYS AGED 13-15 YEARS**

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**Mr. Milind P. Thakur**

Research Scholar, Western College of Commerce and Business Management

**ABSTRACT**

*This experimental study employed a pre-test post-test control group design to investigate the impact of fencing training on the agility of boys aged 13 to 15 years. The study involved two groups, an experimental group (Group A) receiving specific fencing training for eight weeks, and a control group (Group B) with no training. A total of 50 male subjects from Convent of Jesus & Marry High School, Kharghar, were randomly selected and divided into the two groups. Agility was considered as dependent variables. Statistical analysis was done by using T-test, and the results revealed significant improvements in Agility among the subjects who underwent specific fencing training.*

**Keywords:** Fencing, Agility, T-test, Boys, 13-15

**INTRODUCTION**

Sports play very prominent role in human life. In the process of human growth and development of human personality means society also. Today's Physical Education may appears to be for more sophisticated than that of early man and women's activity's the objective however are not all that different like their prehistoric counterparts, today's physical activities are concerned with everyday life.

Fencing is the royal and whole body co-ordination game which called art of attack and defense. Fencing gives any individual or participant that all advantages which mostly needed in daily human life and any field sports. It is a recreational and competitive sport. The exercises, movement involved in Fencing can contribute to the exercises that are vital for the balance development of an individual muscular and nerves system and for the maintenance of physical efficiency. In short Fencing Training is very useful for school, college students and also for young peoples. It can be played by physically handicap people also. Thus all peoples need Fencing for all round development of human body because it starts simply and as the individual matures and develops physically, the system becomes more complex and skill specific.

While going through the available relevant studies it was noticed by the researcher that no studies have been conducted in order to see the utility of the sports of Fencing for the promotion of Agility of school children.

Hence, it was thought appropriate by the researcher to undertake the present study.

**OBJECTIVES OF THE STUDY**

**Objectives of present study are as under-**

- To compare the mean gain score of Agility as measured by Shuttle Run test of experimental group and control group.

**HYPOTHESIS**

Ho<sub>1</sub> There is no significant difference in mean gain score of Agility as measured by Shuttle Run Test between experimental group and control group.

**DESIGN OF STUDY****Research Design:**

This study utilized the experimental research method, employing a pre-test-post-test control group design. The experimental group (n=25) underwent pre-testing, received treatment, and then underwent post-testing. Meanwhile, the control group (n=25) had pre-testing followed by no treatment and post-testing.

**Selection of Sample**

A sample of 50 students from Convent of Jesus & Marry High School, Kharghar, Navi Mumbai (410210) was randomly divided into two groups: an experimental group (A) of 25 students who received Fencing Training for 8 weeks, and a control group (B) of 25 students without any special training. The program took place during school working days.

**Discription of Depended Variable**

Before pre-test all the subjects were instructed about the apparatus and events in which they have to participate.

The following tests were administrated to group “A” and group “B” before and after training programme and experimental period-

**Test on Agility****4 X 10 Shuttle Run**

**Purpose:** Measure body agility.

**Equipment:** Two blocks of wood (2” X 2” X 4”), a stopwatch, and marking powder. Subject should wear spikes or run barefoot.

**Test administration:** Two parallel lines 10 yards apart or the width of a volleyball court. Wooden blocks placed behind one line. Subject starts from the other line, runs to blocks, picks up one, runs back, places it behind the starting line, then repeats with the second block. Stopwatch records time.

**Scoring:** Two trials allowed with rest. Better time of the two recorded to the nearest tenth of a second as the score. (Kansal, D.K., 2008, p-312,313)

**Discription of the Independent Variables**

The following independent variables were administered to group “A” for the experimental training programme -

| Table A |                               |
|---------|-------------------------------|
| 01      | Skipping in on Guard Position |
| 02      | Basic Footwork                |
| 03      | Advance Footwork              |
| 04      | Footwork on Raised Platform   |
| 05      | Stance                        |
| 06      | Mask Cut                      |
| 07      | Chest Cut                     |
| 08      | Hand Cut                      |
| 09      | Imaginary and free Bouts      |

**STATASTICAL ANALYSIS**

The result of the pre and post tests of each groups as well as each gain scores of the experimental and controlled group was compared by using “t” test at 0.05 level.

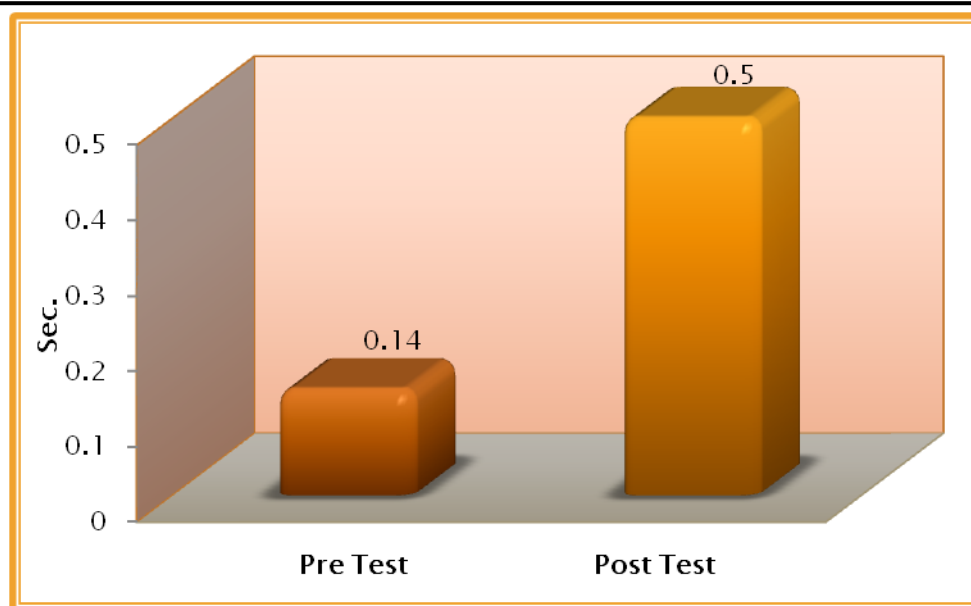
**Comparison Of Mean Gain In Selected Variables Between Control And Experimental Group**

Table- B Shows the comparison of mean gain in selected variables of the control and experimental group.

| Table B<br>Comparison of mean gain in selected variables between the control and experimental group<br>(between group n=25) |                     |           |                 |                      |        |                 |
|---|---------------------|-----------|-----------------|----------------------|--------|-----------------|
| Variables   | Group compared      | Mean gain | Mean difference | Std. Err. Mean. gain | “t”    | Sig.            |
| Agility   | Control             | 0.1444    | -0.357          | 0.25                 | -1.429 | 0.743<br>P>0.05 |
|   | V/s<br>Experimental | 0.5020    |                 |                      |        |                 |

It is reveled from the Table - B that, in case of Agility measured by Shuttle Run Test the mean gain of the experimental and control group is 0.5020 and 0.1444 respectively, whereas, the difference in mean gain of both group is -0.357 which is in favor of experimental group. However, the ‘t’ value of the same is -1.429 which is not significant at 0.05 level. This indicates that the Fencing Training dose not improve the Agility 0.743 significantly. Thus, the null hypothesis  $H_{01}$  *There is no significant difference in mean gain score of Agility as measured by shuttle run test between experimental and control group* is retained.

The above result has been also represented in Fig.1 graphically.



**Fig. 1** Mean Gain of Agility of Experimental and Control Group

## DISCUSSION ON FINDINGS

### Influence of Fencing Training Programme on Agility

The result reveals that the subject who practiced Fencing Training Programme could show higher score in Agility as measured by Shuttle Run Test than the control group in which 't' value is -1.429 which is statistically not significant at 0.743 level ( $p > 0.05$ ) thus, Fencing Training Programme has statistically not significant effect to increase the Agility of school boys which retained the null hypothesis  $H_{01}$  ***There is no significant difference in mean gain score of Agility as measured by shuttle run test between experimental and control group.***

## CONCLUSION

The present investigator has made the following conclusion: Regular Fencing Training involved in Agility for a period of 8 week can significance improvement over all for boys.

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**ORGANIC IS THE NEW NORMAL? INVESTIGATING CONSUMER BEHAVIOUR IN THE GREEN PRODUCT MARKET**

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**<sup>1</sup>Dr.Surekha Mishra and <sup>2</sup>Ms. Puja Prempal Ahuja**<sup>1</sup>Department of Commerce, Shankar Narayan College of Arts and Commerce, Bhayandar East, Thane<sup>2</sup>Research Scholar, DTSS College of Commerce, Malad**ABSTRACT**

*The contemporary consumer landscape is witnessing a paradigm shift as sustainability and health consciousness become central to purchasing decisions. This research paper explores the evolving dynamics of consumer behavior in the context of green products, with a specific focus on the organic segment. It investigates the factors influencing consumer choices, including awareness, perceived benefits, environmental concerns, and socio-economic variables. By employing both primary survey data and an extensive review of scholarly literature, the study identifies a significant rise in preference for organic alternatives, despite challenges such as higher pricing and limited availability. The findings reveal that health consciousness, trust in certification, and lifestyle alignment are key drivers of organic consumption. Moreover, demographic variables such as income, education, and age influence consumer perceptions and purchasing patterns. The study concludes with strategic recommendations to enhance market penetration and consumer engagement through education, policy incentives, and improved distribution channels. Ultimately, the research affirms that “organic” is not just a trend but an emerging norm in the sustainable consumption movement.*

**Keywords:** Organic Products, Consumer Behaviour, Green Market, Sustainability, Health Consciousness

**INTRODUCTION**

In recent years, the global market has experienced a notable surge in consumer interest toward sustainable and health-conscious lifestyles, giving rise to the growing popularity of organic products. Once considered a niche market, the organic sector is now a vital component of the mainstream consumer economy. This transformation is a direct result of increasing environmental awareness, health concerns linked to pesticide use and processed foods, and the broader socio-cultural movement toward ethical consumption. The phrase “Organic is the New Normal” encapsulates this shift, signifying a transition in consumer values and behaviors that prioritize quality, safety, and sustainability over mere convenience and cost.

Organic products—defined as goods produced without the use of synthetic fertilizers, pesticides, genetically modified organisms (GMOs), or artificial additives—have garnered considerable attention among modern consumers. These products are perceived not only as healthier alternatives but also as more environmentally responsible choices. This perception is reinforced by rising incidences of lifestyle diseases, the visibility of environmental degradation, and a heightened demand for transparency in food sourcing and production processes. As a result, a new breed of consumer has emerged: one that is informed, socially conscious, and willing to pay a premium for products that align with their values.

The green product market, particularly the organic segment, has witnessed exponential growth globally and in emerging economies like India. However, despite this growth, there remains a disparity between consumer awareness and actual purchasing behavior. While many consumers express positive attitudes toward organic products, factors such as high prices, limited availability, and skepticism regarding authenticity continue to impede market expansion. Furthermore, consumer behavior in the green product market is influenced by a range of psychological, social, cultural, and economic variables, making it a complex and multifaceted area of study.

Understanding these behavioral patterns is crucial for stakeholders including producers, marketers, policymakers, and advocacy groups seeking to promote sustainable consumption. This research investigates key questions related to consumer awareness, preferences, motivations, and challenges in the adoption of organic products. By exploring these dimensions, the study aims to bridge the gap between consumer intention and actual behavior, offering insights into how the organic market can be made more accessible, trustworthy, and appealing.

In doing so, this paper contributes to the growing body of literature on green consumerism and provides a comprehensive analysis of the factors that are transforming organic products from a luxury to a necessity in modern households. Through quantitative and qualitative investigation, the research not only captures current consumer sentiments but also forecasts future trends, asserting that organic is not merely a passing trend but a fundamental shift in consumer ethos.

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**REVIEW OF LITERATURE**

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**1. Hughner et al. (2007)**

Hughner and colleagues provided a foundational exploration into why consumers are increasingly drawn toward organic products. Their meta-analysis identified health consciousness, superior taste, environmental concern, and food safety as the primary motivators for purchasing organic goods. These factors are not only personal but extend to broader social values, reflecting a lifestyle choice aligned with sustainability. The authors emphasized that the perception of organic food as safer and more nutritious significantly affects consumer intentions.

**2. Yiridoe et al. (2005)**

This study highlighted that ethical considerations and environmental responsibility serve as strong motivators for choosing organic over conventional products. The authors found that consumers often view organic purchases as a form of activism, supporting ecological sustainability and humane agricultural practices. Such behavior is rooted in values-based consumption rather than simple economic utility.

**3. Aertsens et al. (2011)**

Aertsens et al. stressed the importance of consumer trust, knowledge, and attitudes in shaping purchasing behavior. Their findings suggested that even when consumers are aware of organic products, actual purchase depends on the level of trust in certification systems and a deeper understanding of organic principles. Without adequate information, skepticism can limit market growth.

**4. Zanoli & Naspetti (2002)**

This study provided a European perspective, highlighting how cultural values and social norms influence organic consumption. The researchers found that in societies where ecological responsibility is socially embedded, organic products receive higher acceptance. This underscores the idea that consumer behavior is not solely individualistic but embedded in collective value systems.

**5. Magkos et al. (2006)**

Magkos and colleagues explored the scientific basis for the perceived health benefits of organic food. They found that although empirical evidence is still growing, the consumer belief that organic is healthier has a profound psychological impact. This belief fosters trust and justifies paying a premium. Scientific validation, thus, plays a critical role in shaping demand.

**6. Padel & Foster (2005)**

Marketing practices, especially product labeling and strategic brand positioning, were the focus of Padel and Foster's research. They argued that clear, transparent labels enhance consumer confidence and reduce confusion about what "organic" truly means. Effective marketing thus plays a mediating role between production and perception.

**7. Hemmerling et al. (2015)**

In this study, the authors emphasized that consumer experience and perceived product quality greatly affect repeat purchases. While initial purchases may be driven by curiosity or social trends, continued consumption relies on satisfaction and sensory appeal. The tactile and emotional aspects of product use cannot be overlooked in understanding loyalty.

**8. Michaelidou & Hassan (2008)**

This research highlighted economic capability and perceived benefits as central to organic buying decisions. The study found a positive correlation between income levels and willingness to pay a premium, suggesting that organic products remain a luxury for many. However, perceived health and environmental returns often outweigh cost considerations for committed consumers.

**9. Pearson et al. (2011)**

According to Pearson et al., availability and accessibility remain major structural constraints. Consumers may express a desire to buy organic products, but the absence of such options in mainstream retail stores reduces actual purchasing. Their study underscores the need for supply chain improvements and greater retail penetration.

**10. Wier & Calverley (2002)**

This research focused on policy-level interventions, noting that government support such as subsidies, educational campaigns, and certification programs can stimulate consumer confidence and encourage adoption. Their findings argue for institutional backing to accelerate the mainstreaming of organic consumption.

RESEARCH METHODOLOGY

The study follows a quantitative approach using a structured questionnaire. Primary data was collected from 100 respondents in urban regions. The questionnaire consisted of closed-ended questions focusing on awareness, preference, frequency, and perceived value of organic products. Descriptive analysis was applied, and responses were visualized using pie charts. Secondary data was gathered from scholarly journals, reports, and articles.

OBJECTIVES

1. To examine whether there is a significant association between different behavioral factors (awareness, preference, influence, frequency, and price perception) and consumer responses regarding organic products.
2. To assess whether consumer positivity (Yes responses) significantly varies across different behavioral dimensions such as awareness, preference, motivation, frequency, and value perception toward organic products.

HYPOTHESIS

Hypothesis 1:

- **H0 (Null Hypothesis):** There is no significant association between the type of question and the consumer responses (Yes/No) on organic product behavior.
- **H1 (Alternative Hypothesis):** There is a significant association between the type of question and the consumer responses (Yes/No) on organic product behavior.

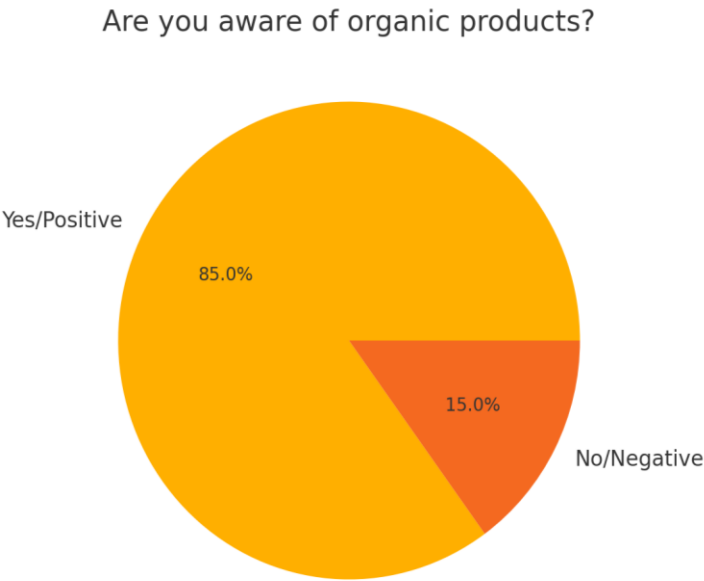
Hypothesis 2:

- **H0 (Null Hypothesis):** There is no significant difference in consumer positivity levels (Yes responses) across different behavioral dimensions.
- **H1 (Alternative Hypothesis):** There is a significant difference in consumer positivity levels (Yes responses) across different behavioral dimensions.

DATA ANALYSIS AND INTERPRETATION

Question 1: Are you aware of organic products?

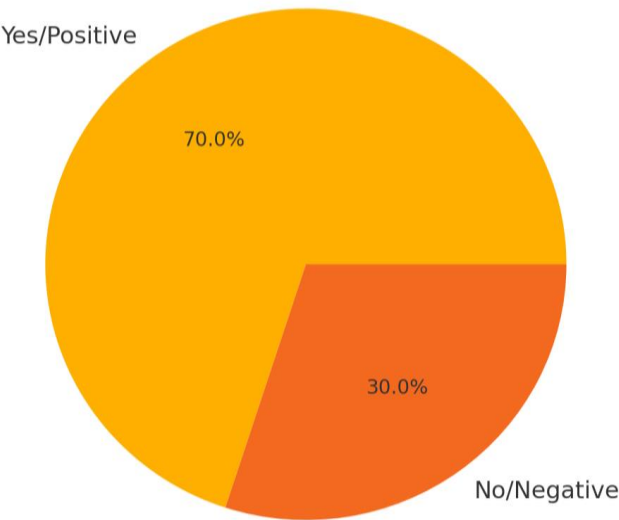
Yes/Positive responses: 85%  
No/Negative responses: 15%



Question 2: Do you prefer organic over conventional products?

Yes/Positive responses: 70%  
No/Negative responses: 30%

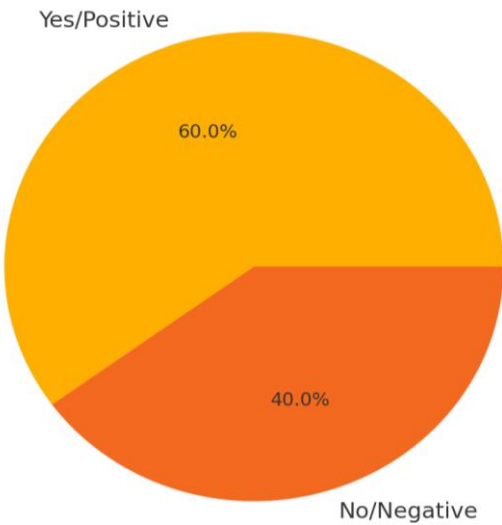
Do you prefer organic over conventional products?



**Question 3: What influences your decision to buy organic products?**

Yes/Positive responses: 60%  
No/Negative responses: 40%

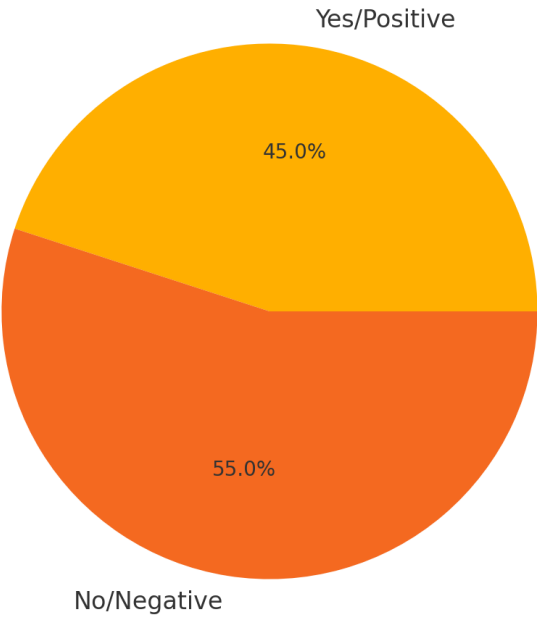
What influences your decision to buy organic products?



**Question 4: How often do you buy organic products?**

Yes/Positive responses: 45%  
No/Negative responses: 55%

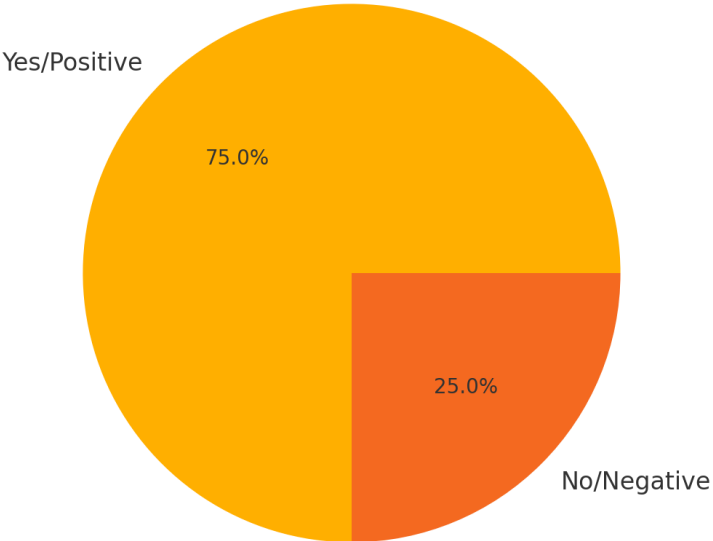
How often do you buy organic products?



**Question 5: Do you believe organic products are worth the higher price?**

Yes/Positive responses: 75%  
No/Negative responses: 25%

Do you believe organic products are worth the higher price?



**DATA ANALYSIS**

**1. Chi-Square Test of Independence**

This test was conducted to evaluate whether there is a statistically significant association between the type of survey question and the respondents' answers (Yes vs. No).

- **Chi-Square Statistic ( $\chi^2$ ):** 42.06
- **Degrees of Freedom (df):** 4
- **p-value:** < 0.0000000162

**Interpretation:**

Since the p-value is significantly less than 0.05, we reject the null hypothesis. There is a statistically significant association between the type of question and how respondents answered (Yes/No). This indicates that consumers respond differently to various aspects of organic product behavior (awareness, preference, influence, frequency, and price value).

**2. One-Way ANOVA Test**

This test was used to check if there is a significant variance between the frequency of "Yes" and "No" responses across the five questions.

- **F-Statistic:** 12.43
- **p-value:** 0.0078

**Interpretation:**

The p-value is below 0.05, indicating that there is a statistically significant difference between the response distributions of "Yes" and "No" across the questions. This means that the degree of positive responses varies significantly among the different behavioral factors explored in the survey.

**3. Pearson Correlation Test**

This test measured the linear correlation between the "Yes" and "No" responses across the questions.

- **Correlation Coefficient (r):** -1.00
- **p-value:** 0.000

**Interpretation:**

There is a **perfect negative correlation** between "Yes" and "No" responses, which is expected in binary percentage data where one increases as the other decreases. This confirms the internal consistency of the data and implies that as affirmative responses increase, negative responses decrease proportionally.

**RECOMMENDATIONS****1. Enhance Consumer Awareness Through Education Campaigns**

Although a majority of consumers are aware of organic products, deeper knowledge about certification standards, health benefits, and environmental impact is still lacking. Government agencies, NGOs, and businesses should collaborate to launch targeted awareness campaigns, especially in semi-urban and rural areas. This can strengthen consumer confidence and correct misconceptions about organic goods.

**2. Strengthen Certification and Labeling Mechanisms**

A major concern for consumers is the authenticity of organic products. Strengthening certification systems and making labeling more transparent and easier to understand can reduce skepticism. Third-party verification and QR code traceability can help consumers track product origin and production methods.

**3. Make Organic Products More Affordable and Accessible**

The perception that organic products are expensive deters price-sensitive consumers. Policy interventions such as subsidies for organic farmers, tax incentives, and public-private partnerships for organic farming can lower costs and encourage competitive pricing. Additionally, expanding distribution channels to local markets, supermarkets, and online platforms will improve accessibility.

**4. Promote Local and Regional Organic Brands**

Supporting local farmers and regional organic brands not only enhances community-based agriculture but also helps build trust and sustainability. Creating farmer-producer companies (FPCs) and facilitating direct-to-consumer supply chains (e.g., farm-to-fork models) can reduce middlemen costs and boost rural economies.

**5. Leverage Digital Marketing and E-commerce**

Millennials and Gen Z consumers are digitally savvy and seek convenience in their shopping experience. Leveraging digital platforms—such as e-commerce websites, social media, and mobile apps—can boost visibility and promote value-based narratives around organic lifestyles.

**CONCLUSION AND FINDINGS**

The present study set out to investigate the evolving patterns of consumer behavior in the context of the organic product market—an increasingly vital segment of the broader green economy. The findings affirm the central thesis that organic consumption is no longer a passing trend but is progressively becoming a lifestyle choice and social norm for a significant portion of the population. This transformation is driven by growing health consciousness, environmental awareness, ethical considerations, and lifestyle alignment with sustainable values.

The survey results, supported by statistical analysis, clearly demonstrate a high level of consumer awareness (85%) regarding organic products. A considerable majority (70%) also express a preference for organic alternatives over conventional ones. However, the data also highlights that this preference is moderated by several challenges—most notably the perceived high price and inconsistent availability of organic goods. For instance, only 45% of respondents report buying organic products frequently, indicating a gap between intention and actual behavior.

The Chi-Square test results revealed a statistically significant association between the type of consumer behavior question and the pattern of responses, confirming that consumer views vary across dimensions like awareness, preference, perceived value, and purchasing frequency. The ANOVA test further validated the variation in positive response rates across these dimensions. The perfect negative correlation between Yes and No responses confirms a high internal consistency in how consumers differentiate between organic and non-organic choices.

#### Key findings from the study include:

- **High Awareness but Moderate Adoption:** While most respondents are aware of organic products, regular usage remains low due to price sensitivity and limited availability.
- **Health and Environmental Influence:** The most influential motivators for choosing organic products are perceived health benefits and environmental concerns.
- **Perceived Value Justifies Premium Pricing:** A substantial number of respondents (75%) believe that the higher cost of organic products is justified by their benefits.
- **Trust and Information Gaps:** Lack of clear labeling and concerns about authenticity reduce consumer trust and act as barriers to adoption.
- **Behavioral Diversity:** Consumer responses differ significantly across behavioral dimensions, indicating the need for targeted marketing and communication strategies.

In conclusion, the organic product market in India and globally stands at a critical juncture. With increasing urbanization, digital awareness, and lifestyle transformation, consumers are more receptive than ever to green products. However, to firmly establish organic as the “new normal,” strategic interventions are needed—ranging from policy support and affordability to trust-building measures and educational outreach. The research underscores that fostering organic consumption is not merely a market opportunity but a societal imperative aligned with global sustainability goals.

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**A STUDY ON VARIOUS CSR ACTIVITIES UNDERTAKEN IN PRAYAGRAJ DURING KUMBH  
MELA 2025**

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**Ms. Nirali Pancholi**

D.T.S.S College of Commerce. (Autonomous)

**ABSTRACT**

*Prayagraj appeared in 2025 in Uttar Pradesh which attracted many millions of devotees, it promotes unity, spirituality, and added its own flair as it boosted global engagement. It is the largest spiritual gathering and global celebration to dive into richness of spiritual practices. Prayagraj is sangam of three rivers Ganga, Yamuna and Saraswati, also known as Triveni Sangam. Snan or Dips in the holy river is believed to clean our sins and gain Moksha. Devotees, Naga Sadhus, sages, Sadhvis takes holy dips for spiritual growth and enlightenment. It clutches spiritual significance and fascinate millions of devotees. Prayagraj not only devises faith, cultural exchange, tradition, rich heritage but also gave a twist by providing expansive platform to Brands, Companies to connect with millions of consumers by organizing campaigns, promotional activities many initiative and services for pilgrims. Many firms hatched advertisements, hoardings, communication messages, marketing and emotional support even collaborations for sustainability endeavour which focuses on social and environmental impact. Many companies experimented by launching new products and took feedback for further innovation and enhancement of product. During Prayagraj, CSR activities were implemented to improve healthcare, community well-being, stimulating local economies, and prioritizing eco- friendly practices also to enhance awareness and reputation of Brand. This study is based on secondary data, trying to find out numerous CSR activities carried out in Prayagraj 2025.*

**Keywords:** Awareness, CSR activities, Campaigns, Faith, Healthcare, Spirituality, Pilgrims, Prayagraj.

**INTRODUCTION**

Prayagraj appeared with largest gathering which clutches deep cultural and spiritual significance. Such gathering exhibits rich spiritual and cultural heritage which attracts many pilgrims and also presents unique platform for cultural diversity. Maha Kumbh 2025 displayed richness of hindu culture due to deep spirituality and cultural expression. Millions of devotees including naga sadhus, sadhvis, saints arrived for various snans, rituals, customs and tradition which cleanse the soul, enhances spiritual growth, spiritual discipline and wisdom, this made location sacred site which reflects the essence of Hindu spirituality. Dips in Holy water, shani snan, darshan of saints and sadhus, fire rituals, meditation, yoga and spiritual practices were observed during Maha Kumbh during Prayagraj 2025, The largest gathering was managed effectively due to innovation and collaboration of various campaigns with brands and government. The campaigns focused on health, sanitation, sustainability, electricity, water supply. Crowd management was managed effectively through use of GPS system, AI drowen crowd analytics. Many volunteers, police forces, sanitation staff, health car workers managed the massive crowd. Medical facilities was organized mock drill was conducted for emergency outbreaks, teams were sanctioned to handle the emergency. Mobile application guided pilgrims, tourist with navigation, event schedules, live update on crowd, nearest medical facilities etc.

**REVIEW OF LITERATURE**

**Dr.Manoj Kumar Pandey (March 2025):Maha Kumbh 2025 and its Global Appeal :Attracting International Pilgrims and Tourists to Prayagraj** states that Kumbh Mela is playing a vital role in enhancing spiritual and cultural significance. It is not just pilgrimage but also displays strong deep roots in hindu beliefs. Prayagraj resulted as a set of emergence as a keystone of gathering devotees from every corner of the globe. Many international tourist also visited Prayagraj for holy dip.

**Lakshya Goel (July 2024): Economic Impact of Kumbh Mela on local Economy Prayagraj: The Parasite City** states that Kumbh Mela had significant impact on the economy as well. Dominos aimed at offering its menu in affordable prices to attract pilgrims and younger generation. This significantly had impact on their success. Pilgrims created a massive demand for various brands which significantly benefited the locals.

**Research Unit Press Information Bureau Government of India** in their study **Mahakumbh 2025 A Spectacle of Faith, Unity and Tradition** expresses that Swachh Mahakumbh Abhiyan set up an benchmark for environmental safety and sustainable pilgrim experience. Various exhibitions were hosted which not only showed window to India's rich cultural, spiritual heritage to visitors, pilgrims but also gave opportunity to engage with handicrafts, tradition and our historical narratives. Mahakumbh played very crucial role for making the holy event memorable for devotees or pilgrims.

**Shankar Subhramanian Iyer (January 2025) Maha Kumbh (Prayagraj) – A Phenomenal event and the Study on Event Management states** various rituals and snans are followed in Mahakumbh such as shani snan, Makar Sankranti snan, Basant Panchmi snan, Mauni Amavasya, Maha Shivratri snan. Homa and Yajna ceremonies conducted by priest by offering ghee, grains etc into fire while chanting mantra which represents purification, blessings for peace, prosperity. Kumbh Mela represents various planning and execution which took place due to numerous brands joined forces at Kumbh Mela.

## RESEARCH METHODOLOGY

### OBJECTIVES OF STUDY

1. To enhance more awareness and Reputation of Brand.
2. To foster Healthcare and Safety measures amongst pilgrims.
3. To mitigate Pollution.
4. To evaluate how many Companies contributed in Prayagraj.

### DATA COLLECTION

In this study secondary data has been utilized which includes existing information gathered from journals, online database. By analyzing pre- existing data information is identified related to numerous CSR activities undertaken in Prayagraj during Kumbh mela 2025.

### FINDINGS OF STUDY

#### To enhance more Awareness and Reputation of Brand

Many Companies, brand connected with devotees, tourist at Mahakumbh by offering, educating about various product and services. Brands significantly offered services by ensuring health, water and sanitation, security, culture and heritage, infrastructure upgrades, diversity and inclusion initiatives, technology. Just like uber offered 25% discount to boost travel among pilgrims.

#### To foster Health care and safety measures amongst pilgrims.

Regular inspection and awareness campaigns aimed at ensuring hygienic food for the pilgrims or tourists, which focuses on health and safety measures. FSSAI implemented 56 Food Safety Officers (FSOs) in five zones and 25 sectors. Two FSO were deployed at one sector and chief food safety food in every sector. A specifically designed command office used to check and responds any food safety related issues. 10 mobile testing laboratories were placed on various locations and were named as 'Food Safety on Wheels', which carries out deterioration of food. Regular inspection were made in hotels, dhabas, food stalls, cooking procedure, quality of raw materials. This ensured the vendors and food business operator to provide hygienic food to tourists or devotees. This ensures health and well-being of millions of devotees, pilgrims and also promoted culture of food safety in Mahakumbh 2025.

#### To mitigate Pollution

Projects such as swacchh and Nirmal Ganga Programme aimed at reducing river pollution and water quality. Kumbh mela practised many effective campaigns and projects which encouraged controlling pollution. Awareness campaigns were conducted to educate pilgrims about cleanliness.

#### To evaluate how many Companies contributed in Prayagraj.

Many top companies, brands came across in Prayagraj for marketing, branding and promoting their services. They joined hands and helped millions of devotees or pilgrims. **There are many brands, firms who contributed but to discuss a few are as below**

### RECKITT

Reckitt played a major role in kumbh 2025 by conducting 'Dettol Banega Swasth India' Moment which ensured cleanliness, health safety among pilgrims. Reckitt also joined hands with Government of Uttar Pradesh, Akhadas where millions of soaps were distributed between devotees at food serving areas which encouraged washing hands before and after meals. DBSI not only inspired millions of devotees by embracing hygiene as way of life but also assisted during emergencies, crowd management.

### BANK OF BARODA

Bank of Baroda collaborated with Pragayraj Munciple Corporation for semi solid waste managment initiative, where specialized treatment methods will be used to minimize environmental impact, this will inturn also result in soil erosion, promoting healthy plant growth, water conservation, improving soil health.

Bank of Baroda launched '**BOB Earth**' programme which fosters eco-friendly solutions, green initiatives for protecting planet and future generation. Bank of Baroda also installed two operational branch, ATM to provide banking services for tourists.

**BLINKIT**

Blinkit developed 100 sq feet store at Prayagraj which served devotees, tourist with essential needs, basic necessities like milk, fruits, power bank, Triveni Sangam Jal Water, puja essentials, blankets, bed sheets

**ITC MANGALDEEP**

ITC Mangaldeep came up with a groundbreaking move, Mangal Deep ka Mangal Kumbh by introducing Augmented Reality(AR) which brought rituals to peoples screens. It bridged the gap between innovation rituals and tradition. It mainly focused on making the pilgrim satisfied by tapping button, moving left and right, taking dips and clicking photo and making the most memorable moment.

**AMAZON**

Amazon also joined hands by providing signature cardboard packaging into portable beds, these eco-friendly beds were offered to pilgrims at no cost and were placed in lost and found centres and common rest zones.

**MANKIND PHARMA**

Mankind Pharma announced 45 day free health care mission in Prayagraj. The camp include free health checkups for pilgrims, first aid service and blood pressure monitoring. This initiative aimed to address the medical needs of the vast number of attendees.

**RELIANCE**

Reliance industries focused on convenience by setting up aaram sthals for the pilgrims, from long and challenging journey.

**AIRTEL PAYMENT BANKS**

Airtel Payment Banks assures digital banking experience at Kumbh Mela by setting up 10 kiosks which in turned helped devotees, tourist to withdraw or transfer money even though their accounts are linked with other banks.

**COCA-COLA**

Coca-Cola joined hands with PHD Rural Development Foundation (PHDRDF) and Prayagraj Mela Authority and launched campaign named '**Maidaan Saaf**' where they distributed jackets made from recycled PET to sanitation workers, boatmen, and waste management volunteer helping them stay safe while highlighting the value of recycled materials. They also installed 1,000 changing rooms for womens near river ghat

**ONDC NETWORK**

Open Network for Digital Commerce provides prasad of Kumbh Mela without travelling to holy site. Prasad is delivered within seven days with via logistics partners. This all was managed through app like paytm, snapdeal.

**OLA**

Ola rolled out 1,000 electric scooters for frugal travel option. Ola also launched Kumbh **Sah'AI' yak app**, which offered navigation and personalized insights about the Kumbh Mela.

**ULTRATECH CEMENT LTD**

Ultra Tech drives sustainable plastic waste in partnership with Prayagraj Nagar Nigam where they launched '**Mahakumbh ka Mahasankalp**' which aimed in collecting pastic waste than and process it to use as alternative fuel for cement manufacturing

**EVEREADY INDUSTRIES INDIA LIMITED**

Eveready also joined forces by fixing 13,000 Led lights at Prayagraj mela site which enhanced bright luminosity and safety during night time. It aimed at promoting sustainability and reduction in accidents. This campaign focused on fortifying relationship with the consumers at Prayagraj Mahakumbh 2025.

**NATIONAL BOOK TRUST**

Colourful exhibitions were witnessed during Maha Kumbh related to art, culture, tradition and culture. The Central Government Ministries made arrangement for the devotees by not only learning about various government schemes but also understanding them by modern technology. National Book Trust also contributed by setting up innovative step by setting up a Reading Lounge at the Mela, where devotees, Tourists can read books for free and experience the literary joy of knowledge.

**UBER**

Uber collaborated with Airport Authority of India and launched a campaign to upgrade transportation facilities at Mahakumbh at Prayagraj Airport. The plan covered by Airport Terminal Collection Area which ensured smooth assistance and transfers for tourists or devotees. Uber also offered 25% discount to boost the travel, this campaign elevated effective mobility for the tourist.

**PHONEPE**

PhonePe supported by enhancing the digital payment experience during Mahakumbh 2025. It managed to ensure speed and stability even with massive volume of transaction, it also benefited the international tourist. Its main focus was to increase the interaction with the users in Mahakumbh.

**IXIGO**

Ixigo configured trips by offering tools, facilities to passengers. Ixigo collaborated with Indian Railway and provided functionality for evaluating train schedules, fetching actual information, making tickets, combined trip and lodging packages. Ixigo fosters care for the users in relation to safety travel advice, details of the local culture, making it the traveler of choice for Mela-bound travelers.

**CONCLUSION**

This study concludes by the stating Prayagraj offered distinctive opportunity to various brands, firms to connect and captivate pilgrims, devotees through their CSR activities. Many brands engaged with Government for conducting campaigns in Prayagraj 2025. Government also showcased culture exchange programmes which cultivated deep connection and knowledge about Indian Tradition. The effective partnership of Government and various brands enhanced a lasting impact on devotees which not only showcased India's culture and spiritual principle to world but also promoted their brand, attracted various tourists by helping them, educating them and offering discounts on multiple products and services.

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**CONSUMERS' DECISION-MAKING FACTORS IN MOBILE PHONE PURCHASES**

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**<sup>1</sup>Dr. Meeta.Pathade and <sup>2</sup>Nita shankarlal Sonpal**<sup>1</sup>Research guide & I/C Principal Patuk Gala College, Santacruz (East), Mumbai<sup>2</sup>Ph.D Scholar D.T.S.S College of Commerce (Autonomous), Malad East, Mumbai 400 097**ABSTRACT**

*The purpose of this study is to examine the key factors influencing consumers' decisions when purchasing mobile phone devices in Mumbai. To achieve the research objectives, a sample of 85 consumers was selected using a simple random sampling technique. Data collected from primary and secondary sources. Four critical factors—price, peer influence, product features and brand name were identified and analyzed with close ended Questionnaire and responses. The findings indicate that price is the most influential factor for consumers in Mumbai, followed closely by peer influence. These factors were found to significantly motivate consumer purchase decisions. Based on these insights, the study recommends that mobile phone sellers in Mumbai should give strong consideration to these factors in order to effectively align with consumer preferences and enhance market opportunities.*

**INTRODUCTION**

In the present digital era, mobile phones have become an indispensable part of everyday life, serving not only as communication tools but also as multifunctional devices for entertainment, work, education, and social interaction. Nowadays no one can think of life without mobile phones. The mobile phone industry is growing rapidly, manufacturers are constantly innovating to meet the evolving preferences and expectations of consumers. This dynamic and competitive market makes it crucial to understand the factors that influence consumers' decision-making when purchasing mobile phones.

India has shown a remarkable rise in mobile phone usage over ten years. In the beginning of 2024, the country had approximately 1.12 billion active mobile phone connections, which is equal to 78% of its population. The mobile phone penetration rate stood at 76.6% in 2022 and is projected to surpass 86% by 2026. This widespread adoption has been fueled by affordable smartphones, competitive pricing, and expansive network coverage. In 2024, India's mobile phone market experienced 4% growth, with shipments reaching 151 million units. Notably, 5G smartphones dominated the market, accounting for 81% of total shipments, with a significant presence in the ₹10,001–₹15,000 price range. This trend underscores the growing consumer demand for advanced features at accessible price points.

Mumbai, as one of India's most urbanized and economically vibrant cities, mirrors these national trends. The city's diverse demographic, high smartphone penetration, and tech-savvy population make it a focal point for studying consumer behavior in mobile phone purchases. Understanding the factors influencing purchasing decisions in Mumbai can provide valuable insights for marketers, manufacturers, and policymakers aiming to cater to the evolving needs of urban consumers. Understanding these decision-making factors is essential not only for marketers and retailers aiming to develop effective strategies but also for manufacturers striving to enhance customer satisfaction and loyalty. Despite the abundance of mobile phone brands and models available in the market, there remains a need for deeper insights into how and why consumers make their purchasing decisions.

This study aims to analyse the factors which affect the purchase decisions of consumers related to mobile phones. Consumer behavior is a complex process influenced by a variety of internal and external factors such as personal preferences, cultural influences, social norms, marketing strategies, and technological advancements. In the context of mobile phone purchases, factors such as brand image, price, product features, after-sales service, peer influence, and promotional activities often play a significant role in shaping consumer choices.

