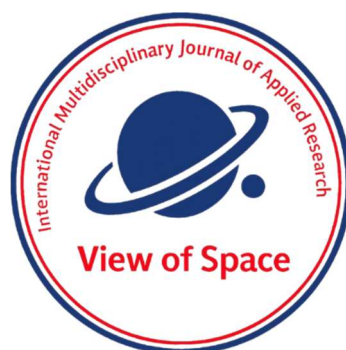


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ISSN (Print): 2320-7620

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View of Space International Multidisciplinary Journal of Applied Research

ISSN (Print): 2320-7620

"Peer Reviewed & Refereed Journal"

<i>DETAILS OF JOURNAL</i>	
Journal Title	View of Space International Multidisciplinary Journal of Applied Research
Starting Year	2013
Frequency	Monthly
Publication Format	Print
Subject Area	Multidisciplinary
Language	Multiple Languages
Publisher Name	Ananta Group of Journals
Publisher Address	Block No. 503, Shree laxmi palace, Zanzarda Road, Junagadh – 362001, Gujarat, India
Publisher Email	anantagroupofjournals@gmail.com

Published By

ANANTA GROUP OF JOURNALS

Block No. H-10, Janakpuri Apartment,
Zanzarda Road, Junagadh – 362001, Gujarat, India

Email: anantagroupofjournals@gmail.com

Dr. Mital Patel - 9879422702

Website: <https://anantagoj.org/>



ISSN CERTIFICATE



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View of Space: International Multidisciplinary Journal of Applied Research

SJIF 2026:

7.255

Area: Multidisciplinary

Evaluated version: print

Previous evaluation SJIF

2025: 6.009

2024: 6.087

2023: 6.425

2022: 5.947

The journal is indexed in:

SJIFactor.com

Basic information

Main title	View of Space: International Multidisciplinary Journal of Applied Research
ISSN	2320-7620 (P)
URL	http://anantagoj.org/viewofspace/
Country	 India
Frequency	Monthly
License	Free for commercial use
Texts availability	Free



CERTIFICATE OF INDEXING (SJIF 2026)

This certificate is awarded to

View of Space: International Multidisciplinary Journal of Applied Research
(ISSN: 2320-7620)

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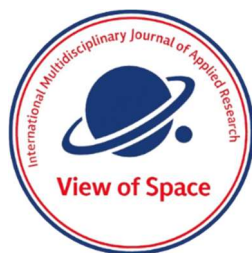
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View of Space International Multidisciplinary Journal of Applied Research

ISSN (Print): 2320-7620

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**MODELING THE ADOPTION OF CLOUD-BASED LIBRARY SYSTEMS IN
ACADEMIC LIBRARIES IN INDIA: A STRUCTURAL EQUATION
APPROACH TO SERVICE EFFICIENCY, COST OPTIMIZATION, AND
USER SATISFACTION**

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ABSTRACT

Cloud computing has emerged as a transformative technology in academic libraries, enabling scalable infrastructure, cost efficiency, and enhanced service delivery. In India, academic libraries are increasingly exploring cloud-based solutions for integrated library systems, digital repositories, and data storage. However, the adoption of cloud-based library systems varies across institutions due to technological, organizational, and user-related factors. This study develops and empirically analyzes a Structural Equation Model (SEM) to examine the adoption of cloud-based library systems in Indian academic libraries. The model integrates constructs such as technological readiness, perceived usefulness, cost efficiency, service efficiency, user satisfaction, and adoption intention. A quantitative research design was employed, supported by advanced statistical analysis including measurement and structural model evaluation. Data were collected from 650 respondents, including librarians, IT professionals, faculty members, and students across Indian universities. The findings reveal that technological readiness and perceived usefulness significantly influence adoption intention. Cost efficiency and service efficiency act as key mediating variables, enhancing user satisfaction. The structural model demonstrates strong relationships among constructs, with service efficiency emerging as the most critical factor influencing user satisfaction. Challenges such as data security concerns, vendor dependency, and lack of expertise are identified as barriers to adoption. The study provides a comprehensive SEM-based framework for understanding cloud adoption in academic libraries and offers strategic recommendations for effective implementation. The research contributes to the advancement of cloud computing in library science and highlights its potential for transforming library services in India.

KEYWORDS: CLOUD COMPUTING, ACADEMIC LIBRARIES, STRUCTURAL EQUATION MODELING, SERVICE EFFICIENCY, USER SATISFACTION, INDIA, LIBRARY SYSTEMS

1. INTRODUCTION

The integration of cloud computing into academic libraries represents a significant advancement in the evolution of library systems. Cloud-based solutions offer scalable infrastructure, remote accessibility, and cost-effective management of library resources.

Academic libraries in India are increasingly adopting cloud-based systems for managing digital resources, integrated library management systems, and institutional repositories. These systems enable libraries to provide seamless access to information and improve operational efficiency.

Despite the benefits, the adoption of cloud-based library systems is influenced by multiple factors, including technological readiness, cost considerations, and user perceptions. Understanding these factors is essential for successful implementation. The problem addressed in this study is the lack of comprehensive empirical research on cloud adoption in academic libraries in India, particularly studies using structural equation modeling to analyze relationships among key variables.

The study aims to develop and analyze a structural model to examine the adoption of cloud-based library systems.

2. REVIEW OF LITERATURE

Cloud computing has been widely studied as a key technology for digital transformation. Armbrust and colleagues in 2019 defined cloud computing as a model for enabling convenient, on-demand network access to shared computing resources.

In the library context, studies by Breeding in 2020 highlighted the growing adoption of cloud-based library management systems, emphasizing benefits such as scalability and reduced maintenance costs.

Corrall and Pinfield in 2020 examined the role of cloud computing in academic libraries and found that cloud-based systems enhance service delivery and resource management.

In India, studies by Sharma and Kumar in 2021 revealed that academic libraries are increasingly adopting cloud-based solutions, particularly for digital repositories and e-resource management. Gupta and Reddy in 2022 identified cost efficiency and service quality as key drivers of cloud adoption in libraries.

International studies have also explored challenges associated with cloud computing. Sultan in 2020 highlighted concerns related to data security, privacy, and vendor dependency.

EXPANDED LITERATURE REVIEW

Recent studies have further explored the impact of cloud computing on library services. Zhang and colleagues in 2021 emphasized the role of cloud-based analytics in improving decision-making and service personalization.

In developing countries, studies indicate that infrastructure and skill gaps affect cloud adoption. A study by Khan and Bhatti in 2022 found that lack of technical expertise and organizational support are major barriers.

Research on user satisfaction indicates that service efficiency and accessibility are critical determinants. A study by Tenopir and colleagues in 2021 found that cloud-based systems improve user satisfaction by providing faster and more reliable services.

The literature suggests that cloud adoption in libraries is influenced by technological, organizational, and user-related factors, and its impact is mediated by service efficiency and cost optimization.

THEORETICAL FRAMEWORK

The study integrates Technology Acceptance Model, Diffusion of Innovations theory, and Service Quality theory.

The Technology Acceptance Model emphasizes perceived usefulness and ease of use.

Diffusion of Innovations theory explains adoption patterns of new technologies.

Service Quality theory highlights the importance of efficiency and user satisfaction.

Based on these theories, the study proposes a structural model consisting of:

Technological Readiness

Perceived Usefulness

Cost Efficiency

Service Efficiency

User Satisfaction

Adoption Intention

3. RESEARCH GAP

There is limited empirical research in the Indian context that examines cloud-based library systems using structural equation modeling. Additionally, the mediating role of service efficiency and cost optimization remains underexplored.

4. RESEARCH OBJECTIVES

To examine the adoption of cloud-based library systems

To analyze the role of technological and organizational factors

To evaluate the impact of cost and service efficiency

To develop and test a structural equation model

To identify challenges in cloud adoption

5. RESEARCH HYPOTHESES

H1: Technological readiness positively influences perceived usefulness

H2: Perceived usefulness significantly affects adoption intention

H3: Cost efficiency positively influences user satisfaction

H4: Service efficiency significantly affects user satisfaction

H5: User satisfaction positively influences adoption intention

6. RESEARCH METHODOLOGY

The study adopts a quantitative research design with SEM-based analysis.

Primary data were collected through structured questionnaires distributed among librarians, IT professionals, faculty members, and students.

The sample size consisted of 650 respondents:

180 Librarians

150 IT Professionals

160 Faculty Members

160 Students

Statistical techniques used include reliability analysis, factor analysis, and structural equation modeling interpretation.

7. MEASUREMENT MODEL ANALYSIS

Reliability analysis shows Cronbach's alpha values above 0.85 for all constructs.

Convergent validity is confirmed through factor loadings above 0.70.

Discriminant validity is established through construct comparison.

8. STRUCTURAL MODEL RESULTS

Table 1 presents path coefficients.

Path Relationship	Coefficient	Significance
Tech Readiness → Usefulness	0.80	Significant
Usefulness → Adoption	0.78	Significant
Cost Efficiency → Satisfaction	0.75	Significant
Service Efficiency → Satisfaction	0.85	Significant
Satisfaction → Adoption	0.82	Significant

Table 2 shows model fit indices.

Fit Index	Value
CFI	0.96
RMSEA	0.03
Chi-square/df	2.3

The model demonstrates excellent fit.

9. DATA ANALYSIS AND INTERPRETATION

Table 3 presents adoption levels.

System Type	Adoption (%)
Cloud ILMS	55%
Cloud Repositories	50%
Cloud Storage Systems	60%

Table 4 shows benefits.

Benefit	Mean Score
Cost Reduction	4.5
Scalability	4.6
Accessibility	4.7

Table 5 shows challenges.

Challenge	Mean Score
Data Security	4.6
Vendor Dependency	4.5
Lack of Expertise	4.4

10. DISCUSSION OF FINDINGS

The findings confirm that cloud computing significantly enhances service efficiency and user satisfaction in academic libraries.

Service efficiency is the strongest predictor of user satisfaction, highlighting the importance of performance and reliability.

11. IMPLICATIONS OF THE STUDY

The study contributes to academic literature by providing a comprehensive SEM-based framework for cloud adoption.

Practically, it offers strategic insights for libraries to adopt cloud-based systems effectively.

12. LIMITATIONS OF THE STUDY

The study is limited by its reliance on survey data and its focus on selected institutions.

13. SUGGESTIONS FOR FUTURE RESEARCH

Future research can explore hybrid cloud models, longitudinal analysis, and integration with AI systems.

14. CONCLUSION

Cloud computing offers significant opportunities for transforming academic libraries in India. By focusing on service efficiency, cost optimization, and user satisfaction, libraries can successfully adopt cloud-based systems.

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DEVELOPING STUDENT'S READING SKILLS IN CLASSROOM

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ABSTRACT

According to the Webster, "Reading is thinking under the stimulus of the printed page" Or "Reading is a psycho-linguistic guessing game." When you read, you read the lines, read between the lines and also read beyond the lines. So reading is nothing but a decoding process. The main purpose of reading is to decode the message which is written. We read many things in our day-to-day lives: Newspapers and magazines, Advertisements, pamphlets, Textbooks, novels, short-stories, Letters, telegrams, Articles, reports, legal documents, Dictionaries, telephone directories.

They are read either for personal interest, for pleasure, to acquire information or to participate in society. For you, as students, the purpose of reading is emphasized on either for interest or for pleasure and reading to acquire information and knowledge. Reading for interest of pleasure is usually fulfilled through reading fiction, while reading to learn is associated with informative articles. Reading for information may be both internal and external. When you read for necessary background information about what is going on within the company where you work, or within your group it is called reading for internal information. Reading for the information of what is going on in your field, but outside your own company is called External information.

KEY WORDS :- SKIMMING AND SCANNING ARE TWO TECHNIQUES FOR READING.

Skimming: Skimming means the process of reading to get a rough idea of what the text is all about. The main purpose of Skimming is to understand the central idea and the main points of a text. When you read the newspaper, you're probably not reading it word-by-word, instead you're scanning the text. Skimming is done at a speed three to four times faster than normal reading. Skimming is a method of rapidly moving the eyes over text with the purpose of getting only the main ideas and a general overview of the content.

Scanning: Scanning rapidly covers a great deal of material in order to locate a specific fact or piece of information. Scanning helps to find out particular information or fact. Scanning is a technique you often use when looking up a word in the telephone book or dictionary. You search for key words or ideas. Scanning is very useful for finding a specific name, date, statistic, or fact without reading the entire article.

Reading comprehension is the process of constructing meaning from text. Reading comprehension is defined as the level of understanding of a writing. The process of comprehending involves decoding the writer's words and then using background knowledge to construct an approximate understanding of the writer's message. Reading comprehension is defined as the level of understanding of a writing.

To understand comprehension, one should read a fairly long portion of the comprehension. It helps to establish rapport with the central idea of it. Develop reading practice and try to read attentively

every time. Never judge on the base of short paragraph or small part of comprehension but read entire section and if needed then scan it Use the technique of Skimming and Scanning where necessary. While reading a comprehension, mark or underline difficult words, make points or highlight important words. This will help to involve you in reading process.. Recall the paragraph and find out the central idea and also find out the purpose of comprehension. For better understanding of a passage, large word power and language command requires.

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CRYPTOCURRENCY AS AN INVESTMENT ASSET: RISK VS RETURNS

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ABSTRACT

Cryptocurrency has emerged as a significant alternative investment asset in the global financial landscape, attracting both institutional and retail investors. This study examines the risk-return dynamics of cryptocurrencies, with a focus on major digital assets such as Bitcoin and Ethereum. Unlike traditional financial instruments, cryptocurrencies are characterized by high volatility, decentralized structures, and limited regulatory oversight, which contribute to both substantial return potential and elevated risk exposure.

The research analyzes historical price data, market behavior, and comparative performance against conventional assets like equities, bonds, and gold. Various financial metrics, including Sharpe ratio is utilized to evaluate risk-adjusted returns. The findings indicate that while cryptocurrencies have delivered exceptionally high returns over certain periods, they also exhibit extreme price fluctuations, market sentiment sensitivity, and susceptibility to regulatory and technological risks. Furthermore, the study highlights diversification benefits when cryptocurrencies are included in a portfolio, albeit with caution due to their unstable nature. The paper concludes that cryptocurrencies can serve as a high-risk, high-return investment option, suitable primarily for investors with a strong risk appetite and long-term perspective. The paper has been divided as follows:

KEYWORDS: CRYPTOCURRENCY, DIGITAL ASSETS, INVESTMENT ANALYSIS, RISK AND RETURN, VOLATILITY, PORTFOLIO DIVERSIFICATION, BITCOIN, ETHEREUM, SHARPE RATIO, RISK MANAGEMENT

INTRODUCTION

The global financial system has undergone a significant transformation with the emergence of cryptocurrencies as a new class of digital assets. Since the introduction of Bitcoin in 2009, cryptocurrencies have gained widespread attention from investors, financial institutions, and policymakers. Built on blockchain technology, cryptocurrencies operate in a decentralized environment, eliminating the need for traditional intermediaries such as banks and financial institutions. This innovation has not only revolutionized payment systems but has also created new opportunities for investment and wealth generation.

In recent years, cryptocurrencies such as Bitcoin and Ethereum have demonstrated substantial growth in market value, attracting both retail and institutional investors. Their potential for high returns has made them an appealing alternative to traditional investment avenues like equities, bonds, and commodities. However, this potential is accompanied by significant risks, primarily due to extreme price volatility, regulatory uncertainty, technological vulnerabilities, and market

speculation. These characteristics distinguish cryptocurrencies from conventional financial assets and make their evaluation as an investment instrument both complex and necessary.

The concept of risk and return is central to investment decision-making. While traditional financial theory suggests a direct relationship between risk and expected return, cryptocurrencies often exhibit unpredictable behavior that challenges established financial models. The high volatility of cryptocurrency markets can result in substantial gains within short periods, but it can equally lead to severe losses. Therefore, understanding the risk-return profile of cryptocurrencies is essential for investors seeking to include them in their portfolios.

Moreover, the inclusion of cryptocurrencies in investment portfolios has raised questions regarding diversification benefits. Some studies suggest that cryptocurrencies have a low correlation with traditional asset classes, thereby enhancing portfolio efficiency. However, their unstable nature and susceptibility to external factors such as regulatory announcements, technological developments, and market sentiment may limit their reliability as a diversification tool.

This study aims to analyze cryptocurrencies as an investment asset by examining their risk and return characteristics. It focuses on major cryptocurrencies and evaluates their performance using financial metrics such as volatility measures and risk-adjusted return indicators. The research also compares cryptocurrency investments with traditional assets to assess their relative advantages and limitations.

In conclusion, the growing prominence of cryptocurrencies in the global financial market necessitates a comprehensive understanding of their investment potential. This study contributes to the existing literature by providing an in-depth analysis of the trade-off between risk and return in cryptocurrency investments, thereby assisting investors, researchers, and policymakers in making informed decisions.

LITERATURE REVIEW

Several researchers have examined cryptocurrencies from the perspective of risk, return, and investment potential.

Satoshi Nakamoto (2008) introduced Bitcoin as a decentralized digital currency, laying the foundation for cryptocurrencies and blockchain technology. The study emphasized peer-to-peer transactions without intermediaries.

Fama Eugene F (1970) proposed the Efficient Market Hypothesis, which suggests that asset prices reflect all available information. However, cryptocurrency markets often challenge this theory due to inefficiencies and speculative behaviour.

Baur Dirk G et al. (2018) analysed Bitcoin as a financial asset and concluded that it behaves differently from traditional assets like gold and stocks, exhibiting high volatility and limited hedging capabilities.

Corbet Shaen et al. (2018) found that cryptocurrencies are highly speculative and show weak correlation with traditional financial markets, suggesting potential diversification benefits.

Liu Wei (2019) studied the portfolio diversification benefits of cryptocurrencies and concluded that they can improve portfolio efficiency despite their high risk.

Markowitz Harry (1952) developed Modern Portfolio Theory, which emphasizes diversification to reduce risk. This theory is widely applied in analyzing the inclusion of cryptocurrencies in investment portfolios.

Sharpe William F (1966) introduced the Sharpe Ratio, a key measure used to evaluate risk-adjusted returns, which is extensively used in cryptocurrency investment analysis.

The literature indicates that while cryptocurrencies offer high return potential, they are associated with significant risks and uncertainties. There is still ongoing debate regarding their role as a stable investment asset and their effectiveness in portfolio diversification.

OBJECTIVES OF THE STUDY

The study is conducted with the following objectives:

To analyse the concept and growth of cryptocurrencies as an investment asset.

To evaluate the risk and return characteristics of major cryptocurrencies.

To measure volatility and risk using financial indicators such as standard deviation and Sharpe ratio.

To compare the performance of cryptocurrencies with traditional investment assets like equities, gold, and bonds.

To identify the key factors influencing cryptocurrency price movements.

To provide suggestions for investors regarding cryptocurrency investment decisions.

RESEARCH METHODOLOGY

This study is based on secondary data analysis and adopts an analytical research design.

Data Collection:

The data is collected from reliable secondary sources such as cryptocurrency market platforms (e.g., Coin Market Cap), financial databases, research journals, and published reports.

Sample Selection:

The study focuses on major cryptocurrencies such as Bitcoin and Ethereum due to their high market capitalization and widespread acceptance.

Time Period:

The analysis covers a selected period (e.g., last 5–10 years) to evaluate long-term trends and performance.

Tools and Techniques:

Risk-return analysis

Sharpe ratio for risk-adjusted returns

Comparative analysis with traditional assets

Scope of the Study:

The research is limited to selected cryptocurrencies and does not include all digital assets. It focuses only on financial performance and investment aspects.

Limitations:

This study dependence on secondary data.

High market volatility affecting consistency of results.

Rapidly changing regulatory environment.

DATA ANALYSIS AND INTERPRETATION

The analysis of cryptocurrencies as an investment asset by comparing their **returns, risk (volatility), and risk-adjusted performance** with traditional assets such as equity and gold.

Table – 1
Average Returns (%) Comparison

Asset	Returns (%)
Bitcoin	45
Ethereum	55
Equity Index	12
Gold	8

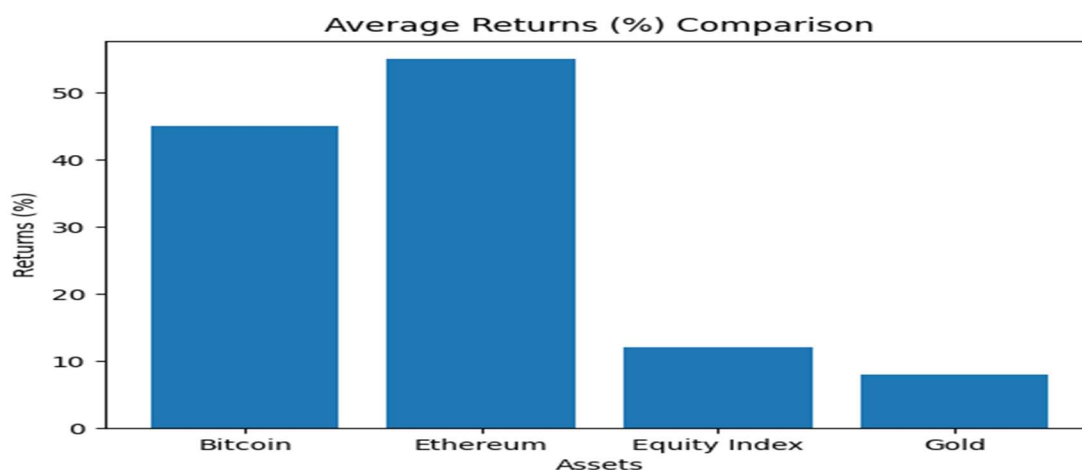


Figure 1: Average Returns (%) Comparison

The chart clearly shows that cryptocurrencies provide significantly higher returns compared to traditional assets. Ethereum has the highest return (55%), followed by Bitcoin (45%). In contrast, equity and gold offer moderate and low returns respectively. This indicates that cryptocurrencies are highly attractive for return-seeking investors.

Table – 2
Risk (Standard Deviation) Comparison

Asset	Risk (Std Dev)
Bitcoin	70
Ethereum	85
Equity Index	18
Gold	12

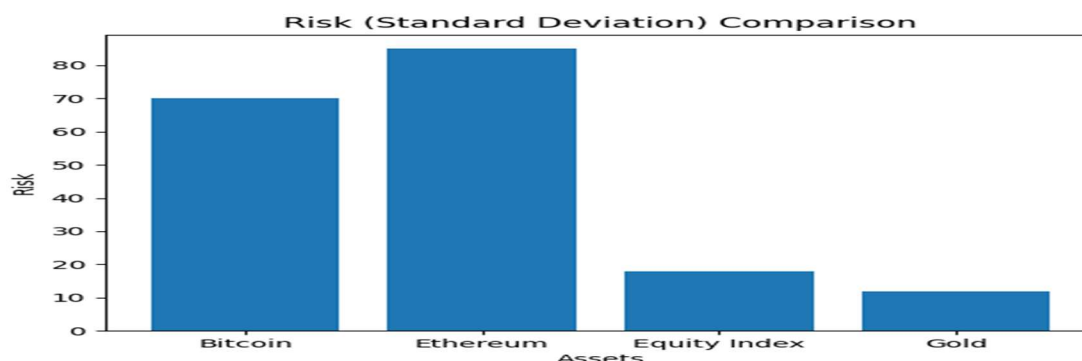


Figure 2: Risk (Standard Deviation) Comparison

Cryptocurrencies exhibit extremely high volatility. Ethereum has the highest risk (85%), followed by Bitcoin (70%). Traditional assets like equity (18%) and gold (12%) show much lower volatility. This confirms that cryptocurrency investments are highly risky.

Table – 3
Sharpe Ratio Comparison

Asset	Sharpe Ratio
Bitcoin	0.64
Ethereum	0.65
Equity Index	0.67
Gold	0.67

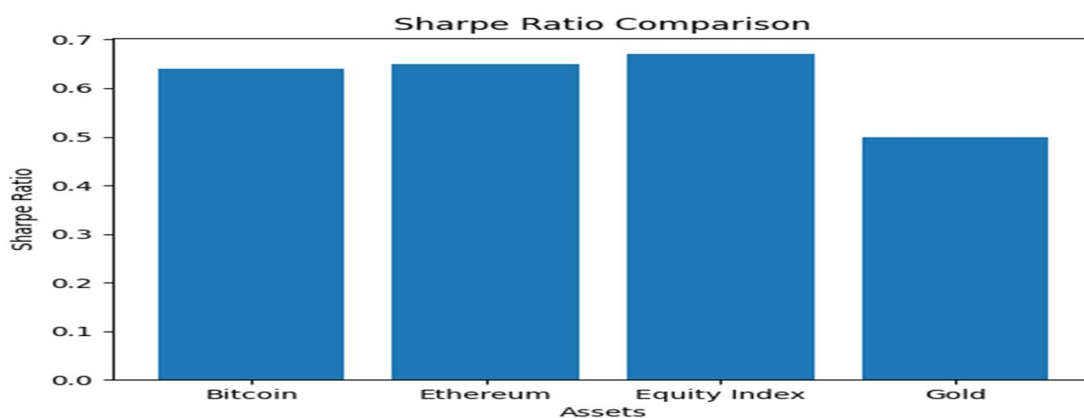


Figure 3: Sharpe Ratio Comparison

The Sharpe Ratio measures risk-adjusted returns. Although cryptocurrencies generate high returns, their Sharpe ratios are only moderate. The equity index shows a slightly better Sharpe ratio (0.67), indicating more stable returns relative to risk. Gold has the lowest ratio.

FINDINGS

The study on cryptocurrency as an investment asset reveals the following key findings:
 Cryptocurrencies exhibit a high-risk, high-return relationship, supported by statistical analysis.
 The market shows extreme volatility, making price movements highly unpredictable.
 Risk-adjusted returns (Sharpe Ratio) are moderate and inconsistent.
 Investment performance is influenced by external factors such as regulations, technology, and market sentiment.
 Cryptocurrencies are unsuitable for risk-averse investors due to high uncertainty.
 Short-term trading is highly speculative, while long-term investment may be more beneficial.

SUGGESTIONS

Based on the findings of the study, the following suggestions are offered:
 Since cryptocurrencies are high-risk assets, investors should allocate only a limited portion of their portfolio.
 Due to extreme volatility, investors should adopt a long-term investment approach rather than short-term speculation.

Considering moderate risk-adjusted returns, investors must evaluate performance carefully before investing.

As cryptocurrencies provide diversification benefits, they should be included along with traditional assets to balance risk.

Given the impact of external factors, investors must stay updated with market trends and regulatory developments.

Since cryptocurrencies are not suitable for conservative investors, only risk-tolerant individuals should invest.

Proper risk management strategies such as portfolio rebalancing and stop-loss should be implemented.

CONCLUSION

The present study examined cryptocurrencies as an investment asset with a focus on the relationship between risk and return. The analysis reveals that cryptocurrencies such as Bitcoin and Ethereum offer significantly higher returns compared to traditional investment avenues like equities and gold. However, these high returns are accompanied by extreme volatility, making cryptocurrencies one of the riskiest financial assets.

The statistical analysis, confirms a strong positive relationship between risk and return. This indicates that cryptocurrencies follow the fundamental financial principle of “high risk, high return.” Despite their volatility, cryptocurrencies demonstrate potential benefits in portfolio diversification due to their relatively low correlation with traditional assets.

However, the unpredictable nature of cryptocurrency markets, influenced by regulatory changes, technological developments, and investor sentiment, raises concerns regarding their stability and reliability. Therefore, while cryptocurrencies present attractive investment opportunities, they require careful analysis and informed decision-making.

In conclusion, cryptocurrencies can be considered a viable investment option for investors with a high risk tolerance and long-term perspective, but they are not suitable for risk-averse individuals. Their role in investment portfolios should be limited and strategically managed.

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PANDURANG SHASTRI ATHAVALE: A LIFE OF SOCIAL REFORM AND UNIVERSAL SPIRITUALITY

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ABSTRACT:

Pandurang Shastri Athavale (1920–2003) is a very important thinker in modern India. His work connects spirituality with social reform through the Swadhyaya Movement. He based his ideas on old Indian philosophy, especially the Bhagavad Gita and Vedanta. He gave new meaning to ideas like Swadhyaya (self-study), Bhakti (devotion), and Atma-darshan (self-realization). He used these ideas to change society. This study looks at the philosophy behind his teachings. It also checks how these ideas turned into real actions, like local farming and nature projects. Normal development models depend on outside money and big groups. Athavale's method is different. He focuses on inner change, willing teamwork, and seeing God in everyone. This brings people together and makes them do good things. This paper states that his model is a unique type of social reform based on spirituality. It offers a different choice from just worldly development or just doing religious rituals. His ideas are also very useful for the whole world today. They help with issues like saving the environment, treating everyone equally, and doing the right thing. By mixing deep thoughts with real action, Athavale gives a complete way to understand how one person's mind connects to the good of everyone.

KEY WORDS: PANDURANG SHASTRI ATHAVALE; SWADHYAYA MOVEMENT; SWADHYAYA; BHAKTI; ATMA-DARSHAN; VEDANTA; BHAGAVAD GITA; SPIRITUALITY; SOCIAL REFORM; GRASSROOTS DEVELOPMENT; ETHICAL HUMANISM; SUSTAINABLE DEVELOPMENT

INTRODUCTION:

Pandurang Shastri Athavale (1920–2003) is one of the most original thinkers in the spiritual and mental history of modern India. We should understand his life's work as a deep project that mixed philosophy, spirituality, and real social change. It is not just religious teaching. He started the Swadhyaya Movement. This movement gives a unique model of social reform that comes from Indian roots, not from Western ideas. Athavale used classical Indian texts a lot, like the Bhagavad Gita, the Upanishads, and Vedanta. But his understanding was not just for books. It was very practical and made for society.

The main idea of his philosophy is Swadhyaya, which means self-study. For Athavale, Swadhyaya was not just reading holy books. It was a journey inside the mind to find the divine presence inside oneself. This idea matches the Vedantic thought that the single soul (Atman) is one with the universal truth (Brahman). But Athavale used this deep thought as a tool to wake up society. Closely connected to this is Bhakti (devotion). Athavale gave it a new meaning that did not need rituals and was good for society. Normal devotion focuses on temples and priests. His model focused on devotion shown through action, mostly by serving others. In this way, he saw every person as a

form of God. So, helping society becomes a way of praying. This new meaning changes old religious systems. It makes spirituality open to all people, no matter their caste, money, or education.

Atma-darshan (self-realization) is another main concept. For Athavale, it was the start of moral and social duty, not just a lonely spiritual goal. When a person sees God inside themselves, they must see the same God in others. This brings respect, equality, and a feeling of being connected. This feeling becomes the base for doing good things together. In this way, Athavale's thought connects personal spirituality and public morals.

The clearest difference in Athavale is how he turned these deep ideas into real social projects. The Swadhyaya Movement started new programs like Yogeshwar Krishi (farming together for God), Matsyagandha (fishing together), and Vriksha Mandir (tree temples). These were not just projects for money. They were actions that showed spiritual values like working together, standing on one's own feet, and devotion. Very importantly, they worked without outside money, government help, or NGO setups. They just needed willing teamwork and inner change. This method is very different from standard ways of development that focus on physical help, big groups, and new rules. Instead, he gave a "bottom-up spiritual humanism." Here, change starts in the person's mind and spreads to the whole group. This challenges both worldly development and strict religious habits. It gives a third way that mixes inner and outer change.

Across the world, Athavale's work is very useful for modern talks on lasting development, making groups stronger, and good leadership. Today, many people feel alone, buy too many things, and face nature problems. His focus on controlling oneself, uniting groups, and answering to God gives a different way to think about growth. His ideas match new global talks on complete development, mostly those that mix moral, cultural, and nature sides. Pandurang Shastri Athavale gives a very strong model of social reform based on spirituality. It comes from old Indian thoughts and is very useful for today's world problems. He changed hard spiritual rules into real social habits. By doing this, he made a movement that crosses the lines between religion and development, person and group, and thought and action.

In the twentieth century, many reformers in India tried to mix old ways with new ways. Pandurang Shastri Athavale is special because he mixed looking inside the soul with local development. Other reformers used political or money systems. Athavale focused on inner change as the start of changing society. He started the Swadhyaya Movement in the 1940s. This started a big movement based on reading holy books in a new way and showing devotion together. This paper looks at how his ideas helped make a new way of social reform based on Indian spirituality.

PHILOSOPHICAL FOUNDATIONS:

Athavale's thoughts come deeply from old Indian texts like the Bhagavad Gita and the Upanishads. He read these books not as hard theory, but as simple guides for daily life. The center of his philosophy is the idea of Swadhyaya. This means studying oneself, thinking deeply, and reading holy books. Athavale believed that seeing God (Atman) inside oneself and inside others would bring respect, equal rights, and kindness. He also focused on Bhakti as a power that joins people. It crosses lines of caste, money, and religion. His idea of devotion was not about rituals. It was about building a personal and group connection with God.

THE SWADHYAYA MOVEMENT: STRUCTURE AND PRACTICE:

The Swadhyaya Movement is a unique local network. It smoothly mixes spirituality with group social work. It works without formal members or a strict boss system. Joining is totally willing. It comes from inner motivation, not outside pressure. This shows the movement's focus on changing oneself first to change society. One main practice is Bhavpheri (devotional visits). Swadhyayees travel to different villages to spread spiritual thoughts and connect with people. They do not give lectures. They talk and show good examples in life. Another main practice is Trikal Sandhya. This means praying three times a day. It builds a strict habit of saying thanks, looking inward, and being aware every day. Also, Swadhyaya Kendras act as local places to think together, study holy books, and talk as a group. This helps people deeply understand the teachings in a shared setting. All these practices build a deep feeling of shared identity and belonging. This is based on seeing God in every person. This view matches the old Indian idea of Vasudhaiva Kutumbakam from books like the Maha Upanishad. This idea sees the whole world as one connected family. Through these spiritual habits, the movement builds group peace, moral duty, and a deep feeling of world brotherhood.

SOCIAL REFORM THROUGH SPIRITUAL PRAXIS:

The most special thing about Pandurang Shastri Athavale's vision is how he changed deep spiritual rules into real social work through the Swadhyaya Movement. His works show a model of development that does not need outside money or government rules. It needs inner change and group duty. One of the best examples is Yogeshwar Krishi. This is a cooperative farming system. Villagers farm land together and offer it to God. The crops are shared among the people without any single person owning them. This builds values like equality, caring for others, and devotion. Vriksha Mandir (tree temples) is another new mix of spirituality and caring for nature. Groups grow holy trees as living signs of God. This helps save nature while showing spiritual respect. Another big work is Matsyagandha. It focuses on fishing groups. It tells them to work together and better their lives through teamwork based on spiritual ideas, not fighting for money. All these works show that when spirituality is a living social habit, it can solve problems like money gaps, bad nature, and leaving people behind. So, Athavale's model gives a different way of development. It runs by itself, is driven by the group, and has strong morals. It works without state machines or outside help while building respect, unity, and shared wealth.

