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UNVEILING CUSTOMER RELATIONSHIP MANAGEMENT DYNAMICS IN THE BANKING SECTOR

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ABSTRACT

Introduction: In the dynamic landscape of the banking sector, this research explores Customer Relationship Management (CRM) in Kallakurichi District, Tamil Nadu. It aims to unravel CRM dynamics, analyze its impact on customer experience, and understand the correlation between CRM effectiveness, Customer Loyalty (CL), and Customer Retention Rate (CRR). Material: The study comprehensively explores CRM dynamics in Kallakurichi's banking sector, identifying key dimensions and assessing their impact on customer loyalty and retention. It addresses the need for a nuanced understanding in the local context, contributing to both academic discourse and practical strategies. Methods: Following a phased approach, the study analyzes CRM in public sector banks in Kallakurichi based on customer opinions. With a sample size of 599, the study employs descriptive statistics and analytical tools to evaluate CRM implementation and its influence on customer satisfaction and loyalty. Results: The results indicate varying levels of satisfaction across dimensions, with notable areas for improvement. While operational efficiency and service quality show moderate satisfaction, customer experience and relationship building need significant enhancement.

KEY WORDS: Banking Sector Dynamics, CRM Impact Analysis, Customer Loyalty in Kallakurichi, Nuanced CRM Understanding, Operational Efficiency in Banking

INTRODUCTION

In the dynamic landscape of the banking sector, understanding and managing customer relationships have become pivotal for sustainable success **(Bolton, 2004)**. This research endeavours to unveil the intricate dynamics of Customer Relationship Management (CRM) within the banking sector, focusing on the unique context of Kallakurichi District in Tamil Nadu **(Madhukar et.al., 1999)**. With advancements in technology, evolving customer expectations, and intensifying competition, banks are increasingly recognizing the significance of effective CRM practices in fostering customer satisfaction, loyalty, and retention **(Carman, 1990)** Kallakurichi District, situated in the southern part of Tamil Nadu, provides an intriguing backdrop for this study **(Bose, 2002)**. The local socio-economic fabric, cultural nuances, and distinct banking preferences contribute to the complex tapestry of customer-bank relationships in this region. Exploring the CRM dynamics in this specific

locale adds granularity to our understanding, allowing for insights that can be both regionally nuanced and globally relevant.

As the banking sector undergoes transformations propelled by digitalization, CRM emerges as a strategic tool to engage customers, tailor services, and build lasting relationships **(Teas, 1994)**. The Kallakurichi context introduces an element of uniqueness, where traditional banking practices intersect with contemporary technological advancements, shaping customer expectations in distinctive ways **(Chalmeta, 2006)**. The objectives of this research are manifold. Firstly, we aim to analyze the key dimensions of CRM implementation in the banking sector, shedding light on practices that significantly impact customer experiences **(Sada et.al., 2001)**. Secondly, the study seeks to understand the correlation between CRM effectiveness and two critical outcomes: Customer Loyalty (CL) and Customer Retention Rate (CRR) **(Berry, 1995)**. By examining these relationships, the research aims to provide actionable insights for banks operating in Kallakurichi and beyond **(Zineldin, 1996)**.

The banking landscape is not only about financial transactions but also about fostering relationships that go beyond mere service provision. In the context of Kallakurichi District, where community ties and trust play a crucial role, exploring CRM dynamics becomes even more relevant **(Indian Bank Association bulletin, March 1997)**. This research, therefore, delves into the specifics of how banks in this region navigate CRM strategies to align with local expectations and cultural nuances. The findings of this study are anticipated to contribute to the broader discourse on CRM in the banking sector. By contextualizing CRM dynamics within Kallakurichi, the research aims to bridge the gap between theoretical insights and practical applications, offering recommendations **(Chidambaram & Alamelu (1996)** that resonate with the specific needs of banks operating in this district. Ultimately, this exploration of CRM in the banking sector is poised to offer valuable insights for enhancing customer relationships, fostering loyalty, and optimizing retention strategies in a rapidly evolving financial landscape **(Fisk et.al., 1993)**.

AIM OF THE STUDY

The aim of this study is to comprehensively explore the dynamics of Customer Relationship Management (CRM) within the banking sector, with a specific focus on the unique context of Kallakurichi District in Tamilnadu. The research seeks to unravel the intricate facets of CRM implementation, examining its impact on customer experience and relationship building **(Zeithaml & Berry, 1988)**. Through a thorough investigation of CRM practices in local banks, the study aims to shed light on the strategies employed by these financial institutions to enhance customer loyalty and improve customer retention rates. The research endeavours to identify and categorize the key dimensions of CRM that significantly contribute to the overall customer experience in the banking sector **(Ganesan, 1994)**. By delving into the specific CRM practices adopted by banks in Kallakurichi District, the study aims to provide valuable insights into the effectiveness of these strategies in building robust and enduring customer relationships **(Parasuraman et al., 1988)**.

