

Souvenir

International Multidisciplinary Conference on Feb 17-18, 2026

“Inclusive Futures: Science, Education, Language, and Social Justice
for Sustainable Development”

***IQAC, Asian Educational Institute
Patiala Punjab***

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**Dr. Sapna Rathore
Prof (Dr). Sandeep Kumar**



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International Multidisciplinary Conference

UN International Day of Women and Girls in Science, Mother Language Day & World Day of Social Justice

Feb 17-18, 2026

*“Inclusive Futures: Science, Education, Language and
Social Justice for Sustainable Development”*

A Book of Conference Proceedings

Editor:

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PROF. (DR) SANDEEP KUMAR

ISBN: 978-93-95789-19-6

Jointly Organized by

IQAC, ASIAN EDUCATIONAL INSTITUTE PATIALA PUNJAB

INTERNATIONAL COUNCIL FOR EDUCATION, RESEARCH AND TRAINING

(ICERT) PENNSYLVANIA, USA & NEW DELHI, INDIA

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First Edition: February 2026

Copyright: International Council for Education Research and Training (ICERT)

ISBN: 978-93-95789-19-6

Price: Rs. 200

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Published and Printed By:

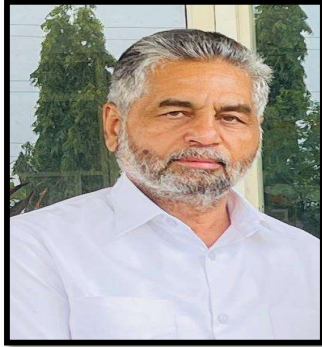
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Message from Chairman, Asian Group of Colleges, Sirhind Road, Patiala Punjab



“Charting the Path for Global Excellence and Social Equity”

It is a moment of profound pride and vision for the **Asian Group of Colleges** as we join hands with the **International Council for Education Research and Training (ICERT), USA & India**, to host the International Multidisciplinary Conference on **February 17-18, 2026**.

As Chairman, I have always believed that education is the most powerful tool for social transformation. Today, as India scales new heights in technology, space, and economic leadership, the responsibility of academic institutions has grown manifold. This conference on **“Inclusive Futures: Science, Education, Language, and Social Justice”** is our contribution to the national and global mandate of [Sustainable Development \(SDGs\)](#).

We are at a junction where digitalization and scientific innovation must go hand-in-hand with linguistic diversity and social justice. By celebrating the spirit of **International Mother Language Day** and the **World Day of Social Justice** through this forum, we are ensuring that the progress of tomorrow leaves no one behind.

I am delighted to welcome the galaxy of eminent scholars, researchers, and industry leaders who have gathered here. It is my firm belief that the [Asian Group of Colleges](#) must remain at the forefront of such high-level intellectual discourse to meet the evolving needs of our students and the global community.

I congratulate the organizing team and wish every participant a journey of profound learning and discovery.

Tarsem Saini

Chairman, Asian Group of Colleges
Patiala, Punjab



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Message from Principal, Asian Group of Colleges, Sirhind Road, Patiala Punjab



"Empowering Progress through Inclusive Innovation"

It is a matter of immense pride and joy that the **Asian Educational Institute (Asian Group of Colleges), Patiala, Punjab**, in prestigious collaboration with the **International Council for Education Research and Training (ICERT), Pennsylvania, USA & New Delhi, India**, is organizing an International Multidisciplinary Conference on **"Inclusive Futures: Science, Education, Language, and Social Justice for Sustainable Development"** on February 17-18, 2026.

In an era where technological advancements and globalization are reshaping the global landscape, it is the "need of the hour" to raise the standards of academic discourse. Our institution continues to set high benchmarks to meet the changing needs of our stakeholders, ensuring that education remains a tool for equity and empowerment. This conference is perfectly timed to honor the spirit of the **International Day of Women and Girls in Science, International Mother Language Day**, and the **World Day of Social Justice**.

By focusing on the critical intersections of scientific innovation, linguistic diversity, and social justice, this conference provides an ideal platform for academicians, researchers, practitioners, and students to disseminate knowledge. It aligns strictly with the **United Nations Sustainable Development Goals (SDGs)**, fostering interdisciplinary collaboration to build a more equitable world.

I extend a warm welcome to all eminent dignitaries, scholars, and participants from across the globe. I am confident that this gathering will serve as a catalyst for meaningful dialogue and professional growth.

I wish this event great success and trust that all participants will find it a rewarding and transformative learning experience.

Dr Meenu Singh Sachan

Principal,

Asian Group of Colleges, Patiala, Punjab



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Message from Convenor, IQAC Coordinator, Asian Group of Colleges, Sirhind Road, Patiala Punjab



Fostering Academic Excellence and Interdisciplinary Research

It is a matter of great professional satisfaction for the **Internal Quality Assurance Cell (IQAC)** of **Asian Educational Institute, Patiala**, to organize this International Multidisciplinary Conference in collaboration with **ICERT (USA & India)** on **February 17-18, 2026**.

As the IQAC Coordinator, my primary focus is to ensure that our institution consistently raises the bar of academic discourse. The theme, **“Inclusive Futures: Science, Education, Language, and Social Justice for Sustainable Development,”** has been carefully curated to address the "need of the hour." In today's digital age, the rapid transformation of the education system in India has created unprecedented opportunities, and it is our responsibility to provide a platform where these advancements are analysed through the lens of the **United Nations Sustainable Development Goals (SDGs)**.

This conference is designed to be a rigorous intellectual exercise, celebrating the intersections of:

- **Scientific Innovation** (International Day of Women and Girls in Science)
- **Linguistic Heritage** (International Mother Language Day)
- **Social Equity** (World Day of Social Justice)

We have invited a diverse group of academicians, practitioners, and researchers to disseminate their findings across disciplines—from Engineering and Law to Humanities and Public Policy. Our goal is to facilitate a "good learning experience" that results in tangible contributions to the global body of knowledge.

I extend a warm invitation to all participants and look forward to the vibrant exchange of ideas that will undoubtedly set new standards for research and leadership at the Asian Group of Colleges.

Dr. Sapna Rathore

IQAC Coordinator

Convenor, Asian Group of Colleges, Patiala, Punjab



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Message from the President, ICERT



"Fostering Global Synergy for an Inclusive Tomorrow"

It is a distinct honor to extend my warmest greetings to the delegates, scholars, and academicians gathered at the Asian Educational Institute, Patiala, for this landmark International Multidisciplinary Conference.

At the International Council for Education, Research and Training (ICERT), our mission has always been to bridge the gap between borders and disciplines. This conference, organized in collaboration with AEI Patiala, is a testament to that vision. By synchronizing this event with the UN International Day of Women and Girls in Science, International Mother Language Day, and the World Day of Social Justice, we are not merely holding an academic gathering; we are igniting a movement.

The theme, *"Inclusive Futures: Science, Education, Language, and Social Justice for Sustainable Development,"* is timely and critical. True sustainable development cannot be achieved in silos; it requires the convergence of scientific innovation, linguistic preservation, and social equity.

I congratulate the entire organizing committee for their meticulous planning and wish all participants a fruitful exchange of ideas.

Prof. (Dr.) Sandeep Kumar

President,

International Council for Education Research and Training (ICERT),
Pennsylvania, USA & New Delhi, India



Message from the Director of Finance & Head Core Committee ICERT



"Investing in Knowledge and Equity"

On behalf of the financial and administrative wing of ICERT, I am delighted to welcome you to this prestigious International Conference.

Sustainable development is often viewed through an economic lens, but at its core, it is driven by human capital—by the scientists, educators, and social advocates who push boundaries. Supporting platforms like this conference is vital because they serve as incubators for the ideas that will shape our collective future.

The collaboration between ICERT and the Asian Educational Institute is a prime example of how shared resources and shared vision can create impactful global dialogues. I commend the organizers for curating such a significant theme that balances the precision of science with the empathy of social justice.

My best wishes to the delegates and the organizing team for a resounding success.

Prof. (Dr) Simran

Director of Finance & Head, Core Committee,

International Council for Education, Research and Training (ICERT)



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Message from the Director, ICERT–Sapientia



"Research as a Catalyst for Social Change"

It gives me great pleasure to present this Souvenir/Book of Proceedings for the International Multidisciplinary Conference 2026.

At the *Sapientia* division of ICERT, we believe that research is not truly complete until it serves society. This conference is unique because it triangulates three pillars: the empirical rigor of Science, the cultural roots of Language, and the ethical imperative of Social Justice.

The papers and abstracts compiled here represent the intellectual labor of scholars who are not content with the status quo. They are exploring how scientific inclusion can empower women, how mother tongues can enhance learning, and how education can be a leveler for social justice.

I congratulate all the contributing authors. Your words are the building blocks of the "Inclusive Future" we aspire to build.

Prof. (Dr.) Aruna Anchal

Director,

ICERT–Sapientia Research, Innovation & Publications Division



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Message from the Director, ICERT–Sophia



"Education: The Architect of Inclusion"

I am thrilled to welcome you to this transformative gathering of minds.

As we celebrate the International Day of Women and Girls in Science alongside Mother Language Day, we are reminded that education is the thread that weaves these elements together. At the Sophia division, our focus is on advancing learning paradigms that are holistic and human-centric.

This conference challenges us to rethink our pedagogies. How do we teach science inclusively? How do we preserve linguistic diversity in a globalized classroom? These are the questions that will define the next decade of education.

I applaud the IQAC of Asian Educational Institute and the ICERT team for curating a platform that places education right at the heart of sustainable development. I wish every participant an enlightening experience.

Dr. Navneet Kaur

Director

ICERT–Sophia – Education & Learning Advancement Division, ICERT



About Asian Educational Institute (AEI), Patiala

Established in 2010, the Asian Educational Institute (AEI), Patiala, stands as a premier Autonomous College at the forefront of disruptive technology and global innovation. Committed to academic excellence and holistic development, AEI has carved a niche for itself as a student-centric institution that blends traditional values with modern pedagogical approaches. Ranked with a 'B' Grade by NAAC, the institute provides a vibrant ecosystem for higher education, characterized by a world-class infrastructure and a culture of continuous learning. Our state-of-the-art laboratories, modern classrooms, and home-like hostel facilities create an environment where students can thrive both academically and personally.

As an autonomous institution, AEI possesses the unique agility to redesign and update its syllabus in real-time, ensuring that the curriculum remains strictly aligned with contemporary industry requirements and student needs. By offering skill-based, in-demand courses and value-added programs alongside degree curricula, the institute significantly enhances the employability of its graduates. Students gain extensive practical exposure through regular industrial visits, excursions, workshops, and seminars led by industry experts, fostering a robust multidisciplinary understanding.

With a strong emphasis on stupendous extra-curricular activities and outstanding academic results, AEI ensures that its graduates emerge as well-rounded leaders. The campus offers a true "Value for Money" experience, supported by liberal scholarships, concessions, and a dedicated placement cell that prioritizes student outcomes. At AEI, our distinguished teaching and non-teaching staff work tirelessly to assist students in achieving their higher education goals, making us the preferred destination for aspiring professionals in the region.





About ICERT

International Council for Education, Research and Training (ICERT) is an autonomous leading professional research & training global organization based in Pennsylvania and New Delhi India, dedicated to advancing quality education, fostering research and innovation, and building capacity for sustainable development. The council is an international professional body with several educators, researchers, consultants, and students as members. This is an institution of learning and training facilitating education, research and social welfare initiatives. The Council functions under the overall supervision of the Core Committee ICERT (Including Board of Directors), a committee of professionals from different domains constituted by the council members and all core committee members are the members of the council. The council has various statutory committees, divisions, which are advisory in nature. The recommendations of all the committees are placed for approval before the Core Committee of ICERT. Guided by its mission to empower individuals and institutions, ICERT connects educators, researchers, policymakers, and community leaders across borders to address pressing social, scientific, and environmental challenges. Through its specialized divisions, global partnerships, and evidence-based programs, ICERT works to create equitable, inclusive, and impactful solutions for a better future.

About the Conference

IQAC, Asian Educational Institute Patiala Punjab in collaboration with International Council for Education Research and Training (ICERT) Pennsylvania, USA & New Delhi, India, is organizing an International Multidisciplinary Conference on Feb 17-18, 2026. This International Multidisciplinary Conference on “Inclusive Futures: Science, Education, Language, and Social Justice for Sustainable Development” aims to bring together scholars, researchers, educators, professionals, policymakers, and students from across the globe to engage in meaningful dialogue on building equitable, inclusive, and sustainable societies.

Aligned with the spirit of:

- International Day of Women and Girls in Science
- International Mother Language Day
- World Day of Social Justice

The conference emphasizes the critical intersections of scientific innovation, educational equity, linguistic diversity, gender inclusion, and social justice within the framework of the United Nations Sustainable Development Goals (SDGs).

This conference provides a global platform to exchange ideas, research findings, best practices, and policy perspectives across disciplines, fostering interdisciplinary collaboration for sustainable development.

Conference Objectives: The conference seeks to

- Promote multidisciplinary and interdisciplinary research aligned with the UN SDGs
- Highlight the role of science, technology, and innovation in achieving inclusive development
- Encourage gender equity, especially the participation and leadership of women and girls in science, education, and society
- Recognize the importance of language, culture, and indigenous knowledge systems in sustainable futures
- Foster dialogue on social justice, equity, ethics, and inclusive governance
- Bridge academia, industry, policy, and community practices
- Support skill development, vocational education, and employability for inclusive growth
- Strengthen institutional quality through IQAC-driven academic excellence and innovation.



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Broad Disciplinary Categories & Sub-Themes

The conference invites original research papers and scholarly works from all disciplines that address any of the listed sub-themes or closely related areas. Contributions that adopt interdisciplinary, innovative, or SDG-focused perspectives are highly welcomed.

A. Science, Engineering & Technology

- ❖ Women and Girls in STEM: Challenges and Opportunities
- ❖ Sustainable Engineering Solutions for Climate Action
- ❖ Renewable Energy Technologies and Green Innovations
- ❖ Artificial Intelligence for Social Good
- ❖ Data Science and Analytics for Sustainable Development
- ❖ Smart Cities, IoT, and Inclusive Urban Planning
- ❖ Environmental Chemistry and Pollution Control
- ❖ Biotechnology for Health, Food, and Environment
- ❖ Public Health Innovations and Health Equity
- ❖ Climate Change Modeling and Risk Mitigation
- ❖ Space Science and Technology for Earth Sustainability
- ❖ Robotics, Automation, and the Future of Work
- ❖ Ethical Dimensions of Emerging Technologies

- ❖ Sustainable Materials and Circular Economy
- ❖ Digital Transformation and Industry 4.0
- ❖ Nanotechnology and Sustainable Applications
- ❖ Cybersecurity and Digital Safety
- ❖ Assistive Technologies for Differently-Abled Communities
- ❖ Engineering Education for Sustainable Futures
- ❖ Technology Transfer and Innovation Ecosystems

B. Social Sciences

- ❖ Social Justice, Equity, and Inclusive Development
- ❖ Gender Studies and Feminist Perspectives
- ❖ Poverty, Inequality, and Sustainable Livelihoods
- ❖ Sociology of Education and Knowledge Systems
- ❖ Community Development and Participatory Governance
- ❖ Migration, Displacement, and Social Inclusion
- ❖ Youth, Citizenship, and Democratic Participation



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- ❖ Urbanization, Rural Development, and SDGs
- ❖ Indigenous Communities and Social Sustainability
- ❖ Social Policy and Welfare State Models
- ❖ Globalization and Cultural Transformations
- ❖ Peace Studies and Conflict Resolution
- ❖ Digital Society and Social Change
- ❖ Social Entrepreneurship and Grassroots Innovations
- ❖ Ethics, Values, and Social Responsibility
- ❖ Disability Studies and Inclusive Societies
- ❖ Population Studies and Demographic Transitions
- ❖ Sociology of Gender, Work, and Family
- ❖ Education, Inequality, and Social Mobility
- ❖ Human Development Index and Policy Analysis
- C. Humanities & Languages**
 - ❖ Mother Tongues, Multilingualism, and Cultural Identity
 - ❖ Language Preservation and Endangered Languages
- ❖ Literature as a Voice for Social Justice
- ❖ Women's Writing and Gender Narratives
- ❖ Translation Studies and Linguistic Inclusion
- ❖ Philosophy, Ethics, and Sustainable Human Values
- ❖ History, Memory, and Social Transformation
- ❖ Cultural Heritage and Sustainable Tourism
- ❖ Indigenous Knowledge Systems and Oral Traditions
- ❖ Ecocriticism and Environmental Humanities
- ❖ Digital Humanities and Cultural Analytics
- ❖ Art, Aesthetics, and Social Change
- ❖ Media, Language, and Power
- ❖ Postcolonial Studies and Global South Perspectives
- ❖ Folklore, Mythology, and Sustainable Cultures
- ❖ Comparative Literature and World Literatures
- ❖ Language Policy and Education
- ❖ Narrative Studies and Social Meaning



D. Commerce, Management & Economics

- ❖ Sustainable Business Models and ESG Frameworks
- ❖ Green Finance and Impact Investing
- ❖ Women Leadership and Gender-Inclusive Workplaces
- ❖ Entrepreneurship, Startups, and Innovation
- ❖ Social Entrepreneurship and Inclusive Growth
- ❖ Digital Economy and Platform Businesses
- ❖ FinTech, Financial Inclusion, and Sustainability
- ❖ Corporate Governance and Ethical Management
- ❖ Circular Economy and Sustainable Supply Chains
- ❖ Marketing Ethics and Responsible Consumerism
- ❖ Human Resource Development and Diversity
- ❖ Behavioral Economics and Decision-Making
- ❖ MSMEs and Sustainable Development
- ❖ International Trade and Sustainable Growth
- ❖ Business Analytics and Strategic Management