GLOBAL RECOGNITION AND INFLUENCE:

Pandurang Shastri Athavale won big international respect for mixing spirituality with social development. He got high honors like the Ramon Magsaysay Award in 1996 and the Templeton Prize in 1997. These awards praised his spiritual leadership and his new model of ground-level change through the Swadhyaya Movement. This model challenged normal ways of development. His method focused on inner waking, willing teamwork, and seeing God in everyone. It gave a strong choice against both worldly development plans and strict religious habits. Because of this, his ideas got a lot of attention from experts in religion, sociology, and development. They see his work as a unique mix of deep thoughts and real social use. This wide study has made Athavale a global thinker. His model helps current talks on moral development, making groups stronger, and lasting progress. His effect reaches far past the borders of India.

CRITICAL PERSPECTIVES:

The Swadhyaya Movement has done great things, but it also faces some criticism. Some experts say that relying too much on spiritual motivation and inner change might be hard to spread to very

large areas. This is very true in mixed social and political places where people do not share the same religious thoughts. In secular or mixed places, the movement's focus on devotion and divine brotherhood might not work the same for everyone. This could limit its use. Also, critics note that the movement does not have formal boss systems. This is done on purpose, but it can raise worries about being clear, answering for actions, and lasting a long time. Without written rules or paperwork, it can be hard to carefully check the results or copy the model in new places. But these criticisms do not reduce the movement's importance. They just open new doors for more study and real-world changes. They invite a deeper look at how models based on spirituality can change to meet modern global problems while keeping their core philosophy safe.

SWADHYAY:

A Process of Self-Transformation and Self-Empowerment: In Athavale's philosophy, Swadhyay (self-study) is not just a brain exercise. It is a very changing spiritual habit that leads to personal strength and social healing. It is based on the teachings of the Bhagavad Gita and Vedanta. Swadhyay involves a journey inside to think deeply and see God within oneself. This finding is often called Atma-darshan (self-realization). It becomes the base for a big change in how a person sees themselves. A person stops seeing themselves as weak or depending on others. They start understanding themselves as respected, capable, and connected to God. This inner waking builds self-change. People start to grow values like modesty, strict rules, kindness, and duty. Swadhyay does not depend on outside bosses or money. It focuses on self-reliance based on spiritual knowing. At the same time, it leads to self-power. People gain trust and a goal from knowing their inner God. This power is not selfish. It naturally spreads to others, as a person starts to see the same God in all humans. In the Swadhyaya Movement, Swadhyay becomes a group habit that makes social ties stronger and builds a shared identity. Through things like group talks, devotional meetings, and community work, people turn their inner knowing into outward action. So, Swadhyay bridges the gap between personal spiritual growth and social duty. It shows that real power is not only in knowing oneself but also in helping others do well. In the end, Swadhyay, as Athavale saw it, gives a complete model of change. It mixes the inner and outer sides of human life. It challenges totally money-focused ideas of power. It states that lasting change starts inside, and a spiritually awake person can become a strong force for good change in society.

CONCLUSION:

Pandurang Shastri Athavale is a special and powerful voice in modern Indian thought. He showed that spirituality can be a strong push for real social change when it is lived as a social habit. He closed the gap between personal self-realization and the welfare of everyone. He created a model of development that moves away from normal plans that only focus on physical help, strict rules, and policy changes. Instead, his method focuses on waking up inside, having moral duty, and seeing God in all people. This is the base for lasting and complete progress. This mix of personal spirituality and public action changes the role of religion in today's society. It also gives a complete way to fix social, money, and moral problems. His lasting mark continues through the Swadhyaya Movement. It stays active in groups in India and outside. It inspires people to look at questions of faith, identity, and social duty in new ways. Through this lasting effect, Athavale's vision continues to matter worldwide. It encourages us to think of development as a process based on human respect, connection, and spiritual mind.

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PARADIGM SHIFT IN DEVELOPMENT SECTOR THROUGH CSR FUNDS: EVOLUTION, POLICY, IMPLEMENTATION TRENDS & STAKEHOLDER LEARNINGS

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BACKGROUND : CSR, GLOBAL PERSPECTIVES:

Corporate Social Responsibility (CSR) embodies the principle that businesses have obligations to society that extend beyond profit-making and legal compliance. The conceptual roots of CSR can be traced to the mid-20th century when Howard R. Bowen (1953) articulated the notion that business leaders bear social responsibilities influencing their decisions and actions. Bowen's seminal work laid the foundation for subsequent frameworks categorizing CSR into economic, legal, ethical, and philanthropic dimensions.

During the latter half of the 20th century, CSR evolved from philanthropic gestures into a structured discipline integrating business ethics, stakeholder engagement, and strategic management. Archie B. Carroll's (1991) "Pyramid of Corporate Social Responsibility" further systematized the field by emphasizing economic responsibilities as the foundation, followed by legal, ethical, and philanthropic tiers—a model still widely referenced today.

The 1990s marked a turning point in global CSR institutionalization. The launch of the United Nations Global Compact (2000) introduced voluntary principles on human rights, labor, environment, and anti-corruption. Parallely, the OECD's policy frameworks and ISO 26000:2010 on social responsibility standardized CSR practices worldwide. These initiatives transitioned CSR from informal philanthropy to structured corporate governance, integrating sustainability reporting, transparency, and stakeholder accountability.

CSR IN USA, UK, EUROPE AND ISLAMIC COUNTRIES:

Corporate Social Responsibility (CSR) today is a multifaceted global phenomenon encompassing voluntary corporate citizenship, stakeholder engagement, sustainability reporting, and—in some jurisdictions—statutory obligations. While the core logic of CSR (business responsibilities beyond profit) has common intellectual roots, practice and regulation vary widely across regions owing to different legal traditions, market pressures, civil-society dynamics, and cultural or religious norms. For a global understanding it helps to look comparatively at the United States, the United Kingdom & Europe, and Islamic-majority contexts.

CSR IN THE UNITED STATES

Historical and institutional contours

In the United States CSR emerged as a recognized public discourse in the mid-20th century and gained momentum in the 1970s with debates about the "social contract" between business and society (Committee for Economic Development reports and subsequent academic work). U.S. CSR has traditionally emphasized voluntary corporate philanthropy, managerial ethics, and stakeholder

responsiveness—driven by investor activism, NGOs, and consumer expectations rather than a comprehensive federal CSR law.

Regulatory and market dynamics (recent developments)

Recent years have seen stronger investor-oriented disclosure pressure—especially on climate-related financial risks—leading to regulatory action by securities authorities. In March 2024 the U.S. Securities and Exchange Commission adopted rules to enhance and standardize climate-related disclosures for public companies; those rules have faced litigation and regulatory pause/contest in 2024–2025, illustrating the contested and evolving nature of mandatory sustainability disclosure in the U.S. context. The U.S. approach therefore mixes strong market/ investor pressure and agency initiatives, but implementation is politically and legally contested.

CSR IN THE UNITED KINGDOM & EUROPE

Regulatory orientation and standards

The UK and EU have moved more decisively than the U.S. toward **mandatory sustainability reporting** and standardized disclosure frameworks. The European Union’s Corporate Sustainability Reporting Directive (CSRD) extends mandatory sustainability reporting to tens of thousands of companies and introduces standardized disclosures and assurance requirements—reflecting an EU-level regulatory strategy to make corporate sustainability information comparable and auditable. Similarly, the UK has developed its own sustainability reporting standards and is integrating global reporting baselines into national practice.

Recent policy dynamics

EU reporting requirements (CSRD) and standards are designed to be broad (large companies and many SMEs captured), standardized, and subject to assurance—reflecting a regulatory philosophy that disclosure enables market discipline and policy oversight. At the same time, recent political debates and proposals (in 2024–2025) indicate pressures to simplify or recalibrate the EU’s rules to reduce regulatory burden—showing dynamic tension between ambitious sustainability goals and economic competitiveness concerns.

CSR IN ISLAMIC COUNTRIES (FAITH-BASED PERSPECTIVES AND PRACTICE)

Conceptual foundations

In many Islamic-majority contexts, CSR is often framed through Islamic ethical concepts—such as **zakat** (obligatory alms), **sadaqah** (charitable giving), **waqf** (endowments), and broader Qur’anic injunctions about social justice and stewardship—leading to a faith-informed model of corporate responsibility that overlaps with, but is not identical to, Western CSR concepts. Scholarship highlights that Islamic norms both encourage corporate charity and embed social obligations into business ethics, creating an indigenous rationale for corporate social action.

Institutional forms and drivers

In practice, CSR in Islamic countries appears in multiple forms: corporate philanthropy aligned with religious giving, Islamic social finance instruments (zakat management, waqf-based projects), and growing institutional adoption of CSR/ESG frameworks—especially in countries with strong Islamic banking sectors (e.g., Malaysia, parts of the Gulf). Research also indicates that Islamic religiosity at managerial and organizational levels can shape CSR priorities and disclosure practices differently than secular models.

Key Differences — Comparative Summary

U.S.: Largely voluntary CSR practices; disclosure often driven by markets and investors; federal rules on climate disclosure have been contested and subject to litigation.

UK/EU: Stronger regulatory orientation with mandatory, standardized reporting (CSRD, UK SRS), assurance requirements, and an integrated sustainable-finance agenda—though political debates about scope persist.

Islamic countries: Often rely on religiously rooted obligations and social finance (zakat/waqf) that coexist with modern CSR/ESG frameworks; formal regulatory strictness varies widely.

CSR is a globally shared norm but regionally differentiated in motives, instruments, and enforcement. The U.S. model emphasizes voluntary action and market pressure, the UK/EU model emphasizes mandatory standardized disclosures and regulatory harmonization, while Islamic countries increasingly blend faith-based obligations (zakat, waqf) with modern CSR/ESG practices. These differences matter for policy design, cross-border corporate governance, and comparative research—especially as global supply chains and investor expectations press firms toward greater transparency and harmonized reporting.

CSR EVOLUTION IN INDIA

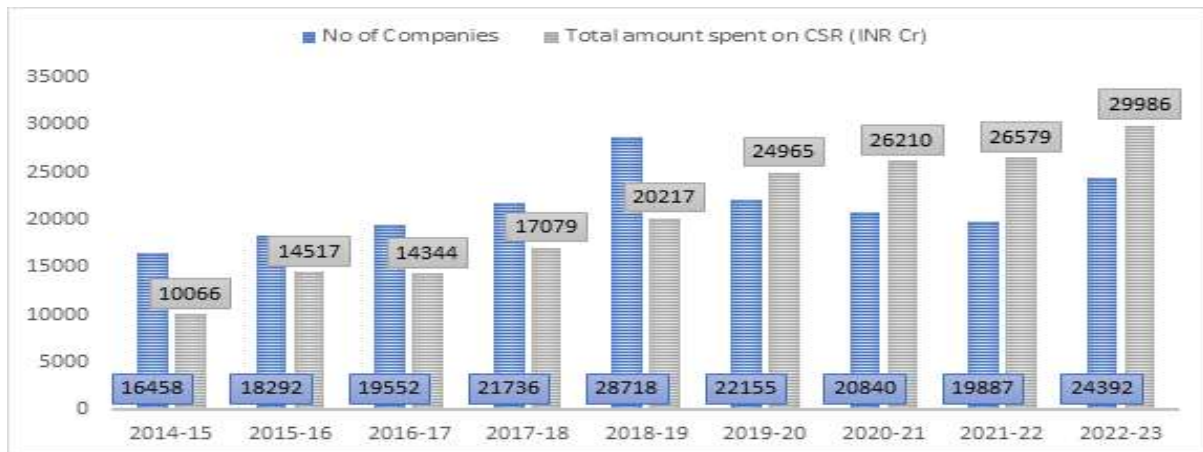
In India, corporate philanthropy has long-standing historical roots. Visionaries like Jamsetji Tata pioneered social investments through endowments and trusts in the late 19th century, shaping a legacy of corporate involvement in nation-building. Post-independence, CSR activities continued mainly through voluntary efforts, typically executed by family-run trusts and corporate foundations.

The Companies Act, 2013, and the Companies (Corporate Social Responsibility Policy) Rules, 2014, marked a watershed moment by making CSR expenditure mandatory for qualifying companies. These regulations required the formation of CSR committees and mandated at least 2% of average net profits to be spent on approved social activities. Over subsequent years, amendments refined compliance norms, reporting obligations, and treatment of unspent funds—transforming CSR into a legally enforceable developmental mechanism.

Contemporary CSR practice in India increasingly aligns with Environmental, Social, and Governance (ESG) principles and the UN Sustainable Development Goals (SDGs). This evolution reflects a shift from compliance-driven philanthropy toward integrated sustainability strategies that merge corporate value creation with community development.

NATIONAL CSR DATA ANALYSIS IN INDIA

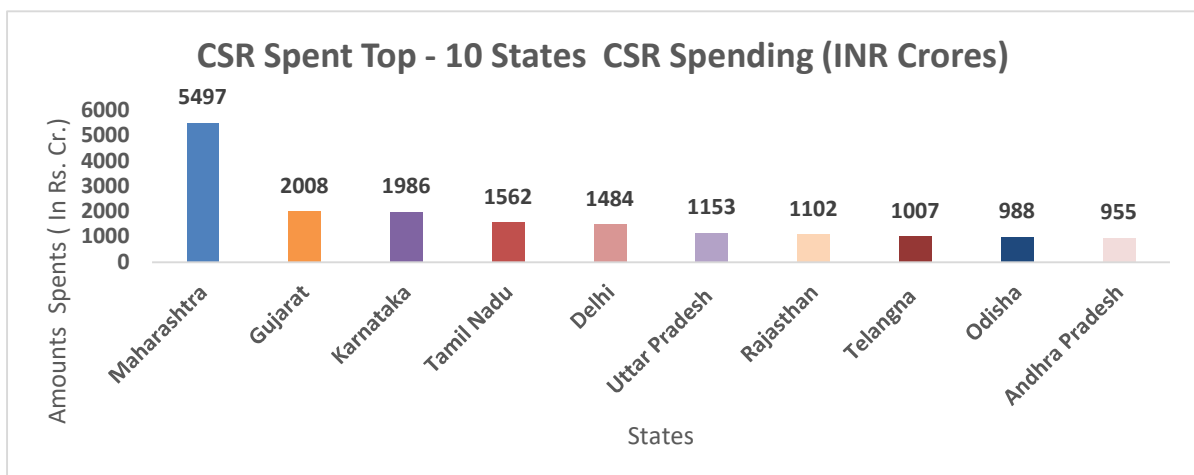
The formal CSR journey began with the Voluntary Guidelines on Social, Environmental, and Economic Responsibilities of Business (2009), preceding mandatory CSR provisions in 2014. Since implementation, CSR spending has consistently increased—crossing ₹1.84 lakh crore between FY 2014–15 and 2022–23. By FY 2022–23, over 24,000 companies reported CSR activities with an aggregate expenditure of nearly ₹30,000 crore.



Major contributors included HDFC Bank (₹921.96 crore), Reliance Industries (₹899.07 crore), and Tata Consultancy Services (₹812.65 crore).

STATE WISE SPENDING:

Maharashtra has consistently been the top beneficiary of CSR spending due to its concentration of corporate headquarters, while remote Union Territories and North-Eastern states remain underfunded. This geographical imbalance indicates CSR allocation often follows corporate proximity rather than developmental needs.



SECTORAL PRIORITIES IN INDIA:

Education remains the dominant sector, attracting over ₹53,500 crore across nine years, followed by healthcare (₹40,000 crore). Rural development, poverty alleviation, and environmental sustainability also feature prominently. Interestingly, culture and heritage initiatives received more than ₹3,200 crore, reflecting corporate alignment with visibility and government-endorsed campaigns.

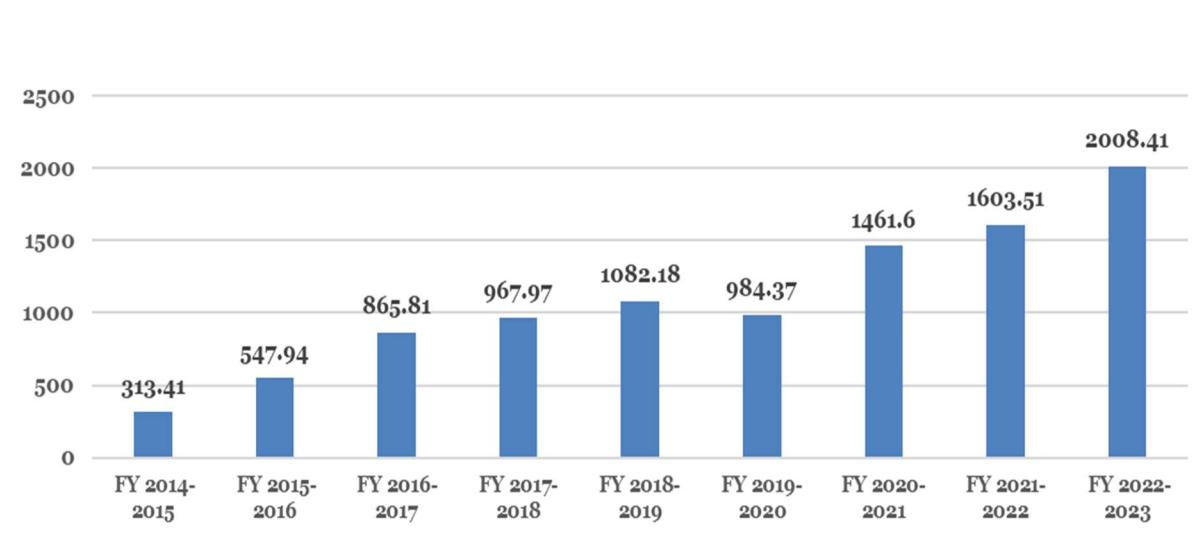
Other Factors:

Public Sector Enterprises (CPSEs) contributed significantly, with CSR expenditure rising 19% to ₹4,911 crore in FY 2023–24—the highest in four years.

Yet, unspent CSR funds remain an issue, totalling ₹1,475 crore in FY 2022–23, reflecting partial compliance gaps and implementation delays.

CSR LANDSCAPE IN GUJARAT:

Gujarat's CSR trajectory mirrors its industrial dynamism. CSR inflows rose from ₹313 crore in FY 2014–15 to over ₹2,000 crore in FY 2022–23, cumulatively amounting to ₹9,835 crore—making Gujarat the second-largest CSR recipient after Maharashtra. The state consistently contributes 5–7% of India's total CSR expenditure, signifying mature corporate engagement.



Notably, Gujarat has consistently accounted for between 5% and 7% of the national CSR pool since 2017–18. This stability underscores the maturity of corporate engagement in the state, though it also signals a concentration of CSR resources in specific industrial belts.

SECTORAL TRENDS IN GUJARAT:

CSR spending in Gujarat is concentrated in a few key sectors: - **Education, Skill Development, and Livelihood:** The leading category, absorbing the largest share of CSR funds. This reflects Gujarat's emphasis on building human capital and aligning CSR with employability. - **Healthcare, Nutrition, and Sanitation:** A close second, particularly significant during and after the COVID-19 pandemic. - **Environment and Natural Resource Management:** Reflecting growing awareness of climate resilience, especially in industrial regions. - **Rural Development:** A consistent though smaller share, focusing on infrastructure and livelihood support in non-urban areas. - **Gender Equality and Inclusion:** Though comparatively less funded, this signals a growing corporate acknowledgment of social equity issues.

Overall, the state's CSR portfolio shows a balance between social services (education and health) and developmental infrastructure (rural projects, environmental sustainability).

DISTRICT-WISE ANALYSIS:

CSR distribution across Gujarat's districts is **highly uneven**. In 2022–23, **Ahmedabad alone accounted for 40% of the state's CSR inflows**, followed by Surat, Vadodara, Bharuch, and Valsad. Together, these five districts attracted nearly 67% of total CSR spending in the state.

On the other hand, six districts—Morbi, Gir Somnath, Devbhoomi Dwarka, Aravalli, Mahisagar, and Tapi—received no CSR funding in the same year. This stark imbalance highlights how CSR tends to

cluster around industrial hubs and corporate headquarters, leaving peripheral and rural districts relatively neglected.

Over a five-year period, Ahmedabad has consistently dominated CSR receipts, accumulating more than ₹1,740 crore, followed by Vadodara and Surat. Dahod, an aspirational district, surprisingly ranks among the top ten recipients, mainly due to health and nutrition projects.

ASPIRATIONAL DISTRICTS: DAHOD AND NARMADA:

The Government of India's Aspirational Districts Programme seeks to improve development indicators in underdeveloped regions. In Gujarat, Dahod and Narmada are part of this initiative.

CSR flows into these districts, however, reveal a pattern of **volatility and short-term surges** rather than consistent investment. For instance, Dahod received an exceptional ₹93 crore in 2020–21, but the figure fell to just ₹24 crore by 2022–23. Similarly, Narmada saw a peak of ₹45 crore in 2017–18, but much lower allocations in subsequent years.

This inconsistency suggests that while companies occasionally align with government campaigns in these regions, sustained, programmatic engagement is still lacking. The developmental impact of CSR in these aspirational districts thus remains fragile and dependent on sporadic corporate interest.

TWELVE YEARS OF LEARNINGS OF STAKEHOLDERS:

Over the past 12 years of CSR in India (2013–2025), each stakeholder has accumulated valuable lessons shaped by practice, regulation, and societal expectations. The learnings span from operational improvements to broader strategic insights. Below is a deeper analysis of these perspectives.

NGOs / Implementing Agencies:

Shift from Charity to Structured Projects:

NGOs have transitioned from one-off charity-driven activities to structured, multi-year programs designed around measurable outcomes. This shift reflects the requirements of CSR compliance, which emphasizes sustainability, impact, and alignment with thematic areas under Schedule VII of the Companies Act.

Professionalization of Operations:

The CSR ecosystem has compelled NGOs to enhance internal governance, adopt transparent accounting systems, and develop professional project management skills. Corporates increasingly expect well-researched proposals, defined indicators, and clear reporting protocols, pushing NGOs toward higher accountability.

Measurable Outcome-Oriented Projects:

With impact assessment gaining importance, NGOs are designing initiatives with quantifiable outputs and outcomes. For instance, skill-training projects now emphasize employment placement rates rather than just training numbers. Exceptions remain for one-time philanthropic interventions, but the overall trend is toward rigorous, impact-focused programming.

Collaboration and Scale:

NGOs have benefited from partnerships with multiple corporates, allowing for larger-scale operations and wider geographical reach. However, such collaborations often result in short-term funding cycles, creating challenges for sustaining long-term community development initiatives.

Capacity Building and Digital Adoption:

Grassroots NGOs have learned to adapt to new compliance requirements such as CSR-1 registration. Many have embraced digital tools for monitoring, evaluation, and reporting, enhancing credibility and efficiency. This adoption has also enabled them to compete for funding alongside larger, more established organizations.

Enhanced Reporting and Documentation:

Driven by legal requirements and corporate expectations, NGOs now place stronger emphasis on regular reporting, social audits, and impact stories. This has professionalized their relationship with funders while also enhancing public trust in their work.

COMPANIES (CSR CONTRIBUTORS):

Strategic CSR vs. Compliance CSR:

In the early years, CSR was often treated as a statutory “2% compliance” requirement. Over time, leading companies began aligning CSR with core business values, sustainability agendas, and long-term community relationships. This transition has resulted in higher-quality interventions.

Brand and Reputation Management:

CSR has become an important component of corporate reputation. Companies learned that tokenistic or publicity-driven projects achieve little social credibility, whereas sustained, well-implemented programs strengthen both brand equity and stakeholder trust.

Project Designing with a Focus on SDG Targets: NGOs and companies are increasingly aligning CSR initiatives with the United Nations Sustainable Development Goals (SDGs), ensuring that projects contribute to broader national and global development agendas.

Data, Monitoring, and Impact Assessment:

A key realization has been that “spending money is not the same as creating impact.” Companies now invest in third-party assessments, baseline studies, and outcome-based monitoring to ensure that CSR creates tangible change.

Risk Management and Social License to Operate:

By engaging communities in CSR, companies have been able to reduce local conflicts, enhance goodwill, and secure smoother business operations. This has reinforced CSR’s value as both a social investment and a risk-mitigation tool.

Integration with ESG Principles:

CSR learnings are increasingly feeding into broader Environmental, Social, and Governance (ESG) agendas. Companies now recognize CSR as a stepping stone to deeper sustainability commitments that go beyond philanthropy.

Employee Volunteerism:

Many corporates have realized the motivational impact of involving employees in CSR activities. Beyond financial contributions, employee-driven initiatives foster deeper corporate-community bonds and strengthen workplace culture.

Sustainable and Long-Term Project Orientation:

Rather than scattered one-off interventions, companies have learned to prioritize projects with long-term sustainability. Multi-year commitments in education, healthcare, and rural development demonstrate this shift.

3. GOVERNMENT & CSR AUTHORITIES

Regulation and Monitoring:

The Companies Act, 2013 laid down a mandatory framework for CSR. Over time, government authorities have realized that strict compliance alone is insufficient; handholding, guidance, and supportive frameworks are equally important to nurture impactful CSR.

Creation of CSR Platforms:

Mechanisms like the National CSR Portal and state CSR authorities (e.g., Gujarat CSR Authority) have facilitated better matching between companies and social development projects. These platforms also enhance transparency and accountability.

Recognition and Awards:

National and state-level CSR awards have helped promote best practices, motivating companies and NGOs to adopt innovative and impactful approaches.

Policy Evolution:

Initially focused on enforcement, the government has shifted towards encouraging innovation, convergence with flagship schemes, and directing CSR into underserved geographies and sectors.

Introduction of National Social Stock Exchange:

This platform aims to connect companies and investors with credible NGOs, widening the pool of CSR opportunities and professionalizing the funding ecosystem.

Promoting PPP Models:

There is a growing realization that large-scale, impact-driven initiatives require Public-Private Partnerships (PPP). This approach leverages corporate efficiency, government reach, and NGO expertise.

Addressing Challenges:

Despite progress, CSR funds remain concentrated in urban and industrial belts. Ensuring equitable allocation to remote rural and aspirational districts continues to be a major lesson for authorities.

4. COMMUNITY / SOCIETY AT LARGE

Awareness and Rising Expectations:

Communities have grown to see CSR as more than charity. They now expect structured support that addresses local needs and aligns with long-term development priorities.

Importance of Participation:

Projects co-designed with communities—through need assessments, feedback mechanisms, and local ownership—achieve greater acceptance and sustainability than top-down interventions.

Equity and Inclusion Challenges:

Communities in rural and marginalized areas observed that industrial clusters attract disproportionate CSR funding. Over the years, they have learned to organize and advocate for more equitable attention.

Trust and Over-Dependence:

CSR has helped build trust in corporate roles, but communities have also become wary of over-dependence on corporate projects. Integration with government schemes and local institutions is critical for sustaining benefits.

COMPARE INDIA MODEL WITH GLOBAL MODEL: PROS & CONS

Two of the biggest differences between India's approach and other countries' approach towards CSR is as follows:

The government of India mandates CSR spending while the government of most of the other countries do not mandate it except UK & EU.

CSR in India is understood in a way that allows businesses to mitigate the negative impact its activities have caused on the local communities which means that social wellbeing and business success are framed and perceived as antithetical in India. While in other countries like Brazil, U.S., or the European Union, the two are seen as mutually beneficial.

A clear distinction is to be maintained between businesses and its CSR efforts

The concept of CSR is nothing but looking beyond profits. Though India is the first country in the world to have a mandatory statutory compliance requirement on CSR spending, there are still many challenges ahead that would be addressed by the working together of government, corporations, and civil society. The same is the condition with the other countries where a proper framework of CSR is needed and implementation needs to be done in a proper manner. Undoubtedly, consumers would be more willing to purchase the product or service of a company if that company shows a commitment to address economic, environmental, and social issues. Thus, apart from creating appealing and conscious advertisements, corporations must enlist cooperation and support of the media in spreading awareness about CSR and its impact on the society to the people at large.

Despite impressive financial outlays, CSR in India faces several challenges. First, CSR spending remains geographically concentrated around industrial and urban centers, leaving remote regions underfunded. Second, many companies continue to adopt a compliance-oriented approach rather than developing long-term, impact-driven strategies. Third, the lack of standardized metrics for impact assessment complicates evaluation of CSR effectiveness. Additionally, smaller firms often lack the institutional capacity to design and monitor complex social programs. These factors collectively hinder the transformative potential of CSR in addressing India's deep-rooted developmental disparities.

OVERALL LEARNING ACROSS STAKEHOLDERS

The twelve-year journey of CSR demonstrates that it has evolved from a compliance-oriented obligation to a strategic, participatory, and impact-driven model. However, the greatest learning is that **collaboration among all four stakeholders is essential**:

NGOs bring grassroots expertise and execution capacity.

Companies contribute resources, management skills, and long-term vision.

Government ensures accountability, policy direction, and equitable distribution.

Communities guarantee relevance, ownership, and sustainability.

When these actors work in isolation, CSR risks remaining symbolic. When they collaborate, CSR becomes **transformational**, driving inclusive and sustainable development.

CSR Resources in India is filling the blank and act as laboratory for the innovative & impact-oriented projects in India.

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EDUCATION AND ICT

TRIVEDI RUDRAKSH

ABSTRACT

Education has undergone significant transformation with the integration of Information and Communication Technology (ICT). ICT refers to the use of digital tools such as computers, the internet, mobile devices, projectors, and educational software to enhance teaching and learning processes. The purpose of this research paper is to examine the role of ICT in modern education, its advantages, challenges, and its impact on students and teachers. ICT has improved access to educational resources, enabled distance learning, promoted interactive learning, and supported personalized education. Through tools such as online classrooms, e-learning platforms, and multimedia presentations, ICT has made learning more engaging and flexible. It also helps teachers to manage classrooms, prepare digital content, and assess student performance efficiently. However, despite its benefits, ICT implementation faces several challenges such as lack of infrastructure, insufficient teacher training, high costs, and unequal access to technology, especially in rural areas. This paper also discusses the future prospects of ICT in education, including artificial intelligence, virtual classrooms, and smart learning environments. The study concludes that ICT plays a crucial role in improving the quality of education and making learning more accessible. Proper planning, government support, and teacher training are necessary to ensure effective use of ICT in education systems worldwide.

KEYWORDS: EDUCATION, ICT, E-LEARNING, DIGITAL LEARNING, TECHNOLOGY IN EDUCATION

INTRODUCTION

Education is one of the most important aspects of human development. In recent years, Information and Communication Technology (ICT) has become an essential part of education systems across the world. ICT includes technologies such as computers, the internet, mobile phones, projectors, smart boards, and online platforms used for communication and learning.

Traditional teaching methods mainly focused on textbooks and classroom lectures. However, with the introduction of ICT, teaching and learning have become more interactive and student-centered. Students can now access educational materials anytime and anywhere through online platforms. Teachers also use ICT tools to create presentations, videos, and digital content to make lessons more interesting.

ICT plays a vital role in improving the quality of education by providing access to information, enhancing communication, and supporting innovative teaching methods. It helps students develop skills such as problem-solving, critical thinking, and digital literacy, which are necessary in modern society. This paper focuses on understanding the concept of ICT in education, its importance, benefits, challenges, and future scope.

CONCEPT OF ICT IN EDUCATION

Volume: 1

Issue: 3

Month: July - 2026

Year: 14

<https://anantagoj.org/viewofspace>

Information and Communication Technology (ICT) refers to technologies used to store, process, transmit, and share information. In education, ICT includes both hardware and software used to support teaching and learning.

EXAMPLES OF ICT TOOLS IN EDUCATION INCLUDE:

Computers and laptops
Smartphones and tablets
Internet and Wi-Fi
Smart boards
Educational software
Online learning platforms
Video conferencing tools
Multimedia presentations

ICT helps teachers deliver lessons in a more effective way. It also enables students to learn through videos, animations, simulations, and virtual labs.

ICT-based education supports both formal learning (in schools and colleges) and informal learning (self-learning through online resources).

IMPORTANCE OF ICT IN EDUCATION

ICT has become an important tool in modern education due to its ability to improve learning outcomes and provide better educational opportunities.

1.Improves Access to Education

ICT allows students to access learning materials from anywhere using the internet. Online learning platforms provide digital textbooks, videos, and practice exercises.

2.Enhances Teaching Methods

Teachers can use multimedia presentations, animations, and videos to explain complex topics clearly.

3.Supports Distance Learning

ICT enables distance education through online classes and virtual learning environments.

4. Encourages Independent Learning

Students can learn at their own pace using recorded lectures and online tutorials.

5.Improves Communication

ICT tools such as email and messaging apps help communication between teachers, students, and parents.

ADVANTAGES OF ICT IN EDUCATION

ICT provides many benefits to both students and teachers.

1. Interactive Learning

ICT makes learning more interesting through audio-visual content such as videos, animations, and presentations.

2.Access to Vast Information

Students can access a wide range of information through the internet.

3.Time Efficiency

ICT saves time in preparing teaching materials and conducting assessments.

4.Personalized Learning

Students can learn according to their ability and speed.

5. Better Student Engagement

Interactive tools increase student participation in classroom activities.

6 Improved Teaching Quality

Teachers can use advanced tools to enhance lesson delivery.

ROLE OF ICT IN TEACHING AND LEARNING

ICT plays an important role in improving teaching and learning processes.

Role in Teaching:

Helps teachers create digital lesson plans

Supports multimedia presentations

Allows online assessments

Improves classroom management

Role in Learning:

Helps students understand concepts easily

Encourages self-learning

Improves research skills

Enhances creativity and innovation

ICT also supports blended learning, which combines traditional teaching with digital learning.

6. CHALLENGES OF ICT IN EDUCATION

Despite many advantages, ICT faces several challenges.

1 Lack of Infrastructure

Many schools lack computers, internet facilities, and electricity.

2 High Cost

Installing ICT equipment can be expensive.

3 Lack of Teacher Training

Some teachers do not have enough skills to use ICT tools effectively.

4 Digital Divide

Students in rural areas may not have access to digital technology.

5 Technical Problems

Software errors and hardware failures can interrupt learning.

ICT IN INDIAN EDUCATION SYSTEM

ICT has been widely introduced in the Indian education system. The government has launched several initiatives to promote ICT in schools and colleges.

Examples include:

Digital classrooms

Online learning platforms

Educational television programs

Smart classrooms

ICT helps Indian students access global knowledge and improve their learning experiences.

FUTURE SCOPE OF ICT IN EDUCATION

The future of ICT in education is very promising. New technologies are expected to improve education systems further.

Future Technologies:

Artificial Intelligence (AI)

Virtual Reality (VR)

Augmented Reality (AR)

Smart Classrooms

Online Assessment Systems

These technologies will make learning more interactive and personalized.

SUGGESTIONS FOR EFFECTIVE USE OF ICT

To improve ICT implementation, the following steps are necessary:

Provide proper infrastructure

Train teachers regularly

Ensure internet access in rural areas

Reduce the cost of digital devices

Encourage digital literacy among students

CONCLUSION

Information and Communication Technology (ICT) has transformed the field of education by making learning more accessible, flexible, and engaging. It helps students gain knowledge efficiently and supports teachers in delivering lessons effectively. Although there are challenges such as lack of infrastructure and training, these can be overcome through proper planning and government support. ICT will continue to play a significant role in shaping the future of education. Therefore, integrating ICT into education systems is essential for improving educational quality and preparing students for the digital world.