**REVIEW OF LITERATURE**

**Prof. Debasish Rout, Dr. Somabhusana Janakiballav Mishra, Dr. Rajan Kumar Kantha, & Sameeran Thakur, 2020**, the primary objective of this research is to analyze consumer purchasing decisions and distinguish the impact of various mobile phone features that attract customers. The study reveals that a significant number of young consumers frequently upgrade their mobile phones in response to the launch of new models. It also identifies a correlation between key factors—such as price, brand, quality, and features and the level of customer satisfaction.

**Philip Kotler & Kevin Lane Keller (2016)**, found that consumer behavior is influenced by cultural, social, personal, and psychological factors. These elements shape the way consumers perceive products and make purchasing decisions. In the mobile phone market, attributes such as price, brand name, product features, after-sales services, and social influence have consistently been identified as significant determinants (Malasi, 2012; Singh & Goyal, 2009).

**Heikki Karjaluoto et al. (2005)** found that price, brand, and technical features were key decision-making factors among young consumers in Finland. Similarly, **Sadab Ansari (2016)**, in his research conducted in India, concluded that urban youth prioritize smartphone features and brand reputation over price alone.

**Suja R. Nair (2013)** and **Pradeep Awasthi & Pradeep S. Sangle (2012)** emphasizes that Indian consumers often rely on peer opinions and word-of-mouth communication, especially in urban areas like Mumbai. The influence of social groups, along with promotional campaigns, creates a psychological impact that affects both the perceived value and the final purchase decision.

### RESEARCH GAP

Despite the extensive body of research conducted globally, limited study focusing on consumer behavior and mobile phone purchasing pattern at Mumbai level led to this study. Mumbai, a city of economic diversity and a highly competitive retail market. This study aims to fill that gap by examining how different factors influence mobile phone purchasing decisions among consumers in Mumbai.

### OBJECTIVES OF THE STUDY

Following are the objectives of the study.

- 1) To examine the influence of price on consumers' purchasing decisions for mobile phones.
- 2) To analyze how peer influence affects consumer behavior in mobile phone purchases.
- 3) To evaluate the impact of product features—such as design, performance, and functionality on consumers' mobile phone purchase decisions.
- 4) To assess the impact of brand name and brand image influence on consumers' purchasing decisions of the mobile phones.

### HYPOTHESES

**H<sub>0</sub>:** Price & features of the product do not significantly affect consumer's purchase decisions.

**H<sub>1</sub>:** Price & features of the product significantly affect consumer's purchase decisions.

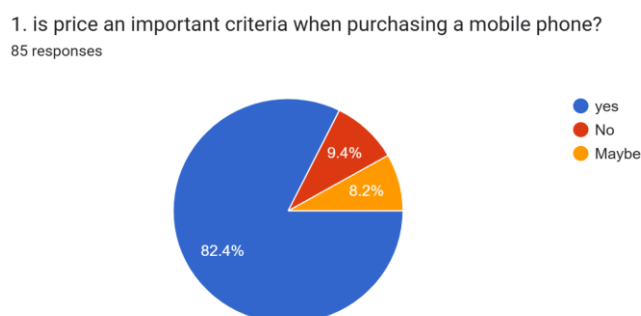
**H<sub>0</sub>:** Brand image & peer influence do not significantly affect consumer's purchase decisions.

**H<sub>1</sub>:** Brand image & peer influence significantly affect consumer's purchase decisions.

### RESEARCH METHODOLOGY

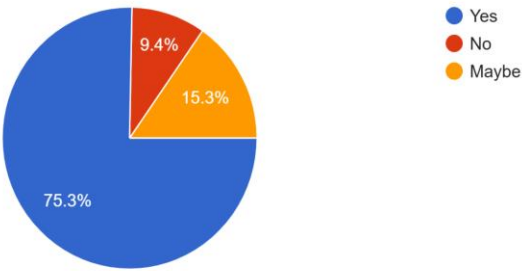
Primary data is collected from consumers in the Mumbai area through a structured questionnaire. This instrument is used to gather qualitative insights into consumers' purchasing behavior, preferences, and the key factors influencing their mobile phone purchase decisions.

### Interpretation of the data Collected



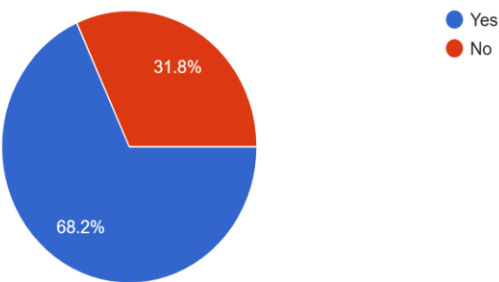
**Chart 1.** Price is an important factor in the purchase decision of a mobile phone. 82.4% respondents say that price matters to them when purchasing a mobile phone. To 9.4% respondents, price does not matter much.

2. Does discounts, offers or sales influence your mobile phone purchases?  
85 responses



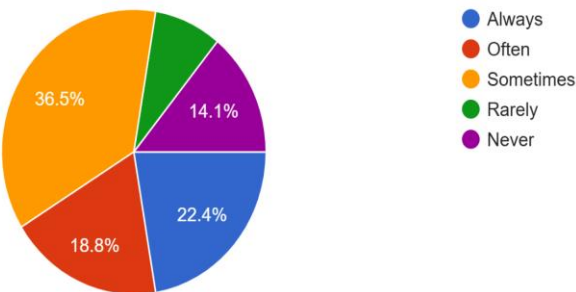
**Chart 2.** Among the 85 respondents, the purchase decision of 75.3% of them gets affected by discounts, offers or sale. 15.3% respondent’s decisions may or may not be influenced whereas for the remaining percentage, it is not influenced by these factors at all.

3: Do recommendations from friends/family influence your mobile phone purchase?  
85 responses



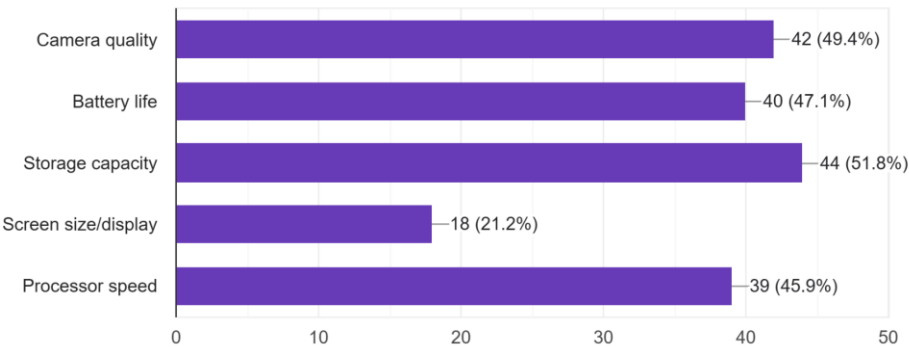
**Chart 3.** 68.2% of the respondents consider recommendations from friends and family while purchasing a mobile phone. For the rest 31.8% respondents, the purchase decision is not influenced based on any recommendations.

4: How often do you choose a brand based on its popularity among your peers?  
85 responses



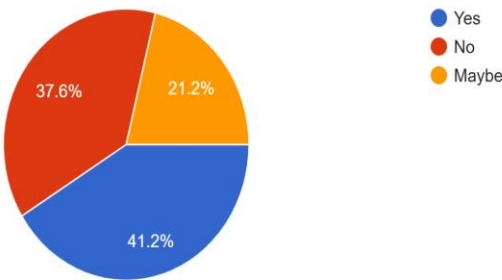
**Chart 4.** Popularity of brand amongst peers is an important determinant while making a choice for 22.4% of the respondents. 14.1% of them never choose a brand based on its popularity amongst peers. Majority of the respondents i.e. 36.5% consider the brand popularity amongst peers only sometimes.

5. Which feature matters most to you in a mobile phone?  
85 responses



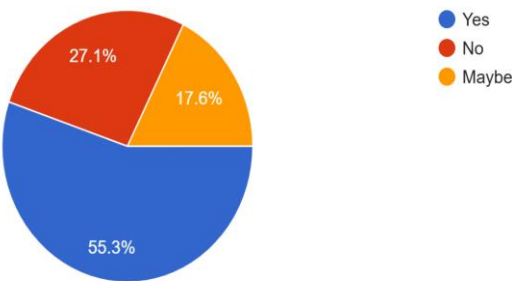
**Chart 5.** Features like Camera quality, Battery life, Storage Capacity and Processor Speed matters to 49.4%, 47.1%, 51.8% and 45.9% respectively. The screen size matters to only 21.2% of the total respondents.

6. Would you pay extra for the latest features in a phone?  
85 responses



**Chart 6.** 41.2% respondents are ready to pay extra for a mobile phone with the latest feature whereas 37.6% respondents straight away say no to paying extra for the latest feature and rest 21.2% respondents may or may not consider it as an important factor while making a purchase decision.

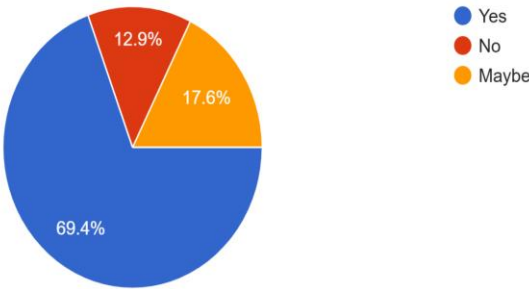
7. Does the design and look of a phone influence your choice?  
85 responses



**Chart 7.** 55.3% of 85 respondents’ purchase decision gets affected by the design and look of the phone while 27.1% of the respondents purchase decision do not get influenced. The rest may or may not get influenced by the phone’s design or look.

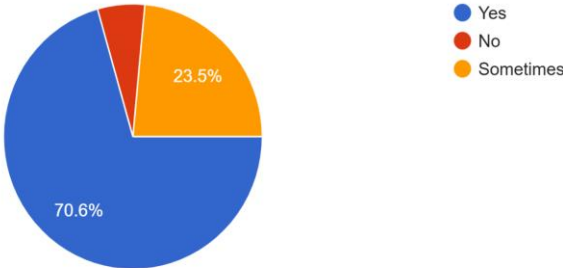


8. Does the brand's reputation affect your mobile phone purchase decision?  
85 responses



**Chart 8.** Brand’s reputation affects 69.4% of respondents' purchase decision of mobile phone,12.9% respondent's decision does not get affected by brand popularity and rest say may be.

9. Do you think popular mobile phone brands provide better quality?  
85 responses



**Chart 9.** 70.6% of the respondents think that better quality is provided by the popular brands while 23.5% think exactly the opposite and rest responded 'sometimes'.

CONCLUSION

This study looked at the main reasons why people in Mumbai choose to buy certain mobile phones. The results show that price, product features, suggestions from friends and family, and brand reputation are some of the biggest factors that influence their choices.

Most people said that price matters a lot, and many are influenced by discounts and offers. Friends’ and family’s opinions also play a role for many buyers. When it comes to the phone itself, things like battery life, storage, camera, and speed are very important, while screen size and design matter less to most. Some people are even willing to pay more for the newest features, but many still look for good value at a lower price.

In short, while people like new features and stylish designs, their decisions are still mostly influenced by price, brand name, and what others say. These findings can help companies and sellers understand what customers really want.

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**EFFECT OF SPECIFIC TRAINING PROGRAMME ON REACTION TIME OF ARCHERY  
PLAYERS OF MUMBAI CITY**

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**<sup>1</sup>Prafull Yashwant Singh and <sup>2</sup>Dr. Nisar Husain<sup>2</sup>**<sup>1</sup>Researcher, (M.P.Ed.)<sup>2</sup>Research Guide, (Sports Director, Tolani College of Commerce, Mumbai)**ABSTRACT OF THE STUDY**

*The present study aimed to investigate the effect of a six-week specific training programme on the reaction time of archery players aged 12 to 14 years from Mumbai City. Sixty archers were selected and divided into a specific training group and a control group. The training programme focused on hand-eye reaction time through ten targeted reaction drills. A pre-test and post-test experimental design was used, with reaction time measured using the Nelson Hand Reaction Time Test. Data were analyzed using ANCOVA. The results showed a significant improvement in the reaction time of the experimental group compared to the control group ( $F_{y.x}=12.02, p<0.05$ ). The findings indicate that specific training effectively enhances reaction time in young archery players.*

**INTRODUCTION**

Archery is the art, sport, practice, or skill of using a bow to shoot arrows. The word comes from the Latin 'arcus', meaning 'bow'. Historically, archery was used for hunting and combat, having been invented in the late Paleolithic or early Mesolithic periods. The oldest signs of archery unearthed in Europe date to around 10,000 BC, while evidence in Asia dates the invention of the bow even earlier. In modern times, archery is primarily a competitive sport and recreational activity. While the format has changed, the principles of precision, focus, control and repetition remain the same. Archery featured at the Olympic Games in the early 1900s and joined the programme permanently in 1972. As a sport, archery is accessible to a wide range of people, no matter their age, gender or ability. It is a widespread pastime in both developed and developing countries. Archery is also one of the few sports that can be practiced by able-bodied and impaired athletes on a level playing field. To play any game it's very important to know the basic skill of that game, just like that in archery before starting actual practice it's very important to know the skills, safety rules and equipment knowledge which helps an archer to perform better in competitions.

Archery is a sport demanding a range of skills from a steady hand, strong shoulders, flexible muscles, a keen eye and a cool disposition. Specific training for Archery is one of the best ways to improve performance due to the fact that Archery has so many components to it. The specialized training programme is created to improve one's potential in the Archery or in any Target games by increasing Power, Coordination, Reaction time and balance in the parts of one's body which is very much important for Archery.

**SKILLS REQUIRED FOR ARCHERY**

Shooting a bow through an arrow is not easy; it requires a lot of skill and physical requirements to hit the perfect shot. You need to have good balance, co- ordination reaction time and Power. Archers should be able to balance their weight with both feet. Only balance gives better stability. You need a strong core muscle to balance. Many muscles are used for shooting, and different muscle groups play different roles in full shooting action, such as agonist, antagonist, stabilizer, and neutralizer muscles. Apart from that, coordination plays an important role in proper shooting as it requires a high degree of hand-eye coordination when aiming the arrow at the target. And to fire an effective shot, you need the power that comes from your back muscles. Archery requires concentration, calmness, decision making, reaction time, respiratory control.

Specific training for Archery is one of the best ways to improve performance due to the fact that Archery has so many components to it. The specialized training programme is created to improve one's potential in the Archery or in any Target games by increasing balance in the parts of one's body which is very much important for Archery.

In this piece of research, the researcher intends to see the Effect of Specific Training Programme on Reaction Time of Archery Players aged 12-14 years under the topic. Effect of Specific Training Programme on Reaction Time of Archery Players of Mumbai City.

**OBJECTIVES OF THE STUDY**

To compare adjusted mean scores of 'Reaction time' of Archery Players of specific training group and control group by taking pre reaction time as co-variate.

## HYPOTHESIS OF THE STUDY

**H<sub>01</sub>:** There is no significant difference in the adjusted mean scores of reaction time of Archery Players of specific training group and control group by taking pre reaction time as co-variate.

## METHODOLOGY

The methodology was main course of the study. The present research was experimental types which provide pre and post data quantitatively. The test marks of students were collected as per Pre training and Post Training. The some aspects related methodology as under;

## SELECTION OF SAMPLE

The sample of (n = 60) Archery Players of aging 12 to 14 years were selected from the total population (n = 115) archery players from Adhyayan Archery Academy, Matunga & Swatantra veer Savarkar Archery Academy (Arjuna Sports Archery Academy), Dadar.

There were two types of variables for experimental design. Independent and Dependent Variables were basically required for conduct any Experimental design. Independent Variable was also known as Discontinues and Dependent Variables known as Continues variable. The present study was tested reaction time component by various following reliable tests according to the standard. These tests are standardized tests which were used for data collection referred from the book entitled Applied Measurement, Evaluation and Sports Selection" written by Kansal, D. K. (1996). (Kansal, 1996)

## RESEARCH DESIGN

It was non-equivalent control group study had been taken for collection of data. The experimental design had two groups' experimental group and control group. The Integrated training was design with help of experts. After a pilot study certain changes were implemented with guide and experts. The training schedule were prepared and conducted for six weeks on specific training group age group 12 to 14 years. There was holiday on Sunday and holidays for training. During six weeks training were conducted daily forty (40) minutes.

The design of the experiment had been planned in three phases' viz., phase – I: Pre-test, Phase – II: Training or Treatment, and Phase – III: Post- test.

### A. Independent Variable (Specific Training)

#### The training was included:

- Clicker Timing Drill
- Ball Drop Drill
- Wall Ball Reaction Catch
- Flashlight Reaction
- Target Tap Drill
- Partner Clap Reaction Drill
- Reaction Cone Tap
- Stick Drop Catch Drill
- Ball Toss with Claps
- Number Flash Reaction Drill

### B. Dependent Variable: Reaction time

#### Tools/Instruments

The following criterion measure was included to record the reading of Reaction Time.

| Variables      | Test                           | Units |
|----------------|--------------------------------|-------|
| Reaction- Time | Nelson Hand Reaction Time Test | Sec   |

#### Training Schedule:

The specific training was considered as the independent variable for the present study which includes the training:

|        | Week                        | 1 & 2  |            |           | 3 & 4  |            |           | 5 & 6  |            |           |
|--------|-----------------------------|--------|------------|-----------|--------|------------|-----------|--------|------------|-----------|
|        | Intensity                   | 50–65% |            |           | 65–80% |            |           | 50–65% |            |           |
|        | Set                         | 2      |            |           | 2      |            |           | 2      |            |           |
| Sr.    | Exercise                    | Reps   | Time       | Rest      | Reps   | Time       | Rest      | Reps   | Time       | Rest      |
| 1      | Clicker Timing Drill        | 6      | 2 min      | 30 sec    | 8      | 2 min      | 30 sec    | 6      | 2 min      | 30 sec    |
| 2      | Ball Drop Drill             | 10     | 1 min      | 30 sec    | 15     | 1 min      | 30 sec    | 10     | 1 min      | 30 sec    |
| 3      | Wall Ball Reaction Catch    | 10     | 2 min      | 30 sec    | 12     | 2 min      | 30 sec    | 10     | 2 min      | 30 sec    |
| 4      | Flashlight Reaction         | 6      | 2 min      | 30 sec    | 8      | 2 min      | 30 sec    | 6      | 2 min      | 30 sec    |
| 5      | Target Tap Drill            | 8      | 2 min      | 30 sec    | 10     | 2 min      | 30 sec    | 8      | 2 min      | 30 sec    |
| 6      | Partner Clap Reaction Drill | 10     | 1 min      | 30 sec    | 12     | 1 min      | 30 sec    | 10     | 1 min      | 30 sec    |
| 7      | Reaction Cone Tap           | 10     | 1 min      | 30 sec    | 12     | 1 min      | 30 sec    | 10     | 1 min      | 30 sec    |
| 8      | Stick Drop Catch Drill      | 8      | 1 min      | 30 sec    | 10     | 1 min      | 30 sec    | 8      | 1 min      | 30 sec    |
| 9      | Ball Toss with Claps        | 10     | 1 min      | 30 sec    | 12     | 1 min      | 30 sec    | 10     | 1 min      | 30 sec    |
| 10     | Number Flash Reaction Drill | 8      | 2 min      | 30 sec    | 10     | 2 min      | 30 sec    | 8      | 2 min      | 30 sec    |
|        | TOTAL                       |        | 15 mins*2= | 5 mins*2= |        | 15 mins*2= | 5 mins*2= |        | 15 mins*2= | 5 mins*2= |
|        |                             |        | 30         | 10        |        | 30         | 10        |        | 30         | 10        |
| Notes: |                             |        | 40 mins    |           |        | 40 mins    |           |        | 40 mins    |           |

## STATISTICS

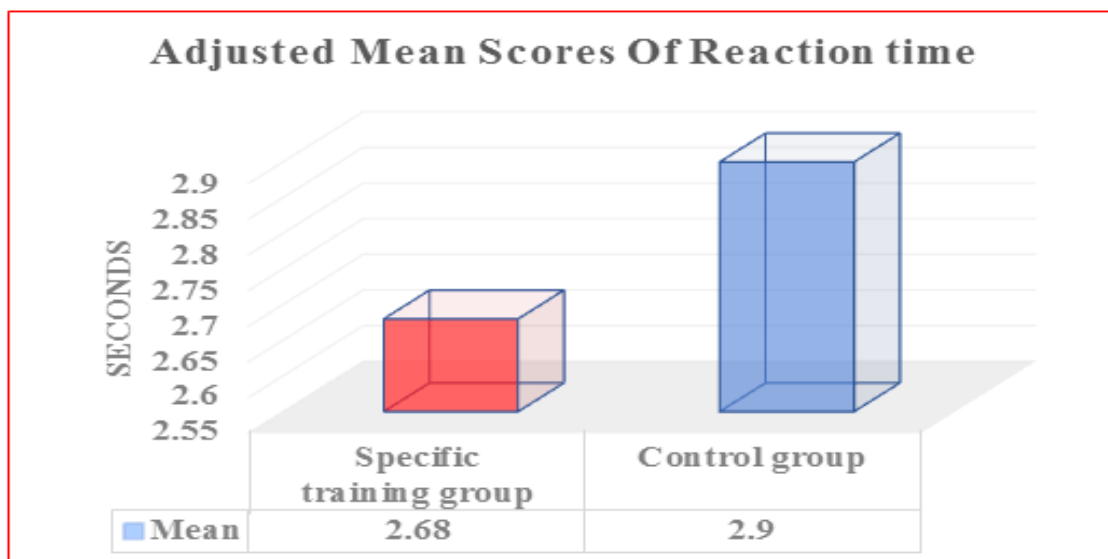
Since, there were two groups for this experimental study viz. experimental group and control group, wherein the researcher has decided to compare the change in mean scores of pre-tests and post-test experimental group and control group in order to see the efficacy of experimental treatment, one-way ANCOVA test was appropriately used for the data analysis.

The analysis of the data collected by the researcher, before and after the training intervention has been presented in this chapter. The data is analyzed by ANCOVA. Change in mean scores of pre and post-test of experimental and control groups comparison was done by one-way ANCOVA. The data is presented, analyzed and interpreted in the following manner.

## RESULTS AND DISCUSSION:

### Effect of Specific training on Reaction Time

The Adjusted Mean Scores of Reaction time due to Specific Training Programme, as obtained from ANCOVA test, revealed that –



There was significant difference between adjusted mean scores of **Reaction Time** of Archery Players of Specific Training Group and Control Group by taking Pre Eye-Hand Reaction Time as covariate ( $F_{y.x}=12.02$ ,  $df=1/57$ ,  $p<0.05$ ). Therefore, the adjusted mean scores of Eye-Hand Reaction Time of Archery Players of Specific Training Group is 2.68. This is significantly better than that of Control Group where adjusted mean score of Eye-Hand Reaction Time is 2.90. Thus, the overall performance scores of both the groups Specific Training Group and Control Group of Reaction Time were not equal.

This result help to interpret that the Specific training was found effective in improving Reaction Time of Archery Players.

### **CONCLUSION**

The result of the study helps to conclude that the Specific Training was found helpful to improve Reaction Time of Archery Players (Boys).

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**TO ANALYZE THE ROLE OF CORPORATE SOCIAL RESPONSIBILITY IN FOSTERING  
STARTUPS & SELF-EMPLOYMENT IN INDIA**

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**Dr. Prof. Shaji. K. Joseph and Asst. Professor. Priyanka Yadav**

**ABSTRACT**

*This research paper examines the role of Corporate Social Responsibility (CSR) in fostering startups and self-employment in India, with a specific focus on the suburban areas of Mumbai. In the wake of India's growing entrepreneurial ecosystem, CSR has emerged as a potential enabler of self-employment and innovation-driven startups. The study explores the impact of CSR initiatives on entrepreneurship, particularly through CSR-driven skill development programs and financial assistance schemes. It further investigates the challenges and opportunities inherent in CSR-funded entrepreneurial ventures. Primary data was collected via structured questionnaires distributed to 50 individuals residing in Mumbai's suburban region, while secondary data was sourced from credible online research papers, websites, blogs, and e-books. The findings aim to determine whether CSR contributes significantly to entrepreneurial growth and to identify the barriers that may limit its effectiveness. Through hypothesis testing, the study offers insights into the effectiveness of CSR in nurturing grassroots entrepreneurship and recommends ways to enhance CSR's role in India's startup landscape.*

**Keywords:** Corporate Social Responsibility (CSR), Startups, Self-employment, Skill Development, Financial Assistance, Entrepreneurship.

**1. INTRODUCTION**

Corporate Social Responsibility (CSR) in India has evolved significantly over the decades. Historically rooted in religious and spiritual values, CSR was once seen as a moral duty by individuals and businesses alike. In ancient Indian business practices, the idea of blending commerce with social welfare was well established, where philanthropic contributions were made generously for the betterment of society (Pillai, 2017; Godfrey et al., 2016). Unlike the Western model that largely prioritizes shareholder returns, Indian enterprises have traditionally focused on creating shared value for society (Pillai, 2017).

Over time, CSR in India transformed from being a voluntary ethical practice to a legally mandated responsibility. This shift was formalized through the Companies Act of 2013, which made CSR activities a statutory obligation for qualifying companies (Satapathy & Paltasingh, 2019). Researchers such as Kumar et al. (2001) have classified CSR in India into four broad categories: Ethical (inspired by Gandhian ideals), Statist (aligned with state-led governance), Liberal (focused on profitability), and Stakeholder-oriented (based on Freeman's stakeholder theory). These frameworks reflect the diverse motivations and approaches Indian companies have taken toward CSR over time.

The post-globalization era further accelerated the focus on sustainable and socially responsible business practices. As awareness around labor rights, environmental impact, and employee welfare grew, businesses began integrating these elements into their operational strategies (Satapathy & Paltasingh, 2019). In the current scenario, CSR initiatives span economic development, environmental conservation, education, health, and social empowerment, thereby playing a significant role in national development.

Interestingly, startups in India have begun to adopt CSR in innovative and impactful ways, often outperforming larger corporations in terms of community engagement and responsiveness. Their agility and closer connection with local communities allow them to address social needs more directly (European Commission, 2002). For instance, during the 2016 Chennai floods, startups like Zomato, Ola, and BookMyShow contributed actively to relief efforts, while others like Big Basket and Paytm played a critical role during the 2018 Kerala floods (Pahwa, 2016; Choudhary, 2018). Additionally, startups like Mrida are working toward sustainable livelihoods by building market linkages for rural producers (Fuwad, 2017).

However, despite this active participation, many startup founders remain unclear about the long-term strategic value of CSR in business development (Korreck, 2019). Moreover, startups often face significant hurdles in implementing CSR due to limited financial resources, lack of technical know-how, and regulatory challenges (Das et al., 2020; Zou et al., 2020). This highlights a critical gap in understanding and integrating CSR as a core component of sustainable entrepreneurship.

Given this context, this research aims to analyze how CSR initiatives contribute to fostering startups and self-employment in India, particularly by evaluating the effectiveness of skill development and financial assistance programs funded through CSR. It also seeks to understand the challenges and untapped opportunities within this ecosystem, ultimately contributing to the discourse on inclusive and sustainable economic growth.

### 1.1 Background and Rationale

India's startup ecosystem has grown exponentially in recent years, becoming one of the largest in the world. Since 2010, the country has witnessed significant investment activity, with over 300 venture capitalists participating in more than 225 angel investment deals, amounting to a total investment of over \$2.3 billion. In addition, mergers and acquisitions have crossed the \$1 billion mark, indicating a robust entrepreneurial environment (NASSCOM, 2014). Startups are not only contributing to innovation but are also making a measurable impact on employment—accounting for 2.64% of job creation in 2018 alone (Korreck, 2019).

In alignment with India's vision of becoming a five-trillion-dollar economy by 2025, the role of startups in driving economic growth and job creation is more important than ever. Therefore, understanding and enhancing startup sustainability is crucial in the current business landscape. Among various factors influencing long-term sustainability, Corporate Social Responsibility (CSR) is increasingly being recognized as a critical determinant. Wani (2017), in her doctoral research, emphasized CSR's role in enhancing the resilience and longevity of startup ventures.

In this context, examining how CSR initiatives—particularly those focusing on skill development and financial assistance—can support the growth of startups and self-employment becomes highly relevant. With the legal mandate under the Companies Act, 2013, CSR has become a powerful tool not just for large corporations but also as a potential support mechanism for emerging entrepreneurs. This study aims to explore this link, highlighting both the potential and the challenges of leveraging CSR for entrepreneurial development in India.

### 1.2 Research Aim and Objectives:

To analyze the role of Corporate Social Responsibility in Fostering Startups & Self-Employment in India.

#### OBJECTIVES

1. To analyze the impact of Corporate Social Responsibility (CSR) initiatives on fostering startups and self-employment in India.
2. To examine the effectiveness of CSR-driven skill development and financial assistance programs in supporting entrepreneurship.
3. To assess the challenges and opportunities associated with CSR-funded entrepreneurial initiatives in India.

#### HYPOTHESES

1. **H<sub>0</sub>:** CSR initiatives do not have a significant impact on fostering startups and self-employment in India.  
**H<sub>1</sub>:** CSR initiatives have a significant impact on fostering startups and self-employment in India.
2. **H<sub>0</sub>:** CSR-driven skill development and financial assistance programs do not significantly contribute to entrepreneurship growth.  
**H<sub>1</sub>:** CSR-driven skill development and financial assistance programs significantly contribute to entrepreneurship growth.
3. **H<sub>0</sub>:** There are no significant challenges that hinder the effectiveness of CSR-funded entrepreneurial initiatives in India.  
**H<sub>1</sub>:** Significant challenges hinder the effectiveness of CSR-funded entrepreneurial initiatives in India.

### 1.3 Significance of the Study

This study holds considerable significance in the context of India's evolving entrepreneurial landscape. As startups and self-employment continue to play a key role in job creation and economic development, there is a pressing need to explore alternative sources of support beyond traditional financial and institutional mechanisms. Corporate Social Responsibility (CSR), mandated by the Companies Act, 2013, presents a unique opportunity to bridge this gap. By analyzing the role of CSR in fostering startups and promoting self-employment, this research offers valuable insights for policymakers, corporate entities, and aspiring entrepreneurs. It helps identify how CSR-driven initiatives—such as skill development programs, financial assistance, and community partnerships—can empower individuals to build sustainable ventures. Furthermore, the study highlights the challenges faced by startups in accessing and benefiting from CSR funds, which can inform future CSR policy design and implementation. Ultimately, the research contributes to the broader discourse on inclusive and sustainable economic growth by positioning CSR as not only a compliance mechanism but also a strategic tool for entrepreneurial development and social impact in India.



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## **2. LITERATURE REVIEW**

### **2.1 CSR and Organization:**

The notion of Corporate Social Responsibility gained importance due to liberalization and globalization (Panigrahi and Sheela, 2015; Sharma and Kiran, 2013). Many experts believe globalization is one factor that forces entrepreneurs to undertake CSR initiatives (Scherer and Plazo, 2008; Kiran and Sharma, 2011). Due to economic reforms, industries gained several benefits such as - industrialization, freedom to trade, procuring the factors of production at a lower cost, mobility of labor, increase in FDI investment, and employment opportunities leading to maximization of efficiency and performance of the firms. Moreover, global warming, climate change, human rights concerns, unequal distribution of wealth were some of the ill effects of globalization that led to an increase in concern regarding social, and environmental issues. Nevertheless, the companies also confronted fierce competition from the globally involved industries. To combat the stiff competition, the industrialists were forced to rethink about CSR issues to attract customers. Companies should align their CSR 25 strategies with the overall firm's objective so that corporate social responsibility takes a consumer perspective (Kiran and Sharma, 2011). Ethical consumerism is yet another driving force to undertake CSR. The phrase "ethical consumerism" focuses on educating the people about their rights and aids in the promotion of CSR (Kiran and Sharma, 2011). Consumers who are literate are therefore concerned about the CSR initiatives undertaken by organizations. They purchase products from organizations that innovates products and cause less harm to the environment. Many experts indicate stakeholder pressure to be the most critical driver for any business to undertake CSR (Kiran and Sharma, 2011). Shareholders or investors now pressurize businesspeople to behave responsibly. By undertaking CSR activities, internal, external, as well as big environmental multinationals avail many benefits.

### **2.2 CSR and Startups:**

Startups should adopt CSR in their strategy as the shreds of evidence highlight that responsible behavior positively affects financial performance, customer retention (Lefebvre and Lefebvre, 2013), risk reduction, reputation, and access to capital (Benn and Bolton, 2011) by satisfying stakeholders. Despite entrepreneurs' opinions on ethical, social, and environmental issues appear to be equivalent to those of large businesses; entrepreneurs are more concerned with their immediate stakeholders, such as customers, workers, suppliers, and investors (Soundararajan et al., 2017). SMEs' stakeholder relationships are similar to (Jenkins, 2006) and stronger than those (Perrini, 2006) those of large businesses. Therefore, integrating CSR at the startup level is essential because it helps the entrepreneurs to produce a product and formulate strategies according to the stakeholder's desideratum (Grayson and Hodges, 2004), enhancing 31 customer contentment as well as develop personal relationships with the workforce and the local community (Fassin, 2008; Freeman, 2010) by responsible behavior. Several studies and reports reveal that startup companies can undertake CSR activities better and are more responsible than big firms (ibid) because of their propinquity to local community values and interests (European Commission, 2002). Some of the initiatives undertaken by the enterprise for the local community are sponsorship, a local charity, voluntary participation in social projects, training programs for the local people; motivating employees to participate in community events, showing commitment towards the local people, and providing them job opportunities.

Furthermore, studies support that by assimilating CSR in core business operations, by innovation, by making new models, and by maintaining a healthy relationship with the community, the enterprise identifies new business opportunities, partnerships, and collaboration (Gupta and Sharma, 2008; Jenkins, 2006). Nevertheless, the innovative and dynamic capability (Teece et al., 1997; Jenkins, 2009; Lee, 2008) enables firms to tap the niche markets. These innovative actions help the startups add value and differentiate themselves from the competitors (Tilley et al., 2003, Ahuja and Katila, 2004), and reduce costs (Mathieu and Reynaud, 2005). By adopting sustainable practices, a startup can cultivate an organizational culture, which further helps in solving several key issues they face. Involvement in CSR practices right at an early stage saves time and cost concerning the restructuring of the strategies, plans, and policies. However, instead of thinking CSR to be a costly affair, it should be implemented right from the beginning as it will bring in favorable conditions for enterprises and hence will help in gaining an edge over competitors (Grayson and Hodges, 2004; Amran and Nejati, 2014). Moreover, Researchers have indicated that sustainability-oriented startups can quickly restructure industry and commerce (Schizk et al., 2012). Similarly, Collins et al., 32 in 2007, revealed that CSR could be used as a communication strategy to spread messages to stakeholders, which further enhances brand image

## **DATA COLLECTION**

The data for this study was collected through both primary and secondary sources to provide a comprehensive analysis of the role of CSR in fostering startups and self-employment in India.

**Primary Data:** Primary data was collected through a survey conducted with individuals from the suburban areas of Mumbai. The survey aimed to gather insights directly from the target population, who are potential beneficiaries or participants in CSR-driven initiatives. This approach allowed for an in-depth understanding of their perspectives on CSR's impact on entrepreneurship and self-employment. The data collection was carried out using a structured questionnaire distributed via Google Forms.

**Secondary Data:** Secondary data was gathered from various online sources including websites, blogs, online research papers, and e-books. These resources provided relevant background information, theoretical frameworks, and previous studies that helped in contextualizing the research problem and identifying key variables for investigation.

**Sample Size:** A sample size of 50 individuals was selected for the primary data collection, ensuring a diverse representation of the target population. The sample was chosen based on availability and willingness to participate in the survey, providing a practical basis for assessing the research questions.

#### DATA ANALYSIS AND INTERPRETATION (PRIMARY DATA)

1) To analyze the impact of Corporate Social Responsibility (CSR) initiatives on fostering startups and self-employment in India.

| Age   |              |           |         |               |                    |
|-------|--------------|-----------|---------|---------------|--------------------|
|       |              | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 18-25        | 10        | 20.0    | 20.0          | 20.0               |
|       | 26-35        | 19        | 38.0    | 38.0          | 58.0               |
|       | 36-45        | 18        | 36.0    | 36.0          | 94.0               |
|       | 46 and above | 3         | 6.0     | 6.0           | 100.0              |
|       | Total        | 50        | 100.0   | 100.0         |                    |

**Interpretation:** The age distribution of respondents indicates a mix of young and experienced individuals participating in the survey. This diversity suggests that CSR initiatives impact a broad range of age groups, fostering entrepreneurship across generations. The data shows that 38% of the respondents are between 26 to 35 age group, 36% of the respondents are between 36 to 45 age group, 20% of the respondents are between 18 to 25 age group and 6% of the respondents are of age between 46 and above.

| Highest level of education? |                      |           |         |               |                    |
|-----------------------------|----------------------|-----------|---------|---------------|--------------------|
|                             |                      | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                       | Doctorate            | 1         | 2.0     | 2.0           | 2.0                |
|                             | High School or below | 4         | 8.0     | 8.0           | 10.0               |
|                             | Postgraduate degree  | 21        | 42.0    | 42.0          | 52.0               |
|                             | Undergraduate degree | 24        | 48.0    | 48.0          | 100.0              |
|                             | Total                | 50        | 100.0   | 100.0         |                    |

**Interpretation:** The educational background of respondents varies, with a significant portion holding higher education degrees. This suggests that CSR initiatives are reaching a well-educated audience, potentially benefiting skilled entrepreneurs. So, from the above chart we can interpreted that 48% of the respondents are having undergraduate degree, 42% of the respondents are having postgraduation degree, 8% of the respondents are having high school or below educational degree and 2% of the respondents are having doctorate degree.

| 4. If self-employed or an entrepreneur, how long have you been running your business? |                   |           |         |               |                    |
|---|-------------------|-----------|---------|---------------|--------------------|
|   |                   | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid   | 1-3 years         | 12        | 24.0    | 24.0          | 24.0               |
|   | 4-6 years         | 11        | 22.0    | 22.0          | 46.0               |
|   | Less than 1 year  | 4         | 8.0     | 8.0           | 54.0               |
|   | More than 6 years | 10        | 20.0    | 20.0          | 74.0               |
|   | None of the above | 13        | 26.0    | 26.0          | 100.0              |
|   | Total             | 50        | 100.0   | 100.0         |                    |

**Interpretation:** From the above chart we can interpreted that 26% of the respondents are not self-employed are they are working in some of the companies, 24% of the respondents are running their business from last 3 years, 22% of the respondents are running their business from last 4 to 6 years, 20% of the respondents are running their business from more than 6 years and 8% of the employees are running their business from less than a year.

| How familiar are you with Corporate Social Responsibility (CSR) initiatives aimed at fostering entrepreneurship? |                     |           |         |               |                    |
|--|---------------------|-----------|---------|---------------|--------------------|
|  |                     | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid  | Neutral             | 9         | 18.0    | 18.0          | 18.0               |
|  | Not familiar at all | 1         | 2.0     | 2.0           | 20.0               |
|  | Slightly familiar   | 3         | 6.0     | 6.0           | 26.0               |
|  | Somewhat familiar   | 17        | 34.0    | 34.0          | 60.0               |
|  | Very familiar       | 20        | 40.0    | 40.0          | 100.0              |
|  | Total               | 50        | 100.0   | 100.0         |                    |

**Interpretation:** The level of awareness about CSR initiatives varies among respondents. This emphasizes the need for better communication and outreach to ensure more aspiring entrepreneurs benefit from these programs. So, from the above chart we can interpreted that 40% of the respondents are very familiar with Corporate Social Responsibility initiatives aimed at fostering entrepreneurship, 34% of the respondents are somewhat familiar with Corporate Social Responsibility initiatives aimed at fostering entrepreneurship, 18% of the respondents are neutral familiar with Corporate Social Responsibility initiatives aimed at fostering entrepreneurship, 6% of the respondents are slightly familiar with Corporate Social Responsibility initiatives aimed at fostering entrepreneurship and 2% of the respondents are not familiar at all with Corporate Social Responsibility initiatives aimed at fostering entrepreneurship.

| Have you received any financial assistance support from company as a part of their CSR activity? If Yes then how much financial assistance have you received? |                      |           |         |               |                    |
|---|----------------------|-----------|---------|---------------|--------------------|
|   |                      | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid   | 1,00,000 to 3,00,000 | 20        | 40.0    | 40.0          | 40.0               |
|   | 3,00,000 to 5,00,000 | 10        | 20.0    | 20.0          | 60.0               |
|   | Above 5,00,000       | 1         | 2.0     | 2.0           | 62.0               |
|   | Upto 1,00,000        | 19        | 38.0    | 38.0          | 100.0              |
|   | Total                | 50        | 100.0   | 100.0         |                    |

**Interpretation:** The level of awareness about CSR initiatives varies among respondents. This emphasizes the need for better communication and outreach to ensure more aspiring entrepreneurs benefit from these programs. So, from the above chart we can interpreted that 40% of the respondents have received between 1,00,000 to 3,00,000 financial assistance support, 38% of the respondents had received upto Rs. 1,00,000 financial assistance support, 20% of the respondents have received between 3,00,000 to 5,00,000 financial assistance and only 2% of the respondents have received more than 5,00,000 financial assistance support from company as a part of their CSR activity.

| Was financial assistance through CSR helpful in forming/running your business? |                 |           |         |               |                    |
|--|-----------------|-----------|---------|---------------|--------------------|
|  |                 | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid  | Somewhat Useful | 13        | 26.0    | 26.0          | 26.0               |
|  | Useful          | 13        | 26.0    | 26.0          | 52.0               |
|  | Very Useful     | 24        | 48.0    | 48.0          | 100.0              |
|  | Total           | 50        | 100.0   | 100.0         |                    |

**Interpretation:** Most respondents who received financial aid through CSR found it beneficial. This suggests that CSR funding is effective in supporting new and existing businesses. So, from the above chart we can interpreted that 48% of the respondents said that financial assistance through CSR was very helpful in forming/running their business, 26% of the respondents said that it was useful and remaining 26% of the respondents said it was somewhat useful for them.