❖ Corporate Social Responsibility and SDGs

❖ Public-Private Partnerships for Development

❖ Gender Budgeting and Inclusive Economics

E. Education & Teacher Development

❖ Inclusive Education and Universal Access to Learning

❖ Curriculum Innovation for SDG Education

❖ Women in Educational Leadership and Policy

❖ Digital Pedagogy and Blended Learning

❖ Teacher Education and Professional Development

❖ Assessment, Accreditation, and Quality Assurance (IQAC)

❖ NEP and Global Education Reforms

❖ Educational Technology and AI in Classrooms

❖ Multilingual Education and Mother-Tongue Instruction

❖ Equity, Diversity, and Inclusion in Education

❖ Action Research and Reflective Teaching Practices

❖ Higher Education Governance and Institutional Quality



- ❖ Lifelong Learning and Adult Education

- ❖ Inclusive Assessment and Evaluation Practices

- ❖ Global Citizenship Education

- ❖ Open Educational Resources and MOOCs

- ❖ Education for Social Justice

- ❖ School–Community Partnerships

F. Law, Governance & Public Policy

- ❖ Human Rights, Gender Justice, and Equality

- ❖ Constitutional Values and Social Justice

- ❖ Environmental Law and Climate Justice

- ❖ Education Law and Policy Reforms

- ❖ Labor Laws and Social Security

- ❖ Access to Justice and Legal Empowerment

- ❖ Governance, Ethics, and Accountability

- ❖ Digital Rights and Cyber Laws

- ❖ Child Rights and Protection Laws

- ❖ International Law and Sustainable Development

- ❖ Legal Frameworks for Inclusive Growth

- ❖ Alternative Dispute Resolution and Peacebuilding

G. Journalism, Media & Mass Communication

- ❖ Media Ethics and Responsible Journalism

- ❖ Gender Representation in Media

- ❖ Language, Media, and Cultural Identity

- ❖ Digital Media, Fake News, and Fact-Checking

- ❖ Communication for Development and Social Change

- ❖ Science Communication and Public Engagement

- ❖ Media Literacy and Critical Thinking

- ❖ Social Media, Activism, and Democracy

- ❖ Community Media and Marginalized Voices

- ❖ Media Policy and Regulation

H. Skill Development & Vocational Education

- ❖ Skill Development for Sustainable Employment

- ❖ Women-Centric Vocational Training Programs

- ❖ Technical and Vocational Education (TVET) Models

- ❖ Green Skills and Future Workforce



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❖ Industry–Academia Collaboration

for Employability

❖ Digital Skills and Emerging Job Markets

❖ Entrepreneurship Skills for Youth and Women

❖ Inclusive Skill Ecosystems

❖ Apprenticeship Models and Workforce Readiness

❖ Lifelong Skill Development and Reskilling

I. Interdisciplinary & Emerging Areas

❖ Interdisciplinary Research for SDGs

❖ Science–Policy–Society Interfaces

❖ Future Studies and Inclusive Development

❖ Technology, Ethics, and Social Responsibility

❖ Language, Education, and Social Justice

❖ Gender, Technology, and Sustainable Futures

❖ Innovation Ecosystems and Knowledge Societies

❖ Indigenous Knowledge and Modern Science

❖ Global Citizenship and Human Values

❖ Sustainable Development through Interdisciplinary Pedagogy

Any well-researched article relevant to the main theme or sub-themes will be considered for presentation and publication.

Call for Research Papers

We invite well-researched papers from academicians, research scholars, students, and professionals from various institutions to be presented at the conference.

- Abstracts should be between 300-500 words and submitted in .doc or .docx format.
- The abstract must include the paper title, name(s) of author(s), University/Institution, and a list of keywords.

Paper Publication & Awards

A proceeding book (Souvenir) of the conference, including all accepted abstracts, will be published with an ISBN. All presenters will receive a soft copy of the proceedings, and physically present participants will also receive a print copy.



Best Paper Presentation Award

A Certificate of Best Paper Presentation will be given to two best presenters from each technical session.

Authors who present their papers will be eligible to submit their research (either the presented paper or a different one) for publication in the following ICERT International Multidisciplinary Journals:

Shodh Sari - An International Multidisciplinary Journal (ISSN: 2959-1376)

Edumania - An International Multidisciplinary Journal (ISSN: 2960-0006)

To learn more about these peer-reviewed, open-access journals with DOI, please visit www.icert.org.in

Submission Guidelines

- Full-length papers should not exceed 10,000 words and should not include endnotes or footnotes.
- English Papers: Typed in Microsoft Word, Times New Roman. Title: 16 pt bold. Main Headings: 14 pt bold. Sub-headings: 12 pt bold. Body text: 12 pt, 1.5 line spacing, one-inch custom margin on all sides, A4 size paper.
- Hindi Papers: Typed in Microsoft Word, Unicode. Title: 16 pt bold. Headings: 14 pt bold. Body text: 14 pt, 1.5 line spacing, one-inch custom margin on all sides.
- All in-text citations must be hyperlinked with the references using the cross-reference feature in Word or a tool like Mendeley.
 - A brief author profile (max one page) should be submitted with the paper.
 - Each article must include an impact statement of no more than 150 words.
 - References/bibliography must be serialized (e.g., 1, 2, 3...).
 - Please include your ORCID in your profile if available.
 - You must check grammar using the review tab in MS Word before submission.
 - Read more detailed submission guidelines at <https://icert.org.in/index.php/shodh-sari-2/submissionguidelines>.



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International Felicitation

"Baba Saheb Dr. B.R. Ambedkar Excellence Award 2026"

ICERT "Baba Saheb Dr. B.R. Ambedkar Excellence Award" formally recognizes the immense contribution of the Academicians/ Professionals/ Social reformers in social inclusion and upliftment of marginalized section of society for the welfare and social inclusion.

"Neta Ji Subhash Chandra Bose Global Excellence Award 2026"

ICERT "Neta Ji Subhash Chandra Bose Global Excellence Award" is a recognition to the dignitaries for their excellence in leadership, social welfare, research, and positive contribution toward social, and education welfare

Eligibility Criteria:

1. The applicant must have the minimum 30 years age
2. The applicant must have demonstrated keen learning attitude, and achievements in life.
3. Applicants must have adequate experience in education, industry, social welfare or other discipline, and have positively contributed towards youth empowerment.
4. Your profile must consist of
 - (i) Your full name as per your academic/ government approved identity document, and DOB.
 - (ii) Current work affiliation and job title, and contact info.
 - (iii) Educational qualification including degree, courses, etc., with dates, and institution names.
 - (iv) Current and past employment with institution name, dates, and title.
 - (v) Award citation and honours if any (social contribution and achievement).
 - (vi) Research experience with journal name and ISSN number with volume and issue number.
 - (vii) Social welfare activities with evidences, social profile links/ identifiers, etc.

Nomination for the award does not imply automatic recognition or conferment. All nominations will be thoroughly reviewed by the Award Screening Committee. The decision of the Committee shall be final and binding. Only the selected nominees will be formally informed through the official ICERT email ID: awards@icert.org.in



Conference Committee

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We look forward to welcoming you to the conference!

International Multidisciplinary Conference on **“Inclusive Futures: Science, Education, Language, and Social Justice for Sustainable Development”** on the occasion of UN International Day of Women and Girls in Science, Mother Language Day & World Day of Social Justice, on Feb 17-18, 2026 at Patiala, Punjab jointly organized by

IQAC, Asian Educational Institute Patiala Punjab
International Council for Education, Research and Training
 (ICERT) Pennsylvania, USA & New Delhi, India

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Agricultural Development and Farmer Livelihoods: Micro-Regional Insights from Jind District, Haryana

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Abstract

Agricultural development in Haryana has played a pivotal role in shaping rural livelihoods, yet micro-regional disparities remain underexplored. This study analyzed the agricultural development and livelihood conditions of farmers in Narwana and Uchana blocks of Jind district, focusing on production trends, resource utilization, and socio-economic outcomes. A mixed-method approach was employed, combining secondary data analysis with farmer perceptions to assess development status, livelihood challenges, and opportunities. Results revealed that while improvements in irrigation, mechanization, and crop productivity have enhanced agricultural growth, persistent issues such as groundwater depletion, rising input costs, and limited diversification continue to constrain sustainability. Livelihood analysis highlighted income instability, market dependence, and vulnerability among smallholders, contrasted with better resilience among larger farmers. The study concluded that agricultural development has positively influenced socio-economic conditions but requires targeted interventions to ensure equitable and sustainable livelihood enhancement. Future scope emphasized crop diversification, skill development, and policy-driven support to strengthen resilience and bridge regional disparities.

Keywords: Agricultural development; Farmer livelihoods; Jind district; Haryana agriculture; Socio-economic analysis; Crop diversification; Rural sustainability.

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Digital Economy and Platform Businesses: Trends, Challenges, and Governance Implications

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Abstract

The digital economy represents a transformative force reshaping global economic activity through digital technologies, networked data flows, and platform-mediated interactions. Central to this transformation are platform businesses—multi-sided digital infrastructures that facilitate exchanges among distinct user groups and generate value through network effects. Key findings show sustained market expansion, deep digital integration across sectors, and regulatory challenges in balancing innovation with competitive fairness. The rise of the digital economy has been characterized by the proliferation of platform businesses, which have become pivotal in facilitating economic transactions and interactions across various sectors. These platforms, ranging from e-commerce and social media to fintech and online labor markets, have leveraged digital technologies to create new business models and revenue streams. The growth of platform businesses has been driven by their ability to facilitate exchanges among diverse user groups, creating value through network effects where the value of the platform increases with the number of users. Current data indicates that platform businesses are experiencing sustained market expansion. The global digital economy is projected to continue growing, driven by increasing internet penetration, the adoption of mobile technologies, and the digital transformation of industries. This growth is accompanied by deep digital integration across sectors, as platforms increasingly intersect with traditional industries such as finance, healthcare, and education. Emerging theoretical frameworks suggest that effective governance of platform businesses requires a nuanced understanding of their economic and social impacts. Regulatory approaches must balance the need to promote innovation and competition with the need to protect consumers and ensure fair market practices. This involves developing regulatory frameworks that are adaptive and responsive to the rapidly evolving digital landscape. The digital economy and platform businesses are reshaping global economic activity in profound ways. While they offer significant opportunities for growth and innovation, they also present regulatory challenges that need to be addressed to ensure competitive fairness and consumer protection. This paper synthesizes current data on market growth, adoption patterns, and structural dynamics of platform enterprises, examines emerging theoretical frameworks, and discusses the implications of platform dominance for competition and governance.

Keywords: - Digital Economy, Platform Business, Network Effects, Market Growth, Data Economy, Digital Transformation, Regulation.

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The Study of Women’s Leadership and Gender-Inclusive Workplaces: Challenges, Practices, and Pathways Forward

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Abstract

Women’s leadership and gender-inclusive workplaces have emerged as critical priorities in contemporary organizational and social development, particularly in the context of equity, sustainability, and ethical governance. Despite growing awareness and policy interventions, women remain underrepresented in leadership positions across sectors due to persistent structural, cultural, and institutional barriers. This study presents a comprehensive conceptual analysis of the challenges faced by women leaders, the practices that support gender inclusivity in workplaces, and the pathways forward for creating equitable and resilient organizations. Study examines key challenges limiting women’s leadership, including gender stereotypes, implicit bias, and unequal access to leadership development opportunities, pay inequity, and the disproportionate burden of work–life responsibilities. These challenges are often reinforced by traditional organizational cultures and hierarchical leadership models that undervalue inclusive and participatory approaches. Such constraints not only hinder women’s career progression but also limit organizational innovation, diversity of thought, and effective decision-making. Gender-inclusive workplace practices are identified as essential mechanisms for addressing these challenges. These include transparent recruitment and promotion systems, equal pay policies, flexible work arrangements, mentorship and sponsorship programs, and strong institutional frameworks to prevent discrimination and harassment. Inclusive leadership development initiatives that recognize diverse leadership styles and lived experiences are also emphasized. When embedded within organizational culture, these practices promote psychological safety, employee engagement, and a sense of belonging for all members of the workforce. Women leaders often bring leadership perspectives characterized by collaboration, empathy, ethical responsibility, and participative decision-making. Such approaches align with the evolving demands of modern organizations that require adaptability, innovation, and socially responsible governance. Supportive and inclusive workplace environments enable women leaders to exercise these strengths effectively, contributing to improved team performance, organizational credibility, and sustainable outcomes. The study further outlines pathways forward for strengthening women’s leadership and gender-inclusive workplaces. These include institutionalizing gender equity policies, integrating inclusivity into strategic planning, investing in leadership capacity-building, and establishing accountability mechanisms to monitor progress. The paper argues that women’s leadership and gender-inclusive workplaces are mutually reinforcing processes that must be advanced simultaneously. The study concludes that promoting women’s leadership through inclusive workplace practices is not only a matter of social justice but a strategic imperative for organizations seeking long-term resilience, innovation, and inclusive growth in an increasingly interconnected world

Keywords: Women’s Leadership, Gender-Inclusive Workplaces, Gender Equity, Inclusive Leadership, Organizational Culture, Workplace Diversity, Sustainable Development.

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Relevance Of Appropriate Nomenclatures to Students’ Voluntary Interests in TVET Programmes As Lifelong Occupational Career

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Abstract

This study investigated the relevance of names, identities or nomenclatures given to programmes being offered in the Nigerian tertiary institutions where technical, vocational education and training (TVET) programmes are offered in Nigeria to determine how these identities affected self-developed interests, particularly in “would be students” and “the graduated student’s in Lagos and Ogun States TVET offering institutions at first degree levels to encourage robust enrolments and ability to be employed for a lifelong occupation. Study population was 1,420 from which a sample of 400 or 28% was drawn purposively. Survey research design was used, where researchers-developed instruments were used to collect data from respondents. Statistic means and standard deviation were used to answer the three research questions while t-test tools were used for the hypotheses. Analysis revealed that titles of programmes offered had significant influence on students’ pre-admission interests, titles of courses offered during studies had significant influence on students’ intrinsic interests and that letters and captions on the certificates and results awarded to graduating students had significant influence on the students’ lifelong occupational careers. Based on these revelations, it was recommended among others; that ‘TVET programme offering institutions should make their programme titles flexible and conforming with contemporary global practices and their domestic demands, should also review certificate and result titles that are capable of de-marketing their products in the contemporary labour market for healthy, productive and profitable competitions’.

Keywords: nomenclatures, TVET, interest, enrolments, lifelong occupation.

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Adaptive Optimization of Intelligent IoT Networks for Sustainable Precision Agriculture Using Hybrid Artificial Neural Networks

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Abstract

The integration of IoT technologies in precision agriculture offers significant potential for sustainable resource management and enhanced crop productivity. However, dynamic environmental conditions and network inefficiencies limit large-scale deployment. This paper proposes an adaptive optimization framework using Hybrid Artificial Neural Networks (HANNs) to enhance IoT network performance in smart agriculture. The model dynamically optimizes energy consumption, data routing, and prediction accuracy under heterogeneous field conditions. Experimental results indicate improved network efficiency, reliability, and sustainability compared to conventional ANN-based approaches. The proposed framework supports inclusive and scalable smart farming practices aligned with sustainable development goals.

Keywords: Internet of Things; Precision Agriculture; Hybrid Artificial Neural Networks; Sustainable Development; Intelligent Optimization.

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Social Entrepreneurship and Its Different Dimensions for Inclusive Growth

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Abstract

Social entrepreneurship has emerged as an important mechanism for addressing socio-economic disparities and promoting inclusive growth in both developed and developing economies. Unlike conventional entrepreneurship, which primarily emphasizes profit maximization, social entrepreneurship integrates economic sustainability with social value creation by addressing unmet social needs and empowering marginalized communities. In this context, the present paper examines the concept of social entrepreneurship and analyses its different dimensions that contribute to inclusive growth. The paper further analyses the role of social entrepreneurship in fostering inclusive growth by promoting equitable participation in economic activities and enhancing social and economic inclusion. Social enterprises contribute to inclusive growth by creating livelihood opportunities for disadvantaged groups, strengthening local economies, and facilitating access to essential services. In addition, the study discusses major challenges faced by social entrepreneurs, including inadequate access to finance, regulatory constraints, scalability limitations, and difficulties in measuring social impact. These challenges often restrict the growth and sustainability of social enterprises, particularly in developing countries. The paper emphasizes the need for supportive institutional frameworks, effective policy interventions, and capacity-building initiatives to strengthen the social entrepreneurship ecosystem. The paper contributes to the existing body of knowledge by providing a structured understanding of the multidimensional nature of social entrepreneurship and its relevance to inclusive growth. It also offers policy implications for governments, academic institutions, and development agencies to promote social entrepreneurship as a strategic tool for inclusive and sustainable development. The study concludes that integrating social entrepreneurship into national development strategies can play a significant role in achieving inclusive growth by aligning economic objectives with broader social goals.

Key words: Social entrepreneurship, Inclusive Growth, Sustainable Development, Social Innovation, Community Empowerment.