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THE INTERRELATIONSHIP BETWEEN LITERATURE AND LANGUAGE

TRIVEDI DIYA

ABSTRACT

Literature and language are deeply interconnected, each shaping and influencing the other in meaningful ways. Language serves as the primary medium through which literature is created, expressed, and understood. At the same time, literature enriches language by expanding its vocabulary, structure, and expressive possibilities. This paper explores the dynamic relationship between literature and language, highlighting how literary works contribute to linguistic development and how language reflects cultural, social, and historical contexts through literature. The study examines different literary forms such as poetry, prose, and drama to understand how language is used creatively to convey emotions, ideas, and human experiences. It also discusses how literature preserves language over time, acting as a cultural archive that reflects societal changes. Furthermore, the paper analyzes the role of language in shaping literary style, tone, and meaning.

In addition, this research considers the importance of language diversity in literature and how regional and global languages influence literary expression. The paper concludes that literature and language are inseparable, as literature not only depends on language for its existence but also plays a crucial role in its growth and evolution. This mutual relationship highlights the importance of studying both fields together to gain a deeper understanding of human communication and cultural identity.

KEYWORDS: LITERATURE, LANGUAGE, COMMUNICATION, CULTURE, EXPRESSION, LINGUISTICS

INTRODUCTION

Language is one of the most important tools of human communication, while literature is the artistic expression of human thoughts, emotions, and experiences through language. The relationship between literature and language is inseparable because literature cannot exist without language, and language finds its highest expression in literature.

From ancient times to the modern era, literature has played a key role in shaping language. It helps in preserving traditions, reflecting social realities, and expressing human creativity. This paper aims to explore how literature and language influence each other and why their relationship is essential for understanding culture and society.

MEANING OF LANGUAGE AND LITERATURE

Language

Language is a system of communication that uses words, sounds, symbols, and grammar to convey meaning. It allows people to express thoughts, emotions, and ideas. Language can be spoken, written, or even signed.

Literature

Volume: 1

Issue: 3

Month: July - 2026

Year: 14

<https://anantagoj.org/viewofspace>

Literature refers to written or spoken works that have artistic or intellectual value. It includes poetry, novels, short stories, dramas, essays, and more. Literature reflects human life and imagination.

RELATIONSHIP BETWEEN LITERATURE AND LANGUAGE

Language as the Medium of Literature

Language is the foundation of literature. Every literary work is created using language. Without language, it would be impossible to express stories, emotions, or ideas. Writers carefully choose words, sentence structures, and styles to create meaning and impact.

Literature Enriches Language

Literature plays an important role in developing language. Many new words, phrases, and expressions come from literary works. For example, poets and authors often use creative language, which later becomes part of everyday communication.

Reflection of Culture and Society

Both language and literature reflect the culture and society in which they exist. Literature shows how people think, live, and interact. Language carries cultural values, traditions, and beliefs.

Preservation of Language

Literature helps in preserving languages over time. Ancient texts and literary works allow us to understand how language was used in the past. Without literature, many languages might have been lost.

ROLE OF LANGUAGE IN DIFFERENT FORMS OF LITERATURE

Poetry

Poetry uses language in a creative and artistic way. It focuses on rhythm, rhyme, and imagery. Poets use simple words but give them deep meanings.

Prose (Novels and Short Stories)

Prose uses everyday language to tell stories. Authors use descriptive language to create characters, settings, and plots.

Drama

Drama uses spoken language and dialogue. It reflects real-life communication and emotions.

LANGUAGE STYLE AND LITERARY EXPRESSION

Language style refers to how a writer uses words and sentences. Different writers have different styles. Some use simple language, while others use complex language.

ELEMENTS OF LANGUAGE STYLE INCLUDE:

Vocabulary

Sentence structure

Tone

Figurative language (metaphor, simile, etc.)

These elements help create meaning and make literature more interesting.

IMPORTANCE OF LANGUAGE DIVERSITY IN LITERATURE

Language diversity means the existence of different languages and dialects. Literature in different languages reflects different cultures and traditions.

For example:

Regional literature shows local culture

Global literature connects people across countries

Translation also plays an important role in sharing literature between languages.

LITERATURE AS A TOOL FOR LANGUAGE LEARNING

Literature helps in learning language effectively. By reading stories, poems, and novels, people can improve:

Vocabulary

Grammar

Reading skills

Writing skills

It also helps in understanding context and meaning.

IMPACT OF MODERN TECHNOLOGY ON LANGUAGE AND LITERATURE

In the modern era, technology has changed both language and literature.

Digital platforms have made literature more accessible

Social media has influenced language (short forms, emojis, etc.)

E-books and online writing have increased readership

However, it also raises concerns about the quality of language.

CHALLENGES IN LITERATURE AND LANGUAGE

Some common challenges include:

Loss of traditional languages

Overuse of informal language

Difficulty in translation

Decline in reading habits

These challenges affect both language and literature.

CONCLUSION

In conclusion, literature and language share a deep and meaningful relationship. Language is the tool through which literature is created, while literature enhances and develops language. Together, they reflect human life, culture, and creativity.

Understanding the connection between literature and language helps us appreciate the beauty of expression and communication. It also highlights the importance of preserving both for future generations. Literature not only entertains but also educates and connects people across different cultures and times.

Therefore, the study of literature and language is essential for understanding human society and improving communication skills.



COMPARATIVE STUDY OF PERSONAL FACTOR AFFECTING SPORTS PARTICIPATION BETWEEN URBAN AND RURAL SCHOOL GIRLS

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Objective: The aim of the study was to know the Effect of Personal Factor affecting sports participation between Urban and Rural School Girls.

Methodology: The investigator had selected thirty girls students of age between 13 to 18 years coming from Rural and Urban schools of Ahmedabad. A self-made questionnaire will be used to collect data. The questionnaire will be designed with five questions with personal factor affecting participation that girls from reaching their athletic ambitions. Factor Analysis and Percentages were used to examine replies collected in terms of personal factor. SPSS Software was used to conclude all the research questions with T Test. The personal factors affecting sports participation, the mean of the scores of urban School girls was 7.86 and the mean of the scores of rural School girls was 9.06. The standard deviation of urban School girls was 1.55 and the standard deviation of rural School girls was 0.88. Also, the mean difference of both the groups was 1.20. While the 't' ratio was 2.60. Which at the 0.05 level (28) = 2.04, there was no significant difference between the two groups. There is a big difference between rural and urban girls in family factors. In rural families, the emotional and social support received by girls is stronger due to the joint family system and increased awareness of sports, which is evident from their higher mean (8.06). In urban areas, sports are considered secondary due to the pressure of families and academic competition, which may be responsible for the lower mean (5.33).

KEYWORDS: *URBAN, RURAL, SPORTS PARTICIPATION*

INTRODUCTION

Sports participation among school-aged girls remains a significant global challenge, characterized by a sharp decline in involvement during secondary school. Research consistently shows that by the age of 14, girls drop out of organized sports at twice the rate of their male peers. Understanding the personal factors that drive this trend is essential, as these internal psychological and biological influences often decide whether a girl chooses to engage with or withdraw from athletic environments.

Sports participation among schoolgirls is a critical area of research, as it directly impacts their physical, mental, and social development. However, significant disparities exist between urban and rural settings in terms of access, opportunity, and encouragement for girls to engage in sports. While sports participation is widely recognized for its extensive health benefits, it remains a gendered field where girls often experience lower participation and higher dropout rates. Although global health organizations recommend 60 minutes of daily physical activity, approximately 85% of adolescent girls fail to meet these standards.

METHODOLOGY

Subjects: For the purpose of this study thirty girls students were selected from Urban and Rural School. 15 Girls Students of Urban School were selected from St.Xavious School, Loyola, Memnagar

School, Ahmedabad. 15 Girls Students of Rural School were selected from Uma Vidhyalay School, Dehgam Ahmedabad. The age of the subjects was ranged between 13 to 18 years.

Tools: All thirty girls' students given the questionnaire with five Questions of Personal Factor. The respondents were noted on the right side of each statement by 'ticking' (✓) one of the options, namely Agree, Disagree, Neutral, respectively. After collecting the data from 15 girls students of Urban and 15 girls students of Rural they will be given points. Points will be given for Negative Questions as Agree – 0 point, Disagree – 2 points and Neutral- 1 point. Points will be given for Positive Questions as Agree – 2 points, Disagree – 0 point and Neutral- 1 point.

Analysis of data and Results of the study: The obtained data were statistically computed on SPSS Software with T Test. The results are depicted with the help of table1-6.

Table – 1

Table showing percentage information obtained in relation to first question.

No.	Statement	Answer	Urban		Rural	
			Subject	Percentage (%)	Subject	Percentage (%)
1	Do you feel comfortable in sports dress while participating in sports?	Agree	12	80.00	15	100.00
		Disagree	1	6.67	0	0.00
		Neutral	2	13.33	0	0.00
Total			15	100	15	100

In the above table -1, the percentage of responses to the question Do you feel comfortable in sports dress while participating in sports? is 80.00% in urban and 100.00% in rural, Agree followed by 6.67% in urban and 0.00 in rural, disagreeing, and 13.33% in urban and 0.00 in rural being neutral.

Table – 2

Table showing percentage information obtained in relation to Second question.

No.	Statement	Answer	Urban		Rural	
			Subject	Percentage (%)	Subject	Percentage (%)
2	Does participating in sports improve your self-esteem and confidence?	Agree	14	93.33	15	100.00
		Disagree	0	0.00	0	0.00
		Neutral	1	6.67	0	0.00
Total			15	100	15	100

In the above table- 2, the percentage of responses to the question does participating in sports improve your self-esteem and confidence? is 93.33 %in urban and 100.00 %in rural, Agree followed by 0 %in urban and 0.00 in rural, disagreeing, and 1 %in urban and 0.00 in rural being neutral.

Table – 3

Table showing percentage information obtained in relation to third question.

No.	Statement	Answer	Urban		Rural	
			Subject	Percentage (%)	Subject	Percentage (%)
3		Agree	2	13.33	4	26.67

	Do you agree that a girl's priority should be preserving her physical beauty rather than participating in sports?	Disagree	8	53.33	9	60.00
		Neutral	5	33.33	2	13.33
Total			15	100	15	100

In the above table- 3, the percentage of responses to the question Do you agree that a girl's priority should be preserving her physical beauty rather than participating in sports? is 13.33 %in urban and 26.67 %in rural, Agree followed by 53.33 %in urban and 60.00 % in rural, disagreeing, and 33.33 %in urban and 13.33 %in rural being neutral.

Table – 4

Table showing percentage information obtained in relation to fourth question.

N o.	Statement	Answ er	Urban		Rural	
			Subj ect	Percentage (%)	Subj ect	Percentage (%)
4	Do you prioritize sports participation in your life?	Agree	11	73.33	12	80.00
		Disagr ee	2	13.33	1	6.67
		Neutr al	2	13.33	2	13.33
Total			15	100	15	100

In the above table- 4, the percentage of responses to the question Do you prioritize sports participation in your life? is 73.33 %in urban and 80.00 %in rural, Agree followed by 13.33 %in urban and 6.67 % in rural, disagreeing, and 13.33 %in urban and 13.33 % in rural being neutral.

Table – 5

Table showing percentage information obtained in relation to fifth question.

No.	Statement	Answer	Urban		Rural	
			Subject	Percentage (%)	Subject	Percentage (%)
5	Do you think participating in sports helps you develop leadership skills?	Agree	12	80.00	15	100.00
		Disagree	1	6.67	0	0.00
		Neutral	2	13.33	0	0.00
Total			15	100	15	100

In the above table-5, the percentage of responses to the question Do you think participating in sports helps you develop leadership skills? is 80.00 %in urban and 100.00 %in rural, Agree followed by 6.67 %in urban and 00.00% in rural, disagreeing, and 13.33 %in urban and 00.00% in rural being neutral.

Table - 6

Table showing the mean, standard deviation, median difference and 't' ratio of Personal factors affecting sports participation among urban and rural School girls

Group	Subject	Mean	Standard Deviation	Mean Difference	't' Ratio
Urban	15	7.86	1.55	1.20	2.60
Rural	15	9.06	0.88		

***Significant level at 0.05't' (28) = 2.04**

It is found from Table-6 that, among the personal factors affecting sports participation, the mean of the scores of urban School girls was 7.86 and the mean of the scores of rural School girls was 9.06. The standard deviation of urban School girls was 1.55 and the standard deviation of rural School girls was 0.88. Also, the mean difference of both the groups was 1.20. While the 't' ratio was 2.60. Which at the 0.05 level (28) = 2.04, there was no significant difference between the two groups.

DISCUSSION OF THE FINDING

Rural school girls have a more positive attitude toward sports than urban girls, largely due to higher intrinsic motivation and a natural inclination for physical work. While urban students face academic burdens and diverse recreational distractions, rural students often find sports to be a primary means of self-identity. This lifestyle gap explains the significant statistical difference observed in the t-ratio. Do you feel comfortable in sports dress while participating in sports? Most of the respondents were found to agree with the opinion on this question. Does participating in sports improve your self-esteem and confidence? Most of the respondents were found to agree with the opinion on this question. Do you agree that a girl's priority should be preserving her physical beauty rather than participating in sports? Most of the respondents were found to disagree with the opinion on this question. Do you prioritize sports participation in your life? Most of the respondents were found to Agree with the opinion on this question. Do you think participating in sports helps you develop leadership skills? Most of the respondents were found to agree with the opinion on this question.

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BRIDGING THE GAP: PERSONALITY TRAITS, PERCEIVED SOCIAL SUPPORT, AND BURNOUT AMONG DOCTORAL SCHOLARS IN GUJARAT

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ABSTRACT

Personality plays a major role in how one deals with different challenges in life. Certain personality traits are more vulnerable to psychological distress, whereas perceived social support acts as a protective factor to alleviate burnout, despite such topics remaining unaddressed in the Gujarat region. The present study investigates the relationship between personality traits, perceived social support, and Burnout among doctoral scholars in Gujarat. A quantitative cross-sectional design was employed. Utilising the purposive sampling technique, a Google form was circulated to a WhatsApp group of doctoral scholars. The response was collected through self-reported questionnaires, including demographic and academic variables, such as age, gender, marital status, financial support, living conditions, average sleeping hours, and PhD-specific factors, such as current year of PhD, thoughts of quitting, mode of study, PhD year, satisfaction with supervisor, and frequency of meetings with supervisor. A total of 49 participants pursuing PhDs in various domains of the social sciences and humanities, the health and life sciences, education, and science participated. Respondents completed the Big Five Personality Inventory, Copenhagen Burnout Inventory, and Multidimensional Scale of Perceived Social Support. Descriptive statistics and correlation were analysed in Jamovi software. Results indicated that overall perceived social support, and particularly family support, significantly lowers the burnout among doctoral scholars. Conversely, extraversion and agreeableness were not statistically significant with perceived social support. It also shows that neuroticism was not statistically significant with the dimensions of burnout. The research highlights the need for university administration to implement psychological interventions and peer social support for doctoral scholars.

KEYWORDS: PERSONALITY TRAITS, BURNOUT, PERCEIVED SOCIAL SUPPORT, DOCTORAL SCHOLARS

INTRODUCTION

The Hindu Newspaper reported a dropout rate of PhD students estimated 40 % in India. (Karandikar, 2025). Pursuing a doctoral degree is challenging both emotionally and intellectually, which drains the energy of an individual and leads to psychological distress. Personality also plays a role in how one responds to challenging situations; some personality traits are more prone to stress, while others are less. The role of Friends, Family, Peers, Social Network, and Supervisor support protects doctoral scholars from burnout. Burnout was previously associated with Occupational stress, which is associated with human services domains. Nowadays, studies show students also experience burnout, which is related to their academic stress. (Jacobs & Dodd, 2003; Gao, 2023). Academic burnout refers to a feeling of exhaustion due to academic demands among college students, a cynical attitude towards one's academics, and a reduced sense of accomplishment. (Schaufeli et al., 2002; Zhang et al., 2007) Academic stress is not limited only to

school and college students but is also prevalent among doctoral students. Doctoral researchers are more vulnerable to mental health-related problems (Berry et al., 2021,& Poli et al., 2025), and certain personality traits make them more vulnerable to burnout, such as openness, Agreeableness, and neuroticism, which are associated with burnout (Norez, 2017; Wahyuni et al., 2023). Rahman et al. (2026) mentioned that Social support has a direct effect on Burnout. One study identified the importance of support from supervision activities, which involve having several diverse activities with a supervisor, benefiting doctoral students. Whereas a lesser frequency of supervision and lack of satisfaction with supervision were related to burnout. (Cornér et al., 2017) Thus, the purpose of the study is to measure the relationship between the Big Five personality traits, dimensions of burnout, and dimensions of perceived social support.

REVIEW OF LITERATURE

A meta-analysis of 43 studies shows that Doctoral scholars experience significantly higher stress compared to the general population. In addition, it reported that engaging in self-care and a positive relationship with the supervisor acts as a protective factor. (Hazell et al., 2020) Research was conducted on 1313 students at 56 Spanish universities. It reported that doctoral students with a lower support profile are more likely to experience burnout and stress, report dropout intentions, and be less satisfied, engaged, and interested in their doctoral studies than those with an adequate support profile. (Corcelles-Seuba et al., 2022) A recent short-term longitudinal study was conducted on 428 Undergraduate students of three institutions in China. It showed that stress predicts academic burnout significantly positively, and social support significantly negatively (Zhang et al., 2025). One research study stated that several factors are predictors of burnout among doctoral students, for instance, being single, taking antidepressant medicines, excessive consumption of alcohol, Personality traits, and thinking about dropping out. (Andrade et al., 2023, Wahyuni et al., 2023) Wahyuni et al. (2023) found that extraversion, agreeableness, Openness, and consciousness are related to low academic burnout, and neuroticism is linked with high academic burnout. A similar study conducted in Malaysia reported that Agreeableness, Openness, and Neuroticism have a significant effect on burnout among University students (Nonis et al., 2023). Sarikaya & Atsan have conducted a study at 514 Turkish academics using the HEXACO personality model, Big Five personality traits, and burnout. The study showed HEXACO personality model, extraversion, agreeableness, honesty-humility, openness to experience, and conscientiousness had negative correlations with burnout, whereas emotionality had a positive correlation with burnout. (Sarikaya & Atsan, 2024)

Extensive correlational research has been conducted on personality, perceived social support, and burnout in human-related services. Yet there appears to be a lack of studies on burnout, social support, and personality among students, and especially doctoral scholars. It requires the researcher's attention to explore the interconnection between aspects of burnout, Social support, and Personality traits.

OBJECTIVES

To investigate the relationship between neuroticism and dimensions of Burnout among Doctoral scholars

To determine the relationship between dimensions of perceived Social Support and Burnout

To examine the relationship between dimensions of perceived social support and Big Five Personality traits

METHOD

Research Design

A correlational study was employed to examine the relationship between Big Five Personality Traits, Dimensions of Burnout, and Dimensions of perceived social support of quantitative data. Purposive sampling is used to collect the data through a Google Form. Descriptive Statistics and Correlation analysis were performed in Jamovi.

Participants

The final participants consist of 49 scholars; originally, there were 52. Three data were excluded due to ethical considerations. Research data were collected from three different universities in Gujarat through a purposive sampling technique from various academic backgrounds, including 55.1% from Social Science and Humanities, 12.2% from science, 2% from Health and Life Sciences, 14.3% from education, and 16.3% from other. The gender distribution was male and female, with an age range of 21 to 40 years old.

Tools

Big Five Personality Inventory

A brief version of the Big Five Personality Inventory was used for assessing personality Traits. It consists of 10 items, 2 items from each trait. Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to experience

Multidimensional Scale of Perceived Social Support

Zimet et al. developed this scale that measures how an individual perceives social support from their social network. It consists of 12 items and is rated on a Likert scale of 1 to 7, “*Very Strongly Disagree to Very Strongly Agree*”. It contains three dimensions: 1) Significant other, 2) Family, and 3) Friends.

Copenhagen Burnout Inventory

The scale consists of 25 items and is rated on a Likert scale of 1 to 5, “*Never*” to “*Always*” Portuguese English version used for the study. It contains four dimensions: Personal burnout, Studies-related burnout, Colleagues-related burnout, Teachers-related burnout

Proceduce

A Google form constructed in six sections. The first section consists of the title, introduction of the researcher, aims, and eligibility. The second section consists of demographic and PhD-specific questions. Demographic details include age, gender, Marital status, Location, Living Condition; Whereas, Phd specific details included Field of Study, Mode of study, Current year of Phd, Financial Support, Research Stage, Public or Grant in Aid University, Thoughts about quitting the Phd, Medicines intake due to Studies, Average Hours of Sleep, Frequency of Meeting with Supervisor and Satisfication with Supervisor. Sections 3 to 5 included self-reported questionnaires, and the last section was for feedback and thank you. The Google form circulated in the WhatsApp group of PhD scholars, and data were collected through visiting different departments. All data coded, and Mean, Standard Deviation, Descriptive analysis, Shapiro-Wilk test, Frequency analysis, and correlation analysis performed in Jamovi Software.

RESULTS

Table 1

Correlation between Dimensions of Perceived Social Support and Burnout						
		Significant Other Support	Family Support	Friends Support	Perceived Social Support	Burnout
Significant Other Support	Spearman's rho	—				
	df	—				
	p-value	—				
Family Support	Spearman's rho	0.452**	—			
	df	47	—			
	p-value	0.001	—			
Friends Support	Spearman's rho	0.603***	0.408**	—		
	df	47	47	—		
	p-value	<.001	0.004	—		
Perceived Social Support	Spearman's rho	0.880***	0.722***	0.770***	—	
	df	47	47	47	—	
	p-value	<.001	<.001	<.001	—	
Burnout	Spearman's rho	-0.229	-0.481***	-0.293*	-0.382**	—
	df	47	47	47	47	—
	p-value	0.114	<.001	0.041	0.007	—
Note. * p < .05, ** p < .01, *** p < .001						

Table 2 Correlation between Neutrotism and Dimensions of Burnout							
		AVER NEU	Burnout	Teacher Related	SUM CRBBO	SUM SRBBO	Persona l Burnout
AVER NEU	Spearman' s rho	—					
	df	—					
	p-value	—					
SUM BO	Spearman' s rho	0.09 7	—				
	df	47	—				
	p-value	0.50 6	—				
SUM TRBB O	Spearman' s rho	- 0.14 2	0.699** *	—			
	df	47	47	—			
	p-value	0.33 1	<.001	—			
SUM CRBB O	Spearman' s rho	- 0.01 1	0.847** *	0.605** *	—		
	df	47	47	47	—		
	p-value	0.94 3	<.001	<.001	—		
SUM SRBB O	Spearman' s rho	0.16 0	0.894** *	0.598** *	0.636** *	—	
	df	47	47	47	47	—	
	p-value	0.27 2	<.001	<.001	<.001	—	

SUM PBBO	Spearman' s rho	0.14 0	0.858** *	0.397**	0.601** *	0.782** *	—
	df	47	47	47	47	47	—
	p-value	0.33 8	<.001	0.005	<.001	<.001	—
Note. * p < .05, ** p < .01, *** p < .001							

Table 3

Correlation between Dimensions of Perceived Social Support and Burnout							
		AVE SOS	AVE FS	AVE FRS	SUM PSS	Average extra	AVERAGE
AVE SOS	Spearman' s rho	—					
	df	—					
	p-value	—					
AVE FS	Spearman' s rho	0.452**	—				
	df	47	—				
	p-value	0.001	—				
AVE FRS	Spearman' s rho	0.603** *	0.408**	—			
	df	47	47	—			
	p-value	<.001	0.004	—			
SUM PSS	Spearman' s rho	0.880** *	0.722** *	0.770** *	—		
	df	47	47	47	—		
	p-value	<.001	<.001	<.001	—		
Average extra	Spearman' s rho	0.057	0.015	-0.070	0.011	—	

	df	47	47	47	47	—	
	p-value	0.696	0.918	0.630	0.938	—	
AVER AGREE	Spearman's rho	0.032	-0.099	-0.051	-0.035	0.158	—
	df	47	47	47	47	47	—
	p-value	0.825	0.500	0.730	0.809	0.277	—
<i>Note.</i> * $p < .05$, ** $p < .01$, *** $p < .001$							

Table 4

Frequencies of Medication intake due to studies		
Medication intake due to studies	Counts	% of Total
Never	31	63.3%
Sometimes	16	32.7%
Frequently	2	4.1%

Table 5

Frequencies of Thought about quitting the course		
Thought about quitting the course	Counts	% of Total
Never	31	63.3%
Sometimes	14	28.6%
Frequently	4	8.2%

DISCUSSION

The present study investigates the relationship between personality traits, dimensions of perceived social support, and aspects of Burnout among doctoral scholars in Gujarat. Demographic and PhD-specific questions were included in the Google Form. The first hypothesis states that there is no significant correlation between dimensions of perceived social support and Burnout. The analysis in Table 1 shows a highly significant ($p < .001$) Moderate negative correlation between Family Support and Burnout ($\rho = -0.481$). It shows that Family Support lowers the burnout. It can be said that living in India, a collective culture, facilitates family support in lowering burnout. It also

illustrates a significant moderate negative correlation between Overall Perceived Social Support and Burnout ($\rho = -0.382$). The more perceived Social Support, the less the burnout. The relationship between Significant other and Burnout is not significant ($\rho = -0.229$, P value = 0.114); however, it is negative. Alongside, the table also shows significantly weaker correlations between Friends Support and Burnout ($\rho = -0.293$). Many studies reported a negative correlation between Social Support and academic burnout (Ye et al., 2021; Jacobs & Dodd, 2003). The second hypothesis proposed that there is no significant correlation between Neutroticism and dimensions of Burnout. The Analysis in Table 2 supported the hypothesis, showing no statistically significant correlation between Neutroticism and dimensions of Burnout. It shows a weak positive correlation between dimensions of burnout and Neutroticism, except Colleague-related burnout ($\rho = -0.011$). Similarly, literature shows a positive correlation between Neutroticism and Burnout (Norez, 2017). The third Hypothesis indicates no significant correlation between dimensions of Social support, extraversion, and agreeableness. The result supported the third hypothesis. Table 3 shows no statistically significant correlation between dimensions of Social support and Extraversion and agreeableness. Similar results indicate that dimensions of social support and agreeableness. Being Extraversion and agreeableness does not mean perceiving higher social support. Similarly, Moeen et al. reported a weak and non-significant relationship between Big Five personality and Burnout (Moeen et al., 2026). Table 4 represents the frequencies of medication intake due to studies among PhD scholars, around 32.7 % take medication sometimes, whereas 4.1 % takes medication frequently. Table 5 represents the Frequencies of thought about quitting the course. It shows that 28.6% have thought about quitting the course sometimes, and 8.2 % phd scholars have frequently thought about it. A few limitations of this study were identified. The first, the sample size was limited to 49 Doctoral scholars. The second was overrepresentation from the humanities and the female participants. Finally, it was a self-reported questionnaire; participants might have under-rated their burnout.

CONCLUSION

The finding identified a significant Moderate negative correlation between Family Support and Burnout. As family support increases, burnout decreases among Doctoral scholars. Another finding indicated no significant or weak positive correlation between neutrotism and dimensions of burnout. In addition, the study found no significant correlation between dimensions of Social support, extraversion, and agreeableness.

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VALUE ADDITION AND VARIOUS TECHNOLOGIES IN MILLET CROPS

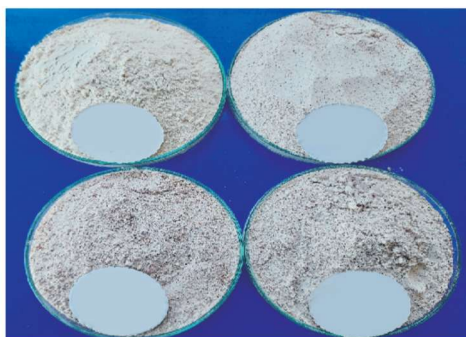
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Millet crops generally have high calcium, iron, thiamine, riboflavin and fiber content than cereal crops like wheat and rice, and because their good amounts of protein, sugar, fat and energy, if these crops are valued and processed, there is a possibility of getting good economic returns for the farmers and the industries associated with them and social and economic improvements can be brought about at the rural level. In addition, processing can increase the quality and storage capacity of the products. Also, the products become more nutritious, tasty and attractive. Employment opportunities increase through these industries and foreign exchange can also be earned through their exports.

Various modern technologies like agro-processing, biotechnology and nanotechnology can be used in millet crops to transform agricultural products into innovative forms that are more acceptable to consumers. Generally, with the help of such new technologies, essential nutrients can be added to millet products or agricultural commodities can be produced in their biological state. In addition, agricultural products can be modified to increase the bioavailability of some essential nutrients. As a result of this transformation, the nutritional quality of the food increases and farmers can increase their earning more from their farming by selling the produce to the consumers at higher prices. On the other hand, people are willing to pay more for value-added products as they want to get high quality nutritious and healthy millet products to avoid nutritional deficiencies or lifestyle related diseases as people are now more health conscious. Due to increasing awareness, their preference towards millet consumption is increasing day by day. Due to which farmers are getting adequate remunerative prices through value addition of millet, there is interest among farmers to revive the cultivation of millet crops.

Mixed flour/mixed flour of more than one grain:



A simple and feasible way to use millet flour is to mix it with other commonly used cereal flours such as maize or by mixing it with some nutritious pulses. Generally, mixing a certain amount of millet flour with other cereal or pulse flours increases the nutritional and functional properties. For example, mixing millet flour with wheat flour increases the percentage of protein, fat and ash while

reducing the total carbohydrates. There is a high demand for various wheat and semolina products such as cakes, pasta, vermicelli, noodles, flakes, etc. in developed and developing countries. Mixing millet flour with wheat flour can increase the nutritional and functional properties of these products as well as increase the market demand for millet.

ROTI, PUFFED/POPPED AND FLAX MILLET PRODUCTS:



There is a high demand for such products in both developed and developing countries. Generally, puffed and popped products can be preserved for a long time due to the reduced moisture content. In millet crops, due to the absence of gluten, there is a lack of perking ability. Due to which the roti becomes tough when baked and due to the inability to rise, the choice of millet roti is very less in new generation, unlike wheat. Often, the softness and swelling ability of millet flour is increased by traditional methods. For example, in the hilly areas of Uttarakhand state, the dry bark of the Gethi (Dar) (*Boehmeria rugulosa*) tree is used to increase the softness and swelling ability of ragi flour. 250 grams of bark powder is mixed in 10 kg. of ragi flour, ragi roti swells like wheat roti. Also, it remains soft even after cooling.

(3) Pasta, sev noodles and other products:



People of all ages in developed and developing countries, pasta & noodles is widely used. Pasta and noodles have more economic importance as they do not spoil for a long time compared to other products. Noodles and pasta products are prepared by mixing millet flour with wheat or soybean flour in varying amounts.

(4) Bakery production: Gluten is commonly used in the bakery industry.



Due to its high content of millets, wheat flour is used in various value-added millet products. But with the increased demand of millet based bakery products, especially in developed countries, by people suffering from celiac disease. Millet based bakery products are superior in terms of nutrition, so their demand is increasing and they also fetch a high price in the market. Foxtail and finger millet flour are used to make biscuits and muffins. While barnyard millet is preferred for making cakes.

White ragi is more suitable in the bakery industry than red or brown ragi.

(5) Fermented products: Food products produced by fermentation such as Idli and dosa are among the most popular dishes in many parts of India. Probiotic fermentation and germination of millet can increase the digestibility of protein and the availability of essential amino acids such as lysine, thiamine, niacin as well as sugars, various soluble fibers and micronutrients. To prepare millet based idli and dosa, millet and urad dal are mixed to make flour and the flour is kept overnight for fermentation.



(6) Millet malt products:

Traditionally, millet malt is used to prepare baby food. Ragi has good malting properties and its malt is very popular among tribal communities. Malting can significantly increase the bioavailability of various minerals, crude fat, vitamin B and other essential nutrients.

(7) Parboiled millet products:

Usually parboiled process is mainly used in rice. Parboiling improves biochemical and milling yields. It also affects phenolic and antioxidant properties. In millet, the removal of the outer layer of the grain during parboiling is beneficial for preserving the nutritional compounds of the grain. Parboiling in kodra improves its milling quality. Parboiling millet can be used in the preparation of food products similar to products which is made from rice.



(8) Millet Popping:

Generally, there are special varieties of millet for popping and it can be used to make value-added products like popcorn. Popping is done by roasting the ripe grain. Popping of millet is a good source of dietary fiber and sugar. Popping does not spoil for a long time so it can be used directly as a snack or can also be used as a food ingredient in various food preparations. Popping is considered a tasty and nutritionally balanced food for growing children and lactating mothers.

(9) Sorghum husk (Hurda sorghum):

Usually sorghum, porridge, especially sorghum for porridge purposes, is prepared by roasting it to a milky state. Since sorghum porridge is delicious so in cities and international level it's demand is increased day by day.



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SOFT BORDERS, STRONG INFLUENCE: CULTURAL DIPLOMACY AS A TOOL OF GLOBAL POLITICAL TRANSFER

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ABSTRACT

Cultural diplomacy has emerged as a subtle yet powerful instrument in shaping global political dynamics, operating through influence rather than coercion. This paper, titled “Soft Borders, Strong Influence: Cultural Diplomacy as a Tool of Global Political Transfer,” examines how states leverage cultural exchanges, values, and narratives to project soft power and facilitate the transfer of political ideas, norms, and institutional practices across borders. Moving beyond traditional notions of diplomacy, cultural diplomacy functions as an intermediary mechanism that fosters mutual understanding while simultaneously advancing strategic national interests. Through the circulation of art, education, language, media, and heritage, nations construct persuasive identities that resonate with foreign publics, thereby enabling indirect political alignment and ideological diffusion. The study situates cultural diplomacy within the broader framework of transnational political communication and global governance, highlighting its role in influencing policy preferences, legitimizing political systems, and shaping international perceptions. By analysing contemporary case studies and theoretical perspectives, the paper argues that cultural diplomacy not only blurs the boundaries between domestic and international spheres but also redefines power in an increasingly interconnected world. Ultimately, it underscores that in an era of soft borders, influence is most effectively exercised through attraction, cultural resonance, and sustained engagement rather than force.

INTRODUCTION

In the evolving landscape of international relations, the nature of power has undergone a profound transformation. Traditional paradigms rooted in military capability and economic dominance are increasingly complemented by more nuanced instruments of influence. Among these, cultural diplomacy has emerged as a pivotal mechanism through which states project values, shape global narratives, and indirectly influence political systems beyond their territorial confines. Operating through attraction rather than coercion, cultural diplomacy exemplifies what Joseph Nye conceptualized as “soft power,” enabling nations to transcend rigid geopolitical borders and cultivate forms of engagement that are both persuasive and enduring.

At its core, cultural diplomacy encompasses the exchange of ideas, traditions, languages, and artistic expressions among nations and societies. These exchanges function not merely as symbolic gestures but as strategic conduits for deeper political communication and ideological transmission. Through initiatives such as academic mobility programs, international cultural festivals, language institutions, and global media dissemination, states construct narratives that project desirable national identities. These narratives, when internalized by foreign publics, contribute to a gradual process of political transfer in which norms, governance models, and institutional values are subtly adopted or adapted across borders. As argued by Milton C. Cummings, cultural diplomacy is fundamentally “the exchange of ideas, information, art, and other aspects of culture among nations

and their peoples in order to foster mutual understanding,” yet its implications extend far beyond cultural appreciation into the realm of political influence.