2) To examine the effectiveness of CSR driven skill development & financial assistance programme in supporting Entrepreneurship:

| Extent do you agree with the following statements regarding CSR initiatives and their impact on entrepreneurship? (Likert scale: Strongly Agree - Agree - Neutral - Disagree - Strongly Disagree) |  |           |         |               |                    |
|---|--|-----------|---------|---------------|--------------------|
|   |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid   | CSR efforts should focus more on entrepreneurship rather than charity-based activities.      | 6         | 12.0    | 12.0          | 12.0               |
|   | CSR initiatives have played a significant role in fostering startups in India.               | 21        | 42.0    | 42.0          | 54.0               |
|   | CSR-driven programs provide essential financial and non-financial support for entrepreneurs. | 19        | 38.0    | 38.0          | 92.0               |
|   | Startups that receive CSR support have a higher success rate than those that don't.          | 4         | 8.0     | 8.0           | 100.0              |
|   | Total  | 50        | 100.0   | 100.0         |                    |

**Interpretation:** From the above chart we can interpreted that 42% of the respondents are agree on the statements that CSR initiative have played a significant role in fostering startup in India, 38% of the respondents said that CSR driven programs provide essential financial and non-financial support for entrepreneurs, 12% respondents agree on the statement CSR efforts should focus more on entrepreneurship rather than charity-business and 8% agree on startups that receive CSR support have a higher success rather than those that don't.

| How often do you think CSR initiatives successfully reach aspiring entrepreneurs? |              |           |         |               |                    |
|---|--------------|-----------|---------|---------------|--------------------|
|   |              | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid   | Occasionally | 11        | 22.0    | 22.0          | 22.0               |
|   | Often        | 15        | 30.0    | 30.0          | 52.0               |
|   | Rarely       | 4         | 8.0     | 8.0           | 60.0               |
|   | Very often   | 20        | 40.0    | 40.0          | 100.0              |
|   | Total        | 50        | 100.0   | 100.0         |                    |

**Interpretation:** From the above chart we can interpreted that 40% of the respondents very often think that CSR initiatives successfully reach aspiring entrepreneurs, 30% of the respondents often think that CSR initiatives successfully reach aspiring entrepreneurs, 22% of the respondents occasionally think that CSR initiatives successfully reach aspiring entrepreneurs and 8% of the respondents rarely think that CSR initiatives successfully reach aspiring entrepreneurs.

| How accessible do you find CSR-driven financial assistance for entrepreneurs? |                     |           |         |               |                    |
|---|---------------------|-----------|---------|---------------|--------------------|
|   |                     | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid   | Neutral             | 6         | 12.0    | 12.0          | 12.0               |
|   | Not very accessible | 1         | 2.0     | 2.0           | 14.0               |
|   | Somewhat accessible | 18        | 36.0    | 36.0          | 50.0               |
|   | Very accessible     | 25        | 50.0    | 50.0          | 100.0              |
|   | Total               | 50        | 100.0   | 100.0         |                    |

**Interpretation:** From the above chart we can interpreted that 50% of the respondents finds CSR-driven financial assistance very accessible for entrepreneurs, 36% of the respondents finds CSR-driven financial assistance somewhat accessible for entrepreneurs, 12% of the respondents finds CSR-driven financial assistance neutral for entrepreneurs and 2% of the respondents finds CSR-driven financial assistance not very accessible for entrepreneurs.

3) To assess the challenges and opportunities associated with CSR-funded entrepreneurial initiatives in India:

| To what extent do you agree with the following statements about CSR funding for entrepreneurs? [There is a lack of transparency in the selection process for CSR funding.] |                   |           |         |               |                    |
|--|-------------------|-----------|---------|---------------|--------------------|
|  |                   | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid  | Agree             | 25        | 50.0    | 50.0          | 50.0               |
|  | Disagree          | 2         | 4.0     | 4.0           | 54.0               |
|  | Neutral           | 10        | 20.0    | 20.0          | 74.0               |
|  | Strongly Agree    | 12        | 24.0    | 24.0          | 98.0               |
|  | Strongly Disagree | 1         | 2.0     | 2.0           | 100.0              |
|  | Total             | 50        | 100.0   | 100.0         |                    |

**Interpretation:** The data shows a strong perception among respondents that transparency is lacking in the CSR funding selection process. A combined 74% either agreed (50%) or strongly agreed (24%) with this statement, indicating that the majority feel the process is not open or clearly communicated. Only 6% of respondents disagreed (4%) or strongly disagreed (2%) with the statement, suggesting very few believe the selection process is transparent. Meanwhile, 20% remained neutral, possibly reflecting limited direct experience or uncertainty regarding how CSR funding decisions are made.

| What are the biggest challenges in accessing CSR-driven support for entrepreneurs? [Limited funding and financial support] |                |           |         |               |                    |
|--|----------------|-----------|---------|---------------|--------------------|
|  |                | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid  | Agree          | 14        | 28.0    | 28.0          | 28.0               |
|  | Disagree       | 3         | 6.0     | 6.0           | 34.0               |
|  | Neutral        | 10        | 20.0    | 20.0          | 54.0               |
|  | Strongly Agree | 23        | 46.0    | 46.0          | 100.0              |
|  | Total          | 50        | 100.0   | 100.0         |                    |

**Interpretation:** The results indicate that limited funding and financial support is widely recognized as a major challenge in accessing CSR-driven entrepreneurial assistance. A significant 74% of respondents either agreed (28%) or strongly agreed (46%) that inadequate financial backing is a key issue, emphasizing its critical impact on entrepreneurs. Only 6% of participants disagreed, suggesting that very few perceive funding availability as sufficient. Meanwhile, 20% of respondents chose a neutral stance, possibly indicating uncertainty or varied experiences with CSR funding.

**Interpretation:** The data suggests that a majority of respondents (74%) perceive a significant gap between CSR-driven training programs and the actual needs of entrepreneurs in real-world business environments. This is reflected by 52% agreeing and an additional 22% strongly agreeing that such a mismatch exists. A smaller portion of respondents 20% remained neutral, indicating uncertainty or mixed experiences with these programs. Only 6% (4% disagree, 2% strongly disagree) believed that the training provided is well-aligned with real business needs.

| What are the biggest challenges in accessing CSR-driven support for entrepreneurs? [Inefficient execution and lack of follow-up support] |                |           |         |               |                    |
|--|----------------|-----------|---------|---------------|--------------------|
|  |                | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid  | Agree          | 16        | 32.0    | 32.0          | 32.0               |
|  | Disagree       | 2         | 4.0     | 4.0           | 36.0               |
|  | Neutral        | 13        | 26.0    | 26.0          | 62.0               |
|  | Strongly Agree | 19        | 38.0    | 38.0          | 100.0              |
|  | Total          | 50        | 100.0   | 100.0         |                    |

**Interpretation:** The data reveals significant concern among respondents regarding inefficient execution and lack of follow-up support in CSR (Corporate Social Responsibility)-driven initiatives for entrepreneurs. A combined 70% of respondents either *agreed* (32%) or *strongly agreed* (38%) that these issues pose major challenges. This indicates a widespread perception that while CSR programs may be initiated with good intentions, their impact is often undermined by poor implementation and insufficient ongoing assistance. On the other hand, only 4% of participants disagreed with the statement, suggesting that very few believe these issues are not problematic. Meanwhile, 26% remained neutral, possibly reflecting either a lack of personal experience with such programs or uncertainty about their effectiveness.

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## FINDINGS

1. **Demographic Profile of Respondents:** A significant majority of respondents (74%) are within the 26–45 age range, highlighting CSR's strong influence on mid-career entrepreneurs. Additionally, 90% of the respondents hold undergraduate or postgraduate degrees, suggesting that CSR initiatives primarily engage a highly educated entrepreneurial audience.
2. **Self-Employment and Business Longevity:** The study reveals that 74% of respondents are self-employed, with most having sustained their businesses for over three years. This demonstrates that CSR initiatives engage entrepreneurs who have established and experienced businesses, contributing to long-term sustainability.
3. **Awareness and Familiarity with CSR Initiatives:** While 74% of respondents are at least somewhat familiar with CSR initiatives, this indicates a moderate level of awareness. However, it also suggests that there is room for improvement in outreach efforts to fully engage potential entrepreneurs.
4. **Impact of CSR Financial Assistance:** The findings show that 78% of respondents have received financial assistance up to Rs. 3,00,000, indicating that CSR-driven financial support is largely concentrated in lower to mid-range funding amounts. A notable 74% of respondents found CSR financial assistance either very helpful or useful, underscoring the positive impact of such support on business formation and operations.
5. **Role of CSR in Supporting Start-ups:** 80% of respondents acknowledge the significant role of CSR initiatives in supporting start-ups, with many emphasizing both financial and non-financial forms of assistance. This highlights CSR's broad scope in fostering entrepreneurial growth.
6. **Perception of CSR Outreach and Accessibility:** A substantial 70% of respondents believe CSR initiatives often or very often successfully reach aspiring entrepreneurs, indicating a generally positive perception of the effectiveness of CSR outreach. Moreover, 86% of respondents find CSR-driven financial assistance either very accessible or somewhat accessible, suggesting favorable perceptions of its availability to entrepreneurs.
7. **Challenges in Accessing CSR Assistance:** Despite the positive impacts, several challenges were identified. 74% of respondents cited limited financial support as a significant challenge in accessing CSR-driven entrepreneurial assistance, highlighting the need for increased funding. Furthermore, 74% of respondents expressed concerns that CSR-driven training programs do not adequately align with the real-world needs of entrepreneurs, pointing to a gap in their practical effectiveness.
8. **Challenges in CSR Program Execution:** A majority (70%) of respondents noted that inefficient execution and lack of follow-up support are major obstacles in CSR initiatives, emphasizing the need for more effective implementation and sustained engagement to maximize the impact of CSR-driven programs.

## CONCLUSION

This study highlights the significant role of Corporate Social Responsibility (CSR) initiatives in supporting entrepreneurship, particularly among mid-career, highly educated, and self-employed individuals. The findings suggest that CSR programs have a broad and positive impact on business formation and operations, with a majority of respondents recognizing the importance of both financial and non-financial support provided by these initiatives. Additionally, respondents generally perceive CSR initiatives as accessible, with many entrepreneurs receiving financial assistance that helps sustain their businesses.

However, the study also reveals several areas where CSR initiatives can be improved. While most respondents are familiar with CSR programs, there is a need for greater transparency in their execution. The data shows that CSR-driven training programs often fail to align with the real-world needs of entrepreneurs, indicating a gap in their practical effectiveness. Furthermore, a substantial portion of respondents expressed concerns about inadequate funding and inefficient execution of CSR initiatives, underscoring the importance of refining these programs to ensure they are more impactful and sustainable.

The findings underscore the necessity for CSR strategies to better address the challenges faced by entrepreneurs. To enhance the effectiveness of CSR initiatives, it is essential to improve the alignment of training programs with entrepreneurial needs, increase funding opportunities, and ensure more efficient implementation and follow-up support.



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## RECOMMENDATIONS

1. **Increase Funding Opportunities:** CSR-driven financial support should be expanded, particularly for startups in their early stages, to provide more comprehensive funding that meets the diverse needs of entrepreneurs.
2. **Align Training Programs with Real-World Needs:** CSR-driven training programs should be designed in collaboration with entrepreneurs and industry experts to ensure they are practical and relevant to the challenges faced by startups.
3. **Enhance Transparency and Communication:** Greater transparency in the execution of CSR programs and clearer communication about the available resources and processes will help entrepreneurs better understand and access these initiatives.
4. **Improve Program Execution and Follow-up Support:** Strengthening the efficiency of CSR program implementation and ensuring continuous support and follow-up can significantly enhance their impact, helping entrepreneurs overcome early-stage challenges.
5. **Expand Outreach and Engagement:** CSR programs should focus on expanding their outreach to ensure that aspiring entrepreneurs, especially from underrepresented groups, are informed and encouraged to participate.

By refining CSR strategies to address these challenges, businesses can better serve the entrepreneurial community, fostering long-term success and contributing to the broader economic development of India.

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**IMPACT OF PHYSICAL EDUCATION AND SPORTS ON HOLISTIC DEVELOPMENT UNDER  
NEW EDUCATION POLICY (NEP) 2020 AND NEW SPORTS POLICY (NSP) 2024**

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**Punam Dastagir Mujawar**

Director of Physical Education and Sports, Sree Narayana Guru College of Commerce, P.L. Lokhande Marg,  
Chembur – 400 089 (M.S.) INDIA

Ph.D. Research Scholar, Department of Physical Education and Sports, Dr. Babasaheb Ambedkar Marathwada  
University, Chhatrapati Sambhaji Nagar – 431 004 (M.S.) INDIA

**ABSTRACT**

*The main goal of new education policy 2020 and new sports policy 2024 is sports for nation building to harness the power of sports for nation's holistic development in 'amrit kaal'. The Department of Sports, Ministry of Youth Affairs and Sports, New Delhi, frame National Sports Policy (NSP), 2024 aligned with new education policy 2020 for the development of sports and providing a roadmap to achieve excellence in sports in the country. The national sports policy 2024 envisages nation building through the Power of Sports with focus on excellence on the global stage, sports for economic development, sports for social development and making sport a people's movement. The new education policy 2020 is imperative to formulate a new new sports policy that encompasses the latest developments in the field of Sports and presents a roadmap to address the present and future challenges. India, with its favorable demographic dividend and rapidly growing economy, stands at a crucial juncture in its journey towards becoming a global leader. As one of the youngest nations in the world, with a fifth of the global youth population i.e. between the age group 15-29, India possesses immense potential to leverage sports as a catalyst for national development. The NSP 2024 is designed to align with the principles outlined in the 'Viksit Bharat' emphasizing development of sports as a mass movement, broad-based economic growth, and bridging the gap between public and private sector performance.*

**Keywords:** Physical education, sports, holistic development, New education policy (NEP) 2020 and New Sports Policy (NSP) 2024.

**INTRODUCTION**

The earliest national sports policy of 1984 and 2011 stresses broad base sports and promote excellence sports activities, need to promote media support for the creation of sports culture and corporate houses must be involved in promotion of sports promotion of sports mindedness in the public at large. The existing National Sports Policy was formulated in the year 2001 with a twin objective of broad basing of sports and achieving excellence in sports at National and International level. However, given the evolving sports ecosystem and current needs, it has become necessary that a new National Sports Policy in alignment with the existing requirements is developed.

The Government of India, recognizing the transformative power of sports in nation-building and holistic development, hereby formulates the National Sports Policy 2024 (NSP 2024). This policy aims to harness the potential of sports to drive excellence, economic growth, and social progress while promoting the overall well-being of the nation's citizens. Building upon the foundations laid by previous initiatives such as the National Sports Policy 2001, the Khelo India Scheme, and the Target Olympic Podium Scheme (TOPS), this comprehensive policy seeks to create a robust sporting ecosystem that nurtures talent from the grassroots to the Olympic podium. The policy takes into account India's recent performances in major international competitions, including the Olympic Games, Paralympic Games, Commonwealth Games, and Asian Games. It recognizes the need to build on these achievements and create a sustainable system for long-term success in sports.

**AIM AND OBJECTIVES**

**To achieve the vision, the policy focuses on the following core components:**

1. Establish comprehensive sports programs for all participation groups, from grassroots to elite levels.
2. Organize sports competitions and leagues at various levels, creating a robust competitive structure.
3. Implement physical literacy initiatives to promote a culture of sports and physical activity.
4. Develop a robust talent identification and development system to nurture future champions.
5. Ensure equitable access to sports infrastructure across the country.
6. Provide athlete-centric support systems for the holistic development of sportspersons.

7. Promote sports science, medicine, and innovation to enhance performance and well-being.
8. Strengthen governance and institutional frameworks in the sports sector.
9. Revamp funding mechanisms to ensure sustainable development of sports.
10. Foster economic growth through sports-related industries and activities.
11. Promote social development and inclusion through sports.
12. Establish sports as a viable career option for youth.
13. Encourage mass participation in sports and fitness activities for a healthier nation.
14. Develop a robust mechanism to reward and recognize champion athletes as well as retired athletes.
15. Develop a framework and guidelines for educational institutions to act as feeder institutes to impart sporting culture.

## REVIEW OF LITERATURE

*Ahmed (2009)* opined that various aspects of personality of student is not possible without proper planning of the programme of physical education. *Pobria (2009)* reviewed that despite recognition of the positive impact, sport on education and child development, physical education is being increasingly challenged within education system across country and globe. *Prasad (2009)* concluded that sports and physical exercise emotionally disturbed, mentally handicapped and economically poor children gain lot of self confidence when they are exposed to the real situation of exercise and participation in they feel confidence about their abilities and in turn do well in their future life.

## METHODOLOGY

The National Sports Policy (NSP) 2024 outlines a comprehensive methodology for enhancing the sporting culture and ecosystem across various levels in India. The policy includes a range of initiatives aimed at bolstering sports programs, leagues and competitions, while fostering physical literacy, outreach and awareness.

**Sports Programs:** The NSP 2024 advocates for the implementation of inclusive sports programs across all participation groups, starting from the unit level and extending to educational institutions like schools, colleges, universities etc. This involves developing structured sports programs that cater to different age groups and skill levels, ensuring that every individual has access to sporting opportunities. National Sports Federations (NSFs) will facilitate to create robust program frameworks at various levels of the sports development pyramid, promoting a seamless progression from grassroots to elite levels.

**Sports Leagues & Competitions:** The policy emphasizes the establishment of sports competitions and leagues at the community, educational institution, and district levels. By enabling NSFs to develop a sustainable framework for these competitions, the NSP 2024 aims to foster a competitive spirit and provide regular opportunities for athletes to showcase their skills. This framework will be developed in collaboration with all stakeholders to ensure a cohesive and effective competition structure.

**Physical Literacy:** An action plan for imparting physical literacy from early childhood is a central component of the policy. In alignment with the National Education Policy 2020, sports and physical literacy will be developed as major subjects in educational institutions, ensuring that students develop a lifelong appreciation for physical activity and well-being.

**Outreach & Awareness:** Regular sports outreach programs will be organized to engage the general public and provide opportunities to interact with renowned national/international sports stars. Awareness campaigns and knowledge sessions will be conducted to encourage active participation in sports and promote the benefits of a physically active lifestyle amongst masses.

**Major Sporting Events:** A roadmap for organizing major sporting events, involving various stakeholders such as the Indian Olympic Association (IOA), NSFs, state governments, and private organizations will be prepared. This includes creating a sustainable framework to ensure that these events are executed effectively and generate tangible returns for betterment of society.

**Strong Sports Promotion Institutions:** Sports promotion institutions in the country, including NSFs, will be strengthened by focusing on operational efficiency, professional management, transparency, and financial sustainability. This will call for the enhancement of national-level monitoring agencies to ensure seamless functioning and effective issue redressal mechanisms.

**Athlete-Centric Sports Development:** A framework will be established to create an accessible and efficient sports support ecosystem for athletes. This includes comprehensive coaching, scientific support, and streamlined mechanisms for addressing athlete issues. The policy also proposes a simplified funding framework to support potential and elite athletes, along with mechanisms to aid athletes at different stages of their careers, including post-retirement support.

**Sports Personnel:** The sports personnel ecosystem shall be strengthened through effective development programs and encouraging the establishment of institutions for training and development.

**Safety, Ethics & Professionalism:** Strengthening institutions focused on sports safety, ethics, and professionalism will be prioritized. This will include developing programs for anti-doping, officiating, and para-classification, as well as encouraging research in these areas. National agencies will be formed to ensure a safe and ethical sports environment.

**Sports Research & Innovation:** Research and innovation in sports science, medicine, and technology will be promoted. Educational institutions will be encouraged to engage in sports-related research with initiatives such as hackathons and research grants supporting innovation and ideas. A Sports Innovation Task Force will be established to oversee targeted innovation efforts.

**Rewards & Recognition for Champion Athletes:** A framework for rewarding and recognizing champion and retired athletes will be established, alongside a uniform recruitment mechanism for hiring athletes in government services.

**Educational Institutions in Sports Development:** Educational institutions will be guided to act as feeder institutes for sports development, with frameworks to foster a sporting culture and identify talent early. NSFs and other sports promotion agencies will be encouraged to organize sporting activities for students.

**Strengthening Funding Mechanism for Sports Development:** The policy proposes a revamped funding mechanism, including initiatives such as "Adopt an Athlete", "Adopt a District Sports Program," and "Adopt a Venue". An independent body will be formed to strategize, execute, and supervise funded activities, ensuring a collaborative approach to sports development.

**Talent Search & Development:** The NSP 2024 aims to expand sports talent search and development activities involving important stakeholders like NSFs, States, educational institutes, private organizations. A National platform that facilitates talent identification, development, and monitoring will also be developed to act as a single window. Integration with educational institutions and a smooth transition mechanism for athletes will be key components.

**Sports Infrastructure:** The policy emphasizes equitable access to sports facilities, with a focus on infrastructure development from block to state levels irrespective of economic, social and geographic disparities. A targeted approach will be adopted to address high-performance needs based on regional data like demographic, personnel, previous performance etc. and an Infrastructure Development Board will oversee project planning and progress.

**Districts & States:** States and districts will be encouraged to strengthen their sporting ecosystems, with initiatives such as Model Sports State and Model District programs designed to enhance local sports capabilities.

**Excellence in Para-Sports:** Athlete pathways and programs will be formulated and implemented for excellence in Para-Sports. The major focus domain will include physical literacy for the differently-abled, grass-root sports development in para-sports, elite para-sports development, para-sports complaint sports infrastructure etc.

## **Result and Discussion:**

### **Sports for economic, social development & for people's movement:**

Sports play a pivotal role in driving economic development, and several strategies can enhance this impact. The initiatives for promoting economic development through sports encompasses various measures including tourism, entrepreneurship, manufacturing etc. These are mentioned below:

**Sports Tourism through major Sporting Events:** To position India as a global sports tourism hub, it's essential to capitalize on major sporting events.

**Strong Sports Equipment Manufacturing Ecosystem:** Developing a robust sports equipment manufacturing sector is crucial for economic growth. Integrating this sector with national schemes such as "Make in India" and "Atmanirbhar Bharat" will be emphasized which can drive innovation and create significant job opportunities.

**Strong Sports Startup & Entrepreneurship Environment:** Fostering a thriving environment for sports startups and entrepreneurs is vital for innovation and growth. Government initiatives such as procurement programs, innovation hackathons, sports incubator programs, and seed funding will provide the necessary support for startups.

**Operational & Financial Sustainability of Hard & Soft Sports Assets:** Ensuring the financial sustainability and operational excellence of sports infrastructure is essential for their long-term success.

**Recognition & Rewards for Innovation:** A National Award Scheme will be launched to recognize innovation in sports which can drive progress in various emerging areas such as digital technology, affordable products, and inclusivity.

**Global Sports Destination:** Leveraging India's diverse geographic and climatic conditions can transform it into a premier global sports destination.

**Sports Business Advisory Group:** Efforts shall be made to establish Sports Business Advisory Group comprising representatives from relevant Ministries, the private sector, and other stakeholders for fostering the growth of the sports industry.

**Reduced Barriers for Participation of Underrepresented Population Groups:** To foster inclusivity and increase participation in sports among underrepresented groups such as women, the LGBTQ+ community, economically weaker sections, tribal communities, and those with physical or psychological challenges, dedicated sports facilities will be established along with services tailored to their unique needs.

**Indigenous Games:** Expanding the recognition and support for indigenous games from various states can enrich India's sports landscape and preserve the cultural heritage.

**Underrepresented Population Talent Development Initiatives:** A comprehensive talent development mechanism tailored for underrepresented groups shall be established which is vital for nurturing sports talent across the country.

**Peace & International Cooperation Activities through Sports:** Sports can serve as a powerful tool for international diplomacy and cooperation. International sports exchange programs will be promoted to allow knowledge sharing, capacity building, and collaborative development efforts.

**Promotion of Sports & Allied Services as Mainstream Career:** To enhance the recognition and attractiveness of sports as a career option, it is important to promote sports professional education through structured frameworks and regulations, such as the National Sports Education Board.

**Sports Volunteering Programs:** Engaging the youth in sports volunteering can enhance community involvement and support various sporting schemes.

## CONCLUSION

The National Sports Policy 2024 embodies a visionary and comprehensive framework aimed at revolutionizing sports development in India. It is designed to align sports advancement with the broader objectives of economic and social progress, leveraging sports as a powerful tool for nation-building. The policy adopts a multi-faceted strategy that addresses critical areas such as infrastructure development, talent identification, nurturing, governance reforms, and enhancing mass participation. By improving sports facilities, creating robust talent pipelines, implementing governance reforms, and encouraging widespread involvement, NSP 2024 aspires to elevate India to the status of a global sporting powerhouse while simultaneously fostering national development.

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**EFFECT OF JUDO KATA TRAINING ON EYE-HAND COORDINATION OF JUDO PLAYERS  
AGED 17 TO 19 YEARS BOYS**

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**<sup>1</sup>Rajkumar C. Gupta and <sup>2</sup>Dr. Sayyed Asma Pravin**<sup>1</sup>Ph.D. scholar, M.S.M. College of Physical Education, Chhatrapati Smabhaji Nagar, Dr. Babasaheb Ambedkar Marathwada University<sup>2</sup>Research Guide, Asst. Professor, Lokseva Education Society's Arts & Science College, Dr. Babasaheb Ambedkar Marathwada University**ABSTRACT**

*This study investigates the effect of Judo Kata training on the coordination of college students aged 17 to 19, with a focus on eye-hand coordination. The research aims to compare the adjusted mean scores of eye-hand coordination between an experimental group undergoing Judo Kata training and a control group, using pre-eye-hand coordination as a covariate.*

*A sample of 70 male students from Prakash College, Kandivali (W), was divided into two groups: an experimental group and a control group, each comprising 35 participants. The experimental group underwent 16 weeks of Judo Kata training, consisting of five sessions per week, each lasting 60 minutes. The training emphasized specific techniques, including forms of throwing (Nage No Kata) such as Te Waza, Koshi Waza, Ashi Waza, Ma Sutemi Waza, and Yoko Sutemi Waza.*

*Eye-hand coordination was assessed using the Ball Transfer Test, with results analyzed through One-Way Analysis of Covariance (ANCOVA). The study revealed a significant difference in the adjusted mean scores of eye-hand coordination between the experimental and control groups ( $F = 4.979, p < 0.05$ ). The experimental group demonstrated improved eye-hand coordination, with an adjusted mean score of 20.485 compared to 21.372 for the control group.*

*The findings indicate that Judo Kata training effectively enhances eye-hand coordination, suggesting its potential as a valuable intervention for improving motor skills in college-aged individuals. This research highlights the importance of structured physical training programs in fostering coordination and overall physical development.*

**INTRODUCTION**

Physical activity plays a pivotal role in students' health and academic success. Physical education (PE) provides a wide range of benefits, including enhanced physical and mental well-being, improved social skills, greater self-esteem, and character development. Through age-appropriate activities, PE teachers help students build motor skills, muscle strength, and bone density while fostering lifelong healthy habits. Moreover, PE helps combat obesity, reduces the risk of chronic diseases, and supports mental health by promoting teamwork, social interaction, and overall development. It also contributes to better sleep, stress reduction, and healthier eating habits, all essential for a balanced lifestyle. Beyond these, the impact of PE extends to the classroom, where it improves behavior, focus, and academic performance.

Judo, often referred to as "the gentle way," is a modern martial art emphasizing competitive techniques. Judoka, or practitioners, engage in throwing, immobilizing, or grappling with opponents. Striking techniques are confined to pre-arranged forms (kata) and are excluded from competitions and free practice (randori). Judo's principles have significantly influenced contemporary Japanese martial arts.

A critical aspect of judo training is kata, which consists of specialized movements designed to teach self-defense. Created by Jigoro Kano, kata conveys core concepts and provides a structured environment for practicing techniques. It encourages judoka to think creatively beyond randori, enabling them to explore various scenarios, including strikes and self-defense applications. Kata fosters innovation and adaptability, making it indispensable for a comprehensive martial arts education. Developing coordination and motor fitness through kata also enhances performance in other sports.

Regular physical activity is crucial for children's holistic development mentally, physically, socially, and spiritually. Well-structured PE programs in schools and colleges are essential to foster this growth. Physical activity has long been associated with improved well-being, vitality, and overall quality of life, contributing to both survival and peak performance.

Today, sports and physical activities engage a large portion of the population. Regular exercise enhances oxygen efficiency, reduces resting heart rates, and supports metabolic processes critical for sustained energy. An individual's fitness level determines their ability to perform efficiently and adapt to changing demands.

In high-performance sports like judo, motor fitness is vital for thriving under physical and mental pressure. Judo demands high-intensity motor activities and skills such as explosive leg power, balance, and coordination. Motor fitness, encompassing agility, balance, coordination, power, and reaction time, is the foundation for athletic excellence. Training these attributes ensures endurance, quick recovery, and mastery of intense physical activities, making motor fitness indispensable for success in judo and other sports.

Coordination in sports refers to the harmonious operation of body parts to execute complex motor tasks effectively and efficiently. It involves the ability to move fluidly, precisely, and with control during physical activities. Coordination encompasses both fine motor coordination precise movements involving small muscles and gross motor coordination, which involves whole-body movements using larger muscle groups. It is a fundamental aspect of skill execution, balance, and stability, enabling athletes to perform at their peak.

### **Eye-Hand Coordination**

Eye-hand coordination is the synchronization between visual input and hand movements, enabling tasks that require the simultaneous use of the eyes and hands. This skill involves processing visual information to guide actions such as reaching, gripping, or manipulating objects.

It is essential for activities demanding accuracy and timing, such as writing, typing, or playing a musical instrument. Eye-hand coordination combines fine motor skills precise movements of the hands and fingers with visual perception, the ability to interpret and respond to visual cues. This integration allows for precise interaction with the environment and enhances performance in tasks requiring dexterity.

This skill is critical for activities that require accurate footwork and quick decision-making based on visual signals. It plays a significant role in sports that involve kicking, dribbling, or precise foot placement, where coordination between the eyes and feet is essential for success. Eye-foot coordination supports effective movement and ensures optimal performance in dynamic environments.

This research aims to investigate the effect of Judo Kata training on the Co-ordination of college students aged 17 to 19, focusing on the topic: "The Effect of Judo Kata Training on the Co-ordination of Judo Players."

### **PURPOSE OF THE STUDY**

- To compare the adjusted Mean Scores of Eye-Hand Coordination of Judo Players of Experimental Group and Control Group by taking Pre Eye-Hand Coordination as Covariate.

### **HYPOTHESIS OF THE STUDY**

**H01:** There is no significant difference in the adjusted Mean Scores of Eye-Hand Coordination of Judo Players of Experimental Group and Control Group by taking Pre Eye-Hand Coordination as Covariate.

### **METHODOLOGY**

#### **Selection of Sample:**

A sample of sixty (n=70) male students of aging 17 to 19 years were identified as subjects from Prakash College, Kandivali (W).

#### **RESEARCH DESIGN: (NON EQUIVALENT CONTROL GROUP DESIGN)**

The experimental design consist of three phases: Phase I: Pre-test, Phase II: Training or Treatment, and Phase III: Post-test. The subjects were divided into two groups: one is Experimental Group and another is Control Group, with each group comprising 35 participants. The experimental group received Judo Kata Training five days a week for a total of 16 weeks.

#### **Dependent Variable:**

Eye-Hand Coordination

#### **Independent Variable:**

The Specific Judo Kata training was treated as the independent variable in this study.

#### **Tools/ Instruments**

The following criterion measure was included to record the reading of Eye-Hand Coordination.

| Variable      | Test                                       | Unit |
|---------------|--|------|
| Co-ordination | Eye-hand coordination test (Ball Transfer) | Time |

**Training Schedule:**

The following training schedule has followed.

| PARTICULARS        | DURATION          |
|--------------------|-------------------|
| Warming Up         | 10 minutes        |
| Judo Kata Training | 40 minutes        |
| Cooling down       | 10 minutes        |
| <b>Total</b>       | <b>60 minutes</b> |

The Following Specific Judo Kata Training has given for 16 week training.

| Sr. No | Nage No Kata (Forms of Throwing)             |  |
|--------|--|--|
| 1.     | Te Waza (Hand Techniques)                    | 1) Uki Otoshi (Floating Drop)<br>2) Seoi Nage (Shoulder Throw)<br>3) Kata Guruma (Shoulder Wheel)                                    |
| 2.     | Koshi Waza (Hip Techniques)                  | 1) Uki Goshi (Floating Hip)<br>2) Harai Goshi (Sweeping Hip)<br>3) Tsuru Komi Goshi (Lifting Pulling Hip)                            |
| 3.     | Ashi Waza (Foot Techniques)                  | 1) Okuri Ashi Harai (Double Foot Sweep)<br>2) Sasae Tsuru Komi Ashi (Lifting Pulling Foot Block)<br>3) Uchi Mata (Inner Thigh Throw) |
| 4.     | Ma Sutemi Waza (Rear Sacrifice Techniques)   | 1) Tomoe Nage (Stomach or Circle Throw)<br>2) Ura Nage (Back Throw)<br>3) Sumi Gaeshi (Corner Throw)                                 |
| 5.     | Yoko Sutemi Waza (Side Sacrifice Techniques) | 1) Yoko Gake (Side Hook)<br>2) Yoko Guruma (Side Wheel)<br>3) Uki Waza (Floating Throw)  |

**Statistics:**

Comparison of group was done with the help of One Way Analysis of Covariance (One Way ANCOVA).

**RESULTS AND DISCUSSION**

➤ **Treatment Wise Comparison Of Adjusted Mean Scores Of Eye-Hand Coordination By Taking Pre Eye-Hand Coordination As Covariate Of Judo Players Of Experimental Group And Control Group**

The first objective was to compare adjusted mean scores of Eye-Hand Coordination of judo players of experimental group and Control Group by taking Pre Eye-Hand Coordination as Covariate. The data were analyzed with the help of One Way ANCOVA and results are given in Table 1.

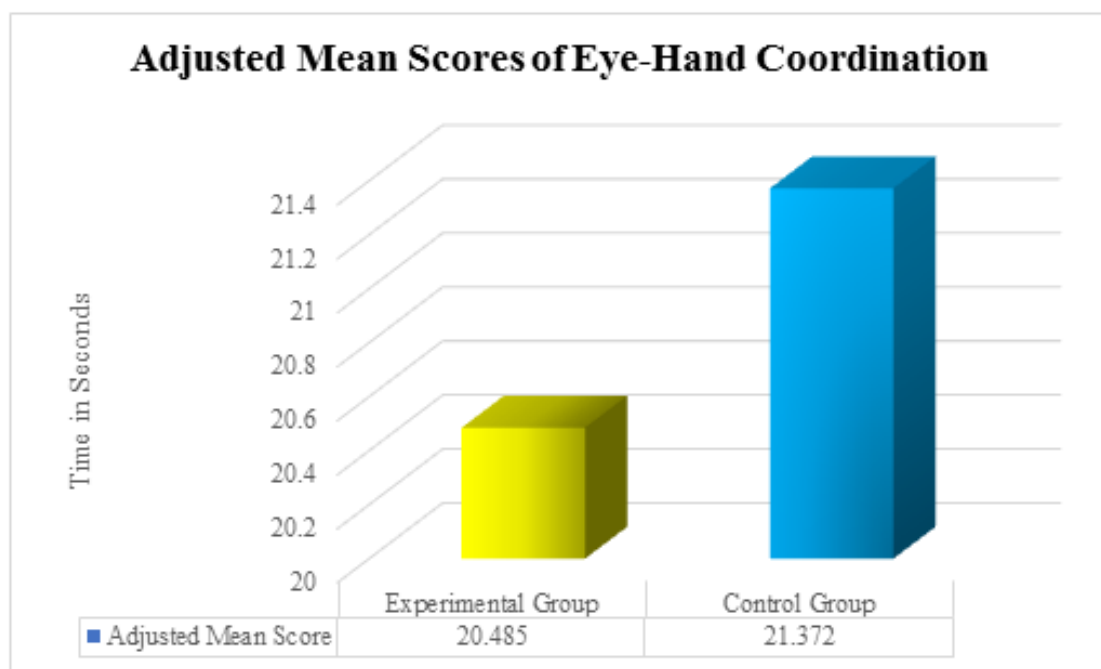
**Table 1** Summary of One Way ANCOVA of Eye-Hand Coordination by taking Pre Eye-Hand Coordination as Covariate

| Source of Variance | df | SSy.x   | MSSy.x | Fy.x  | Remark   |
|--------------------|----|---------|--------|-------|----------|
| <b>Treatment</b>   | 1  | 13.442  | 13.442 |       |          |
| <b>Error</b>       | 67 | 180.882 | 2.700  | 4.979 | P < 0.05 |
| <b>Total</b>       | 69 |         |        |       |          |

From Table 1. The adjusted F-value is 4.979 which is significant at 0.05 level with df=1/67 when Pre Eye-hand Coordination was taken as covariate. It shows that adjusted mean scores of Eye-hand Coordination of judo players of experimental group and control group differ significantly when Pre Eye-hand Coordination was taken as covariate. Thus, the Null Hypothesis that there is no significant difference in the adjusted mean scores of Eye-hand Coordination of Judo Players of Experimental Group and Control Group by taking Pre- Eye-hand Coordination as Covariate is rejected.



Further the adjusted mean score of Eye-hand Coordination of Judo Players of Experimental Group is 20.485 this is significantly lower than that of Control Group where adjusted mean score of Eye-hand Coordination is 21.372. It may, therefore, said that Judo Kata Training was found to be effective in improving Eye-hand Coordination of Judo Players of Experimental group than Control Group where Pre- Eye-hand Coordination was taken as covariate.



**Figure 1.** Comparison of Adjusted Mean Scores of Eye-Hand Coordination between Experimental Group and Control Group

## CONCLUSION

The results of this study indicate that Judo Kata training significantly enhances the eye-hand coordination of judo players in the experimental group. The findings suggest that the structured training regimen effectively contributes to improved eye-hand coordination skills, which are crucial for optimal performance in judo.

This improvement in coordination can be attributed to the specific movements and techniques practiced during Judo Kata, which emphasize coordination, body awareness, and stability. By engaging in this focused training, participants were able to develop greater control over their body mechanics, leading to enhanced performance in both competitive and practice settings.

Overall, the study underscores the importance of incorporating Judo Kata training into physical education programs for judo players. Such training not only benefits balance but also supports the development of other essential skills, contributing to the holistic growth of athletes.

## ACKNOWLEDGEMENT

The investigators would like to express their gratitude to the students who generously participated in this study. We also extend our thanks to the college authorities for granting permission to conduct this experiment.

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**THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE (EI) IN LEADERS AND ORGANIZATIONAL CITIZENSHIP BEHAVIOUR (OCB) AMONG EMPLOYEES**

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<sup>1</sup>Dr. Bageshree P. Bangera Bandekar and <sup>2</sup>Mr. Rishabh Rajan Desai

<sup>1</sup>Research Guide, Professor & I/C Principal, Valia College, D. N. Nagar, Andheri (W)

<sup>2</sup>Assistant Professor, Department of Commerce, Nirmala Memorial Foundation College of Commerce and Science, Kandivali (E). Research Scholar, Research Centre, DTSS College, Malad (E)

**ABSTRACT**

*This study explores the relationship between Emotional Intelligence (EI) in leaders and Organizational Citizenship Behaviour (OCB) among employees. As organizations increasingly emphasize leadership qualities beyond technical expertise, EI has emerged as a key factor influencing leadership effectiveness. OCB, voluntary Behaviours that go beyond formal job expectations, plays a significant role in enhancing organizational performance. Drawing upon secondary data from existing literature, this study synthesizes findings from previous research to examine how emotionally intelligent leadership fosters OCB in employees. The analysis reveals a moderate to strong positive correlation between EI in leaders and the exhibition of OCB among employees. Specifically, leaders with high EI are better able to foster trust, empathy, and effective communication, which encourages employees to engage in extra-role behaviours that contribute to a collaborative work environment. Furthermore, contextual factors, such as organizational culture and leadership style, significantly moderate this relationship. The study underscores the importance of developing EI competencies in leaders to enhance organizational effectiveness and employee engagement. By highlighting the link between EI and OCB, the research contributes to the broader understanding of leadership and organizational Behaviour in contemporary work settings. Future research should explore the impact of specific EI dimensions and investigate how cultural and industry contexts influence this relationship.*

**Keywords:** Emotional Intelligence (EI), Organizational Citizenship Behaviour (OCB), Leadership, Employee Behaviour

**I. INTRODUCTION**

In today's rapidly evolving organizational landscapes, leadership effectiveness is increasingly measured by a leader's ability to understand and manage emotions—both their own and those of others. This capacity, known as Emotional Intelligence (EI), encompasses self-awareness, self-regulation, motivation, empathy, and social skills. Leaders exhibiting high EI are better equipped to foster trust, collaboration, and a positive organizational culture.

Organizational Citizenship Behaviour (OCB) refers to discretionary, extra-role Behaviours that are not directly recognized by the formal reward system but collectively promote the effective functioning of the organization. These Behaviours include helping colleagues, being proactive, and demonstrating initiative.

The interplay between EI in leaders and the exhibition of OCB among employees is a critical area of study. While existing literature has explored these constructs separately, limited research has delved into how leaders' emotional competencies influence employees' voluntary Behaviours. This study aims to bridge this gap by examining the relationship between EI in leaders and OCB among employees.

**II. AIMS AND OBJECTIVES**

The research aims to provide a robust, comprehensive view of how Emotional Intelligence (EI) in leaders influences Organizational Citizenship Behaviour (OCB) among employees. To guide this study, the following objectives have been set:

1. To define and analyse the concept of Emotional Intelligence in the context of leadership.
2. To examine the concept and dimensions of Organizational Citizenship Behavior, and its role in enhancing organizational effectiveness.
3. To explore the relationship between EI and OCB, focusing on how emotionally intelligent leadership can foster OCB among employees.
4. To identify contextual or moderating factors such as organizational culture, leadership style, and work environment that might affect this relationship.
5. To provide practical recommendations for organizations to enhance EI in leadership as a strategy to encourage OCB.

### III. REVIEW OF LITERATURE

1. Goleman (1995) emphasized that EI is crucial for effective leadership, as it enhances communication, conflict resolution, and team dynamics. Emotional Intelligence (EI) in leadership involves the ability to recognize, understand, and manage emotions to facilitate interpersonal relationships and decision-making. Leaders with high EI are adept at perceiving emotional cues, regulating their own emotions, and responding empathetically to others.
2. Podsakoff et al. (2000) identified five dimensions of OCB: altruism, conscientiousness, sportsmanship, courtesy, and civic virtue. Organizational Citizenship Behaviour (OCB) encompasses voluntary actions by employees that contribute to the organizational environment but are not part of their formal job requirements. These Behaviours, such as helping colleagues and showing initiative, are vital for fostering a cooperative and productive workplace.
3. O'Boyle et al. (2011) revealed a moderate positive correlation between EI and OCB, indicating that individuals with higher EI are more likely to engage in OCB. Similarly, a study by Turnipseed (2018) found that EI positively influenced both OCB directed at individuals and the organization.
4. Mandell and Pherwani (2003) in a cross-cultural study, highlighted that EI's influence on OCB is stronger in collectivist cultures, where group harmony and cooperation are emphasized. The impact of EI on OCB may vary across different cultural and organizational contexts.

### IV. RESEARCH METHODOLOGY

This research study adopts a secondary data analysis approach, relying on existing literature and empirical studies to explore the relationship between Emotional Intelligence (EI) in leaders and Organizational Citizenship Behaviour (OCB) among employees. The basis for selecting secondary data is to produce insights from established research, enabling the identification of patterns and trends across different studies without the need for new primary data collection. This approach is particularly appropriate for understanding well-researched constructs like EI and OCB, allowing for a comprehensive overview of the topic.

#### 1. Data Collection

The data for this study was collected from peer-reviewed journal articles, meta-analyses, and academic books. The focus was on studies published in the last two decades, as these would reflect the most current understandings and research in the field. Sources were chosen based on their credibility, including journals such as the *Journal of Organizational Behaviour*, *Leadership & Organization Development Journal*, and *Academy of Management Journal*.

- **Inclusion Criteria:** Only studies that explicitly examined the relationship between EI in leaders and employee OCB were included. Studies that explored other forms of leadership, such as transformational leadership, were also considered if they made a clear connection between EI and OCB.
- **Exclusion Criteria:** Studies that focused solely on other leadership traits (e.g., charisma, power) without addressing EI were excluded. Furthermore, studies outside the context of organizational settings, such as those in non-profit or educational institutions, were also omitted unless they provided clear links to organizational outcomes.