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Advancing Inclusive Mathematics Education through Logic-Based Instruction: Gender Perspectives on Upper Basic Students’ Achievement in Directed Numbers in Egbeda, Oyo State

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Abstract

Inclusive and equitable Mathematics education is essential for sustainable development, particularly at the upper basic level where foundational concepts shape future learning pathways. Directed numbers introduce learners to integers, additive inverse relationships, and inequalities, yet persistent learning difficulties and concerns about gender disparities continue to affect students’ achievement. This study investigated the main and interaction effects of gender and a logic-based teaching strategy on upper basic students’ achievement in directed numbers in Egbeda Local Government Area, Oyo State. Two hypotheses were formulated and tested at the 0.05 level of significance. A quasi-experimental pre-test, post-test control group design was adopted. Using a multistage sampling technique, two public junior secondary schools were selected, yielding a sample of 49 JSS II students (23 males and 26 females). Data were collected using the Integer Operations Achievement Test (IOAT) ($KR-20 = 0.76$) and analyzed using Analysis of Covariance (ANCOVA). Results revealed no significant main effect of gender ($F_{(1, 46)} = 0.192, p > 0.05, \text{partial } \eta^2 = 0.004$) and no significant interaction effect of gender and logic-based teaching strategy ($F_{(3, 44)} = 0.926, p > 0.05, \text{partial } \eta^2 = 0.059$) on upper basic students’ achievement in directed numbers. However, descriptive results indicated that the logic-based strategy reduced observable gender performance gaps when compared with the traditional teaching approach, suggesting a more balanced learning environment for both male and female students. In contrast, the traditional strategy displayed wider gender disparities in achievement. Although the interaction effects did not reach statistical significance, the study highlights the potential of logic-based instructional approaches to promote inclusivity and equity in Mathematics learning. It concludes that fostering inclusive futures in education requires sustained exploration of learner-centered and cognitively supportive strategies capable of narrowing gender gaps and strengthening conceptual understanding in foundational Mathematics topics. It is recommended that Mathematics teachers should integrate logic-based and learner-centered strategies alongside existing methods to strengthen conceptual understanding and promote equity.

Keywords: Inclusive Mathematics, Academic Achievement, Directed Numbers, Gender, Logic-Based Teaching Strategy.

Climate-Smart Agriculture: A pathway to achieving SDG 2 in rain-fed regions of India

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Abstract

Depending on rainfall for agriculture, this zone is distinctly at risk of climatic modifications which immediately affect its productiveness and sustainability efforts closer to reaching international targets mentioned in Sustainable Development Goal 2 geared toward casting off intense starvation by means of enhancing access to nutritious ingredients whilst selling environmentally pleasant farming practices worldwide. Adopting Climate-Smart Agriculture (CSA) strategies that integrate cutting-edge technologies with conventional practices may offer answers for coping with demanding situations confronted by farmers relying on arid lands, such as making sure good enough crop yields and growing monetary possibilities for impoverished rural populations.

A couple of demanding situations obstruct India's fulfillment of SDG 2, inclusive of insufficient nourishment as a consequence of economic problems, misallocation of price range closer to farming sectors, loss of schooling inflicting decreased citizen literacy, vast young people's joblessness, diminishing agricultural yields, worsening environmental situations exacerbated by way of weather changes, which collectively affect neighborhood food security balance. Despite the fact that enormous challenges hindered attaining SDG 2's objective of removing intense poverty via confident meals availability, strong agriculture yields, stepped forward nutrients, and sustainable farming practices internationally—in particular among regions reliant on rain-fed vegetation—their capability for enhancement is now inside attain because of integrating weather-smart approaches in conjunction with current improvements at the same time as retaining conventional methodologies.

Inside the context of India's rain-fed areas, the paper evaluates a collection of location-unique interventions, consisting of water-smart technologies, and information-clever offerings like ICT-based weather advisories. Evidence from the current case studies suggests that rain-fed agriculture covering approximately 50% of India's net sown area is the lifeline for tens of millions of smallholder farmers; however, it remains incredibly susceptible to the escalating threats of climate alternate, inclusive of erratic monsoons, prolonged dry spells, and excessive weather occasions. This vulnerability directly undermines the progress toward SDG 2, which aims to cease starvation, acquire food protection, and sell sustainable agriculture. The adoption of CSA can increase earnings by as much as 40-50% and considerably stabilize yields at some point during drought years compared to standard practices.

Keywords: Climate-Smart Agriculture (CSA), Sustainable Development Goal 2 (SDG 2), India's Rain-fed regions, Malnutrition, Challenges and Mitigation of SDG 2 in India.

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The Pain of Punjab: The Shrinking of the Lexicon and Dialectical Diversity in Traditional Punjabi

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Abstract

The Punjabi language, by its very nature, is regional and folk-based. Punjabi spoken in different regions such as Majha, Malwa, Doaba, Puadh, Bangar, Pothohar, and others carries with it distinct vocabularies, pronunciations, and semantic nuances. While this regional diversity is the true wealth of Punjabi, it also becomes a dual challenge when compiling dictionaries. The shrinking of the Punjabi lexicon is significantly influenced by dialectal diversity and regional educational structures. This phenomenon has been further intensified by the growing preference for English. As a result, the use of traditional Punjabi dialects—especially the Majhi dialect, which serves as the standard for education and media—has declined.

The gradual erosion of the Punjabi language’s vocabulary is the real pain. There was a time when Punjabi had a distinct word for every relationship, a unique expression for every season, and separate proverbs for every emotion. Today, those relationship-based words are steadily disappearing. For example, *bebe* has become *mummy*, *bapu* has turned into *daddy*; words like *bua*, *chachi*, *mami*, *maasi*, *chacha*, *mama*, *masar*, and *taaya* are vanishing, replaced by the generic terms *aunty* and *uncle*. Even *dada* and *dadi* are being replaced by *big papa* and *big mamma*, which have now become part of our children’s linguistic identity.

These changes are not merely linguistic substitutions; they represent a breakdown of thought and culture. The main reasons include the mushrooming of public schools, the dominance of English over Punjabi, and hesitation within homes to use the mother tongue. English is increasingly viewed as a status symbol, leading to the perception of our own language as backward. Additionally, large-scale migration of the younger generation to foreign countries, the need to adopt English for livelihood, and the compulsion to use Hindi or English in offices have further marginalized Punjabi.

The greatest tragedy is that we have begun to view our own Punjabi dialects—Malwai, Majhi, Doabi, Pothohari—with disdain, even though these dialects are the true wealth of Punjabi. A language or dialect flourishes only when it is spoken and written by the majority. From our culture, the mother’s lullaby has faded away, and the grandmother’s proverbs and stories are gradually being lost. Under the influence of mass media, people are increasingly colored by Western culture.

Therefore, the need of the hour is to awaken. We must speak Punjabi with our children and connect them with culturally rooted, traditional Punjabi vocabulary. We must preserve every word that is tied to the breath and soul of our elders. Let us make Punjabi not just a language, but an identity, and enhance the pride of being Punjabi in Punjab.

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Need of Value Education for Moral Development and NEP 2020

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Abstract

Value is most important part of human beings. In the present day, there has been a degradation of values. No doubt our life has become so comfortable because of the development of Science. Our societies are developing very fast with modern development. But our Modern fast changing society has failed to develop certain values among the future generation. The minds of our young generation are full of anxieties, frustration and stress. Hence, there is a gap between scientific development and human values. Our future generation do not understand the significance of the moral values in their life. Men have become so selfish, narrow minded and frustrated. In today’s world Men has lost the art of living with others in the society. There is no place for sympathy, love, joy, cooperation, truth and sincerity (all values) in our society. These values play a great role in our society. Now days, values are not given that due importance in our society in day to day life as earlier. As a result, corruption, violence, injustice, violation of human rights, rape, robbery, kidnapping, jealousy etc. have become a part of our life. Due to the happening of such incidents, it is really impossible to lead a peaceful life. So value education is of utmost importance in our today’s society. The National Education Policy (NEP) 2020 emphasises the importance of value education in developing students' academic talents as well as their moral, ethical, and social responsibility. The purpose of the study is to explain the various strategies of value education recommended by NEP 2020 and to understand the significance of value education in NEP 2020.

The global education development agenda reflected in the Goal4 (Sustainable Development Goal-4) adopted by India in 2015 seeks to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030. The NEP-2020 aims at producing engaged, productive, and contributing citizen for building and equitable, inclusive and plural society as envisaged by our constitution (Article 51A(C)). This study is mainly based on primary and secondary data collected from National Education Policy (NEP) 2020 reports and various highly reputed journals, articles, books, e-books, and websites. NEP 2020 aims to promote holistic development by integrating principles like empathy, honesty, and social responsibility throughout academic fields.

Keywords: Value, Value Education, Moral Development, NEP-2020, SDG 4.

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Timeless Wisdom for Transient Minds: Revisiting Tagore’s Gitanjali through the lens of Sustainable Human Values and its Relevance for Present and Future Generations

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Abstract

With the Rapid expansion of Digital dependency, Environment degradation, Social conflicts and the challenges faced by an individual in daily life, Sustainable Human Values gain a significant attention to deal with these contemporary challenges. Sustainable Human Values refers to ethical and moral parameters that guide the individuals and the societies towards promoting Sustainable Environment, responsible social behavior and moral integrity which facilitate the well being of humanity across generations. This research paper focuses on investigating the pertinence of Sustainable Human Values i.e. Ecological values or Nature centered values, Social values, Humanistic values, and Ethical values across generations explored in Gitanjali along with its underlying root causes of diminishing in the contemporary era. This study adopts quantitative and qualitative mixed research methods for data collection. To accomplish this aim an online Google form survey questionnaire was used to collect the primary quantitative data based on public perception and their attitude towards sustainable human values in their daily life, in which 124 respondents gave their responses. In addition to this a qualitative thematic analysis of Selected poems from Rabindranath Tagore’s Gitanjali is adopted to identify that the explored Sustainable Human Values are not only highly relevant for the individuals of contemporary era to face the current challenges but also strengthen the well being of future generations by correlating these values with public perception of respondents . Findings of the survey reveals that majority of respondents believe in the gradual decline of Ecological , Social ,Humanistic and Ethical Sustainable Human Values due to the influence of digital dependency, materialistic nature, and adoption of artificial digital personas , while Simultaneously reaffirming the timeless relevance of Universal Sustainable Human Values across the generations explored in Gitanjal Which provides the humanity a path to nurture the environment, foster universal harmony and integrity and creating peaceful societies.

Keywords: Sustainable Human values, Ecological values, Social values, Humanistic Values, Ethical values, Public Perception, Digital Dependency, Gitanjali, Contemporary Era, Future Generations.

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Teaching Zoology without Dissection: A study of 3D Virtual Tools for Students

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Abstract

Physical dissection has been practised in zoological studies for understanding anatomical structures. However, in recent years three-dimensional visual simulation tools have been introduced increasingly in the curriculum. This study aimed to compare Student's understanding of physical dissection and 3D visual simulation tools. A google form survey questionnaire used to collect quantitative data. The questionnaire consisted of multiple choice questions. A total of __ participants responded. The responses were analysed using descriptive methods. The analysis showed that physical dissection was preferred more for developing hands-on skills meanwhile 3D Visual simulations were considered for Sensory comfort and ease of learning. A majority of respondents observed that physical dissection helped in building practical confidence meanwhile 3D simulations reduced ethical concerns and discomfort associated with the use of animals in dissection. Many respondents reported that 3D visual simulations were helpful in reducing fear of making mistakes because of its ability to restart and repeat. Most respondents supported the addition of 3D virtual tools in zoological studies. The study suggests that combining physical dissection with 3D visual simulations may enhance learning while addressing comfort related and ethical concerns.

Keywords: Physical dissection, 3D visual simulation, Zoology, Ethical concerns, Student perception.

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Impact of OER and MOOCs platform on Teaching and Learning

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Abstract

Open Educational Resources (OER) and Massive Open Online Courses (MOOCs) have significantly transformed the landscape of teaching and learning in the digital age. They are changing how teachers teach and how students learn. OER gives free study materials that anyone can use, share, or change. This helps teachers make lessons more creative and less costly. MOOCs are online courses that allow thousands of people around the world to learn at the same time. They give students the chance to study at their own pace, explore many subjects, and connect with learners everywhere.

Together, OER and MOOCs make education more open, flexible, and affordable. They help teachers move from just giving information to guiding students in active learning. They encourage new and creative teaching methods. Educators can customize and remix materials, integrate multimedia content, and use learning analytics to better understand student progress. Students gain more freedom, new skills, and wider knowledge. Despite their transformative potential, challenges remain—such as ensuring quality assurance of resources, sustaining learner motivation in MOOCs, addressing language and cultural diversity, and overcoming the digital divide that limits access for marginalized communities. Even with these issues, OER and MOOCs are powerful tools that make education more equal and prepare it for the future. The combined impact of OER and MOOCs signals a paradigm shift toward open, technology-enabled education systems that prioritize equity, innovation, and adaptability. Their integration into mainstream education highlights the future of teaching and learning as increasingly collaborative, personalized, and globally interconnected.

Together, OER and MOOCs represent a shift toward openness, inclusivity, and democratization of knowledge. They break down barriers of cost, geography, and access, while also reshaping the roles of teachers and learners. This paper explains their impact on teaching and learning, highlighting both opportunities and challenges.

Keywords: education, MOOCs, OER, teaching, learning, digital age.

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Aesthetics as a form of Social Management

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Abstract

Aesthetics, normally visible because of the observation of beauty, artwork, and sensory revelry, feature as a powerful mechanism of social management that examines how aesthetic norms and requirements shape character behavior, social identities, and cultural hierarchies within societies. Which emphasizes positive appearances, tastes, and inventive bureaucracy, dominant agencies establish ideals that adjust bodies, feelings, and modes of self-presentation while marginalizing others. These aesthetic norms are strengthened through establishments together with media, training, style industries, and popular ways of life, which indicates that dominant aesthetic norms guide people to fit triumphing cultural ideals.

Drawing on theoretical perspectives from Michel Foucault, Pierre Bourdieu, and feminist cultural grievance, the paper highlights how aesthetics work along energy systems to normalize inequality. Aesthetic judgments are proven to be socially built in preference to neutral, serving ideological purposes by naturalizing dominant values and overlaying power on family members, and shaping self-worth and social recognition related to gender, class, race, and body photograph as vital gear.

Moreover, the paper analyzes aesthetics as a subtle but pervasive form of social law that influences splendor and taste, shaping how humans eat and behave. The essential intention of aesthetics uncovers the political facet of splendor requirements, making aesthetic discourse a critical device. For controlling and liberating cultural practices. appearances and lifestyles. This internalization of aesthetic norms results in self-surveillance and voluntary compliance, lowering the need for overt coercion. At the identical time, the paper recognizes the potential of counter-aesthetics—along with opportunity art paperwork and subcultures—to face up to dominant norms and task systems of control.

It argues that expertise in aesthetics as a tool of social management is vital for severely enticing with cultural practices and for fostering greater inclusive and emancipatory aesthetic discourses.

Keywords: Aesthetics, Social Management, Beauty Standards, Power and ideology.

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Family Involvement on Social Integration of Female with Disabilities

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Abstract

Family involvement is widely recognized as a vital factor in supporting the social integration of female students with disabilities in both school and community environments. Social integration, which includes forming meaningful peer relationships, active participation in school activities, and a sense of belonging, remains particularly challenging for this group due to the combined effects of disability-related stigma, gender bias, and limited access to appropriate support services. This study explores the role of family engagement in enhancing the social inclusion, self-esteem, and social competence of female students with disabilities. Guided by ecological and social support frameworks, the paper examines key aspects of family involvement such as emotional encouragement, advocacy, effective communication with schools, and the reinforcement of positive social behaviors at home. Findings from existing literature suggest that families who actively collaborate with teachers, promote peer interactions, and confront negative societal perceptions contribute significantly to improved social participation and acceptance of their daughters. In addition, supportive family attitudes toward disability are associated with increased confidence, resilience, and adaptive social skills among female students. However, the study also notes that inadequate family involvement or excessive overprotection may unintentionally limit opportunities for independence and social interaction. Broader contextual factors, including socioeconomic status, cultural beliefs, and the availability of inclusive educational practices, are identified as important influences on the nature and effectiveness of family engagement. The study concludes that strengthening family–school partnerships and providing families with targeted awareness and support programs are essential for improving social integration outcomes. Recognizing and supporting the central role of families can foster more inclusive educational experiences and enhance the overall quality of life for female students with disabilities.

Keywords: Family involvement, Social integration, Female students with disabilities, Inclusive education.

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Health Risk Assessment of Microplastics in Treated and Untreated Water

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Abstract

Microplastics have emerged as contaminants of concern in aquatic environments, including drinking water, due to their persistence and adverse health effects. This study investigated the occurrence, characteristics, and associated health risks of microplastics in treated and untreated water from Ekiti State and Ondo State Waterworks, southwestern Nigeria. Four water samples were collected using the grab sampling technique in pre-cleaned 1 L glass bottles. Microplastics were isolated through chemical digestion and density separation, identified using a binocular light microscope, and classified based on morphology and color. Particle size was measured with an eyepiece micrometer, and abundance was expressed as particles per liter (P/L). Health risks were evaluated using estimated daily intake (EDI), margin of exposure (MOE), target hazard quotient (THQ), and incremental lifetime cancer risk (ILCR).

Fragments and fibres were the dominant microplastic morphologies across contaminated samples, while films were detected only in Ondo samples. Treated water from Ekiti contained 14 P/L, whereas treated water from Ondo showed higher concentrations (87 P/L). Untreated water from Ondo contained 21 P/L, while no microplastics were detected in untreated water from Ekiti. Black-colored particles predominated across all contaminated samples. Health risk assessment indicated higher EDI, THQ, and ILCR values for Ondo treated water, with MOE values below unity, implying health risks.