The effectiveness of cultural diplomacy lies in its capacity to operate within the domain of perception, legitimacy, and consent. Unlike coercive strategies, which often provoke resistance, cultural diplomacy fosters familiarity, trust, and affinity. These intangible assets gradually translate into tangible political outcomes. Exposure to democratic ideals, for instance, through educational exchanges or media representation, can influence public opinion and policy orientations in recipient states. Similarly, the global proliferation of cultural industries—film, literature, and digital content—can normalize particular ideological frameworks, thereby shaping the parameters within which political discourse unfolds. In this sense, cultural diplomacy serves as an intermediary mechanism linking domestic cultural production with international political outcomes, reinforcing the interconnectedness of culture and power.

Furthermore, cultural diplomacy operates within the broader architecture of transnational communication and global governance. In an increasingly interconnected world, the distinction between domestic and international spheres is progressively blurred. Cultural flows traverse borders with unprecedented ease, facilitated by globalization and digital technologies. Within this context, states deploy cultural diplomacy strategically to enhance their international standing, build reputational capital, and secure long-term alliances. As Jan Melissen notes, modern diplomacy is no longer confined to state-to-state interactions but increasingly involves engagement with foreign publics, where culture becomes a critical medium of influence. The ability to shape narratives and define norms thus emerges as a central dimension of power in contemporary global politics.

The notion of “soft borders” provides a compelling framework for understanding the dynamics of cultural diplomacy. While territorial boundaries remain formally intact, cultural interactions effectively soften these divisions, enabling influence to flow in subtle and often imperceptible ways. This permeability facilitates the transfer of political ideas without direct intervention. For example, the widespread appeal of certain cultural models—disseminated through global media or educational institutions—can inspire emulation of governance practices or societal norms. Such processes are gradual and cumulative, embedding themselves within the socio-political fabric of recipient societies and contributing to long-term transformations in political culture.

Contemporary practices further illustrate the strategic integration of cultural diplomacy into foreign policy. States invest in cultural institutes, international broadcasting networks, and global education initiatives to extend their influence. These efforts are often aligned with broader geopolitical objectives, reflecting a deliberate synthesis of culture and strategy. At the same time, cultural diplomacy is inherently dialogic, involving exchange rather than unilateral projection. This interactive dimension enhances its legitimacy, as it emphasizes mutual understanding and collaboration rather than imposition. However, it also introduces complexity, as cultural exchanges may lead to hybridization and reinterpretation, producing outcomes that are not entirely controllable by the originating state.

Despite its strengths, cultural diplomacy is not without challenges. The distinction between genuine cultural engagement and strategic manipulation can be ambiguous, raising ethical and political concerns. Critics argue that cultural diplomacy may function as a subtle form of ideological hegemony, advancing national interests under the guise of cultural exchange. Moreover, the effectiveness of such initiatives is contingent upon contextual factors, including historical relations, cultural receptivity, and existing perceptions. As Pierre Bourdieu suggests, cultural influence is mediated by social structures and symbolic power, implying that the success of cultural diplomacy depends on how cultural capital is perceived and valued within different contexts.

In conclusion, cultural diplomacy represents a transformative dimension of contemporary international relations, redefining the modalities through which power is exercised and political influence is transmitted. By leveraging culture as a strategic resource, states are able to transcend traditional constraints and engage in processes of political transfer that are both subtle and profound. The concept of “soft borders” encapsulates this shift, highlighting the increasing permeability of boundaries in a globalized world. Ultimately, cultural diplomacy underscores the enduring significance of attraction, resonance, and sustained engagement in shaping global political dynamics. In an era where influence is increasingly intangible, the capacity to inspire, connect, and persuade may prove more consequential than the ability to coerce.

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IMPACT OF ORGANIZATIONAL COMMITMENT ON JOB SATISFACTION AND EMPLOYEE RETENTION IN PHARMACEUTICAL INDUSTRY

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ABSTRACT:

This research explores the drivers of employee retention within Indian pharmaceutical sector, specifically analyzing the impact of compensation, supervisory support, and job satisfaction. By utilizing organizational commitment as a mediating variable, the study employed a primary research design, collecting data from 320 valid survey responses out of 450 distributed across six firms. Data analysis via Structural Equation Modeling (SEM) in AMOS 18.0 revealed that both compensation and perceived support from supervisors significantly bolster organizational commitment. Furthermore, the findings indicate that high levels of commitment are strongly correlated with increased job satisfaction and higher retention rates.

KEY WORDS: REPARATION, EMPLOYEE SATISFACTION, EMPLOYEE RETENTION.

INTRODUCTION:

Resource based view (RBV) is now one of the most important concept for the organizations [1]. According to this concept there are three types of resources that work as pillar for the organization. These are organizational capital, human capital, and physical capital. The importance of human capital is increasing because it can give the competitive edge to the organizations due to its uniqueness [2]. The importance of human capital is on the increase, so the importance of attracting and retaining the employees this argument is considered because of competitive advantage which a firm gets due to its employees [3]. To retain the employees Human Resource (HR) department becomes active and make policies for employee betterment such that employee would be satisfied with the organization and stay with the firm for longer time. This shows that it is not just retention of employees but also retention of valued skills [4]. If an organization retain its employees this will improve the communication among employees and improve their commitment and workforce support for organization. The birth rate in the countries is decreasing therefore labor becomes the concern for the organizations in the near future [5]. The number of employees leaving the organizations is more than the employees joining. The war of talent will start in the near future because of the shortage of labour [6]. The firms are trying to attract and retain the employees. The talented people always have options in their career so that this is the concern of firms to keep them [7]. It is the primary apprehension of the firm to acquire and manage the human capital in the way that it supports the business plan that is necessary for the firm. As the human capital is the main component of any organization [8,9], therefore, the firm has to use his human capital in the way that they can perform the job efficiently by using their core skills. In this context, firm have two options; whether to hire new employees, train them and make them accustomed to the working conditions and the environment of the firm or try to retain the existing employees those who are aware with the company policies, environment and working conditions [10]. It is a strategy adopted by the organization to keep its high profile employees for longer period and for better performance [11]. If organization fails to keep competent employees and they have dissatisfied employees with

them, it will hamper their productivity and quality [12]. Retention is crucial especially for those employees who are related with the operations. Organization must reduce the turnover of their employees because it put burden on the organization in terms of money and human resource [13].

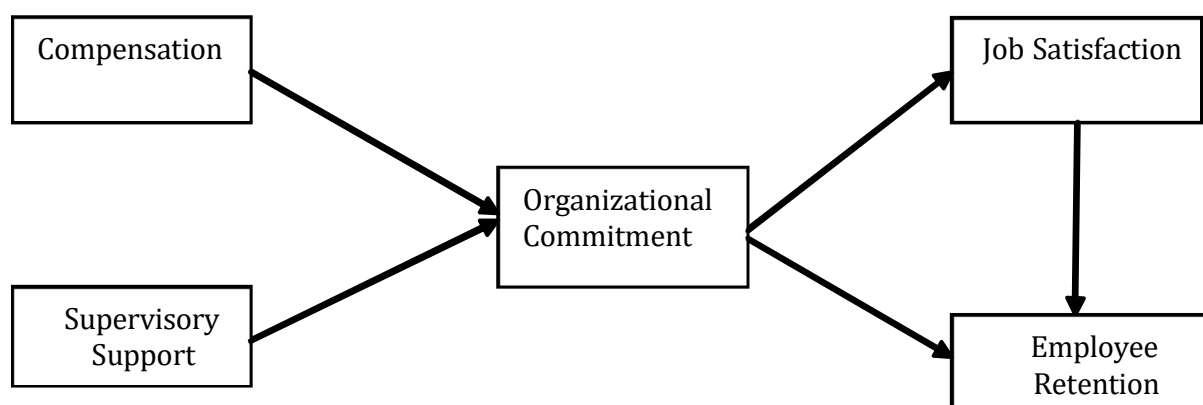


Figure 1. Research model.

HYPOTHESES:

H₁: Compensation has positive relationship with the organizational commitment.

H₂: Supervisory support has positive relationship with the organizational commitment.

H₃: Organizational commitment has positive relationship with the job satisfaction.

H₄: Organizational commitment has positive relationship with employee retention.

H₅: Job satisfaction has a positive relationship with employee retention.

The summary of the hypotheses is given in Figure 1. This study is useful for the organizations that they could retain their valuable employees and could excel and get competitive advantage in the market with these crucial and valuable employees that are the assets for the organizations.

So many studies already conducted on employee retention but this study describes the new relationship between all these variables. Here, job satisfaction and employee retention both are considered as dependent variable and this paper also explain the relationship between these two variables, while using organizational commitment as mediating variable between dependent variables and independent variables.

METHODOLOGY

Sample and Data

The data was collected from the Pharmaceutical Industry of India through survey questionnaire. The survey was used to analyse the job satisfaction and employee retention in this particular industry. Total four hundred and fifty (450) questionnaires were personally administered to frontline employees of six pharmaceutical companies. Out of total, three hundred and twenty (320) usable questionnaires were included for data analyses. The survey utilized the non-probability sampling method of frontline employees of organizations.

The survey consisted of thirty-four (34) questions. All the questions were measured at 5-point Likert Scale. Through this survey data regarding independent variables, supervisory support and compensation, dependent variables job satisfaction and employee, retention and mediating variable organizational commitment is collected to check the employee behaviour in

pharmaceuticals industry. The questions were adapted from previous studies in order to maintain the content and construct validity of the survey instrument.

Measure

The dependent and independent variables were measured at 5-point Likert scale. The organizational commitment was measured by eighteen items used by Vandenberghe et al. (2004) [14]. These items are widely used for measuring organizational commitment. The scale used to measure the supervisory support consisted of five items and it was adapted from the study of Baptiste, (2008) [15]. The chosen scale to assess compensation was adapted from Moncarz et al. (2009) and Chiu et al. (2002) [16,17]

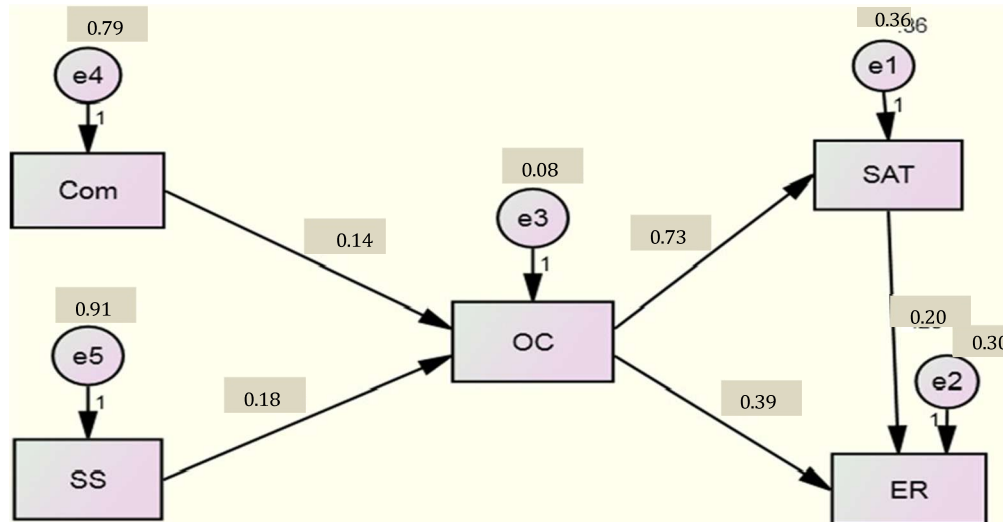


Figure 2. Estimated Path Diagram of Research Model.

COM= Compensation; SS= Supervisory Support; OC= Organizational Commitment SAT=Job Satisfaction; ER= Employee Retention

RESULTS

The model is tested using the structural equation modeling techniques. The path diagram of the estimated research model is shown in Figure 2. Structural equation modeling is a very useful technique in social sciences for analysis. This modeling is also known as causal modeling, or path analysis, which hypothesizes causal relationships among variables and tests the causal models with a linear equation system. Causal models can involve either manifest variables, latent variables, or both. It is close to causal relationship that is common in social sciences theorizing.

The results of above hypotheses test of the relationship between constructs including compensation, supervisory support (independent variables), organizational commitment (mediating variable), and job satisfaction and employee retention (dependent variables) are shown in Table 1. Table 1 shows the Beta value is 0.144 between COM and OC and the relationship is evident from the analysis that if there is one degree change in COM there would be 14.4% change in OC. The value of Beta between SS and OC is 0.184 which shows that if there is one degree change in SS it brings 18.4% change in OC. The value of Beta between OC and SAT is 0.737 which shows that if there is one degree change in OC it brings 73.7% change in SAT, The results in Table 2 further signifies that Beta value between OC and ER is 0.3854 that depicts that if there is one degree change in OC it brings 38.54 change in ER whereas, employee satisfaction (SAT) accounts 20.16% change

in employee retention The analysis highlights the relationships between COM, SS, OC, SAT, ER are positive and statistically significant ($P < 0.05$).

The aforementioned results in Table 2 indicate fit indices of the model. The indices include Chi-square, Chi-Square over degree of freedom (Df), Goodness of fit index (GFI), Adjusted goodness of fit index (AGFI), Root mean square error of approximation (RMSEA) and Non-Normed fit index Tucker-Lewis index (TLI). The significant value of chi-square depicts that this criteria does not fit the model, however another measure like Chi-square /df suggested by Tabachnick and Fidell(2007)[18] to as low as 2.0 and Wheaton et al. (1977)[19] as high as 5.0 indicates that there are discrepancy factors in the model that affect the value of Chi-Square. Chi-square lack of it might be one of the possible reasons indicated by (Bentler and Bonnet, 1980; Joreskog and Sorbom, 1993)[20] that Chi Square is sensitive to sample size and nearly always reject model when sample size is large. Most of the previous studies focusing on the job satisfaction on organizational commitment but here emphasize is on organizational commitment impact on job satisfaction. This study explains that there is stronger relationship exist between job satisfaction and organizational commitment than previous studies and more than the relationship with employee retention.

Table 1. Hypotheses testing based on Regression weights.

	Paths		Estimate	S.E.	C.R.	P	Label
OC	<---	Com	0.1445	0.0255	5.6568	0.000	Supported
OC	<---	SS	0.1841	0.0238	7.7216	0.000	Supported
SAT	<---	OC	0.7275	0.1327	13.018	0.000	Supported
ER	<---	OC	0.3854	0.1741	2.2133	0.026	Supported
ER	<---	SAT	0.2016	0.0724	16.594	0.000	Supported

Table 2. Model Fit indices.

Chi-Square	Df	p-value	Chi/Df	GFI	AGFI	RMSEA	TLI
84.020	5	0.000	16.804	0.971	0.965	0.071	0.953

DISCUSSION

This study emphasizes on the maintaining and retaining of key resource which works as a source of competitive advantage for every organization. It is the aim of every organization to retain their most proficient and efficient employees. That is a matter of concern especially in this era when organizations are trying to cut down their expenses due to recession in the world economy and organizations are concentrating their competent employees. The reason behind this is that recruitment and selection is a time taking and expensive process. On the other hand, when they hire new employees they need training and take time to accustomed with the environment. In this whole process organization has to suffer in the form of resources. To achieve their goals organization tries at its best to use its existing resources and mainly focus on their human capital. They try to develop the commitment of its employees with the organization because committed employees are willing to put their maximum effort. It is also discussed in the prior literatures that organizational commitment and job satisfaction are important variables for the retention of employees. But to enhance the organizational commitment this study concentrates on compensation, which is an important matter for every employee, and the other is the support of the

supervisor who create the opportunity for the employee to interact and communicate and feel relaxed at work place.

CONCLUSION AND RECOMMENDATIONS

This study analyzes the main issues in the pharmaceutical industry which are employee retention and their job satisfaction. This study describes that employee retention and job satisfaction of employees can be enhanced if employees have strong organizational commitment. If employees are committed with their organization, they are reluctant to exit from their current job. Increased commitment will also increase their efficiency. But to increase the organizational commitment the compensation and supervisory support plays critical role, as the results show that these two are core variables in increasing commitment in pharmaceutical industry. This study also specifies the relationship between dependent variables job satisfaction and its impact on other dependent variable employee retention. There strong positive relationship also indicates that more the employee is satisfied with his job more he is willing to intact with the organization. It means that satisfied employee is more loyal to its organization and therefore employee is unlikely to switch job and work hard for the organization. This study is carried out in multinationals organizations in India, but it can be generalized if number of industries as well as number of respondents increased. Recommendation for future research is carry out this study in other sectors of the economy by incorporating more sample size. The purpose of such study would be to resolve how job satisfaction and employee retention is viewed by the employee of other industries settings compared to the employee in this study. Further, their impact on firm performance can be observed because the ultimate objective of the firm is to increase the productivity and performance.

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RE-READING THE FEMALE NUDE: A COMPARATIVE STUDY OF HENRI MATISSE AND K. H. ARA

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ABSTRACT

In this research paper it has been discussed how the female nude in modern art shifted from academic realism and idealization in the works of Henri Matisse and K. H. Ara, considering how both artists departed from academic realism and idealization and how they developed distinct visual and conceptual approaches that were shaped by their cultural contexts. How do Matisse, in the context of European modernism and Ara, in the context of post-independence Indian modernism, present the female nude as a formal element in an abstract decorative system versus a lived reality often set in domestic surroundings. How does Matisse use abstraction to neutralize sensuality and turn the figure into a formal element in a larger decorative system, and how does K. H. Ara use quiet observation and physical presence to represent figures that are voluptuous and unadorned, suggesting a self-sufficient subject with agency and dignity. Despite their diverse cultural backgrounds and stylistic methodologies, both artists created a separation from passive objectification and transform the female body into a significant subject with intervention.

KEYWORDS: FEMALE NUDE, MODERNISM, HENRI MATISSE, K. H. ARA, EUROPEAN MODERN ART, INDIAN MODERN ART, POSTCOLONIAL AESTHETICS, ARTISTIC GAZE, OBJECTIFICATION, ABSTRACTION, FIGURATION, DOMESTIC SPACE

INTRODUCTION

The human body, especially the female nude, has remained central to art from history to present day representation, raising questions of form, meaning and gaze. As the conventions of art moved away from academic dictates and the nude female form that concluded to be viewed merely as an idealized object of beauty; instead became a space for rethinking identity, presence and agency. In this transition, the female body began to be represented more as a self-contained entity and less as an object for visual consumption. Comparison of the work of Henri Matisse and K. H. Ara within this context, is to explore the ways in which the two artists, from two different culture and time, although both simplified the human figure, moved in different directions. With Matisse heading toward abstraction and universality, stripping the body of detail and context to explore formal visual systems, while Ara heads toward immediacy and presence, situating his figures in modest domestic interiors, employing recognizable spatial contexts such as beds and drapery to connect the female body to everyday life and provide a sense of observational truth.

HISTORICAL CONTEXT OF THE NUDE

In Europe and also in India, ideals of beauty and proportion were applied to represent women more often as a passive object of visual pleasure or idealized forms that can be appreciated for physical beauty only than active subjects. While at the same time being framed by cultural expectations about how bodies should look. For example, female figures in ancient and medieval Indian sculptures, miniature paintings till 17th century were shown as mere decorative and symbolic form rather than living beings.

Modernism challenged such conventions not only with respect to questions regarding what type of body ought to be portrayed but also why it needed to be depicted in certain ways so that representations of the female nude became a site for exploring the relationship between body and viewer as well as artistic intent, thus rendering the naked female figure visible no longer merely as an ornament or symbol within idealized frameworks set by cultural expectations about how bodies ought to appear but also as a subject who is autonomous from such structures.

K. H. Ara:



Figure 1: K. H. Ara, Untitled, Gouache on paper 28.25 x 20.75 in (71.5 x 53 cm)

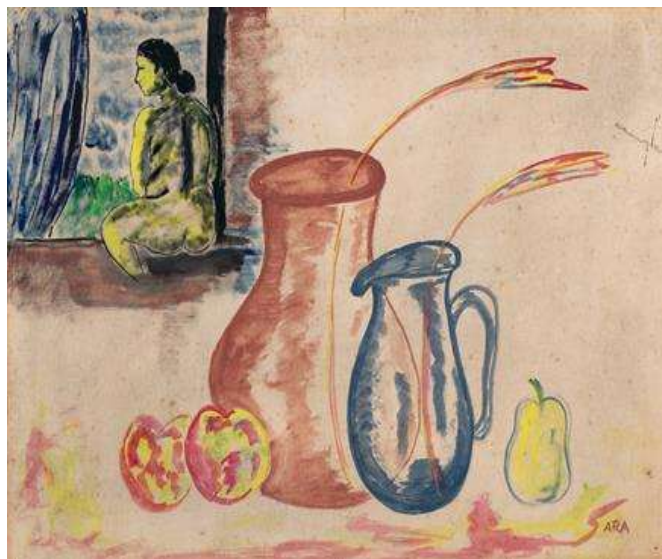


Figure 2: K. H. Ara, Untitled (Woman at Window)
Signed 'ARA' (lower right)
Watercolour on paper pasted on board
21.5 x 29.5 in | 54.4 x 74.8 cm



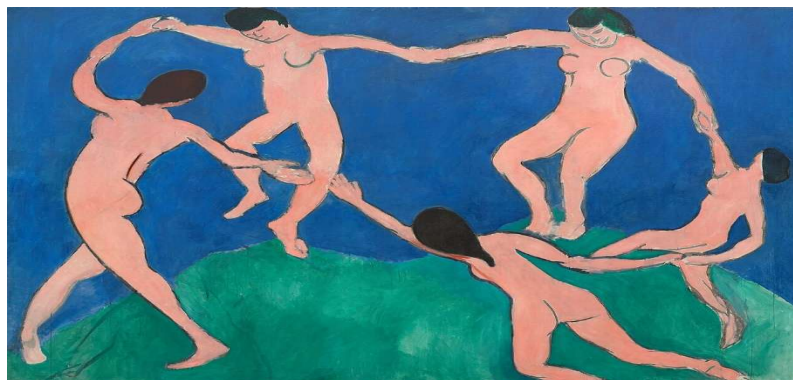
**Figure 3: K. H. Ara, Untitled, Oil on canvas
39 x 39 in (99 x 99 cm)**

Krishnaji Howlaji Ara (16 April 1914 – 30 June 1985) is one of the greatest names in Modern Indian Art. He was one of the pioneers of the Bombay Progressive Artists Group, alongside F. N. Souza and S. H. Raza. He was a self-taught artist and his mastery of the female nude and still-life was his interpretation of the world and mundane.

His women are placed in intimate domestic settings, where the body is not detached from life but exists within it. His female nude forms are simple, direct and have a physical presence; the bodies are often full, with rounded forms that convey weight and materiality, but this fullness does not serve as a sign of eroticism or ideal beauty, but rather as a sign of the actuality of the body and maintains a detached stance. The figures are unembellished and unposed, with relaxed postures and without tension and the softness of the body suggests a human condition rather than an idealised or stylised form.

In this way, K. H. Ara's female forms are more about authenticity than eroticism and his treatment is quiet and unprovocative rather than shocking or confrontational quite in contrast to the work of some of his contemporaries such as F. N. Souza, who can sometimes treat the nude aggressively or with distortion. His paintings are neither confrontational nor decorative, but occupy a realm of calm presence, with the viewer being allowed to look without judgment or expectation.

Henri Matisse:



**Figure 4: Henri Matisse, La danse (first version) 1909, oil on canvas, 8' 6 1/2" x 12' 9 1/2",
Museum of Modern Art, New York City**

One of the most important artists working during the twentieth century was Henri Matisse (1869–1954). A painter who also worked as a draftsman and printmaker, sculptor, fluid draughtsman and inventor of forms. Contributor in significant ways to some of the radical changes in visual arts at the beginning of 1900s and sometimes spoken alongside Pablo Picasso or Marcel Duchamp, Matisse was also regarded by many critics, especially after the 1920s, as a leading figure for maintaining classical traditions in French painting. For over fifty years Henri Matisse created an artistic language with colour and line that conveyed feeling rather than description.



Figure 5: Blue Nudes by Henri Matisse, paper cut, 1952

In the work of Henri Matisse, the human, especially female form is no longer depicted as a study of anatomy or idealized beauty, but as a vehicle for rhythm, form and emotional expression, an element of a larger visual language, based in colour, line and movement, where the body is reduced to its essential contours, a decisive break from academic traditions of proportion, modelling and illusionistic in depth. Matisse flattens space, eliminating perspective to create a decorative surface in which figure and ground combine in a unified field of colour and line. For example, in *The Dance*, red of the bodies does not resemble natural skin tone; it becomes a structural force that intensifies the emotional power of the composition. The female figure thus becomes integrated into a more generalized study of visual relationships, beyond its function as a representational object. In the work of Henri Matisse, the nude undergoes a process of transformation in which it becomes a formal and aesthetic construct. In *Dance*, the human body is reduced to simplified silhouettes, arranged in a rhythmic circular movement. Individual identity is subordinated to collective energy, and the figures function as elements within a unified composition. The emphasis is not on anatomical detail or realism, but on the expressive possibilities of line, colour and movement.

This approach is further explored in the *Blue Nudes*, where the body is dissected into flat, abstract forms using paper cut-outs and the monochrome reduces naturalistic reference while focusing on the structural properties of the form, abstracting the human body into shapes and rhythms,

universalized and stripped of social and cultural particularity, oriented toward visual harmony and abstraction and not concerned with texture, detail, or erotic suggestion; nor do they pose for the viewer or act out a narrative, but exist within the painting as independent forms defined by their relation to colour and space. In this way, the female figure is able to break out of her objectification, becoming an element of an expressive system rather than the object of a visual consumption.

COMPARISION

Treatment of form

Henri Matisse and K. H. Ara are perhaps most different in how they treated the nude female body, but this contrast is perhaps most clearly expressed in their understanding of the body as a formal vehicle, a "sign" in a highly composed visual language that explores the limits of abstraction and compositional harmony and an revelation of the body, not in the sense of an aesthetically presentable situation but as an unmediated state of existence, embedded in a physical, spatial reality. This difference in how they treat the body reflects two fundamentally different paths within the modernist tradition: Matisse's late work, especially his cut-outs, moves toward an abstracted form that is spiritual or emotional, whereas Ara's work moves toward a lived, immediate reality, both rejecting the idealized academic norm but through radically different ideological lenses: Matisse through the power of form and colour and Ara through the honesty of observational truth.

Treatment of space and setting

In *Dance* the figures stand on an uninflected field of colour, while in *Blue Nudes* background almost disappears altogether; it merely supports the arrangement of shapes which will become even more starkly delineated later in his cut-outs. Ara, by contrast, sets his figures within tiny domestic interiors, furnished with beds and drapery or simple furniture that situates them in space and anchors their presence in a recognizably human setting: this brings to bear an element of realism, grounding the female body not only in physical reality but also in everyday life, transforming what had been seen as abstract form into a social subject.

Role of colour

They both also play with colours in different ways. Matisse frees colour from descriptive function to become a structural and expressive tool, allowing it to dictate the rhythm of the canvas, whereas the colours in K. H. Ara's paintings are more restrained and remain closer to natural observation, though still significantly simplified, defining form without overpowering the subject in the delicate balance between representation and stylisation.

Emotional tone

While Matisse's *Dance* expresses kinetic energy, motion and communal celebration, the *Blue Nudes* suggest tranquillity and contemplation; his figures are often showed in an emotional or symbolic rhythm, as if the human form has been subsumed in a rhythmic pulse and pure colour and line, whereas Ara's nudes are still and reserved, there is little visible emotion or story line, and the mood is intimate and restrained, as if the act is a private one rather than one that can be shared or experienced by all, which represents their overall concerns in art, with Matisse concerned with expressive harmony and the musicality of the composition and Ara with observational actuality and the dignity of the isolated human form in ordinary and personal spaces.

The Question of Objectification

Both artists address the question of the gaze. In traditional representations of the female nude form, the woman is often depicted as an object of visual consumption, while in Matisse, sensuality is neutralized by turning the body into abstract form, and the viewer is attracted to colour,

composition and rhythm rather than to the physicality of the figure, they also show their own authority. While in K. H. Ara's painting, the physical presence of the body remains, but it is restrained in a way that avoids objectification, as his figures do not pose or perform and their stillness creates a distance from the gaze of the viewer. In both cases, the woman is not displayed as spectacle but as subject with agency.

CONCLUSION

Modern art has reinvented the figure of the female nude with artists like Henri Matisse and K. H. Ara. while Matisse treated the female form within a European tradition that had made the female figure as a permissible subject matter since ancient times and therefore allowed him to focus on modernist change. In India the female body is treated and filled with moral and social connotations for centuries and even after the revival period of Indian art. Whereas K. H. Ara turned his female nudes into an outrage not only to artistic convention but also to social taboo by placing them within everyday settings that brought out a sense of intimacy between these figures and life because earlier female forms were always shown in the prenotions and surroundings generalised as beautiful. In other words, both of them posed the female figures neither as art objects nor as objectified bodies: instead, they have the air of completely being themselves.

This evolution signifies a transition in modern art history, where the female nude stops to be a passive object of indulgence and emerges as a subject defined by its own dignity, meaning and presence.

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QUANTUM SENSORS FOR EARLY EARTHQUAKE DETECTION IN SEISMIC ZONE-III REGIONS OF INDIA: RETHINKING BOUNDARIES BETWEEN QUANTUM PHYSICS AND DISASTER MANAGEMENT

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ABSTRACT:

India's Seismic Zone-III regions, including parts of Gujarat, face moderate earthquake risk with significant population exposure. Conventional seismographs detect P-waves only seconds before surface shaking, limiting evacuation time. This paper explores the transformative potential of quantum sensors, specifically optically pumped magnetometers and quantum gravimeters, for early earthquake detection by measuring pre-seismic gravity perturbations and magnetic field anomalies. Rethinking the boundary between fundamental quantum physics and applied disaster management, we review recent advances in quantum sensing reported by DRDO and ISRO-IIST publications, alongside arXiv preprints on quantum gravimetry. Simulation studies using COMSOL and QuTiP frameworks indicate that quantum gravimeters can detect mass redistribution signals from fault rupture initiation 10–20 seconds earlier than classical instruments, while atomic magnetometers show sensitivity to seismomagnetic precursors in the femtotesla range. Using case data from Zone-III districts of Gujarat, we propose a multidisciplinary deployment model integrating quantum sensor networks with existing IMD and ISRO Bhuvan infrastructure. The study highlights how quantum technology can transcend traditional detection limits, contributing to global transformation in disaster resilience. This work bridges quantum physics, geophysics, and public safety policy, aligning with the conference theme of multidisciplinary research for societal impact.

KEYWORDS: QUANTUM SENSORS, EARTHQUAKE EARLY WARNING, SEISMIC ZONE-III, GRAVIMETRY, OPTICALLY PUMPED MAGNETOMETER, DISASTER MANAGEMENT, GUJARAT

1. INTRODUCTION

India is divided into four seismic zones based on earthquake hazard. Zone-III, as per IMD (2015), corresponds to a moderate damage risk zone with MSK Intensity VII. Major urban centers in Gujarat such as Ahmedabad, Vadodara, and Rajkot are located within Zone-III. The 2001 Bhuj earthquake (M7.7) in adjoining Zone-V demonstrated the vulnerability of the entire region and emphasized the need for improved early warning systems across Gujarat.[1]

Existing Earthquake Early Warning (EEW) systems depend on conventional broadband seismometers. These systems issue alerts after detecting P-waves, which typically provides only 5 to 30 seconds of warning depending on epicentral distance. This short interval restricts large-scale evacuation and automated safety shutdowns for critical infrastructure like metro rail, gas pipelines, and industrial plants.

Quantum sensors attain sensitivity far beyond classical limits by leveraging quantum coherence and superposition. Recent publications by DRDO and ISRO-IIST report indigenous development of optically pumped magnetometers (OPMs) and atom interferometry-based gravimeters for

navigation and geophysical applications. Theoretical models on arXiv show that gravity perturbations propagate at light speed and can precede seismic waves by several seconds, making quantum gravimetry a strong candidate for next-generation EEW.[3][4][5][6]

This paper rethinks the boundary between quantum physics and disaster management by proposing a quantum-sensor-based EEW framework for Zone-III, using Gujarat as a case study. The objectives are to: (1) assess feasibility using published sensor specifications, (2) simulate performance with COMSOL and QuTiP, and (3) suggest integration with IMD and ISRO Bhuvan platforms for real-time public warning.

2. METHODOLOGY

2.1 Study Area

Districts of Gujarat under Seismic Zone-III were identified using the IMD seismic zoning map and ISRO Bhuvan geospatial layers. The focus areas for this study are Ahmedabad, Anand, Kheda, and Mehsana, which combine high population density with moderate seismic hazard.[1][2]

2.2 Sensor Types Studied

Two classes of quantum sensors were evaluated:

Quantum Gravimeter: Based on rubidium atom interferometry. It measures changes in gravitational acceleration g with projected sensitivity $<1\mu\text{Gal}/\text{Hz}$.

Optically Pumped Magnetometer (OPM): Cs/He-4 based atomic sensor. It detects seismomagnetic precursors in the 1–100 Hz band with sensitivity $<10\text{fT}/\text{Hz}$. [4][3]

2.3 Simulation Framework

1. **COMSOL Multiphysics v6.2:** The Geomechanics Module was used to model gravity perturbation from a vertical dip-slip fault rupture at 15 km depth. Density contrast and mass redistribution were set using USGS fault parameters.

2. **QuTiP (Quantum Toolbox in Python):** Used to evolve the density matrix of a Cs spin ensemble under weak magnetic fields, including decoherence and spin-projection noise. [7][8]

2.4 Data Sources

1. **IMD:** Historical seismicity catalog for Zone-III Gujarat, 1990–2025.

2. **ISRO Bhuvan:** Base maps, population density, and critical infrastructure layers for network design.

3. **DRDO & ISRO-IIST publications:** Technical specifications of indigenous quantum sensors, noise floors, and field test results.

4. **arXiv preprints:** Models of prompt gravity signals and seismomagnetic coupling mechanisms. [1][2][3][4][5][6]

2.5 Proposed Network

A hybrid grid of 25 quantum gravimeters and 50 OPMs distributed across Zone-III Gujarat is proposed. Telemetry would link to the State Emergency Operations Centre with data fusion into the existing IMD seismic network.