#### 2. Data Analysis

This study analyzed secondary research to understand how Emotional Intelligence (EI) in leaders affects Organizational Citizenship Behaviour (OCB) among employees. Thematic coding was used to identify common patterns across different studies. Key emotional traits—like empathy, self-regulation, and social skills—were frequently mentioned as influencing positive employee behaviour. Studies showed that leaders with high EI create a supportive work environment where employees are more likely to help each other, take initiative, and show loyalty—key features of OCB. In cultures or organizations that value teamwork, the connection between EI and OCB was even stronger. The analysis also revealed that emotionally intelligent leaders help build trust and improve communication, which encourages voluntary, extra-role behaviours in employees. Overall, the data suggests that emotionally intelligent leadership fosters a workplace culture where OCB thrives. This highlights the importance of including EI in leadership development to improve teamwork, employee satisfaction, and organizational success. Key findings were:

| Theme                                 | Outcome of the Study   |
|---------------------------------------|--|
| Emotional Intelligence in Leaders     | Leaders who show empathy, emotional control, and social awareness are more successful in building strong teams.                          |
| Impact on Employee Behaviour          | Employees are more likely to help others, stay positive, and go beyond their job duties when their leaders are emotionally supportive.   |
| Organizational Environment            | A positive, respectful, and trust-filled work culture boosts the effects of EI and increases OCB.  |
| Cultural and Work Setting Differences | In team-oriented (collectivist) cultures or remote/hybrid work environments, emotionally intelligent leaders have an even bigger impact. |

**In this research, it was noticed that:**

1. Empathy and self-regulation in leaders were often linked to better employee behaviour. Leaders who demonstrate emotional awareness and empathy are more successful in inspiring voluntary behaviours like helping colleagues and taking initiative.
2. Employees tend to mirror the emotional tone set by their leaders, which influences organizational climate and behaviour.
3. EI impacts OCB both directly (through emotional engagement) and indirectly (through improved communication, trust, and support).

## V. SCOPE OF THE STUDY

**The study primarily focuses on:**

- **Leaders' Emotional Intelligence:** The EI of leaders was measured based on established scales like the Wong and Law Emotional Intelligence Scale (WLEIS), which evaluates self-awareness, self-regulation, motivation, empathy, and social skills. Studies that utilized validated measures of EI were prioritized.
- **Organizational Citizenship Behaviour (OCB):** The study considers OCB as defined by Podsakoff et al. (2000), encompassing Behaviours like altruism (helping others), conscientiousness (going beyond the minimum requirements), sportsmanship (avoiding negativity), courtesy (showing respect to others), and civic virtue (engagement in organizational governance).
- **Contextual Factors:** The study also takes into account contextual factors such as organizational culture (e.g., collectivist vs. individualist cultures) and the work environment to understand how these variables influence the relationship between leader EI and employee OCB.

## VI. SIGNIFICANCE OF THE STUDY

This study highlights the crucial role of emotionally intelligent leadership in fostering Organizational Citizenship Behavior (OCB) among employees. By understanding this relationship, organizations can enhance employee engagement, improve teamwork, and boost overall performance, offering practical insights for leadership development and creating more supportive, productive workplace environments. Also, as this study relies on secondary data, there are no direct ethical concerns related to data collection.

## VII. LIMITATIONS OF THE METHODOLOGY

While secondary data analysis provides a comprehensive view of existing research, it comes with certain limitations:

- **Lack of Primary Data:** Since this study does not involve the collection of new primary data, it may miss out on specific insights from unique contexts or industries.
- **Bias in Existing Studies:** The quality of the results is dependent on the robustness of the studies being reviewed. If some studies had biases or methodological flaws, it could affect the overall synthesis of findings.
- **Generalizability:** The findings of this research may not be entirely generalizable to all organizations or industries, particularly those outside the scope of the reviewed studies.

## VIII. RECOMMENDATIONS

Based on the comprehensive analysis of secondary literature, several key insights emerged regarding the influence of Emotional Intelligence (EI) in leadership on Organizational Citizenship Behavior (OCB) among employees. These findings inform the following recommendations for organizations seeking to cultivate a high-performing and collaborative workforce:

**1. Integrate Emotional Intelligence into Leadership Development Programs**

Research consistently shows a positive relationship between emotionally intelligent leaders and higher levels of OCB in employees. Leaders who demonstrate empathy, emotional regulation, and interpersonal awareness are better able to connect with their teams, inspiring voluntary, extra-role behaviours such as helping colleagues and showing loyalty to the organization. Therefore, organizations should incorporate EI training into leadership development to enhance leaders' ability to foster trust and collaboration.

**2. Promote a Culture of Reciprocity through Social Exchange**

Drawing on Social Exchange Theory, emotionally intelligent leadership encourages employees to reciprocate with OCB. When leaders treat employees with respect, fairness, and empathy, employees are more likely to respond with positive behaviours that benefit the team and the organization. Organizations should promote leadership practices that model these values and reinforce mutual respect.

**3. Encourage Transformational Leadership Practices**

The findings suggests that emotionally intelligent leaders are more likely to motivate and inspire employees to exceed expectations. Leaders should be encouraged to use inspirational communication, provide individual consideration, and foster a shared vision-key elements that have been shown to stimulate OCB among team members.

**4. Recognize and Reward OCB**

Although OCB is technically voluntary, recognizing and valuing such behaviours can reinforce a positive organizational culture. Leaders with high EI are more attuned to these subtle contributions and should be encouraged to acknowledge them regularly. Doing so helps to build morale and encourages others to follow suit.

**5. Create a Supportive Organizational Climate**

A psychologically safe and emotionally supportive work environment amplifies the effect of EI on OCB. Organizations should strive to create a culture where emotional awareness, open communication, and interpersonal support are prioritized. This kind of climate empowers emotionally intelligent leaders and encourages OCB as a norm.

**IX. CONCLUSION**

This study reaffirms the positive relationship between EI in leaders and OCB among employees, highlighting the critical role of emotional intelligence in effective leadership. Organizations should prioritize the development of EI competencies in their leaders to cultivate a workplace culture that encourages OCB, thereby enhancing overall organizational effectiveness.

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**EFFECT OF UP AND DOWN HILL RUNNING TRAINING PROGRAMME ON THE PERFORMANCE OF 100M RUN FOR BOYS AGED 12 TO 14 YEARS**

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**Mr. Rizwan Bashir Shah**

Phd Research Scholar

Bpcas College of Physical Education, Wadala Mumbai-400031

**ABSTRACT**

*The Objective of the study was to collect information about Effect of Up and Down Hill Running Training Programme on the Performance of 100m Run For Boys Aged 12 to 14 Years from South Mumbai. It was an experimental design study consisted of Controlled Group and Experimental Group. All the subjects were randomly selected from The New Era School, Mumbai Aged 12 to 14 Years Boys. Six weeks Up and Down Hill Running Training Programme was conducted for the Experimental Group. As per the design of the study, Pre and Post Data was collected from both the groups respectively. The collected data was analysed by t- test method of Statistical procedure. The t-value of the comparison mean between Pre and Post test of 100m Run was 0.54 which was significant at 0.05 level. It was concluded that Six weeks Up and Down Hill Running Training Programme was useful for improving 100m Run performance for Boys Aged 12 to 14 Years.*

**Keywords:** Up and Down Hill Running, 100m Run, Adolescence, Training Programme, Experimental Design.

**INTRODUCTION**

The purpose of the study is to collect scientific evidence in connection with the utility of up and down hill running in the promotion of speed as required for the athletic event namely 100m.

**OBJECTIVES OF THE STUDY**

The objective of the study was to find out whether 100m run performance can be improved with the help of up and down hill running.

**HYPOTHESIS**

HO<sub>1</sub> : Up & down hill running would not contribute to the 100m run performance

**LIMITATIONS**

While conducting the experiment, the research scholar could not control the food habits, health & the daily living style of the subjects involved in the study of both control as well as experimental group, as they were day scholars & had varied background.

**DELIMITATIONS**

Since the study has large scope for different age groups. It is therefore, decided to delimit the study to 6 weeks only for the boys aged 12 to 14 years of The New Era School, Kemp's Corner, Mumbai-400007 for the 100m run performance.

**SIGNIFICANCE OF THE STUDY**

The study will help the players, coaches and Research scholars to see the usefulness, effectiveness as well as utility of uphill & downhill running to improve speed & performance of the 100m athletic event. This study may give an opportunity and encouragement to the interested researchers to conduct further studies on hill running in relation with performance, fitness of the athletes and for the players participating in other games.

**METHODOLOGY****3.1 Research Design**

The researcher had chosen a parallel group design for conducting experiment.. This study consisted of one controlled group and the other experimental group. The experimental group received up and down hill running training, whereas controlled group organized before and after an experimental period of six weeks.

**3.2 Selection of subjects**

Subjects were pulled by using technique of Fisher's table random sampling, from the New Era School, Mumbai. The students represented the school in inter school athletics were selected. They were divided into groups consisting 20 subjects in each, viz. experimental and control group.

**3.4 Selection of variables and test****3.4.1 Dependent variables**

100m run.

**3.4.2 Independent variables**

Uphill and Downhill running.

**3.4.2(a) Up hill running**

The same leaning forward position as on the flat surface.

1. Run with shorter steps and a bit higher stride frequency.
2. The body weight must be on the balls of the feet and pull the feet from the ground under the hips.
3. Get comfortable with the perception of shorter stride length and with the necessity to increase the stride frequency.

**3.4.2(b) Downhill Running-**

1. Keep the body straight, just above the point of support on the ball of the foot as it on a flat surface as a running pose
2. Keep the feet strictly under the body and never extend them out or leave them behind.

The period of training was of six weeks. The subjects will be made to run up hill and downhill as per the training schedule i.e., mentioned in training period

**Training Schedule had been imparted as below**

|            |                 |
|------------|-----------------|
| 15 minutes | warm up         |
| 25 minutes | training period |
| 10 minutes | event practice  |
| 10 minutes | cool down       |

**3.5 Criterion measures**

100m performance in seconds and  $1/10^{\text{th}}$  of seconds.

**3.6 Description of test**

The following test was administered to the control and experimental group before and after the training period.

**3.6.1 100m run**

**Aim** - To measure the speed performance

**Equipment** -Whistle, stopwatch, Flags, 2 observers

**Procedure** - On your mark-At this command the athlete took their position on starting block.

**Set** - Athlete were ready to take a start.

**Clapper** - Clapper was clapped and runner completed the distance.

Observer took the performance in seconds and  $1/10^{\text{th}}$  of seconds.

**3.7 Procedure of the study**

The researcher selected 40 students from the New Era School, Kemps corner, Mumbai and they were divided into two equal groups.

**Group A-** Control group

**Group B-** Experimental group

**A) Pre test phase**

All the variables were measured by using all reliable equipment with the help of experts and score were recorded.

**B) Training phase**

| Phase | Load | Intensity | Recovery | Repetition |
|-------|------|-----------|----------|------------|
| I     | 50%  | 50m       | 8min     | 4          |
| II    | 75%  | 75m       | 5min     | 6          |
| III   | 100% | 100m      | 4min     | 8          |
| IV    | 50%  | 50m       | 8min     | 4          |



**C) Post test phase**

All the variables were measured by using all reliable equipment with the help of experts and score were recorded.

**3.8 Statistical analysis**

The data was recorded by using standard procedures. The data was analyzed by using 't' test as suggested by M.C Guigan for significance of difference. The analysis was done by SPSS 11.5 (software statistical package).

**CHAPTER IV****Presentation Analysis and Interpretation Of Data**

In this analysis of the data Table no.1 shows the comparison of mean between pre test and post test of the Control group. (Within group)

Table no.2 shows comparison of mean between pre test and post test of the experimental group. (Within group)

The comparison of mean gain in selected variables of the control group and experimental group have been presented in Table no.3

The detail statistical analysis of the data is as follows

**4.1 Result of yhe Selected Variables On The Control Group. (Within Group)**

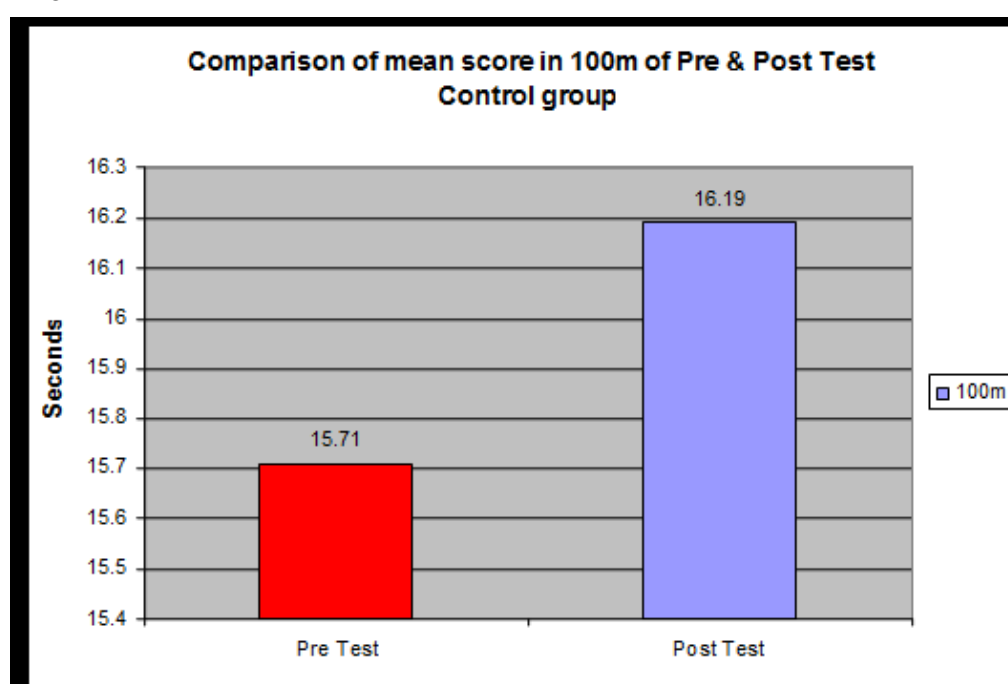
Table no.1 shows the comparison of mean between pre test and post test of the selected variables.

**Table-1**

| <b>Comparison of Mean in selected Variables. N=20 in each group (Control, Within Group)</b> |            |                   |                    |                 |                |      |              |
|---|------------|-------------------|--------------------|-----------------|----------------|------|--------------|
| Variables   | Score Unit | Pre-Test Mean+_SD | Post-Test Mean+_SD | Mean Difference | Standard Error | 't'  | Significance |
| 100m  | Sec.       | 15.71 (1.084)     | 16.19 (0.99)       | 0.11            | 0.21           | 0.54 | P<0.05       |

**4.1.1. Result of selected exercises on 100m run of Control group**

It is seen from Table no.1 that in the case of 100m the mean score of pre test and post test of the controlled group are 15.71 (1.08) and 16.19 (0.99) respectively, whereas the mean difference is -0.48 and 't' value of the same which is significant at 0.05 level.(P<0.05)

**Fig. 4.1**

**4.2 Result of Selected Variables on the Experimental Group. (Within Group)**

Table no.2 shows the comparison of mean scores between pre test and post test of the selected variables.

**Table-2**

| <b>Comparison of Mean in selected Variables. N=20 in each group(Experimental, (Within Group))</b> |            |                   |                    |                 |                |      |              |
|---|------------|-------------------|--------------------|-----------------|----------------|------|--------------|
| Variables   | Score Unit | Pre-Test Mean+_SD | Post-Test Mean+_SD | Mean Difference | Standard Error | 't'  | Significance |
| 100m  | Sec.       | 14.8705 (0.97)    | 14.1955 (1.01)     | 0.19            | 0.14           | 1.29 | P<0.05       |

**4.2.1. Influence of selected exercise on 100m run**

It is seen from Table no.1 that in the case of 100m the mean score of pre test and post test of the experimental group are 14.87 (0.97) and 14.19 (1.01) respectively, whereas the mean difference is 0.19 and 't' value of the same which is significant at 0.05 level.(P<0.05)

The above results have been also represented graphically

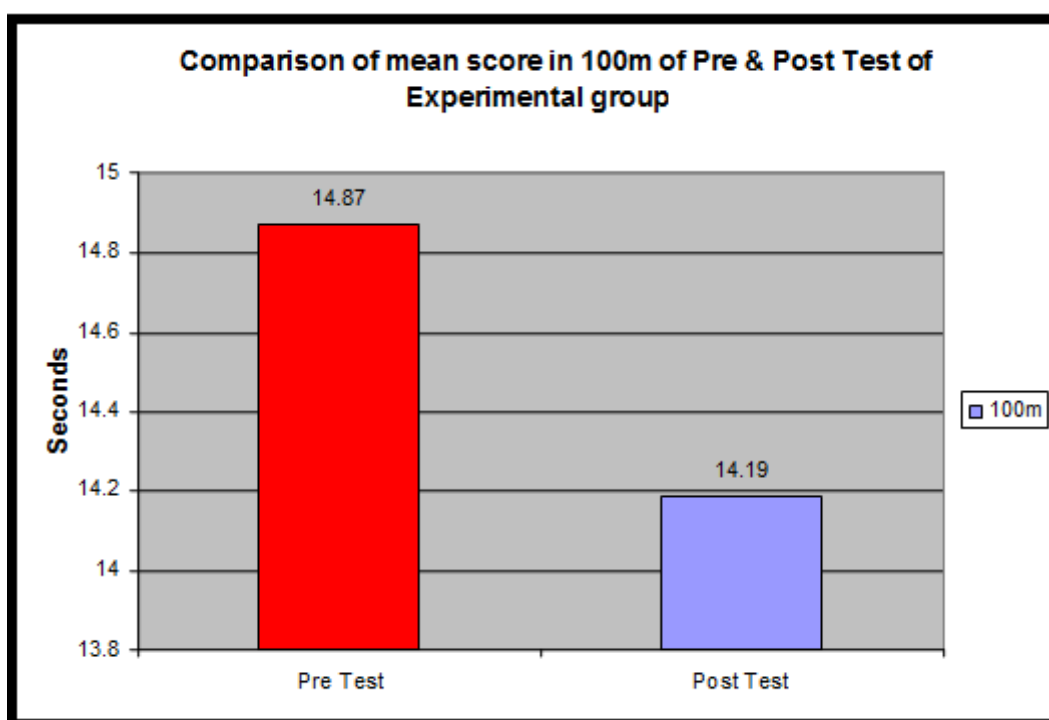
**Fig. 4.4****4.3 Comparison Of Results Of Selected Variables Between the Control And Experimental Group. (Between Group)**

Table no.3 shows the comparison of mean gain in selected variables between control group and experimental group. (Between group)

**Table-3**

| <b>Comparison of Mean(Gain) in selected Variables between Control and Experimental Group (Between Group)</b> |                         |                  |                 |                          |       |              |
|--|-------------------------|------------------|-----------------|--------------------------|-------|--------------|
| Variables  | Group Compared          | Mean Gain        | Mean Difference | Standard Error Mean Gain | 't'   | Significance |
| 100m   | Control Vs Experimental | 0.1150<br>0.1835 | 0.685           | 0.25433                  | 0.269 | P>0.05       |

**4.3.1.** It is seen that from the table 3 that in case of 100m that the mean gain of the control group and experimental group is 0.1150 and 0.1835 respectively, whereas the difference in mean gain of both group is 0.0685 which is not in favor of control group, whereas the 't' values of the same is 0.269 which is not significant at 0.05 level.

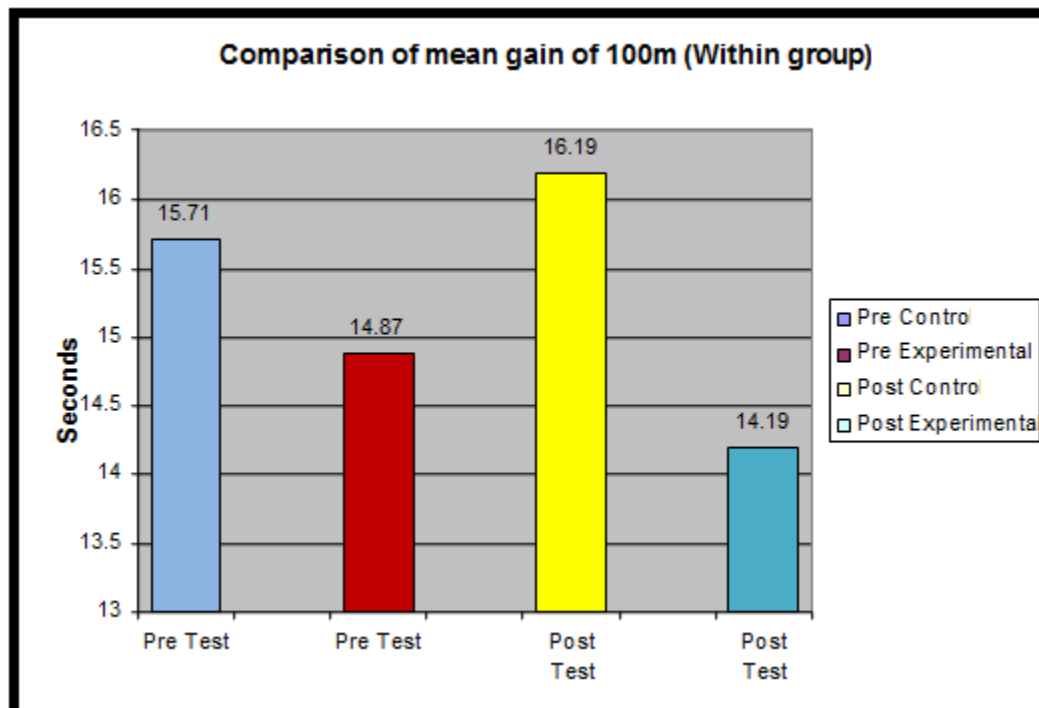


Fig. 4.7

The above result are also graphically represented in fig. 4.1,4..2.....

#### 4.3 Discussion on results

The analysis of data reveals that the Experimental group has improved in 100m, within group significantly. Also the comparison between the Experimental and the controlled group shows that the Experimental group improved significantly in 100m. The probable reason behind this was the up hill and down hill running training program was proper for the improvement in the above Performance test. The selected exercise might lead to the improvement in 100m of the Experimental group who had undergone of training programme. The training intervention composed of up hill and down hill running training might have helped to improve the selected performance variable of the Experimental group. Regarding the 100m improvement is statistically significant though there is little improvement in the variable in Control group i.e. 100m run, but not statistically significant.

It is seen the significant improvement in 100m the positive result in turn rejected the null hypothesis  $H_{01}$ . Various research reports in the area of exercise and physical fitness revealed that training of up hill and down hill running has a good effect on the performance factors. A systematic training of training can improve 100m run performance.

Training contributes to take care of ones Performance, skill, co-ordination. The result of present study is also in agreement of with various findings related to up hill and down hill running training. Therefore it can be interpreted that the result obtained in the present study has real significances with special reference to performance.

### CHAPTER V - SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 SUMMARY

Sports represent the human culture. Sports are generally classified as a part of our culture in different ways in several areas. e.g. Sports performance, physical education, rehabilitation sports, fitness and leisure sports, adventure sports, etc, each area of sports caters to the requirements and demands of particular sections of his society and importance then the area. The principal aim of performance sports is to prepare sports person for giving high sports performances.

Coaches and physical educationist today are continuously confronted with the task of improving the performance of the players with the help of specialized training in athletics, games and sports. For achieving high level of performance at national and international levels, the systematic training and conditioning of players play a vital role.

The status in athletics reveals an upward trend in the performance, which clearly indicates that physical educationist, and coaches have been working hard in the field of research to find new methods of training so as to maintain players on top for a long period of time by achieving peak performance.

The present study aims to find whether athletic performance can be developed with the help of up hill and down hill running training programme.

The investigator is of the opinion that the quality of traditional training has to be radically altered to enable or to attain consistency of peak performance for long period. various training methods had been used for the improvement of the performance, they are interval, weight training, fartlek, etc. however, regarding the efficiency of up hill and down hill running training may have better significance for enhancing top performance of an athlete. This assumption has difference of opinion and infact it has no real experimental evidence especially for the Indian athletes. Therefore, the research problem, **“A Study Of Effect Of Up And Down Hill Running Training Programme On The Performance Of Selected Athletic Events For Boys Aged 12 To 14 Years”** has been studied with the following **objectives** to conduct.

1. To study whether performance can be improved with the help of up and down hill running
2. To study the utility of hill running in the performance of 100m run.
3. To study the utility of hill running in the performance of 200m run.
4. To study whether up hill and down hill running can improve the performance of the athletes in running broad jump.

The present researcher formulated the following hypothesis which can be tested satisfactory:

**HO<sub>1</sub>** Up & down hill running does not contribute to the 100m run performance. Thus, the hypothesis is rejected

#### **The study was conducted because**

The findings of the study may be helpful to know the effectiveness as well as utility of hill running for the promotion of speed and performance.

This type of study will help the coaches to see the usefulness of uphill & downhill running to improve speed & performance of the athletic events such as 100m.

This study may give an opportunity and encouragement to the interested researchers to conduct further studies on hill running in relation with performance, fitness of the athletes and for the players participating in other games.

The findings of the present study may be helpful to the sports researcher, scholars, players and coaches to understand the utility of up and down hill running programme while preparing athletes.

The study may help physical educators and coaches to prepare the appropriate training programme by incorporating up and down hill running training programme.

The study may give appropriate opportunity and encouragement to the interested personnel to conduct further studies.

The researcher uses simple random group design in the present study. The subjects were randomly assigned into two groups. One group has been designed as treatment group and one as control group. The subjects were examined by pre and post test methods.

Subjects were pulled by using technique of Fisher's table random sampling, from the New Era School, Mumbai. The students represented the school in inter school athletics were selected.

They were divided into groups consisting 20 subjects in each, viz. experimental and control group.

## **5.2 CONCLUSION**

This study within limitations warrants the following conclusion Regular exposure of exercise involved in up and down hill running for the period of six weeks can significantly improve the overall performance.

## **5.3 RECOMMENDATIONS**

1. The study recommends that up and down hill running training can be used as a suitable means to improve the performance of athletes.
2. This type of study can be given to women and youth boys athlete.

- 
3. This type of study can be given for long distance runners.
  4. It is recommended that further studies be conducted to verify these results using perhaps a longer period of up and down hill running training with greater practice session per day. Thus, great need of additional studies is emphasized.
  5. This type of study can be incorporated in the schedule of sports training for the better results.

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**FORENSIC SCIENCE IN TRANSITION: LEGAL CHALLENGES AND THE EVOLVING  
CRIMINAL JUSTICE LANDSCAPE IN INDIA**

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**<sup>1</sup>Shivani Goyal and <sup>2</sup>Dr. Suneeta Bhadoo**<sup>1</sup>(LL.M, D.F.S.Ph.D. Scholar)<sup>2</sup>(LL.m, Ph.D.)**ABSTRACT**

*Forensic science in India stands at a critical juncture, evolving rapidly in response to technological advancements, shifting legal standards, and increasing demands for accuracy in criminal investigations. This paper explores the transitional phase of forensic science within the Indian criminal justice system, analysing its growing significance, the legal and institutional challenges it faces, and the implications for law enforcement, judiciary, and policy making. While forensic techniques offer promise in enhancing the credibility and efficiency of criminal proceedings, systemic issues such as lack of standardization, insufficient infrastructure, training deficits, and the admissibility of scientific evidence continue to hinder its potential. The paper also examines recent judicial pronouncements and legislative efforts aimed at integrating forensic science more effectively into the investigative and adjudicative processes. By critically evaluating current practices and identifying key areas of reform, this study aims to contribute to the development of a more robust, transparent, and science-driven criminal justice system in India.*

**I. INTRODUCTION**

In the contemporary landscape of criminal justice, traditional methodologies are undergoing significant metamorphosis, prompting critical legal inquiries. The rise of forensic science in India signifies an intersection where empirical investigation meets evolving legal standards, creating both opportunities and challenges. As law enforcement agencies increasingly rely on advanced technologies, such as biometric-enabled intelligence and cybersurveillance, the legal framework must adapt to safeguard constitutional rights. Notably, the integration of biometric databases raises substantial concerns regarding privacy and civil liberties in an era defined by extensive data sharing among various agencies. The complexities introduced by these advancements signal a pressing need for reinforced statutory protections under frameworks like the Posse Comitatus Act, which seeks to separate military intelligence operations from domestic law enforcement (Hu et al.). Thus, the pressing question remains: are India's legal structures equipped to manage the implications of this forensic evolution while ensuring justice and equitable rights for all citizens? (Hu et al.)

One of the most rapidly evolving areas is **digital forensics**, which now encompasses advanced data recovery methods and the ability to analyze evidence from cloud storage and mobile devices. This field is essential in addressing cybercrime, offering the capability to reconstruct digital behavior and trace electronic footprints. However, these innovations also raise complex issues related to privacy and the ethical boundaries of digital evidence collection.

Similarly, **fingerprint analysis** has seen considerable progress, particularly through the integration of technologies such as Automated Fingerprint Identification Systems (AFIS), chemical enhancement methods, and 3D imaging. These tools have enhanced the speed and accuracy of fingerprint identification, enabled the recovery of prints from challenging surfaces, and strengthened the evidentiary value of fingerprints in judicial proceedings.

The examination of trace evidence—such as fibers, paint fragments, and other microscopic materials—has been significantly enhanced by advances in microscopy and the development of sophisticated spectroscopic techniques like Raman spectroscopy and Fourier-transform infrared (FTIR) spectroscopy. These innovations have greatly improved the capacity to connect individuals to crime scenes by providing more precise and comprehensive analyses of residual materials. Likewise, **forensic toxicology** has experienced notable progress, especially through the use of high-resolution mass spectrometry. This technology enables the detection of designer drugs and emerging psychoactive substances with greater accuracy, allowing forensic experts to stay ahead of evolving trends in substance use and poisoning cases. **Forensic anthropology** and **archaeology** have seen considerable advancement through the integration of modern technologies such as 3D scanning and printing of skeletal remains, enhanced dating methods, and sophisticated facial reconstruction software. These innovations have significantly improved the identification of human remains, estimation of the post-mortem interval, and the resolution of previously unsolved cases. Similarly, **ballistics and firearm analysis** have evolved with the adoption of 3D imaging for bullet striation patterns and automated comparison systems.

These developments have increased the accuracy of matching bullets to firearms while also accelerating the examination and processing of ballistic evidence.

Despite significant advancements, forensic science continues to face notable challenges and controversies. One of the central concerns is the **admissibility of forensic evidence in legal proceedings**, particularly in relation to the **Daubert and Frye standards**, which govern the scientific credibility of expert testimony. Questions about the **reliability and consistency** of certain forensic methods remain unresolved, fueling ongoing debates within the legal and scientific communities. Ethical concerns—especially those involving **privacy issues related to DNA databases**—are also becoming increasingly prominent. Striking a balance between **ensuring public safety** and **protecting individual privacy rights** has emerged as a critical legal and ethical dilemma.

#### A. Overview of Forensic Science and its Importance in the Criminal Justice System

The evolution of forensic science has significantly transformed investigative practices within the criminal justice system, offering unprecedented methodologies for evidence collection and analysis. As societal complexities rise, especially in densely populated regions like India, the need for reliable forensic techniques has become paramount. Sophisticated tools such as DNA analysis and fingerprinting not only assist in identifying victims, particularly in cases of human trafficking and violent crimes, but also play a crucial role in delivering justice by accurately linking suspects to crimes. This necessity is underscored by the historical challenge of wrongful convictions, where reliance on forensic evidence could help mitigate misjudgments. As noted, procedures surrounding claims of innocence are evolving, reflecting a broader commitment to justice that acknowledges the value of newly discovered evidence (Garrett et al.). Particularly in the context of mass disasters, the contributions of forensic science in victim identification are invaluable, highlighting its essential role in the criminal justice landscape (Dr. Joseph C et al.).

The transformative potential of forensic innovations in enhancing law enforcement, criminal investigations, and judicial processes has been widely acknowledged. A landmark moment in the field came in 2009 with the publication of the **National Academies of Sciences (NAS) report**, titled *"Strengthening Forensic Science in the United States: A Path Forward."* Regarded as one of the most influential documents of the 21st century in shaping the future of forensic science, the report, though focused on the U.S., has had a **global impact**.

The NAS report brought to light several critical challenges, including **excessive caseloads, limited funding, poor quality control**, and a **lack of scientific rigor** in many commonly used forensic techniques and practices across state laboratories. Its release triggered significant public discourse and drew mixed reactions from the forensic community, with some professionals responding defensively. This response deepened the **divide between academic researchers and field practitioners**, contributing to a broader skepticism surrounding the reliability of forensic science.

Moreover, the report pointed out a notable **lack of strategic focus** on integrating emerging scientific techniques and technologies into routine forensic practice. This gap has hindered the full realization of forensic science's potential in **solving crimes more efficiently and improving judicial outcomes**.

In the UK, conferences like the one-day event on "The Future of Forensic and Crime Scene Science" in 2006 gathered forensic professionals to discuss how to shape the field amidst scientific advancements. A third era of change was predicted, with a focus on customer needs, such as faster service, better quality, and lower costs. However, the conference did not thoroughly explore emerging scientific and technological innovations, such as mobile forensic instruments, lab-on-a-chip technologies, and expanded use of DNA and biometrics.

Around the same time, the Netherlands Forensic Institute (NFI) was grappling with several issues, including a growing demand for forensic services without an increase in expert capacity. This led to a massive backlog, with an average case processing time of 140 days. NFI's main clients, the criminal justice system, criticized the institute as bureaucratic and out of touch. A political debate emerged on whether the forensic market should be opened to other laboratories to address the workload. Although the quality of forensic work was never questioned, it was clear that more was needed for NFI to thrive. In response, NFI launched an improvement program, implementing Lean Six Sigma principles to reduce.

**Judicial outcomes have significantly benefited** from the integration of advanced forensic evidence, leading to more accurate and dependable convictions. The use of **cutting-edge visualization tools** enables juries to better comprehend complex scientific data, while the adoption of **scientifically validated methods with measurable error rates** has enhanced the credibility of forensic testimony in courtrooms.

These developments have also played a crucial role in the **exoneration of wrongfully convicted individuals**, with post-conviction applications of **DNA analysis, advanced ballistics, and digital forensics** leading to the overturning of numerous unjust verdicts.

Additionally, progress in **forensic psychiatry** and **toxicology** has contributed to more precise sentencing by providing in-depth assessments of a defendant's **mental health** and **substance use** at the time of the offense. In the digital age, **cyberforensic evidence** frequently uncovers intent, further aiding judges and juries in making informed sentencing decisions.

Beyond the courtroom, forensic advancements also serve as a **powerful deterrent to crime**. The widespread knowledge that modern forensic techniques make it increasingly difficult to eliminate all traces of evidence may discourage criminal behavior. Moreover, **long-term evidence preservation** allows for the re-examination of cases as technologies advance. The ability to **rapidly identify and apprehend suspects** through forensic databases not only strengthens investigations but also promotes **public safety** by enabling law enforcement to detect and address criminal patterns at an early stage.

**Environmental forensics** play a crucial role in identifying and mitigating large-scale public health risks, thereby contributing to the overall well-being and safety of communities. Moreover, the use of **credible and scientifically grounded forensic evidence** enhances public confidence in the justice system. Greater transparency in forensic procedures and a reduction in wrongful convictions help reinforce perceptions of fairness, accountability, and integrity within legal proceedings.

Other specialized areas of forensic science—such as **forensic medicine, cybercrime investigation, and environmental forensics**—have likewise experienced significant benefits from technological advancements. In forensic medicine, improvements in **autopsy procedures, toxicological analysis, and medical imaging** have led to more accurate determinations of cause and manner of death. In the realm of cybercrime, **network forensics** and tools for **cryptocurrency tracking** have become essential for investigating digital offenses and financial fraud.

Meanwhile, environmental forensics now aid in detecting **ecological crimes and pollution sources**, playing a key role in environmental protection. **Wildlife forensics** supports efforts to combat the illegal trade of endangered species by providing scientific evidence to enforce conservation laws. Similarly, advancements in tracing the **origin and distribution of illicit drugs** have enhanced law enforcement's ability to address substance-related criminal activity more effectively.

## II. CURRENT STATE OF FORENSIC SCIENCE IN INDIA

The landscape of forensic science in India is undergoing a significant transformation, driven by both technological advancements and evolving legal challenges. As forensic methodologies become increasingly sophisticated, the gap between scientific capability and legal application remains a critical concern. For instance, the lack of standardized protocols across laboratories often leads to inconsistencies in forensic evidence, hindering the pursuit of justice. Furthermore, the integration of digital technologies raises questions about data protection and the ethical handling of sensitive information, particularly given the vulnerabilities highlighted by existing regulations like Law Number 27 of 2022 Concerning Personal Data Protection. This legal framework, while foundational, reveals substantial shortcomings in safeguarding personal data from criminal exploitation, thereby complicating forensic investigations in the digital age. Such challenges underscore the necessity for a cohesive strategy that aligns scientific rigor with legal standards, as advocated by initiatives like the Sydney Declaration, which emphasizes the importance of understanding forensic traces as pivotal in addressing societal issues (Fernandes L et al.), (Enggarsasi et al.).

### A. Technological Advancements and Their Impact on Forensic Investigations

The evolution of scientific methods has fundamentally altered the landscape of forensic investigations, enhancing their precision and reliability. Innovations such as artificial intelligence and machine learning have revolutionized techniques like forensic voice analysis, improving accuracy in identifying speakers and assessing authenticity in audio evidence. Technologies like Layered Voice Analysis (LVA) provide insights into emotional cues and speaker identity, aligning with international legal standards for admissibility in court. Furthermore, the integration of advanced statistical methods, such as Bayesian analysis, offers nuanced approaches to interpreting evidence, even amid challenges like voice alterations due to illness. These advancements not only bolster the scientific rigor behind forensic evidence but also underscore the critical need for continuous research and development in forensic methodologies. As sciences credibility and systematic approach contribute to achieving justice, embracing these enhancements will be vital for a more equitable judicial system in India (Chaudhary et al.), (Iqbal MW et al.).



### III. CHALLENGES IN THE LEGAL INTEGRATION OF ADVANCED FORENSIC TECHNIQUES IN INDIA'S CRIMINAL JUSTICE FRAMEWORK

In an era where technological advancements radically transform criminal investigations, the intersection of forensic science and legal frameworks presents significant challenges. The emphasis on rapid technological innovation often outpaces the legal systems designed to govern its use, leading to contentious issues regarding the admissibility of forensic evidence in court. For instance, while international norms guarantee a fair trial, they do not adequately address the complexities of post-trial claims of innocence, particularly when new forensic evidence surfaces, illuminating systemic flaws in earlier convictions (Garrett et al.). Moreover, the rise of cybercrime introduces traditional offenses into the digital realm, further complicating the legal landscape and necessitating updated methodologies for evidence collection and analysis (McDaniel et al.). These challenges underscore the urgent need for a re-evaluation of existing legal frameworks to ensure that the application of forensic science is both reliable and just within the evolving context of the criminal justice system.

Crime has existed since the inception of human civilization, evolving in tandem with societal development. As civilizations have progressed, so too have the methods and complexities of criminal activity. The 20th century marked a turning point, characterized by rapid advancements in science and technology that transformed nearly every aspect of life, including criminal behavior. These technological breakthroughs have redefined how crimes are committed, increasingly influenced by digital connectivity, instantaneous communication, heightened privacy concerns, and widespread access to technology—particularly computers. Modern criminals now harness the power of cutting-edge research and sophisticated tools, thereby expanding the scope of traditional offenses and giving rise to entirely new forms of crime.

In the current landscape, crime has largely transitioned into the digital domain, with cybercrime and technology-enabled offenses becoming increasingly prevalent. In such cases, traditional investigative tools—such as eyewitness testimonies, confessions, and statements from standard witnesses—are often insufficient. Witnesses may be unwilling or unavailable, confessions are more difficult to secure, and constitutional protections, such as the right to privacy and the right against self-incrimination, create further legal barriers. Moreover, in complex or highly organized criminal networks, approvers or cooperative witnesses may be absent altogether. As a result, the role of scientific evidence has become paramount. It offers objectivity, consistency, and universal reliability. Forensic science, which involves the scientific collection, preservation, and analysis of physical evidence, has thus become an indispensable part of the legal process.

The increasing complexity of crime, coupled with a noticeable decline in police investigation efficacy and conviction rates, underscores the urgent need for modern investigative approaches. Falling arrest rates suggest that traditional reliance on an officer's intuition and field experience is no longer adequate. In today's legal and societal climate, there is diminishing tolerance for overly punitive policing methods or investigative shortcuts. Emphasis has shifted toward protecting human rights and ensuring that law enforcement practices align with contemporary standards of justice and accountability.

Investigating modern crimes requires not only technical expertise but also intellectual discipline and ethical rigor. Effective investigators must possess a deep understanding of forensic concepts and remain objective, free from preconceived notions. Upholding neutrality and a commitment to truth-seeking is essential, as investigators play a critical role in ensuring fairness and accuracy within the criminal justice system.

**Forensic science has emerged as a vital instrument in the pursuit and administration of justice.** The integration of modern technologies—such as computers, photography, videography, advanced surveillance devices, and specialized search tools—has become essential for conducting thorough and effective investigations. A range of scientific techniques, including **fingerprint analysis, DNA profiling, brain mapping, narco-analysis, lie detection, cheiloscropy, and rugoscopy**, have been developed to enhance the investigative process and provide objective evidence.

#### A. Issues of Admissibility and Reliability of Forensic Evidence in Court

The judicial landscape often grapples with the complexities surrounding the admissibility and reliability of forensic evidence, particularly as new technologies emerge. For instance, while DNA and fingerprint analysis have become stalwarts in criminal investigations, the legal framework governing forensic modalities such as lip prints and voice identification remains murky, leading to challenges in their application in court. Notably, contemporary cases like the ongoing investigation into the death of Ghanaian politician Mr. J. B. Danquah highlight the untapped potential of impression-related evidence despite its underutilization in the courtroom, suggesting that legal practitioners must be vigilant about evaluating such evidence to prevent miscarriages of justice (Abedi et al.). Moreover, advancements in forensic acoustics, including technologies like Layered Voice

Analysis and AI-enhanced voice recognition, illustrate the need for evolving legal standards to accommodate these emerging methods, thereby addressing inconsistencies in voice sample admissibility (Chaudhary et al.).

#### Chain of Custody Concerns

- Maintaining a **continuous and documented chain of custody** is fundamental to preserving the integrity of forensic evidence. In India, procedural lapses—such as improper **collection, handling, storage, or transport** of evidence—frequently give rise to allegations of **tampering or contamination**, which can ultimately lead to the exclusion of such evidence during trial.
- The issue is even more pronounced in the context of **digital evidence**, where the integrity of data depends on secure **extraction, preservation, and analysis** protocols. While the **Information Technology Act, 2000** provides a legal foundation for handling electronic evidence, inconsistent implementation and lack of specialized training often undermine the reliability and **admissibility** of digital forensic findings in court.