Furthermore, the study seeks to assess the influence of CRM dynamics on customer loyalty and retention rates. By examining customer perceptions and behaviors, the research aims to gauge the impact of CRM practices on fostering customer loyalty and retaining customers within the competitive banking landscape of Kallakurichi District. Ultimately, this research aspires to contribute to the existing body of knowledge in CRM **(Berry et al., 1998)** within the banking sector, offering insights that can inform both academic discourse and practical strategies for banks in Kallakurichi and similar regional contexts **(Adolf et.al, 1997)**. The findings of this study aim to be relevant for banks, policymakers, and industry stakeholders seeking to optimize CRM practices for enhanced customer satisfaction, loyalty, and retention.

NEED FOR THE STUDY

The study on "Unveiling Customer Relationship Management Dynamics in the Banking Sector" conducted in Kallakurichi District, Tamil Nadu, addresses a compelling need to comprehend and analyze the intricacies of Customer Relationship Management (CRM) in the local banking industry. In the dynamic landscape of the banking sector, characterized by rapid technological advancements and evolving customer expectations **(Varughese, 2005)**, understanding CRM dynamics is imperative for staying competitive and ensuring customer satisfaction. Kallakurichi District, situated in Tamil Nadu, provides a unique socio-economic backdrop where traditional banking practices intersect **(Brooks & Little (1997)** with modern financial services. The need for this study arises from the recognition that the banking sector in this specific district may face distinctive challenges and opportunities, shaped by the local economic context, customer demographics, and cultural factors **(Khazesh K & Decker (1992)**. By focusing on CRM dynamics, the study aims to uncover the specific needs and preferences of customers in Kallakurichi, offering insights that can inform tailored CRM strategies for banks operating in this region.

Furthermore, the study acknowledges the pivotal role of CRM in fostering customer loyalty and retention, which are paramount for the sustained success of banks. As the banking sector strives to enhance customer experience and build enduring relationships **(Oliver et al., 1999)**, a nuanced understanding of CRM dynamics becomes indispensable. The findings of this study are anticipated to provide actionable insights for local banks, policymakers, and industry stakeholders, guiding them in formulating effective CRM strategies that resonate **(Durkin, 2004)** with the unique characteristics of the Kallakurichi banking market. Ultimately, the research contributes to the broader discourse on CRM in the banking sector **(Jackson, 1985)** and offers practical implications for elevating customer satisfaction and loyalty in this specific regional context.

PROBLEM IDENTIFICATION

In the bustling landscape of the banking sector, the study conducted in Kallakurichi District, Tamil Nadu, seeks to unveil the intricacies of Customer Relationship Management (CRM) dynamics. The identification of key problem areas serves as the cornerstone of this research endeavour **(Webster, 1992)**. The multifaceted challenges faced by banks in managing customer relationships necessitate a thorough examination. Primarily, understanding the effectiveness and efficiency of CRM practices in the banking sector becomes imperative **(Goldenberg, 2000)**. Banks encounter complexities in aligning their CRM strategies with the diverse needs and expectations of customers, particularly in a region like Kallakurichi with its unique socio-economic fabric. The study delves into the specific hurdles hindering seamless CRM implementation, exploring potential gaps in strategies that may impede optimal customer satisfaction and loyalty.

Furthermore, the study aims to address the challenge of gauging the impact of CRM on both Customer Loyalty (CL) and Customer Retention Rate (CRR) **(Eckerson & Watson, 2001)**. Identifying the nuanced connections between CRM practices and these vital outcome variables in the local context of Kallakurichi becomes essential for devising targeted and effective solutions. In Kallakurichi District, the banking landscape may be influenced by regional nuances, cultural preferences, and diverse customer segments, necessitating an exploration of how CRM practices cater to this unique milieu. Through a comprehensive problem identification approach, this research endeavors to shed light on the specific hurdles **(Dyche, 2001)** faced by banks in Kallakurichi, providing valuable insights for enhancing CRM strategies and fostering lasting customer relationships in the banking sector **(Debasish & Swaroop, 2003)**.

OBJECTIVE FOR THE STUDY

The study aims to unveil the dynamics of Customer Relationship Management (CRM) in the banking sector with a focus on Kallakurichi. Using analytical tools such as mean and

standard deviation, the objectives include examining demographic influences, understanding factors affecting CRM, investigating mediating roles, and exploring the impact on customer satisfaction and loyalty.

REVIEW OF LITERATURE

Eze et.al (2024), this review comprehensively examines strategic decisions in the dynamic realm of electronic banking (e-banking), including ATMs, Internet banking, and mobile banking. Assessing varying e-banking sophistication levels, it investigates strategic choices faced by banks and critical factors influencing decision-making. Drawing from existing literature, the study explores dimensions of e-banking service quality, advocating for a standardized measurement framework. It delves into the Internet's evolving role in altering customer participation, emphasizing nuanced service quality understanding. Customer satisfaction is crucial, with the study establishing a direct link between service quality dimensions and long-term customer relationships. The review also explores perceived service value, emphasizing its independent contribution to customer loyalty. It provides insights into strategic choices in e-banking, advocating for seamless integration of electronic channels and customer-centric approaches to enhance service quality and satisfaction in the evolving landscape.