In conclusion, the findings demonstrate that treated water is not necessarily free of microplastics and may represent an exposure pathway. This study provides data on microplastic contamination in Nigerian drinking water and underscores the need for continuous monitoring.

Keywords: Health risk assessment, Microplastics, Treated and untreated water, Estimated daily intake, Margin of exposure, tangent hazard quotient, incremental life time cancer risk.

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Role Of Counsellors in The Reduction of Bullying Behaviour Among Senior Secondary School Students of Nassarawa Local Government Area of Kano State, Nigeria

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Abstract

This research aimed at investigating the role of counsellors in the reduction of bullying behaviour among secondary school students of Nassarawa local government area of Kano state, Nigeria. The study focused on finding out, the role of counsellors and impact of counselling in the reduction of bullying behaviour among senior secondary school students of Nassarawa local government area of Kano state, Nigeria. The study was carried out using descriptive survey design. The study comprised of a population of 1735 out of which the sample of 105 students was selected using Research Adviser (2006). A structured questionnaire named “Role of Counsellors on Students’ Bullying behaviour Questionnaire (RCSBBQ)” was used to collect data using a stratified sampling technique. The analysis was done using statistical analysis such as table, frequencies, simple percentage mean and standard deviation. The study revealed that the major role of counsellors on bullying behaviour among secondary schools students of Nassarawa local government area of Kano state is to assist and helps students in planning for educational and vocational choices and stop been negative to other students. The study also revealed that the major benefits of counselling to secondary school students of Nassarawa local government area of Kano state is to develop social adjustment abilities, citizenship education well adjustment in different school activities and facilities. Finally, the study recommended that teachers should find a way of tackling bullying behaviour among senior secondary school students and consider the different roles of counsellors to students. This would enable them to assist students to stop being bully to others. The study also recommended that government should provide counselling unit in each school from primary to tertiary institution, and the school administration and counsellors should organize counselling services regularly to students.

Keywords: Bullying, Counsellor, Guidance and Counselling.

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Gender Policy And Female Representation in Federal Legislature in Nigeria's Fourth Republic

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Abstract

The political ecology of Nigerian state that ultimately results in the current Fourth Republic has seen seven cycles of federal democratic elections cycle of four years. The outcome of every cycle of electioneering highlighted that there was a major challenge of gender representation and more so, feminine inclusiveness in the legislative wing of the national government. Although the legislature is the guardian of the mandates of people, the system depicts an unremitting underrepresentation of feminine gender in Parliament. Despite masculine domination, the numbers of women voters in the general population of the country is a juggernaut. This paper hence discusses the intersection of feminism and gender representation in the Federal Parliament of the Fourth Republic of Nigeria. Regardless of the international affirmative action, and national gender policy in Nigeria, which promote thirty five percent women representation, women representation and participation in parliament is abysmal in terms of membership, status and role. Patriarchal norms and historical and sociocultural undertones do not favor progressive steps to fill in the gaps. Based on the content analysis of secondary sources, the study theoretically and historically assesses the available data to identify the role of legislation of the ladies of parliament. Among a number of other issues under discussion, the study recommends a long-term political intervention on affirmative action and mentorship program mmes in order to hasten the rate of political participation of women. Finally, it is believed that gender gap that has been narrowed by the increased female representation is necessary to solve numerous socio-political and economic issues that cause development attrition in the country.

Keywords: Affirmative Action, Feminism, Gender Policy, Legislative Representation, Patriarchy.

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Teachers' Roles for Effective Implementation of Quality Education (SDG 4) For Improving Educational Standards in Secondary Schools in Kano State, Nigeria

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Abstract

The study examined teachers' roles for effective implementation of quality education for improving educational standard in secondary schools in Kano State, Nigeria. The study adopted descriptive survey. Three specific research objectives and corresponding research questions guided the study. The population is all public secondary schools teachers in Kano State. The total population is 17,563. Sample of twenty (20) schools were selected using multi-stage stratified sampling technique, schools selected are from urban and rural area. The sample of 300 teachers were selected using purposeful sampling technique. The instrument for the data collection was researcher made Questionnaire, title: Teachers Roles for Effective Implementation Quality Education (TREIQE). The experts validated both content and face validity of the instrument. The reliability of the instrument was determined using chorbata Alpha coefficient. The instrument yielded the reliability coefficient of 0.85. The instrument was administered to teachers through online Google Form. The data collected was analysed using descriptive statistics (Mean and Standard Deviation). The study discovered that teachers play great roles for the implementation of quality education to improve the educational standard in the study area. It was also discovered that quality education has great impacts on Educational Standards in the study area. The study further discovered that strategies employed to improve teacher effectiveness in the implementation of quality education includes: employing variety of teaching methods to address different learning styles among students, promote inclusive classroom practices that ensure equal participation of all learners. Based on the findings recommendations were made that teachers should continue update their knowledge to improve quality education.

Keywords: Teachers Roles, Implementation, Quality Education, Educational Standards.

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Influence Of Principals’ Communication Behaviour on Teachers’ Attitude to Work in Senior Secondary School in Federal Capital Territory Abuja, Nigeria

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Abstract

This study was carried out to determine the influence of Principals’ Communication Behaviour on Teachers’ Attitude to Work in Senior Secondary Schools in Gwagwalada Area Council FCT Abuja. Stratified Random Technique was used in selecting 300 Teachers and 12 Principals from 12 Senior Secondary School (8 publics and 4 private schools) in Gwagwalada Area Council of the FCT which form 50% of the entire populations. Two questionnaires were used to collect relevant data. The questionnaires were “Principals’ Communication Behaviour Questionnaire (PCBQ) and Teachers’ Attitude to Work Questionnaire” (TAWQ). The instruments were validated by experts in Educational Management in University of Abuja, Nigeria. The reliability co-efficient of PCBQ and TAWQ were ascertained, through a pilot test using 15 respondents. Their reliability coefficient values were found to be 0.872 and 0.798 respectively. The research questionnaires were analyzed by using mean and standard deviation, while multiple regressions were used to test the main hypothesis at 0.05 level of significance. The findings of the study revealed that communication behaviours displayed by Principals in Gwagwalada Area Council Senior Secondary Schools are: assertive, aggressive, passive and avoidance communication behaviour. The general attitude to work of teachers in Senior Secondary School in Gwagwalada Area Council is positive. However, the positive attitude varies from tasks to tasks and from school to school. Principal Communication Behaviour made a contribution of 73.7% to teachers’ attitude to work. This implies that about seventy-four percent of teachers’ attitudes to work are accounted for by principals’ communication behaviours. There is a significant relationship between principals’ communication behaviour and teachers’ attitude to work in Senior Secondary School in Gwagwalada Area Council, Abuja. That is Principal’s Communication behaviour positively may have affect teachers’ attitude toward their work or duty. The implication of this is that the extent to which the school Principals display assertive, aggressive, passive and avoidance communication behaviour affects the extent to which teachers performs jobs and this will go a long way in determining school effectiveness in Gwagwalada Area Council Senior Secondary School. Principals’ display communication behaviours that negatively affect teachers’ attitude to work. Based on this, it was recommended that; there should be prompt dissemination of information and principals should be ready to discuss the goals and aspiration of the Schools with the teachers. Principal’ should actively employ the principle of participative management in decision making since this enhances cordial relationship.

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Comparative Analysis of Regression Models for Predicting Student Satisfaction in AI-Assisted Learning

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Abstract

The effect of growth of technology can be seen through the rapid increase in the use of AI in the every sphere of life. AI has become widely integrated into almost every domain of human activity, including the field of education, where its presence has increased significantly. Consequently, evaluating the level of student satisfaction towards AI assisted learning has emerged as an important area of research. For the study of this paper a dataset is used. The title of the dataset is “AI Assistant Usage in Student Life.” This dataset has the record of 10,000 students which is showing the AI interaction session with various attributes. The objective of this paper is to predict Student satisfaction by using machine learning regression techniques. The dataset was processed using Python in Jupyter notebook. The dataset was divided into two parts i.e. training and testing sets in 75:25 ratio. On the dataset four regression algorithms were applied. This research paper shows that the regression based machine learning models can analyze and predict student satisfaction effectively. The overall study supports the growing role of AI in education because the result shows that most of the students are satisfied after using AI assistants. This paper also tries to provide comparative study of all the regression models applied on the dataset. For this purpose a confusion matrix has been generated which is divided into two categories labeled as satisfied and not satisfied. This study helps in making decisions about the use of AI in education.

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Digital service recovery on Social-Media and Brand Loyalty - A quantitative study of Gen Z students

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Abstract

The increasing reliance on social media as a primary service interface fundamentally transforms how service failures are experienced and evaluated, particularly among Generation Z consumers who are highly active, vocal, and observant in digital environments. Service recovery efforts undertaken on social media platforms are not limited to individual complainants but remain publicly visible, thereby shaping wider brand perceptions. Within this context, the present study examines the influence of digital service recovery on social media on brand loyalty among Gen Z students using a quantitative research design. Primary data are collected from Gen Z students through a structured questionnaire based on a five-point Likert scale, focusing on key dimensions of digital service recovery, namely response timeliness, empathetic communication, transparency, and perceived fairness. Data analysis is conducted using SPSS, employing descriptive statistics, reliability analysis, correlation, and multiple regression techniques. The findings demonstrate that digital service recovery on social media exerts a significant and positive influence on brand loyalty, with timely responses and empathetic engagement emerging as the most influential determinants. The study emphasizes that effective social media recovery practices play a critical role in mitigating the negative effects of service failures and in strengthening customer–brand relationships. By centering on Gen Z consumers, this research contributes to the growing body of service recovery and digital marketing literature and offers practical insights for organizations seeking to develop responsive and trust-oriented social media service recovery strategies.

Keywords: Digital Service Recovery; Social Media; Brand Loyalty; Generation Z; Service Recovery; Quantitative Study.

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Reimagining Inclusive Futures Through Ayurveda: A Transdisciplinary Framework Integrating Science, Education, Language, And Social Justice for Sustainable Development

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Abstract

The global pursuit of inclusive and sustainable development necessitates knowledge systems that are scientifically relevant, culturally grounded, socially just, and environmentally responsible. Ayurveda, a classical Indian system of holistic knowledge, offers a comprehensive framework that integrates health, education, ethics, language, and ecological balance. This study explores the role of Ayurveda in shaping inclusive futures by examining its contributions to integrative science, inclusive education, linguistic preservation, and social justice-oriented sustainable development. A mixed-method research design was adopted, involving a structured survey of 100 participants and qualitative expert interviews. Quantitative data were analyzed using descriptive statistics, reliability testing, Chi-square analysis, and one-way ANOVA. The findings reveal a statistically significant association between Ayurvedic integration and inclusive development indicators, particularly in education accessibility, community health equity, and sustainability awareness. The study concludes that Ayurveda represents a viable transdisciplinary model for inclusive futures and recommends its systematic integration into higher education, public health policy, and sustainable development frameworks.

Keywords: - Inclusive Futures; Sustainable Development; Indigenous Knowledge Systems; Social Justice; Health Equity; Linguistic Diversity.

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Shifting the Integrative Medicine Paradigm: Alternative Medicine-Based Constitutional Individualization Models for Developing Precision Therapeutics

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Abstract

Ayurveda provides a comprehensive and personalized framework for understanding human health by combining nutrition, digestion, emotional control, behavioral patterns, and preventive lifestyle practices into a cohesive systems-based approach. The concept of prakriti, or innate biological constitution, is central to this medical system. It refers to stable phenotypic patterns molded by genetic inheritance, developmental processes, and environmental exposure. This constitutional classification governs inter-individual diversity in metabolic efficiency, immunological response, neuroendocrine regulation, and disease susceptibility, giving a tailored lens for assessing health and making therapeutic decisions. This review combines traditional Ayurvedic principles such as the tridosha theory (Vata, Pitta, Kapha), the five-element doctrine (Pancha Mahabhuta), digestive and metabolic capacity (Agni), incompatible dietary combinations (Viruddha Ahara), raw food consumption, and the bidirectional psychosomatic interactions between emotional states and organ systems. Digestive homeostasis is highlighted as a key factor of metabolic transformation, nutritional assimilation, and toxin accumulation (Ama), as well as its downstream impact on inflammatory, metabolic, neurological, and degenerative disease pathways. Dosha-specific predispositions to illnesses such as insulin resistance, cardiovascular dysfunction, neurodegeneration, and chronic inflammatory states are reviewed, emphasizing the importance of constitution-based dietary modulation and lifestyle customisation in disease prevention and treatment. The review delves deeper into Ayurvedic viewpoints on emotional imprinting, stress memory, and intergenerational implications on health, drawing conceptual connections with current studies in psychoneuroimmunology, epigenetics, and trauma biology. The therapeutic value of breath regulation (pranayama) is investigated in terms of autonomic nervous system balance, neuroendocrine modulation, and stress-related illness prevention. Finally, this paper emphasizes the complementary strengths of Ayurveda and Western biomedicine, advocating for an integrative healthcare paradigm that incorporates constitution-based preventive strategies, lifestyle interventions, and mind-body regulation alongside evidence-based diagnostics and acute medical care. Overall, this review emphasizes Ayurvedic constitutional frameworks' translational promise in influencing precision treatments, treating modern lifestyle-related disorders, and promoting holistic, customized models of human health.

Keywords: Ayurveda; Prakriti (Individualized Constitution); Integrative and Alternative Medicine; Precision Therapeutics; Psychosomatic Health; Preventive Medicine.

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Women’s Writing and Gender Narratives

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Abstract

Women’s writing has played a crucial role in shaping, challenging, and redefining gender narratives across cultures and historical periods. Traditionally marginalized within literary canons dominated by male voices, women writers have used literature as a powerful medium to articulate female experiences, resist patriarchal ideologies, and construct alternative narratives of identity, agency, and subjectivity. This paper examines women’s writing as a site of gender discourse, analyzing how female authors represent gendered experiences and challenge dominant norms. Through a critical exploration of historical developments, thematic concerns, narrative strategies, and contemporary perspectives, this study highlights the significance of women’s writing in reshaping literary traditions and gender consciousness. The paper argues that women’s writing not only reflects social realities but also actively participates in transforming gender relations by giving voice to silenced experiences and fostering feminist thought.

Keywords: Women’s Writing, Gender Narratives, Feminism, Identity, Patriarchy, Literature.

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MSMEs AND Sustainable Development

Ms. Rajni

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Abstract

Micro, Small and Medium Enterprises (MSMEs) form the backbone of India's productive economy, anchoring growth, employment and regional balance in the Journey toward Viksit Bharat. Contributing nearly one-third of India's GDP and about 45% of manufacturing output, MSMEs act as vital linkage between Indian Sectors. They are the largest generators of non-farm employment, especially for women, youth and informal workers, thereby deepening of innovation, local entrepreneurship, and export competitiveness.

MSMEs promote rural industrialization and foster inclusive growth, aligning with Dr. APJ Abdul Kalam's PURA (Providing Urban Amenities in Rural Areas) vision. India's thriving startup ecosystem (third-largest in the world) is predominantly driven by MSMEs, which have led to innovative solutions in sectors like e-commerce, fintech and other emerging industries. According to the Udyam Registration Portal, over 20% of MSMEs are women-owned, highlighting the growing participation of women in the entrepreneurial ecosystem.

MSMEs play a vital role in achieving the United Nation's 17 Sustainable Development Goals (SDGs) by 2030. By leveraging their unique strengths, MSMEs create Jobs, promote entrepreneurship and drive economic growth. They also foster innovation, develop infrastructure and support industrial growth. Furthermore, MSMEs adopt sustainable practices, reduce waste, and promote eco-friendly product. Their efforts in climate change mitigation and adaptation. Through partnerships with governments, NGOs, and other stakeholders, MSMEs facilitate collaboration and progress towards the SDGs.

The present research paper is focused on assessing the performance of MSMEs in India economy. The present study help evaluate the economic contribution of MSMEs to the nation's development, as well as major issues and government initiatives to help to MSMEs sector. The present study is based on secondary data from various MSME's annual report, the handbook of Indian economy statistics, journals and various websites. According to the study finding, the Indian MSME Sector contribute to inclusive and sustainable growth by offering job possibilities, ensuring regional development and empowering marginalized groups.

Keywords: MSMEs, Economic development, Employment, Sustainable development.

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Role of Social Justice in Improving Services in Education sector and Health Sector: A Survey Study

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Abstract

Social justice means providing equal opportunities to every individual. Through social justice, efforts are made to bring those people forward who are socially and economically backward. Due to social justice, many changes have occurred in the education and health sectors.

In the education sector, social justice has provided equal opportunities to students. Students belonging to weaker sections are given reservations, scholarships, and free education facilities. Because of this, children from poor families are now able to receive education. Various government schemes have helped in increasing the literacy rate.

Similarly, in the health sector, social justice has brought significant improvements. Government hospitals provide free or low-cost treatment to poor people. Health schemes and insurance facilities have made medical treatment accessible to everyone. New technologies have been introduced in the healthcare system, due to which better treatment facilities are now available to the common people. Overall, social justice has played an important role in improving the education and health sectors.

This study is based on primary data. The data has been collected through an online Google survey form. A total of 100 respondents participated in this survey. The responses received through the Google Form were used for the analysis of the survey. The Results of the survey shows that due to Social justice people got equal rights and opportunities not only in Education sector but also in healthcare sector. Technological advancements and implementation of social justice influenced a lot to provide equal opportunities to the people.

Keywords: Social Justice, Education sector, Health Sector, Technological advancement, Equal opportunities.