#### Privacy and Data Protection

- The establishment of **DNA databases** for use in criminal investigations, while potentially beneficial for law enforcement, has raised significant concerns regarding **individual privacy rights**. The **DNA Technology (Use and Application) Regulation Bill, 2019** has come under criticism for its **inadequate safeguards** related to data collection, storage, and misuse, prompting legal debates over its **compliance with privacy norms**.

#### Technological and Resource Gaps

- **Disparities in Forensic Infrastructure:** India's forensic capabilities vary widely across regions, resulting in **limited access to advanced forensic technologies** in many areas. This uneven distribution contributes to inconsistencies in the application of forensic science, potentially leading to **inequities in legal proceedings and outcomes**.

- **Privacy and Data Protection**

The development of **DNA databases** for criminal investigations, while offering significant advantages for law enforcement and crime resolution, has also triggered serious concerns regarding **individual privacy rights**. The **DNA Technology (Use and Application) Regulation Bill, 2019** has been widely criticized for lacking robust mechanisms to ensure the **secure collection, storage, and use** of genetic data. These shortcomings have sparked ongoing legal debates about the bill's alignment with **constitutional privacy standards**.

#### A. The Future of Forensic Science and Its Role in Shaping Criminal Justice in India

The intersection of law enforcement and technological advancement is becoming increasingly vital in addressing contemporary criminal justice issues in India. This evolving landscape emphasizes the need for incorporating modern forensic science into traditional investigative practices. The recent introduction of legislative frameworks like the Bharatiya Nyaya Sanhita (BNS), 2023, reflects a significant shift towards modernizing the legal structure to better handle digital evidence amidst rising cybercrime. As (Singh S et al.) notes, these reforms aim to streamline the collection and prosecution processes for cyber offenses, which are becoming more prevalent. Simultaneously, forensic innovations, including digital evidence analysis and advanced techniques such as narco-analysis and polygraph tests, are reshaping the methodologies employed by law enforcement. However, as highlighted in (Singh AK et al.), these advancements also raise ethical concerns regarding privacy and self-incrimination, necessitating a delicate balance between effective law enforcement and the protection of civil liberties in India.

#### IV. CONCLUSION

The evolving integration of forensic science into India's criminal justice framework heralds significant advancements, albeit accompanied by intricate legal challenges. As the nation grapples with the need for modernization in investigative practices, the adoption of scientific methods such as digital evidence analysis and bloodstain pattern recognition has proved indispensable for enhancing the accuracy of crime solving (Singh AK et al.). However, the legal implications of these innovations necessitate critical examination, particularly concerning privacy rights and self-incrimination. Moreover, emerging fields like forensic nursing illustrate the potential for interdisciplinary collaboration that addresses both victim care and legal processes, ultimately aiming for a more just system (Jaiswal A et al.). This synergy between forensic science and law emphasizes a pivotal transition, fostering an environment where technological advancements enhance not just the efficiency of investigations, but also the broader pursuit of justice in a rapidly changing legal landscape.

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**UTILITARIANISM VS. DEONTOLOGY IN HR DECISION-MAKING: A COMPARATIVE ANALYSIS OF ETHICAL FRAMEWORKS**

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**<sup>1</sup>Dr. Hiresih Luhar and <sup>2</sup>Mr. Shivprasad M. Kurhade**

Director, Viva College

**ABSTRACT**

*Human Resource Management (HRM) frequently faces ethical dilemmas where decision-makers must balance competing interests. This paper examines how utilitarianism (maximizing overall good) and deontology (duty-based ethics) influence HR policies and practices. Through a comparative analysis, we explore real-world HR scenarios—such as layoffs, hiring biases, and workplace surveillance to assess which ethical framework offers more coherent guidance. Drawing on philosophical theories and empirical HR studies, we argue that while utilitarianism aligns with strategic business outcomes, deontology better protects employee rights and dignity. The study concludes with recommendations for integrating both frameworks to achieve ethically balanced HR decision-making.*

**Keywords:** *Utilitarianism, deontology, HR ethics, ethical decision-making, employee rights, organizational justice*

**1. INTRODUCTION**

Human Resource Management (HRM) operates at the intersection of organizational strategy and human well-being. HR professionals are tasked with making complex decisions that impact not only the functioning and competitiveness of organizations but also the lives and dignity of employees. Whether it is implementing performance management systems, restructuring teams, handling disciplinary procedures, or ensuring workplace diversity and inclusion, ethical considerations are inherent in nearly every HR decision.

Amidst the evolving business landscape, especially in the age of globalization, technological advancement, and heightened awareness of social justice, ethical decision-making has become an indispensable component of responsible HR practice. Ethical dilemmas in HR often involve conflicting obligations to shareholders seeking profitability, to employees seeking fairness, and to society demanding accountability. As such, HR managers need a strong ethical compass to navigate these situations with integrity and clarity.

Two dominant ethical frameworks have been widely applied to guide decision-making in such contexts: utilitarianism and deontology.

- **Utilitarianism**, as articulated by philosophers Jeremy Bentham and John Stuart Mill, is a consequentialist theory that emphasizes maximizing overall happiness or benefit. From this perspective, an HR decision is considered ethical if it results in the greatest good for the greatest number. For instance, laying off a small number of employees may be justified if it prevents the bankruptcy of the company and safeguards the jobs of the remaining workforce.
- **Deontology**, founded on the philosophy of Immanuel Kant, adopts a duty-based approach. It posits that actions are morally right or wrong based on adherence to universal moral principles, regardless of the outcomes. For example, a deontologist would argue that employees have a right to be treated fairly and with dignity, and this duty must be upheld even if doing so is costly for the organization.

These two frameworks offer contrasting yet valuable ethical lenses for evaluating HR practices. While utilitarianism aligns more closely with outcome-driven business strategies, deontology emphasizes intrinsic human rights and moral duties. Understanding the implications of both approaches is critical for creating ethically sound HR policies and maintaining organizational legitimacy. This paper undertakes a comparative analysis of utilitarianism and deontology within the domain of HRM. Specifically, it aims to answer the following research questions:

1. How does each approach justify HR policies?
2. Which framework better resolves ethical conflicts in HR?
3. Can a hybrid model balance efficiency and ethics?

By analyzing these questions, this research seeks to contribute to the broader discourse on business ethics and provide actionable insights for HR practitioners who strive to align organizational goals with ethical principles.

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## 2. LITERATURE REVIEW

The ethical landscape of Human Resource Management (HRM) has been extensively explored through various philosophical and empirical lenses. Among the dominant frameworks shaping ethical decision-making in HR are utilitarianism and deontology each offering distinct interpretations of what constitutes a morally sound course of action. This section reviews the conceptual underpinnings and practical implications of both frameworks in HRM, along with relevant empirical studies that reveal their impact on organizational outcomes.

### 2.1 Utilitarianism in HRM

Utilitarianism, as a consequentialist theory, asserts that actions are ethically justified if they produce the greatest benefit for the greatest number of people. In HRM, this translates to decisions that enhance overall organizational performance, profitability, or stakeholder satisfaction, even if such choices involve difficult trade-offs for a few individuals.

Utilitarian principles often underpin HR strategies focused on productivity, efficiency, and cost reduction. For instance, in the face of declining revenues, a company might lay off a portion of its workforce to preserve financial stability and protect the jobs of the remaining employees. This rationale prioritizes the collective welfare over the hardships faced by those laid off.

Freeman and Phillips (2021), in their analysis of stakeholder theory in HRM, argue that utilitarian reasoning can align with stakeholder interests, particularly when balancing employer obligations to shareholders, customers, and the broader workforce. They illustrate how workforce downsizing, when executed with transparency and support mechanisms, may serve long-term organizational survival and broader employee welfare.

However, utilitarianism is not without criticism. A significant limitation lies in its potential to overlook the rights of minorities or vulnerable individuals. For example, the use of algorithmic recruitment tools aimed at efficiency might inadvertently reinforce systemic biases, leading to discrimination against certain demographic groups. In such cases, the pursuit of greater efficiency or profit comes at the cost of fairness and equal opportunity an ethical blind spot that utilitarian logic may fail to address adequately.

### 2.2 Deontology in HRM

In contrast, deontology—most notably associated with the work of Immanuel Kant emphasizes moral duties, rights, and universal ethical principles over consequences. From this perspective, HR decisions must respect the inherent dignity and autonomy of every individual, regardless of the broader outcomes.

Within HRM, deontological reasoning manifests in policies that uphold fairness, justice, and respect for persons. A prime example is the commitment to equal pay for equal work, even when such a policy may increase operational costs. As Greenwood (2020) asserts, deontological ethics require organizations to act in accordance with moral obligations—such as non-discrimination and transparency—irrespective of whether these actions lead to immediate business gains.

This framework often informs HR practices related to anti-discrimination, harassment prevention, whistleblower protection, and employee privacy, where rights-based principles take precedence over utilitarian calculations. For instance, maintaining employee confidentiality during disciplinary procedures is viewed not as an optional courtesy but as a moral duty.

Nevertheless, deontology may be critiqued for its rigidity and lack of flexibility. Ethical absolutism can make it difficult for HR professionals to adapt to rapidly changing business environments or navigate competing obligations. For example, strictly adhering to non-termination policies might hinder an organization's ability to respond to economic crises, thereby jeopardizing broader employee welfare.

### 2.3 Empirical Studies on HR Ethics

A growing body of empirical research sheds light on how these ethical frameworks impact organizational outcomes, employee perceptions, and workplace culture. Surveys and reports from leading HR institutions reveal a consistent trend: ethical treatment of employees significantly influences job satisfaction, retention, and organizational commitment.

According to the 2023 SHRM (Society for Human Resource Management) Ethics in the Workplace Report, 65% of employees indicated that they would prefer to work in an organization that treats its workforce ethically—even if it means receiving slightly lower compensation. This underscores the importance employees place on ethical consistency, fairness, and trust in the employer-employee relationship.

Similarly, a 2022 Deloitte Global Human Capital Trends report found that companies perceived as upholding strong deontological values—such as integrity, respect, and procedural fairness—experienced 20% lower

employee turnover rates compared to firms whose HR policies were primarily outcome-driven. These findings suggest that deontological ethics may contribute to a more stable and committed workforce, even in competitive or high-pressure business contexts.

In sum, both utilitarianism and deontology have valid applications in HRM, each supported by theoretical justifications and empirical evidence. The next section will explore how these ethical models play out in real-world HR scenarios, comparing their implications across common dilemmas such as layoffs, algorithmic hiring, and workplace surveillance.

### 3. METHODOLOGY

To explore the comparative influence of utilitarianism and deontology in Human Resource Management (HRM), this study adopts a qualitative, multi-method approach rooted in both theoretical analysis and empirical observation. Given the ethical and philosophical nature of the research questions, a descriptive and interpretive framework was chosen to allow for deeper engagement with both normative theory and real-world practice.

#### 3.1 Philosophical Textual Analysis

The foundation of this research lies in an in-depth analysis of classical and contemporary philosophical texts. Primary works such as Jeremy Bentham's *An Introduction to the Principles of Morals and Legislation* and John Stuart Mill's *Utilitarianism* were examined to establish the tenets of utilitarian ethical reasoning in a business context. Likewise, Immanuel Kant's *Groundwork of the Metaphysics of Morals* was analyzed to understand deontological principles such as the categorical imperative, respect for persons, and the duty to act from moral laws.

Modern interpretations and applications of these ethical theories in the HRM domain were also reviewed. These include academic contributions from scholars such as Greenwood (2020) and Freeman & Phillips (2021), who have contextualized classical ethical theories within modern corporate and employment settings. This theoretical foundation helps in framing how ethical philosophies are operationalized in HR policy and practice.

#### 3.2 Case Study Analysis

The study further incorporates qualitative case studies of prominent HR dilemmas to evaluate how each ethical framework would guide decision-making in specific contexts. Selected cases include:

- **AI and algorithmic bias in recruitment processes:** exploring how efficiency-driven tools may unintentionally discriminate against certain demographic groups, raising questions of fairness and accountability.
- **Mass layoffs and corporate restructuring:** evaluating the tension between business survival (utilitarian justification) and employee rights (deontological objection).
- **Workplace surveillance and data monitoring:** assessing the ethical implications of monitoring employee behavior for productivity versus the right to privacy.
- **Whistleblowing protections:** examining whether duty-based obligations to uphold truth and integrity outweigh the risks to organizational cohesion.

Each case was analyzed through both utilitarian and deontological lenses to identify which framework offers more coherent or practically applicable ethical guidance.

#### 3.3 Use of Secondary Data Sources

To complement the philosophical and case study approaches, the research also utilizes secondary data from reputable HR research bodies and corporate audits. Specifically:

- **SHRM (Society for Human Resource Management)** reports were analyzed to gather insights into employee perspectives on ethical treatment, organizational justice, and values-driven leadership.
- **Gallup workplace surveys** provided data on employee engagement, retention, and ethical culture perceptions across industries.
- **Ethical audits and HR compliance reviews** from large organizations were examined to assess how ethical standards are applied and monitored in practice.

These data sources provided empirical support to assess the real-world implications of ethical frameworks on workforce behavior, turnover, and organizational reputation.

3.4 Justification of Methodology

This triangulated approach—blending philosophical theory, case study analysis, and empirical data—allows for a holistic understanding of HR ethics. It not only compares utilitarianism and deontology on a theoretical level but also tests their relevance and application in practical HR settings. This methodology supports the core aim of the research: to determine which ethical framework, or combination thereof, provides the most balanced and effective approach to ethical decision-making in Human Resource Management.

4. COMPARATIVE ANALYSIS: UTILITARIANISM VS. DEONTOLOGY IN HR SCENARIOS

This section presents a side-by-side ethical analysis of common HR dilemmas using both utilitarian and deontological lenses. It also integrates empirical data from recognized HR studies to reinforce the findings with real-world trends and outcomes.

Table 1: Ethical Frameworks Applied to HR Dilemmas

| HR Issue               | Utilitarian Approach   | Deontological Approach   |
|------------------------|--|--|
| Mass Layoffs           | Justified if it ensures the survival of the company and protects the jobs of the majority. | Considered unethical as it treats employees as means to an end; breaches moral duty of loyalty and care. |
| AI Hiring Bias         | Acceptable if the use of AI increases hiring speed and reduces cost—even with some bias.   | Morally unacceptable if it leads to discrimination; violates principles of fairness and equal respect.   |
| Workplace Surveillance | Permissible if monitoring enhances overall productivity and deters misconduct.             | Considered unethical if it infringes on employee autonomy and privacy rights.                            |

Source: Deloitte. (2022). *Global human capital trends*

4.1 Insights from Empirical Data

To strengthen the analysis, the following data points were considered:

- Mass Layoffs and Employee Perception:** According to a 2023 Gallup Workplace Study, 72% of employees in companies that underwent large-scale layoffs reported reduced trust in leadership and a 32% decline in engagement within six months. In contrast, companies that chose retention-focused strategies (even at a financial cost) experienced only a 9% drop in productivity, suggesting the value of ethical consistency over cost-cutting.
- AI Hiring Tools and Bias:** A 2022 SHRM Technology & Ethics Report noted that 58% of companies using AI in hiring did not audit their algorithms for bias, leading to disproportionate rejection rates for minority candidates. Firms that implemented bias detection protocols saw a 26% improvement in diversity outcomes over 12 months (SHRM, 2023).
- Workplace Surveillance and Employee Morale:** A 2022 Deloitte Human Capital Trends Report revealed that 49% of employees in highly surveilled environments felt “micromanaged” or “distrusted,” contributing to a 24% higher turnover rate. Organizations emphasizing transparency and consent in data monitoring maintained 15% higher engagement scores, highlighting the alignment with deontological respect for dignity and autonomy.

4.2 Key Findings

- Utilitarianism:**
  - Often aligns with business goals such as efficiency, survival, and productivity.
  - May justify ethically questionable practices if they serve the larger benefit.
  - However, risks include erosion of trust, perceived exploitation, and potential legal and reputational consequences.
- Deontology:**
  - Upholds non-negotiable duties to employees such as fairness, non-discrimination, and privacy.
  - Fosters stronger ethical culture and long-term trust but may constrain flexibility in crisis-driven decisions.

• **Quantitative Summary:**

| Metric                               | Utilitarian-Focused Firms       | Deontological-Focused Firms               |
|--------------------------------------|---------------------------------|---|
| Employee Turnover Rate               | 32% (avg. during restructuring) | 20% (avg. post-policy ethics integration) |
| Employee Engagement (Gallup Score)   | 61/100                          | 78/100                                    |
| Diversity in Hiring (12-month trend) | +8% (low bias oversight)        | +26% (with fairness protocols)            |
| Trust in Leadership (Post-Layoffs)   | 41%                             | 68%                                       |

**Source:** Deloitte. (2022). *Global human capital trends*

**CONCLUSION OF THE COMPARATIVE ANALYSIS**

The comparative data suggest that while utilitarian principles may deliver short-term organizational gains, deontological approaches foster ethical resilience, employee satisfaction, and reputational integrity. HR professionals need to consider contextual appropriateness when applying either framework. In high-stakes or high-impact decisions, a hybrid approach often provides the most sustainable path.

**5. DISCUSSION: CAN HR BALANCE BOTH FRAMEWORKS?**

Human Resource Management operates at the intersection of ethical responsibility and strategic pragmatism. While utilitarianism and deontology often appear contradictory, HR decision-making does not need to rigidly adhere to one at the exclusion of the other. In fact, a hybrid ethical approach can help navigate complex scenarios where competing values organizational performance and human dignity are at stake.

**5.1 The Case for a Hybrid Ethical Framework**

In practice, HR professionals are required to make both macro-level decisions (like company-wide restructuring) and micro-level choices (such as handling individual grievances). These two levels naturally lend themselves to different ethical orientations.

1. **Utilitarianism for Strategic Decisions** Utilitarian ethics, with its focus on maximizing outcomes, is particularly effective in guiding high-level strategic HR decisions. During crises such as economic downturns or organizational restructuring—management might face difficult choices that involve laying off a portion of the workforce to save the business as a whole. In such scenarios, a utilitarian approach helps rationalize these actions by focusing on long-term benefits for the majority, such as:

- 1. Sustaining operations
- 2. Preserving core jobs
- 3. Avoiding bankruptcy

**Deontology for Employee Rights** However, when it comes to individual treatment of employees, deontological ethics offers a strong moral compass. HR policies that involve hiring, promotion, privacy, discrimination, and equitable pay should be governed by the principle of respect for persons irrespective of outcomes. Deontology ensures that:

- 1. All employees are treated as ends in themselves.
- 2. Ethical boundaries are maintained, even under pressure.
- 3. Rights such as privacy, freedom from discrimination, and fair hearing are protected.

**Rule Utilitarianism as a Bridging Mechanism** John Stuart Mill’s concept of rule utilitarianism offers a useful middle ground. Rather than evaluating each action solely based on outcomes, rule utilitarianism advocates adherence to general ethical rules that typically lead to the greatest good. For HRM, this means formulating policies that are:

- 4. Consistent
- 5. Predictable
- 6. Based on prior ethical evaluation

For instance, a company may adopt a no-retaliation rule for whistle-blowers not only as a moral imperative (deontology) but also because such a rule enhances long-term transparency and employee trust (utilitarianism).



### 5.2 Challenges in Balancing the Two Frameworks

While the hybrid model is ideal in theory, its implementation faces several challenges:

- **Conflict Between Ethics and Profitability:** There are cases where upholding moral duty may conflict with cost-saving or performance-maximizing strategies.
- **Cultural Variance:** Ethical expectations differ across regions and employee demographics, making it hard to craft universally accepted HR policies.
- **Policy Interpretation:** Ambiguities in rule-based systems may lead to inconsistency, unless clear guidelines and training are in place.

### 5.3 Recommendations for HR Practitioners

To successfully implement a hybrid ethical framework in HR, the following steps are recommended:

- **Ethical Training Programs:** Educate HR professionals in ethical philosophy to improve moral reasoning and decision-making capabilities.
- **Policy Design Workshops:** Co-create HR policies with diverse stakeholders to ensure both efficiency and fairness are represented.
- **Ethics Committees:** Establish internal review boards to evaluate major HR decisions from multiple ethical standpoints.
- **Continuous Monitoring:** Use tools like ethical audits and employee feedback surveys to detect misalignment and course-correct policies.

## CONCLUSION OF THE DISCUSSION

HR professionals are not merely policy implementers—they are ethical stewards of organizational life. By strategically applying utilitarianism where efficiency matters, and deontology where human rights are concerned, HRM can achieve a balanced, principled, and sustainable ethical practice. The hybrid model is not just possible—it is essential in a world where the line between corporate interest and human values is increasingly blurred.

## 6. CONCLUSION & RECOMMENDATIONS

This study has explored how utilitarianism and deontology—two of the most influential ethical frameworks—shape decision-making within Human Resource Management (HRM). Utilitarianism offers valuable insights for making strategic decisions that maximize organizational efficiency and benefits for the majority. In contrast, deontology provides a strong foundation for protecting individual rights, ensuring fairness, and upholding moral duties regardless of consequences. Both approaches offer distinct advantages and limitations when applied to real-world HR dilemmas such as layoffs, workplace surveillance, and hiring practices.

However, relying exclusively on one ethical framework can create significant ethical blind spots. A purely utilitarian approach may sacrifice minority interests or individual dignity in pursuit of broader goals, while strict deontology can hinder flexibility and responsiveness to rapidly changing business environments. Therefore, HR professionals must adopt an integrated ethical approach that balances the practical advantages of utilitarianism with the principled integrity of deontology. This balanced strategy allows HR departments to align organizational goals with ethical responsibility, fostering both trust and performance.

To implement this integration effectively, HR leaders must be equipped with a deeper understanding of philosophical ethics. Training programs, workshops, and professional development courses should incorporate modules on ethical theories, case-based discussions, and practical applications of moral reasoning in HR settings. Such training will empower HR practitioners to navigate complex ethical challenges with greater clarity, consistency, and confidence.

Lastly, while this study has focused primarily on utilitarian and deontological ethics, future research could extend this analysis by examining virtue ethics an approach that emphasizes character, integrity, and the cultivation of ethical organizational culture. Virtue ethics may provide long-term guidance for building morally resilient HR practices that not only comply with ethical norms but also nurture ethical behavior as an organizational value.

In conclusion, the path to ethically sound HRM lies not in choosing between utilitarianism or deontology but in thoughtfully integrating both to create a decision-making framework that is both effective and just.

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**7. LIMITATIONS OF THE STUDY**

Although this study presents a meaningful comparison between utilitarian and deontological ethical frameworks within the context of Human Resource Management, it is essential to acknowledge its inherent limitations. Firstly, the scope of the case studies analyzed—such as mass layoffs, AI-driven hiring biases, and workplace surveillance—though significant and widely debated, does not encompass the full spectrum of ethical dilemmas faced by HR professionals today. Emerging issues like global workforce integration, remote work surveillance, algorithmic performance tracking, and the ethical implications of post-pandemic hybrid work models were beyond the scope of this paper and merit further investigation in future research.

Secondly, the study is limited by its cultural and legal generalizations. Ethical norms and HR practices vary widely across cultural and geographical contexts. For instance, the application of deontological principles—such as individual autonomy and privacy rights—may resonate strongly in Western liberal democracies but may contrast with the collectivist or hierarchical norms prevalent in many Eastern or developing nations. This variance could affect the applicability and relevance of certain ethical interpretations across jurisdictions.

Additionally, the research draws heavily on secondary data sources such as SHRM reports, Deloitte surveys, and academic literature. While these sources provide valuable insights, the absence of primary data collection—such as interviews, field observations, or direct surveys with HR professionals—limits the depth and contextual richness of the analysis. Engaging directly with practitioners could yield more nuanced understanding of how ethical frameworks are applied in day-to-day HR operations.

Lastly, there is an inherent tension between philosophical abstraction and practical reality. While utilitarianism and deontology offer structured ways to evaluate ethical behavior, real-world HR decision-making is often shaped by a blend of intuition, business strategy, regulatory compliance, and interpersonal dynamics. This complexity may not be fully captured through purely theoretical analysis. Thus, while this study establishes a strong ethical foundation, further interdisciplinary research is needed to bridge philosophical ideals with operational HR practices.

**8. IMPLICATIONS FOR HR PRACTICE**

The integration of ethical reasoning into HR management is not merely a philosophical concern it is a practical necessity with far-reaching implications for organizational culture, employee retention, public image, and long-term sustainability. As organizations become more transparent and employees increasingly value ethical conduct in the workplace, HR departments must evolve into ethical stewards as much as administrative units.

Firstly, ethical training should become an essential component of HR leadership development. Exposure to ethical theories such as utilitarianism and deontology, along with training in ethical decision-making models, equips HR professionals to navigate complex scenarios such as whistle-blower protection, diversity, equity and inclusion (DEI) policies, and disciplinary actions. By embedding ethical reasoning into their professional toolkit, HR leaders can move beyond compliance to actively foster a culture of integrity and trust.

Secondly, HR policies must be intentionally designed to reflect a balance between consequences and principles. Utilitarian considerations such as productivity, efficiency, and financial incentives should be complemented by deontological commitments to fairness, dignity, and non-discrimination. For instance, performance-based reward systems can be made more ethically robust when combined with transparent evaluation criteria and equal opportunity safeguards. This dual-framework approach ensures that business outcomes do not come at the cost of employee rights or morale.

Finally, transparent communication is crucial in building and maintaining employee trust, particularly during difficult decisions. When HR justifies its actions such as layoffs or policy changes through clear ethical reasoning, it demonstrates accountability and care. Even in adverse situations, explaining decisions with empathy and providing support mechanisms can significantly mitigate reputational damage and employee resentment.

In summary, applying ethical frameworks to HR practice is not just about doing what is right it is also about strengthening the fabric of the organization. By embedding both utilitarian and deontological ethics into policies, training, and communication, HR can lead the way in cultivating ethical resilience and long-term organizational excellence.

**9. FUTURE RESEARCH DIRECTIONS**

Future studies in HR ethics can broaden the philosophical and practical scope of ethical decision-making. One promising direction is the application of virtue ethics based on Aristotle's philosophy—which emphasizes moral character and the cultivation of virtues such as integrity, empathy, and fairness.

Unlike utilitarianism or deontology, which focus on rules or outcomes, virtue ethics can offer HR professionals a deeper foundation for shaping an ethical workplace culture. Another area worth exploring is cross-cultural ethics in global HRM. As multinational companies expand into diverse regions, reconciling Western ethical frameworks with local norms, traditions, and legal environments becomes increasingly complex. Comparative studies can help develop culturally sensitive HR models that uphold universal ethical standards while respecting local values. Lastly, technology and ethics represent a dynamic frontier. With HR processes becoming increasingly digitized—ranging from AI-driven hiring to biometric monitoring—research must critically assess how these tools affect employee autonomy, privacy, and fairness. Understanding these dimensions is crucial for ensuring that technological innovation in HR does not outpace ethical responsibility.

## 10. FINAL THOUGHTS

Ethical decision-making in HR is not a binary choice between utilitarianism and deontology. Rather, it is a spectrum where context, stakeholder interests, and long-term goals intersect. While utilitarian reasoning supports the survival and scalability of organizations, deontological ethics ensure those organizations uphold the dignity, rights, and trust of their workforce. A blended, context-sensitive ethical framework bolstered by reflective leadership can pave the way for more just, effective, and humane HR practices.

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**DIGITAL LEADERSHIP AND ORGANIZATIONAL BEHAVIOR: ELEVATING CUSTOMER SERVICE QUALITY IN AIR INDIA.**

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**Shunaza Khan**

Arden University London

**ABSTRACT**

*This research paper examines how Air India leverages digital leadership and organizational behavior transformations to enhance customer service quality. Through initiatives such as AI-powered customer support, cloud migration, customer-centric policies, and advanced feedback mechanisms, Air India has made significant strides in improving operational efficiency and passenger satisfaction. However, challenges such as an aging fleet and supply chain constraints persist. The study provides insights into Air India's digital transformation journey, evaluates its impact on service quality, and suggests future directions for sustainable growth.*

**Keywords:** Digital Transformation, Digital Leadership, Organizational Behavior, Customer Service Quality, AI-powered Customer Support, Service Quality Improvement.

**1. INTRODUCTION**

In today's digitally driven world, the airline industry stands at the forefront of adopting advanced technologies to enhance customer service and operational efficiency. Among India's leading carriers, Air India has undergone a remarkable transition—marked by its privatization in 2022 and subsequent acquisition by the Tata Group. This transition triggered a wave of digital transformation, cultural restructuring, and a renewed emphasis on customer-centric service. In light of these developments, evaluating the influence of digital leadership and organizational behavior on customer service quality becomes critically important.

Customer satisfaction, once predominantly dependent on in-flight experience, now hinges on end-to-end service quality from ticket booking, real-time updates, and digital check-ins to post-travel support. Amidst this shift, digital leadership plays a pivotal role in steering Air India through organizational reforms and service innovation. However, there remains a research gap in understanding how internal factors particularly leadership style, employee engagement, and organizational culture translate into tangible improvements in customer service quality within Indian premium airlines. This study seeks to bridge that gap through a focused examination of Air India's recent trajectory.

The global aviation industry is undergoing a rapid digital transformation, driven by rising passenger expectations, competitive pressures, and technological advancements. According to the International Air Transport Association (IATA), airlines worldwide invested \$50 billion in digital transformation initiatives between 2020 and 2023, with a focus on AI, cloud computing, and automation to enhance operational efficiency and customer satisfaction (IATA, 2023).

In India, the aviation sector is projected to become the third-largest market by 2026, with passenger traffic expected to reach 420 million annually (Ministry of Civil Aviation, 2023). Amid this growth, Air India, the country's flagship carrier, has embarked on a comprehensive digital and organizational overhaul to improve service quality and regain market share. Since its acquisition by the Tata Group in 2022, Air India has committed \$400 million over five years to modernize its IT infrastructure, customer service systems, and fleet (Air India, 2023).

**2. REVIEW OF LITERATURE****2.1. Digital Leadership in the Airline Industry**

Digital leadership refers to the ability of leaders to drive organizational change through the strategic use of technology. Leaders who possess digital competence are not only tech-savvy but also visionary in transforming service models using innovation and data analytics (Bennett & Segerberg, 2021). In the airline industry, digital leadership encompasses decisions related to automated check-ins, AI-based customer engagement, and real-time operations management.

According to Kane et al. (2019), digital leaders are crucial in aligning IT capabilities with customer expectations, particularly in service sectors like aviation. In the Indian context, post-privatization, Air India's top leadership under the Tata Group has prioritized digital investment and process automation, aiming to emulate the success of global carriers like Emirates and Singapore Airlines.

## 2.2. Organizational Behavior and Employee Performance

Organizational behavior (OB) encompasses the attitudes, behaviors, and culture within an organization that influence employee performance and satisfaction. Robbins and Judge (2022) highlight that transformational leadership and participative culture significantly improve employee engagement and service delivery. In the Indian airline industry, employee morale and training have historically been weak points, particularly in state-run setups (Kumar & Bansal, 2020). As Air India transitions into a private enterprise, organizational behavior rooted in accountability, motivation, and customer focus becomes pivotal to transforming its image.

## 2.3. Service Quality in Airlines

Service quality in aviation is measured across dimensions such as reliability, responsiveness, assurance, empathy, and tangibles—based on the SERVQUAL model (Parasuraman, Zeithaml, & Berry, 1988). In the era of digital transformation, these dimensions have extended to include mobile accessibility, real-time updates, and personalization (Chung et al., 2021).

Studies on Indian carriers suggest that while private airlines like Indigo and Vistara score high on consistency and digital efficiency, Air India struggles with legacy issues affecting timely delivery and customer responsiveness (Rao & Jadhav, 2022). Understanding how leadership and OB interact to uplift these metrics is crucial for Air India's resurgence.

## 2.4. Bridging Digital Leadership, OB, and Service Quality

An integrative approach suggests that digital leadership fosters a conducive organizational environment, enabling employees to deliver better service. When leaders communicate a digital vision and model adaptability, it translates into an organizational culture that supports innovation and customer orientation (Westerman et al., 2014).

In the case of Air India, where digital tools are being introduced amid structural overhaul, the challenge lies in aligning leadership intent, employee behavior, and service goals. Studies have shown that this alignment can significantly enhance customer satisfaction and operational efficiency (Nambisan et al., 2019).

## 3. METHODOLOGY

This research adopts a **qualitative approach**, leveraging **secondary data** to examine the impact of digital leadership and organizational behavior on customer service quality in Air India. This method enables a nuanced exploration of the "how" and "why" behind the airline's transformation strategies, extending beyond surface-level metrics to uncover deeper organizational shifts. A qualitative framework is particularly appropriate in this context as it allows for historical and strategic perspectives that may not be easily captured through primary surveys alone. Furthermore, it aligns with similar qualitative analyses conducted by global aviation bodies such as the **International Air Transport Association (IATA)** and other academic studies on airline digital transformation.

The data for this study was collected from three primary categories of secondary sources. First, **corporate reports and official publications** were examined, including Air India's annual reports from 2022 to 2024. These documents provide critical insights into the airline's financial investments, progress in digital transformation, and operational restructuring. Official press releases and investor presentations offer specific examples of digital initiatives such as the deployment of **AIg**, a virtual assistant that has handled over **four million customer queries**, resulting in annual cost savings of approximately **\$1 million**. Additionally, filings from regulatory bodies like the **Directorate General of Civil Aviation (DGCA)** and the **Ministry of Civil Aviation** supply benchmarking data on fleet modernization, regulatory compliance, and industry standards.

Second, the research draws upon **industry reports and aviation studies**. Key sources include IATA reports from 2022 to 2024, which detail global trends in artificial intelligence, cloud computing, and customer experience enhancements in aviation. Reports by consulting firms such as **McKinsey & Company**, **Deloitte**, and **Bain & Company** are utilized to provide comparative data—highlighting, for example, **30–40% efficiency gains** from AI chat-bot integration and **20–30% cost reductions** associated with cloud adoption. Research from the **Centre for Aviation (CAPA)** is used to evaluate Air India's competitive positioning, with data on fleet age (notably, 12.5 years versus an industry average of 8 years) and shifting market share trends.

Third, the study incorporates **case studies and academic literature**. Comparative analyses of global airlines, such as **Singapore Airlines' AI-driven personalization strategies** and **Delta Airlines' cloud infrastructure migration**, help contextualize Air India's own digital journey. Peer-reviewed journal articles on **organizational behavior** and **digital leadership in aviation** are integrated to support the theoretical framework and deepen the analysis.

The collected data is analyzed using **thematic analysis** to identify recurring patterns, such as cost efficiencies, leadership effectiveness, and customer satisfaction metrics. In addition, **comparative benchmarking** is employed to evaluate Air India’s digital transformation against global standards. A **SWOT analysis** further enhances the assessment, identifying key strengths (e.g., adoption of AI.g and Tata Group backing), weaknesses (e.g., an aging fleet), opportunities (e.g., expanded investments and international partnerships), and threats (e.g., supply chain delays and geopolitical risks).

This research does recognize certain **limitations**. Chief among them is the exclusive reliance on secondary data, which may introduce inherent biases from the original sources. There is also **limited access to real-time operational data**, such as internal Net Promoter Scores (NPS) or employee engagement levels beyond publicly disclosed figures. Additionally, given the **rapidly evolving nature of the aviation industry**, some findings may become outdated as new technologies and leadership initiatives emerge.

**Ethical considerations** have been carefully maintained throughout this research. All information is drawn from publicly available, credible, and properly cited sources. No confidential, proprietary, or non-public data has been used, ensuring full compliance with academic integrity standards.

While the qualitative approach offers valuable insights, future research could be enhanced through **primary data collection**—such as structured interviews with employees, customer surveys, or field observations—to provide a more comprehensive understanding of the internal and external dynamics influencing Air India’s customer service transformation.

4. DIGITAL TRANSFORMATION INITIATIVES

4.1 AI-Powered Customer Support

To automate customer service and improve response efficiency, Air India launched “AI.g”, a generative AI-based virtual assistant. The table below presents a performance analysis for 2023–2024:

Table 1: Performance Metrics of Air India’s AI.g Virtual Assistant (2023–2024)

| Metric                     | Value                    | Industry Benchmark (Top Airlines) |
|----------------------------|--------------------------|-----------------------------------|
| Queries Handled            | 4 million                | 5–6 million (Emirates, 2023)      |
| Autonomous Resolution Rate | 97%                      | 92–95% (Singapore Airlines)       |
| Cost Reduction in Support  | 30% decrease             | 25–40% (Delta, Lufthansa)         |
| Languages Supported        | 8 (incl. Hindi, English) | 10–15 (Emirates, Qatar Airways)   |

(Air India. (2024). *IT infrastructure modernization report: Cloud migration and cost savings.*)

Air India’s AI-powered virtual assistant, AI.g, against industry benchmarks from top global airlines. In 2023–2024, AI.g successfully handled 4 million customer queries, which is slightly below the 5–6 million queries managed by Emirates’ chatbot. However, it achieved an impressive 97% autonomous resolution rate—outperforming airlines like Singapore Airlines, which maintain rates between 92–95%. This suggests AI.g is highly efficient in independently resolving customer issues. Furthermore, Air India reported a 30% reduction in customer support costs after implementing AI.g, aligning well with the 25–40% cost savings seen by Delta and Lufthansa. In terms of accessibility, AI.g currently supports 8 languages, including Hindi and English, compared to the broader multilingual capabilities (10–15 languages) of airlines like Emirates and Qatar Airways. This highlights Air India’s strong performance in AI adoption while indicating potential for further scalability in query volume and language diversity.

Table 2: Comparative Analysis of AI Chatbots in Aviation (2024)

| Airline            | AI Tool       | Queries/Year | Resolution Rate | Cost Savings |
|--------------------|---------------|--------------|-----------------|--------------|
| Air India          | AI.g          | 4 million    | 97%             | 30%          |
| Emirates           | Sarah         | 6 million    | 95%             | 35%          |
| Singapore Airlines | KrisChat      | 5.2 million  | 96%             | 28%          |
| Delta              | Messenger Bot | 7 million    | 94%             | 40%          |

(Air India. (2024). *IT infrastructure modernization report: Cloud migration and cost savings.*)

The AI-driven customer service performance of leading global airlines. Air India's AI.g handles 4 million queries annually with a standout autonomous resolution rate of 97% and achieves a 30% cost saving in support operations. Emirates’ Sarah leads in query volume, managing 6 million queries per year with a strong 95% resolution rate and slightly higher cost savings of 35%. Singapore Airlines’ KrisChat processes 5.2 million queries annually, offering a solid 96% resolution rate and 28% in cost savings. Delta’s Messenger Bot tops the

chart in query volume at 7 million per year, with a 94% resolution rate and the highest reported cost reduction of 40%. While Air India’s AI.g lags behind in query volume, it leads in resolution efficiency, suggesting a highly effective implementation of AI in customer interaction and support.

4.2 Cloud Migration

Air India transitioned its IT infrastructure to AWS in 2022. The following tables outline its cloud performance and compare global adoption patterns:

Table 3: Air India's Cloud Migration Performance Metrics (2023–2024)

| Metric                      | Air India        | Industry Benchmark              |
|-----------------------------|------------------|---------------------------------|
| Annual Cost Savings         | \$1 million      | \$1.2 million (Delta, 2023)     |
| Deployment Time Reduction   | 40% faster       | 35–50% (Lufthansa)              |
| Data Center Closures        | 3 legacy centers | 2–5 (Industry Average)          |
| Security Incident Reduction | 60% decrease     | 45–65% (Cloud-Adopted Airlines) |

(Air India. (2024). *IT infrastructure modernization report: Cloud migration and cost savings.*)

Here is Highlights Air India's performance in its cloud migration journey during 2023–2024 compared to industry benchmarks. The airline achieved annual cost savings of \$1 million, slightly below Delta’s \$1.2 million benchmark but still notable. Its deployment times were reduced by 40%, aligning well within the industry range of 35–50%, as observed in Lufthansa's benchmarks. Air India successfully closed 3 legacy data centers, which falls comfortably within the industry average of 2–5 closures post-migration. Most impressively, the airline reported a 60% reduction in security incidents, positioning itself near the upper end of the 45–65% decrease seen across cloud-adopted airlines, underscoring the effectiveness of its security modernization efforts.

Table 4: Comparative Cloud Adoption in Global Airlines (2024)

| Airline   | Cloud Provider         | Migration Year | Annual Savings | Key Benefits                  |
|-----------|------------------------|----------------|----------------|-------------------------------|
| Air India | AWS                    | 2022           | \$1M           | 60% faster disaster recovery  |
| Delta     | Microsoft Azure        | 2020           | \$1.2M         | 55% fewer IT outages          |
| Lufthansa | Google Cloud           | 2021           | \$1.5M         | Real-time baggage tracking    |
| Emirates  | Hybrid (AWS + On-prem) | 2019           | \$0.8M         | Legacy integration challenges |

(Air India. (2024). *IT infrastructure modernization report: Cloud migration and cost savings.*)

This comparative table showcases cloud migration strategies and outcomes among leading airlines. Air India partnered with AWS in 2022, achieving \$1 million in annual savings and a 60% improvement in disaster recovery speed. Delta, migrating earlier in 2020 with Microsoft Azure, reported slightly higher savings of \$1.2 million and a 55% reduction in IT outages, emphasizing stability. Lufthansa, using Google Cloud since 2021, led in financial gains with \$1.5 million in savings and introduced real-time baggage tracking as a standout benefit. Emirates opted for a hybrid approach (AWS + on-premise) back in 2019, resulting in relatively lower savings of \$0.8 million and ongoing challenges in integrating legacy systems—highlighting the complexities of hybrid cloud environments.

4. 1 Aged Fleet and Service Quality

Air India’s fleet averages **12.5 years**, significantly older than competitors like IndiGo (5 years) and Emirates (8 years), leading to higher maintenance costs and reliability issues (CAPA, 2024). The airline has placed orders for **470 new aircraft** (250 Airbus, 220 Boeing) to phase out older models by 2030, aiming to reduce the average fleet age to **7 years**. However, only **20% of cabins have been refurbished** as of 2024, with passengers rating interior comfort **15% lower** than rivals (Skytrax, 2023). To address this, Air India plans to invest **\$200 million** in cabin upgrades, including lie-flat business seats and premium economy sections, targeting a **30% improvement** in passenger comfort scores by 2026.

4.2 Supply Chain Constraints

Global supply chain disruptions have delayed aircraft deliveries by **6–12 months**, with **40% of Air India’s new A350s deferred** to 2025 (Boeing, 2024). Seat manufacturers like Recaro face **18-month backlogs**, forcing the airline to retain outdated interiors on 60% of its fleet.

To mitigate this, Air India is diversifying suppliers, including partnerships with **Indian manufacturers like Tata Advanced Systems**, and stockpiling critical components. These measures aim to cut lead times

by **25%** and reduce grounding incidents, which currently cost **\$3 million monthly** in lost revenue (DGCA, 2024).

#### 4.3 Future Roadmap

Air India is expanding **AI-driven predictive maintenance**, projected to reduce unscheduled repairs by **35%** and save **\$50 million annually** by 2025 (McKinsey, 2024). Blockchain integration for spare-part tracking will enhance transparency, targeting a **20% reduction** in procurement fraud. Sustainability initiatives include a **10% sustainable aviation fuel (SAF) blend** by 2026 and **carbon-neutral domestic flights** by 2027, aligned with IATA's net-zero goals. These efforts aim to boost ESG ratings, currently **15% below industry leaders**, while improving operational efficiency.