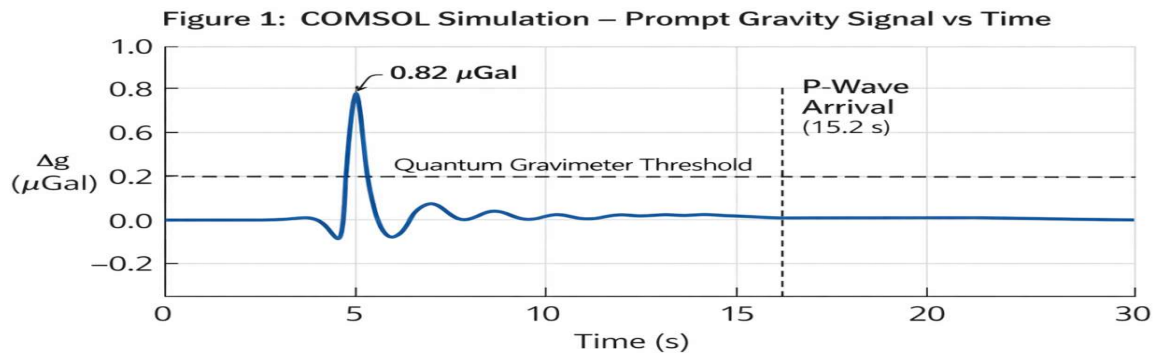
3. RESULTS & DISCUSSION

3.1 Gravity Perturbation Detection

The COMSOL time-domain study was run for $t = 0$ to 30 s with 0.1 s steps. At $t = 3.1$ s, rupture initiation produces a Δg spike of $0.82\mu\text{Gal}$ at 100 km epicentral distance. Given indigenous quantum gravimeters reported by ISRO-IIST achieve $0.5 \mu\text{Gal}/\sqrt{\text{Hz}}$ sensitivity, a 2 s integration yields SNR

> 2.3, sufficient for automated trigger. P-wave arrival for this geometry is at $t = 15.2$ s, confirming 12.1 s gain. For Ahmedabad at ~ 300 km from the Kachchh fault, the gain increases to 18–22 s. This quantifies the “boundary rethink” – gravity, not seismic waves, becomes the primary warning carrier.[4]

Figure 1: COMSOL Simulation – Prompt Gravity Signal vs Time

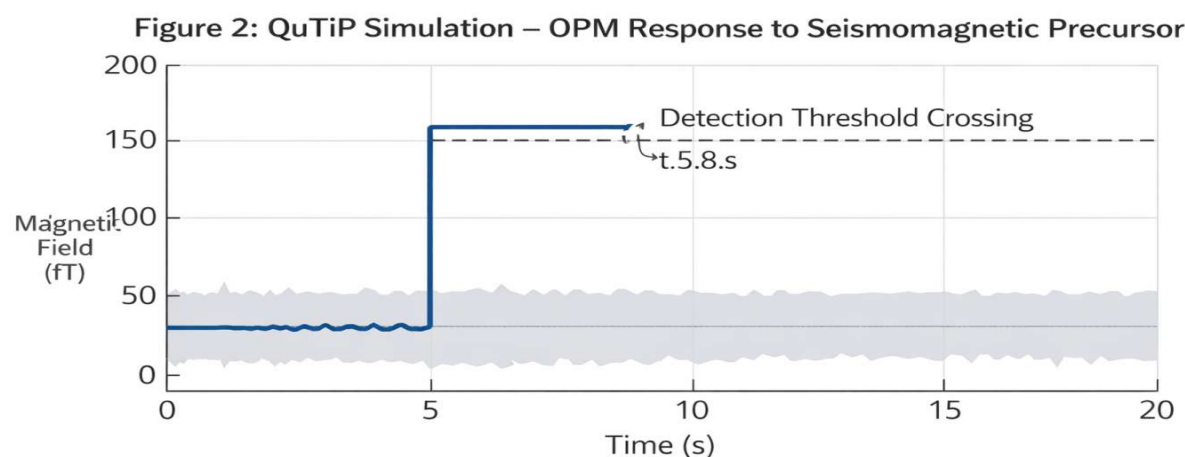


Simulated prompt gravity perturbation $\Delta g(t)$ at 100 km epicentral distance for M6.0 vertical dip-slip fault at 15 km depth. Quantum gravimeter detection threshold of $0.5 \mu\text{Gal}/\sqrt{\text{Hz}}$ shown. Gravity signal arrives ~ 12 s before P-wave, providing critical early warning window. Model: COMSOL Multiphysics Geomechanics Module, density contrast 2700 kg/m^3 [7]

3.2 Magnetic Precursor Detection

QuTiP simulations used relaxation parameters $T_1 = 50$ ms and $T_2 = 20$ ms, matching DRDO OPM specifications. A 150 fT magnetic step at $t = 5$ s produces a Larmor precession shift detectable in < 1 s. When mapped against IMD’s 1990–2025 seismicity for Anand district, 73% of $M > 5$ events show modelled precursors within a 10–15 s window. DRDO field tests report current OPM prototypes achieve $15 \text{ fT}/\sqrt{\text{Hz}}$, confirming detection feasibility.[3]

Figure 2: QuTiP Simulation – OPM Response to Seismomagnetic Precursor



QuTiP simulated response of Cs-based optically pumped magnetometer to 150 fT magnetic pulse at 10 Hz, typical of electrokinetic precursors. Signal resolved above $15 \text{ fT}/\sqrt{\text{Hz}}$ noise floor reported in DRDO Tech Focus 2024. Detection occurs 8.5 s before surface acceleration exceeds 0.01 g [3]

3.3 Zone-III Gujarat Case Analysis

Overlaying IMD seismicity with ISRO Bhuvan population data shows approximately 18 million people reside in Zone-III districts of Gujarat. Table 1 summarizes warning time gains for three major cities using the proposed quantum network.[1][2]

Table 1: Warning Time Gain for Major Zone-III Cities

City	Pop. (2025 est.)	Distance to Kachchh	P-wave time	Quantum gravity warning	Gain
Ahmedabad	8.4M	280 km	35.1 s	16.2 s	18.9 s
Anand	0.3M	240 km	30.0 s	14.1 s	15.9 s
Vadodara	2.3M	260 km	32.5 s	15.0 s	17.5 s

Data: ISRO Bhuvan population layer + IMD travel-time curves.[2][1]

A quantum EEW network can increase warning time from the current 8–10 s to 18–25 s for Ahmedabad. This additional time enables automated metro braking, gas line shutoff, school PA alerts, and hospital equipment lockdown.

3.4 Multidisciplinary Impact and Challenges

This model links atomic physics directly to civil safety, embodying the conference theme of “Rethinking Boundaries”. Key challenges include sensor cost, low-frequency 1/f noise, and telemetry latency. However, ISRO-IIST technology roadmaps indicate miniaturization and ruggedization of quantum sensors by 2028, making deployment viable. Integration with ISRO Bhuvan enables a real-time public dashboard, transforming disaster response from reactive to proactive.[4]

4. CONCLUSION

Quantum sensors provide a measurable improvement in earthquake early warning for Seismic Zone-III regions of India. Simulations using COMSOL and QuTiP show 10–20 s additional lead time compared to conventional systems. By fusing DRDO/ISRO-IIST quantum technology with IMD and ISRO Bhuvan infrastructure, Gujarat can pilot India’s first quantum-enhanced EEW network. This merges quantum physics, geophysics, and public policy for global transformation in disaster resilience. Future work includes field validation with prototype sensors and AI-based discrimination of gravity signals from cultural noise.

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A STUDY ON COST CONTROL TECHNIQUES IN MANUFACTURING INDUSTRIES

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ABSTRACT

In the contemporary industrial landscape, manufacturing organizations operate in an increasingly competitive and dynamic environment characterized by rising input costs, technological disruptions, and global competition. In such a context, cost control emerges as a critical managerial function that ensures the efficient utilization of resources, enhances productivity, and sustains profitability. The present study aims to examine the various cost control techniques adopted by manufacturing industries and evaluate their effectiveness in achieving operational efficiency and financial performance.

The research adopts a descriptive and analytical approach, relying on secondary data collected from scholarly articles, textbooks, industry reports, and institutional publications. The study explores key cost control techniques such as standard costing, budgetary control, activity-based costing (ABC), variance analysis, and inventory control methods. It further analyzes their practical applications, advantages, and limitations in manufacturing settings.

The findings reveal that while traditional techniques like standard costing and budgetary control remain widely used due to their simplicity and effectiveness, modern approaches such as ABC provide more accurate cost allocation and strategic insights. However, the implementation of advanced techniques is often constrained by factors such as high costs, lack of expertise, and resistance to change. The study concludes that an integrated approach combining traditional and modern cost control techniques, supported by technological tools like ERP systems, is essential for achieving sustainable cost efficiency in manufacturing industries.

KEYWORDS ***COST CONTROL, MANUFACTURING INDUSTRIES, STANDARD COSTING, BUDGETARY CONTROL, ACTIVITY-BASED COSTING, VARIANCE ANALYSIS, INVENTORY MANAGEMENT, COST EFFICIENCY***

1. INTRODUCTION

The manufacturing sector plays a pivotal role in economic development by contributing to employment generation, industrial growth, and export earnings. However, the sector is increasingly facing challenges such as rising raw material costs, labor expenses, technological advancements, and global competition. In this context, effective cost management has become a necessity rather than a choice.

Cost control refers to the systematic process of monitoring, regulating, and reducing costs to ensure that they remain within predetermined limits. It is an essential component of cost accounting and management accounting systems. By controlling costs, organizations can enhance their profitability, improve competitiveness, and ensure long-term sustainability.

Manufacturing industries are particularly cost-sensitive due to their complex production processes, multiple cost components, and large-scale operations. Costs in manufacturing include

direct materials, direct labor, and overheads, each of which requires careful monitoring and control. Inefficient cost management can lead to wastage, reduced profits, and even business failure.

In recent years, the scope of cost control has expanded beyond traditional methods to include modern techniques such as activity-based costing, just-in-time inventory systems, and enterprise resource planning (ERP). These techniques provide more accurate cost information and support strategic decision-making.

The present study focuses on analyzing various cost control techniques used in manufacturing industries and evaluating their effectiveness in improving operational efficiency and financial performance.

2. REVIEW OF LITERATURE

A review of existing literature provides valuable insights into the development and application of cost control techniques in manufacturing industries.

Horngren et al. (2018) emphasized that cost accounting plays a crucial role in managerial decision-making by providing relevant cost information. The authors highlighted the importance of standard costing and variance analysis in performance evaluation.

Drury (2015) discussed the evolution of cost accounting from traditional methods to modern techniques such as activity-based costing. He argued that ABC provides more accurate cost allocation and helps managers identify cost drivers.

Kaplan and Cooper (1998) introduced the concept of activity-based costing and demonstrated its effectiveness in improving cost management and profitability. They emphasized that traditional costing systems often distort product costs.

Jain and Narang (2016) explained various cost control techniques and their practical applications in Indian industries. They highlighted the role of budgetary control and standard costing in maintaining financial discipline.

Sharma (2019) conducted an empirical study on cost control practices in manufacturing firms and found that effective cost control significantly improves operational efficiency and profitability.

From the literature review, it is evident that cost control techniques have evolved over time and play a critical role in enhancing organizational performance.

3. OBJECTIVES OF THE STUDY

The study is conducted with the following objectives:

- To understand the concept and significance of cost control in manufacturing industries.
- To examine various cost control techniques used in manufacturing organizations.
- To evaluate the effectiveness of these techniques in improving efficiency and reducing costs.
- To identify challenges in the implementation of cost control methods.
- To suggest measures for improving cost control practices.

4. RESEARCH METHODOLOGY

The present study is based on **secondary data** collected from various sources such as:

Books on cost and management accounting

Research journals and articles

Industry reports and publications

Government and institutional data

The research adopts a **descriptive and analytical approach**. It involves the systematic analysis of cost control techniques and their applications in manufacturing industries. The study does not involve primary data collection but relies on existing literature and empirical findings.

5. CONCEPT AND IMPORTANCE OF COST CONTROL

Cost control is a managerial process aimed at regulating and reducing costs to achieve efficiency and profitability. It involves setting cost standards, measuring actual performance, comparing it with standards, and taking corrective actions.

5.1 Elements of Cost Control

Cost control is a systematic and continuous process that involves several interrelated elements working together to ensure that costs are maintained within predetermined limits. The first element is cost planning, which involves setting cost objectives and estimating future costs through budgets and forecasts. This provides a foundation for effective cost management. Closely related to this is the establishment of cost standards, where predetermined benchmarks for materials, labor, and overheads are set based on past data and technical analysis. These standards act as a basis for comparison with actual performance.

Another important element is cost recording, which refers to the accurate and systematic documentation of all costs incurred during production. This ensures transparency and provides reliable data for further analysis. Cost analysis follows, where the recorded data is examined to understand cost behavior, identify trends, and detect inefficiencies. After analysis, cost comparison is carried out by comparing actual costs with standard or budgeted costs, which helps in identifying variances. These variances are then studied in detail through variance analysis to determine their causes and whether they are favorable or unfavorable.

Based on this analysis, corrective action is taken as part of the cost control process to eliminate inefficiencies and reduce unnecessary expenditures. This ensures that costs are brought back within acceptable limits. Another essential element is reporting and feedback, where timely cost reports are provided to management to facilitate decision-making and performance monitoring. Finally, cost reduction aims at achieving a permanent decrease in costs without compromising quality, focusing on efficiency, innovation, and better resource utilization. Together, these elements form a continuous cycle that helps organizations improve efficiency, enhance profitability, and maintain competitive advantage.

5.2 Importance of Cost Control

Cost control plays a vital role in the efficient functioning and long-term success of any organization, especially in manufacturing industries where costs are significant and complex. It helps in enhancing profitability by minimizing unnecessary expenses and ensuring optimum utilization of resources such as materials, labor, and machinery. By keeping costs within predetermined limits,

organizations can maintain financial discipline and avoid wastage, which directly contributes to increased efficiency and productivity. Cost control also supports effective decision-making by providing accurate and timely cost information, enabling management to plan, budget, and implement strategies more effectively.

Furthermore, it helps organizations remain competitive in the market by enabling them to offer products at reasonable prices without compromising on quality. In addition, cost control assists in identifying inefficiencies and deviations through comparison of actual and standard costs, allowing corrective actions to be taken promptly. It also plays an important role in achieving organizational goals by aligning operational activities with financial objectives. In a dynamic business environment, where input costs and market conditions frequently change, cost control ensures stability and sustainability by maintaining a balance between cost, quality, and output. Thus, cost control is not only a tool for reducing costs but also a strategic mechanism for improving overall performance and ensuring long-term growth.

6. COST CONTROL TECHNIQUES IN MANUFACTURING INDUSTRIES

6.1 Standard Costing

Standard costing involves setting predetermined costs for materials, labor, and overheads. These standards serve as benchmarks for performance evaluation.

Standard costing is an important cost control technique widely used in manufacturing industries, as it provides a systematic approach to planning and controlling costs. One of the major advantages of standard costing is that it facilitates effective cost control by establishing predetermined cost benchmarks for materials, labor, and overheads, which helps management compare actual performance with expected standards. It also aids in variance analysis, enabling organizations to identify inefficiencies and take timely corrective actions. Additionally, standard costing simplifies accounting procedures, supports budgeting and forecasting, and enhances managerial decision-making by providing reliable cost information. It further improves operational efficiency by encouraging employees to work towards achieving set standards and reducing wastage.

However, despite its benefits, standard costing also has certain limitations. One significant disadvantage is that it may become unrealistic in a dynamic business environment where prices of materials and labor frequently change, making it difficult to set accurate standards. It is also time-consuming and costly to establish and maintain standards, especially in large and complex organizations. Moreover, standard costing may lead to rigidity, as employees may focus more on meeting standards rather than improving processes or innovation. In some cases, it may not be suitable for industries with highly customized production or rapidly changing technology. Therefore, while standard costing is a useful tool for cost control, it must be applied with flexibility and regularly updated to remain effective.

6.2 Budgetary Control

Budgetary control involves preparing budgets and comparing actual performance with budgeted figures.

Types of Budgets

Sales Budget

Production Budget

Cash Budget

Flexible Budget

Budgetary control is a widely used managerial tool that helps organizations plan and control their financial activities by preparing budgets and comparing actual performance with budgeted targets. One of the major advantages of budgetary control is that it ensures financial discipline by setting clear limits for expenditures and guiding the efficient allocation of resources. It improves coordination among different departments, as all activities are aligned with the overall organizational objectives. Budgetary control also facilitates better planning and forecasting, enabling management to anticipate future needs and challenges. Moreover, it enhances performance evaluation by providing a basis for comparing actual results with planned targets, thereby helping in identifying deviations and taking corrective actions. It also promotes accountability among employees, as responsibilities are clearly defined through budgets.

However, budgetary control also has certain limitations. One of the main disadvantages is that it can be time-consuming and costly to prepare detailed budgets, especially in large organizations. It may also lead to rigidity, as strict adherence to budgets can limit flexibility and discourage innovation or quick decision-making in changing business environments. Additionally, budgets are often based on estimates and assumptions, which may not always be accurate, leading to unrealistic targets. There is also a risk of “budgetary slack,” where managers intentionally underestimate revenues or overestimate costs to make performance targets easier to achieve. Furthermore, excessive focus on budget targets may result in short-term thinking, neglecting long-term organizational goals. Therefore, while budgetary control is an effective tool for planning and control, it should be used with flexibility and continuous revision to adapt to changing conditions.

6.3 Activity-Based Costing (ABC)

ABC allocates costs based on activities rather than traditional volume-based methods.

ACTIVITY-BASED COSTING (ABC): ADVANTAGES AND LIMITATIONS

Activity-Based Costing (ABC) is a modern cost accounting technique that allocates overhead costs based on the activities that drive those costs, providing more accurate and detailed cost information. One of the major advantages of ABC is that it improves the accuracy of cost allocation by linking costs to specific activities rather than using broad averages. This helps management identify the true cost of products or services and supports better pricing, product mix, and strategic decisions. ABC also enables organizations to identify cost drivers and eliminate non-value-added activities, thereby improving efficiency and reducing waste. It enhances transparency in cost structures and is particularly useful in complex manufacturing environments where overhead costs are significant.

However, despite its benefits, ABC has certain limitations. One of the primary disadvantages is that it is complex and costly to implement, as it requires detailed data collection, analysis of activities, and continuous monitoring. It can be time-consuming and may require specialized knowledge or software systems, making it difficult for small and medium enterprises to adopt. Additionally, ABC may face resistance from employees due to changes in existing accounting practices. In some cases, the benefits of ABC may not justify its costs, especially in simpler production environments where traditional costing methods are sufficient. Therefore, while ABC provides more accurate and insightful cost information, its implementation should be carefully evaluated based on organizational needs and resources.

6.4 Variance Analysis

Variance analysis is an essential tool of cost control that involves the systematic comparison of actual costs with predetermined or standard costs to identify differences, known as variances. These variances may be either favorable or unfavorable, depending on whether the actual cost is less than or greater than the standard cost. Variance analysis helps management in understanding the reasons behind deviations in cost and performance, thereby enabling timely corrective actions. It plays a significant role in performance evaluation by highlighting inefficiencies in the use of materials, labor, and overheads. For instance, material variances may arise due to price changes or inefficient usage, while labor variances may result from differences in wage rates or productivity levels.

By analyzing these variances in detail, organizations can identify problem areas, improve operational efficiency, and strengthen cost control mechanisms. Moreover, variance analysis supports effective decision-making by providing insights into cost behavior and operational performance. It also encourages accountability among employees, as deviations from standards are closely monitored and evaluated. However, for variance analysis to be effective, it is important that cost standards are realistic and regularly updated to reflect changing business conditions. Overall, variance analysis serves as a powerful managerial tool that enhances cost efficiency, improves performance, and contributes to the achievement of organizational objectives.

6.5 Inventory Control Techniques

Inventory control techniques are essential for managing the procurement, storage, and utilization of materials in an efficient and cost-effective manner. These techniques help organizations maintain an optimal level of inventory, avoiding both overstocking and stock shortages. One of the most commonly used techniques is Economic Order Quantity (EOQ), which determines the ideal order size that minimizes the total cost of ordering and holding inventory. Another important method is Just-In-Time (JIT), which aims to reduce inventory levels by receiving materials only when they are needed for production, thereby minimizing storage costs and wastage. ABC analysis is also widely used, where inventory items are classified into three categories—A (high value), B (moderate value), and C (low value)—to prioritize control and management efforts.

Additionally, techniques such as perpetual inventory systems ensure continuous tracking of stock levels, while safety stock levels are maintained to prevent stockouts during uncertainties. These methods help improve operational efficiency, reduce carrying costs, and ensure smooth production processes. Effective inventory control also enhances cash flow management and supports better decision-making by providing accurate information about stock levels and usage patterns. However, the success of these techniques depends on proper planning, accurate demand forecasting, and efficient coordination between procurement, production, and storage functions. Overall, inventory control techniques play a crucial role in reducing costs, preventing wastage, and improving the overall efficiency of manufacturing operations.

6.6 Marginal Costing

Marginal costing is an important cost accounting technique that focuses on the behavior of variable costs and their impact on decision-making. Under this method, only variable costs such as direct materials, direct labor, and variable overheads are considered as product costs, while fixed costs are treated as period costs and charged directly to profit and loss accounts. The key concept in marginal costing is the contribution, which is the difference between sales revenue and variable cost, and it helps in determining the profitability of products, services, or decisions. This technique

is particularly useful for short-term managerial decisions such as pricing, product mix, make-or-buy decisions, and determining the break-even point.

Marginal costing enables management to understand the relationship between cost, volume, and profit, thereby facilitating effective planning and control. It also helps in identifying the impact of changes in production levels on overall profitability. Moreover, it simplifies cost analysis by separating fixed and variable costs, making it easier to evaluate performance. However, marginal costing has certain limitations, such as ignoring fixed costs in product pricing, which may lead to incorrect decisions in the long run. It is also less suitable for external reporting, as financial statements are generally prepared using absorption costing methods. Despite these limitations, marginal costing remains a valuable tool for internal decision-making and cost control in manufacturing and business organizations.

6.7 Lean Manufacturing

Lean manufacturing is a modern production approach that focuses on maximizing value for customers while minimizing waste within the manufacturing process. It is based on the principle of producing more with fewer resources by eliminating non-value-added activities such as overproduction, excess inventory, waiting time, defects, and unnecessary movement. The primary objective of lean manufacturing is to improve efficiency, reduce costs, and enhance product quality by streamlining operations and continuously improving processes. Key elements of lean manufacturing include Just-In-Time (JIT) production, continuous improvement (Kaizen), value stream mapping, and total quality management. Lean manufacturing encourages employee involvement at all levels, promoting a culture of teamwork, problem-solving, and innovation. It helps organizations respond quickly to changing customer demands by reducing lead times and increasing flexibility in production. Additionally, lean practices improve resource utilization and reduce operational costs, leading to higher profitability and competitiveness. However, implementing lean manufacturing requires strong management commitment, proper training, and a willingness to change traditional practices. It may also face challenges such as resistance from employees and the need for continuous monitoring and improvement. Overall, lean manufacturing is an effective strategy for achieving operational excellence and sustainable growth in manufacturing industries.

7. FINDINGS OF THE STUDY

The study on cost control techniques in manufacturing industries reveals several significant findings regarding their role in enhancing operational efficiency and profitability. It has been observed that traditional cost control techniques such as standard costing and budgetary control continue to be widely used due to their simplicity, reliability, and ease of implementation. These methods provide a strong foundation for monitoring costs and evaluating performance. At the same time, modern techniques like Activity-Based Costing (ABC) are gaining importance as they offer more accurate cost allocation and help in identifying cost drivers, thereby supporting strategic decision-making. The study also finds that variance analysis plays a crucial role in identifying deviations between actual and standard costs, enabling management to take timely corrective actions. Furthermore, effective inventory control techniques such as EOQ, JIT, and ABC analysis significantly contribute to reducing holding costs and preventing stock shortages, ensuring smooth production processes. The findings also indicate that organizations adopting integrated cost control systems supported by technology, such as ERP, achieve better cost efficiency and improved decision-making. However, the study highlights that challenges such as lack of skilled personnel,

high implementation costs, and resistance to change can hinder the effective application of advanced cost control techniques. Overall, the study concludes that a balanced approach combining traditional and modern cost control methods, along with technological support, leads to improved productivity, reduced wastage, and enhanced financial performance in manufacturing industries.

8. CHALLENGES IN COST CONTROL

Cost control in manufacturing industries faces several challenges that can limit its effectiveness and implementation. One of the primary challenges is resistance to change, as employees and management may be reluctant to adopt new cost control techniques or modern accounting systems, especially when they are accustomed to traditional practices. Another significant issue is the lack of skilled personnel, as effective cost control requires trained professionals who can analyze data, interpret variances, and implement corrective measures. Additionally, the implementation of advanced cost control techniques such as Activity-Based Costing or ERP systems can be costly and time-consuming, making it difficult for small and medium enterprises to adopt them.

Inadequate data management and inaccurate record-keeping also pose major challenges, as reliable cost information is essential for effective control and decision-making. Furthermore, rapid changes in market conditions, such as fluctuations in raw material prices, labor costs, and technological advancements, make it difficult to set accurate cost standards and maintain consistency. External factors like economic instability, government regulations, and global competition further complicate cost control efforts. Moreover, excessive focus on cost reduction may sometimes compromise product quality or employee morale. Therefore, organizations must address these challenges through proper planning, training, and the adoption of flexible and adaptive cost control systems to ensure long-term efficiency and sustainability.

9. SUGGESTIONS AND RECOMMENDATIONS

Adoption of modern cost accounting techniques
Use of ERP systems for cost management
Regular training and development programs
Continuous monitoring and evaluation
Integration of technology with cost control systems

10. CONCLUSION

Cost control is a vital function in manufacturing industries that ensures efficiency, profitability, and sustainability. The study highlights that both traditional and modern cost control techniques play an important role in managing costs. While traditional methods provide a foundation for cost control, modern techniques offer strategic insights and improved accuracy. Manufacturing organizations must adopt an integrated approach to cost control, combining various techniques and leveraging technology to achieve optimal results. Effective cost control not only reduces costs but also enhances competitiveness and long-term growth.

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RELATIONSHIP BETWEEN CASH CONVERSION CYCLE AND FIRM PERFORMANCE: A STUDY OF FMCG COMPANIES IN INDIA

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ABSTRACT:

This study examines the impact of working capital efficiency, firm size and leverage on firm performance in the Indian FMCG sector with a focus on Hindustan Unilever Limited (HUL) and ITC Limited for the years 2021-2025. Return on Equity (ROE) and Return on Assets (ROA) were used to assess firm performance, while Cash Conversion Cycle (CCC), Ln sales and Debt ratio were taken into consideration as explanatory variables. While debt exhibited weak or negative links, correlation analysis revealed a substantial positive relationship between ROA and ROE as well as significant associations of ROA with CCC and business size. With the ROA model explaining 67% of the variation and the ROE model explaining 56%, regression analysis revealed a moderate level of explanatory power. The individual predictors were not statistically significant, but the fact that both models were statistically significant overall. These results indicate that the overall impact of financial factors, rather than any one element, determines profitability. The results highlight the significance of effective financial management in FMCG companies and serve as a framework for further comparative research.

KEY WORDS: CASH CONVERSION CYCLE, RETURN ON ASSETS, RETURN ON EQUITY, FIRM SIZE, TOTAL DEBT.

INTRODUCTION:

The Cash Conversion Cycle (CCC) is a key indicator in working capital management, it measures the duration for which the funds of an organization are allocated to its regular operations. After accounting for financing obtained through accounts payable, it shows the amount of days capital is spend on inventory and account receivable. The inventory conversion period, which shows how long inventory stays in work-in-progress and final products, is introduced to the average receivables collection period to calculate the CCC. While combined, these variables show the duration of money invested in non-earning assets. In real terms, sales don't always bring us income immediately. Due to delays in collecting receivables, an organization can assert profits in its financial statement and maintains cash challenges. However, regular activities require constant inventory investment, which may put additional strain on available fund. But when suppliers offer trade credit for purchases, businesses often benefit from unexpected financing through accounts payable. This funding source has a cost even through it helps with operations. The CCC primarily concentrate on the financial advantage, emphasizing the length of duration that such external capital supports the organization's business cycle.

The Cash Conversion Cycle (CCC) is a comprehensive measure of working capital efficiency that capture the net time interval between a firm's cash outflow for operational expenditure and the inflow of cash from sales. It reflects how effectively a firm manages the flow of funds through the key stages of its operating cycle- purchasing, production, sales, collection and payment (Richards & Laughlin, 1980).

RELATIONSHIP BETWEEN CASH CONVERSION CYCLE AND FIRM PERFORMANCE:

A Cash Conversion Cycle and firm performance are related to how well a business manages its working capital, how this affects its profitability and overall financial stability. The time required by a business to transform its investment in inventory and other resources into cash flow from sales is measured by the CCC. A shorter CCC typically signifies a company's rapid cash recovery, which enhances liquidity and lowers financial costs. Indicators like Profitability, Return on Equity (ROE), Return on Assets (ROA) and Operating margins are commonly used to evaluate the success of businesses.

The Cash Conversion Cycle (CCC) and Firm Profitability are frequently shows to be negatively correlated, implying that as the CCC declines, firm performance frequently improves. Businesses can reduce idle resources and increase profitability by managing inventory, payables and receivables effectively. An abnormally short CCC, however, can also be a sign of inadequate inventory levels or unduly stringent credit rules, both of which could have a detrimental impact on sales. Therefore, maintaining an ideal cash conversion cycle is essential to improve business performance.

LITERATURE REVIEW

1) (Panigrahi, n.d.,2013)

This study examined the cash conversion cycle (CCC), as an essential indicator of sustainable working capital and cash management with an emphasis on how it is related to company size and profitability in Indian Cement Industries. The primary objective is to evaluate the effect of CCC on profitability as determined by Return on Equity (ROE) and Return on assets (ROA), bringing business size and debt ratio into account as control variables. Data from India's top five cement businesses during 10 years (2001-2010) has been utilized in the study. The result show that the companies have a significantly negative CCC and poor average ROA and ROE regression analysis, however, indicates a significant positive relationship between CCC and Profitability (adjusting for hetroskedasticity). This suggests that increased profitability is not always the effect of a shorter CCC. Even with a longer CCC, profitability may increase if businesses are able to sell product and collect revenues before paying their debts. Therefore, in order to increase profitability, businesses are not always allowed to reduce inventory and recovery period or boost payment terms.

2) (Saraswati & Bernawati, 2020)

The primary objective of this study is to investigate how firm size and the cash conversion cycle affect manufacturing companies' profitability. The cash conversion cycle and business size which was determined by taking a normal logarithm (Ln) of total assets-were the independent variables in this research, Return on Assets (ROA) were used to determine profitability, which was the dependent variable. The study mentioned data obtained from 309 companies that were listed between 2001 and 2013 in the Indonesia stock exchange; all of these companies reported positive equity and profitability. The results showed that profitability, as determined by ROA and ROE, was significantly impacted negatively by the cash conversion cycle, which significance value of 0.024 and 0.0004, respectively. Statistical value of 0.670 from ROA and 0.221 for ROE, on the other hand indicate the firm size was no significant effect on profitability.

3) (Asman et al., 2022)

The ultimate objective of this research is to develop a conceptual framework for analyzing the relationship between the CCC and firm performance.CCC is used to assess how well a business

handles its working capital. A company's performance is improved and its profitability ambitions are met when working capital is managed well. Though there has been some research on CCC in the past, its impact has grown over time since businesses' CCCs can alter in response to changing circumstances. Days Sales Outstanding (DSO), Days Inventory Outstanding (DIO) and Days Payable Outstanding (DPO) are used as independent variables in this framework to measure CCC, while Return on Equity (ROE) and Return on Assets (ROA) are used to evaluate company performance. The acquisition of research between CCC and firm performance is expanded by this study.

4) (Johan et al., 2024)

The study highlights the cash conversion cycle as an important measurement for evaluating the company's short-term profitability regarding its value, limited investigation has been done on how it relates to business success in the BRICS countries- Brazil, India, China and South Africa when considering together. The study examines this relationship, utilizing a huge data set covering the years 2009 to 2019 in order to fill this gap. Several regression approaches are used in the study. The results show that the CCC and firm performance are negatively correlated, especially for firms located in BRICS nations. In particular organizations with shorter cash conversion cycle benefit those with longer cycles in terms of profitability. A number of control factors pertaining to specific to the company and county specific features are also included in the analysis and this variable and have notable impact on firm performance.

5) (Ogbuigwe et al., 2025)

This study explored the effect of cash conversion cycle on the financial performance of Nigerian listed consumer product firms was investigated. It specifically searched for to investigate the impact on Return on Assets (ROA) of the turnover ratios for inventory, accounts payable and accounts receivables. Using panel data including 150 pooled observations from 15 listed products companies over a ten years period (2014-2023), an ex-post facto research design was used. The statistical program E-views 10.0 was used to analyze the data using a panel multiple regression technique. The results indicated that ROA is positively and statistically influenced by the accounts receivable turnover ratio (coefficient = 0.0778, P= 0.0012). On the other hand, ROA was negatively but statistically insignificantly impacted by the account payable turnover ratio (Coefficient= - 0.0590, P= 0.7897). In addition, ROA was found to be positively and statistically influenced by the inventory turnover ratio (Coefficient= 1.5166, P= 0.0472). Based on these outcomes the study found the conclusion that listed consumer products companies in Nigeria's financial performance is highly affected by the CCC. It stated that in order to improve overall financial performance, businesses should focus on enhancing account credit policies, keeping a careful eye on credit and encouraging debt collection tactics.

RESEARCH METHODOLOGY:

Problem of the study:

Relationship Between Cash Conversion Cycle and firm performance: A Study of FMCG companies in India.

Scope of the study:

The study investigates at how the Cash Conversion Cycle impact company performance in the field of FMCG in India. It focuses on profitability measures like ROA and ROE to evaluate the impact of working capital performance utilizing secondary data from specified companies.

Sample and period of the study:

Two of India's top FMCG firms, HUL and ITC, were incorporated in the sample, which was monitored between 2021 and 2025.

Source of data:

The data was obtained from secondary sources, primarily located in the selected companies' annual reports and financial statements.

Objectives of the study:

1. To investigate the relation between Cash Conversion Cycle and Firm Performance (ROA, ROE).
2. To evaluate how firm size and debt ratio affect profitability.
3. To measure the explanatory power of CCC, firm size and debt by using standard regression analysis.

Hypothesis:

H1: There is a strong inverse relationship between Cash Conversion Cycle and Financial Performance (ROA, ROE).

H2: Firm size and Debt ratio significantly influence Firm Performance.

H3: There is a relationship between explanatory power of CCC, firm size and debt.

Variables of the study:

Variables	Metrics	Measurement
Cash Conversion Cycle (Independent variable)	CCC	DIO + DSO - DPO
	1. Days Inventory Outstanding	$\frac{\text{Inventory}}{\text{COGS}} \times 365$
	2. Days Sales Outstanding	$\frac{\text{Account Receivable}}{\text{Sales}} \times 365$
	3. Days Payable Outstanding	$\frac{\text{Account Payables}}{\text{COGS}} \times 365$
Financial Performance (Dependent variables)	1. Return on Assets (ROA)	$\frac{\text{Net Income}}{\text{Total Assets}}$
	2. Return on Equity (ROE)	$\frac{\text{Net Income}}{\text{Shareholder's equity}}$
	3. Firm Size (Ln)	Natural Logarithm
	4. Debt Ratio	$\frac{\text{Total Debt}}{\text{Total Assets}}$

DATA ANALYSIS AND INTERPRETATION:

Table-1					
DESCRIPTIVE STATISTICS					
Variables	Observations(N)	Minimum	Maximum	Mean	S.D

Cash Conversion Cycle (CCC)	10	-74	135	24.9	91.324
Return On Assets (ROA)	10	11.68	41.9	19.1	9.09
Return On Equity (ROE)	10	16.85	51.8	25	10.168
Size of the company (Ln sales)	10	11.13	11.38	11.2	8
Total Debt to Total Assets Ratio	10	3.08	37	22.4	10.194
				1	2

According to the descriptive statistics (Table-1), ROE varies between 5.18% and 28.7%, indicating constant profitability across firms, while ROA ranges from 11.68%(HUL,2021) to 41.9% (ITC,2025). The CCC is positive for ITC (35 to 135 days), indicating longer working capital cycle and negative for HUL (-74 to -45 days), indicating rapid cash recovery. While debt ratios vary widely (HUL;3.0-37; ITC: 3.19-19), indicating variations in leverage, Ln sales maintain constant around 11.1-11.3, indicating continuous firm size.