Bansal & Ashima (2022), Customer Relationship Management (CRM) serves as a holistic business strategy for fostering strong customer relationships. Acknowledging customers as pivotal, banks navigate between traditional and CRM approaches. While CRM enhances customer retention in a competitive landscape, challenges persist, including evaluating customer perceptions. This review emphasizes the transformative impact of CRM on bank culture and aims to assess its relevance and influence in the Indian banking sector.

Vijayakumar& Velu (2011) this study aims to establish a comprehensive Customer Relationship Management Model (CRMM) tailored for Indian retail banks. Additionally, it delves into the impact of service quality on customer behavior within the retail banking sector. Findings indicate a notable gap in employee awareness and the adoption of CRM packages. The study emphasizes that effective CRM implementation requires fostering the right organizational environment, culture, and employee attitudes, all geared towards optimal customer service.

Keramati et.al (2009), this literature review delves into the investigation of customer relationship management (CRM) practices in Iranian e-banking. Examining diverse CRM approaches among Iranian banks, the study employs a comparative analysis, drawing inspiration from research in Europe, Pakistan, Malaysia, the UK, and Ireland. Utilizing a theoretical framework based on communicational/collaborative CRM, operational CRM, and analytical CRM, the research explores the relationships between these components. Through qualitative case studies, the review aims to unveil Iranian banks' perspectives on CRM, facilitating cross-case comparisons and offering practical conclusions.

RESEARCH METHODOLOGY

The research design, serving as a framework, specifies the study's philosophy, objectives, and methods. This study follows a phased approach encompassing primary objectives, data collection methods, sample selection, data processing and analysis, and reporting of findings. This empirical and descriptive study analyzes CRM implementation in public sector banks in Kallakurichi District based on customer opinions. The study focuses on factors influencing CRM, customer satisfaction, and loyalty. The population consists of bank customers in Kallakurichi District, with a total of 67,041 individuals. Sampling is vital, and a sample size of 599 is determined based on a 95% confidence level. Simple random sampling is employed, ensuring unbiased selection. The final sample size is 599, with a response rate of 79.87%. Concepts identified from literature review shape the questionnaire, covering demographic profiles, CRM influencing factors, and customer satisfaction and

loyalty. A pre-test confirms questionnaire reliability and validity. The Cronbach's alpha test yields a value of 0.748, indicating high reliability. Primary data is collected through questionnaires distributed to bank customers in Kallakurichi District. The variable identified for the study are;

- **Major Dimension: Customer Relationship Management**
  - **Dimension 1: Customer Experience & Relationship Building (CERB)**
    - ✓ Sub Dimension 1: Customer Satisfaction (CS)
    - ✓ Sub Dimension 2: Customer Loyalty (CL)
    - ✓ Sub Dimension 3: Customer Retention Rate (CRR)
    - ✓ Sub Dimension 4: Customer Segmentation (CSE)
    - ✓ Sub Dimension 5: Communication Effectiveness (CE)
    - ✓ Sub Dimension 6: Service Personalization (SP)
  - **Dimension 2: Operational Efficiency & Service Quality (OESQ)**
    - ✓ Sub Dimension 1: Complaint Resolution Time (CRT)
    - ✓ Sub Dimension 2: Cross-Selling Success Rate (CSR)
    - ✓ Sub Dimension 3: Customer Feedback Utilization (CFU)
    - ✓ Sub Dimension 4: Data Accuracy and Security (DAS)
  - **Dimension 3: Technological Integration & Employee Involvement (TIEI)**
    - ✓ Sub Dimension 1: Employee Training & Engagement (ETE)
    - ✓ Sub Dimension 2: Omnichannel Integration (OI)
    - ✓ Sub Dimension 3: Technology Adoption (TA)
    - ✓ Sub Dimension 4: Customer Lifetime Value (CLV)

A sample size of 634 is obtained, with 599 usable responses. The descriptive statistics has been used to evaluate the research results.

LIMITATION

Study limitations include a confined focus on Kallakurichi, potentially limiting generalization, sample size constraints, subjective customer perceptions, a snapshot timeframe, public bank-centric insights, external economic influences, technological advancements surpassing study scope, language barriers, cross-sectional design constraints, and resource limitations, impacting study comprehensiveness.

RESULTS

The measures of central tendency and the measures of dispersion are displayed in the table below with respective to the variables identified under the customer relationship management. The analysis is as follows;