#### 5. CONCLUSION

Air India's digital transformation, marked by AI-driven customer support, cloud migration, and data-driven feedback systems, has demonstrably enhanced operational efficiency and passenger satisfaction. However, persistent challenges-particularly its aging fleet and supply chain bottlenecks-highlight the need for balanced investment in both technological and physical infrastructure. The airline's progress aligns with global aviation trends, but sustained success hinges on addressing these structural gaps while maintaining its customer-centric ethos.

#### Strategic Suggestions

To secure long-term competitiveness, Air India should:

- (1) **Accelerate fleet modernization** through strategic leasing and phased retirements, targeting a sub-8-year average fleet age by 2026;
- (2) **Localize critical supply chains** via partnerships with Indian manufacturers to mitigate global delays;
- (3) **Expand AI/blockchain applications** to predictive maintenance and loyalty programs, emulating Delta's \$100M annual savings from similar initiatives. Concurrently, transparent communication of these improvements-through campaigns like "Air India 2.0"- can rebuild brand trust and market share.

#### Key Takeaways for Practitioners

This research underscores four critical insights for aviation leaders: AI and automation are indispensable for delivering cost-efficient, high-quality customer service, as demonstrated by Air India's AI. Handling 97% of 4 million queries autonomously. Cloud migration not only enhances operational agility but also drives significant cost savings, with Air India achieving \$1 million in annual IT reductions. Customer-centric policies, such as strict employee travel rules and real-time NPS feedback systems, directly foster loyalty, evidenced by Air India's 6-point NPS increase post-implementation. Finally, fleet modernization and resilient supply chains remain foundational to long-term success, as aging fleets and global part shortages continue to hinder service quality challenges that demand strategic investments in local partnerships and predictive maintenance. These actionable takeaways provide a blueprint for airlines navigating digital transformation while emphasizing the need for balanced progress across technology, operations, and customer experience.

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## THE ROLE OF CARBOHYDRATES (CHO) IN ATHLETES

<sup>1</sup>Sonali Sanjay Jadhav and <sup>2</sup>Dr.J.M. Hotkar<sup>1</sup>Scholar, M.P. Ed, students of BPCA's College of Physical Education, Wadala, Mumbai<sup>2</sup>Research Guide, Assistant Professor in BPCA's College of Physical Education, Wadala, Mumbai

## ABSTRACT

Carbohydrates are essential organic compounds made of carbon, hydrogen, and oxygen, serving as the primary energy source for athletes, particularly during moderate to high-intensity exercise. They are categorized into monosaccharides, disaccharides, oligosaccharides, and polysaccharides. Adequate carbohydrate intake is vital for optimizing performance, fueling endurance, replenishing glycogen stores post-exercise, and supporting muscle function. Strategic consumption of carbohydrates before, during, and after exercise can enhance athletic performance and recovery, making them crucial for success in endurance activities.

**Keywords:** Carbohydrates, Performance, Athletes

## INTRODUCTION

A Carbohydrate is defined as an organic compound containing carbon, hydrogen and oxygen, and typically broken down to release energy in the body. Carbohydrates are the compounds of carbon, hydrogen and oxygen with chemical formula CHO. They include sugars, starches, and fibres, and are found in various foods like grains, vegetables, and fruits. Carbohydrates are one of the three macronutrients in the human diet, along with protein and fat. These molecules contain carbon, hydrogen, and oxygen atoms. Carbohydrates play an important role in the human body. Among the macronutrients, carbohydrates are the most important for fueling exercise particularly in moderate to high intensity activities.

**Types of carbohydrates**

Carbohydrates are broadly classified into simple and complex carbohydrates.

**1. Simple Carbohydrates**

- a. **Monosaccharides:** Monosaccharides is the simplest form of carbohydrate Single sugar units, like glucose, fructose, and galactose.
- b. **Disaccharides:** Two sugar units bonded together, like sucrose (table sugar) and lactose (milk sugar).

**2. Complex Carbohydrates**

- a. **Oligosaccharides:** Oligosaccharides are carbohydrates composed of a few (typically 2-10) monosaccharide units (simple sugars) linked together by glycosidic bonds.
- b. **Polysaccharides:** Polysaccharides are large molecule formed by the union of many monosaccharides long chains of many sugar units, including starches and dietary fiber.

**Why Carbohydrates are Important for Athletes:**

**Primary Energy Source:** During exercise, the body breaks down carbohydrates (primarily glucose) into energy that fuels muscles and other body systems.

**Glycogen Storage:** Carbohydrates are stored in the muscles and liver as glycogen, which can be quickly converted back into glucose for energy when needed.

**Fueling Endurance:** Athletes in endurance sports (running, cycling, swimming) rely heavily on carbohydrates to provide sustained energy for long periods.

**Optimizing Performance:** Adequate carbohydrate intake can enhance performance during training and competition by ensuring sufficient energy stores and delaying fatigue.

**Recovery:** Carbohydrates are essential for replenishing glycogen stores after exercise, which is crucial for recovery and preparing for future training sessions.

**Muscle Function:** Carbohydrates help spare protein, which is important for muscle repair and growth, by ensuring that the body has sufficient energy from carbs.

**Breakdown of carbohydrates .... cellular level**

Carbohydrate digestion begins in the mouth, where salivary amylase starts the breakdown. After breaking down throughout the digestive system, monosaccharides are absorbed into the bloodstream. As carbohydrates are consumed, the blood sugar levels increase, stimulating the pancreas to secrete insulin. Insulin signals the body's cells to absorb glucose for energy or storage.

**The role of carbohydrates in athletic success**

Carbohydrates are a crucial macronutrient for athletic success, serving as the primary energy source during physical activity and helping to replenish muscle glycogen stores.

Adequate carbohydrate intake is vital for optimal athletic performance, particularly in endurance activities, by providing fuel for muscle contraction and delaying fatigue.

**1. Energy Supply**

Carbohydrates are broken down into glucose, which fuels muscles and the brain. Excess glucose is stored as glycogen in muscles and the liver — a key energy reserve for athletes. During prolonged or intense activity, glycogen is the main fuel source.

**2. Performance Enhancement**

Adequate carbohydrate intake improves endurance, strength, and speed. Athletes with higher glycogen stores can perform longer before fatigue sets in. Low-carb availability can lead to early fatigue, decreased performance, and slower recovery.

**3. Recovery**

Post-exercise carbs help replenish glycogen stores, especially important for athletes with frequent training sessions. Combining carbohydrates with protein post-workout also supports muscle repair.

**4. Brain Function**

Carbohydrates support cognitive function, which is vital for coordination, decision-making, and focus during competition.

**5. Immune Support**

Regular intense training can strain the immune system; carbs help reduce stress hormone levels, thus supporting immunity.

**CARBOHYDRATE INTAKE FOR ATHLETIC PERFORMANCE**

For optimal athletic performance, athletes should focus on consuming 3-12 grams of carbohydrates per kilogram of body weight daily, depending on the intensity and duration of their training.

During exercise, especially for events lasting longer than an hour, athletes may benefit from consuming 30-90 grams of carbohydrates per hour to maintain blood glucose levels and energy stores.

**Pre-Exercise Carbohydrate Intake:** Consuming complex carbohydrates 1-4 hours before exercise can help ensure adequate energy stores for the activity.

**During Exercise Carbohydrate Intake:** During sustained or high-intensity exercise, athletes may benefit from consuming 30-60 grams of carbohydrates per hour to maintain blood glucose levels and performance. For longer events, up to 90 grams per hour may be recommended.

**Post-Exercise Carbohydrate Intake:** Replenishing muscle glycogen stores after exercise is crucial for recovery and future performance. This can be achieved by consuming carbohydrate-rich foods and drinks within the first few hours after exercise.

**CARBOHYDRATES AND ATHLETIC PERFORMANCE & RECOVERY****1. Carbohydrates and Athletic Performance**

**Primary Fuel Source:** During moderate to high-intensity exercise, carbohydrates are the main source of energy. They are stored in the muscles and liver as glycogen.

**Sustains Endurance:** Adequate glycogen stores delay fatigue and support sustained performance, especially in endurance sports.

**Improves High-Intensity Output:** For sports requiring bursts of speed or strength (like sprinting, weightlifting, or team sports), carbs help maintain power and performance.

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**Pre-Workout Carb Strategy:**

**3–4 hours before:** A carb-rich meal (e.g., pasta, rice, oatmeal) helps top off glycogen stores.

**30–60 mins before:** A small, easily digestible carb snack (e.g., banana, sports drink) can provide a quick energy boost.

**2. Carbohydrates and Recovery**

**Glycogen Replenishment:** After intense exercise, muscle glycogen is depleted. Replenishing it is crucial for recovery, especially if training again within 24 hours.

**Promotes Muscle Repair:** Carbs increase insulin levels, which helps shuttle amino acids into muscles for repair when consumed with protein.

**Reduces Muscle Soreness:** A good post-workout carb intake can reduce delayed onset muscle soreness (DOMS) by aiding recovery.

**Post-Workout Carb Strategy:**

**Timing:** Consume carbs within 30–60 minutes post-exercise for optimal glycogen resynthesis.

**Best Carb Sources for Athletes:**

**Complex Carbs:** Whole grains, legumes, starchy vegetables (great for sustained energy).

**Simple Carbs:** Fruits, honey, white rice, sports drinks (useful around workouts for quick energy).

**CONCLUSION**

In conclusion, carbohydrates are an essential macronutrient that serve as the primary energy source for athletes, significantly enhancing performance and recovery during and after physical activity. Carbohydrates are the body's main source of energy for athletic events. Carbohydrate feedings before exercise can help to restore glycogen stores, which may be called upon during prolonged training and in high-intensity competition. Adequate carbohydrate intake is crucial for sustaining endurance, optimizing muscle function, and replenishing glycogen stores, ultimately contributing to athletic success.

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**EFFECTIVENESS OF ROPE SKIPPING AND LADDER TRAINING ON SPEED OF SPRINTERS OF SCHOOL CHILDREN OF MUMBAI****Vaibhav Balaji Phad<sup>1</sup> and Dr. Kailas Asai<sup>2</sup>**<sup>1</sup>M.P.Ed-II Student and <sup>2</sup>Assistant Professor, B.P.C.A's College of Physical Education, Wadala, Mumbai**ABSTRACT**

*The study aims to evaluate the effectiveness of rope skipping and ladder training on the speed performance of sprinters among school children in Mumbai. Speed, as a critical component of athletic performance, particularly in sprinting, requires a combination of strength, agility, and coordination. This research investigates how two different training modalities rope skipping and ladder drills can influence sprinting performance in young athletes.*

*Schools students of Mumbai, participated in the study. The subjects were divided into two groups: a experimental and a control group.*

*Rope skipping, known for improving cardiovascular endurance, coordination, and lower limb strength. Ladder training, on the other hand, is a popular technique to enhance foot speed, coordination, and quickness*

*Pre- and post-test measurements of sprinting speed were taken for all participants, using a 30- meter dash test.*

*The findings of this study demonstrated that both rope skipping and ladder training led to significant improvements in sprint speed compared to the control group. However, ladder training showed slightly more pronounced effects on sprinting performance. This research highlights the importance of incorporating dynamic training techniques like rope skipping and ladder drills to improve sprinting capabilities in school children.*

**Keywords:** *Rope skipping, ladder training, speed, school children, athletic performance.*

**INTRODUCTION**

It is important to consistently play sports in then balanced and healthy growth of children. Regular physical activities performed by children before and after puberty ensure that a well physical structure is developed in children; and in further years, it also deferral the disruption of physical structure. The period of sports related activity in children has main place in psychomotor development.

**SPRINT**

The 100 -meter sprint as well linked and thrilling track and field and field event that test an athlete's speed and acceleration. It is often considered one of the most prestigious and competitive event in athletics the race covers a distance of 100 meters, which is approximately equivalent to 109.36 yards or 328 feet. Sprinters start from blocks, which are movable starting devices placed on the track. These blocks allow athletes to push off with maximum power and gain an advantage in the race. Sprinters use a combination of explosive power, speed, and proper running technique to maximize their performance. They drive their knees forward, pump their arms vigorously, and maintain a slight forward lean to optimize their speed.

**OPERATIONAL DEFINITION OF THE TERM USED****Speed**

Speed is the rate of movement, or the amount of time it takes for a body or object to move between two different points. Speed is related to strength and power. Speed is the total of distance covered in a given period of time.

**Ladder Training**

Ladder training is the form of training by using agility ladders which involve runs, skips, shuffles and jumps.

**Rope Jumping**

A division of exercise that requires one to jump over the rope COMBINED TRAINING Combination is the form of training in which the rope skipping exercises and ladder drills are combined.

**OBJECTIVE OF THE STUDY**

- To find out the combine effects of jump rope skipping training and ladder exercise training on speed.
- To locate the appropriate training procedure to obtain attractive changes on speed laud of 100 meter runner age between 13 to 15 year students of Mumbai city.
- To create awareness regarding enhancement of Speed due to combined training of Rope Skipping and Ladder exercise.

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**HYPOTHESIS OF THE STUDY**

Based on the available literature on the outcomes of training program on selected particular physical and performance variables of 100meter runner, the researcher has made the following hypothesis.

**H01** - There would be no significant improvement on Speed due to the effect of Rope Skipping training and Ladder exercise training program.

**METHODOLOGY****Design of the Study**

The first step towards an enhanced physical fitness at any age is to establish a systematic, productive, safe, and enjoyable conditioning program that addresses the following factors: endurance, speed, and strength. In this program we learn the importance of rope skipping and ladder drills exercises designed to improve athletic performance.

**Dependent variables**

- Speed

**Independent Variables**

Each stage in an athlete's training requires modification of the various modes and methods of training according to the goals set by the athlete, skill of the coach and the conditioning specialist. A successful athlete has an optimal blend of training modes and methods. Hence, the following training methods were selected as independent variables.

1. Jump rope training
2. Ladder exercise training

**SELECTION OF POPULATION AND SAMPLE**

The purpose of the study was to investigate the combine effects of jump rope skipping and ladder training on selected variables such as speed and cardiovascular endurance. For the present study, 50 male participants were selected at random from Salvation Army Tucker School Byculla, Mumbai, India. The age of the participants ranged between 13 and 15 years. The selected participants were divided into experimental groups and a control group with twenty five participants (n=25) in each group. Experimental group I (BG-25) underwent combine jump rope training and ladder exercise and Group II served as control group

(CG-25)

All participants were informed about the nature of the study and their consent was obtained to co-operate till the end of the experiment and testing period.

**Unit of dependent variables**

30M dash (in seconds)

**STATISTICAL PROCEDURE USED**

The data collected from the groups before and after the experimental period were statistically examined for significant improvement by using analysis of covariance

ANCOVA. In all cases the criterion for statistical significance was set at 0.05 level of confidence ( $P < 0.05$ ).

**Justifications for Using ANCOVA**

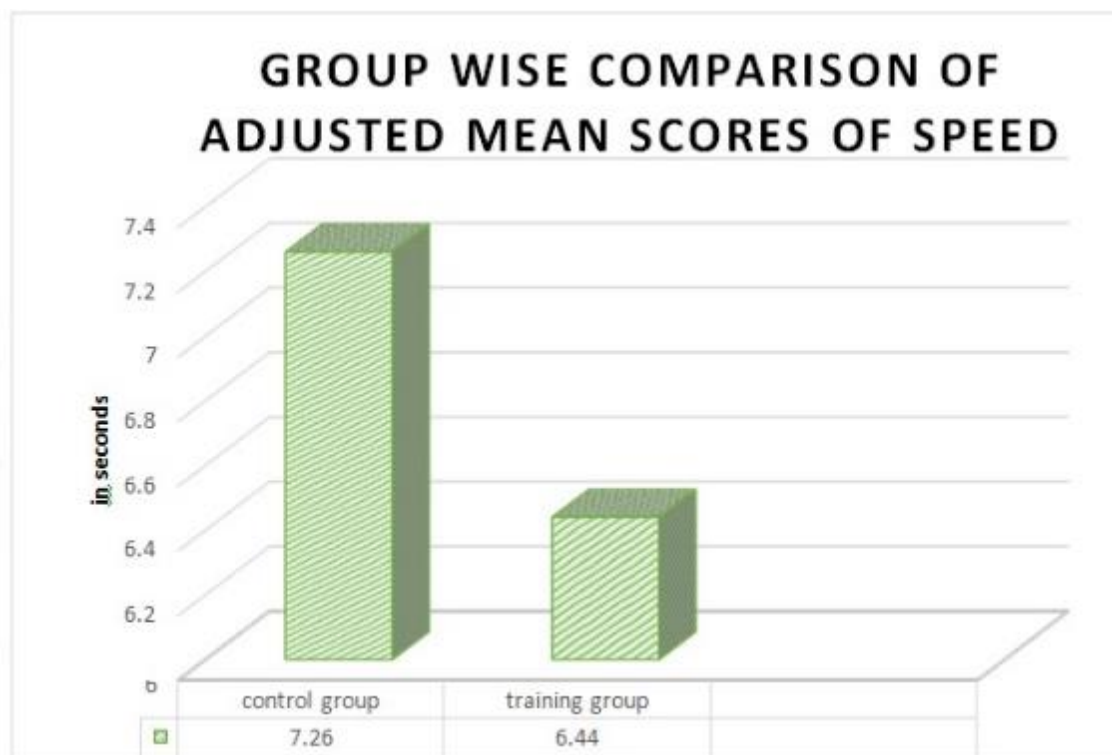
Analysis of covariance was used to determine how each dependent variable is influenced by independent variables while controlling for a covariate (**Clarke and Clarke, 1972**). In this study, pre-test scores of the selected variables have been shown to correlate with the post test scores and thus they were considered as appropriate covariates.

**RESULT****Group Wise Comparison Of Adjusted Mean Scores Of Speed**

The first objective was to compare adjusted mean scores of Speed of School Students belonging to Rope Skipping and Ladder training Group and Control Group by taking Pre- Speed as Covariate. The data were analyzed with the help of One Way ANCOVA and results are given in Table.

**Table:** Summary of One Way ANCOVA of Comprehension by taking PreV Speed as Covariate

| Source of variance | Df | SSy.x | MSSy.x | Fy.x | Remark  |
|--------------------|----|-------|--------|------|---------|
| Treatment          | 1  | 8.41  | 8.41   | 3.14 | P<0.001 |
| Error              | 47 | 1.25  | 0.27   |      |         |
| Total              | 49 |       |        |      |         |



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**PHYSICAL EXERCISE AND HEALTH: ROLE OF YOGA IN WELLNESS**

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**<sup>1</sup>Varsha Vipul Gala and <sup>2</sup>Dr. Kiran Save**<sup>1</sup>Research Scholar (Philosophy)<sup>2</sup>Research guide, DTSS College of commerce, Malad (East)**ABSTRACT**

*In today's modern world, we see cases like people who are regular in their exercise routine die with cardiac arrest, suffering from hypertension, autoimmune diseases, etc. Modern Life throws different kinds of challenges, as due to globalization today's work is not just physical, but rather it is more mental. Corporate jobs with odd working hours, sitting on the desk, dealing with numbers, marketing, meetings, calls, tasks, all are so taxing on the health of modern man, which makes him vulnerable to the modern-day diseases that has its root cause in mind. In this paper, I have thrown light on how a physically fit muscular body is not always healthy.*

**Keywords:** Health, wellness, world health organization, yoga, yoga philosophy, mental health, physical exercise.

**RESEARCH PROBLEM**

We read in the headlines that extremely muscular and fit, athlete died of cardiac arrest. Or world-famous swimmer suffering from depression. Perfectly fit and toned very famous film star suffering from insomnia. Celebrities who spend hours at gymnasium with most expensive trainers are popping anxiety pills. This hammers the big-time question on what is fitness? Is health different from physical fitness? What is wellness? In this paper I have tried to throw some light on how weight lifting, cardio, running is beneficial but they do not guarantee us complete wellbeing. Working on our mental health along with physical exercise is answer to modern day health issues.

**INTRODUCTION**

Physical fitness is “a set of attributes or characteristics that individuals have or have achieved that relates to their ability to perform physical activity.” Fitness is a capacity to perform a specific task. Fitness of soccer player, teacher, carpenter, CEO, accountant, athlete is not on same level. Exercising regularly can give you physical fitness. But at the same time there is need for mental wellness.

World health organization defines health as, “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” In today's fast-moving world, the link between the mind and body is more evident than ever, making psychosomatic diseases a pressing issue. Psychosomatic disorders are those where emotional stress and psychological factors lead to physical symptoms. Unlike purely physical illnesses, these disorders arise from the interplay between the mind and body. They can manifest when psychological stress results in physical symptoms like headaches or stomach-aches, even if there's no medical explanation. Conversely, somatic symptom disorders involve ongoing physical symptoms that may or may not have a clear medical basis, often paired with excessive worry and emotional distress. Addressing both conditions requires a well-rounded approach that includes psychological support, stress management, and lifestyle changes to improve overall health and well-being.

**YOGA AS A HOLISTIC INTEGRATED APPROACH**

Yoga connects stress to the concept of Kleshas, as highlighted by Maharshi Patanjali in his Yoga Sutras, where he mentions “*Avidya Asmita Raga Dvesha Abhinivesha kleshah*” (II.3). At its core, ignorance creates an imbalance at the most subtle level, which, when combined with ego, leads to the accumulation of stress and fragmentation of the self. This stress is further intensified by attachments, aversions, and the fear of death, ultimately driving individuals into a state of misery and limitation. Patanjali emphasizes that stress arises from an insatiable desire (*Kaam*) and attachment (*Raga*) to material pleasures. When desires go unfulfilled, stress emerges, and even when current desires are satisfied, new ones quickly take their place, creating a relentless cycle of stress. This cycle contributes to fluctuations in the mind (*Chitta Vrittis*), resulting in an agitated mental state.

Our personality is thought to consist of five layers, known as sheaths: *Annamaya Kosha*, *Pranamaya Kosha*, *Manomaya Kosha*, *Vijnanamaya Kosha*, and *Anandmaya Kosha*. Persistent distress disrupts the *Manomaya Kosha*, which in turn affects the *Pranamaya Kosha* (the vital sheath) and *Annamaya Kosha* (the physical sheath), leading to what are termed psychosomatic disorders. To effectively address these issues, it is essential to engage with all levels of existence. The holistic approach of Yoga not only targets physical symptoms for temporary relief but also incorporates practices that address the various sheaths of our being.

Techniques such as gentle static Asanas, relaxation methods, Pranayama, and meditation are designed to alleviate stress by harnessing the body's innate ability to return to a balanced state (homeostasis). Research indicates that practicing Yoga for just 20-30 minutes daily can lower stress hormone levels like cortisol and promote the release of endorphins, which are known to enhance well-being.

### **EXERCISE VERSES YOGA**

Both exercise and yoga involve physical movements, leading many to view yoga as a type of exercise and vice versa. However, there are significant differences between the two practices. Exercise encompasses any physical activity that engages muscles and energizes vital organs, often enhancing blood circulation and contributing to overall health. Additionally, various forms of exercise can help prevent diseases by maintaining a healthy weight. In contrast, yoga extends beyond just physical fitness. Rooted in ancient Hindu traditions, it aims to harmonize the physical, spiritual, and mental aspects of an individual. While practitioners often experience improvements in their physical health and appearance, the primary objective of yoga is to attain a higher state of consciousness. This is achieved through a combination of yoga postures (asanas), controlled breathing techniques (pranayama), specific hand gestures (mudra), and internal cleansing practices (shatkarma).

The physiological effects of exercise primarily engage the sympathetic nervous system, which can lead to increased heart rate, reduced digestive activity, and a sense of fatigue. Conversely, yoga activates the parasympathetic nervous system, promoting relaxation by enhancing digestion, widening blood vessels, and slowing the heart rate. Furthermore, while exercise often needs equipment, which can limit the range of activities, yoga is typically self-sufficient and can be practiced without any tools, making it accessible to everyone.

Engaging in physical workouts typically involves using various types of equipment, which can limit the range of activities you can do. In contrast, yoga stands out for its flexibility and can be performed without any special tools; in fact, you do not even need a yoga mat to get started. While traditional forms of exercise, particularly cardiovascular workouts, boost the amount of oxygen your body utilizes, yoga places a strong emphasis on proper breathing techniques. This focus on breath can lead to a decrease in overall oxygen consumption, making it a unique approach to fitness.

When you exercise regularly, it tends to be a catabolic process, meaning it breaks down energy through a type of metabolism that can be destructive. Conversely, yoga is considered anabolic, as it encourages a constructive metabolism that helps to preserve energy. While conventional workouts often aim to tone and build muscle, yoga may not directly focus on this goal; however, many of its poses do enhance muscle strength. Moreover, traditional exercise routines often come with a higher risk of injury due to the stress they place on muscles and ligaments. In contrast, yoga poses are generally safer and less strenuous. Unlike many forms of exercise that are typically more suitable for younger or healthier individuals, yoga is accessible to everyone, regardless of age or health condition.

### **CONCLUSION**

Mental health is a crucial component of a person's overall well-being, significantly influencing their psychological, emotional, and social interactions. It shapes how individuals view and engage with their surroundings and plays a key role in how effectively they handle daily challenges and relationships. A healthy mental state is essential for reaching personal aspirations, building strong connections, and leading a balanced life, highlighting its importance in managing life's complexities. Given the substantial effect mental health has on daily experiences, it is essential to actively protect and improve one's psychological well-being through various effective strategies and practices. Many factors can lead to mental health issues, such as environmental pressures, lifestyle choices, and personal situations. Therefore, recognizing potential risk factors and identifying signs of mental distress is crucial. This awareness helps us understand the value of maintaining good mental health, which not only builds resilience but also enhances overall life quality.

Yoga is becoming increasingly significant worldwide. In the Western perspective, yoga is often seen primarily as a physical workout, while in the Eastern tradition, it is viewed more holistically to unify the body and mind. Research has shown that yoga can positively impact cardio-respiratory performance, glucose tolerance, and the musculoskeletal system. Additionally, recent studies have indicated that yoga may be beneficial for various psychiatric conditions. Yoga encompasses several fundamental practices that are vital across its various forms: physical (asana), breath (pranayama), and mental (meditation). Asana focus on various body positions that align with the breath. Meditation aids practitioners in letting go of distracting thoughts, enabling them to focus on their breathing. Finally, breathing-based yoga, or pranayama, highlights the importance of slow, intentional breathing, designating specific moments for inhalation and exhalation.

Breathing techniques and meditation not only calms the mind but also offers mental advantages, such as decreased anxiety and depression. Interestingly, it can also enhance brain function.

Just as weightlifting builds muscle strength, engaging in yoga assists your brain cells in creating new connections and modifies brain structure and functionality, resulting in enhanced cognitive skills such as learning and memory. Yoga improves areas of the brain vital for memory, attention, awareness, thought, and language—essentially serving as a workout for your brain. Research employing MRI scans and other imaging techniques has shown that individuals who practice yoga regularly possess a thicker cerebral cortex (which processes information) and hippocampus (linked to learning and memory) compared to those who do not engage in yoga. Generally, these brain regions tend to shrink as people age, but older individuals who practice yoga experience less shrinkage than those who do not. This suggests that yoga may help alleviate age-related declines in memory and cognitive skills.

While all types of exercise can enhance mood by lowering stress hormones, boosting endorphins, and improving blood circulation to the brain, yoga could provide additional benefits. It may positively affect mood by increasing levels of a brain chemical known as gamma-aminobutyric acid (GABA). Meditation has been found to lower activity in the limbic system, the brain area tied to emotions. As emotional reactivity diminishes, people often react more calmly to stressful situations. Traditionally, medications and psychotherapy have been the main approaches to treating depression and anxiety. However, complementary methods such as yoga have also shown to be helpful and are comparable to other alternative therapies. Numerous studies have illustrated the beneficial effects of meditation and yoga on both mental and physical well-being. Regular participation in these practices has been shown to reduce anxiety, depression, and chronic pain. Furthermore, yoga and meditation not only enhance overall life quality but also improve emotional resilience and cognitive functions. The results of this research further highlight the transformative benefits of adding yoga and meditation to one's lifestyle. Researchers have noticed that ongoing participation in yoga and meditation significantly enhances individuals' well-being and decreases their perception of stress. Moreover, studies reveal that the brain areas associated with learning and memory become denser with mindfulness meditation practice. These recent discoveries accentuate the extensive advantages of these practices on both physical and mental health.

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**THANK YOU**

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**DRAW LOTS- MOBILE APPLICATION**

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**<sup>1</sup>Mr. Vilas V. Kotian and Guide <sup>2</sup>Dr. Nisar Hussain**

<sup>1</sup>Research scholar and Assistant Sports Director, The D. G. Ruparel College of Arts, Science and Commerce, Mahim, Mumbai, Maharashtra, University of Mum<sup>2</sup>Sports Director, Tolani College of Commerce, Andheri, Mumbai, Maharashtra, University of Mumbai

**ABSTRACT**

*“Draw Lots” is an android mobile application, is an ultra-modern app which features generating random numbers. Initially people used to draw lots to decide the allotment according to sequence of numbers, it used to be like each person use to randomly pick up a piece of paper from a container and according to the sequence of numbers the list used to be prepared. By doing so it was time consuming, limited scalability, human error & bias and lack of security. Now with Draw Lots App the same thing can be done with just a multiple click which would also give a fair result rather it may be unfair while doing in the container. Draw Lots is a simple and extremely easy app to generate random numbers and creating a draw list items / number.*

*So, for these reasons the mobile application “Draw Lots” has been developed by me (Mr. Vilas Kotian) under Aarya Studios for easy handling, long lasting, at the same time it can utilize the time efficiently, instantaneous results, can handle millions of entries instantly. Random selection has been a fundamental method for decision-making in various domains, including gaming, education, and social interactions. With advancements in digital tools, mobile applications like “Draw Lots” by Aarya Studios offering users a quick and unbiased selection method.*

**Keywords:** Mobile application; Android; Draw Lots, Random Number, Digital Tools;

**INTRODUCTION**

“Draw Lots” is a generating random numbers android mobile application specially developed to save time where initially people used to randomly pick up a piece of paper from a container to allotment a fair sequence of numbers while making draw for competition / tournament. Traditional random selection methods, such as drawing names from a hat, have evolved with technological advancements. Mobile applications now provide efficient alternatives for unbiased selection. The “Draw Lots” application by Aarya Studios is one such tool that simplifies decision-making processes. This paper examines the role of mobile applications in randomized selection, focusing on usability, accuracy, and user perception.

**METHODOLOGY**

The need of Draw Lots is not only for random number generating but major effective of it is to save the time consuming for large selections, reliable when properly programmed and audited, instantaneous results, highly precise, unbiased, can handle millions of entries instantly. After the observation of the problems, surveying it and taking into consideration all the advantage of the Draw Lots application, I (Mr. Vilas Kotian) have developed an android mobile application under “Aarya Studios”. Draw Lots is a useful tool in your pocket that will help you to generate random numbers and random number sequences. It is the only app you need to generate random numbers fast.

**Features: -**

- Friendly interface.
- Innovative and simple design.
- Smooth functionality between the buttons.
- Intuitive and easy to use menus.
- Large, easy-to-read buttons.
- Absolutely free application.

**ANALYSIS OF DATA**

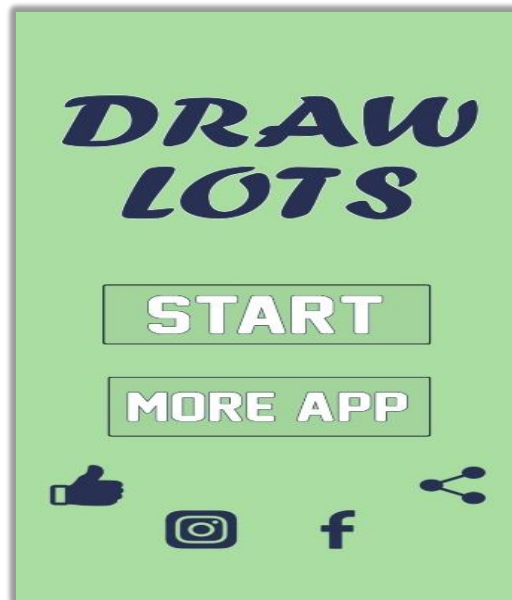
Problem faced while doing manual without an application;

- **Time Consuming** – Manual processes can take longer, especially for complex selection.
- **Limited Scalability** – becomes impractical for large scale selections.

- **Human Error & Bias** – Mistakes can occur, such as mixing issues or improper shuffling, affecting randomness.
- **Lack of Security** – Susceptible to manipulation, such as favouritism or tampering with entries.

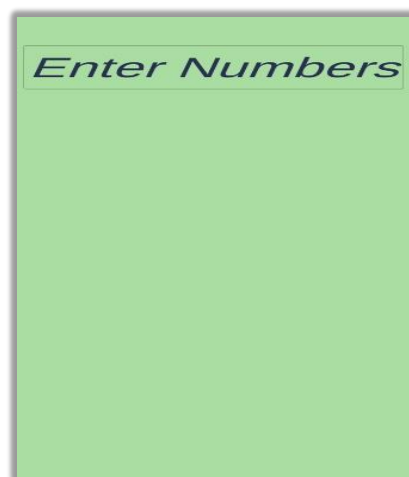
## FINDINGS

### Main Menu



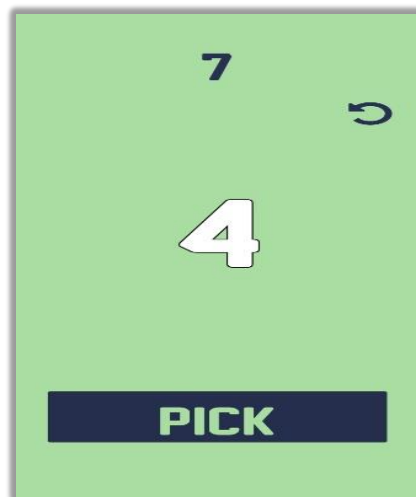
- On the “Main Menu” screen
  - Select “Start” button to proceed.

### Enter Number Screen



- On the “Enter Numbers” screen
  - Tap on the “Enter Numbers” and insert number in it.
  - Press Done or Ok button to proceed.

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**Number Pickup Screen**

- On the “Number Pickup” screen
  - Tap on “Pick” button to generate randomise number.
  - “Restart” button is display on top right of the screen, to start the process again with same number.

**Complete Screen**

- On the “Complete” screen
  - Complete screen is pop up once all number is displayed.

**CONCLUSION**

- The important impact of “Draw Lots” is that it starts to operate with much shorter time controls than ever before.
- Draw Lots is ideal for large scale of numbers, accuracy, security and efficiency.
- It makes it significantly easier for the player to generate random numbers and creating a draw list or any kind of randomise list.
- When it comes to functionality, Draw Lots with all its features is most convenient for all.
- They Draw Lots app provide an accessible, efficient, and bias-free method for decision-making.
- Future research could explore further improvements in algorithm transparency and user trust to enhance the effectiveness of such applications.

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**REFERENCES**

- Used Unity Engine / Software to develop the app.
- Link to download unity Engine: <https://unity3d.com/get-unity/download/archive>
- Unity personal edition: Unity 2020.3.48f1
- Coded in C# language
- User interface has been built with the help of the software tools.
- Gained knowledge on how to prepare an app while pursuing MCA, M.P.Ed.
- <https://play.google.com/store/apps/details?id=com.aaryastudios.drawlots>



**ACADEMIC QUALIFICATION**  
MPed, MCA, BCom

**SPORTS ACHIEVEMENTS**  
NSNIS (CC) in Volleyball  
National Masters Athlete – Shot Put, Discus Throw  
Represented Mumbai University in Volleyball

**Mr. Vilas Kotian**

**ASSISTANT SPORTS DIRECTOR**  
The D. G. Ruparel College of Arts, Science & Commerce,  
Mumbai, Maharashtra

**SOFTWARE DEVELOPER**  
Founder of Aarya Studios – Developed 34 Mobile applications which are  
live on Google Play Store  
[www.aaryastudios.com](http://www.aaryastudios.com)

[vilaskotian05@gmail.com](mailto:vilaskotian05@gmail.com) +91 9867287133

Any suggestions, comments are most welcome!

THANKS & REGARDS,

**VILAS V. KOTIAN**

## व्यवसाय आणि कॉर्पोरेट मधील नैतिकता

डॉ० सुनीलदत्त सोपान गवरे  
शां० घो० कला व विज्ञान आणि  
गो० प० वाणिज्य महाविद्यालय शिवळे

## प्रस्तावना ॥

व्यवसायातील नैतिकता म्हणजे व्यवसाय चालवताना आणि कॉर्पोरेट निर्णय घेताना योग्य न्याय्य आणि पारदर्शक मार्गाने वागण्याची प्रक्रिया. नैतिक निर्णय घेणे म्हणजे फक्त कायद्याचे पालन करणे नव्हे तर सामाजिक जबाबदारी आणि नैतिक मूल्यमापनावर आधारित योग्य निर्णय घेणे.

व्यवसाय नैतिकता म्हणजे व्यवसायाच्या प्रत्येक टप्प्यावर प्रामाणिकपणा पारदर्शकता जबाबदारी आणि नैतिक मूल्यांचे पालन करणे. हे मूल्य व्यवसायाच्या धोरणांमध्ये आणि दैनंदिन कार्यप्रणालीत समाविष्ट असले पाहिजे.

व्यावसायिक नैतिकता म्हणजे व्यवसायाच्या क्षेत्रात योग्य आचारसंहिता प्रामाणिकपणा आणि नैतिक मूल्यांचे पालन करणे. हे नियम आणि तत्वे कोणत्याही व्यवसायाच्या यशासाठी आणि समाजात विश्वास निर्माण करण्यासाठी महत्वाचे असतात.

कॉर्पोरेट नैतिकता म्हणजे कंपन्यांनी त्यांच्या धोरणांमध्ये आणि निर्णय प्रक्रियेत सामाजिक जबाबदारी आणि नैतिक मूल्यांचे पालन करणे. हे कर्मचारी ग्राहक गुंतवणूकदार आणि समाज यांच्याशी योग्य प्रकारे वागण्यास प्रोत्साहित करते.

## अभ्यासाची उद्दिष्टे ॥

- व्यवसाय व कॉर्पोरेट मधील नैतिकतेचे संबंध पाहणे.
- व्यवसाय व कॉर्पोरेट यांची तत्वे समजावून घेणे.
- व्यवसाय आणि कॉर्पोरेट नैतिकतेचे महत्व यांचा आढावा घेणे.

## गृहीतक :

- नैतिकता व्यवसाय आणि कॉर्पोरेट मध्ये कशाप्रकारे कार्य करते.
- व्यवसाय आणि कॉर्पोरेट यांचा संबंध कशा प्रकारचा आहे त्याची माहिती घेणे.
- नैतिकतेचे महत्व व्यवसाय आणि कॉर्पोरेट मध्ये कसे आहे याचा विचार करणे.
- व्यवसायाने कॉर्पोरेट मध्ये नीतिमतेची आव्हाने आणि परिणाम काय आहेत याचा विचार करणे.

## अभ्यास पद्धती ॥

प्रस्तुत शोध निबंध लिहिण्यासाठी दुय्यम तथ्य संकलन पद्धतीचा अवलंब करण्यात आला आहे. यासाठी पुस्तके उद्योजक मित्र विविध खंड मासिके वर्तमानपत्र आणि इंटरनेट इत्यादी माध्यमातून दुस्यम् सामुग्रीचे संकलन करण्यात आले आहे.

## व्यावसायिक नैतिकतेची तत्वे (क्षपदबपचसमे व चितवमिपवदंस मजीपबे) ॥

- प्रामाणिकपणा** (भवदमेजलद्ध : ग्राहक कर्मचारी आणि भागीदारांशी प्रामाणिक राहणे आवश्यक आहे.
- उत्तरदायित्व** (बववनदजंइपसपजलद्ध : आपल्या कृतींना जबाबदार राहून योग्य निर्णय घेणे.
- गोपनीयता** (बवदपिकमदजपसपजलद्ध : ग्राहक व व्यवसायाची गुपिते सुरक्षित ठेवणे.
- समता आणि न्याय** (धंपतदमे - श्रनेजपबमद्ध : भेदभाव न करता सर्वासोबत न्याय्य वर्तन करणे.
- गुणवत्ता आणि व्यावसायिकता** (फनंसपजल - क्षवमिपवदंसपेउद्ध : सेवांमध्ये उच्च दर्जा राखणे.
- सामाजिक जबाबदारी** (वबपंस त्मेचवदेपइपसपजलद्ध : समाजाच्या हितासाठी व्यावसायिक जबाबदारी पार पाडणे.
- कायदेशीर पालन** (बवउचसपंदबम पूजी रूद्ध : सर्व नियम आणि कायदे पाळणे.

## व्यावसायिक नैतिकतेचे फायदे :

ग्राहकांचा आणि भागीदारांचा विश्वास मिळतो. व्यवसायाची चांगली प्रतिमा तयार होते. दीर्घकालीन यश मिळते. कर्मचारी संतुष्ट राहतात आणि सकारात्मक वातावरण तयार होते. व्यावसायिक नैतिकता ही केवळ कायदेशीर जबाबदारी नसून ती व्यवसायाच्या सतत वाढीसाठी आवश्यक असते.

## कॉर्पोरेट नैतिकतेची तत्वे (क्षपदबपचसमे व बवतचवतंजम मजीपबे) ॥



१) **कॉर्पोरेट नैतिकतेचा अर्थ** (डमंदपदह व बिबतचवतंजम मजीपबे) : कॉर्पोरेट नैतिकता म्हणजे व्यवसाय आणि उद्योग क्षेत्रातील नैतिक नियम मूल्ये आणि जबाबदाऱ्या. हे व्यवसायाच्या पारदर्शकतेवर प्रामाणिक व्यवहारांवर आणि सामाजिक जबाबदाऱ्यांवर आधारित असते.

२) **कॉर्पोरेट नैतिकतेची गरज** (छममक वित्त बवतचवतंजम मजीपबे) : विश्वासार्हता आणि पारदर्शकता वाढवण्यासाठी ग्राहक कर्मचारी आणि भागीदारांमध्ये नातेसंबंध दृढ करण्यासाठी कायदेशीर अडचणी टाळण्यासाठी समाज आणि पर्यावरणाविषयी जबाबदारी पार पाडण्यासाठी.