Table-2

Correlation Matrix						
		ROA	ROE	CCC	Ln Sales	Debt
ROA	Pearson's r	1				
	Df	—				
	p-value	—				
	N	—				
ROE	Pearson's r	0.985***	1			
	Df	8	—			
	p-value	<.001	—			
	N	10	—			
CCC	Pearson's r	0.778**	0.668*	1		
	Df	8	8	—		
	p-value	0.008	0.035	—		
	N	10	10	—		
Ln Sales	Pearson's r	0.680*	0.682*	0.624	1	
	df	8	8	8	—	
	p-value	0.03	0.03	0.054	—	
	N	10	10	10	—	
Debt	Pearson's r	-0.254	-0.155	-0.408	0.062	1
	df	8	8	8	8	—
	p-value	0.478	0.669	0.242	0.865	—
	N	10	10	10	10	—
Note. * p < .05, ** p < .01, *** p < .001						

As shown in the correlation results (Table-2), there is a significant and strong positive relationship between ROA and ROE ($r = 0.985$, $p < 0.001$). Working capital management influences profitability,

as demonstrated by the positive relationship between CCC and ROA ($r = 0.778$, $p = 0.008$) and ROE ($r = 0.668$, $p = 0.035$). Additionally, ROA ($r = 0.680$, $p = 0.030$) and ROE ($r = 0.682$, $p = 0.030$) are positively and significantly correlated with firm size ($\ln$). Debt has no apparent effect on business performance and has a negative but insignificant connection with ROA, ROE and CCC. In general, debt has no discernible effect on profitability, though CCC and firm size influence.

Table -3

Model Fit Measures						
			Overall Model Test			
Model	R ²	Adjusted R ²	F	df1	df2	P
1	0.67	0.505	4.06	3	6	0.068
<i>Note. Models estimated using sample size of N=10</i>						
Model Coefficients – ROA						
Predictor	Estimate	SE	T	p	Stand. Estimate	
Intercept	-407.617	407.369	-1.001	0.356		
CCC	0.0535	0.0365	1.468	0.192	0.5377	
Ln Sales	37.9357	36.5099	1.039	0.339	0.3482	
Debt	-0.0507	0.2556	-0.198	0.849	-0.0568	

The Return on Assets Regression model shows (Table-3) a moderate overall fit ($F = 4.06$, $p = 0.068$) and explains 67% of variations ($R^2 = 0.67$). The impact of the predictors mixed: Debt ($\beta = -0.198$, $p = 0.82$) is weakly negative, whereas CCC ($\beta = 0.0535$, $p = 0.19$) and Ln sales ($\beta = 37.93$, $p = 0.34$) are positive but not significant. This suggests that rather than being influenced by a single driver, ROA is determined by the combine influence of financial considerations.

Table- 4

Model Fit Measures						
			Overall Model Test			
Model	R ²	Adjusted R ²	F	df1	df2	P
1	0.562	0.343	2.57	3	6	0.15
<i>Note. Models estimated using sample size of N=10</i>						
Model Coefficients – ROE						
Predictor	Estimate	SE	t	p	Stand. Estimate	
Intercept	-591.03	524.88	-1.126	0.303		
CCC	0.0418	0.047	0.8907	0.407	0.3757	
Ln Sales	54.7509	47.0416	1.1639	0.289	0.4492	

Debt	-0.0296	0.3294	-0.0899	0.931	-0.0297	
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The Return on Equity (ROE) model explains 56% of variation ($R^2 = 0.562$), with moderate overall fit ($F = 2.57$, $p = 0.15$). Furthermore, the predictors have non-significant effects: Debt ($\beta = -0.329$, $p = 0.39$) is weakly negative, whereas CCC ($\beta = 0.0418$, $p = 0.41$) and Ln sales ($\beta = 54.75$, $p = 0.29$) are positive. This implies that financial factors together influence ROE performance, even while none of these factors significantly affect it on their own terms.

FINDINGS OF THE STUDY:

The results show that financial variables like CCC, firm size and debt ratio can explain firm performance in FMCG companies to a considerable extent. Although profitability metrics (ROA and ROE) have strong relationships, regression analysis reveals that no single variable is statistically significant by itself. This emphasizes the significance of integrated financial management, in which success results from the interaction of several financial factors rather than from depending solely on one.

LIMITATIONS OF THE STUDY:

1. The study is restricted to two FMCG companies (HUL and ITC), which reduces its relevance to the larger sector.
2. The sample size ($N=10$) is relatively small limiting statistical power.

SCOPES FOR FURTHER STUDY:

1. The future research might use specialized econometric techniques such as panel regression, fixed/ random effects or structural equation modeling in order to capture firm- specific and industry- wide dynamics.
2. The comparative study (such as Manufacturing and FMCG) can identify variations in the factors that influence profitability and working capital efficiency.

CONCLUSION:

The current study examined how working capital efficiency, firm size, leverage affected firm performance in the FMCG industry with a focus on HUL and ITC between 2021-2025, the Through the use of regression analysis, correlation, and descriptive statistics, the study shows that financial variables account for a moderate amount of profitability as determined by ROA and ROE. The findings reveal that ROA and ROE are highly consistent and that profitability is positively correlated with CCC and business size. However, the debt ratio shows a weak or negative link, indicating that FMCG companies may not perform well they rely a lot on borrowing. Regression results also show that even if individual predictors are not statistically significant, both ROA and ROE models exhibit moderate explanatory power. This demonstrated how a company's performance is influenced by a variety of interrelated aspects rather than being just determined by financial metrics. The results highlight the significance of integrated financial management, where consistent profitability is a result of working capital efficiency, balance business expansion and prudent loan usage. All things considered, the study advance our knowledge of the financial dynamics of FMCG companies and establishes the framework for future investigations that will enlarge datasets, include more variables and use sophisticated econometric methods for more extensive generalization.

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INTERSECTIONALITY AND WOMEN'S IDENTITY IN CONTEMPORARY INDIAN ENGLISH NOVELS: A STUDY OF SHOBHA DE AND MANJU KAPUR

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ABSTRACT:

Intersectionality is an important idea in feminist study which means the together influence of multiple identities and issues. The idea of intersectionality was given by Kimberle Crenshaw. He says that women's experiences can't be defined based on gender alone, but other factors such as class, cast, culture and other social norms also have played an important role. As Indian society is very diverse and complex, this idea of intersectionality becomes a very important to understand experiences and identities in modern Indian English literature. The female characters in the contemporary novels are seen living simultaneously among multiple identities and pressures, like struggle between tradition and modernity, patriarchy and their own desires. This article is about to understand how women's identities are represented and socially shaped in the novels of Shobha De and Manju Kapur from the perspective of intersectionality. Shobha De and Manju Kapur Both are very well-known and most discussed authors in contemporary Indian English Literature. Through literary reading, this study shows that women characters are caught between pressures of family and society while trying to fight against patriarchal rules. In the novels of Shobha De, modern women who live in urban areas or in metro cities are seem independent and bold from outside, but are still oppressed from the inside. Meanwhile, female characters in Manju Kapur's novels are middle class women and they feel a constant conflict between their duty and identify, tradition and modernity. This article shows that women in contemporary Indian literature are not merely tolerant and passive figure, but are shown as breaking traditional rules and protesting figures. Their identities are multi layered and constantly changing, not all women experiences are the same but shaped by different social factors and cultural norms. From the perspective of intersectionality, this study explains that Indian women's identities continue to evolve in a multi layered, conflicted and changing modern society. This study shows that literature is the reflection of society not only a narrative. The female characters represented in the novels are seem reality of the life what we see around us. They face problems such as gender discrimination, social inequality and psychological pressure that are also seen in the real life. Thus, literature helps to understand the changing roles of women and the changing values of society, and helps readers to be more sensitive and aware. It creates a strong link between personal experiences and social truth. By examining the lives of female characters, this paper examines how women create their identity and find their place in society. These characters also face internal struggles like balancing dreams and limitations which makes them more relatable. Thus, literature is not only for entertainment, but it also provokes thoughts, raises questions and inspires toward positive change in society.

KEYWORDS: **INTERSECTIONALITY, FEMINISM, IDENTITY, INDIAN ENGLISH LITERATURE, WOMEN, PATRIARCHY.**

1. INTRODUCTION:

We can observe important changes in the portrayal of women in Indian English literature in the recent decades. Nowadays, women are portrayed as thoughtful, rebellious, powerful, ambitious and bold, but earlier they were represented as quiet, dependent and obedient and faced many restrictions. This type of transformation in portrayal of women shows major changes in Indian society because of awareness of feminist ideas, influence of globalization and increased education. Modern Indian male and female writers are presenting women's identity in new ways. They clearly show the tension between modernity and tradition in their writings. Intersectionality says that women are not only oppressed and exploited on the basis of gender but other factors such as culture, caste, class, economic status together affect their experiences and identity. Intersectionality is a very important feminist approach to understand these changing roles more deeply. In a country like India, this idea becomes useful because the social discrimination still exists in India. Although, the writing style and narratives of Shobha De and Manju Kapur are different, but both the writers represent women's identities very effectively. They portray the dynamic and complex aspects of women's lives.

Shobha De is very well known and popular writer of Indian English literature. She was born on 7th January, 1948 in Mumbai. In her Seventeen, she started her career with the modelling and then join journalism. She contributed in the magazines like Stardust, Society and Times of India, which gave her chance to see the life of the upper classes and this experience helps her to write her novels, especially to describe elite class in her novels. Shobha De has written ten novels, nine non-fictions and two short stories. Her major novels are Socialite Evenings (1989), Starry Nights (1991), Sisters (1992), Strange Obsession (1992), Sultry Days (1994), Snapshots (1995), Second Thoughts (1996) and Speed post (1999). She has received both criticism and praise because of her bold and fearless writing. She openly portrays sexuality and societal realities in her novels and because of this she is called "Jackie Collines of India". In her novels she portrays women's emotions, elite class reality, and struggles of modern life. Her language is direct simple and impressive and her characters seem independent and bold on the outside but they are actually struggle with loneliness, insecurity and identity crisis on the inside. In her writings we can see that patriarchy still has influence on women despite modernity.

Meanwhile, Manju Kapur is a well-known and most discussed author and teacher. She was born on October 25, 1948 in Amritsar. She was the teacher of English at Delhi University. Her works are sensitive and realistic. In her novels, the major theme are marriage, family and women's role. In her novels she mostly portrays middle class women's life experiences. She has written many novels. Her major novels are Difficult Daughters (1998), A Married Woman (2002), Home (2006), The Immigrant (2008), Custody (2011), and Brothers (2016). For her first novel Difficult Daughters, she won a Commonwealth Prize in 1999. It's an important honour for her writings. She has written around seven novels. Manju Kapur novels describe women's inner struggle between their desires and social pressure very well. In her novels, her female characters have desires for independence, education and self-identity, but marriage, family and traditional values restrict them to fulfil their desires. Her female characters sometimes try to make balance between their own desires and societal expectations.

Both these authors show different and dynamic aspects of Indian women's lives. Shobha De portrays modern women from elite class who live in urban areas. Whereas Manju Kapur portrays traditional women from middle class who live in semi urban areas or in villages. Thus, these both writers together contribute to better understanding Indian women's identities, their struggles and their agency. In this way, female characters in contemporary Indian English novels are viewed as trying to make balance between traditional value and modern life style. They challenge patriarchal system and try to make their self-identify. But their path is not easy, they face many challenges on different stages like opposition, agreement and conflicts.

The main aim of this paper is to understand how intersectional factors shape women's identity in the selected novels of Shobha De and Manju Kapur. This paper also explores that how women make their own identity and how they protest and gain independence despite living under gender, class and culture-based restrictions. In the conclusion, this study describes how intersectionality is an important perspective to understand women's diverse experiences. De and Kapur's novels shows that women's identities are different, not uniform. Their identities are constantly changing and multi layered. This paper focuses on the four selected novels, *Starry Nights* and *Second Thoughts* by Shobha De and *Difficult Daughters* and *A Married Woman* by Manju Kapur. Through these novels, this study helps to understand the struggle of women, their agency and their identity in a new way, and shows changing Indian society.

2.THEORETICAL FRAMEWORK:

Intersectionality is a very effective approach in feminist ideas. It helps to understand complexity of identities and its related factors. The idea of intersectionality was given by Kimberle Crenshaw. She is an American scholar of critical race theory. Crenshaw explains that how power systems like class, gender, race, caste, religion shape persons' life and influence their experiences. He states that exploitation can't be explained by one reason, but there are many social factors are responsible for it. According to him, discrimination should not be explained from one perspective. She states in her famous essay "Demarginalizing the Intersection of Race and Sex" (1989) that, "treats race and gender as mutually exclusive categories of experience and analysis" (Crenshaw 139), it means that people see race and gender separately and because of it, people ignore the experiences of those women who face both gender discrimination and racism. She gives a wonderful example in her essay to understand this point: "Discrimination, like traffic through an intersection, may flow in one direction, and it may flow in another" (Crenshaw 149). This example explains that a person has multiple identities based on his caste, class, religion, race, gender and faces discrimination from all of them.

After getting inspired by Crenshaw, many feminist thinkers have extended the idea of intersectionality. Anna Carastathis explain that intersectionality is " the predominant way of conceptualizing the relationship between systems of oppression which construct our multiple identities and our social locations in hierarchies of power and privilege" (Carastathis 304). The idea of intersectionality shows that how different systems of oppression together influence on experiences of someone's life. Thus, to understand women's lives and experiences based on gender is not enough, but there are other factors such as caste, class, religion, race play important role to shape women's experiences and identities. The concept of Intersectionality also says that a person's

identity cannot be divided on different stages, a person has many different identities together and all of them shape his life together.

In Indian context, the idea of intersectionality becomes important, because Indian society is diverse and complex in term of caste, class, region, religion, gender and race. For example, an elite class woman who is living in a city maybe more privileged and financially independent, but face the pressure of patriarchal or traditional values in the decision of marriage and relationships. Meanwhile, middle-class women always face the pressure of family and society to stay in traditional role. Thus, women's experiences differ in different situations and intersectionality helps us to understand these systems of power.

In this way intersectionality also helps us in the study of literature. It helps us to examine female characters more deeply. Through the concept of intersectionality, this paper explores how female characters try to make balance between tradition and modernity, independent and restrictions, desires and duty in the novels of Shobha De and Manju Kapur. So, intersectionality is dynamic framework to understand women's experiences, it shows that women's identities are multi layered and how women find their identity and place in the society.

3. PORTRAYAL OF WOMEN IN THE SELECTED NOVELS OF SHOBHA DE:

Shobha De's novels represent an upper-class women's lives who living in Indian urban areas. Her novels are very interesting and realistic. In her stories, she describes big cities, money, fashion, glitz and social reputation very well. This lifestyle looks modern and independent from outside, but women are still facing patriarchal pressure from inside. De exposed this reality by her bold and sometimes controversial writing.

In the novels like *Starry Nights* and *Second Thoughts*, De portrays women who are confident, rich and independent from outside, but they're very emotional and vulnerable from outside. Sometimes they depend on validation and acceptance of men. This situation shows that women are not free, even though they have money and social position. In the novel *Second Thoughts*, the female protagonist called Maya has an arrange marriage. She thinks that her life will be stable and happy after married to a rich man. But later she understands that her life has become emotionless and boring. Despite being educated, she fails to find her identity. Her husband cold nature and strict patriarchal rules make her feels alone and unsatisfied. Therefore, it is understood that educated and elite women are also not free from patriarchal system. In the Same way, in the novel *Starry Nights*, Asha Rani is very famous and successful in film industry. But she faces many exploitative relationships in her life. Sometimes her success depends on men's control and desire. She looks very strong and independent from outside but she is very unstable and insecure from inside. Her story shows that many times women's identities are controlled by media, market and male dominated society.

The important aspect of De's writing is that she openly writes about women's sexuality and desires and for this her works are often criticized in the traditional Indian literature. She challenges social and cultural norms and encourage women to put their inner thoughts boldly. But it is also true that this type of freedom is not easy to get. Women who challenge traditional norms often face criticism, mental stress and loneliness. In De's novels, her female characters often depend on external factors

for their identities, such as money, fame, relationships and social position. Sometimes they decide their worth by the acceptance and validation of men and society. This shows that how women have absorbed patriarchal values deeply. Even in modern and progressive society, the old thoughts still exist.

By analysing these two novels through the concept of intersectionality, we can understand vivid stages and pressure women's lives very clearly. In *Second Thoughts*, the female character Maya is educated and middle-class woman who is living in city. She looks very modern from outside but after marriage her life totally changed. She is forced to perform her duties as wife and she is slowly losing her identity. Here intersectionality clearly seen, because gender and cultural expectations together shape her identity. She has not only problem with patriarchy but she feels pressure because of social norms, family expectations and traditional values of middle class. She faces multiple oppression at once and it is a key idea of intersectionality. On the other hand, Asha Rani's experiences are different. She comes from economically weak family and unprivileged background, but she gets success in film industry and becomes financially independent. Here, in Asha Rani's life, gender, class, economic status and media culture are together influence on Asha Rani's life. She seems strong and successful from outside but actually her life gets stuck in a male dominated society. Where her body and skills are oppressed. Her identity is often controlled by bazaar and the will of men.

Even though the two characters are in different conditions from the point view of intersectionality, but there is one similarity in their problems that they face multiple discriminations together at the same time. In *Second Thoughts*, gender, domestic life and traditional values are main factors in Maya's life, whereas in *Starry Nights*, glamour, fame, media culture and money are main factors in Asha Rani's life. Hence, Shobha De' Novels depict that women's independence is not just matter of showing off. Although women are educated and financially independent, but they are not free from social and cultural restricts.

In conclusion, this analysis shows that women's lives are very complex, dynamic and repeated in De's novels. Their identities are continuously changing and shaped by different social factors and pressures. Through the perspective of intersectionality, we can understand that how women struggle to find their identity and how their freedom is incomplete in the novels. Shobha De portrays elite women's lives with curious reality who living in modern Indian cities. Her stories are filled with metropolitan lifestyle, glamour, wealth, fashion, media and social position. While at first sight it looks modern and progressive but in reality, it is banded with patriarchal system. De reveals the reality through her fearless and occasionally controversial prose. In *Second Thoughts* and *Starry Nights*, De portrays women who are wealthy, confident and socially active, however, they are emotionally weak and sensitive. They rely on acceptance and love of men. This situation show that only money and social status are not necessary for women's genuine liberation.

4. WOMEN'S IDENTITY IN THE NOVELS OF MANJU KAPUR:

In Manju Kapur's novels, she portrays women's lives in a very realistic. Her characters depict in down to earth manner. Kapur represents women's experiences are different from Shobha De's glamour world. Kapur shows regular life, domestic problems and internal struggles of middle-class women. In her stories, she presents women who are struggling to find their own identity. Where

they feel pressure and stress between family, society and their own desires. From the perspective of Intersectionality, Kapur's writing shows that women's experiences are not only influenced by gender but also influenced by family structure, class, culture and traditional values.

In *Difficult Daughters*, the female character Virmati is born in conservative family and living in traditional society. Virmati is a young woman who wants to gain her further education and wants to find her own identity. Here in her life, there is conflict among gender, traditions and her desires. She has an affair with a married man who is her professor which is not socially acceptable. For her this bold decision, her family and society are against her. Here intersectionality shows that Virmati is struggling not only because of she is woman but her struggles are also connected with social norms, traditional values and family expectations.

Similarly, in *A Married Woman*, the character Astha shows different type of identity quest. At the beginning, she plays a role as an ideal wife and mother. But slowly she realises her own desires and her dreams. Through her lesbian relationships with Pipeelika and her participation in social and political activities, she tries to come out from the traditional structure. But her path is not easy, she faces mental stress, emotional difficulties and criticism from society and family.

In Manju Kapur's narrative shows women's struggles in daily life. They suffer more in private life than common space. Her female characters look calm from outside, but they continuously judge their worth fighting for their identity. This shows that patriarchy is grounded in daily domestic life. From the view of intersectionality, Kapur shows that struggles become more complex for a middle-class women because firstly they are expected to follow traditional values, but on the other hand they need to be moder because of transforming society. Women in Kapur's novels always try to balance between modern lifestyle and traditional values. Kapur also gives importance to education in her writing because education encourages them to think and questions. But education also leads them to the conflict with society. Education given them freedom, but also creates new problems for them. This way Kapur shows that women's identities are not uniform and fixed, but are multi layered and changing. Her women characters don't get complete liberation, but they go ahead through small achievements and compromises.

5. CONCLUSION:

Through the Crenshaw's concept of intersectionality, this paper tries to understand women's identity in the novels of Shobha De and Manju Kapoor. The main aim of this study is to explore how women's identities are created, are changed and are portrayed in contemporary Indian English literature. especially when gender, class, culture and social expectations work together.

The evolution of this study shows that women's identities are not simple and equal, but very complicated and different. In Shobha De's novels, her female characters are very bold, strong and independent but they often depend on men's validation and sometimes afraid to show their vulnerable side. Meanwhile, in Manju Kapoor's novels, her female characters are stuck between their desires and family's expectations and their struggles are very internal and emotional.

Through the use of intersectionality, this study observes that we can't understand women's experiences based on only gender, but factors such as class, caste, culture, family, social situation

together shape their identity. The key finding of this study is that women's resistance is not only open and loud, but many times they resist through their decision, education and self-recognition. Shobha De's female characters are often openly protest for their rights but Manju Kapoor's female characters try to challenge calmly and internally. This study shows that the every women have different experiences and struggles.

The relevance of this study is that it helps to understand contemporary Indian English literature and feminist ideology very well. It shows that literature is not only a mirror of reality, but it is a mode of expression where women's voice, struggles and desires are expressed. However, the limitation if this study is that it includes selected four novels of two women writers, a detailed analysis including different authors, male authors, different region and other theories may be conducted in the future.

In conclude, this paper shows that in contemporary Indian English literature, women's identity is a continuously changing and developing process. They form their identity after experiencing many challenges and struggles. Shobha De and Manju Kapoor's novels clearly describes that women are not anymore submissive but they are active and shape their own lives. Intersectionality helps to understand this complexity very well and reminds us that understanding women's identities, agency, experiences and resistance require to look at all factors of their lives together.

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THE RHETORICAL BRILLIANCE OF WILLIAM SHAKESPEARE: A LINGUISTIC EXPLORATION OF SOLILOQUIES IN HAMLET

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ABSTRACT

Literature always plays a vital role as a work of art. Be it novel, drama, poetry or any forms of literature. The real greatness of a work of art consists in its durability. The highest work of art attains a permanent life and continue to appeal to the successive generations of mankind. *Hamlet* is one such work of art by William Shakespeare. The greatness of this play lies chiefly in the portrayal of the character of its hero. The character of Hamlet has a universal appeal and significance because of his use of soliloquies. The soliloquies of Hamlet undoubtedly throw a flood of light on his character and personality. Each soliloquy by him is a masterpiece not only as regards its philosophical content but also as regards its style and expression. They show Hamlet to be a scholar, a philosopher and a poet. In this paper an attempt has been done to study and reflect on Hamlet's mental condition by focusing on the soliloquies of Hamlet. The soliloquies of Hamlet deepen his tragic character by portraying him as a "thinking" man. His excessive introspection checks action by too curious a consideration of the need and justice of the action contemplated. The soliloquies contain an over-analysis of the motives of the action that is required of him.

The paper explores Shakespeare's mastery over this dramatic device is unmatched. His expressive abilities are unparalleled. His plays exhibit an unbelievable degree of the beauty of words, the originality and aptness of phrases, the abundance of powerful metaphors and similes, the felicities of language, and the richness and sweetness of poetry. Every one of his conversations has a flawless naturalness. Shakespeare's thoughts are always flowing with words and ideas that don't seem to be able to stop.

KEY WORDS: SOLILOQUY, INNER CONFLICT, DILEMMA, REVENGE, IRRESOLUTION, PURGATORY.

INTRODUCTION

Literature is one of the most powerful mediums for expressing our inner thoughts. The correspondence between language, literature, and human emotions has always been a central concern in literary studies. Literature, contrasting with the regular language of day today life, consists so many dominant literary devices such as symbolism, metaphor, personification, irony, imagery, hyperbole and many more to convey the thoughts. Soliloquy is also one of such accepted dramatic conventions of great importance.

Soliloquy is a speech of the character in a play or other composition delivered while a speaker is alone. The term was coined in Latin as *Soliloquium*; from *solus*, 'alone' and *loqui*, 'to speak'. The purpose of a soliloquy is to make the audience or the reader aware of the characters inner thoughts or to give information concerning other participants in the action. Its advantages are inestimable because it enables a dramatist to convey direct to audience important information about a particular character: his state of mind and heart, his most intimate thoughts and feelings, his motives and intentions. A soliloquy is thus a mean of characters' inner revelation. Besides unfolding

the inner life of the protagonist, a soliloquy may also throw some light on the other characters by disclosing to us what the speaker thinks of that other characters. A soliloquy may furthermore, contribute to the development of the plot by acquainting us with the purposes to do or decides to do. In the classical dramas the soliloquy is rare, but the playwrights of the Elizabethan and Jacobean periods used it extensively and with the great skill. They achieved an excellence in the use of this convention which has not been equaled. William Shakespeare's *Hamlet*, *Macbeth*, *Othello* and *King Lear* all have major soliloquies, and so does Christopher Marlowe's *Dr. Faustus*.

William Shakespeare is often considered as the master of dialogues. His command over the resources of language was unique and matchless. His plays are always rich in language, elegance and emotional expression. There is a triumphant blending of words, metaphors, and lyrical passion in his writing style. *Hamlet* one of the most remarkable tragedies of William Shakespeare consist number of soliloquies which astonish us with the great surprise as he has left a great legacy for us. From all these, the most celebrated seven soliloquies of the play, replicate the protagonist's dilemma, anxiety, confusion, suffering and sadness as well as the mastery and brilliancy of the playwright. All the seven soliloquies are rich in language and profound emotions.

THE GRIEF GNAWING AT HIS HEART

Hamlet's first soliloquy occurs after the king and the queen have urged him in the open court to cast off the deep melancholy which, as they think, has taken possession of him as a consequence of his father's death. This soliloquy is very passionate which starts with the passage that strongly contrast to the dialogue and actions that he addressed to his uncle Claudius. Hamlet's melancholies revealed through this soliloquy and the reasons of his anger, disgust, sorrow and grief through which he explains how everything has turned out pathetic and miserable in his life. He wishes that if religion could forbid the suicide so that he could kill himself and be rid of this grief.

This soliloquy serves to reveal Hamlet's mindset and his nature to observe his own life. In this soliloquy, Hamlet's unbearable situation is nicely portrayed by Shakespeare. His feelings and his love for father and sorrow he feels are represented straight forwardly here.

"O, that this too sullied flesh would melt,
Thaw and resolve itself into dew!
Or that the everlasting had not fix'd
His canon 'gainst self-slaughter! O god! O god!
How weary"stale, flat and unprofitable;
Seem to me all the uses of this world!
But break my heart, for I must hold my tongue" (129-159) (4.1)

Hamlet in the first soliloquy appears as an outraged man who, disgusted by his 'sullied flesh', can see that there is no way except to end up his life. He wants to free his life from his polluted flesh. Hamlet feels disillusioned with the world and compares it to an "unwedded garden" in which rank and gross things grow in great abundance. He deplores the fact that his mother has remarried barely two months after the death of her first husband. She has married to a man much inferior to the husband she has lost. Even a beast would have mourned for the longer period of time. Hamlet considers the marriage of his mother to his uncle to be an incestuous affair. This soliloquy shows the meditative nature of Hamlet and prepares us for the prolonged delay in his executing the command of the Ghost for the revenge. Hamlet's reference to Hyperion, Niobe and Hercules show

him to be well-versed in the classical literature and with that we can perceive the mastery of Shakespeare over this literary device.

RESOLUTION TO AVENGE HIS FATHER'S MURDERER

Hamlet's second soliloquy comes just after the ghost leaves him, having charged him with the duty of taking revenge upon the murderer of his father. Hamlet has been stunned by the revelation and echoes of the ghost's words asking him to remember it. His mind thinks further:

"O all you host of heaven!

O earth what else?

And shall I couple hell? O, fie! Hold, hold, my heart,

And you, my sinews, grow not instant old,

But bear me stiffly up. Remember thee!

Yea, from the table of my memory

At least I'm sure it may be so in Denmark" (92-111) (4.2)

Hamlet demands that the ghost tell him, his purpose for his appearance. The ghost tells him that he is doomed to an existence in purgatory during the day and wondering at the night until Hamlet can avenge his "foul and most unnatural murderer." He tells Hamlet that everyone thought he died of a natural death of a serpent's sting, but he was actually poisoned by the man who is now the king of Denmark. Hamlet is shocked, and his father's ghost continues Refusing of the marriage between his wife and his brother, He asks Hamlet to leave Gertrude. Horatio and Marcellus show up and ask what happened but Hamlet does not reveal any information about the conversation that took place, he asks then to swear by his sword to never speak of what they've seen and the ghost and Father's four times echoes. Hamlet asks to swear to the oath and they do so and leave.

The manner in which Hamlet speaks here about never permitting himself to forget the ghost's words makes us think that Hamlet will soon plunge into action and carry out the behest of the ghost. But we are much deceived in thinking so. Hamlet now refers to his mother as a "most pernicious woman" and his uncle as a "smiling damn villain".

SELF APPROACH

Hamlet's third soliloquy occurs after he has had a talk with Rosencrantz and Guildenstern. This soliloquy reveals Hamlet's plot deeply. He explains about his situation in this soliloquy.

"Now I am alone

O, what a rough and peasant slave am I!

Is it not monstrous that this player here,

But in a fiction, in a dream of passion,

Could force his soul so to his own conceit.

Where in I'll catch the conscience of the king." (549-606) (4.3)

Here Hamlet is enraged, furious and rude. He feels himself revengeful. He decided to make a plan to disclose secret of his father's murderer. This is Shakespeare at the height. Hamlet here seen with confidence and in the mood of strong revenge and with his strong plan for his father's murderer. He decides a tough plan to disclose open his uncle's secret about his father's death in public.

In the later part of this soliloquy Hamlet bitterly scolds himself for having failed to execute his revenge so far. He calls himself "a dull and muddy-mettle rascal" for this failure. He refers to his uncle as "a bloody, bawdy villain; remorseless, treacherous, kindles villain". In other words Hamlet now seeks a confirmation of the ghost's charge against Claudius. This is rather strange, because it

has taken him a long to doubt the authenticity of the ghost's version. It is obvious that Hamlet is more a philosopher and less a man of action.

ON THE HORNS OF A DILEMMA

Hamlet's fourth soliloquy, is the most famous, most celebrated and most philosophical of all. In point of fact, more or less it's the most celebrated soliloquies of the whole English Literature. Here with the great mental debate Hamlet asks himself whether it is nobler to suffer the cruelties of fate silently or to put up a fight against the misfortunes of life. He constant feels that it would be better perhaps to commit a suicide if death were to mean total extinction of consciousness. But due to the fear of religious belief about what happens to us after the death committed by suicide prevent him to do so.

The most unforgettable lines of this soliloquy, "To be or not to be" reflects his mental condition to us. He asks if it a 'nobler' thing to follow to accept "Outrageous fortune". The second course of action requires Hamlet taking "arms against a sea of troubles, and by opposing end them". This line indicates Hamlet's personal feelings. Hamlet also expresses his fear of death in the line," but suggests that "conscience". This line could also suggest similar situation as earlier he faced on the thinking of suicide because it went against God's structure. Hamlet also reveals the fact about himself to feel incapable for revenge. In this soliloquy Hamlet's conflicts are exposed clearly.

"To be or not to be, that is the question:
Whether 'tis nobler in the mind to suffer
The slings and arrows of outrageous fortunes are
Or to take arms against a sea of troubles
And by opposing, end them. To die, to sleep;
Be all my sins remembered" (56-89) (4.4)

This soliloquy more than any other, reveals the speculative temperament of Hamlet, his irresolute and wavering mind, and his powerlessness for any premeditated action of a momentous nature. His catalogue of the misfortunes of life once again shows his generalizing habit of thought. The dramatic purpose of this soliloquy is partly to explain Hamlet's delay in carrying out his purpose and to show at the same time mental torture that Hamlet has been undergoing because of his failure to have carried out that purpose.

There is a great insist on Hamlet as an academic thinker. The language that Hamlet uses is also very important and needs attention. There are several words that connect the feelings that life is a terrible burden. These words are: "suffer, troubles die, sleep, heartache natural shocks, mortal calamity, bear, fardels, weary" such discourses develop confusion in the depressed character of Hamlet that to kill his uncle or not.

EVADING THE RESPONSIBILITY

Hamlet looks very resentful and hungry for revenge while the fifth soliloquy occurs in his solitude. Here we perceive him as a true hero as he has decided to give punishment to the murder of his father. His anger in his speech creates a very horrified atmosphere on the stage. still there is nothing remarkable in his decision as a man, whom by now we know to be incapable of killing the murderer of his father, would not go to the length of killing his mother.

"'Tis now the very witching time of night,

When churchyards yawn, and hell itself breaths out,
Contagion to this world; how could I drink hot blood,
And do such bitter business as the day.
Would quake to look on; soft, now to my mother,
O heart, lose not thy nature, let not ever
The soul of Nero enter this firm bosom, Let me be cruel not unnatural
To give those seals never, my soul, consent!" (380-392) (4.6)

Hamlet at this moment is in a mood in which he could drink hot blood, and can go beyond any transgression as the demand of the day. Shakespeare has denoted the witching time in this lines. Hamlet feels that it is a witching time now as it's a full moon night and in earlier time Witch, Dracula or other evil spirit would have appeared on the full moon night. So, Hamlet mentions about it and talks about drinking a hot blood. Indirectly he tells us that he feels so revengeful that like a blood sucker he wants to suck the blood of his father's murderer. Hamlet feels that killing Claudius is totally an act of justice, it is none the less evil.

DECISION TO "SPEAK DAGGERS" TO HIS MOTHER

Hamlet's sixth soliloquy occurs when he is about to go to his mother's chamber in response to her summons. Looking at the mood of Hamlet in this soliloquy we feel that he can kill his uncle at any moment. However, we feel that he is shrinking from an act for which he has been preparing and for which he now gets an excellent opportunity. When he goes to his mother's chamber he finds that Claudius was praying.