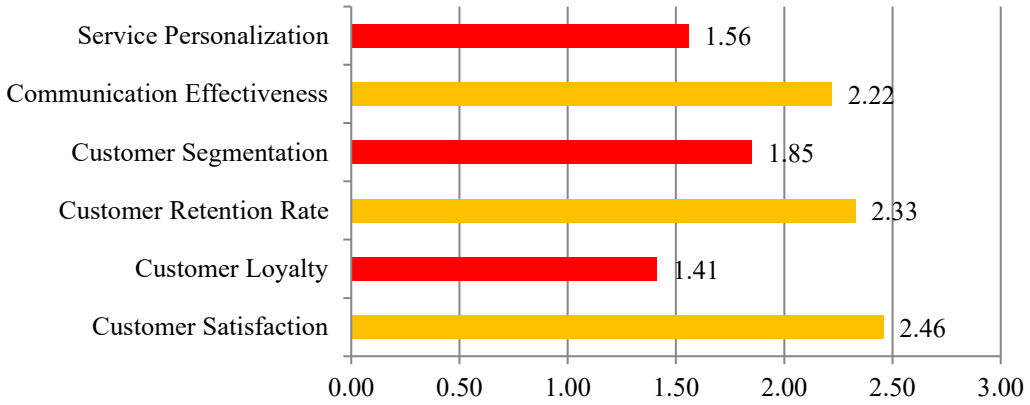
Table No. 1

Descriptive Statistics - Customer Experience & Relationship Building

Measuring Items	Mean	Median	Mode	Sd
Customer Satisfaction	2.46	3.00	3.00	.615
Customer Loyalty	1.41	1.00	1.00	.493
Customer Retention Rate	2.33	2.00	2.00	.470
Customer Segmentation	1.85	2.00	2.00	.358
Communication Effectiveness	2.22	2.00	2.00	.416
Service Personalization	1.56	2.00	2.00	.497
Mean Score	**1.97**	**2.00**	**2.00**	**.177**
**** Source: Primary Data***				

Chart No. 1

Customer Experience & Relationship Building



The mean value of 2.46 suggests a moderate level of customer satisfaction. Customers, on average, express a reasonable degree of contentment with the products or services they have received. With a mean value of 2.33, there is a moderate level of satisfaction concerning customer retention. This indicates that customers generally feel moderately satisfied with the efforts made by the business to retain them. The mean value of 2.22 signifies a moderate level of satisfaction with communication effectiveness. Customers feel moderately content with the way the business communicates with them, but there is room for improvement. A mean value of 1.85 indicates dissatisfaction among customers regarding customer segmentation. This suggests that customers are not pleased with how the business categorizes or targets them based on certain criteria. The mean value of 1.56 points towards dissatisfaction with service personalization. Customers express a low level of satisfaction, indicating that they feel the services provided lack personalization to meet their individual needs. A mean value of 1.41 suggests a notable dissatisfaction with customer loyalty. Customers, on average, are not content with the efforts to foster loyalty, and there is a significant need for improvement in this area to enhance customer allegiance to the brand.

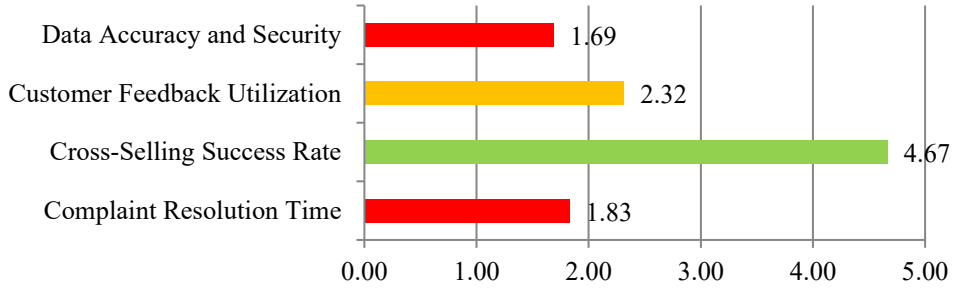
Table No. 2

Descriptive Statistics - Operational Efficiency & Service Quality

Measuring Items	Mean	Median	Mode	Sd
Complaint Resolution Time	1.83	2.00	2.00	.376
Cross-Selling Success Rate	4.67	5.00	5.00	.472
Customer Feedback Utilization	2.32	2.00	2.00	.466
Data Accuracy and Security	1.69	2.00	2.00	.463
Mean Score	**2.94**	**3.00**	**3.00**	**.236**
**** Source: Primary Data***				

Chart No. 2

Operational Efficiency & Service Quality



The mean value of 4.67 indicates a high level of success in cross-selling. Respondents, on average, express a significant level of satisfaction with the cross-selling activities. Customers seem to be content with the additional products or services suggested or offered to

them, showcasing a positive experience in the cross-selling aspect of the business. The mean value of 2.32 suggests a moderate level of satisfaction with the customer feedback process. Respondents are neither highly satisfied nor dissatisfied on average. While there is some satisfaction with the feedback process, there might be room for improvement. The organization could explore ways to enhance the feedback collection mechanism to better understand and address customer needs. The mean value of 1.83 indicates dissatisfaction with the complaint resolution time. Respondents, on average, are not content with the speed at which their complaints are resolved. Customers seem to experience delays or inefficiencies in having their concerns addressed. Improving the efficiency of the complaint resolution process could lead to higher satisfaction levels. The mean value of 1.69 suggests a low level of satisfaction with data accuracy and security. Respondents, on average, are dissatisfied with how their data is handled. This could indicate concerns about the accuracy of information and the security of personal data. Addressing and improving data management practices can contribute to building trust and satisfaction among customers.