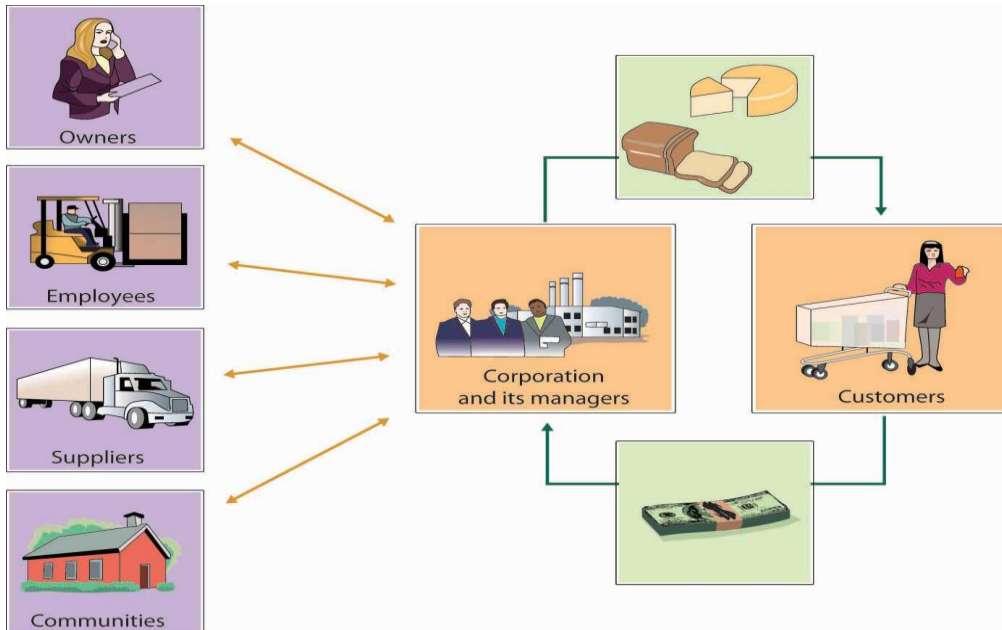
३) **महत्त्वाचे नैतिक तत्व** (पुचवतजंदज मजीपबंस चतपदबपचसमे) : प्रामाणिकपणा : ग्राहक आणि भागीदारांशी प्रामाणिक व्यवहार करणे. उत्तरदायित्व: कंपनीच्या कृतींसाठी जबाबदारी स्वीकारणे. ४) **पारदर्शकता** (ज्त्तंदेचंतमदबल) : आर्थिक व्यवहार आणि धोरणे स्पष्ट ठेवणे. सर्व कर्मचाऱ्यांना समान वागणूक देणे. समाज आणि पर्यावरणाच्या हिताचे निर्णय घेणे ही सामाजिक जबाबदारी आहे.

४) **नैतिकता आणि सामाजिक जबाबदारी** (मजीपबे 'दक'ेवबपंस तमेचवदेपइपसपजल) : कॉर्पोरेट नैतिकता केवळ नीतिमूल्यांपुरती मर्यादित नसून ती कॉर्पोरेट सोशल रिस्पॉन्सिबिलिटी (बेद्ध) च्या माध्यमातून सामाजिक बांधिलकीदेखील दर्शवते. उदाहरणार्थ पर्यावरणपूरक उत्पादन पद्धती सामाजिक उपक्रमांना मदत कर्मचारी कल्याण योजना इत्यादी.

५) **कॉर्पोरेट नैतिकतेची अंमलबजावणी** (पुचसमउमदजंजपवद व बिबतचवतंजम मजीपबे) : नैतिक मार्गदर्शक तत्वे तयार करणे. कर्मचारी प्रशिक्षण कार्यक्रम राबवणे. गैरप्रकार रोखण्यासाठी कठोर धोरणे आखणे. पारदर्शक व्यवसाय मॉडेल स्वीकारणे.

**कॉर्पोरेट निर्णय घेताना नैतिकतेची भूमिका :**

- १) **हितसंबंधांमध्ये संतुलन राखणे** : कंपनीच्या फायद्यासोबतच ग्राहक कर्मचारी आणि समाजाच्या हिताचा विचार करणे.
- २) **पारदर्शकता आणि जबाबदारी** : निर्णय खुलेपणाने घेऊन त्यांच्या परिणामांची जबाबदारी स्वीकारणे.
- ३) **वैयक्तिक आणि सामाजिक नैतिकता** : व्यवस्थापकांनी केवळ कायदेशीर नियमांचाच विचार न करता नैतिक मूल्यमापन करणे.
- ४) **टिकाऊ आणि हरित व्यवसाय धोरणे** : पर्यावरणपूरक आणि सामाजिकदृष्ट्या जबाबदार निर्णय घेणे.



**व्यावसायिक नेत्यांसाठी नैतिक निर्णय घेण्याचे मॉडेल :**

- १) **उपयुक्ततावादी दृष्टिकोन**: हे मॉडेल अशा कृती निवडण्याचे सुचवते जे बहुतेक लोकांना सर्वात जास्त फायदा देतील जे बहुतेकदा समुदाय कल्याण आणि संसाधन वाटपासाठी मध्ये लागू केले जाते.
- २) **हक्क-आधारित दृष्टिकोन** रू व्यक्तींच्या हक्कांचा आदर करण्यावर आणि नैतिक निर्णयांमुळे भागधारकांची प्रतिष्ठा आणि स्वायत्तता जपली जाईल याची खात्री करण्यावर लक्ष केंद्रित करते.

३) **न्याय दृष्टिकोन** ः निष्पक्षतेवर भर देते जेथे कृती पक्षपात किंवा भेदभावाशिवाय केल्या पाहिजेत. विशेषतः नैतिक कामगार पद्धती आणि भागधारक व्यवस्थापनात संबंधित.

४) **सद्गुण नीतिमत्ता** ः नेत्यांना त्यांच्या निर्णयांमध्ये प्रामाणिकपणा करुणा आणि सचोटी यासारखे गुण मूर्त रूप देण्यास प्रोत्साहित करते. मूल्यांवर आधारित कॉर्पोरेट संस्कृतीला चालना देते.

**व्यवसायातील नैतिकतेची अंमलबजावणी करण्यासाठी धोरणे :**

१) **नैतिक आचारसंहिता तयार करणे** : कंपनीसाठी स्पष्ट नियम आणि मूल्ये निश्चित करणे.

२) **कर्मचाऱ्यांसाठी नैतिकतेचे प्रशिक्षण** : त्यांना नैतिक निर्णय घेण्यास सक्षम करणे.

३) **तक्रार निवारण प्रणाली** : अनैतिक वागणुकीसंदर्भात गुप्त तक्रारीसाठी यंत्रणा निर्माण करणे.

४) **नैतिक नेतृत्वाचा आदर्श** : व्यवस्थापनाने स्वतः नैतिकतेचे पालन करून इतरांना प्रेरित करणे.

**व्यवसाय आणि कॉर्पोरेट नैतिकता :**

व्यवसाय नैतिकता आणि कॉर्पोरेट नैतिकता या संकल्पना व्यवसाय क्षेत्रात महत्वाच्या आहेत. या नैतिकता व्यवसायातील निर्णय प्रक्रिया, व्यवहार, कर्मचारी व ग्राहक यांच्याशी असलेल्या संबंधांवर परिणाम करतात.

**व्यवसाय आणि कॉर्पोरेट नैतिकतेचे महत्त्व :**

१) **विश्वासाहता आणि प्रतिष्ठा वाढवते** : नैतिकतेचा अवलंब केल्याने ग्राहकांचा आणि भागधारकांचा विश्वास मिळतो. नैतिक निर्णय घेतल्याने ग्राहक गुंतवणूकदार आणि कर्मचारी यांचा विश्वास वाढतो.

२) **दीर्घकालीन यशासाठी उपयुक्त** : नैतिक व्यवसाय मॉडेल टिकाऊ आणि स्थिर वाढीस मदत करतो.

३) **कायद्याचे पालन सुनिश्चित करते** : नैतिक व्यवसाय पद्धतींमुळे कायदेशीर अडचणी टाळल्या जातात. नैतिकतेचे पालन केल्याने कायदेशीर गुंतागुंत आणि दंडात्मक कारवाई टाळता येते.

४) **कर्मचाऱ्यांचे समाधान वाढते** : नैतिक वातावरणात कर्मचारी अधिक समाधानी आणि उत्पादक असतात. नैतिक वातावरणामुळे कर्मचारी आनंदी राहतात आणि चांगली उत्पादकता देतात.

५) **सामाजिक जबाबदारी पार पाडता येते** : कॉर्पोरेट नैतिकतेच्या आधारावर कंपनी समाजाच्या विकासात योगदान देऊ शकतात.

६) **सततची वाढ आणि स्थिरता** : नैतिक व्यवसाय धोरणांमुळे कंपनी दीर्घकालीन यश मिळवते.

**व्यवसाय आणि कॉर्पोरेट नैतिकतेच्या मुख्य तत्त्वे :**

साधारणपणे १२ व्यवसाय नीतिमत्ता तत्त्वे आहेत.

१) **नेतृत्व** ः व्यावसायिक आणि वैयक्तिक जीवनातील सर्व पैलूंमध्ये निर्णय आणि वर्तनाचे मार्गदर्शन करण्यासाठी इतर ११ तत्त्वे स्वीकारण्याचा एकत्रित करण्याचा आणि अनुकरण करण्याचा जाणीवपूर्वक प्रयत्न.

२) **जबाबदारी** ः संस्थेमध्ये मालकी हक्क वाढवा. कर्मचाऱ्यांना त्यांच्या कामासाठी जबाबदार राहण्याची आणि तुमच्या कामासाठी जबाबदार राहण्याची परवानगी द्या.

३) **पारदर्शकता** ः भागधारक म्हणजे व्यवसायात रस असलेले लोक. जसे की भागधारक, कर्मचारी, फर्म चालवत असलेला समुदाय आणि कर्मचाऱ्यांचे कुटुंबातील सदस्य. व्यापार गुपिते उघड न करता, कंपन्यांनी त्यांच्या आर्थिक बाबी किंमतीतील बदल, भरती आणि काढून टाकण्याच्या पद्धती, वेतन आणि पगार आणि पदोन्नती याबद्दलची माहिती व्यवसायाच्या यशात रस असलेल्यांना उपलब्ध असल्याची खात्री करावी.

४) **जबाबदारी** ः स्वतःला आणि इतरांना त्यांच्या कृतींसाठी जबाबदार धरणे. नैतिक पद्धतींचे पालन करण्याची आणि इतरांनी नीतिमत्ता मार्गदर्शक तत्त्वांचे पालन करावे याची खात्री करण्याची वचनबद्धता.

५) **सचोटी** ः इतर तत्त्वे समाविष्ट करते - प्रामाणिकपणा, विश्वासाहता आणि विश्वासाहता. सचोटी असलेली व्यक्ती सातत्याने योग्य गोष्ट करते आणि स्वतःला उच्च दर्जावर ठेवण्याचा प्रयत्न करते.

६) **इतरांचा आदर** ः कामाच्या ठिकाणी नैतिक वर्तन आणि वातावरण वाढवण्यासाठी इतरांचा आदर करणे हा एक महत्वाचा घटक आहे. प्रत्येकाला प्रतिष्ठा, गोपनीयता, समानता, संधी, करुणा आणि सहानुभूती मिळण्यास पात्र आहे.

७) **प्रामाणिकपणा** ॥ सर्व बाबतीत सत्य असणे हे नैतिक वातावरण निर्माण करण्याची गुरुकिल्ली आहे. आंशिक सत्ये वगळणे आणि कमी किंवा जास्त सांगणे व्यवसायाची कामगिरी सुधारण्यास मदत करत नाही. वाईट बातमी चांगल्या बातमीप्रमाणेच कळवली पाहिजे आणि स्वीकारली पाहिजे जेणेकरून उपाय विकसित करता येतील.

८) **कायद्यांचा आदर** ॥ नैतिक नेतृत्वामध्ये सर्व स्थानिक राज्य आणि संघीय कायदे लागू करणे समाविष्ट असले पाहिजे. जर कायदेशीरदृष्ट्या काही राखाडी क्षेत्र असेल तर नेत्यांनी त्या अंतराचा फायदा घेण्याऐवजी कायदेशीरतेच्या बाजूने चूक करावी.

९) **करुणा** ॥ कर्मचारी व्यवसायाभोवतीचा समुदाय व्यवसाय भागीदार आणि ग्राहक या सर्वांना त्यांच्या कल्याणाची काळजी घ्यावी.

१०) **निष्पक्षता** ॥ सर्वांना समान संधी मिळायला हव्यात आणि त्यांना समान वागणूक मिळाली पाहिजे. जर एखादी पद्धत किंवा वर्तन तुम्हाला अस्वस्थ करत असेल किंवा समानता सामान्य सौजन्य आणि आदरापुढे वैयक्तिक किंवा कॉर्पोरेट फायद्याला प्राधान्य देत असेल तर ते कदाचित न्याय्य नाही.

११) **निष्ठा** ॥ नेतृत्वाने त्यांच्या कर्मचार्यांना आणि कंपनीला वचनबद्धता दाखवली पाहिजे. कर्मचारी आणि व्यवस्थापनामध्ये प्रेरणादायी निष्ठा ही खात्री देते की ते सर्वोत्तम पद्धतींबद्दल वचनबद्ध आहेत.

१२) **पर्यावरणीय चिंता** ॥ ज्या जगात संसाधने मर्यादित आहेत भूतकाळातील पद्धतींमुळे परिसंस्थांचे नुकसान झाले आहे आणि हवामान बदलत आहे अशा परिस्थितीत व्यवसायाच्या पर्यावरणीय परिणामांबद्दल जागरूक असणे आणि काळजी घेणे अत्यंत महत्वाचे आहे. सर्व कर्मचार्यांना अशा पद्धती शोधण्यास आणि त्यांच्या उपाययोजनांचा अहवाल देण्यास प्रोत्साहित केले पाहिजे जे आधीच केलेल्या नुकसानात भर घालू शकतात.

**व्यवसाय नीतिमत्ता आणि सीएसआर अंमलबजावणीतील आव्हाने :**

१) **नफा आणि उद्देश संतुलित करणे** : नफा ध्येये आणि नैतिक वचनबद्धता यांच्यात संतुलन साधणे आव्हानात्मक असू शकते विशेषतः स्पर्धात्मक बाजारपेठांमध्ये जिथे नफा कमी असतो.

२) **मोजमाप आणि जबाबदारी** : सीएसआर उपक्रम आणि नैतिक पद्धतींच्या परिणामांचा मागोवा घेण्यासाठी मजबूत मोजमाप साधने आणि पारदर्शकता आवश्यक आहेत जी काही कंपन्यांना अंमलात आणणे कठीण वाटू शकते.

३) **नियामक अनुपालन** : कामगार कायदे पर्यावरणीय नियम आणि आर्थिक पारदर्शकतेच्या आवश्यकतांचे पालन सुनिश्चित करण्यासाठी कंपन्यांना वेगवेगळ्या देशांमध्ये वेगवेगळ्या जटिल कायदेशीर चौकटीतून जावे लागते.

४) **भागधारक व्यवस्थापन** ॥ भागधारक ग्राहक कर्मचारी आणि समुदायासह विविध भागधारकांच्या हिताचे संतुलन साधल्याने नैतिक दुविधा निर्माण होऊ शकतात.

**व्यवसाय नीतिमत्तेवर परिणाम करणारे घटक :**

व्यवसाय जगात नैतिकतेबाबत व्यक्तीच्या निर्णय घेण्यावर कामाच्या वातावरणाचे अनेक पैलू प्रभाव पाडतात. जेव्हा एखादी व्यक्ती कंपनी वाढवण्याच्या मार्गावर असते तेव्हा अनेक बाह्य प्रभाव त्यांच्यावर विशिष्ट पद्धतीने कामगिरी करण्यासाठी दबाव आणू शकतात. कामाच्या ठिकाणी व्यक्तीच्या कामगिरीचा गाभा त्यांच्या वैयक्तिक वर्तन संहितेत असतो. व्यक्तीच्या वैयक्तिक नैतिकतेमध्ये सचोटी प्रामाणिकपणा संवाद आदर करुणा आणि सामान्य ध्येये असे अनेक भिन्न गुण समाविष्ट असतात. याव्यतिरिक्त व्यक्तीच्या वरिष्ठांनी ठरवलेले नैतिक मानक बहुतेकदा त्यांच्या स्वतःच्या नैतिकतेच्या संहितेत रूपांतरित होतात. कंपनीचे धोरण हे नैतिकतेचे शिखर आहे जे नैतिक वर्तनाच्या संदर्भात लोक वैयक्तिक विकास आणि निर्णय घेण्याच्या प्रक्रियेत प्रमुख भूमिका बजावते.

कंपनी आणि तिच्या व्यक्तींच्या नीतिमत्तेवर त्यांच्या देशाच्या स्थितीचा मोठा प्रभाव पडतो. जर एखादा देश गरिबीने ग्रासलेला असेल तर मोठ्या कंपन्या सतत वाढत राहतात परंतु लहान कंपन्या कोमेजून जाऊ लागतात आणि नंतर त्यांना जगण्याच्या कोणत्याही पद्धतीसाठी जुळवून घेण्यास आणि कचरा उचलण्यास भाग पाडले जाते. परिणामी कंपनीच्या नेतृत्वाला अनेकदा नवीन व्यवसाय संधी मिळविण्यासाठी अनैतिक पद्धतींमध्ये भाग घेण्याचा मोह होतो. याव्यतिरिक्त सोशल मीडिया हा नीतिमत्तेतील सर्वात प्रभावशाली घटक आहे. इतक्या माहितीची त्वरित उपलब्धता आणि लाखो लोकांची मते लोकांच्या वर्तनावर खूप प्रभाव पाडतात. सामान्य म्हणून दर्शविलेल्या गोष्टींशी जुळवून घेण्याची इच्छा अनेकदा नैतिक आणि नैतिकदृष्ट्या योग्य काय आहे याची आपली कल्पना हाताळते. सोशल मीडियावरील लोकप्रिय ट्रेंड आणि अशा जलद गतीने सहभागी होण्यापासून मिळणारे तात्काळ समाधान लोकांच्या कल्पना आणि निर्णयांना विकृत करते.

**व्यवसाय नीतिमत्ता आणि सीएसआरचे भविष्य :**

१) पर्यावरणीय सामाजिक आणि प्रशासन (नैतिक) निकषांवर वाढलेले लक्ष: गुंतवणूकदार आणि ग्राहक कंपन्यांचे त्यांच्या कामगिरीच्या आधारे मूल्यांकन करत आहेत ज्यामुळे स्पर्धात्मकतेसाठी नैतिक आणि शाश्वत पद्धती महत्वाच्या आहेत.

२) सामाजिकदृष्ट्या जबाबदार गुंतवणूक (नैतिक) चा उदय: कॉर्पोरेट धोरणांवर प्रभाव टाकत आहे कंपनी पारंपारिक आर्थिक निकषांपेक्षा सामाजिक परिणामांना प्राधान्य देणाऱ्या गुंतवणूकदारांना आकर्षित करण्यासाठी नैतिक पद्धतींचा अवलंब करत आहेत.

३) पारदर्शकतेसाठी तांत्रिक एकीकरण: पारदर्शकता वाढविण्यासाठी नैतिक पुरवठा साखळ्या सुलभ करण्यासाठी आणि सीएसआर परिणामांचा अधिक प्रभावीपणे मागोवा घेण्यासाठी ब्लॉकचेन आणि एआय सारख्या तंत्रज्ञानाचा वापर केला जात आहे.

४) ग्राहकांच्या अपेक्षांमध्ये बदल: आधुनिक ग्राहक पारदर्शकता नैतिक उत्पादन आणि शाश्वत उत्पादनांची मागणी करतात. या बदलामुळे व्यवसायांना त्यांच्या मुख्य धोरणांमध्ये नैतिकता आणि सीएसआरचा समावेश करण्यास प्रवृत्त केले जात आहे.

**निष्कर्ष :**

व्यवसाय आणि कॉर्पोरेट नैतिकता हे केवळ कायदेशीर बंधने नसून ते व्यवसायाच्या टिकाऊपणासाठी आणि सामाजिक प्रगतीसाठी महत्वाचे घटक आहेत. नैतिक मूल्यांचे पालन केल्याने व्यवसायाची दीर्घकालीन वाढ आणि यश सुनिश्चित करता येते.

कॉर्पोरेट नैतिकता व्यवसायातील विश्वास जबाबदारी आणि टिकाऊ विकासाला चालना देते. नैतिक मूल्यांचे पालन केल्याने व्यवसाय केवळ आर्थिक प्रगती साधत नाही तर समाज आणि पर्यावरणासहित संपूर्ण पद्धतीने प्रगती करतो.

व्यवसाय आणि कॉर्पोरेट निर्णय घेण्यात नैतिकतेचा विचार हा केवळ सामाजिक दायित्व नसून दीर्घकालीन यशासाठी आवश्यक बाब आहे. नैतिक व्यवसाय धोरणे नफ्याच्या पलिकडे जाऊन समाजहित पर्यावरणसंवर्धन आणि पारदर्शकतेला प्रोत्साहन देतात. त्यामुळे कंपन्यांनी केवळ कायदेशीरता नव्हे तर उच्च नैतिक मूल्यांवर आधारित निर्णय घेण्याचा प्रयत्न करावा.

कॉर्पोरेट प्रशासनात नैतिकता महत्वाची भूमिका बजावते संस्थांमध्ये सचोटी पारदर्शकता आणि जबाबदारी सुनिश्चित करते. भागधारकांमध्ये विश्वास निर्माण करण्यासाठी आणि सकारात्मक प्रतिष्ठा राखण्यासाठी व्यावसायिक नीतिमतेचे पालन करणे आवश्यक आहे. निर्णय प्रक्रियेत नैतिकतेचे एकीकरण करणे ही कॉर्पोरेट प्रशासनाची सर्वोत्तम पद्धत आहे जी जबाबदार आणि शाश्वत व्यवसाय पद्धतींना प्रोत्साहन देते. हे व्यावसायिकता निष्पक्षता आणि आदराची संस्कृती वाढवते जी शेवटी संस्थेच्या एकूण यशात योगदान देते.

**संदर्भ :**

- १) व्यवसाय नीतिमत्ता" स्टॅनफोर्ड विश्वकोश ऑफ फिलॉसॉफी. २००८-०४-१६
- २) फ्रेडरिक जॉन फेरल लंडन फेरल ओसीए व्यवसाय नीतिमत्ता: नैतिक निर्णय घेणे आणि प्रकरणे, अकरावी आवृत्ती. बोस्टन मॅसेच्युसेट्स: केंगेज (जानेवारी २०१६).
- ३) स्मिथ ए राष्ट्रांच्या संपत्तीच्या स्वरूप आणि कारणांची चौकशी. शिकागो इलिनॉय: शिकागो विद्यापीठ प्रेस (१७७६/१९५२)
- ४) मॅडसेन व्यवसाय नीतिमतेचे मूलतत्वे.
- ५) रिचर्ड डी जॉर्ज व्यवसाय नीतिमत्ता.
- ६) व्यवसाय नीतिमत्ता" (पीडीएफ). मूळ (पीडीएफ) वरून २०१६-१२-२१ रोजी संग्रहित २०१६-०९-१४ रोजी पुनर्प्राप्त.
- ७) रॉबर्ट टी. कियोसाकी अनुवादक अभिजित थिटे, बिझनेस आणि व्यवस्थापन सेल्फ हेल्प अनुवादित. मंजुल पब्लिशिंग हाउस

व्यवसाय नीतिमत्ता आणि आचारसंहिता गुन्हेगारी फसवणूक प्रतिबंध कार्यक्रमांचा नमुना [https://www.phoenix.gov/policesite/Documents/d\\_049344.pdf](https://www.phoenix.gov/policesite/Documents/d_049344.pdf)

[https://en.wikipedia.org/wiki/Business\\_ethics](https://en.wikipedia.org/wiki/Business_ethics)

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## आधुनिक शैक्षणिक वातावरणात स्वामी विवेकानंदांचे शिक्षणावरील तत्वज्ञान

Uday Umakant Rawool<sup>1</sup> and Dr. Sunildatt Sopan Gavare<sup>2</sup><sup>1</sup>Research Scholar, D.T.S.S College of Commerce, Malad (E), Mumbai-400097<sup>2</sup>D.T.S.S College of commerce, Malad (E), Mumbai-400097

## प्रस्तावना:&amp;

भारत हा वैविध्यपूर्ण आणि समृद्ध सांस्कृतिक वारसा असलेला देश आहे. १९ व्या शतकात शिक्षण व्यवस्था एका परिपूर्ण चौकटीत बसविण्यासाठी अनेक महान शिक्षणतज्ज्ञ त्यांच्या वैयक्तिक कल्पना आणि शिक्षणाचे तत्वज्ञान घेऊन आले. या सर्वांमध्ये, स्वामी विवेकानंद (१२ जानेवारी १८६३ - ४ जुलै १९०२) हे भारतातील सर्वात प्रभावशाली आणि प्रसिद्ध सिद्धांतकार, शिक्षणतज्ज्ञ आणि सुधारक होते ज्यांचे विचार आणि शिक्षणाचे तत्वज्ञान नैतिक आणि आध्यात्मिक संस्कृतीचे उदात्तीकरण आहे. विवेकानंद हे केवळ वेदांताचे मोठे समर्थक नव्हते तर त्यांनी वेदांताला व्यावहारिक स्वरूप देखील दिले होते. भारतातील अपूर्ण शिक्षण व्यवस्थेमुळे विविध सामाजिक दुष्प्रवृत्ती उद्भवतील याची विवेकानंदांना कल्पना होती. आधुनिक भारताने वैज्ञानिक आणि यांत्रिक जीवनशैलीवर प्रचंड भर दिला आहे ज्यामुळे माणूस वेगाने यंत्राच्या स्थितीत येत आहे. नैतिक आणि धार्मिक मूल्ये कमकुवत होत आहेत. सभ्यतेच्या मूलभूत तत्वांकडे दुर्लक्ष केले जात आहे. स्वामीजींच्या मते माणूस हा पशुत्व, मानवता आणि देवत्वाचा मिश्रण आहे. शिक्षणाचे उद्दिष्ट हे त्याला स्वतःच्या प्रयत्नातून, आत्मसाक्षात्कारातून आणि योग्य प्रशिक्षणातून प्राण्यांपासून दैवी अवस्थेत पोहोचण्यास मदत करणे असले पाहिजे. जर आधुनिक भारत कोणत्याही क्षेत्रात अपयशी ठरला असेल, तर तो निःसंशयपणे एका परिपूर्ण शिक्षण प्रणालीद्वारे विकसित समाजाचा प्रमुख घटक असलेल्या खऱ्या मानवांना निर्माण करण्याच्या क्षेत्रात आहे. सध्याच्या विषयगत पेपरमध्ये स्वामीजींचे विचार आणि शिक्षणाचे तत्वज्ञान अधोरेखित करण्याचा प्रयत्न केला आहे. भारतातील एकविसाव्या शतकातील शिक्षण प्रणालीच्या प्रकाशात त्यांच्या शैक्षणिक कल्पना आणि तत्वज्ञानाची प्रासंगिकता आणि गरज यांचे विश्लेषण करण्याचा प्रयत्न केला आहे. शेवटी ते राष्ट्राच्या अविनाशी विकासाचा चालना देण्यासाठी शिक्षण हे एक सक्षम साधन म्हणून स्पष्ट करण्याचा प्रयत्न करते.

आज त्यांना भारतामतेच्या महान पुत्रांपैकी एक तसेच जगातील महान पुत्रांपैकी एक म्हणून सर्वत्र प्रसिद्धी मिळाली आहे. त्यांचे जीवन पूर्व आणि पश्चिम, भूतकाळ आणि भविष्य, पारंपारिक आणि आधुनिकता, धर्म आणि विज्ञान, आणि अध्यात्म आणि शिक्षण यांचा संगम होता. ते पूर्व आणि पश्चिमेला जोडणाऱ्या आध्यात्मिक पुलाचे शिल्पकार होते - वेदांतिक तत्वज्ञानाच्या मध्यवर्ती सत्यांवर बांधलेला पूल. मानवी विकासाचा असा कोणताही पैलू नव्हता जो स्वामी विवेकानंदांच्या भेदक अंतर्दृष्टीला पात्र नव्हता. त्यांनी परिपूर्ण शिक्षण प्रणालीद्वारे भारत आणि जगाच्या पुनरुज्जीवनासाठी रचनात्मक कल्पना आणि तत्वज्ञान आपल्यासमोर ठेवले आहे. त्यांचे गतिमान शिक्षणाचे विचार आणि तत्वज्ञान मानवाच्या जन्मजात देवत्वाच्या अमृत वेदांतिक दृष्टिकोनावर आधारित होते जे मानवी विकास, विकास आणि परिपूर्णतेकडे नेईल. आज जर भारताला त्याचे हरवलेले वैभव प्राप्त करायचे असेल आणि जगातील एक अग्रगण्य देश बनावचे असेल तर स्वामीजींचे गहन विचार त्यांच्या परिपूर्ण शिक्षण प्रणालीच्या मॉडेलद्वारे आपल्या सर्वांमध्ये आत्मसात केले पाहिजेत.

## विवेकानंदांची शिक्षणाविषयीची संकल्पना:&amp;

स्वामी विवेकानंदांच्या मते, आज आपल्याला मिळत असलेल्या शिक्षणात काही चांगले मुद्दे आहेत परंतु त्यात प्रचंड तोटे आहेत जे इतके मोठे आहेत की चांगल्या गोष्टी सर्वच ओझे बनल्या आहेत शिक्षण आधुनिक ., जे कमी अधिक-केंद्रित-करिअर प्रमाणात आहे, ते सद्गुण जोपासण्याची, मनाला शिस्त लावण्याची, नैतिक इच्छाशक्ती बळकट करण्याची किंवा सकारात्मक चारित्र्य घडवण्याची फारशी काळजी घेत नाही मित्र किंवा नियंत्रण-आत्म ते ., शेजारी किंवा सहकाऱ्यांशी कसे सुसंगत राहायचे ते शिकवत नाही सत्य ते ., प्रामाणिकपणा, प्रेम, करुणा ही मूल्ये रुजवत नाही, जी एखाद्याला खरा माणूस बनवतात करायचे कसे कमी तणाव ते ., कठीण परिस्थितीत शांत कसे राहायचे किंवा परम आनंद अनुभवण्यासाठी मनाला कसे आत वळवायचे हे शिकवत नाही.

स्वामी विवेकानंदांच्या मते शिक्षण म्हणजे जे मुक्त करते (स विद्या या विमुक्तये). ते नकारात्मक प्रवृत्ती आणि स्वतःच्या वास्तविक 'स्व' बद्दलच्या अज्ञानापासून मुक्त करते. भारतीय परंपरेत, 'विद्या' (शिकणे किंवा ज्ञान) 'अविद्या' (अज्ञान किंवा अज्ञान) च्या विरुद्ध मानली जाते आणि ती पूर्ण होण्यासाठी 'आत्मा-विद्या' (स्वाचे ज्ञान) मध्ये परिणत झाली पाहिजे. समग्र जीवनासाठी आणि अमरत्व प्राप्त करण्यासाठी सांसारिक आणि आध्यात्मिक ज्ञानाचा शोध 'यजुर्वेद' (XL.14) मध्ये जोर देण्यात आला आहे. म्हणूनच शिकणे हे स्वतःचे ध्येय नाही, तर एखाद्या व्यक्तीला आत्म-जागरूकतेत वाढण्यास मदत करण्याचे, त्याला जीवनाच्या अंतिम एकतेची जाणीव करून देण्याचे एक

साधन आहे, ही वस्तुस्थिती वैदिक द्रष्ट्यांनी आणि श्री रामकृष्ण (१८३६-१८८६), स्वामी विवेकानंद (१८६३-१९०२), श्री अरविंदो (१८७२-१९५०) आणि अलिकडच्या काळात इतर व्यक्तिमत्त्वांच्या तेजस्वी आत्म्यांनी तार्किकपणे स्पष्ट केली आहे.

विवेकानंदांच्या शैक्षणिक विचारांचा तात्विक आधार:&

स्वामी विवेकानंदांच्या शैक्षणिक तत्वज्ञानाची आवश्यक वैशिष्ट्ये आदर्शवाद, निसर्गवाद आणि व्यावहारिकता आहेत.

- निसर्गवादी दृष्टिकोनातून, त्यांनी यावर भर दिला की खरे शिक्षण केवळ निसर्ग आणि नैसर्गिक प्रवृत्तींद्वारेच शक्य आहे.
- आदर्शवादी दृष्टिकोनातून, ते म्हणतात की शिक्षणाचे उद्दिष्ट मुलामध्ये नैतिक आणि आध्यात्मिक गुणांचा विकास करणे आहे.
- व्यावहारिक दृष्टिकोनातून, त्यांनी भौतिक समृद्धी मिळविण्यासाठी तंत्रज्ञान, वाणिज्य, उद्योग आणि विज्ञानाच्या पाश्चात्य शिक्षणावर भर दिला.

**स्वामी विवेकानंदांचे विचार आणि भारतातील २१ व्या शतकातील शिक्षणाची सुधारणा:-**

स्वामी विवेकानंदांना हे समजले होते की मानवजात एका संकटातून जात आहे. वैज्ञानिक आणि यांत्रिक जीवनशैलीवर प्रचंड भर दिल्याने माणूस वेगाने यंत्राच्या स्थितीत येत आहे. नैतिक आणि धार्मिक मूल्यांचे अवमूल्यन होत आहे. संस्कृतीच्या मूलभूत तत्वांकडे दुर्लक्ष केले जात आहे. स्वामीजींच्या मते माणूस हा पशुत्व, मानवता आणि दिव्यत्वाचा संयोग आहे. शिक्षणाचे उद्दिष्ट त्याला आत्मप्रयत्न, आत्मसाक्षात्कार आणि योग्य प्रशिक्षणाद्वारे प्राण्यांपासून दैवी अवस्थेत वाढण्यास मदत करणे असावे. जर आधुनिक भारत कोणत्याही क्षेत्रात अपयशी ठरला असेल, तर तो निःसंशयपणे खऱ्या चारित्र्याचे मानव निर्माण करण्याच्या क्षेत्रात आहे. आज समाजाचा प्रमुख घटक असलेला मानव हा स्वभावाने मानव नाही. म्हणूनच, स्वामी विवेकानंदांनी अशा माणसाची निर्मिती करण्याची कल्पना केली होती जो दयाळू आणि बुद्धिमान असेल, "मनाने महान आणि मनाने महान" असेल आणि जो गतिमानतेने समाजात सकारात्मक बदल घडवू शकेल. स्वामीजी म्हणाले की, "आम्हाला असा माणूस हवा आहे ज्याच्या हृदयाला जगातील दुःखे आणि वेदना तीव्रतेने जाणवतात... आणि (आम्हाला) असा माणूस हवा आहे जो केवळ अनुभवू शकत नाही तर गोष्टींचा अर्थ शोधू शकतो, जो निसर्गाच्या आणि समजुतीच्या हृदयात खोलवर जातो. (आम्हाला) असा माणूस हवा आहे जो तिथेच थांबणार नाही (पण) जो (प्रत्यक्ष कृतींद्वारे) भावना आणि अर्थ बाहेर काढू इच्छितो. हात, हृदय आणि डोके यांचे असे संयोजन जे आपल्याला हवे आहे." त्यांच्या मते, प्लेटोने विचार केल्याप्रमाणे शिक्षण म्हणजे केवळ मानसिक क्षमतांचे संवर्धन नाही.

विकासाचे स्वातंत्र्य आणि विविधतेतील एकता:&

स्वामीजींच्या मते स्वातंत्र्य ही आत्मविकासाची पहिली आवश्यकता आहे. मुलाला त्याच्या स्वतःच्या स्वभावानुसार वाढण्याचे स्वातंत्र्य दिले पाहिजे. विवेकानंद म्हणाले, "तुम्ही मुलाला रोप लावण्याइतकेच शिकवू शकत नाही. तुम्ही फक्त नकारात्मक बाजू करू शकता - तुम्ही फक्त मदत करू शकता. तुम्ही अडथळे दूर करू शकता, परंतु ज्ञान त्याच्या स्वतःच्या स्वभावातून बाहेर येते. आत्म्याला थोडे सैल करा, जेणेकरून तो सहजपणे बाहेर येईल. त्याच्याभोवती एक कुंपण घाला; ते इतर कोणत्याही गोष्टीने मारले जाणार नाही आणि तुमचे काम तिथेच थांबेल याची खात्री करा. तुम्ही दुसरे काहीही करू शकत नाही. बाकीचे त्याच्या स्वतःच्या स्वभावातून प्रकट होते." शिक्षकाने मुलावर कोणत्याही प्रकारचा बाह्य दबाव आणू नये. मुलाला त्यांच्या समस्या स्वतः सोडवण्यास मदत केली पाहिजे. शिक्षकांनी सेवा आणि उपासनेची वृत्ती बाळगली पाहिजे. शिक्षणाचे उद्दिष्ट शेवटी साकार करणे आहे. ते मानवजातीच्या बंधुत्वाची स्थापना करण्याचे एक साधन आहे.

शिक्षणाचे खरे उद्दिष्ट व्यक्तींमध्ये अंतर्दृष्टी विकसित करणे आहे जेणेकरून ते विविधतेत एकता शोधू शकतील आणि ती साकार करू शकतील. विवेकानंद म्हणाले की भौतिक आणि आध्यात्मिक जग एक आहेत; त्यांचे वेगळेपण एक भ्रम (माया) आहे. विविधतेत एकता शोधणारी ही भावना विकसित करण्यास शिक्षण सक्षम असले पाहिजे.

**चारित्र्य निर्मिती आणि नैतिकता आणि आध्यात्मिक विकास:-**

चारित्र्य निर्मिती हे शिक्षणाचे सर्वात महत्वाचे उद्दिष्ट आहे. स्वामी विवेकानंद म्हणाले, "कोणत्याही माणसाचे चारित्र्य म्हणजे त्याच्या प्रवृत्तींचा समूह, त्याच्या मनाच्या कलतेचा योग असतो. सुख आणि दुःख त्याच्या आत्म्यासमोरून जात असताना, ते त्यावर वेगवेगळे चित्र सोडतात आणि या एकत्रित संस्कारांचे परिणाम म्हणजे माणसाचे चारित्र्य." शिक्षकांनी विद्यार्थ्यांसमोर उच्च आदर्श मांडले पाहिजेत. चारित्र्य विकसित करण्याचा सर्वोत्तम



मार्ग म्हणजे शिक्षकाने मांडलेले उच्च चारित्र्याचे वैयक्तिक उदाहरण. चारित्र्य विकासासाठी विवेकानंदांनी ब्रह्मचर्याचे पालन करण्यावर भर दिला ज्यामुळे मानसिक, नैतिक आणि आध्यात्मिक शक्तींचा विकास होतो ज्यामुळे विचार, शब्द आणि कृती शुद्ध होतात. स्वामीजींच्या मते विद्यार्थ्यांना कठोर परिश्रम करण्याचे, चांगल्या सवयी लावण्याचे आणि चुकांमधून शिकण्याचे प्रशिक्षण दिले पाहिजे. याशिवाय, चारित्र्य घडवण्यासाठी ज्ञानाची तहान, चिकाटी, श्रद्धा, नम्रता, समर्पण आणि आदर इत्यादी गुणांची आवश्यकता असते. विवेकानंदांच्या मते, "शिक्षकांप्रती आपल्या अंतःकरणात श्रद्धा, नम्रता, समर्पण आणि आदर नसल्यास आपल्यात कोणतीही वाढ होऊ शकत नाही. ज्या देशांमध्ये या प्रकारचे नाते टिकवून ठेवण्याकडे दुर्लक्ष केले आहे, तेथे शिक्षक फक्त व्याख्याता बनला आहे... खरा शिक्षक तो आहे जो लगेच विद्यार्थ्यांच्या पातळीवर उतरू शकतो आणि आपला आत्मा विद्यार्थ्यांच्या आत्म्यात स्थानांतरित करू शकतो आणि त्याच्या मनातून पाहू शकतो आणि समजून घेऊ शकतो."

स्वामीजींच्या मते, राष्ट्राची महानता केवळ त्याच्या संसदीय संस्था आणि क्रियाकलापांवरूनच मोजली जात नाही तर त्याच्या नागरिकांच्या महानतेवरून देखील मोजली जाते. परंतु नागरिकांची महानता केवळ त्यांच्या नैतिक आणि आध्यात्मिक विकासाद्वारेच शक्य आहे जी शिक्षणाने वाढवली पाहिजे.

### शिक्षणाची विविध साधने:-

१. प्रेम: स्वामी विवेकानंदांच्या मते शिक्षणाचे सर्वोत्तम साधन प्रेम आहे. शिक्षण प्रेमावर आधारित असले पाहिजे. प्रेम हे चारित्र्य घडवण्याची सर्वोत्तम प्रेरणा आहे. मुलांना प्रेमाने आणि काळजीने शिकवले पाहिजे. हे प्रेम म्हणजे पुरुषांसाठी, मानवांसाठी प्रेम. शिक्षण देण्याचा एकमेव हेतू म्हणजे शिकणाऱ्यावर आणि त्याच्यातील माणसासाठी प्रेम असणे.
२. मदत: शिक्षकाचे काम म्हणजे शिकणाऱ्याला त्याच्या क्षमता आणि क्षमता व्यक्त करण्यास मदत करणे. शिक्षकाने शिकणाऱ्याला त्याचा सांस्कृतिक वारसा ओळखण्यास आणि त्याच्या जीवन संघर्षात त्याचा वापर करण्यास मदत केली पाहिजे. शिक्षकच विद्यार्थ्यांना अंतर्दृष्टीतून वाढण्यास मदत करेल.
३. मार्गदर्शन: शिक्षण हे फुलांची बाग नाही. प्रत्येक विद्यार्थ्याला स्वतःच्या आयुष्यात समस्यांना तोंड द्यावे लागते. तो स्वतःच्या प्रयत्नांनी आणि शिक्षकांच्या मार्गदर्शनाने त्या सोडवतो. शिक्षकाने विद्यार्थ्याला फक्त त्याच्या समस्यांकडे लक्ष केंद्रित करण्याची सूचना दिली पाहिजे. जितके जास्त लक्ष असेल तितके प्रयत्न प्रभावी होतील.
४. ब्रह्मचर्य: प्राचीन भारतीय विचारवंतांच्या मते ब्रह्मचर्य हे एकाग्रता प्राप्त करण्याचे पहिले साधन आहे. ते सर्वोच्च प्रकारची आध्यात्मिक आणि मानसिक शक्ती देते. ते लैंगिक इच्छांना आध्यात्मिक शक्तीमध्ये रूपांतरित करते. ब्रह्मचर्य म्हणजे विचार, शब्द आणि कृतींची शुद्धता. ते विविध मानसिक प्रक्रिया विकसित करण्यास आणि तीक्ष्ण करण्यास मदत करते, उदा. शिकणे, लक्ष देणे, लक्षात ठेवणे, विचार करणे इ.
५. चर्चा आणि चिंतन: एकाग्रता वगळता, शिक्षणाचे इतर मार्ग म्हणजे चर्चा आणि चिंतन. याद्वारेच विद्यार्थी त्याच्या अडचणी दूर करू शकतो. चर्चा अनौपचारिक वातावरणात करावी आणि चिंतन शांत आणि शांत वातावरणात मनाने पूर्ण जिवंत ठेवून केले पाहिजे. शिक्षणाच्या शेवटी विद्यार्थ्याने त्याच्या/तिच्या शिक्षकांबद्दल श्रद्धा आणि आदर निर्माण केला पाहिजे. श्रद्धा आणि आदराशिवाय खरे ज्ञान प्राप्त होणार नाही.