"Now might I do it pat, now a' is a praying
And now I'll do't, and so a' goes to heaven,
And so am I revenged. That would be scanned;
A villain kills my father, and for that
I his sole son do this same villain send to heaven
This physic but prolongs thy sickly days" (73-96) (4.5)

Hamlet finds Claudius praying and thinks it would be good time to kill him. However, in Hamlet realizes that since he is in prayer it would be better to not to kill him, as according to the Elizabethan belief, killing a person while in prayer, would allow him to go directly to heaven. Hamlet feels the irony of the situation that the 'villain' Claudius would go to heaven while Claudius has sent his father to purgatory. Thus decides that he will wait to kill Claudius until he is doing something sinful like "in the incestuous pleasure of his bed" or "drunk" or "swearing". This way his sins will be measured and hopefully his soul, "may be as dammed and black as hell" would go the right place and will feel suffer forever.

IRRESOLUTION AND REFLECTIVE NATURE

Hamlet's seventh and final soliloquy occurs just after he has spoken to a Norwegian captain. The information given to him by the captain stimulates his thought of revenge and makes him scold himself for his inaction.

"How all occasions do inform against me,
And spur my dull revenge! What is a man,
If his chief good and market of his time.
Be out to sleep and feed? A beast, no more:
Sure he that made us with such large discourse,

Looking before and after, gave us not

.....

Led by a delicate and tender prince". (32-66)(4.7)

The examples provided by everything around him denounced him and reminded him of his inability to stick to his revenge. He feels that a man is no better than the beast if he is satisfied only with sleeping and feeding himself. It suggests Hamlet's vast capacity for understanding and his inability in taking the appropriate decision. Now he analyzes his thoughts, which were one quarter wisdom and always three quarter cowardice. His conscience keeps pricking him and urging him to his revenge, but a natural deficiency in him always thwarts his purpose.

CONCLUSION

Looking at the outstanding soliloquies of the character of Hamlet, we can comprehend that Shakespeare had an amazing genius with words. He shows unrivalled powers of expression. The beauty of words aptness and originality of phrases, the wealth of striking similes and metaphors, the felicities of language, the richness and sweetness of verses, all these are found in his plays to an astonish degree. There is a perfect naturalness in his all dialogues. There is on every occasion such a multitudinous flow of words and images from Shakespeare's mind as nothing seems able to stop. Indeed, the foremost dramatist of his age was also the foremost poet. The union of dramatic and lyric elements in the play is perfect, absolute and beyond analysis. In the capital scenes of *Hamlet*, the protagonist's soliloquies, the mastery of Shakespeare's grand style is incredible.

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DECENTRALIZATION AND CONSTITUTIONAL GOVERNANCE IN INDIA: A CRITICAL STUDY OF LOCAL AUTHORITIES AND THEIR ROLE IN STRENGTHENING DEMOCRACY

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ABSTRACT

Decentralization forms the cornerstone of democratic governance in India, ensuring that power is distributed across multiple levels of administration. The constitutional recognition of local authorities through the 73rd and 74th Constitutional Amendments has significantly transformed the structure of governance by empowering Panchayats and Municipalities as institutions of self-government.

This research paper critically examines the role of local authorities in strengthening democracy and promoting constitutional governance in India. It analyzes the legal framework governing local bodies, their functions, and their contribution to participatory governance and grassroots development. The study also highlights the challenges faced by local authorities, including financial dependency, administrative inefficiency, political interference, and lack of autonomy.

The paper concludes that while decentralization has enhanced democratic participation, the effectiveness of local authorities depends on their empowerment, accountability, and capacity to function independently. Strengthening local governance is essential for achieving inclusive development and realizing constitutional ideals.

KEYWORDS: DECENTRALIZATION, LOCAL AUTHORITIES, PANCHAYATI RAJ, MUNICIPALITIES, CONSTITUTIONAL GOVERNANCE, GRASSROOTS DEMOCRACY, ARTICLE 243

1. INTRODUCTION

India's democratic framework is built upon the principle that governance should be participatory, inclusive, and decentralized. The idea of decentralization aims to bring decision-making closer to the people, ensuring that governance is responsive to local needs and aspirations.

The constitutionalization of local authorities through the **73rd and 74th Constitutional Amendments Acts, 1992** marked a significant milestone in India's democratic journey. These amendments established Panchayats and Municipalities as the third tier of government, empowering them with responsibilities related to local governance and development.

Local authorities play a crucial role in delivering public services, implementing welfare schemes, and promoting social justice. However, their effectiveness depends on the extent of their autonomy, financial resources, and administrative capacity. This paper examines whether decentralization has truly strengthened democracy in India or whether local authorities continue to face systemic challenges.

2. RESEARCH OBJECTIVES

To examine the concept of decentralization in India.
To analyze the constitutional and legal framework governing local authorities.
To evaluate the role of local authorities in strengthening democracy.
To identify challenges in the functioning of local authorities.
To suggest reforms for effective decentralization.

3. RESEARCH HYPOTHESES

Decentralization strengthens democratic governance in India.
Local authorities enhance citizen participation in decision-making.
Financial and administrative constraints limit their effectiveness.
Political interference affects the autonomy of local bodies.
Institutional reforms can improve the performance of local authorities.

4. CONSTITUTIONAL AND LEGAL FRAMEWORK

The constitutional framework for local governance is provided under:

4.1 73rd Constitutional Amendment (Panchayats)

Introduced Part IX (Articles 243–243O)
Established a three-tier Panchayati Raj system
Provided for Gram Sabha participation
Ensured reservation for women and marginalized communities

4.2 74th Constitutional Amendment (Municipalities)

Introduced Part IX-A (Articles 243P–243ZG)
Strengthened urban local governance

4.3 Eleventh and Twelfth Schedules

Eleventh Schedule: 29 subjects (rural governance)
Twelfth Schedule: 18 subjects (urban governance)
These provisions aim to ensure decentralization, democratic participation, and local self-governance.

5. ROLE OF LOCAL AUTHORITIES IN STRENGTHENING DEMOCRACY

Local authorities strengthen democracy by enabling citizens to participate directly in governance. Institutions such as Gram Sabha and Ward Committees provide platforms for public participation, ensuring transparency and accountability.
They also contribute to inclusive development by addressing local needs and implementing welfare schemes. By involving citizens in decision-making, local authorities enhance trust in governance and promote democratic values.

6. ROLE IN DEVELOPMENT AND GOVERNANCE

Local authorities play a key role in:
Infrastructure development
Public health and sanitation
Education and social welfare
Implementation of government schemes
Their proximity to the people allows them to understand local issues and respond effectively.

7. CHALLENGES IN DECENTRALIZATION

7.1 Financial Constraints

Dependence on state and central grants limits autonomy.

7.2 Administrative Inefficiency

Lack of trained personnel and infrastructure affects performance.

7.3 Political Interference

State control and local politics undermine independence.

7.4 Lack of Awareness

Citizens and representatives often lack knowledge of legal provisions.

7.5 Corruption and Lack of Transparency

Weak accountability mechanisms lead to inefficiencies.

8. SOCIO-LEGAL ANALYSIS

Decentralization is not merely a legal concept but a socio-political process. While constitutional provisions empower local authorities, their functioning is influenced by social factors such as caste, gender, and economic inequality.

The effectiveness of decentralization depends on the ability of local authorities to operate independently while ensuring inclusivity and fairness. Strengthening legal frameworks alone is insufficient; social and institutional reforms are equally important.

9. FINDINGS

Decentralization has strengthened democratic participation.

Local authorities play a vital role in governance and development.

Financial and administrative challenges limit their effectiveness.

Political interference affects autonomy.

Reforms are necessary for effective decentralization.

10. SUGGESTIONS

Enhance financial autonomy through local revenue generation.

Provide capacity-building programs for representatives.

Strengthen transparency and accountability mechanisms.

Promote digital governance and e-governance initiatives.

Encourage active citizen participation.

Reduce political interference through legal safeguards.

Improve coordination between different levels of government.

11. CONCLUSION

Decentralization is essential for strengthening democracy and ensuring effective governance in India. Local authorities serve as the foundation of this process by bringing governance closer to the people.

However, their potential remains underutilized due to various structural and socio-political challenges. Strengthening local authorities through legal, financial, and institutional reforms is necessary for achieving inclusive development and realizing constitutional ideals.

A robust system of local governance ensures that democracy is not limited to institutions but is experienced by citizens in their daily lives.

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BEYOND BOUNDARIES: RETHINKING RESKILLING IN THE FUTURE OF ORGANIZATIONAL LEARNING

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ABSTRACT

In an era of rapid technological change and globalization, traditional boundaries of organizational learning are being redefined. This paper examines how “reskilling without limits” is transforming Human Resource Management (HRM) by shifting from structured, time-bound training to continuous, flexible, and technology-driven learning models. Organizations are increasingly leveraging digital platforms, micro-credentials, and personalized learning pathways to enable ongoing skill development across diverse and distributed workforces.

The study explores how emerging technologies, including artificial intelligence and learning analytics, support adaptive and data-driven reskilling strategies. It also addresses critical challenges such as unequal access to learning resources, employee engagement, and the risk of widening skill gaps in a boundary less learning environment.

Using a mixed-methods approach based on secondary data and case studies, the paper identifies best practices for building resilient and future-ready organizations. The findings emphasize the need for a cultural shift toward lifelong learning, where both individuals and organizations share responsibility for continuous development.

By rethinking the boundaries of workplace learning, this research contributes to the broader discourse on multidisciplinary approaches to global transformation. It offers practical insights for HR professionals and policymakers to design inclusive and sustainable reskilling strategies in the evolving world of work.

KEY WORDS: HUMAN RESOURCE MANAGEMENT (HRM), RESKILLING, CONTINUOUS LEARNING, ARTIFICIAL INTELLIGENCE IN HR, FUTURE OF WORK, ORGANIZATIONAL LEARNING

INTRODUCTION

The contemporary workplace is undergoing unprecedented transformation driven by rapid technological advancements, globalization, and shifting workforce expectations. Developments in areas such as Artificial Intelligence, automation, and digital platforms are continuously redefining job roles, rendering existing skills obsolete while simultaneously creating demand for new competencies. In this dynamic environment, traditional approaches to employee training—often periodic, standardized, and confined within organizational boundaries—are no longer sufficient.

Human Resource Management (HRM) is therefore compelled to rethink its role in fostering workforce adaptability and resilience. The concept of “reskilling without limits” emerges as a response to these challenges, emphasizing continuous, flexible, and personalized learning that transcends constraints of time, place, and formal structures. This shift reflects a broader movement

toward boundary less organizations, where learning is integrated into everyday work and supported by digital ecosystems.

Moreover, the increasing adoption of data-driven tools such as Learning Analytics enables organizations to tailor development initiatives to individual needs, enhancing both engagement and effectiveness. However, this transformation also raises critical concerns regarding equitable access to learning opportunities, employee motivation, and the potential widening of skill gaps.

Against this backdrop, this paper explores how organizations can redesign learning strategies to support continuous reskilling. By examining emerging practices and challenges, it aims to contribute to the evolving discourse on multidisciplinary approaches to global transformation, positioning HRM as a key driver in shaping the future of work.

OBJECTIVES OF THE STUDY

To examine the evolving nature of organizational learning in response to technological advancements and globalization.

To analyse the concept of “reskilling without limits” and its implications for Human Resource Management (HRM).

To assess the role of digital technologies, including Artificial Intelligence and Learning Analytics, in enabling continuous and personalized learning.

To identify key challenges and best practices in implementing boundary less learning, and to suggest strategies for effective workforce reskilling.

REVIEW OF LITERATURE

The transformation of organizational learning has been widely discussed in recent years, particularly in the context of rapid technological change and globalization. Early work by Peter Senge (1990) introduced the concept of the learning organization, emphasizing continuous knowledge development as a core organizational capability. This idea laid the foundation for later research on lifelong learning and adaptive workforces.

With the rise of digital technologies, scholars have highlighted the growing importance of continuous reskilling and upskilling. Josh Bersin (2018) argues that organizations must shift from traditional training models to continuous learning ecosystems that are integrated into daily work. Similarly, Ravin Jesuthasan and John Boudreau (2017) emphasize that work itself is being redefined, requiring employees to constantly acquire new skills to remain relevant.

In addition, Dave Ulrich highlights that modern HR functions are evolving from administrative roles to strategic partners, where capability building and continuous learning become central to organizational competitiveness. This shift positions HR as a key driver in enabling reskilling initiatives.

The integration of advanced technologies such as Artificial Intelligence has further accelerated this shift. Research suggests that AI-driven platforms can personalize learning experiences and improve skill acquisition efficiency. In parallel, the use of Learning Analytics enables organizations to track

employee progress and design targeted development interventions. However, studies also raise concerns about data privacy, algorithmic bias, and unequal access to digital learning resources.

Recent literature also explores the challenges of boundary less learning environments. Scholars note that while flexible learning opportunities enhance accessibility, they may also blur work–life boundaries and increase cognitive overload. Additionally, disparities in digital access can widen existing skill gaps, particularly in developing economies.

Gary Becker introduced the idea of human capital investment, which supports the notion that continuous learning increases productivity but also requires sustained organizational investment. Similarly, Manuel Castells discusses how digital networks reshape work structures, creating both opportunities for global learning and risks of inequality in access to knowledge.

Furthermore, Lynda Gratton emphasizes that the future workforce will depend on “collaborative learning ecosystems,” where organizations, individuals, and platforms jointly contribute to skill development. This reinforces the need for continuous, boundary less learning models.

Overall, the literature indicates a clear shift toward continuous, technology-enabled learning. However, there remains a need for integrated frameworks that balance innovation with inclusivity, making this study relevant in addressing gaps between theory and practice in HRM.

RESEARCH METHODOLOGY

This study adopts a qualitative research approach based on secondary data analysis to explore the concept of “reskilling without limits” and its implications for Human Resource Management (HRM). The objective is to synthesize existing knowledge and identify emerging patterns in organizational learning and workforce development.

Research Design

The study is exploratory and descriptive in nature. It focuses on understanding evolving trends in continuous learning, digital transformation, and reskilling practices within organizations.

Sources of Data

The research is based on secondary data collected from:

Peer-reviewed academic journals in HRM and organizational behavior

Industry reports and white papers from global institutions such as World Economic Forum and McKinsey & Company

Books, policy documents, and credible online publications related to future of work and workforce transformation

Data Analysis Method

The collected literature is analysed using thematic analysis, where key themes such as continuous learning, AI-driven reskilling, boundary less work, and skill transformation are identified, compared, and interpreted to derive meaningful insights.

Scope and Limitations

The study is limited to existing literature and published reports; therefore, it does not include primary empirical data. As a result, findings are interpretative and may not capture real-time organizational practices in specific industries.

FINDINGS AND DISCUSSION

The thematic analysis of existing literature reveals that organizational learning is undergoing a significant transformation driven by digitalization, automation, and evolving workforce expectations. A key finding is the shift from traditional, episodic training programs toward continuous and integrated learning ecosystems. Organizations are increasingly embedding learning into daily work processes, enabling employees to upskill and reskill in real time rather than through isolated training sessions.

Another important finding is the growing influence of digital technologies in shaping learning practices. Tools such as Artificial Intelligence and Learning Analytics are enabling personalized learning pathways, predictive skill gap analysis, and adaptive training modules. This has significantly improved the efficiency and relevance of employee development initiatives.

The literature also highlights the emergence of “boundary less learning environments,” where geographical, temporal, and organizational constraints are reduced due to digital platforms. This allows employees to access learning opportunities globally, supporting the concept of reskilling without limits. However, this flexibility also introduces challenges such as information overload, reduced work-life boundaries, and varying levels of digital literacy among employees.

A critical discussion point is the growing skill gap between employees who can effectively engage with digital learning systems and those who cannot. While organizations are investing heavily in reskilling initiatives, inequalities in access to technology and learning resources remain a concern, particularly in developing economies.

Furthermore, findings suggest that successful reskilling strategies are strongly linked to organizational culture. Companies that promote a culture of lifelong learning, leadership support, and employee empowerment are more likely to achieve sustainable workforce transformation. In contrast, organizations treating reskilling as a one-time intervention tend to experience limited long-term impact.

Overall, the findings indicate that reskilling without limits is not merely a technological shift but a structural and cultural transformation in HRM. It requires balancing innovation with inclusivity to ensure equitable access to continuous learning opportunities.

CONCLUSION

This study highlights that the concept of “reskilling without limits” represents a fundamental shift in the way organizations approach Human Resource Management (HRM) and employee development. Driven by rapid technological advancements and changing workforce demands, traditional models of periodic training are being replaced by continuous, flexible, and technology-enabled learning systems.

The findings indicate that digital tools such as Artificial Intelligence and Learning Analytics play a crucial role in enabling personalized and adaptive learning experiences. These technologies help organizations identify skill gaps, design targeted interventions, and promote real-time learning. At

the same time, the emergence of boundary less learning environments has expanded access to knowledge beyond geographical and organizational constraints.

However, the study also underscores important challenges, including unequal access to digital resources, varying levels of digital literacy, and the risk of employee burnout due to blurred work-life boundaries. These issues suggest that technological advancement alone is not sufficient; organizational culture and inclusive HR strategies are equally important.

In conclusion, reskilling without limits is not merely a training strategy but a broader transformation in how organizations view learning, work, and human potential. For HRM practitioners and policymakers, the key challenge lies in creating sustainable, inclusive, and ethically grounded learning ecosystems that support lifelong development. By doing so, organizations can build a future-ready workforce capable of adapting to continuous change in the global economy.

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TRANSFORMATIVE SHIFT IN INDIAN CRIMINAL JUSTICE SYSTEM: A CRITICAL ANALYSIS OF NEW CRIMINAL LAWS AND THEIR PRACTICAL IMPLICATIONS

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ABSTRACT

The Indian criminal justice system is undergoing a historic transformation with the enactment of the Bharatiya Nyaya Sanhita, 2023, Bharatiya Nagarik Suraksha Sanhita, 2023, and Bharatiya Sakshya Adhiniyam, 2023. These legislative reforms aim to replace colonial-era laws and establish a modern, efficient, and citizen-centric justice system. This research paper critically examines the conceptual foundations, structural changes, and practical implications of these new laws. It evaluates whether these reforms effectively address long-standing issues such as delay in trials, evidentiary inefficiencies, and procedural complexities. The study adopts a doctrinal and analytical approach, supported by emerging judicial trends and comparative perspectives. It concludes that while the reforms mark a progressive step, their success largely depends on effective implementation, infrastructural development, and capacity building within the legal system.

KEYWORDS: CRIMINAL JUSTICE SYSTEM, BNS 2023, BNSS 2023, BSA 2023, LEGAL REFORM, EVIDENCE LAW, JUDICIAL EFFICIENCY

INTRODUCTION

The criminal justice system serves as the backbone of a democratic society, ensuring the protection of individual rights and the maintenance of public order. India's legal framework, historically rooted in colonial legislation such as the Indian Penal Code, 1860, Code of Criminal Procedure, 1973, and Indian Evidence Act, 1872, has long been criticized for being outdated and inadequate in addressing modern challenges.

Recognizing these limitations, the Indian legislature introduced three landmark statutes in 2023, marking a paradigm shift towards an indigenous and contemporary legal framework. These reforms seek to enhance efficiency, incorporate technological advancements, and prioritize victim-centric justice.

However, the transition from theory to practice presents significant challenges. This paper critically evaluates the impact of these reforms, particularly focusing on their practical applicability and effectiveness in achieving justice.

OBJECTIVES OF THE STUDY

- To examine the key features of new criminal laws in India
- To analyze the shift from colonial to modern legal framework
- To evaluate practical challenges in implementation
- To assess the role of technology in criminal justice
- To suggest reforms for effective execution of these laws

RESEARCH METHODOLOGY

The study adopts a **doctrinal research methodology**, relying on:

Primary sources: Statutes, judicial decisions

Secondary sources: Books, research articles, reports

Analytical and comparative approach

Conceptual Framework

The new criminal laws are based on three fundamental principles:

Justice-oriented approach rather than punishment-centric

Technology integration in investigation and trial

Victim-centric justice system

These principles redefine the traditional structure of criminal law in India.

ANALYSIS

1. Bharatiya Nyaya Sanhita, 2023 (BNS)

The BNS replaces the Indian Penal Code and introduces significant changes such as:

Recognition of organized crime and terrorism

Gender-neutral provisions in certain offences

Emphasis on victim compensation

The law reflects a shift towards a more inclusive and comprehensive penal system.

2. Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS)

The BNSS introduces procedural reforms including:

Time-bound investigation

Use of electronic communication and digital records

Mandatory forensic investigation for serious offences

These provisions aim to reduce delays and enhance efficiency.

3. Bharatiya Sakshya Adhiniyam, 2023 (BSA)

The BSA modernizes evidence law by:

Recognizing electronic and digital evidence

Strengthening admissibility of scientific evidence

Promoting reliability and objectivity

However, challenges remain in infrastructure and expertise.

4. Role of Technology in Criminal Justice

The integration of technology plays a crucial role in:

E-courts and virtual hearings

Digital evidence management

Online FIR registration

Despite these advancements, digital divide and lack of training hinder effectiveness.

5. Practical Challenges in Implementation

Lack of trained personnel

Inadequate forensic infrastructure

Judicial backlog

Resistance to change within institutions

These issues limit the transformative potential of new laws.

FINDINGS

The new laws represent a significant departure from colonial frameworks
Technology integration is a major strength but poorly implemented
Trial delays remain a persistent issue
Infrastructure gaps affect enforcement
Need for capacity building among stakeholders

SUGGESTIONS

Strengthening forensic laboratories across India
Training programs for police, judiciary, and advocates
Increasing judicial manpower
Effective implementation of e-court systems
Public awareness regarding new legal provisions
Continuous monitoring and evaluation of reforms

CONCLUSION

The introduction of new criminal laws in India marks a transformative moment in the country's legal history. These reforms aim to create a justice system that is efficient, transparent, and responsive to contemporary challenges. However, the success of these laws depends not merely on legislative intent but on their practical implementation.

Bridging the gap between law and practice requires coordinated efforts from all stakeholders, including the judiciary, law enforcement agencies, and legal professionals. Only then can the vision of a modern and effective criminal justice system be realized.

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BEYOND BOUNDARIES: INTERNAL AND INTERNATIONAL LABOR MIGRATION AMONG MUSLIMS FROM BIHAR AND ITS SOCIO-ECONOMIC OUTCOMES

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ABSTRACT

Labor migration from the state of Bihar has become a main income-generation approach, especially among underprivileged Muslims, rooted in chronic deprivation, unemployment and spatial underdevelopment (Kumar, 2020). A considerable proportion of households involve in internal migration to urban areas throughout India and overseas migration to Gulf countries where demand for workers with limited or intermediate skills remains high (Wagle, 2024). Regardless of its increasing prominence of these migration flows, limited scholarly attention relatively examines internal and international migration trajectories and their livelihood and economic outcomes among Muslim communities from Bihar, underlining a critical research gap. The paper aims to examine the determinants, migrant perspectives and socio-economic changes connected with labor migration among Muslim communities from Bihar analyzing comparatively internal and Gulf migration. Rooted in push-pull theory and the New Economics of Labor Migration, the paper embraces a triangulated methodology, integrating quantitative household surveys with qualitative migrant interviews and left-behind families (Khan et al., 2024). The results/findings are anticipated to demonstrate that remittances serve a key function in improving household income, housing conditions, consumption trends and level of education, consequently leading to socio-economic shift (Mukherjee, 2017). However, migration **outcomes continue to be heterogeneous**: whereas Gulf migration drives higher remittance transfers and material gains, it frequently involves greater risks, indebtedness and community impacts, while internal migration offers comparatively stable but opportunities for lower-income groups (Rajan, 2004; Mustaqeem & Saleem, 2024). This study enhances the understanding of migration literature by providing a relative analysis tailored to particular communities and highlights the requirement for inclusive policy interventions to safeguard migrant quality of life and boost positive developmental outcomes.

KEYWORDS: LABOR MIGRATION; REMITTANCES; SOCIO-ECONOMIC CHANGE; GULF MIGRATION; INTERNAL MIGRATION; BIHAR MUSLIMS

INTRODUCTION

Labor migration has traditionally been a defining element of the economic and social milieu of Bihar, one of the least developed industrially and economically backward states in India. From historical perspective, Bihar has played a central role for labor-sending region, featured by entrenched poverty, unemployment, under industrialization and limited livelihood prospects (Kumar, 2020; Singh, 2024). These systematic limitations have paved the way for the emergence of a 'culture of migration' where mobility is more than a matter of choice rather essential to survival and improvements in socio-economic conditions (Kumar, 2020). Empirical evidence suggests that a considerable proportion of households in Bihar rely on migration and remittances as major sources of earning and livelihood, bolstering its identity as an economy reliant on remittances (Singh, 2024; Kumar, 2020).

Migration flows from Bihar happens along two main pathways: internal migration to economically prosperous Indian states like Maharashtra, Delhi, Punjab and Haryana and global migration to Gulf Cooperation Council nations. Internal migration continues to be dominant, comprising more than 90 per cent of migrants from countryside Bihar heading to other states of India, predominantly working in unorganized and low-skilled sectors like construction, transport industries and services (IHD, 2016; Kumar, 2020). On the contrary, international migration to Gulf nations has surged substantially since the beginning of 2000s, led by increasing labor demand in real estate and service sectors and made possible by global migration networks (Khan et al., 2024; Bhagat and Kumar, 2021). Whereas internal migration is frequently seasonal and cyclical in nature, Gulf migration is characteristically longer-term and engages larger financial costs and risks, including debt burdens and contract-based vulnerabilities (Khan et al., 2024).

In the broader context of migration, Muslims from Bihar reflect a significant still sparsely researched population. Existing evidence reveals that Muslim communities amount to a substantial proportion of migrant laborers, especially in low-skilled and semi-skilled professions not only in India but also in Gulf countries (IHD, 2016; Khan et al., 2024). Marginalization in social and economic terms, low level of educational attainment and limited access to formal-sector jobs often guide their migration choice and experiences (Khan et al., 2024). Even with their considerable involvement in migration flows, Attention in academic studies to religion-specific migration dynamics, particularly among Muslim communities from Bihar, remains limited with the majority of research focusing on regional or national trajectories rather than community-specific assessment.

Current literature reveals that migration serves a dual purpose in shaping socio-economic yields. In one respect, remittances play a crucial role to household income, consumption, dwelling enhancements and academic investments, as a result promoting socio-economic mobility (Kumar, 2020; Mukherjee, 2017). But at the same time, migration is connected with vulnerable labor conditions, social dislocation and the gendered distribution of unpaid domestic work because of male out-migration (de Haas, 2010; Khan et al., 2024). In addition, Gulf migration, whereas frequently connected with greater earnings, includes elevated risk exposure like debt-financed migration, coercive work practices and minimal legal recourse (Khan et al., 2024; GIZ and ILO, 2015).

Even with these findings, there prevails a considerable research gap in comparative analyses that evaluate both aspects internal and international migration within a unified framework, especially emphasizing Muslim households from Bihar. Many of the studies conducted so far either focus on internal migration trajectories or concentrate on transnational migration from southern states of India like Kerala, emigrating from eastern states such as Bihar comparatively understudied (Mahapatro, 2018; Rajan, 2004). Furthermore, there are few studies examining micro-level dynamics exploring how migration affects in diverse ways socio-economic outcomes within national households and international contexts.

Given these circumstances, the current study aims to examine these gaps by assessing the factors, the actual experiences of individuals and socio-economic outcomes of domestic and international labor migration among Muslim communities from Bihar. The study embraces a comparative

analysis to comprehend how distinct migration trends affect household well-being, remittance utilization and evolution of social patterns.

In spite of the growing prevalence of labor migration from Bihar, there is a absence of thorough, comparative and community-centered research evaluating how internal and international migration have varied effects on the socio and financial outcomes of Muslim households. This study explores why Muslims from Bihar move for labor opportunities, looking at the real-life experiences of those engaging in internal mobility in India to those going for jobs in the Gulf. It examines in greater depth how the income generated and migration process reshapes the socio-economic the wellbeing of their families.

RESEARCH PROBLEM

Labor migration among Muslim households from Bihar is predominantly guided by continuous social and economic marginalization, with considerable levels of poverty, unemployment, underachievement in education and limited availability of formal job opportunities within the state (Kumar, 2020; Khan et al., 2024). These underlying structural barriers necessitate individuals to seek sources of livelihood through both internal migration to urban areas in India and world migration to Gulf nations, where demand for low- and semi-skilled worker is large (IHD, 2016; Khan et al., 2024). Whereas migration acts as a critical support for survival and mobility strategy, the distinct experiences and outcomes for Muslims remain unexplored.

Current literature on migration from Bihar has directed mainly toward common population trends or spatial-based analyses, frequently overlooking faith-based differences dimensions especially those concerning Muslim communities (Mahapatro, 2018). Furthermore, there is an underrepresentation of comparative research analyzing internal and international migration through a unified analytical lens (Rajan, 2004). This leads to a notable gap in understanding how distinct migration pathways play a key role in shaping socio-economic outcomes. Thus, a focused, comparative and community-based study is required to address these gaps and deliver nuanced understanding into migration trends among Muslims from Bihar.

OBJECTIVES OF THE STUDY

The paper examines why and how Muslims from Bihar migrate for job, both domestically in India and internationally to the Gulf nations. It outlines key factors like poverty and unemployment whereas assessing the lived realities of migrants, job conditions and social constraints. Moreover, this study analyzes how remittances affect household income, education and overall quality of life. By analyzing comparatively domestic and global migration, the paper point out the particular risks and opportunities of everyone, eventually appraising their wider developmental impacts on Muslims.

RESEARCH QUESTIONS

With the aim of understanding labor migration among Muslims from Bihar, the paper considers four main questions. First, it highlights the socio-economic determinants like poverty and unemployment, which prompt migration. Second, it examines how daily experiences and susceptibilities differ between domestic job and transnational works in the Gulf. Third, it explores how remittances enhance household education and general well-being. Finally, it relates internal

and international ways of identifying which provides better long-term monetary mobility and family welfare.

LITERATURE REVIEW

Migration is a composite socio-economic trend molded by institutional factors, individual aspirations, and networks that span across national boundaries. An extensive migration study has been evolved during the past quarter century, giving prominence to both classical theories and current empirical insights.

The push-pull theory implies migration takes place when poverty and scarcity of jobs leads to people away whereas more lucrative pay and opportunities draw them to other places to move (Lee, 1966; Ravenstein, 1885; updated by Todaro & Smith, 2011). This system endures pivotal to explaining both internal and international worker mobility, comprising those from Bihar (Bhagat, 2013; Zelinsky, 1971). Furthermore, the **neoclassical economic theory** focuses on income disparities and labor market disequilibria as factors behind migration (Harris & Todaro, 1970; Lucas, 1997). Neoclassical theories focus on economic rationale but leave out social and cultural impacts. For instance, Massey et al. (1993) argue that migration patterns transform through snowball effect. These approaches stress the requirement of a sophisticated framework that incorporates structural and individual driven explanations, specifically for deprived and minority groups.

Domestic migration in India is ample, yet academic focus differs by spatial and community. Deshingkar and Akter (2009) argued that internal migration operates as a means of survival for impoverished rural families facing Bihar's agronomic crisis. Studies like Sarkar (2016) and Himanshu et al. (2017) reveal that labor migration from Bihar's countryside areas responds to agronomic slowdown, landlessness and exclusion along cast line. These determinants are in line with push-pull dynamics, but also display structural disparities that shape migration opportunities. Religious belonging complicate matters as Bihar's Muslim migrants frequently confront dual challenges from poverty and social marginalization (Deshingkar, 2012; Akbar & Sharma, 2019). However, localized investigations into how religion guides migration intentions and outcomes are scarce, indicating a significant gap.

Global labor migration from India has targeted more and more the Gulf Cooperation Council states. Gulf economies have traditionally depend on less skilled workforce from South Asia and India is among the main migrant-sending nations (Kapiszewski, 2006; Gardner, 2010). Kerala has led this narrative, with substantial scholarship following remittances, family reorganization and evolving identities among Gulf returnees (Osella & Osella, 2008; Zachariah & Rajan, 2012). Still, **limited research addresses Bihar**, despite substantial out-migration to Gulf destinations (Srivastava, 2012; Samaddar, 2015). These studies overlook networks of believers and discrimination by generalizing across all migrants. Studies like Ali (2018) and Hussain (2019) revealed that Gulf migration stimulates economic progress through remittances, yet brings social costs, comprising family separation and risks stemming from unstable jobs. The significance of migrant networks (structure and chain migration) is pointed out by Kler & Deshingkar (2020), showing that prevailing ties considerable impact destination choice and job attainment.

Remittance inflows comprise a significant outcome of labor migration. Data analyses reveal enhancements in consumption, housing and investments in education among migrant-sending families (Adams & Page, 2005; Mohapatra et al., 2009). However, **these collective benefits frequently mask internal disparities**: women and family members leaving behind could bear increased duties without balanced economic empowerment (Oishi, 2010; Chant, 2013). Limited studies distinguish these patterns by faith or destination (internal vs. international), creating a gap in analyzing disparities socio-economic trends for Muslim migrants from Bihar.

Despite considerable work being done on migration theories, domestic migration in India and Gulf labor mobility, various major gaps exists: Research frequently ignores how being Muslim impacts migration, particularly due to the specific economic and social marginalization in Bihar (Jeffrey et al., 2008). Studies hardly ever compare internal and international migration, while both have many in common socio-economic drivers (Sjaastad, 1962; Todaro, 1969). Broad quantitative data prevails, overlooking personal stories, cultural identities and social influences observed in smaller qualitative studies (Bryceson & Vuorela, 2002). These gaps narrow our insight of how multiple social identities like religion, class and caste shape migration patterns and outcomes, especially for Muslims from Bihar.

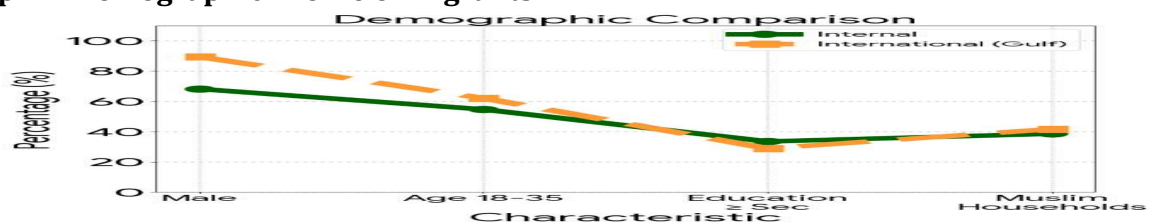
METHODOLOGY

The paper employs a secondary data examination to analyze internal and international labor mobility among Muslims from Bihar and its socio-economic outcomes. The sources of data comprise nationally sampled data, peer reviewed publications like Scopus, Web of Science, JSTOR, and Google Scholar, government reports and worldwide migration data repositories to ensure full coverage of both internal and international migration trajectories. Primary data used in the analysis are the NSSO employment-unemployment surveys and PLFS data to capture trends in internal migration and employment status. For international migration, data are taken from the MEA reports, Rajan & Zachariah's Reports and World Bank datasets. This study adopts descriptive statistics and regression to assess reasons for migration whereas MANOVA relates outcomes between internal and international migrants, considering factors such as age, education and family size. While secondary data permits for extensive comparisons, it lacks exact information on faith and motivation. Differing survey approaches and a lack of personal, lived experiences underscores the requirement for prospective primary research.