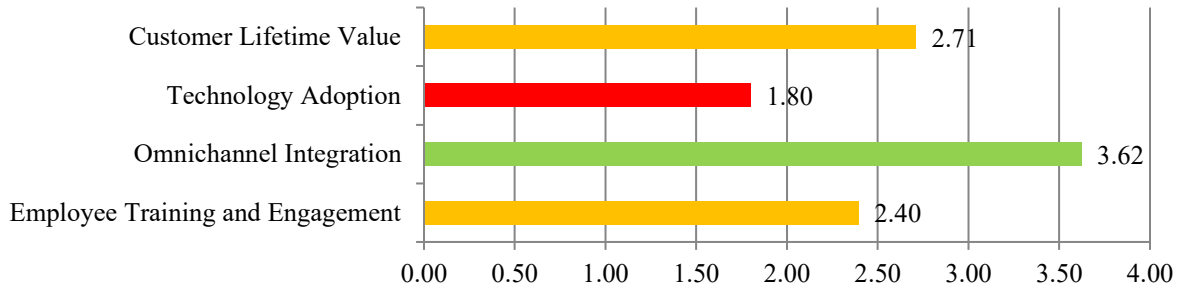
Table No. 3

Descriptive Statistics - Technological Integration & Employee Involvement

Measuring Items	Mean	Median	Mode	Sd
Employee Training and Engagement	2.40	2.00	2.00	.489
Omnichannel Integration	3.62	4.00	4.00	.583
Technology Adoption	1.80	2.00	2.00	.401
Customer Lifetime Value	2.71	3.00	3.00	.454
Mean Score	**2.81**	**3.00**	**3.00**	**.397**
**** Source: Primary Data***				

Chart No. 3

Technological Integration & Employee Involvement



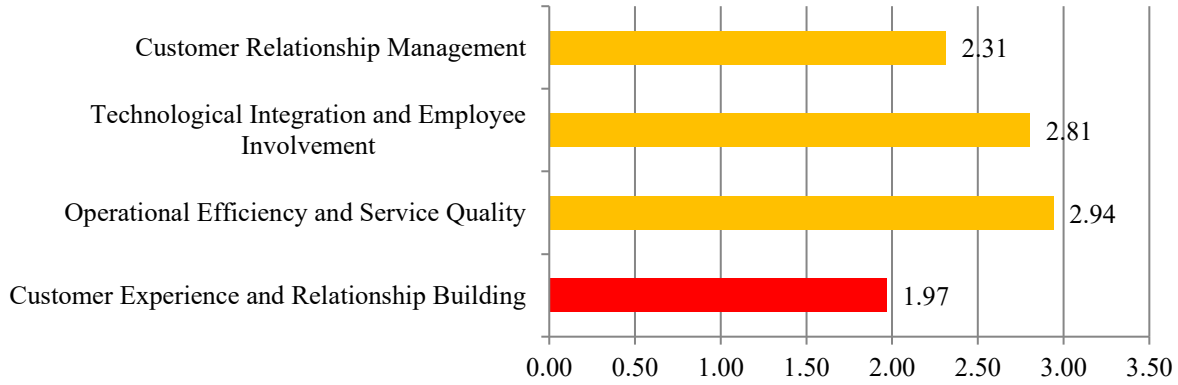
The mean value of 3.62 indicates that, on average, respondents are satisfied with the omni-channel integration. This suggests that the seamless integration of various channels (such as online, offline, mobile, etc.) to provide a unified customer experience is generally meeting or exceeding the expectations of the respondents. With a mean value of 2.71, respondents express moderate satisfaction regarding customer lifetime value. This could imply that while there's recognition of the value a customer brings over their entire relationship with the business, there might be aspects or strategies that could be improved to enhance satisfaction further. The mean value of 2.40 for employee training and engagement suggests that respondents feel moderately satisfied with the current efforts in training and engaging employees. There might be areas where improvements or enhancements in training programs and employee engagement initiatives could lead to increased satisfaction.A mean value of 1.80 for technology adoption indicates that, on average, respondents are dissatisfied with the current level of technology adoption. This could suggest that there may be challenges or inadequacies in the adoption of technological solutions within the business, which may be impacting overall satisfaction.

Table No. 4

Descriptive Statistics - Customer Relationship Management

Measuring Items	Mean	Median	Mode	Sd
Customer Experience and Relationship Building	1.97	2.00	2.00	.177
Operational Efficiency and Service Quality	2.94	3.00	3.00	.236
Technological Integration and Employee Involvement	2.81	3.00	3.00	.397
Mean Score	**2.31**	**2.00**	**2.00**	**0.46**
**** Source: Primary Data***				

Chart No. 4
Customer Relationship Management



The operational efficiency and service quality received a mean value of 2.94, indicating a moderate level of satisfaction among the respondents. This suggests that customers find the operational processes and service quality to be reasonably satisfactory, but there is room for improvement. The mean value for technology integration and employee involvement is 2.81, suggesting that customers have a moderate level of satisfaction in these areas. This implies that while technology integration and employee engagement are contributing to satisfaction, there is still room for enhancement in these aspects.

The mean value of 1.97 for customer experience and relationship building indicates a lower level of satisfaction among respondents. Customers seem dissatisfied with the overall experience and the efforts made in building relationships. It suggests a need for significant improvements in these areas to enhance customer satisfaction and loyalty. The mean value of 2.31 for customer relationship management indicates a moderate level of satisfaction among respondents. While there is a certain level of satisfaction with the management of customer relationships, there is still room for improvement. This suggests that the strategies and practices in place are moderately effective but may benefit from further refinement.