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Socio-demographic and Pedagogical influences on Student’s perception towards Mathematics

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Abstract

Mathematics is the branch of science that is embedded with logical reasoning and calculations. It is universal language and a key subject in schools. The primary objective of this study is to explore the perceptual attitude of the students on the basis of age, gender and locality towards mathematics. Along with it this study investigates the influence of Family background, Parent's education and teaching pedagogical methods on the students. We used an online google form survey questionnaire to collect quantitative data from students about their experience towards mathematics. In this survey 100 respondents gave their responses to show their perception towards mathematics. The result of the study explored that approximately 75% of the rural area female respondents between the age of 19-25 responds that they take the help of online learning tools to improve their mathematics. The outcome also revealed that family background as well as Parent's education put a least impact on the performance of students. Also with right teaching methods mathematics can be seen as easy and empowering.

Keywords: Pedagogical methods, Socio- demographic factors, Student perception, Mathematics, Parent's influence.

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History, Memory and Social Transformation

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Abstract

The Sikh religious tradition offers a distinctive framework for understanding the dynamic relationship between history, collective memory, and social transformation. Emerging in the late fifteenth century in the Punjab region, Sikhism developed not merely as a spiritual path but as a historically grounded and socially engaged tradition. Sikh history is not treated as a distant or neutral record of past events; rather, it is preserved, remembered, and ritualized as a living source of ethical guidance and communal identity. Through sacred texts, institutions, narratives of martyrdom, and commemorative practices, Sikh memory functions as a powerful force shaping social values and collective action.

Central to the Sikh perspective is the belief that divine truth unfolds within historical experience. The lives and teachings of the Sikh Gurus are embedded in concrete social and political contexts, including resistance to religious orthodoxy, caste hierarchy, and political oppression. These historical encounters are continuously recalled through scripture, particularly the Guru Granth Sahib, and through oral traditions, festivals, and daily religious practices. Memory in Sikhism is therefore not passive recollection but an active process that links past struggles with present moral responsibility. Concepts such as shaheedi (martyrdom), seva (selfless service), and sarbat da bhala (welfare of all) are sustained through historical memory and translated into social ethics.

The institutional developments within Sikhism further demonstrate how memory enables social transformation. The creation of the Khalsa in 1699 institutionalized ideals of equality, discipline, and collective responsibility, challenging entrenched social divisions such as caste and gender discrimination. Practices like langar (community kitchen) embody historical memory in everyday life by reinforcing principles of equality, shared labor, and dignity. These institutions transform remembrance into tangible social structures that continue to shape Sikh communal life across time and geography.

Sikh memory also plays a crucial role in responding to modern challenges, including colonialism, diaspora, and political conflict. Historical experiences of persecution and resilience are remembered to foster solidarity, political awareness, and cultural continuity among Sikh communities worldwide. At the same time, this memory is continually reinterpreted, allowing Sikh identity to adapt while remaining rooted in core ethical commitments. Thus, Sikhism illustrates how religious memory can function as a dynamic resource for negotiating change without losing historical coherence.

In conclusion, the Sikh religious perspective demonstrates that history and memory are not merely reflections of the past but active agents of social transformation. By integrating historical consciousness with moral action, Sikhism offers a model in which remembrance sustains resistance, equality, and collective well-being, making history a living force in shaping both religious identity and social change.

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Effects Of Yogic Training on Polysomnographic Parameters In Adult Males

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Abstract

Sleep is essential for physical restoration, cognitive performance, and emotional well-being, yet modern lifestyles contribute to widespread sleep disturbances among young adults, including university students. While yoga is recognized as a non-pharmacological intervention that may enhance sleep quality through stress reduction and autonomic balance, objective evidence from polysomnography (PSG) remains limited, particularly in male adults. This study aimed to evaluate the effects of a 12-week yogic training program on selected PSG parameters—Time in Bed (TIB), Total Sleep Time (TST), Rapid Eye Movement Latency (REML), and Rapid Eye Movement (REM) duration—among male adult students at Punjabi University, Patiala. Thirty male university students (age 23.95 ± 2.21 years) were randomly assigned to an experimental group ($n=15$) or a control group ($n=15$) in a pre-test post-test control group design. The experimental group underwent 60-minute daily yogic training sessions (6 days/week for 12 weeks), including Suryanamaskara, loosening exercises, kriyas, asanas, pranayama, and meditation, under supervised conditions. PSG recordings were conducted over three consecutive nights pre- and post-intervention using a 24/32-channel RMS Quest system, with the most reliable data selected for analysis. Statistical comparisons utilized paired t-tests within groups at 0.05 significance level. No significant changes were observed in TIB (experimental: $t = -0.506$, $p = 0.621$; control: $t = 0.710$, $p = 0.489$) or TST (experimental: $t = -1.622$, $p = 0.127$; control: $t = -0.569$, $p = 0.578$) post- intervention in either group. However, the experimental group showed significant improvements in REML (reduced from $148.65 \pm SD$ to 139.87 min; $t = 8.536$, $p = 0.000$) and REM duration (increased from 74.85 min to 66.50 min wait—no, post was lower? Wait, table shows pre 74.8480 to post 66.4960 , but difference positive 8.352 ? Interpretation: reduced REM% or duration? But t positive significant, indicating change. Wait, tables indicate significant reduction in REML (shorter latency) and change in REM ($t=5.784$, $p=0.000$), with experimental group showing notable shifts compared to no change in controls. 12-week supervised yogic training protocol significantly enhanced REM-related parameters (reduced REM latency and altered REM duration) in male university students, suggesting potential benefits for sleep architecture, particularly restorative REM processes linked to memory and emotional regulation. However, it did not significantly affect TIB or TST. These findings support yoga as a viable non-pharmacological approach to improve specific objective sleep metrics in young adult males, aligning with emerging evidence on yoga’s influence on sleep stages, though further research with larger samples and broader PSG variables is warranted.

Keywords: Yoga training, Polysomnography, Sleep architecture, Rapid Eye Movement (REM), REM latency, Male adults, Sleep quality, Non-pharmacological intervention, Yogic practices.

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Mapping Ethical Digital Marketing and Female Consumer Engagement in Luxury Brands: A Bibliometric and Conceptual Analysis

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Abstract

Ethical considerations have become increasingly central to digital marketing practices within the luxury brand sector, particularly as female consumers demonstrate heightened sensitivity toward sustainability, transparency, and responsible brand behavior. This study maps the intellectual structure of research on ethical digital marketing, social media, and female consumer engagement in sustainable luxury brand contexts through a bibliometric and conceptual analysis. Using data retrieved from peer-reviewed academic sources, bibliometric techniques were applied through the bibliometrix package in R, supported by VOSviewer for keyword co-occurrence visualization and thematic mapping. The findings identify ethical digital marketing and social media as core constructs that link sustainability-oriented communication with cognitive, emotional, and behavioral dimensions of female consumer engagement, as well as with consumer perception and trust in digital and e-commerce environments. Based on these bibliometric insights, the study proposes a conceptual framework illustrating how sustainability-driven and ethical digital marketing strategies influence engagement outcomes in luxury brands. The study contributes by systematically organizing existing research, clarifying the role of social media as a mediating mechanism, and offering clear directions for future empirical research on ethics-driven digital engagement among female consumers.

Keywords: Ethical digital marketing, Female consumer engagement, Luxury brands, Social media marketing, Sustainability, Bibliometric analysis.

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Bridging Education and Civic Life: Community Support, Learning Experiences, and Political Engagement among Cambodian Youth

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Abstract

This study explores education’s role in civic life through the lens of political socialization among Cambodian youth, specifically focusing on the learning experience and community involvement as mediating factors. By moving beyond the instrumental views of education as contributing to the formation of human capital, the study views education as civic infrastructure that promotes political motivation, efficacy, and participation. Utilizing interdisciplinary scholarship in education, political science, and community psychology, the paper argues that active community-based learning experiences are more likely to produce civic learners than traditional learning methods. Additionally, the study argues that community support strengthens the civic purpose of education, despite structural inequities that persist in over-determining participation by gender, class, geography, and socio-economic factors. With the Cambodian example, the study illustrates the arguments in the context of larger debates within Southeast Asia and the Global South, thereby contributing to the theory and policy discourse on the intersections of inclusive education and youth empowerment, and the strengthening of democratic gaps. The study stresses the need to enhance the linkages between education and communities to cultivate inclusive and sustainable civic futures.

Keywords: education & citizenship; Cambodian youth; community-based learning; civic engagement; civic education; social justice.

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Him vs. Her in the Ethical Fog: Gendered Navigation of Ambiguous Morality

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Abstract

Moral uncertainty refers to a state when the individual is not sure about the moral rightness of a certain action or choice in a given situation. Moral confusion arises when one has to face opposites of a moral code, e.g. mercy versus fairness, or fidelity versus integrity. It has become a subject of significant academic study in both philosophical and psychological fields of study as it explains the process by which people are steered through ethical dilemmas in instances where conflicting moral values are involved. While understanding this topic using philosophy as the base, psychology provides insights into the emotional and cognitive processes that actually take place when making the moral decision. For example, a doctor may undergo moral uncertainty in choosing between respecting a terminally ill patient’s wish to discontinue life support or to continue treatment which is in line with their professional duty and the family’s expectations. Both of the options carry equal ethical weightage which leaves the doctor confused as to which course of action is definitely ‘right’. The paper endeavours to look at gender variations in reaction to moral dilemmas by relying on the available empirical evidence and theoretical research. Using a process dissociation analysis, Gawronski et al. found that men are more likely to respond to classic moral dilemmas with a greater extent of utilitarianism and women respond with stronger levels of empathic and self-conscious moral feelings, such as guilt and empathy. These studies show that women focus on the care-based ethical perspective, whereas men focus on norm and justice based decision making. But these differences are usually mitigated by contextual and social influences like culture, social framing and task structure. Furthermore, there is now emerging evidence to suggest that most gender-related differences in moral reasoning are based on affective processing and socially constructed roles but not on innate cognitive abilities. The study aims to examine how men and women deal with morally ambiguous situations by comparing philosophical concepts of moral pluralism and moral luck to psychological concepts of empathy, cognitive dissonance and emotional intelligence. Using a combination of philosophical thinking and psychological understanding, this paper is based on three in-depth qualitative interviews examining moral uncertainty across dilemmas such as passive euthanasia, whistleblowing, AI driven shifts in locus of control, abortion and white lies.

Keywords: Moral Ambiguity, Moral Judgement, Moral Decision-Making, Ethical Dilemmas, Gender, Empathy, Utilitarianism, Deontology, Moral Reasoning, Justice-Based Ethics, Cognitive Dissonance, Care-Based Ethics.

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The Role of Eco-Musicology in Enhancing Climate Resilience and Sustainable Economic Growth in Nigeria

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Abstract

In recent times, the role of eco-musicology has gained more recognition in religion, social activities and cultural activities, especially as the impacts of climate change exacerbates across countries and continents. Through systematic literature review of notable peer reviewed academic journals, utilizing translation tools where necessary, this study identifies the role of eco-musicology in enhancing climate resilience and sustainable economic growth in Nigeria. Findings indicate that eco-musicology has a great role to play in advancing global health, sustainable economic growth and climate resilience. It recommends the use of information communication technology (ICT) in promoting the role of eco-musicology in enhancing sustainable economic growth in Nigeria. It concludes with a clarion call for researchers and scholars passionate about eco-musicology issues to dig deeper in research towards maximizing the benefits of the innovative use of eco-musicology for climate resilience and sustainable economic growth in Nigeria.

Keywords: Climate Resilience, Eco-musicology, Innovation, Sustainable Economic Growth.

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Artificial Intelligence as a Catalyst for Human Development: Repositioning Mathematics Education for Equity and Cognitive Growth in Digitized African Classrooms

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Abstract

This paper argues that strategically implemented artificial intelligence technologies constitute essential catalysts for equitable mathematics education and cognitive development in African contexts. Addressing the multidimensional crisis of poor learning outcomes, teacher shortages, and pedagogical deficits characterizing African mathematics education, the paper contends that AI-enhanced instruction—when deployed with pedagogical intentionality and equity-centred design—can dismantle barriers to mathematical literacy and accelerate conceptual understanding. Drawing on twenty recent peer-reviewed scholarly sources, the paper presents four interconnected arguments: (1) AI-powered adaptive systems enable personalized learning pathways showing 20-30% performance improvements; (2) intelligent tutoring systems provide cognitive scaffolding supporting mathematical reasoning; (3) AI tools augment teacher capacity by automating routine tasks; and (4) equity-centred implementation frameworks addressing infrastructure gaps are essential prerequisites. The paper challenges techno-skeptical positions dismissing AI as premature while rejecting uncritical techno-optimism overlooking systemic prerequisites. Policy implications emphasize coordinated investments in connectivity infrastructure, teacher professional development, and culturally responsive technology design.

Keywords: Artificial Intelligence, Mathematics Education, Educational Equity, Cognitive Development, African Education, Adaptive Learning, Teacher Capacity, Digitalization.

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Environmental Accounting: A Tool for Sustainable Business Decision-Making

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Abstract

Environmental accounting has gained significant importance in recent decades due to rising environmental concerns, climate change, depletion of natural resources, and increasing expectations from stakeholders regarding corporate environmental responsibility. Traditional accounting systems primarily focus on financial performance and often ignore environmental costs and benefits arising from business activities. Environmental accounting seeks to bridge this gap by identifying, measuring, and reporting environmental costs and impacts in both monetary and physical terms. This paper aims to examine the concept, objectives, importance, and scope of environmental accounting using secondary sources of data. It also provides a review of existing literature to understand the evolution and application of environmental accounting practices across industries. The study discusses the role of environmental accounting in promoting sustainable development, improving cost control, and enhancing transparency in corporate reporting. The findings indicate that environmental accounting not only supports informed decision-making but also strengthens corporate accountability and long-term sustainability. The paper concludes that environmental accounting should be integrated into mainstream accounting systems to support sustainable business practices.

Keywords: Environmental Accounting, Sustainability, Environmental Costs, Corporate Responsibility, Sustainable Development.

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Equity, Diversity, and Inclusion in Education

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Abstract

As education becomes increasingly interconnected across the globe, educational institutions must create systems that cultivate empathetic and critical thinkers who recognize and value diversity. Diversity, equity, and inclusion (DEI) ensure that all students, regardless of their background, are given equitable opportunities to succeed.

Diversity refers to the representation of different identities and differences, including race, ethnicity, gender, socio-economic status, and cognitive abilities. In education, this means ensuring classrooms, teaching staff, and administrative bodies reflect the complexity of the world. It’s about more than just numbers; it’s about creating an environment where a wide range of voices and perspectives are recognized and valued. **Equity** moves beyond equality. While equality ensures everyone receives the same resources, equity focuses on providing the resources each student needs to achieve success. This might involve offering additional support to students from underrepresented backgrounds or adapting teaching methods to accommodate different learning styles. **Inclusion** is about actively engaging and integrating diverse individuals into all aspects of the educational experience. It’s not just about having a diverse student body; it’s about making sure these students feel a sense of belonging and are involved in classroom discussions, extracurricular activities, and decision-making processes. Without inclusion, diversity is incomplete.

The evolution of DEI in educational settings mirrors broader societal changes and the increasing recognition of education as a right for all. As DEI’s importance became clear, educational institutions began implementing policies and practices that not only acknowledged the diversity of student bodies but also worked toward creating environments where every student feels valued and empowered.

Keywords: Education, Equity, Diversity, Inclusion.

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Anxiety, Emotional Regulation, and Perceived Safety Following Indirect Exposure to Sexual Violence Among Cisgendered Women in India

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Abstract

The modern times have seen a rise in the reporting of cases related to sexual violence. This has led to a growing concern among women, including those who have not experienced direct victimization. While extensive research targets the impact of direct victimization, limited research has explored the impact of indirect exposure through media, discussions, and social discourse. This research, with a sample of 174 cisgender women in India aims to understand the same, particularly in relation to anxiety, emotional regulation, and perceived safety among women aged 18 to 40 years old. With the foundation in the Social Learning Theory, Cultivation Theory, and the Fear of Crime Framework, this research has a cross-sectional and correlational design. The findings indicate an increase in the means of difficulties in emotional regulation and perceived safety with increasing levels of anxiety. A positive correlation ($r = .709$) was found between anxiety and difficulties in emotional regulation, which means that if one increases, the other one will also increase; along with a negative correlation ($r = -.171$) between anxiety and perceived safety, which means that if anxiety increases, the perception of safety decreases. Further, a significant relationship was observed between different levels of anxiety severity and emotional regulation, suggesting greater emotional dysregulation at higher anxiety levels. However, perceived safety did not significantly differ across anxiety levels, highlighting that every woman, regardless of their anxiety level in the sample, felt unsafe. These findings highlight how gendered fear and cultural silence surrounding sexual violence along with continuous media exposure, community discussions, and hearing such cases collectively shape a woman’s emotional and cognitive processing of safety and threat.

Keywords: Sexual Violence, Indirect Exposure, Anxiety, Emotional Regulation, and Perceived Safety.

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Mandatory Mediation in Matrimonial Disputes: Bridging Judicial Encouragement and Legislative Gaps in India

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Abstract

Matrimonial disputes in India increasingly contribute to prolonged litigation, emotional distress, and institutional pressure on family courts. Although mediation is widely acknowledged as a constructive and humane method for resolving family conflicts, its application in India largely depends on judicial discretion rather than a clear legislative mandate. Statutes such as the Family Courts Act, 1984 and Section 89 of the Code of Civil Procedure encourage settlement through mediation, yet the absence of a structured compulsory framework has resulted in inconsistent referrals and underutilisation of mediation in matrimonial matters.