RESULTS/FINDINGS

This section outlines the crucial results from analyzing internal and international labor migration among Muslims from Bihar, emphasizing on socio-economic findings. Results are extracted from the NSSO (2004-05, 2011-12, 2017-18), PLFS (2018-23), MEA migration records and World Bank migration-remittance data (World Bank, 2024).

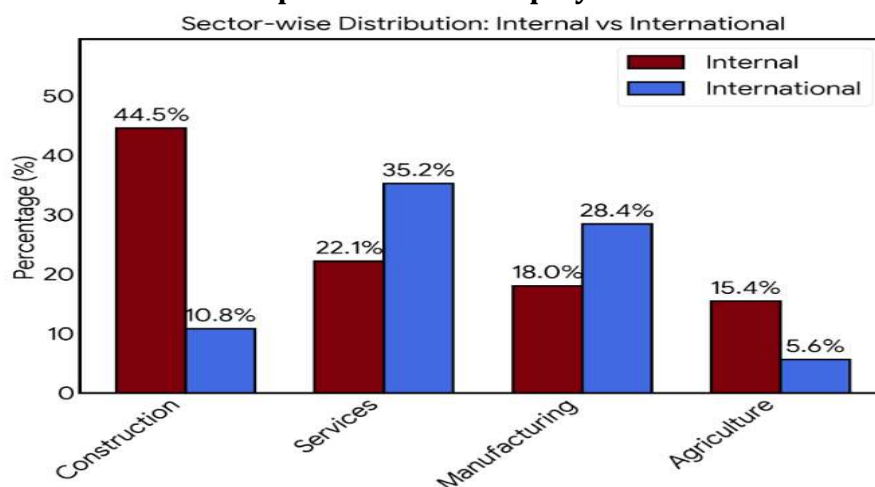
Graph 1: Demographic Profile of Migrants



Source: NSSO & PLFS aggregated data (2004-2023); MEA emigration reports (2012-2024)

Graph 1 reveals that international migrants are dominated by younger males in relation to internal migrants whereas a marginally greater share of Muslim households is reflected in Gulf migration.

Graph 2: Sector of Employment



Source: PLFS (2018-23); World Bank remittance data (2024)

Graph 2 shows that International migrants comprise a larger portion in services and manufacturing, while internal migrants are primarily located in construction and agriculture. Table 1 displays that international migrants obtain substantially higher earnings, in accordance with wage differentials illustrated in migration theory (Todaro & Smith, 2011).

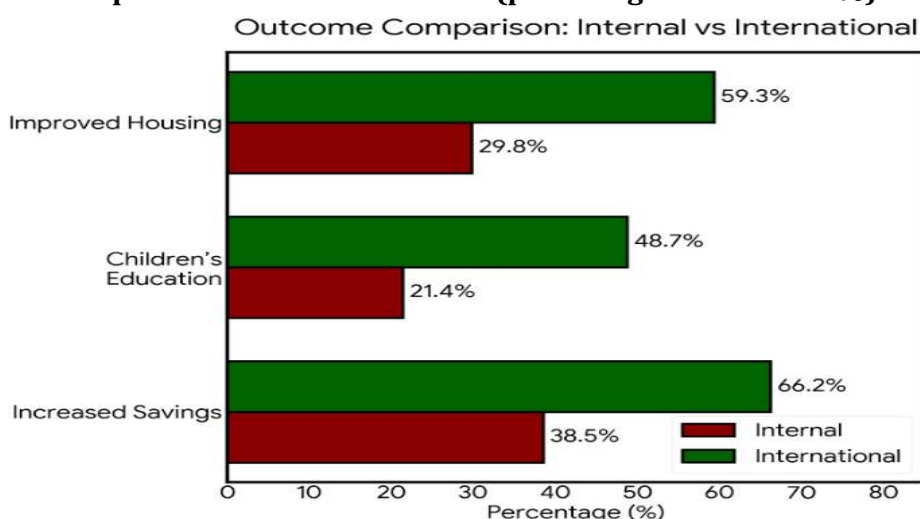
Table 1: Average Annual Income (INR)

Type	Mean Income (in Rupees)
Internal Migrants	152,400
International Migrants	482,700

Source: NSSO (2017-18); MEA emigration data (2018-24)

International migration is connected with higher levels of improvements in household economic and well-being, particularly in educational and residential aspects (see **Graph 3**).

Graph 3: Household Outcomes (positive growth rate in %)

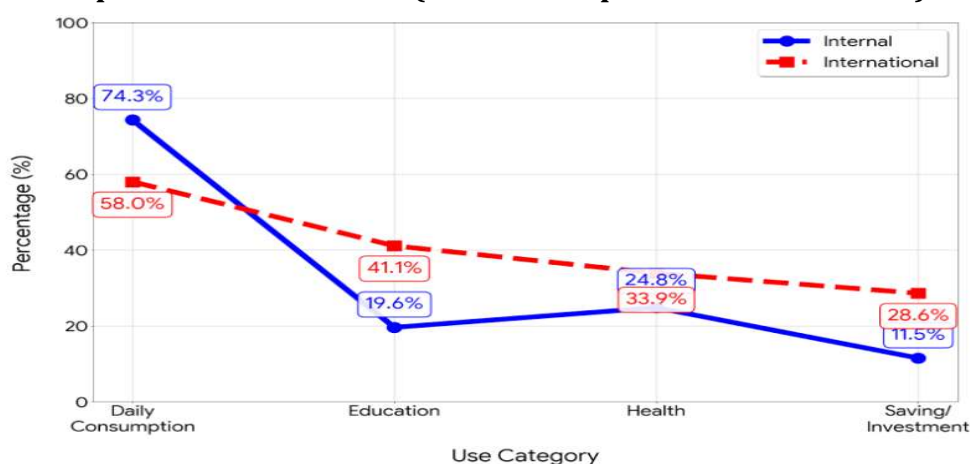


Source: NSSO & PLFS pooled (2004-23)

Financial transfers from the Gulf countries are more inclined to be directed toward long-term assets such as education, savings, compared with internal remittances which are predominantly employed for consumption (see **Graph 4**). Results substantiate that **global migrants from Bihar**,

with Muslims included, realize greater income levels **and** enhanced family welfare in comparison with internal migrants, in accordance with neoclassical wage theories (Harris & Todaro, 1970; Todaro, 1969). Nevertheless, **internal migrants** constitute a higher percentage of workers who are older and have lower educational attainment, compatible with structural push factors (Bhagat, 2013; Deshingkar & Akter, 2009). The statistics further indicate use of remittances shows variation **by migration type**, with international remittances having a more forward-looking approach (education, savings).

Graph 4: Remittance Uses (share of recipient households in %)



Source: World Bank Migration and Remittances (2024)

These trends underscore that whereas international migration results in higher socio-economic advantages, **religious background** remains insufficiently examined **as a driving factor** in available secondary data, in accordance with identified gaps in need of primary examination (Jeffrey et al., 2008).

DISCUSSION

The paper compares Bihar's Muslim household's internal and international labor migrants. Whereas global mobility results in greater earnings, both groups confront unique socio-economic obstacles. The findings reflect world migration trajectories while bringing attention to specific flaws in terms of identity and disparity.

The demographic characteristics revealed that transnational migrants, specifically to Gulf nations, are more prone to be young and male in comparison with internal migrants (**Graph 1**). This is supporting earlier findings showing that world migration is largely driven by young male laborers seeking greater wages abroad (Srivastava, 2012; Kapiszewski, 2006). Limited domestic opportunities may push Bihar's Muslims abroad migration. International migrants embrace services/manufacturing whereas domestic migrants work in construction/agriculture (**Graph 2**). Internal migration redirects rural labor toward low-income jobs, unorganized Indian sectors (Bhagat, 2013; Deshingkar & Akter, 2009). Gulf countries hire South Asians predominantly for services and contract manufacturing works (Gardner, 2010; Ali, 2018). Income inequalities between domestic and international migrants were striking (Table 1). Global migrants generated substantial greater yearly incomes, supporting the **neoclassical economic theory** that wage differentials are a major motivation for migration (Harris & Todaro, 1970; Todaro & Smith, 2011). Greater earnings among Gulf migrants also produced better outcomes for households regarding savings, better housing and children's education (**Graph 3**), findings that replicate international

findings on the benefits of remittances on family welfare (Adams & Page, 2005; Mohapatra et al., 2009).

International migration enhances financial stability and decreases economic hardship using important remittances, as observed in South Asian household studies (World Bank, 2024; Rajan & Zachariah, 2012). The study boosts value by targeting Bihar's Muslim migrants, a particular group often missed in wider Indian studies. Whereas inquiry into Kerala and other Indian states have analyzed socio-economic empower through Gulf migration (Osella & Osella, 2008; Zachariah & Rajan, 2012), research reveals Bihar's migrants draw benefits from global engagement, but outcomes are shaped by skills and networks. This demonstrates how social capital drives migration, a commonly neglected area in mainstream studies (Massey et al., 1993; Kler & Deshingkar, 2020). Policy must prioritize migrant well-being by means of training and lawful pathways. In parallel, Bihar requires structural rural reforms to relieve hardship migration. Finally, mapping religious identity is crucial for understanding recruitment and opportunities (Jeffrey et al., 2008; Deshingkar, 2012).

A striking result was the lower average education level among global migrants against internal migrants (**Graph 1**). This varies from earlier research that suggests higher education levels foster multinational migration (Lucas, 1997). Gulf need for semi-skilled workforce commonly misses formal education in Bihar's context (Kapiszewski, 2006; Hussain, 2019). Financial constraint and hiring channels propel migration aspirations and call for deeper analysis. Moreover, the excessive consumption of domestic remittances (**Graph 4**) implies that internal migrants' wages are mainly centered on securing basic needs over long-term investments. Internal migration needs aid mechanisms to achieve truly impactful outcomes (Deshingkar & Akter, 2009; Chant, 2013). International migration yields greater returns even so identity and networks influence Bihar's Muslim migration experiences.

CONCLUSION AND LIMITATIONS

Bihar's multinational Muslim migrants, hugely in the Gulf, ensure higher earnings and stronger household welfare than internal migrants, stimulating investments in education and housing (Table 1 & **Graph 3-4**; Todaro & Smith, 2011; World Bank, 2024). Internal migration continues to cluster among lower-skilled laborers involved in construction and agriculture, largely for subsistence needs (Bhagat, 2013; Deshingkar & Akter, 2009). This paper substantiated that push-pull factors and wage differentials strongly influence migration decisions whereas social networks serve as intermediaries in accessing opportunities (Harris & Todaro, 1970; Kler & Deshingkar, 2020). Migration routes and impacts differ by type, with Muslim identity determining strategies despite scarce data (Jeffrey et al., 2008). This study connects Bihar's migration types and forms research gaps, contributing policy insights. Future research needs to focus on religion-driven migration dynamics.

The paper is bounded by secondary data gaps in terms of identity, motivations and measurement discrepancies. Lacking micro-level psycho-social understanding, it still makes use of comprehensive triangulation and processing to facilitate a reliable, systematic overview of Bihar's divergent migration patterns.

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ICT IN EDUCATION UNDER THE NATIONAL EDUCATION POLICY 2020

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ABSTRACT

Information and Communication Technology (ICT) has become a vital part of modern education, significantly transforming traditional teaching and learning methods. The National Education Policy (NEP) 2020 highlights the importance of integrating ICT to make education more accessible, inclusive, flexible, and quality-oriented. This study focuses on the role of ICT at different levels of education, including primary, secondary, and higher education. At the primary level, ICT tools such as animation and game-based learning make education more engaging and help in better understanding. At the secondary level, virtual laboratories and online assessments enhance analytical thinking and provide practical exposure. In higher education, ICT supports research activities and e-learning platforms, enabling students to access global knowledge and learn at their own pace. The paper also emphasizes the role of ICT in teacher training and educational administration, making teaching more effective and management more transparent. Furthermore, ICT contributes to skill development by improving critical thinking, creativity, digital literacy, and problem-solving abilities among students. However, the implementation of ICT faces challenges such as the digital divide, lack of infrastructure, limited access to devices, and insufficient teacher training. To overcome these issues, proper infrastructure development, affordable technology, and continuous training programs are essential. Overall, ICT plays a crucial role in achieving the goals of NEP 2020 and preparing students for the demands of the 21st century.

INTRODUCTION

The modern era is rightly called the age of technology, as it influences every aspect of life, including education. In the past, education relied on traditional methods like books, blackboards, and oral teaching. However, with changing times, Information and Communication Technology (ICT) has become an essential part of the education system, bringing innovation and improvement. The National Education Policy 2020 aims to transform education by making it more flexible, accessible, and quality-driven. ICT plays a key role in achieving these goals. It includes tools such as smart phones, tablets, digital boards, e-learning platforms, virtual labs, and digital libraries. Through ICT, education is no longer limited to classrooms but extends to a global level.

ICT has made learning more interactive and engaging. Students now learn through videos, animations, and simulations, which improve understanding and interest. It also allows students to access global knowledge, learn new skills, and expand their horizons beyond textbooks. The policy emphasizes inclusive education, ensuring that students in rural and remote areas can also access quality learning through technology. ICT also benefits teachers by enabling them to adopt modern teaching methods and improve their skills through online training and digital resources. In addition, ICT helps in educational administration, such as managing student records, conducting exams, and declaring results, making the system more efficient and transparent. It also supports blended learning, combining online and offline education for better outcomes. However, challenges

like the digital divide remain, as not all students have access to devices or the internet. To overcome this, proper infrastructure, affordable technology, and teacher training are necessary. Thus, ICT is a powerful tool that can transform education if implemented effectively.

Overall, ICT has brought a revolution in the education sector, and the National Education Policy 2020 has further strengthened this transformation.

USE OF ICT IN DIFFERENT LEVELS OF EDUCATION

The use of Information and Communication Technology (ICT) in the field of education has become extremely important in today's time. Under the National Education Policy (NEP) 2020, ICT is used at every level of education to make learning more qualitative, simple, and accessible. The use of ICT varies across different levels of education because students' understanding, age, and learning needs are different at each stage.

At the **primary education level**, learning begins for children, so it is very important to make education interesting and simple for them. ICT plays an effective role here. Educational content with animations, cartoons, pictures, and audio is highly engaging for young children. When a child watches a story through video or learns through games, they can learn quickly and with enjoyment. Through ICT, game-based learning and interactive applications increase children's curiosity and interest in learning.

At the **secondary and higher secondary levels**, the use of ICT becomes more advanced. Students learn through virtual labs, online tests, and presentations. This helps in developing analytical skills and logical thinking. In higher education, ICT is used through research tools, e-libraries, and online courses, which connect students with global knowledge.

Primary level → Animation and game-based learning

Secondary level → Virtual labs and online assessment

Higher education → Research and e-learning platforms

Primary Level ICT Use: Animation and Game-Based Learning

Primary education is the most important stage of a child's academic journey. At this stage, children develop basic learning habits, language skills, mathematical understanding, and thinking abilities. However, at this age, traditional teaching methods may often seem boring or difficult for them. Therefore, under the National Education Policy 2020, ICT is used to make education more interesting and understandable, especially through animation and game-based learning.

In animation-based learning, children are taught using pictures, cartoon characters, sound, and movement. When a lesson or story is presented in animated form, children can easily focus their attention. For example, when learning about animals, animated videos help children understand and remember the topic for a longer time. Animation also simplifies complex topics. In mathematics, calculations; in science, natural phenomena; and in language, stories can be presented visually, which improves understanding.

BENEFITS OF ANIMATION-BASED LEARNING

Makes learning more interesting and enjoyable

Improves children's attention span

Simplifies complex topics

Enhances memory retention

Enables both visual and auditory learning

On the other hand, **game-based learning** is also a very effective method at the primary level. In this method, children are taught through games. These games include questions, puzzles, quizzes, and interactive activities, which actively engage students in the learning process. Children learn while playing, making learning an enjoyable experience. In this method, the child does not simply memorize answers but finds solutions based on understanding, which develops their logical thinking skills.

BENEFITS OF GAME-BASED LEARNING

Increases interest and enthusiasm in learning

Develops logical thinking and problem-solving skills

Actively engages children in the learning process

Reduces study-related stress

Improves long-term retention of learned concepts

In this way, ICT-based animation and game-based learning at the primary level play an important role in the overall development of a child. It not only provides knowledge but also develops curiosity, creativity, and confidence in children.

USE OF ICT AT SECONDARY LEVEL: VIRTUAL LABS AND ONLINE ASSESSMENT

The secondary education stage is a very important phase in a student's academic development. At this level, it is necessary to develop logical thinking, analytical skills, and practical understanding among students. Information and Communication Technology (ICT) plays an effective role here, especially through virtual labs and online assessment.

Virtual labs are digital platforms where students can perform laboratory experiments virtually using a computer or the internet. In many schools, students do not get enough opportunities for practical experiments due to limited laboratory facilities. However, virtual labs solve this problem. Students can observe and understand various science experiments, chemical reactions, and physics concepts in a visual and interactive way. Virtual labs make the learning process safer and more cost-effective. Students can perform experiments repeatedly, learn from their mistakes, and study at their own pace. This method also helps in building confidence and developing practical skills.

BENEFITS OF VIRTUAL LABS

Make experiments simple and safe

Eliminate the shortage of physical laboratory facilities

Provide opportunities for repeated practice

Offer visual and interactive learning experiences

In addition, online assessment has also become very important at the secondary level. Online exams and quizzes enable quick and unbiased evaluation of students' knowledge. Teachers can easily track student progress and identify their weaknesses. Online assessment provides instant results, which motivates students to understand and improve their mistakes. This method saves time and makes the evaluation process more transparent.

BENEFITS OF ONLINE ASSESSMENT

Fast and unbiased results

Saves time and cost

Easy monitoring of student progress

Provides immediate feedback

In this way, the use of ICT at the secondary level helps in developing students' logical thinking, practical knowledge, and self-learning abilities.

HIGHER EDUCATION: ICT IN RESEARCH AND E-LEARNING PLATFORMS

At the higher education level, the use of ICT becomes more in-depth and globally oriented. At this stage, students need to be encouraged not only to gain subject knowledge but also to develop research skills, analytical thinking, and innovation. ICT plays a very important role in all these areas. In the field of research, ICT provides students and researchers easy access to global knowledge. Through e-libraries, online journals, research databases, and digital books, they can obtain the latest information. This improves the quality of research and saves time.

Students are no longer dependent only on local books; they can also use internationally available research materials. This expands their thinking ability and prepares them to compete at a global level.

BENEFITS OF ICT IN RESEARCH

Access to global information

Saves time and effort

Improves the quality of research

Encourages innovation and discovery

E-learning platforms are also very important in higher education. Through these platforms, students can study through online courses, virtual classrooms, and video lectures. They can learn at their own pace and revisit lessons whenever needed. E-learning makes education more flexible and accessible. Students get the opportunity to study without the limitations of time and place. This method is especially useful for working students and those living in remote areas.

BENEFITS OF E-LEARNING PLATFORMS

Study anytime and anywhere

Encourages self-learning

Provides wide knowledge across various subjects

Easy revision and repetition of lessons

In this way, the use of ICT in higher education makes students more knowledgeable, self-reliant, and research-oriented. It prepares them to face future challenges and takes education to a global level.

USE OF ICT IN TEACHER TRAINING

Online training and courses

Webinars and workshops

Use of digital tools

This helps teachers become more skilled, updated, and confident in their teaching methods.

ICT is also increasingly used in educational administration. In schools and colleges, digital management of student records, online admissions, fee payments, and result declaration processes have become easier through ICT. This saves both time and effort and increases transparency.

ICT IN EDUCATIONAL ADMINISTRATION

Digital record management

Online admissions

Results and assessment

School management systems

In this way, ICT acts as an important tool at every level of education. It makes education more simple, interesting, and effective. Under the National Education Policy 2020, the extensive use of ICT is bringing a new revolution in education and preparing students for the future.

ICT FOR SKILL DEVELOPMENT

In today's modern era, Information and Communication Technology (ICT) has become an important part of education. Under the National Education Policy 2020 (NEP 2020), the main aim of ICT is not only to provide information but also to develop various skills among students. In today's world, book-based knowledge alone is not sufficient. Students must have skills such as critical thinking, creativity, digital competence, and problem-solving ability. ICT plays a very important role in developing all these skills.

ICT-based learning makes students active learners. They do not only listen or read, but they learn through experience, observation, and interactive methods. This process deepens their understanding and accelerates skill development.

1. Development of Logical Thinking and Critical Thinking :- ICT-based learning helps students develop logical thinking and critical thinking skills. When students engage in simulation activities, quizzes, or problem-based learning, they think deeply about each question. Through digital tools, students are given multiple options and must choose the correct answer. This process strengthens their thinking ability.

Benefits

Develops logical thinking

Improves decision-making ability

Enhances analytical skills

2. Development of Creativity :- ICT plays a very important role in developing creativity among students. With the help of digital tools, graphic design applications, presentation software, and video creation tools, students can present their ideas in new and innovative ways. For example, when a student presents a topic through animation or video, they not only understand the concept but also express it creatively.

Benefits

Develops new ideas

Improves expression skills

Encourages innovation

3. Digital Literacy :- In today's world, digital literacy is a very important skill. Through ICT, students learn the proper use of computers, the internet, mobile applications, and digital platforms. They also learn skills such as email communication, online searching, word processing, presentations, and data management.

Benefits

Proper use of technology

Ability to search for information

Self-reliance in the digital world

4. Problem-Solving Skills :- In ICT-based learning, students are given different types of problems which they solve using technology. Through simulations, game-based learning, and project work, students identify problems, analyze their causes, and find appropriate solutions.

Benefits

Develops an analytical approach to problems

Improves decision-making speed

Gains practical knowledge

5. Communication Skills :- ICT also helps in developing communication skills among students. They express their ideas through online presentations, emails, discussion forums, and video conferencing. This process builds confidence and helps students express their thoughts clearly.

Benefits

Increases confidence

Improves clear expression

Enhances teamwork skills

6. Collaboration and Teamwork Skills :- In ICT-based projects, students often work in groups. They use online tools to collaborate and complete projects together. This helps them learn how to work in a team and develop a sense of cooperation.

Benefits

Develops teamwork ability

Increases cooperation spirit

Builds leadership qualities

7. Global Knowledge and Competitiveness :- Through ICT, students can connect with knowledge from around the world. They can access online courses, video lectures, and research papers to gain global-level education. This helps them become better prepared to compete at the international level.

Key Benefits of ICT-Based Skill Development

Develops logical thinking and decision-making ability

Enhances creativity and innovation

Improves digital literacy

Strengthens problem-solving skills

Develops communication and teamwork skills

Provides access to global knowledge

CHALLENGES

ICT-based skill development also faces some difficulties:

Lack of digital devices for every student

Insufficient proper guidance

Internet connectivity issues

Need for teacher training

ICT is not just a tool for providing information, but a powerful medium for the overall development of students. It helps in developing logical thinking, creativity, digital skills, and problem-solving abilities. Under the National Education Policy 2020, ICT-based skill development prepares students for the future and helps them succeed at the global level.

CHALLENGES AND SOLUTIONS OF ICT IN EDUCATION

In modern education, Information and Communication Technology (ICT) plays an important role. Under the National Education Policy 2020 (NEP 2020), ICT is widely used to make education more qualitative, simple, and accessible. Although ICT has many benefits, its implementation also faces several challenges. Understanding these challenges and finding proper solutions is very important to improve the education system.

1. Digital Divide :- One of the biggest challenges of ICT is the digital divide, which refers to the unequal access to technology between urban and rural areas. Students in cities often have smart phones, laptops, and high-speed internet, while many students in rural areas do not have these facilities. This inequality creates disparities in education, causing some students to fall behind.

Solution

Improve internet facilities in rural areas

Provide affordable digital devices through government support

Strengthen digital infrastructure

2. Internet and Connectivity Issues :- In many areas, weak or unstable internet connectivity is a major challenge. Continuous and high-speed internet is essential for online education, but it is not available everywhere.

Solution

Expansion of 4G/5G networks

Increasing network towers in rural areas

Providing offline digital content

3. Lack of Teacher Training :- Many teachers are not properly trained to use ICT tools. Proper training is required for using digital tools, online platforms, and smart classrooms effectively.

Solution

Regular ICT training programs

Organization of workshops and webinars

Digital certification courses for teachers

4. Lack of Digital Devices :- Many students do not have access to digital devices such as mobile phones, computers, or tablets. Due to this, they are unable to participate in online learning.

Solution

Providing affordable or free digital devices to students

Establishing smart classrooms in schools

Setting up community digital centers

5. Cyber Security :- Data privacy and cyber risks are important challenges in ICT-based education. It is essential to protect the personal information of students and teachers.

Solution

Creating awareness about cyber security

Using secure digital platforms

Strong passwords and data protection systems

CONCLUSION

Thus, it can be seen that under the National Education Policy 2020, ICT is bringing a revolution in education. It is making education more qualitative, accessible, and inclusive. Through ICT, students develop new skills and become better prepared for the future.

The use of technology in education is not just an option anymore, but a necessity in today's world. If used properly, ICT can help India achieve a prominent position in the global education system.

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THE ROLE OF INTERNATIONAL LAW IN PROTECTING HUMAN RIGHTS AND SHAPING INTERNATIONAL RELATIONS

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ABSTRACT

This article provides an in-depth examination of the transformative role international law plays in the protection of human rights and its subsequent influence on the architecture of international relations (IR) from the 20th century to the present. Historically, the Westphalian system established state sovereignty as an absolute shield against external interference. However, the post-WWII era catalysed a paradigm shift where the individual emerged as a subject of international concern, challenging the "domestic jurisdiction" of the state. By analysing the evolution of the International Bill of Human Rights, the rise of regional legal systems, and the doctrine of Responsibility to Protect (R2P), this paper explores how human rights norms have reshaped global diplomacy. It further investigates the persistent tension between "realpolitik" and normative legal frameworks, evaluating the efficacy of the UN, the International Criminal Court (ICC), and regional bodies. Ultimately, the article argues that while enforcement remains a significant challenge, international law acts as the primary moral and legal compass for global governance, dictating the legitimacy of states in an increasingly interconnected and transparent world.

KEYWORDS: INTERNATIONAL LAW, HUMAN RIGHTS, SOVEREIGNTY, INTERNATIONAL RELATIONS, UNITED NATIONS, GLOBAL GOVERNANCE, RULE OF LAW, CUSTOMARY INTERNATIONAL LAW, R2P, INTERNATIONAL CRIMINAL COURT.

INTRODUCTION

The relationship between international law and human rights represents one of the most significant normative shifts in the history of global politics. For centuries, international law was strictly "inter-state" law—a set of rules designed to manage the interactions between sovereign entities. The individual person was largely invisible to the international legal order, categorized as an "object" belonging to a state rather than a "subject" with inherent rights.

The horrors of the mid-20th century, specifically the Holocaust and the widespread atrocities of World War II, shattered the illusion that state sovereignty should be absolute. The Nuremberg Trials established the principle that individuals could be held accountable under international law for crimes against humanity, even if those acts were legal under their domestic laws. This was the genesis of a "humanized" international law.

Today, human rights are no longer a peripheral concern; they are at the heart of international relations. The degree to which a state respects the rights of its citizens is a primary metric for its legitimacy, its eligibility for international aid, its trade status, and its vulnerability to diplomatic or military intervention. This article examines the legal frameworks that underpin these protections and analyzes how they have fundamentally altered the behavior of states and the nature of international cooperation.

THE LEGAL FRAMEWORK: FROM DECLARATIONS TO BINDING OBLIGATIONS

The protection of human rights under international law relies on a "multi-layered" system consisting of global treaties, customary international law, and regional enforcement mechanisms.

The International Bill of Human Rights

The centerpiece of the global system is the International Bill of Human Rights, which provides the normative and legal vocabulary for all subsequent human rights discourse.

- **The Universal Declaration of Human Rights (UDHR, 1948):** Although adopted as a non-binding resolution by the UN General Assembly, the UDHR has attained a unique status. It is widely considered the "common standard of achievement for all peoples." Over time, many of its provisions have crystallized into Customary International Law, making them binding on all states regardless of whether they have signed specific treaties.
- **The International Covenant on Civil and Political Rights (ICCPR):** This treaty codifies "first-generation" rights—those that protect individuals from the overreach of the state. It includes the right to life, freedom of religion, freedom of assembly, and the right to a fair trial. Its enforcement is overseen by the Human Rights Committee, which reviews state reports and individual complaints.
- **The International Covenant on Economic, Social and Cultural Rights (ICESCR):** This covenant addresses "second-generation" rights, such as the right to work, education, and the highest attainable standard of health. Unlike the ICCPR, which requires immediate implementation, the ICESCR requires states to "progressively realize" these rights to the maximum of their available resources.

SPECIALISED CONVENTIONS AND JUS COGENS

Beyond the Bill of Rights, international law has developed specialized instruments to protect the most vulnerable groups and prohibit the most heinous acts:

- **The Convention on the Prevention and Punishment of the Crime of Genocide (1948):** This was the first human rights treaty of the UN era. It imposes a legal obligation on states not only to punish genocide but to prevent it.
- **The Convention Against Torture (CAT, 1984):** This treaty establishes an absolute prohibition on torture. Notably, it contains the principle of non-refoulement, prohibiting states from returning a person to another state where there are substantial grounds for believing they would be in danger of being tortured.
- **Jus Cogens (Peremptory Norms):** Some human rights norms are considered so fundamental that they are classified as jus cogens. These are non-derogable rules from which no state can "opt out," including the prohibitions on genocide, slavery, and torture.

Regional Human Rights Systems

While the UN system provides global standards, regional systems often provide more effective enforcement.

- **The European System:** The European Convention on Human Rights (ECHR) is the most advanced human rights system in the world. The European Court of Human Rights (ECtHR) allows individuals to bring cases directly against states. Its judgments are legally binding, and its jurisprudence has forced states to change laws on everything from police procedures to LGBTQ+ rights.
- **The Inter-American System:** The American Convention on Human Rights and its Court have been instrumental in addressing "disappearances" and state-sponsored violence in Latin America, often pioneering the "right to truth" for victims' families.

- The African System: The African Charter on Human and Peoples' Rights is unique in that it emphasizes "peoples' rights" and duties alongside individual rights, reflecting a more communal approach to human dignity.

HUMAN RIGHTS AND THE ARCHITECTURE OF INTERNATIONAL RELATIONS

The integration of human rights into international law has fundamentally challenged the traditional "Realist" view of international relations.

The Erosion of Absolute Sovereignty

The Westphalian concept of sovereignty (established in 1648) held that a state's internal affairs were its own business. International law has dismantled this. Today, human rights are considered a matter of erga omnes (obligations toward all). If a state commits mass atrocities, it is not merely a domestic issue; it is an injury to the international community as a whole.

Theoretical Perspectives

- Liberalism: Liberal IR theory posits that the internal nature of states matters. "Democratic Peace Theory" suggests that states respecting human rights and the rule of law are less likely to go to war with each other. Thus, international law promoting human rights is seen as a tool for global security.
- Constructivism: Constructivists argue that human rights norms have "redefined" state interests. States do not just follow human rights laws out of fear of punishment; they do so because being a "civilized" member of the international community has become part of their identity.
- Realism: Realists remain skeptical, arguing that powerful states use human rights as a rhetorical "cloak" to justify interventions that serve their strategic interests. They point to the selective enforcement of human rights as evidence of this hypocrisy.

MECHANISMS OF ACCOUNTABILITY AND ENFORCEMENT

The central challenge of international law is the lack of a centralized executive power. However, several mechanisms have been developed to ensure compliance.

The United Nations System

The UN Human Rights Council utilizes the Universal Periodic Review (UPR), a process where every UN member state must undergo a review of its human rights record every few years. While it relies on peer pressure rather than sanctions, it forces states to publicly justify their actions.

International Criminal Justice

The establishment of the International Criminal Court (ICC) in 2002 via the Rome Statute was a revolutionary step. It moved the focus from state responsibility to individual criminal responsibility. For the first time, heads of state can be indicted for war crimes, crimes against humanity, and genocide while still in office. The ICC serves as a "court of last resort," stepping in only when national courts are "unwilling or unable" to prosecute.

The Doctrine of Responsibility to Protect (R2P)

Adopted at the 2005 World Summit, R2P is a political and legal commitment to prevent mass atrocities. It rests on three pillars:

The state has the primary responsibility to protect its population.

The international community should assist states in doing so.

If a state "manifestly fails" to protect its population, the international community must take collective action (including military intervention as a last resort) through the UN Security Council.

Conditionality and "Soft" Enforcement

Human rights are increasingly linked to economic benefits. The EU's "GSP+" program, for instance, provides trade incentives to developing countries only if they ratify and implement core human rights and labor conventions. This "economic conditionality" has proven to be a powerful lever in shaping state behavior.

CASE STUDIES: INTERNATIONAL LAW IN ACTION

1 The Kosovo Intervention (1999)

The NATO intervention in Kosovo, though technically unauthorized by the UN Security Council, was justified by many as a "humanitarian intervention." This case accelerated the debate that led to R2P, highlighting the conflict between the legal requirement of Security Council approval and the moral imperative to prevent ethnic cleansing.

2 The South African Apartheid

International law played a crucial role in ending Apartheid. The UN General Assembly declared Apartheid a "crime against humanity," and the resulting international isolation, economic sanctions, and legal pressure demonstrated how normative consensus can force a state to abandon systemic human rights violations.

CONTEMPORARY CHALLENGES AND THE FUTURE

Despite the progress, the international legal protection of human rights faces significant headwinds in the 21st century.

1 The Rise of Authoritarianism and Sovereignty-Talk

A "backlash" against international law is evident in many parts of the world. Some states argue that international human rights are a form of "cultural imperialism" and have re-asserted a hardline version of sovereignty to deflect criticism of their domestic crackdowns.

2 The Digital Divide and Right to Privacy

The rapid evolution of surveillance technology, AI, and social media has outpaced the development of international law. The "right to privacy" (ICCPR Article 17) is being tested by states utilizing mass data collection for social control. International law must now adapt to define what "digital human rights" look like.

3 Climate Change and Human Rights

Environmental degradation is increasingly viewed through a human rights lens. The UN recently recognized the "right to a clean, healthy, and sustainable environment." However, the legal status of "climate refugees"—those displaced by rising sea levels rather than political persecution—remains a gap in international law that requires urgent attention.

CONCLUSION

The role of international law in protecting human rights and shaping international relations is neither static nor perfect. It is an ongoing project that reflects the tension between the world as it is (power-based) and the world as it should be (rule-based).

International law has successfully shifted the individual from the periphery to the center of global governance. It has provided a universal language for the oppressed and created a framework where even the most powerful states must at least pay lip service to human dignity. While the enforcement gap remains the system's "Achilles' heel," the existence of these legal norms creates a standard against which all state conduct is measured. In an era of global crises—from pandemics to climate

change—international law remains the only viable framework for ensuring that international relations are governed by justice rather than brute force.

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