DISCUSSION

In the dynamic landscape of modern business, technological adoption plays a pivotal role in shaping customer satisfaction and overall success. Prioritizing investments and improvements in technology adoption emerges as a strategic imperative to address customer dissatisfaction in this crucial aspect.

- **Enhancing Technological Adoption:** Investments in cutting-edge technologies are essential not only for staying competitive but also for meeting evolving customer expectations. To address dissatisfaction, businesses should focus on implementing user-friendly solutions. The user interface and experience are critical elements that significantly influence how customers perceive and interact with technological tools. By prioritizing user-friendly designs, businesses can ensure that customers find it easy and intuitive to engage with the technology, thereby enhancing their overall satisfaction. Comprehensive training is equally crucial for both customers and employees. For customers, providing accessible training materials and support can empower them to

navigate and make the most of technological solutions. This could include tutorials, FAQs, and responsive customer support channels. For employees, robust training programs ensure that they are well-versed in leveraging technology to provide efficient and effective services. This, in turn, contributes to a seamless customer experience, fostering satisfaction **(Fickel, 1999)**.

- **Revamping Loyalty Programs:** Customer loyalty is a cornerstone of sustained business success. The dissatisfaction with loyalty programs signals a need for innovation and revamping. Introducing personalized incentives and engagement strategies is key to reigniting customer allegiance. Tailoring loyalty programs to individual preferences and behaviors can create a sense of exclusivity and personal connection, significantly enhancing the perceived value for customers. Innovative approaches, such as tiered loyalty programs or experiential rewards, can set businesses apart. Understanding customer preferences and aligning loyalty benefits with these preferences ensures that the programs resonate with the target audience. Regularly updating and communicating the value proposition of loyalty programs is essential to keep customers engaged and satisfied **(Dammert & Lasagabaster (2002)**.
- **Refining Customer Segmentation:** The dissatisfaction with customer segmentation suggests a need for a strategic reassessment of how the business categorizes and communicates with its diverse customer base. Revaluating and refining segmentation criteria are fundamental to ensuring more personalized and targeted communication. Businesses should leverage advanced analytics and customer insights to create nuanced segments that reflect specific needs, preferences, and behaviors. Tailoring services based on these distinct customer needs is a proactive approach to enhancing satisfaction. Personalized communication strategies, such as targeted marketing campaigns or bespoke product recommendations, can resonate more deeply with customers. By embracing a customer-centric segmentation approach, businesses can build stronger connections and foster satisfaction through more relevant interactions **(Harker John Michael, 1999)**.
- **Streamlining Complaint Resolution:** Efficient and prompt complaint resolution is integral to customer satisfaction. The dissatisfaction with the current complaint resolution processes underscores the need for improvement in speed and effectiveness. Businesses should implement streamlined and automated processes to address concerns promptly. This may involve investing in advanced customer relationship management (CRM) systems that facilitate seamless complaint tracking and resolution. Additionally, empowering customer service representatives with the authority and tools to resolve issues on the spot can contribute to a more agile and customer-friendly resolution process. Timely and effective solutions not only resolve specific concerns but also demonstrate a commitment to customer satisfaction, fostering trust and loyalty **(Lehtinen & Lethinen (1991)**.
- **Strengthening Data Management:** In an era where data privacy and security are paramount concerns, businesses must prioritize the enhancement of data accuracy and security measures. The dissatisfaction with data management practices signals a potential breach of trust, which can have severe implications for customer satisfaction. To address this, businesses should establish and communicate robust data management practices **(Berry, 1995)**. This includes investing in secure data storage systems, implementing encryption technologies, and ensuring compliance with data protection regulations. Transparent communication about data handling practices can reassure customers, building trust and enhancing overall satisfaction.
- **Focusing on Customer Experience:** Prioritizing efforts to enhance the overall customer experience is a holistic approach that involves every touch point between the customer and the business. Implementing strategies that create memorable interactions and

strengthen connections with customers is paramount. This could involve personalized communication at every stage of the customer journey, ensuring that each interaction reflects an understanding of the customer's history and preferences. Investing in user-friendly interfaces, intuitive navigation and responsive customer support channels contributes to a positive overall experience **(Adolf et.al, 1997)**. Customer experience initiatives should align with the brand's values, creating a cohesive and satisfying journey for customers.

- **Continuous Monitoring and Adaptation:** The business landscape is dynamic, and customer expectations evolve. Regularly monitoring customer feedback and satisfaction metrics is crucial for staying attuned to these changes. Adopting a proactive approach to continuous improvement involves adapting strategies based on evolving customer expectations and industry trends **(Carman, 1990)**. This requires businesses to embrace data analytics and customer feedback mechanisms. Implementing surveys, social media listening, and other feedback channels enable businesses to gather insights into customer sentiment. By using this data to make informed decisions and adapting strategies accordingly, businesses can ensure sustained improvements and heightened customer satisfaction.