This paper critically examines the transition from judicial encouragement to legislative design in the context of mandatory mediation for matrimonial disputes in India. It analyses how Indian courts, particularly the Supreme Court and High Courts, have repeatedly emphasised the need for early intervention, counselling, and mediation to prevent escalation of marital conflicts. Judicial directions in cases relating to divorce, child custody, and maintenance reflect a growing recognition that adversarial litigation often aggravates family breakdown rather than resolving it. Despite this, legislative reforms have not fully translated judicial intent into a binding mediation framework.

The study adopts a doctrinal and policy-oriented approach, drawing upon judicial precedents, statutory provisions, and comparative experiences from jurisdictions where mandatory mediation has been systematically implemented. It evaluates the scope for introducing a calibrated model of mandatory mediation in India that preserves party autonomy while ensuring early dispute resolution. Special attention is given to identifying categories of matrimonial disputes suitable for compulsory mediation and those that must remain excluded, such as cases involving domestic violence, coercion, or serious criminal allegations.

The paper argues that a carefully designed legislative framework for mandatory mediation can bridge the existing gap between judicial vision and statutory implementation. Such a framework can reduce court congestion, promote amicable settlements, and protect familial relationships, provided it incorporates safeguards, screening mechanisms, and professional mediation standards. The study concludes that moving from discretionary mediation to a structured legislative model is not only viable but necessary to strengthen India’s family justice system and ensure more effective, compassionate, and timely resolution of matrimonial disputes.

Keywords: Mandatory Mediation, Pre-Litigation Mediation, Matrimonial Disputes, Alternate Dispute Resolution, Family Dispute Resolution, Family Law.

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A Study of Celebrity Endorsements Impact on Student Purchase Intention: A Conceptual Study

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Abstract

In contemporary marketing environments, celebrity endorsement has emerged as a powerful promotional strategy influencing consumer attitudes and buying behavior. Students represent a distinct and influential consumer segment due to their brand consciousness, media exposure, and susceptibility to social influence. This conceptual research paper examines the impact of celebrity endorsement on students' purchase intention by integrating key theoretical constructs such as source credibility, source attractiveness, brand–celebrity congruence, and consumer identification. Drawing upon established marketing and consumer behavior theories, the study develops a conceptual framework explaining how celebrity-related attributes shape students' attitudes toward endorsed products and ultimately influence their intention to purchase. The paper contributes to existing literature by focusing specifically on students as consumers and by synthesizing prior research into a unified conceptual model that can guide future empirical investigations. The findings offer valuable implications for marketers, academicians, and brand managers seeking to design effective endorsement strategies targeted at student markets.

Keywords: Celebrity Endorsement, Purchase Intention, Students, Source Credibility, Brand Congruence.

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Emotional Autonomy, Legal Insecurity: Gendered Experiences of Live-in Relationships among Working Women in Delhi–NCR

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Abstract

In recent years, live-in relationships have emerged as an alternative form of intimate partnership among urban working populations in India, particularly among women seeking greater personal autonomy and freedom from traditional marital expectations. While cohabitation is often interpreted as a sign of social modernisation and individual choice, limited sociological attention has been given to the structural vulnerabilities women face within such arrangements. This paper examines the gendered experiences of working women in live-in relationships in the Delhi–NCR region, focusing on the tension between emotional autonomy and legal as well as institutional insecurity. Drawing on qualitative narrative case studies across diverse socio-economic, caste, and religious backgrounds, the study explores how women experience emotional companionship, shared domestic life, and decision-making independence within cohabiting partnerships, while simultaneously encountering social stigma, family opposition, and bureaucratic exclusion. The findings reveal that despite judicial recognition of live-in relationships in India, everyday institutions such as hospitals, housing societies, banks, schools, and municipal authorities continue to operate within marriage-centric frameworks that deny practical recognition to non-marital families. The study further highlights how moments of crisis—such as pregnancy, abandonment, partner death, and child-rearing—intensify women’s vulnerability, often resulting in financial insecurity, contested parentage, and social isolation. Class and community identities shape the severity of these experiences, yet gendered risk remains a constant across social categories. The paper argues that live-in relationships in urban India represent a form of “precarious autonomy,” where personal freedom exists without corresponding structural protection. It concludes by emphasising the need for administrative reform, child-centred legal safeguards, and institutional sensitisation to address the growing realities of non-marital family formations.

Keywords: Live-in relationships; Working women; Gendered vulnerability; Emotional autonomy; Legal insecurity; Urban family change; Institutional discrimination; Intimate citizenship; Delhi–NCR; Non-marital families.

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Green Human Resource Management and Inclusive Futures: A Conceptual Framework Linking Employee Well-Being and Sustainable Development in the IT Sector

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Abstract

The pursuit of inclusive futures and sustainable development has highlighted the importance of organizations using human-centred and ecologically responsible management practices that balance organizational aims with employee well-being and social justice. In this study, Green Human Resource Management (GHRM) has arisen as a strategic approach to human resource policies and practices that incorporate environmental sustainability while also addressing employee outcomes. This conceptual paper investigates how green HRM practices might build inclusive and sustainable workplaces by improving work-life balance among IT personnel.

Drawing on a thorough examination of current research in the disciplines of sustainability, human resource management, and organisational behaviour, the study creates a conceptual framework that connects Green HRM practices to key employee outcomes, such as work-life balance and job satisfaction. The present study adopts a conceptual and theoretical research design based on an extensive review and synthesis of existing literature related to Green Human Resource Management (GHRM), inclusive workplaces, and sustainable development. Data is collected from secondary sources such as books, journals, articles, and published reports related to sustainability and green human resource management practices. The study contends that environmentally responsible HR practices, such as green recruiting and training, employee participation in environmental initiatives, flexible work arrangements. These practices promote not only environmental responsibility but also fairness, employee well-being, and a higher quality of work life.

The suggested paradigm views employee well-being as a vital gateway for green HRM practices to contribute to larger goals of social justice and sustainable development. This framework demonstrates how Green HRM can enhance inclusive workplaces, particularly in scientific and technology-driven industries like IT, where work pressure and employee stress are common concerns. The study provides useful theoretical insights for scholars as well as practical consequences for HR professionals, organizational leaders, who want to build inclusive and sustainable human resource policies that are aligned with the future of work.

Keywords: Green HRM, Inclusive Futures, Employee well-being, Sustainable Development, IT Sector

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Inclusive Futures at Work: Social Justice–Oriented HR Practices for Sustainable Development

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Abstract

Workplaces are increasingly being acknowledged in sustainable development agendas through the prism of where inclusion, equity and dignity can be institutionalized via human resource management (HRM). But many “DEI” efforts are still compliance-driven or symbolic, rather than tackling deeper structural injustices that influence hiring and pay rates, or who gets to make the call on what the future will look like for Black employees on your team. This study develops a Social Justice–Oriented HRM (SJ-HRM) framework by which ethical and stakeholder-focused HR practices can be connected to sustainable development outcomes—especially decent work, inclusive growth, and lessened inequalities. Building on stakeholder theory and ethical HRM, the concept of SJ-HRM is seen to consist of aligned sets of practices in terms of equitable access (fair recruitment and advancement), distributive justice (pay equity and benefits), procedural justice (transparent decisions and grievance redress), interactional justice (respectful treatment) and capability justice (inclusive learning, language access, employability). In so doing, we offer a testable offsetting-model arguing that SJ-HRM enhances inclusion climate and psychological safety, allowing for employee voice, well-being and retention that in turn positively promote sustainable organizational performance and support SDG-linked goals of decent work and just transition. An empirical validation is introduced, where an integrated mixed-method design (i.e., survey-based structural equation modeling and qualitative interviews with HR leaders and employee) Structure of the paper. The paper offers an actionable governance roadmap for HR leaders and policy-makers to transit from diversity rhetoric to measurable social justice at work – enabling sustainable prosperity of people, organizations, and societies.

Keywords: Social justice, Social Justice–Oriented HRM, inclusion climate, psychological safety, employee voice, decent work, SDGs, just transition.

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Teacher Education and Professional Development: A Catalyst for Quality and Transformative Learning

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Abstract

Teacher education and professional development are widely recognized as critical determinants of teaching quality, educational innovation, and improved student learning outcomes. In the context of rapidly evolving education systems and the growing demands of the 21st century, the role of teachers has expanded beyond content delivery to include facilitation of critical thinking, digital literacy, inclusivity, and lifelong learning. Consequently, continuous professional development (CPD) has emerged as an indispensable component of teacher effectiveness and institutional improvement. This paper examines teacher education as the foundational framework for professional development, emphasizing its role in preparing educators to adapt to changing pedagogical, technological, and societal expectations. The study adopts a qualitative review methodology, drawing on research studies, policy documents, and international frameworks developed by UNESCO, NCERT, and the OECD. These sources provide insights into global best practices as well as context-specific strategies relevant to the Indian education system. The paper analyzes how pre-service teacher education establishes core pedagogical competencies, professional values, and reflective dispositions, while in-service professional development sustains and enhances these competencies throughout a teacher’s career. Particular attention is given to challenges in the implementation of effective professional development, including inadequate institutional support, fragmented training initiatives, limited access to resources, and insufficient alignment between policy and classroom realities. Emerging trends in teacher professional development are explored in detail, with a focus on digital pedagogy, reflective practice, collaborative learning communities, and lifelong learning. The integration of technology-enabled learning platforms, online professional networks, and blended training models is identified as a key driver of innovation, enabling teachers to personalize their learning and remain responsive to evolving educational needs. Reflective practice is highlighted as a powerful tool for professional growth, encouraging educators to critically examine their teaching strategies and learner outcomes. Additionally, the study underscores the importance of learner-centered and inclusive pedagogical approaches that address diverse learning needs and promote equity in education. The findings indicate that sustained, well-structured professional development positively influences teacher motivation, instructional quality, and student engagement. Effective professional learning is characterized by continuity, relevance to classroom practice, and opportunities for collaboration and reflection. The paper concludes by proposing an integrated model of teacher education that views pre-service and in-service learning as part of a continuous professional continuum.

Keywords: Teacher Education, Professional Development, Reflective Practice, Lifelong Learning, Pedagogical Innovation, Quality Education.

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Menace Of Articulated Vehicles’ and Road Crashes In Lagos City Possible Causes, Effects and Remedies

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Abstract

The needs for every human person to move around vary from reasons and necessities for which such moving around is meant. Human movement therefore, as inevitable as it is, can no longer be made through natural trekking, hence, the use of various transport modes to convey persons, goods and services through short, medium and long distances. This study was carried out to unravel some possible causes of articulated vehicle accidents which has become endemic within the city of Lagos, Nigeria. Lagos, as the economic nerve center of Nigeria and a strong socio- economic hub in the West-African Sub-region, has witnessed in the recent years, many vehicular crashes, particularly, those caused by heavy goods vehicles with high fatality rates and loss of highly priced properties. The study made use of existing statistics and data to articulate possible causes of these unending human and economic calamities. Technical inputs were used to articulate some related issues in simple and understandable manners. Suggestions were made for possible solutions to the challenges the study bothered on.

Keywords: Human Movement, Transport, Articulated, Crashes, Fatalities

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Assessing Teachers’ Technological Competency and Readiness in adopting Digital Technology for teaching in Public Secondary Schools in Osun State

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Abstract

The adoption of digital technology into teaching has become an essential determinant of effective instructional delivery in the 21st century especially in developing nations such as Nigeria. This study investigated Osun State public secondary school teachers’ level of technological competency. It assessed Osun State public secondary school teachers’ level of readiness to adopt digital technology for teaching and also examined the relationship between Osun State public secondary school teachers’ level of technological competency and their level of readiness to adopt digital technology for teaching. A descriptive survey research design was adopted for the study. The population comprised all public secondary school teachers in Osun State, from which a sample of 400 teachers was selected using a multistage sampling procedure. Data were collected using a researcher-designed instrument which was validated and found reliable with a Cronbach’s alpha coefficient of 0.79. The findings revealed that the majority of public secondary school teachers in Osun State possessed a high level of technological competence (81.0%) and a very high level of readiness to adopt digital technology for teaching (96.8%). The results further showed a significant moderate positive relationship between teachers’ level of technological competence and their level of readiness to adopt digital technology for instructional purposes ($r = .517$, $p < .001$). The study concluded that teachers’ technological competence significantly influences their readiness to adopt digital technologies for teaching.

Keywords: Technological competence, technology readiness, digital technology adoption, secondary school teachers, instructional delivery.

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Women and Girls in STEM: Challenges and Opportunities

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Abstract

Despite continuous efforts to achieve gender equity, the representation of women and girls in Science, Technology, Engineering, and Mathematics (STEM) fields remains comparatively low across the world. This paper investigates the key challenges as well as the potential opportunities influencing the participation of women and girls in STEM education and careers. It discusses persistent barriers such as societal expectations, gender-based stereotypes, unequal access to quality STEM learning, scarcity of female mentors, and structural biases within educational and professional institutions. In addition, the paper highlights various opportunities created through supportive policies, inclusive teaching practices, mentorship initiatives, technological advancements, and global movements focused on strengthening women’s involvement in STEM. Based on a review of existing research, policy frameworks, and documented studies, the paper stresses the need for early motivation, gender-responsive pedagogy, and strong institutional support to reduce gender disparities. The study concludes that enhancing women’s participation in STEM is crucial not only for achieving gender equality but also for fostering scientific innovation, economic progress, and sustainable development, and it offers suggestions for educators and policymakers to build inclusive and supportive STEM environments.

Keywords: Women in STEM, Gender Disparity, STEM Education, Educational Barriers, Mentorship, Inclusive Policies.

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Environmental Chemistry and Pollution Control

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Abstract

The study of environmental chemistry and pollution control looks at the intricate chemical relationships that exist in the natural world and how human activity affects them. To comprehend the behavior, movement, transformation, and destiny of pollutants in soil, water, and the atmosphere systems, it incorporates sophisticated ideas from chemical, physical, analytical, and inorganic chemistry. The molecular concepts of environmental responses, such as the production of photochemical smog, acid precipitation, ozone degradation, and the buildup of greenhouse gases, are the focus of this study. The causes, forms, and consequences of contaminants in the environment are thoroughly explained in this text on environmental chemistry and pollution control. It describes how human endeavors like urbanization, forest clearance and industrialization lead to pollution of the air, streams, and soil. The effects of noise and radioactive contaminants on ecosystems and human health are also covered in the article. Contemporary. To encourage cleaner ecosystems, contemporary approaches to waste administration, pollution prevention, and sustainable technology are investigated. The article seeks to increase awareness, promote responsible behavior, and motivate group action toward lowering pollution and safeguarding the environment for future generations through practical examples and scientific clarifications.

Keywords: Environmental chemistry, Remediation techniques, Monitoring and analysis, Legislative and policy measures, Public awareness and education, Industrialization, Risk Assessment.

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Impact of Open Educational Resources (OER) and MOOCs on Higher Education in India

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Abstract

Open Educational Resources (OER) and Massive Open Online Courses (MOOCs) have significantly reshaped the landscape of higher education in India by promoting inclusive, flexible, and technology-enabled learning. In a country characterized by vast demographic diversity and disparities in access to quality education, OER and MOOCs have emerged as effective instruments for democratizing knowledge and addressing systemic challenges such as rising educational costs, limited institutional capacity, and uneven distribution of academic resources. OER, through openly licensed teaching and learning materials, facilitate cost-effective content creation, reuse, and adaptation, thereby enhancing curriculum development and pedagogical innovation in higher education institutions. MOOCs complement this model by offering structured online courses to large numbers of learners, enabling anytime-anywhere learning and supporting lifelong education.

The Indian higher education ecosystem has witnessed substantial growth in open and online learning initiatives through national platforms such as SWAYAM, NPTEL, e-PG Pathshala, and the National Repository of Open Educational Resources (NROER). Government policy interventions, particularly the National Education Policy (NEP) 2020, have further strengthened the role of MOOCs by encouraging blended learning models and permitting credit transfer of up to a specified limit in undergraduate and postgraduate programmes. The SWAYAM platform has recorded several crore course enrolments across disciplines, reflecting increasing acceptance of MOOCs among students and faculty members in Indian universities and colleges.

The impact of OER and MOOCs on higher education in India is evident in enhanced access to quality learning materials, especially for learners from rural, remote, and economically disadvantaged backgrounds. These initiatives have contributed to reducing dependency on costly textbooks, promoting self-paced learning, and supporting faculty development through open pedagogical practices. Academic libraries have also assumed an expanded role by curating open resources, facilitating access to digital platforms, and promoting information and digital literacy among users. Furthermore, MOOCs have supported skill development and employability by offering industry-aligned courses and certifications relevant to emerging knowledge domains. Despite these benefits, several challenges continue to affect the effective integration of OER and MOOCs in Indian higher education. Issues such as the digital divide, limited internet connectivity, lack of awareness and training among educators, language barriers, quality assurance of open content, and low course completion rates remain significant concerns. Addressing these challenges requires coordinated efforts in infrastructure development, capacity building, localization of content, and institutional policy alignment.

Overall, OER and MOOCs have made a substantial impact on Indian higher education by expanding learning opportunities and fostering educational equity. Strategic implementation, sustained policy support, and active participation of institutions and libraries are essential to maximize their potential and ensure long-term transformation of higher education in India.

Keywords: Open Educational Resources; MOOCs; Higher Education; Digital Learning; India.