### राष्ट्रीय शिक्षण धोरण २०२० चे व्हिजन:-

धार्मिक शिक्षण विद्यार्थ्यांच्या अंतःकरणाचा विकास करून, अर्थातच वैद्यकीय अर्थाने नव्हे, तर त्यांच्यात इतरांबद्दल प्रेम आणि करुणेच्या भावना निर्माण करून त्यांच्या आंतरिक व्यक्तिमत्त्वाला अधिक सक्षम बनवू शकते. शिक्षणाचे पाश्चात्य मॉडेल बुद्धीवर लक्ष केंद्रित करते, हृदयाकडे पूर्णपणे दुर्लक्ष करते, ते व्यक्तिमत्त्वाला "दहापट" अधिक स्वार्थी बनवते. "बुद्धी ही ज्ञानाचे साधन असते, तसेच हृदयहीन असते... योग्यरित्या विकसित केलेले हृदय... बुद्धीच्या पलीकडे जाईल; ते प्रेरणेत बदलले जाईल." स्वामी विवेकानंदांच्या धार्मिक शिक्षणाच्या संकल्पनेतील सामाजिक भाव त्यांना १९ व्या शतकातील इतर विचारवंतांपेक्षा वेगळे करते. त्यांनी एकदा लिहिले होते, "मी देवावर किंवा अशा धर्मावर विश्वास ठेवत नाही जो विधवेचे अश्रू पुसू शकत नाही किंवा अनाथांच्या तोंडात भाकरीचा तुकडा आणू शकत नाही." शिक्षणाद्वारे ते तरुणांना मानवजातीसमोरील समस्यांबद्दल संवेदनशील बनवू इच्छित होते आणि सामाजिक बदल घडवून आणण्यासाठी नेतृत्व भूमिकांसाठी त्यांना तयार करू इच्छित होते. त्यांच्या मते, "धर्म म्हणजे विस्तार, आणि विस्तार म्हणजे सर्वोच्च अर्थाने साक्षात्कार आणि आकलन - बडबडणारे शब्द किंवा विक्षेपण. माणसाला दैवी बनायचे आहे, दिवसेंदिवस अंतहीन प्रगतीमध्ये दैवीतेची अधिकाधिक जाणीव होत आहे."

### आधुनिक शिक्षणाचा आधार:-



विवेकानंदांना असे वाटले की जगभरातील आधुनिक शिक्षण आतापर्यंत 'करायला शिकणे' या पैलूवर केंद्रित आहे, शिक्षणाच्या 'असण्यास शिकणे' या घटकांवर नाही. ते म्हणतात की शिक्षणाने मानवी मनाच्या गरजांवर लक्ष केंद्रित केले पाहिजे. त्यांचे शिक्षणाचे तत्वज्ञान नैतिकता आणि नीतिमतेच्या सार्वत्रिक तत्वांवर आधारित आहे. ते भारतातील सामान्य जनतेला संश्लेषण, सहिष्णुता आणि वैश्विक सुसंवादाचे आदर्श शिकवू इच्छित होते. त्यांचे तत्वज्ञान आत्मा आणि पदार्थाच्या दाव्यांना समान महत्त्व देते. त्यांच्यासाठी विविधता एकतेइतकीच वास्तविक आहे. पदार्थ हा फक्त 'आडवा आत्मा' आहे. अशा प्रकारे ते आत्मा आणि पदार्थाच्या दाव्यांमध्ये समेट घडवून आणणारा एक आधिभौतिक संश्लेषण तयार करतात आणि त्याला शिक्षणाच्या तत्वज्ञानाच्या मुख्य पायांपैकी एक बनवतात.

त्यांच्या हयातीत खालील ग्रंथ प्रकाशित झाले:

१. वर्तमान भारत
२. कर्मयोग
३. कोलंबो ते अल्मोडा पर्यंत व्याख्याने
४. माझे गुरु
५. राजयोग
६. संगीत कल्पतरु
७. वेदांत तत्वज्ञान: पदवीधर तत्वज्ञान संस्थेसमोरील भाषण
८. वेदांत तत्वज्ञान: ज्ञानयोगावरील व्याख्याने त्यांच्या मृत्यूनंतर प्रकाशित झालेले कार्य:
१. भक्ती योगावरील भाषणे
२. भक्ती योग
३. पूर्ण ग्रंथ: नऊ खंडांच्या संचातील त्यांच्या लेखन, व्याख्याने आणि प्रवचनांचा संग्रह
४. प्रेरित भाषणे (१९०९)
५. नारद भक्ती सूत्रे - अनुवाद
६. परा भक्ती किंवा सर्वोच्च भक्ती
७. व्यावहारिक वेदांत
८. स्वामी विवेकानंदांची भाषणे आणि लेखन; एक व्यापक संग्रह
९. पूर्व आणि पश्चिम (१९०९)

#### निष्कर्ष:-

समकालीन विचारांच्या प्रकाशात पाहिले तर, विवेकानंद हे प्रत्यक्षात चाळीस वर्षांपेक्षा कमी कालावधीत आपल्या मातृभूमीला सर्व प्रकारच्या सामाजिक दुष्कृत्यांशी लढण्यासाठी अद्ययावत करणारे एक युगाचे कॅप्सूल होते. 'समतोल' आणि 'संश्लेषण' हे विवेकानंदांचे उद्दिष्ट होते. त्यांच्या व्यक्तिमत्त्वात चिंतन आणि कर्तव्याप्रती समर्पण एकरूप होते. त्यांनी भारताच्या सामाजिक आणि राजकीय अधोगतीत खोलवर जाऊन सर्व सामाजिक असमानता नष्ट करण्यासाठी एक व्यवहार्य सूत्र लिहून देण्याचा प्रयत्न केला. त्यांच्या मते आधुनिक भारताची जागृती आणि मुक्ती ही सार्वत्रिक प्रेम आणि बंधुत्वाच्या अनुभूतीसाठी एक टप्पा होता. त्यांनी त्यांच्या बांधवांना सर्वोच्च निर्भयता आणि शक्तीची गतिमान सुवार्ता दिली. त्यांनी भारतीय समाजातील उच्च वर्गाच्या अहंकाराचा आणि सुसंस्कृतपणाचा निर्दयपणे निषेध केला. भारतीय इतिहासाचे समाजशास्त्रीय अर्थ लावणारे ते भारतातील महान विचारवंतांपैकी एक होते.

स्वामी विवेकानंद हे खरे तर सर्व काळातील महान संश्लेषक होते. राजकारण, समाजशास्त्र, अर्थशास्त्र आणि शिक्षण यांना पुनर्दिशा देऊन त्यांना समाजातील वाईट गोष्टी दूर करायच्या होत्या. या बदलासाठी स्वामी विवेकानंदांनी शिक्षण हे एक शक्तिशाली शस्त्र म्हणून भर दिला. एक शिक्षणतज्ज्ञ म्हणून ते परिपूर्ण मूल्यांवर विश्वास ठेवतात जे

चांगल्या शिक्षण प्रणालीद्वारे साकारले पाहिजेत. शिक्षण ही जीवनाची तयारी असली पाहिजे. त्यातून राष्ट्रवादाची आणि आंतरराष्ट्रीय समजुतीची भावना निर्माण झाली पाहिजे, त्यामुळे चारित्र्य विकास झाला पाहिजे आणि व्यक्तींना स्वावलंबी बनवले पाहिजे. आज सांस्कृतिक नीतिमत्ता आणि मानकांचा जहास होत आहे. या भावनिक, नैतिक आणि सांस्कृतिक पतनाला तोंड देणे ही काळाची सर्वात मोठी गरज आहे. केवळ चांगल्या शिक्षण प्रणालीची प्रक्रियाच निरोगी राजकीय आणि सामाजिक जीवन आणू शकते. स्वामी विवेकानंद याचे समर्थन करतात आणि त्यांचा संदेश सर्वकाळासाठी आहे.

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22 एप्रिल २०२५ रोजी होणाऱ्या कॉन्फरन्ससाठी रिसर्च पेपर --

विषय - यश निर्मितीचे द्वार उघडते ,क्रिडा मानसशास्त्राच्या तात्विक अध्ययनाने

शोध निबंधक सदर कर्ता - प्रा. वैशाली चंद्रशेखर पाटील ,विद्यावर्धिनी महाविद्यालय धुळे.

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**गोषवारा -**

कठोपनिषदांत सांगितले आहे की ,श्रद्धा म्हणजे स्वतःच्या अनुमानाची, ज्ञानाची, बुद्धीची ,निर्णय शक्तीची ,आपल्याला पटलेली खात्री, ही डोळसच असायला हवी. अंध असता कामा नये, ही काळजी घ्यायलाच हवी. आपण पत्करलेला मार्ग, मिळवलेले ज्ञान आणि कौशल्य, आपले गुरु आणि त्यांचे श्रेष्ठत्व, आपण करत असलेले तप या साऱ्यांबद्दल मनात दृढ श्रद्धाच असायला हवी. तरच आपला विकास शक्य आहे. उच्च दर्जाची एकाग्रता साधण्याकरिता वरील सर्व गुण अत्यंत आवश्यक आहेत असे योगदर्शनात ही सांगितले आहे. त्या मध्ये श्रद्धा हा गुण प्रथम क्रमांकाचा मानला आहे. त्याशिवाय विकासाच्या टप्प्याची सुरुवातच होत नाही. मुळातच आपल्या कर्तृत्वशक्तीवरच श्रद्धा ठेवायला शिकले पाहिजे. मग खेळ असो कि ,जीवनातील स्पर्धा असो तीच शक्ती तुम्हाला यशाकडे घेऊन जाते हे मानसशास्त्रीय व तत्त्वज्ञानाचा मूळ गाभा आहे. पतंजली योगदर्शन हा भारतीय मानसशास्त्राचा ग्रंथ आहे, त्याचा आधार जगण्याच्या प्रत्येक क्षेत्रात उपयुक्त आहे. योग दर्शनातील तप म्हणजे स्वतःचे ज्ञान व कौशल्य वाढवण्यासाठी केले जाणारे प्रत्यक्ष प्रयत्न होय. इतरांचे अनुभव, कौशल्य आणि ज्ञान शब्दांच्या माध्यमातून संपादन करणे म्हणजे स्वाध्याय होय. आपले ज्ञान इतरांसमोर मांडणे म्हणजे प्रवचन असे त्यांचे स्पष्टीकरण आहे. व्यवहारात चित्त ,मन ,बुद्धी अहंकार हे शब्द वेगवेगळ्या अर्थाने वापरले जातात. यापैकी प्रत्येकाचे कार्य वेगळे आहे, आणि कार्यानुसार त्यांना वेगवेगळ्या संज्ञा प्राप्त झाल्या आहेत. "योग शास्त्रानुसार" मनाचे अस्तित्व व संचार सर्व शरीर भर असतो. इंद्रियांच्या द्वारे घेतलेले अनुभव स्मृतीमध्ये साठवून ठेवते ते चित्त, स्वतःच्या आवडीन निवडी ठरवतो तो अहंकार , वस्तू आणि घटना यांचे वास्तविक स्वरूप ठरवते ती बुद्धी , आणि भविष्यातील संभाव्य घटनांचा बरा वाईट अंदाज बांधते ते मन असा त्यांचा उलगडा आहे. आपण सर्वसाधारणपणे वेगवेगळ्या भूमिका पार पाडणाऱ्या या चारही घटकांचा समावेश मन या एका शब्दांमध्ये करून टाकत असतो. तुम्ही विचार कसा करतात यावर विचारांचे तरंग तुमच्या मनाची शक्ती तयार करत असतात .म्हणून कोणत्याही खेळाच्या स्पर्धेत तुम्ही त्या क्षणाला काय विचार करत आहात यावर तुमचं यश अवलंबून असते. तयारीत आपण कमी पडणार आहोत ,आपल्या विरुद्ध उतरलेले प्रतिस्पर्धी जबरदस्त आहेत हा विचार खेळाडूंनाच नव्हे तर कोणत्याही क्षेत्रात आव्हान पेलणाऱ्या व्यक्तीला सतावत असतो. असे विचार मनात घोळण्याने आत्मप्रतिमा खचते आणि त्याचा कामगिरीवर अर्थातच वाईट परिणाम होतो. अशावेळी आपली भूतकाळातील उत्कृष्ट कामगिरी एकाग्र होऊन आठवली की आत्मप्रतिमा परत उंचावते मग हातून परत उत्तम कार्य घडू शकते. आपल्या ज्ञानाची, कौशल्याची ,कलेची पातळी उंचवण्यासाठी आपण सतत सराव करीतच असतो. त्यामुळे पुष्कळदा मागचा पराक्रम काहीच नाही असा पराक्रम आपण घडवू शकतो.

**१ - प्रस्तावना -**

जगातील प्रत्येक सजीव कळत न कळत मानसशास्त्र आणि तत्त्वज्ञान सोबत प्रत्येकजण जुळलेले असतात . यात खेळ विश्वात या शास्त्राची तर नितांत गरज असते. साधी मुंगी चालताना दिसते तेव्हा आपण तिचा मार्ग अडवला आणि तो तिच्या शक्तीने दूर करता येत नसेल तर ती काही सेकंद विचार प्रयत्न करून मार्ग बदलते. तरीही त्रास होत राहिला तर ती माघार घेते किंवा अडचणीला सर्व शक्ती एकवटून चावा घेते. हेच आयुष्याचं मानसशास्त्र आहे. केव्हा तडजोड करायची, किती करायची याच हि तत्त्वज्ञान आहे .

खेळ आणि युद्धे यांच्यात मानसशास्त्र आणि तत्त्वज्ञान मूल्य वापराची पद्धती सारखीच असते. अजून स्पष्ट म्हणजे खेळ हे जीवितहानी शिवाय युद्धाचे डावपेच खेळण्याचा प्राथमिक सराव व अनुभव आहे जेथे पदोपदी भविष्याचा विचार करत फटाफट ,किती कालबद्ध हिंमत शक्ती लावायची हे त्याक्षणी ठरवावे लागते. तात्विक व मानसिकता आधारे निर्णय घावे लागतात .सदर शोध निबंधात खेळात किंवा जीवनात यशस्वी होण्यासाठी मानसशास्त्र व तत्त्वज्ञान कस उपयोगात आणू शकतो हे मांडण्याचा प्रयत्न केला आहे.

**२ - उद्देश -**

खेळात सर्वसाधारणपणे उपयोगी ठरणारे मानसशास्त्र व तत्त्वज्ञान यांची मूल्ये अभ्यासणे.

**३- गृहीतक -**

मानसशास्त्र व तत्त्वज्ञान हे जीवनातील वैयक्तिक आयुष्यसह , प्रत्येक क्षेत्रात व खेळातही

मार्गदर्शक ठरतात.

**४ - अभ्यास पद्धती -**

मानसशास्त्र व तत्त्वज्ञानावर आधारित पुस्तके व सामाजिक माध्यमे रिसर्च गेटवर उपलब्ध माहिती

स्तोत्र व काही निवडक खेळाडूंच्या जीवन प्रवासाचे वाचन करून आढावा घेतला

#### ५ - विश्लेषण --

**खेळ जिंकण्यासाठी मानसशास्त्र आणि तत्वज्ञानाची भूमिका खालीलप्रमाणे आहे: -**

**मानसशास्त्राची भूमिका -**

मानसिक तयारी: - -

खेळाडूची मानसिक तयारी खूप महत्वाची असते. आत्मविश्वास, एकाग्रता, आणि तणाव व्यवस्थापन यांसारख्या गोष्टी मानसशास्त्राच्या मदतीने सुधारता येतात. खेळाचा मानसिक सराव ही महत्वाचा असतो.

**प्रेरणा: -** खेळाडूंना प्रेरणा देणे आणि त्यांचे मनोबल वाढवणे हे मानसशास्त्रज्ञांचे काम असते.

**संघ भावना: -** सांघिक खेळांमध्ये, खेळाडूंमध्ये चांगली संघ भावना निर्माण करणे आवश्यक असते.

**तणाव व्यवस्थापन: -** खेळादरम्यान खेळाडूंना अनेकदा तणावाचा सामना करावा लागतो. मानसशास्त्रज्ञ त्यांना हा तणाव कसा हाताळायचा हे शिकवतात. क्रीडा मानसशास्त्र खेळाडूंच्या क्षमता, मानसिक आरोग्य, कौशल्यवृद्धी, भावना, प्रेरणा, आणि आत्मविश्वास यांसारख्या गोष्टींचा अभ्यास करतो आणि मार्गदर्शन करते.

**तत्वज्ञानाची भूमिका: -**

**नैतिकता: -** खेळांमध्ये नैतिकता आणि न्याय हे खूप महत्वाचे असतात. तत्वज्ञान खेळाडूंना योग्य आणि अयोग्य यातला फरक शिकवते.

**खेळाचे महत्त्व: -** तत्वज्ञान खेळाडूंना जीवनात खेळाचे महत्त्व समजावते. खेळ फक्त जिंकण्यासाठी नसतो, तर तो एक शिकण्याचा आणि स्वतःला सुधारण्याचा मार्ग आहे.

यश ,अपयश हे चालूच असते आयुष्यला सहजतेनं कस बघाव हे शिकवते

**धैर्य आणि संयम: -** तत्वज्ञान खेळाडूंना धैर्य आणि संयम शिकवते, ज्यामुळे त्यांना कठीण परिस्थितीतही हार न मानता प्रयत्न करत राहण्याची प्रेरणा मिळते.

**खेळाडूवृत्ती: -** तत्वज्ञान खेळाडूंना चांगली खेळाडूवृत्ती शिकवते, ज्यामुळे ते विजय आणि पराभव दोन्ही स्वीकारायला शिकतात.

**आध्यात्म खेळाडूंची यशप्राप्ती योग्यता सुलभ करते : -** रोज निदान १५-२० मिनिटे ईश्वर पूजा, नामस्मरण एकाग्रता, आशावाद , संयम, नम्रता , शरारिक स्वास्थ्य , कठोर परिश्रम , मानसिक संतुलन , स्नेहभाव , नैराश्य प्रतिबंधकता , न्याय , निस्पृहता सारखे नैतिक मूल्य युक्त व्यक्तिमत्व विकासास सहजतेने मदत करते.

एकंदरीत मानसशास्त्र आणि तत्वज्ञान बरोबर आध्यात्म खेळाडूंना शारीरिक आणि मानसिकदृष्ट्या मजबूत बनवतात. यामुळे, ते फक्त चांगले खेळाडू बनत नाहीत, तर चांगले व्यक्ती देखील बनतात.

**"तमसो मा ज्योतिर्गमय"** मला अंधाराकडून प्रकाशाकडे ने , असत्याकडून सत्याकडे ने, मृत्यू कडून अमरत्वाकडे ने, अशी उपनिषदात प्रार्थना आहे. अंधारातून सुटका होण्यासाठी ईश्वराची मदत हवी आहे म्हणून ही प्रार्थना आहे.

सत्याचे सुद्धा तसेच असते. व्यवहारात असत्य कधीच नसते, सत्यच फक्त अस्तित्वात असते. असत्याचा अवतार आपल्या मनात होतो. ज्ञानाचा प्रकाश जवळ असून तो बाहेर पडू न दिल्याने हे असत्य आपल्याला घेऊन टाकतो. आपण प्रत्येक गोष्टीचा विचार कसा करतो यावर आपली मनाची शक्ती अवलंबून असते ,तीच शक्ती तुम्हाला यशाकडे घेऊन जात असते. योगशास्त्राचा एक महत्वाचा सिद्धांत आहे की ,ज्या गुणांवर किंवा दोषावर आपले लक्ष केंद्रित राहील ते सर्व आपल्यामध्ये उतरतात आणि प्रकर्षणाने वाढीला लागतात. आपल सतत लक्ष सदगुणावर , जे चांगलं होत असेल त्यांच्यावर आणि ते तसे का होत आहे याबद्दलच्या विचारांवर आणता आलं पाहिजे. ही उत्तम आराधना आहे व तिचा आपल्याला स्वतःला तर फायदा होतोच, पण आपल्या संपर्कात येणाऱ्या इतरांनाही त्याचा उपयोग होतो. खेळाडूंना मानसशास्त्र व तत्वज्ञानाचा उपयोग कसा होतो याचे उदाहरण असे की ,गीत सेठी हा विलियर्डस् च्या खेळाचा अनभिषिक्त बादशहा आहे. आतापर्यंत त्याने सात वेळा जागतिक अजिंक्यपद मिळवले आहे. त्याच्यासारख्या खेळाडू बरोबरही मानसिक प्रयोग केला होता. मद्रासच्या एका आंतरराष्ट्रीय स्पर्धेमध्ये गीत एका साध्या खेळाडू कडून पहिल्याच फेरीत हरला होता. दोनच महिन्यांनी मुंबईत होणाऱ्या जागतिक अजिंक्यपदाच्या स्पर्धेत त्याचा पहिला क्रमांक हिरावून घेतला जाण्याचा धोका स्पष्ट दिसत होता. सायकॉलॉजिकल ,फिलाॅसॉफीकल अँनालिसिस केल्यानंतर लक्षात आलं की ,गीत ची उत्तम खेळण्याची ,स्पर्धेत सर्वोत्तम ठरण्याची ओढच नाहीशी झाली होती. या अगदी आतून येणाऱ्या ओढीला तत्वज्ञानाच्या योगदर्शनात संवेग अशी संज्ञा आहे. आपली एकाग्र होण्याची शक्ती या संवेगावर अवलंबून असते. संवेग कमी झाला, की एकाग्रता सुद्धा खालच्या पातळीवर येते. तो जितका तीव्र होईल तितकी एकाग्रतेची पातळी वाढते.

गीत सेठी इतके बिलियर्ड्स खेळले होते की ,अतिपरिचयामुळे तो खेळ त्यांना शिळा वाटायला लागला. मग एकाग्रता साधने अशक्य होऊन खेळावर परिणाम झाला. अतिपरिचयामुळे ओढ कमी होते, ती विरहाने वाढते हा सर्वसामान्य अनुभव सर्वांनाच आलेला असतो त्याचाच आधार घेऊन अभ्यासक भीष्मराज बाम यांनी एक महिना बिलियर्डसच्या क्यूला हातसुद्धा लावायचा नाही असे सांगितले. अगदी मनात खेळाचा विचार सुद्धा आणायचा नाही अस ठरले. जागतिक स्पर्धा दोन महिन्यांवर आलेल्या असताना हा प्रयोग करणे धाडसाचेच होते ,पण गीत यांना आवश्यकता पटवून दिल्यावर त्यांनी तो मन लावून केला, एक महिना संपता संपता स्पर्धा जाहीर झाल्यामुळे त्यांनी शेवटच्या आठवड्यात सराव सुरू करण्याची परवानगी विचारली. परवानगी विचारण्याचा मोठेपणा दाखविला ,पण भीष्मराज बाम यांनी स्पष्टपणे नकार दिला.

शेवटी केव्हा एकदा आपण बिलियर्ड्स खेळतोय असे त्याला झाले. संवेग इतका तीव्र झाल्यावर एक महिनाभराच्या सरावात त्याने जागतिक अजिंक्यपद पुन्हा एकदा जिंकले आणि तेही अगदी सहज.

तर कठोपनिषदांत सांगितले आहे की ,श्रद्धा म्हणजे स्वतःच्या अनुमानाची, ज्ञानाची, बुद्धीची ,निर्णय शक्तीची , आपल्याला पटलेली खात्री, ही डोळसच असायला हवी. अंध असता कामा नये, ही काळजी घ्यायलाच हवी. आपण पत्करलेला मार्ग, मिळवलेले ज्ञान आणि कौशल्य, आपले गुरु आणि त्यांचे श्रेष्ठत्व, आपण करत असलेले तप या साऱ्यांबद्दल मनात दृढ श्रद्धाच असायला हवी. तरच आपला विकास शक्य आहे. उच्च दर्जाची एकाग्रता साधण्याकरिता वरील गोष्टी व गुण अत्यंत आवश्यक आहेत असे योगदर्शनात ही सांगितले आहे. त्या मध्ये श्रद्धा हा गुण प्रथम क्रमांकाचा मानला आहे. त्याशिवाय विकासाच्या टप्प्याची सुरुवातच होत नाही. मुळातच आपल्या कर्तृत्वशक्तीवरच श्रद्धा ठेवायला शिकले पाहिजे. मग खेळ असो जीवनातील स्पर्धा असो तीच शक्ती तुम्हाला यशाकडे घेऊन जाते .हे मानसशास्त्रीय व तत्वज्ञानाचा मूळ गाभा आहे. पतंजली योगदर्शन हा भारतीय मानसशास्त्राचा ग्रंथ आहे त्याचा आधार जगण्याच्या प्रत्येक क्षेत्रात उपयुक्त आहे. योग दर्शनातील तप म्हणजे स्वतःचे ज्ञान व कौशल्य वाढवण्यासाठी केले जाणारे प्रत्यक्ष प्रयत्न होय. इतरांचे अनुभव, कौशल्य आणि ज्ञान शब्दांच्या माध्यमातून संपादन करणे म्हणजे स्वाध्याय होय. आपले ज्ञान इतरांसमोर मांडणे म्हणजे प्रवचन असे त्यांचे स्पष्टीकरण आहे. व्यवहारात चित्त ,मन ,बुद्धी अहंकार हे शब्द वेगवेगळ्या अर्थाने वापरले जातात. यापैकी प्रत्येकाचे कार्य वेगळे आहे, आणि कार्यानुसार त्यांना वेगवेगळ्या संज्ञा प्राप्त झाल्या आहेत. "योग शास्त्रानुसार" मनाचे अस्तित्व व संचार सर्व शरीर भर असतो. इंद्रियांच्या द्वारे घेतलेले अनुभव स्मृतीमध्ये साठवून ठेवते ते चित्त, स्वतःच्या आवडीन निवडी ठरवतो तो अहंकार , वस्तू आणि घटना यांचे वास्तविक स्वरूप ठरवते ती बुद्धी , आणि भविष्यातील संभाव्य घटनांचा बरा वाईट अंदाज बांधते ते मन असा त्यांचा उलगाडा आहे. आपण सर्वसाधारणपणे वेगवेगळ्या भूमिका पार पाडणाऱ्या या चारही घटकांचा समावेश मन या एका शब्दांमध्ये करून टाकत असतो. तुम्ही विचार कसा करतात यावर विचारांचे तरंग तुमच्या मनाची शक्ती तयार करत असतात .म्हणून कोणत्याही खेळाच्या स्पर्धेत तुम्ही त्या क्षणाला काय विचार करत आहात यावर तुमचं यश अवलंबून असते. याच उत्तम उदाहरण म्हणजे अंजली भागवतचा अनुभव होय. ISSF World Cup Final (International Shooting Sport Federation World Cup Final) मध्ये 2002 साली, अंजली भागवत यांनी 10 मीटर एअर रायफल या प्रकारात सुवर्णपदक (Gold Medal) जिंकले होते. त्या स्पर्धेत त्यांनी उत्कृष्ट कामगिरी करत संपूर्ण जगाचे लक्ष वेधले होते. ही जागतिक स्तराची स्पर्धा जिंकल्यावर त्यांना भीष्मराज बाम यांनी एक प्रश्न विचारला की "तू हेच कसं केलस " ? कारण त्या स्पर्धेसाठी तिची तयारी म्हणावी तशी झालेली नव्हती आणि तंदुरुस्ती सुद्धा काही प्रकृतीच्या तक्रारीमुळे नीट नव्हती. तरीसुद्धा सर्वोत्तम खेळ करून तिने साऱ्यांना मागे टाकले. हा प्रश्न विचारल्यावर तिने उत्तर दिले " एशियाड स्पर्धेमधील माझी अंतिम कामगिरी मी आठवली आणि तशीच नेमबाजी परत करायची असं ठरवलं आणि तसं केलं. "

तयारीत आपण कमी पडणार आहोत ,आपल्या विरुद्ध उतरलेले प्रतिस्पर्धी जबरदस्त आहेत हा विचार खेळाडूंनाच नव्हे तर कोणत्याही क्षेत्रात आव्हान पेलणाऱ्या व्यक्तीला सतावत असतो. असे विचार मनात घोळण्याने आत्मप्रतिमा खचते आणि त्याचा कामगिरीवर अर्थातच वाईट परिणाम होतो. अशावेळी आपली भूतकाळातील उत्कृष्ट कामगिरी एकाग्र होऊन आठवली की आत्मप्रतिमा परत उंचावते मग हातून परत उत्तम कार्य घडू शकतं. आपल्या ज्ञानाची, कौशल्याची ,कलेची पातळी उंचवण्यासाठी आपण सतत सराव करीतच असतो. त्यामुळे पुष्कळदा मागचा पराक्रम काहीच नाही असा पराक्रम आपण घडवू शकतो.

#### सारांश :-

मानसशास्त्र व तत्वज्ञान या दोन्ही विषयांचा मानवाला नुसते क्रिडा क्षेत्रातच नव्हे तर,या स्पर्धात्मक जगात प्रत्येक क्षणाला याची मदत तर होवू शकतेच. पण हे विषय तुम्हाला आनंदी व सहज जीवन जगण्याची कला शिकवतात. आणि माणूस जगतो याच गोष्टींसाठी या विषयाशिवाय माणूस पुढे जाऊ शकत नाही. कुठल्याही क्षेत्रात यशोगाथा रचायची असेल तर या विषयांशिवाय पर्याय नाही हे निश्चित.

#### साहित्य संदर्भ :-

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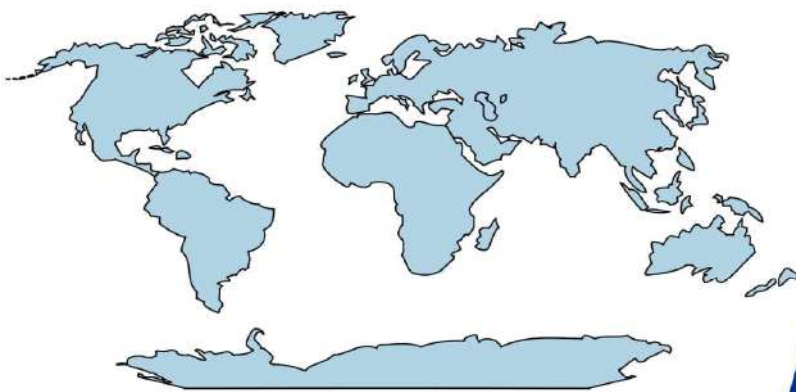


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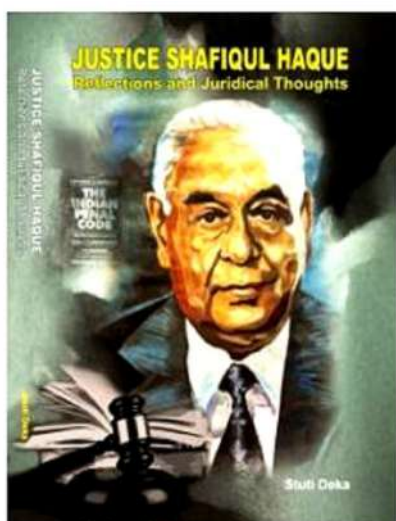


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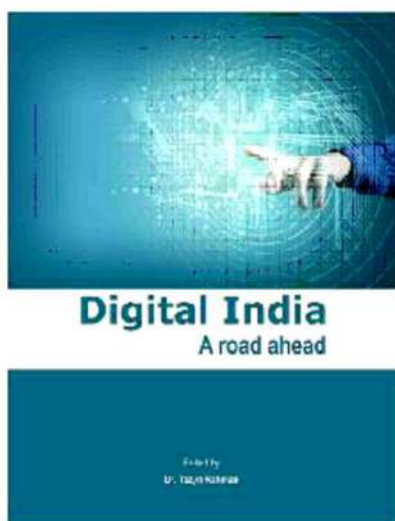
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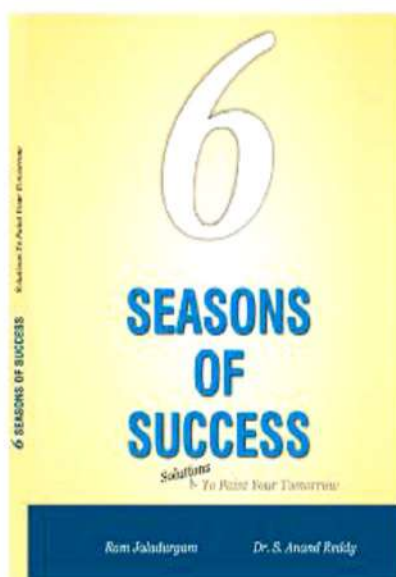
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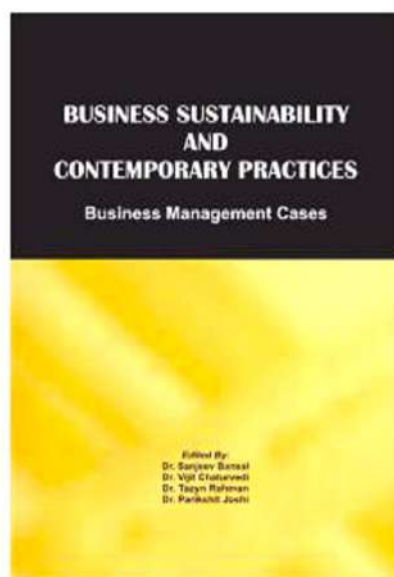
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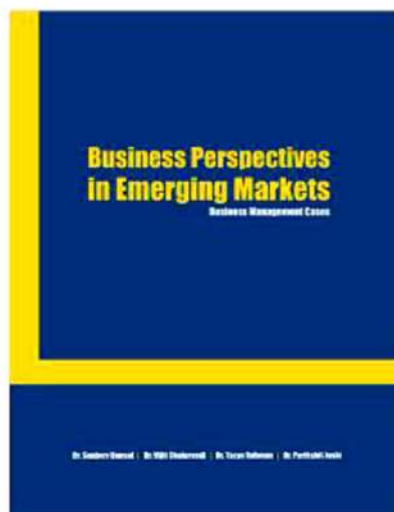


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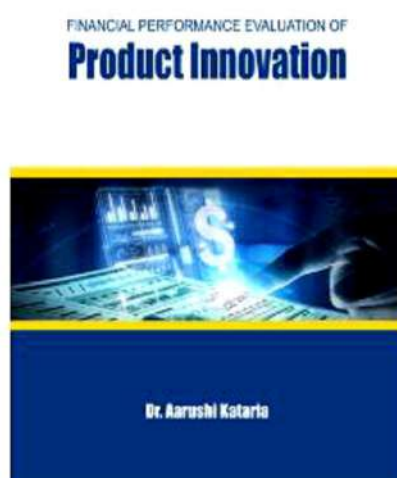
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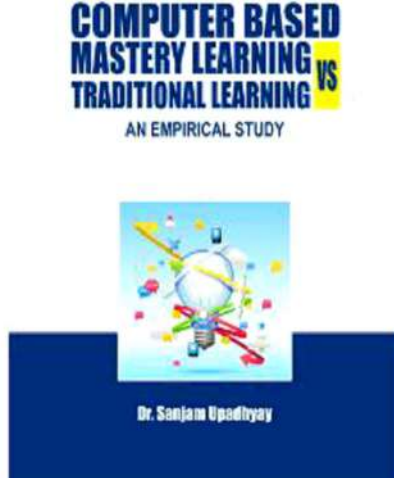
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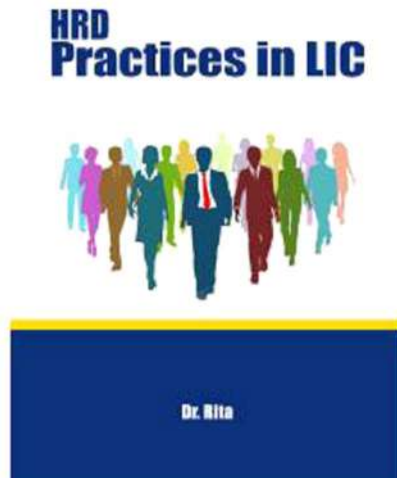
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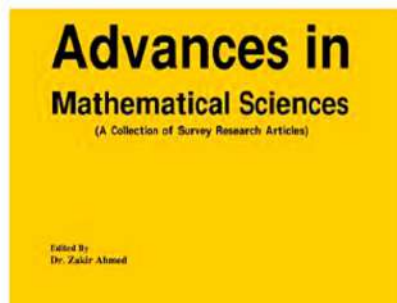
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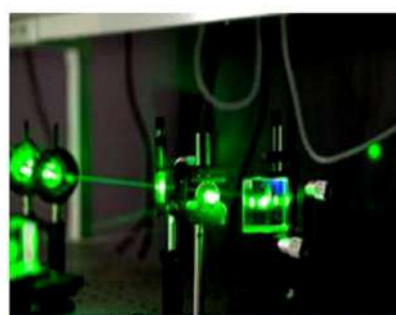


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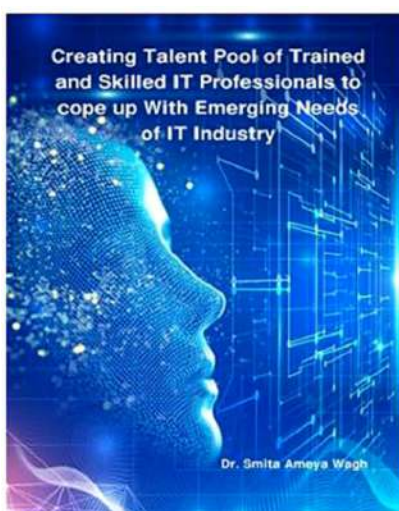
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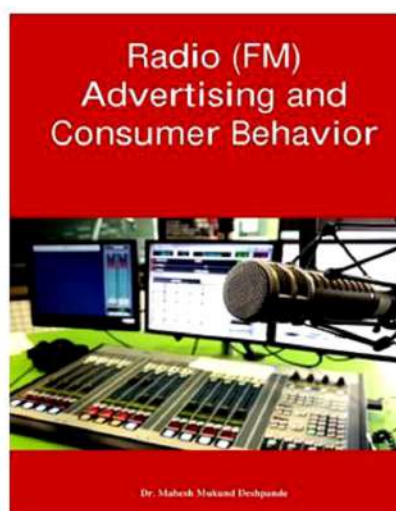
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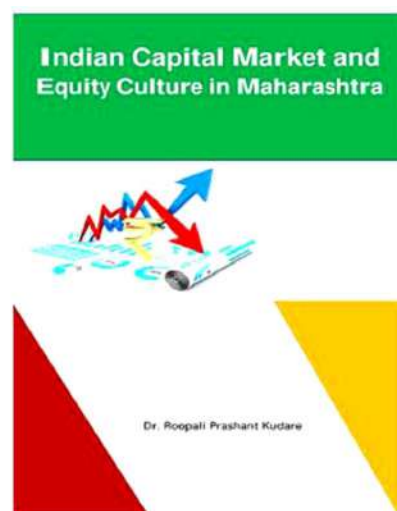
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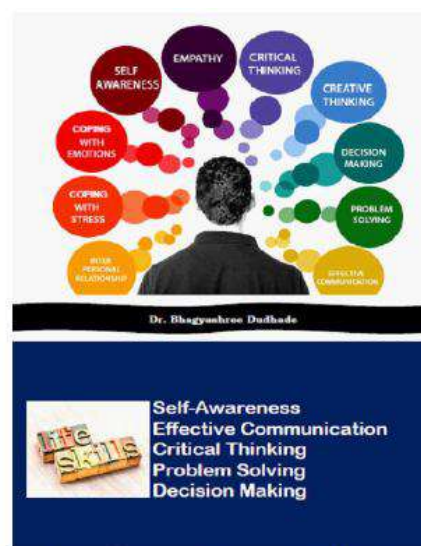
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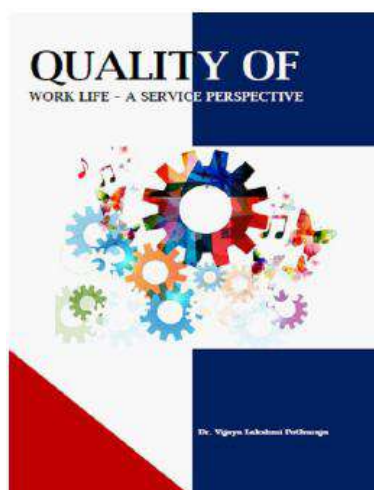


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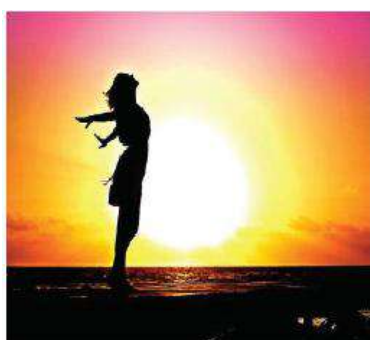
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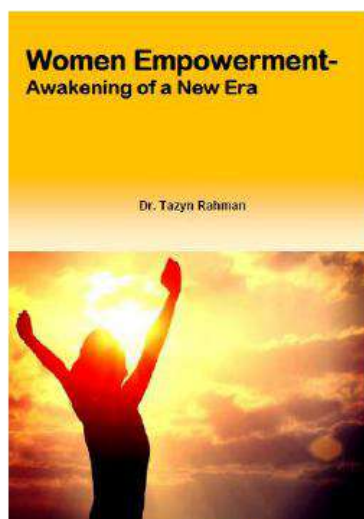


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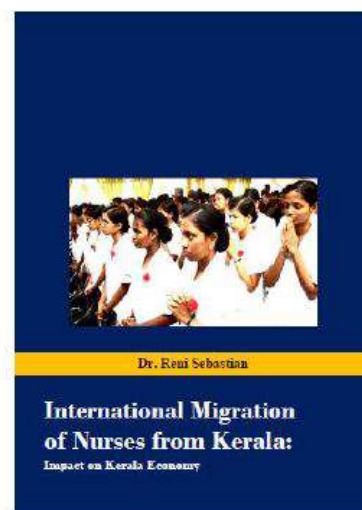


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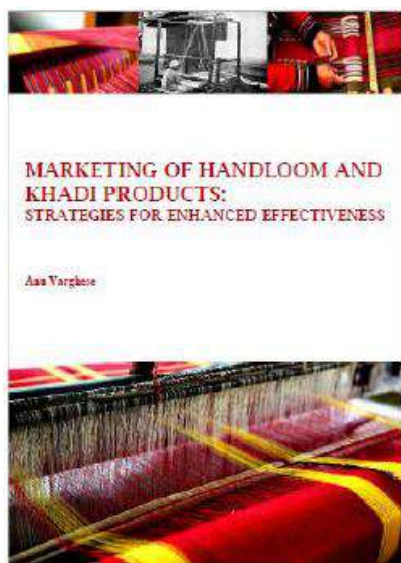
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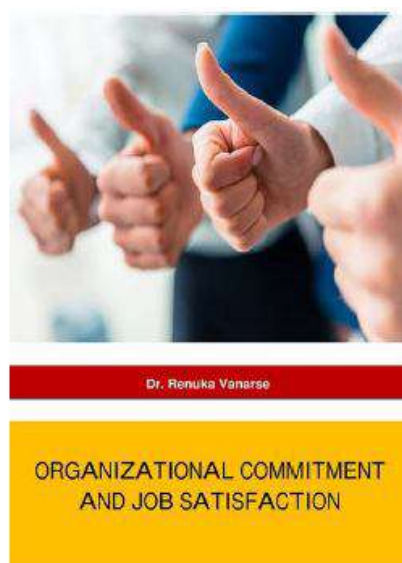
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