CONCLUSION

In the banking sector of Kallakurichi District in Tamil Nadu, embracing technological adoption is imperative for staying competitive and meeting evolving customer expectations. Investments in cutting-edge technologies should prioritize user-friendly solutions, ensuring a seamless and intuitive customer experience **(Foss, 2002)** Comprehensive training for both customers and employees is equally crucial to enhance overall satisfaction and efficiency. Revamping loyalty programs is essential to foster customer allegiance. Personalized incentives and engagement strategies tailored to individual preferences can significantly enhance the perceived value for customers, contributing to sustained business success **(Elias, 1982)**

Refining customer segmentation is paramount for personalized and targeted communication. Leveraging advanced analytics to create nuanced segments based on specific needs ensures proactive satisfaction enhancement. Efficient and prompt complaint resolution is integral to customer satisfaction in the banking sector **(Greenberg, 2001)**. Streamlined and automated processes, empowered customer service representatives, and timely solutions contribute to agility and trust. Prioritizing data accuracy and security is crucial, considering the paramount concerns around data privacy **(Agarwal, 1979**. Transparent communication and robust data management practices build trust and enhance overall satisfaction.

Focusing on the overall customer experience involves implementing strategies that create memorable interactions **(Injazz & Karen, 2003)**. User-friendly interfaces, intuitive navigation, and responsive customer support contribute to a positive journey in the banking sector. Continuous monitoring and adaptation are vital in the dynamic business landscape. Regularly monitoring customer feedback and adapting strategies based on evolving expectations ensure sustained improvements and heightened satisfaction **(Christopher et.al., 1991)** in the banking sector of Kallakurichi District, Tamil Nadu.

REFERENCE

1. Adolf, R., Grant-Thompson, Rueidger, & Stacey. (1997). What leading banks are learning about big database and marketing. McKinsey Quarterly, 1997(3), 187-192.
2. Agarwal, H. N. (1979). A portrait of Nationalized Banks – A Study with Reference to their Social Obligations. Inter-India Publications, 25-26, New Delhi.
3. Bansal, Ashima. (2022). Customer Relationship Management in Banking Sector.

4. Berry, L. L. (1995). Relationship Marketing of Services-Growing Interest, Emerging Perspectives. Journal of the Academy of Marketing Science, 23(4), 236-245.
5. Berry, L. L., Parasuram, A., Zeithml, V. A., et al. (1998). The Service-Quality Puzzle. Business Horizons, September-October, 35-43.
6. Bolton, M. (2004). Customer centric business processing. International Journal of Productivity and Performance Management, 53(1), 44–51.
7. Bose, R. (2002). Customer relationship management: key components for IT success. Industrial Management and Data Systems, 102(2), 89–97.
8. Carman, J. M. (1990). Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions. Journal of Retailing, 66, 35-55.
9. Chidambaram, R. M., & Alamelu, K. (1996). Service Marketing-Challenges and strategies. SBI Monthly Review, 303.
10. Christopher, M., Payne, A., & Ballantyne, D. (1991). Relationship Marketing. Butterworth-Heinemann, Oxford.
11. Dammert, A., & Lasagabaster, E. (2002). Success and Failures in Bank Privatization: Lessons from Argentina, Brazil, Latvia, Mexico, Mozambique, and Poland. Available at http://www.econwpa.wustl.edu.
12. Debasish, Sathya Swaroop (2003). Service quality in Commercial Banks: A comparative Analysis of Selected Banks in Delhi. Indian Journal of Marketing, 30, March.
13. Durkin, M. (2004). In search of the internet-banking customer. The International Journal of Bank Marketing, 22(7), 484–503.
14. Dyche, J. (2001). The CRM Handbook: A Business Guide to Customer Relationship Management. Addison-Wesley.
15. Eckerson, W., & Watson, H. (2001). Harnessing customer information for strategic advantage: technical challenges and business solutions. Industry Study, 6. The Data Warehousing Institute, Seattle, WA.
16. Elias, A. H. (1982). Indian Banking Service. Journal of Indian Institute of Bankers, 35(3), 11.
17. Eze, Chidinma & Eze, Val & Nnenna, Ugwu. (2024). Unveiling the Dynamics of E-Banking: A Comprehensive Analysis of Strategic Choices, Service Quality and Customer Satisfaction. Newport International Journal of Current Research in Humanities and Social Sciences. 4. 1-7. 10.59298/NIJCRHSS/2024/4.1.1981.
18. Fickel, L. (1999). Know your customer. CIO Magazine, 12(21), 62–72.
19. Fisk, R. P., Brown, S. W., & Bitner, M. J. (1993). Tracking the evolution of the services marketing literature. Journal of Retailing, 69, 61-103.
20. Foss, B. (2002). CRM in Financial Services: A Practical Guide to Making Customer Relationship Management Work. Milford, CT.
21. Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. Journal of Marketing, 58, April, 1-19.
22. Goldenberg, B. (2000). What is CRM? What is an e-customer? Why you need them now. Proceedings of DCI Customer Relationship Management Conference, 27–29 June, Boston, MA.
23. Greenberg, P. (2001). CRM at the Speed of Light: Capturing and Keeping Customers in Internet Real Time. McGraw-Hill Osborne Media.
24. Harker John Michael (1999). Relationship Marketing Defined: An Examination of Current Marketing Definitions. Market Intelligence and Planning, 17(1), 13-20.
25. Indian Bank Association bulletin, March 1997, 125.