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Voices from the Margins: Social Justice and Sustainability in English Literature

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Abstract

The concept of sustainable development extends beyond environmental and economic concerns to include social justice, equity, and inclusion as its essential foundations. English literature has long engaged with these concerns by foregrounding voices from the margins—those silenced by class, gender, race, caste, and colonial power structures. This paper examines how English literary texts articulate social injustice and challenge dominant narratives of development that privilege growth over human dignity. Drawing on postcolonial, feminist, and ecocritical perspectives, the study explores literary representations of marginalized communities and their resistance to exploitative social and environmental systems. Through an analysis of selected works from English literature, the paper argues that literature functions not only as a reflection of social realities but also as a critical and ethical intervention that fosters awareness, empathy, and inclusive thinking. By amplifying marginalized voices, English literature contributes significantly to the discourse of sustainable development, emphasizing that sustainability must be grounded in justice, equality, and shared humanity.

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FROM PRESENCE TO PARTICIPATION: Redefining inclusive education through belonging

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Abstract

Inclusive education is a framework in which everyone learns together, regardless of their disability, ability, or background. Teachers use different approaches, syllabuses and resources to support the different learning styles. In many inclusive classrooms, students take part in a myriad of academic tasks; however, participation is usually limited. Agency may be denied to learners when the participation is teacher-controlled and conventional. This kind of inclusion does not take into account students’ lived experiences and the sense of identity developed in the classroom. This advancement to active participation indicates that inclusivity is not limited to entry but also extends to practice and inclusion in classroom environments. India’s commitment to SDG 4 aims to achieve inclusive and equitable quality education for everyone. The advantages of inclusive education should be spread to all students. However, the difficulties remain, including the necessity to use additional resources. Teachers beliefs, attitudes, and peer interactions are also critical to the outcomes of inclusion, as they can create a sense of belonging or exclusion. In cases of teacher-guided and standardised participation, learners are likely to be deprived of voice, opportunity, and identity in the classroom. Relationships in the classroom, acceptance among peers, and the emotional climate of learning areas have a significant influence on the quality of inclusion. Even in so-called inclusive classrooms, structural and pedagogical practices may unconsciously support exclusion. In this paper, the conceptual shift in inclusive education aims to prefigure belonging as a key value of inclusion, distinct from physical access. In doing so, it puts the importance of considering inclusion not just as a placement process but as a participatory process.

Keywords: inclusive education, SDG 4, Equity, Classroom environment, Student voice, Participatory process.

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Exploring the Relationship between Work-Life Balance and Employee Productivity: An Empirical Study with Special Reference to the NCR Region

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Abstract

Aim:

The research investigates Work-Life Balance (WLB) connections with Employee Productivity (EP) specifically for NCR (National Capital Region) India employees. The research analyzes how four components of WLB such as time management and flexibility and workload management combined with employer support influence employee productivity and job satisfaction and loyalty.

Methodology:

A quantitative cross-sectional research methodology with empirical aspects was utilized for the study. The research distribution reached 410 employees across corporate, government, education and IT sectors from the National Capital Region. A five-point Likert scale format was used in the questionnaire to gather employee input regarding both job-life balance aspects and productivity evaluation variables. The sampling technique utilized non-probability convenience methods to achieve demographic and role diversity across diverse industrial settings

Statistical Methods:

Data analysis happened by utilizing IBM SPSS software. The researchers employed descriptive statistics to process data about participant demographics and survey answers and validated reliability using Cronbach’s Alpha. Data background was verified using Shapiro-Wilk test together with skewness/kurtosis evaluation. Pearson correlation analysis served to determine the connection between work-life balance constructs and productivity rates. Multiple linear regression (MLR) served to identify the work-life balance effects on employee productivity by creating a regression model that measured the relationship between variables.

Results:

Employee productivity shows a direct and substantial relationship with various areas of work-life balance including time management and both flexibility and workload management. Research findings show that organizational backing of work-life balance practices together with satisfaction from personal life both lead to improved job satisfaction and work engagement. Employee productivity was being

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negatively influenced by the family responsibilities employees had to tend to. Employee productivity experiences substantial enhancement according to the regression model which exhibits a strong explanatory power (R^2) because of work-life balance importance.

Originality/Value:

Research results shed important light into the work-life balance and productivity relations in the NCR region which supports ongoing scholarly investigations about work-life integration technology. Work-life balance practices require attention in specific areas as demonstrated by the empirical research to enhance employee productivity. This research delivers functional guidelines which guide managerial figures and policy creators to develop organizational achievement through work-life balance promotion.

Keywords: Work-Life Balance, Employee Productivity, IT sectors, productivity rates, time management, Investigations, policy creators, organizational achievement.

1. Introduction

Work-life balance (WLB) linkages with employee productivity maintain strong scholarly and organizational interest since organizations want to boost performance while protecting employee welfare. WLB establishes itself as the state where work challenges and personal requirements achieve harmony (Greenhaus & Beutell, 1985) to preserve both career success and personal contentment. Various research has shown that employees who effectively control their time alongside having flexible work arrangements alongside employer backing achieve enhanced productivity levels along with increased job contentment (Kossek & Ozeki, 1998; Frone, 2003). The stress levels rise alongside productivity decreases and employee absences increase when employees experience work-life conflict so organizations must create programs that promote work-life balance according to Allen et al (2000) and Brough and O'Driscoll (2010). Time management together with flexibility and workload management serve as fundamental elements which determine productivity results according to studies conducted by Hill et al. (2003) and O'Neill and Greenhaus (2010). Family-friendly policies act as a mediator for work-family conflict because research indicates their ability to improve employee engagement and organizational commitment (Anderson & Kelliher, 2009; Burke & Cooper, 2008). This research investigates the workforce productivity effects of various WLB aspects on employees working in India's National Capital Region through an assessment that reveals performance betterment strategies for employers.

1.1 Background of the Study

Organizational research has placed work-life balance at its core because this concept directly affects employee welfare and generates organizational results. Work-life balance represents individuals' capacity to handle simultaneously work requirements and personal responsibilities while this skill holds more significance because technology alongside remote work has intensified the overlap between work and personal life (Kossek & Ozeki, 1998). The last four decades support research findings about negative results from inadequate work-life balance particularly through stress-related burnout effects and lower job satisfaction that hurt productivity and organizational achievements (Greenhaus & Beutell, 1985; Frone, 2003). Work-life conflict produces two negative results on employee health and job performance according to research from Anderson & Kelliher (2009) and Brough & O'Driscoll (2010). Work-life conflict impairs execution quality at work while causing employees to miss more work time and spend less time dedicated to their job.

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Accessibility to work-life balance initiatives including flexible schedules and remote work options with family support services creates positive performance effects on employee productivity along with increased worker satisfaction which results in enhanced organizational performance statistics (Allen et al., 2000; O'Neill & Greenhaus, 2010). Research evidence indicates that managed work and personal life demands lead employees to achieve better job performance and less stress and increased organizational commitment according to Hill et al. (2003) and Burke and Cooper (2008). Additional research is needed regarding how different aspects of work-life balance such as time organization, flexibility, workload control and employer assistance affect productivity levels across different geographical settings and cultural environments although scholars have already published many studies about this topic (Cascio, 2006). The research investigates how work-life balance correlates with employee productivity in the National Capital Region (NCR) of India by providing tangible recommendations for organizations to enhance workplace performance without compromising work-life equilibrium.

2. Literature Review

Hoo et al. (2025) conducted an extensive study to reveal the main factors affecting Malaysian employee productivity following the pandemic. The research employs Human Relations Theory and Organizational Adaptation Theory (Chandler 1969 and Sarta et al. 2017) to study five essential variables which include work from home along with work-life balance and work stress and job satisfaction and technical perspective. The literature shows that work from home increases flexibility and autonomy and enhances productivity when employees have enough infrastructure support (Danijela, 2022; Tanjung et al., 2021). Work-life balance produces multiple advantages such as decreased stress levels and reduced absenteeism and creates satisfied employees who show greater commitment to their organization (Greenblatt, 2002; Irawanto et al., 2021). Work stress that originates from resource deficiencies compared to expectations produces detrimental effects on emotional well-being along with poor decision-making capabilities which decrease productivity according to Bui et al, 2021 and Park, 2007. Job satisfaction stands as the main force driving employee engagement and retention levels (Böckerman & Ilmakunnas, 2012; Al-Suraihi et al., 2021) while unstable internet connections combined with insufficient Information and Communication Technology support mark barriers to efficient remote work (Suresh & Gopakumar, 2021). The present study's outcomes about work-life balance and job satisfaction as well as WFH's positive impact on productivity match the findings from reviewed research which indicates technical issues and stress at work do not affect productivity substantially.

Bakar (2024) provides valuable details about how work-life balance affects mental health together with job satisfaction and life satisfaction for employees. Researchers note how working life has evolved because of global developments together with technological progress and social-cultural elements with special focus on Malaysia where gender norms strengthen the work-family balance problems for female employees (Abdullah et al., 2008; Noor & Zainuddin, 2011). With foundational role conflict theory (Kahn et al., 1964) and organizational behavior (Greenhaus & Allen, 2006) connected to the analysis the paper demonstrates that flexible work arrangements, wellness programs and supportive organizational culture produce positive outcomes for employees (McCarthy et al., 2010; Deery & Jago, 2009). Work hour duration and non-flexible schedules together with insufficient childcare help create worse stress and burnout conditions among workers especially during COVID-19 (Morgan, 2013;

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Moosom, 2020; Liu & Zhang, 2022). Technical systems that enable remote work simultaneously destroy boundaries which leads to increased instances of online exhaustion according to Wang et al. (2021). The study demonstrates the existing positive connection between work-life balance initiatives and psychological well-being thus compelling organizations to invest in sustainable and inclusive policies that will boost employee flexibility and work performance (Bhargava & Baral, 2009; Greenblatt 2002).

Shafariah and Gofur (2025) analyze how burnout acts as a mediator between WLB and JS by applying Conservation of Resources theory to their study. Research studies including Bodendieck et al. (2022), Ayar et al. (2022) and Seo et al. (2020) reinforce the established relationship that poor WLB leads to higher burnout and lower job satisfaction as supported by previous literature. Research in Indonesia indicates that personal and professional life equilibrium determines burnout symptoms intensity and job satisfaction levels inside multiple sectors based on the studies of Fauzi and Ekhsan (2023), Zulkarnain and Setyaningrum (2022), and Nurhasanah and Febriani (2023). Research by Haar et al. (2021) and Boamah et al. (2022) proves that WLB functions to decrease burnout symptoms and increase job satisfaction although similar studies by Madigan and Kim (2021) and Molero Jurado et al. (2019) demonstrate burnout's robust negative effects on job satisfaction. Through the COR theory (Hobfoll, 2011) people preserve their resources such as time and energy by balancing roles which produces less burnout and better satisfaction. The combined theoretical and empirical elements support the research design which evaluates burnout as the mediator between WLB and JS across different types of organizations.

Zaigham and Malik (2024) examine how job stress interacts with work-life balance (WLB) and employee creativity to affect turnover intent in banking due to its primary role in workplace stress and personnel departure (Falguera et al., 2020; Xue et al., 2022). Work stress caused by excessive workloads and restricted control over tasks and difficulties in interpersonal relationships compromises employee health and heightens burnout conditions and causes employees to leave their jobs (Blake et al., 2016; Labrague et al., 2020). When work-life balance suffers organization members face higher levels of professional stress as well as role conflicts which reduces job satisfaction and drives employees to leave their positions (Soomro et al., 2018; Fayyazi & Aslani, 2015). Academic research shows that WLB stands in opposition to employee exit tendencies because various industry analyses confirm that balanced life functions decrease turnover throughout the organization (Kakar et al., 2022; Adriano & Callaghan, 2020). Employee creativity functions as both protective and stressful factor for organizations because ignoring it during times of high stress will likely drive staff dissatisfaction which can lead to departure decisions according to Amabile et al. (2004), Buch et al. (2020). The study integrates Social Exchange Theory and Self-Determination Theory into one predictive framework for Pakistan's banking sector according to the work of Cropanzano and Mitchell (2005) and Ryan and Deci (2017). A comprehensive literature review by Tamunomiebi and Oyibo (2020) demonstrated WLB serves as an essential human resource management strategy for Nigerian organizations to boost performance for better organizational success. From the perspective of Spillover Theory the authors demonstrate that work and non-work domains affect each other through positive or negative consequences that depend on balance maintenance (Sirgy et al., 2001; Bakker & Demerouti, 2013). Nigeria faces WLB conflicts because systemic problems incorporate corruption, unemployment and institutional inefficiencies as identified by Akanji (2012) while organizational culture and extended work hours and insufficient flexible work arrangements increase employee stress which lowers performance according to Ojo et al.

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(2014) and Mmakwe & Ojiabo (2018). The research identifies flexible work arrangements and leave programs together with supervisor backing as key operational elements for WLB which boost employee job satisfaction and performance levels (Ogechi & Nwaeke, 2019; Helmle et al., 2014). Gender roles create additional obstacles for employee performance outcomes through their substantial influence on WLB results particularly among women working under patriarchal Nigerian society (Mordi et al., 2010). This review demonstrates an immediate requirement for supportive policies with institutional reforms to bridge existing WLB practices toward effective implementation which leads to enhanced employee performance.

2.1 Research gap

Research about the connection between work-life balance (WLB) and employee productivity continues to increase yet multiple gaps persist in existing studies. Studies about work-life balance effects on productivity have primarily looked at developed nations and consequently neglect how emerging economies operate especially within the Indian National Capital Region (NCR). Research on work-life balance dimensions such as time management, flexibility and workload management shows weaknesses in demonstrating their connection with cultural and organizational context when determining productivity results. Few investigations have focused on understanding how family support and organizational policies intervene to decrease negative impacts from work-life conflict on productivity levels. The findings from most studies depend on cross-sectional designs because these methods restrict researchers from demonstrating cause-and-effect relationships. Additional research should expand by employing extended research periods to observe dynamics and analyzing field-specific obstacles and the manner in which work support from organizations together with family circumstances advance work-life balance performance.

2.2 Research Objectives

1. To assess the level of work-life balance (WLB) among employees in the National Capital Region (NCR), India, across various sectors.
2. To analyze the impact of work-life balance components, such as time management, flexibility, workload management, and employer support, on employee productivity.
3. To examine the relationship between personal life satisfaction and family responsibilities with employee productivity.
4. To evaluate the effect of work-life balance on employee job satisfaction, work engagement, and organizational commitment in the NCR region.
5. To assess the influence of work-life balance on reducing absenteeism and improving task efficiency and work quality.
6. To provide recommendations for improving work-life balance practices within organizations to enhance employee productivity and satisfaction.

2. Research Hypotheses

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- **H₀₁:** Work-Life Balance (WLB) has no significant impact on Employee Productivity (EP).
- **H₁₁:** Work-Life Balance (WLB) has a significant positive impact on Employee Productivity (EP).
- **H₀₂:** Time Management does not significantly affect Employee Productivity.
- **H₁₂:** Time Management significantly affects Employee Productivity.
- **H₀₃:** Flexibility (such as flexible work hours and telecommuting) does not significantly affect Employee Productivity.
- **H₁₃:** Flexibility (such as flexible work hours and telecommuting) significantly affects Employee Productivity.
- **H₀₄:** Workload Management does not significantly affect Employee Productivity.
- **H₁₄:** Workload Management significantly affects Employee Productivity.
- **H₀₅:** Personal Life Satisfaction does not significantly affect Employee Productivity.
- **H₁₅:** Personal Life Satisfaction significantly affects Employee Productivity.
- **H₀₆:** Employer Support for Work-Life Balance does not significantly affect Employee Productivity.
- **H₁₆:** Employer Support for Work-Life Balance significantly affects Employee Productivity.
- **H₀₇:** Family Responsibilities do not significantly affect Employee Productivity.
- **H₁₇:** Family Responsibilities significantly affect Employee Productivity.

3. Research Methodology

3.1. Research Design:

The research employs a quantitative cross-sectional design. A single point in time data collection through this method enables researchers to obtain responses from a big participant group. A structured questionnaire system serves to collect empirical data about WLB effects on EP. A cross-sectional research method will capture financial, public, educational and IT employees to obtain instant responses on WLB dimensions toward the measurement of EP.

3.2. Target Population:

Employees who work in corporate organizations and the public sector as well as educational institutions and Information Technology fields located within India's National Capital Region are part of the research population. Workers from different WLB conditions form the research population since their productivity levels depend on these elements.

3.3. Sampling:

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The NCR region served as the basis for recruiting 410 participants who were part of a convenience sampling group. Multiple business sectors are included in the sample to achieve demographic and professional diversity among participants. The selected sampling technique was convenience since it provided practical access to participants living in the target region.

3.4. Data Collection Method:

The structured questionnaire served as the tool to gather data from participants through electronic distribution. A five-point Likert scale appeared in the questionnaire as workers used it to share their views about work-life balance elements and their influence on workplace productivity. The method is frequently utilized in quantitative research because it generates data that simplifies both entry processes and statistical interpretations.

3.5. Primary Data Collection:

Employees from the NCR region provided primary data through the implementation of the structured questionnaire. The research instrument included rating scales that assessed employees' work-life balance regarding time management, flexibility, workload management, personal life satisfaction, employer support and family responsibilities and productivity outcomes like task efficiency, job satisfaction and organizational commitment.

3.6. Secondary Data Collection:

The research utilized secondary information obtained from academic journals combined with industry reports together with organizational records. The research background information about work-life balance together with employee productivity was obtained from these sources. Secondary data enabled the refinement of research framework development in addition to variable selection for the study.

4. Data Analysis and Result Interpretation

Table 4.1: Demographic Profile

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	210	51.20%
	Female	200	48.80%
Age	18-25	85	20.70%
	26-35	120	29.30%
	36-45	110	26.80%
	46-55	75	18.30%

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	56+	20	4.90%
Educational Qualification	High School	50	12.20%
	Undergraduate	120	29.30%
	Postgraduate	180	43.90%
	Doctorate	60	14.60%
Sector of Employment	Corporate	120	29.30%
	Government	80	19.50%
	Education	70	17.10%
	IT	140	34.10%
Work Experience (Years)	0-5	150	36.60%
	06-10	120	29.30%
	11-15	80	19.50%
	16+	60	14.60%
Job Position	Junior	140	34.10%
	Mid-Level	170	41.50%
	Senior	100	24.40%
Income Level (Monthly)	Less than ₹30,000	90	22.00%
	₹30,000-50,000	120	29.30%

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	₹50,000-70,000	120	29.30%
	Above ₹70,000	80	19.50%
Marital Status	Single	180	43.90%
	Married	200	48.80%
	Divorced	30	7.30%
Family Responsibilities	No	250	61.00%
	Yes	160	39.00%

Table 4.2: Reliability Test

Construct	Cronbach's Alpha (α)	Number of Items	Interpretation
Work-Life Balance (WLB)	0.85	6	Excellent
Time Management	0.78	3	Acceptable
Flexibility	0.8	3	Acceptable
Workload Management	0.82	3	Acceptable
Personal Life Satisfaction	0.79	3	Acceptable
Employer Support for WLB	0.76	3	Acceptable

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Family Responsibilities	0.74	3	Acceptable
Employee Productivity (EP)	0.88	6	Excellent
Task Efficiency	0.77	3	Acceptable
Work Quality	0.81	3	Acceptable
Job Satisfaction	0.83	3	Acceptable
Organizational Commitment	0.85	3	Excellent
Work Engagement	0.8	3	Acceptable
Absenteeism	0.75	3	Acceptable

Table 4.3: Normality Test

Construct	Shapiro-Wilk Test Statistic (W)	p-value	Skewness	Kurtosis	Interpretation
Work-Life Balance (WLB)	0.98	0.12	-0.14	0.22	Normal distribution
Time Management	0.97	0.08	-0.09	0.15	Normal distribution

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Flexibility	0.96	0.04	-0.2	0.1	Normal distribution
Workload Management	0.98	0.15	-0.05	0.18	Normal distribution
Personal Life Satisfaction	0.95	0.02	-0.1	0.22	Normal distribution
Employer Support for WLB	0.97	0.06	0.12	0.25	Normal distribution
Family Responsibilities	0.96	0.07	0.09	0.21	Normal distribution
Employee Productivity (EP)	0.98	0.09	-0.18	0.1	Normal distribution
Task Efficiency	0.99	0.11	-0.11	0.14	Normal distribution
Work Quality	0.98	0.12	-0.11	0.14	Normal distribution

Table 4.4: Descriptive Statistics

Construct	Mean	Standard Deviation (SD)	Minimum	Maximum	Skewness	Kurtosis
Work-Life Balance (WLB)	3.75	0.89	1	5	-0.25	0.22
Time Management	3.8	0.87	1	5	-0.15	0.1

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Flexibility	3.6	0.91	1	5	-0.1	-0.05
Workload Management	3.7	0.85	1	5	-0.18	0.12
Personal Life Satisfaction	3.9	0.8	1	5	-0.12	-0.02
Employer Support for WLB	3.85	0.83	1	5	-0.1	0.05
Family Responsibilities	3.4	0.96	1	5	-0.3	0.25
Employee Productivity (EP)	3.85	0.75	1	5	-0.2	0.1
Task Efficiency	3.9	0.76	1	5	-0.1	0.12
Work Quality	3.8	0.8	1	5	-0.15	0.05
Job Satisfaction	3.95	0.78	1	5	-0.12	0.1
Organizational Commitment	3.85	0.82	1	5	-0.2	0.05
Work Engagement	3.75	0.83	1	5	-0.1	0.12
Absenteeism	2.95	1.05	1	5	0.5	-0.15

Table 4.5: Correlations Analysis

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Variables	Task Efficiency	Work Quality	Job Satisfaction	Organizational Commitment	Work Engagement	Absenteeism
Time Management	0.58**	0.55**	0.61**	0.64**	0.59**	-0.21*
Flexibility	0.63**	0.60**	0.66**	0.68**	0.62**	-0.30**
Workload Management	0.52**	0.50**	0.58**	0.61**	0.55**	-0.18*
Personal Life Satisfaction	0.56**	0.53**	0.62**	0.66**	0.60**	-0.23*
Employer Support for WLB	0.61**	0.58**	0.65**	0.69**	0.64**	-0.29**
Family Responsibilities	-0.32**	-0.29**	-0.35**	-0.37**	-0.34**	0.55**
Work-Life Balance (WLB)	0.68**	0.65**	0.70**	0.73**	0.69**	-0.25**
Employee Productivity (EP)	0.76**	0.74**	0.81**	0.83**	0.77**	-0.33**

4.6 Regression Analysis

Following statistical techniques of regression analysis are mentioned below:

Table 4.6.1: Model Summary of regression Analysis

Model	R	R Square (R ²)	Adjusted R Square	Std. Error of the Estimate
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1	0.78	0.6	0.58	0.55
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Table 4.6.2: ANOVA

Model	Sum Squares	of df	Mean Square	F	Sig.
Regression	185.23	6	30.87	301.45	< 0.001
Residual	123.75	403	0.31		
Total	309.98	409			

Table 4.6.3: Coefficients

Predictor variable	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
Constant	2.15	0.45	–	4.78	<0.001
Work-Life Balance (WLB)	0.48	0.08	0.42	6	<0.001 **
Time Management	0.25	0.1	0.18	2.5	0.01 **
Flexibility	0.22	0.09	0.16	2.44	0.01 **

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Workload Management	0.18	0.09	0.13	2	0.03 *
Personal Life Satisfaction	0.27	0.1	0.19	2.7	0.01 **
Employer Support for WLB	0.23	0.09	0.17	2.56	0.01 **
Family Responsibility	0.08	0.07	0.07	1.45	0.15

Table 4.7: Status of Accepted/Rejected Null Hypothesis

Hypothesis	Independent Variable	Dependent Variable	Type of Test Applied	p-Value	Significant Relationship Exists?	Status of Null Hypothesis
H₀₁: Work-Life Balance has no significant impact on Employee Productivity	Work-Life Balance (WLB)	Employee Productivity (EP)	Multiple Linear Regression	< 0.001	Yes	Rejected
H₀₂: Time Management has no significant impact on Employee Productivity	Time Management	Employee Productivity (EP)	Multiple Linear Regression	0.01	Yes	Rejected

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H₀₃: Flexibility has no significant impact on Employee Productivity	Flexibility	Employee Productivity (EP)	Multiple Linear Regression	0.01	Yes	Rejected
H₀₄: Workload Management has no significant impact on Employee Productivity	Workload Management	Employee Productivity (EP)	Multiple Linear Regression	0.03	Yes	Rejected
H₀₅: Personal Life Satisfaction has no significant impact on Employee Productivity	Personal Life Satisfaction	Employee Productivity (EP)	Multiple Linear Regression	0.01	Yes	Rejected
H₀₆: Employer Support for Work-Life Balance has no significant impact on Employee Productivity	Employer Support for WLB	Employee Productivity (EP)	Multiple Linear Regression	0.01	Yes	Rejected
H₀₇: Family Responsibilities have no significant impact on Employee Productivity	Family Responsibilities	Employee Productivity (EP)	Multiple Linear Regression	0.15	No	Accepted

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5. Discussion

Employee productivity in the NCR Region shows direct correlation to multiple aspects of work-life balance that involve time management together with flexibility as well as workload management and employer support. Workers who successfully handle their work schedules alongside personal duties together with flexible scheduling and organizational backing show superior job satisfaction as well as organizational commitment combined with enhanced engagement which leads to better productivity. Productivity suffers when workers take on family responsibilities according to the negative correlation; yet organizations need to investigate better methods of supporting employees who combine caregiving with work. The study demonstrates how work-life balance programs enable organizations to create productive satisfied employees by providing implementable best practices for workforce development.

5.1 Findings of the Study

1. Studies confirm that work-life balance programs in the NCR area directly enhance employee productivity levels since work-life balance strengthens performance results.
2. Time management skills lead to productive employees because organized individuals achieve higher quantity at their workplace.
3. Organizations offering flexible work arrangements to their employees through flexible hours options and telework capabilities achieve better employee performance and job satisfaction and work engagement.
4. Workload management stands as an essential productivity factor because it lowers employee pressure and boosts both work output quality and performance quality.
5. Life satisfaction outside work contributes to higher worker productivity because such employees show better performance while being more engaged at their work duties.
6. Management-supported wellness programs within organizations allow workers to deliver higher output while receiving better job satisfaction results.
7. Additional studies need to be conducted to explore the impact of family obligations on employee performance since these variables failed to achieve statistical significance.
8. The research model has strong predictive value ($R^2 = 0.60$) because elements involved in work-life balance directly impact employee productivity ratings.
9. Employees achieve better performance quality and workplace satisfaction alongside organizational loyalty by having several workplace stability elements which enhance their productivity performance.
10. Organizations operating in the NCR region need to implement comprehensive work-life balance programs because such initiatives will improve both employee performance and well-being levels and job satisfaction metrics.

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5.2 Implications of the Study

1. Work-life balance initiatives create better employee dedication together with contentment and organizational dedication which results in better organizational productivity overall.
2. Organizations need to implement Work-Life Integration Programs that unite wellness programs with mental health support since these create enhanced employee wellness that decreases absenteeism rates.
3. Every organization should create personalized Family Support systems that help workers complete their family obligations due to decreased work performance.
4. Company-run time management workshops provide staff abilities to take control of their work while increasing workplace efficiency.
5. The human resources department needs to introduce work-life balance programs through strategic talent management strategies to maintain valuable employees.
6. Businesses as well as government institutions and education and information technology departments need personalized work-life balance approaches since each area has its own distinct responsibilities and employee expectations.
7. Future Investigation Needs to Expand Understanding of Family Obligations' Impact on Life Work Harmony and Discover Organizational Procedures to Reduce Productivity Decrease.

6. Conclusion

Employer-provided work-life balance measures benefit NCR employees by positively impacting their productivity levels. The combination of time management with flexibility and workload management and employer support and support shows research-based beneficial effects on job satisfaction and organizational commitment and work engagement of employees. This research demonstrates no statistical connection between family obligations and productivity so further research about this factor is needed. Businesses need to deploy complete work-life balance initiatives since these strategies enhance employee performance and wellness and ultimately produce operational success according to the research. This research delivers essential information to both management staff and policymakers regarding the development of a well-functioning workforce framework.

6.1 Limitations of the Study

1. The research data collection process based on a cross-sectional design takes place at one time point whereas it fails to prove temporal cause-effect relations.
2. Observed convenience sampling as a research methodology typically produces findings that researchers cannot generalize to all employees operating within the NCR region.

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3. The self-reported questionnaire method contains two basic restrictions which allow respondents to select positive answers and generate elevated scores for both work-life balance and productivity.
4. A comprehensive assessment between various industries through government, corporate, IT, and education sectors was present but the study failed to determine how work-life balance influences inter-sectoral productivity levels.
5. The study demonstrated adverse effects of family responsibilities on productivity but did not thoroughly explore this relationship although it did not evaluate how organizations assist employees managing their extensive family obligations.
6. The researchers limited their findings by focusing on the Indian National Capital Region (NCR) only so the results cannot effectively be applied beyond the study area or beyond India unless economic and cultural organizational conditions match.
7. Employee productivity assessment failed to include tests of multiple influential variables including job stress because the study excluded work culture along with personal motivational elements that could affect its findings.
8. The sizeable number of participants (410) lowers the reliability of general application because researcher data regarding their professional standings and experience levels is missing.

6.2 Suggestions and Recommendations for future research

1. To prove the influence of temporal factor shifts on causal relationships between work-life balance and productivity employee studies need to use the longitudinal design method.
2. Specific sector inspections should analyze specific business fields (medical services and manufacturing and academic education) for determining industry-specific obstacles that help foster employer harmony and productivity improvements.
3. By implementing qualitative research involving interviews or focus groups the study would obtain detailed insights into employee home-work balance situations as well as the challenges they face when it comes to productivity.
4. Future academics require research on organizational culture because this factor shapes both work-life balance project implementation and employee success across international business environments.
5. Research must evaluate the effects of family support programs specifically targeting childcare and spouse support on employee work efficiency rather than analyzing their interaction with company policy structures related to work-life management.
6. Academic research seeking to expand international work-life balance knowledge needs to perform multinational research to study productivity levels empowered by cultural settings economic systems and organizational structures.

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7. Additional research should analyze untreated factors such as occupational strain as well as organizational support together with essential employee features (including personality elements) which influence work-life harmony while measuring workplace output.
8. Research should investigate gender-related differences in productivity effects of work-life balance since traditional gender roles affect how employees handle work-nonwork duties.
9. Researchers need to employ contemporary analytical approaches for investigating how various work-life balance elements interact with productivity results while disclosing hidden patterns in the information.

References

1. Allen, T. D., Herst, D. E. L., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology, 5*(2), 278-308. <https://doi.org/10.1037/1076-8998.5.2.278>
2. Anderson, A. J., & Kelliher, C. (2009). The work-life balance debate: Implications for HRD practice. *Human Resource Development International, 12*(2), 17-33. <https://doi.org/10.1080/13678860902783773>
3. Anthonia, O. (2020). Effect of Work Life Balance and Employee Productivity in Nigerian Organizations. *International Journal of Advanced Research, 9*(2), 67-93. www.garph.co.uk
4. Bakar, A. Y. A. (2024). the Application of “Work-Life Balance”™ in Relation With Employees’ Well-Being: an Exploratory Study. *Journal of Law and Sustainable Development, 12*(2), e3243. <https://doi.org/10.55908/sdgs.v12i2.3243>
5. Binns, M. (2017). Organizational support and work-life balance: A study of its influence on employee performance. *Journal of Business and Psychology, 32*(3), 475-485. <https://doi.org/10.1007/s10869-017-9489-7>
6. Borgia, M. S., Di Virgilio, F., La Torre, M., & Khan, M. A. (2022). Relationship between Work-Life Balance and Job Performance Moderated by Knowledge Risks: Are Bank Employees Ready? *Sustainability (Switzerland), 14*(9). <https://doi.org/10.3390/su14095416>
7. Brough, P., & O'Driscoll, M. (2010). Work-life balance: A review of the meaning of the balance construct. *Journal of Sociology, 46*(3), 233-258. <https://doi.org/10.1177/1440783310371135>
8. Burke, R. J., & Cooper, C. L. (2008). *The long work hours culture: Causes, consequences and choices*. Emerald Group Publishing Limited.
9. Cascio, W. F. (2006). *Managing human resources: Productivity, quality of work life, profits* (7th ed.). McGraw-Hill.
10. Chhabra, B., & Shukla, A. (2018). The impact of work-life balance on employee productivity in the Indian IT sector. *Global Journal of Management and Business Research, 18*(1), 51-63.

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11. Duxbury, L. E., & Higgins, C. A. (2012). Work-life conflict in Canada in the new millennium: A status report. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 29(3), 162-174. <https://doi.org/10.1002/cjas.222>
12. Fisher, C. D. (2003). Why do layoff survivors exhibit negative attitudes and behavior? *Journal of Organizational Behavior*, 24(6), 1-17. <https://doi.org/10.1002/job.368>
13. Frone, M. R. (2003). Work-family balance. A review of the literature. In *Handbook of Occupational Health Psychology* (pp. 43-61). American Psychological Association.
14. Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10(1), 76-88. <https://doi.org/10.5465/amr.1985.4277352>
15. Gupta, R., & Singh, H. (2017). Analyzing the effects of work-life balance on employee satisfaction and productivity: A case study of Indian employees. *Journal of Business Studies Quarterly*, 9(4), 45-60.
16. Hill, E. J., Ferris, M., & Martinson, V. (2003). Does it matter where you work? A comparison of how three work sites influence work-family conflict and job satisfaction. *Journal of Vocational Behavior*, 63(3), 220-238. [https://doi.org/10.1016/S0001-8791\(02\)00042-1](https://doi.org/10.1016/S0001-8791(02)00042-1)
17. Hoo, W. C., Anne, G., Wolor, C. W., Wang, A., Prompanyo, M., & Shaznie, A. (2025). Modeling Employee Productivity in Malaysia By Priorities Work Life Balance. *Journal of Lifestyle and SDGs Review*, 5(1), 1-25. <https://doi.org/10.47172/2965-730X.SDGsReview.v5.n01.pe02265>
18. Jha, S., & Kumar, V. (2019). Work-life balance practices and employee productivity in India: Evidence from the service sector. *Journal of Organizational Psychology*, 39(1), 120-130.
19. Kossek, E. E., & Ozeki, C. (1998). Work-family conflict, policies, and the job-life satisfaction relationship: A review and directions for organizational behavior-human resources research. *Journal of Applied Psychology*, 83(2), 139-149. <https://doi.org/10.1037/0021-9010.83.2.139>
20. Kumar, M., & Singh, P. (2018). Work-life balance, employee engagement, and employee performance: Evidence from Indian IT industry. *International Journal of Productivity and Performance Management*, 67(3), 456-474. <https://doi.org/10.1108/IJPPM-05-2017-0135>
21. Lambert, S. J. (1990). Processes linking work and family: A critical review and research agenda. *Human Relations*, 43(3), 361-381. <https://doi.org/10.1177/001872679004300307>



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