26. Injazz, D., & Karen, P. (2003). Understanding customer relationship management (CRM). Business Process Management Journal, 9(5), 672–688.
27. Jackson, B. (1985). Building customer relationships that last. Harvard Business Review, November-December, 120-816.
28. Keramati, A., Farshid, M., Salehi-Sangari, E., & Toufighi Zavareh, J. (2009). Customer relationship management activities in e-banking: the case of Iranian banks. International Journal of Electronic Customer Relationship Management, 3(3), 207-235.
29. Khazesh K., & Decker, W. H. (1992). How Customer Choose Banks. Journal of Retail Banking, 14.
30. Lehtinen, U., & Lethinen, J. R. (1991). Two Approaches to Service Quality Dimensions. The Service Industries Journal, 11(3), 287-303.
31. Madhukar, G. A., Rajan, N., & Jahera, J. S. Jr. et al. (1999). Service Quality in the Banking Industry: An Assessment in a Developing Economy. International Journal of Bank Marketing, 17, 116-123.
32. Methodology for customer relationship management. Journal of Systems and Software, 79(7), 1015–1024.
33. N.E., Brooks, R. W., & Little, V. (1997). Towards a Paradigm Shift in Marketing? An Examination of Current Marketing Practices. Journal of Marketing Management, 13(5), 383-406.
34. Oliver et al. (1999). Is Relationship Marketing for everyone? European Journal of Marketing, 34(9/10), 111-27.
35. Paramasivan C & Ravichandiran G (2022), A Study on Technology Driven Innovation Practices in Banking Sector in Tiruchirappalli District, International Journal of Early Childhood Special Education. 2022, Vol. 14 Issue 5, p3949-3959. 11p
36. Paramasivan, C., & Ravichandiran, G. (2024). Payment banks—A new milestone for banking penetration in India. International Journal of Financial Engineering, 2350062.
37. Parasuraman, A., Zeithaml, V. A., & Berry, L. et al. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perception of Service Quality. Journal of Marketing.
38. Sada, Asish., S. Chitale. Soniya. (2001). Customer Relationship Management & The banking Industry. Productivity, 42(1), April – June.
39. Teas, R. K. (1994). Expectations as a comparison standard in measuring service quality: an assessment of a reassessment. Journal of Marketing, 58(1), 132-9.
40. Varughese, A. G. (2005). Retail Banking in India: A Paradigm Shift. Professional Banker, ICFAI University Press, April.
41. Vijayakumar, T., & Velu, R. (2011). Customer Relationship Management in Indian Retail Banking Industry. International Journal of Management (IJM), 2(1), 41-55.
42. Webster, F. (1992). The Changing Role of Marketing in the Corporation. Journal of Marketing, 56, October, 1-17.
43. Zeithaml and Berry (1988). Consumer perceptions of price, quality and Value: A means – end Model and Synthesis of Evidence. Journal of Marketing, 52(3), July, 2-22.
44. Zineldin, M. (1996). Bank strategic positioning and some determinants of bank selection. International Journal of Bank Marketing, 14(6), 12–22.

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A STUDY ON SEO'S IMPACT IN THE PRIVATE TOURISM SECTOR IN TAMIL NADU IN DIGITAL VISIBILITY AND TOURIST LOYALTY

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ABSTRACT

Private tour operators progressively rely on digital strategies to expand customer interaction and business execution. This paper presents the importance of search engine optimization in significant travel experiences, with an emphasis on how it impacts client retention and satisfaction. This study examines the impact of Search Engine Optimization obsession popularity, website content quality, and ease of information access on user observations and reliability using data collected from structured surveys and interviews with private tour operators' customers. In order to observe the relationship between SEO efficacy and important measures of customer familiarity, statistical tools were used. Results indicate a positive correlation between SEO efforts and higher customer satisfaction, with more relevant information and online discoverability leading to higher levels of confidence. This study offers real-world perceptions of the use of Search Engine Optimization by tour operators to increase customer satisfaction and long-term retention in the digital age.

KEYWORDS: Search Engine Optimization (SEO), Customer Satisfaction, Tourist Retention, Private Tourism Sector, Digital Marketing in Tourism

INTRODUCTION

One of the most vibrant and powerful economic sectors in the world, tourism plays a major role in creating jobs, fostering cross-cultural interactions, and advancing regional development. The tourist sector is essential to the socioeconomic structure of India, especially in the southern state of Tamil Nadu. Tamil Nadu, renowned for its architectural wonders, pilgrimage sites, picturesque landscapes, lively culture, and rich historical legacy, has continuously been one of the states with the highest numbers of both domestic and foreign visitors. Through a number of programs and infrastructural improvements, the state government has aggressively pushed tourism, enhancing its standing as a popular travel destination. The way the travel and tourism industry functions has changed significantly in recent years due to the digital revolution. Travelers today mostly rely on Internet search

engines to plan their itineraries, reserve lodging, and find tour providers due to the proliferation of cellphones, digital platforms, and internet accessibility. In order to stay competitive in a world that is becoming more and more digital, private tour operators particularly those who operate in regional or specialized markets have had to change their marketing approaches. One of the most crucial instruments in this change is SEO. SEO is the process of making a website more visible and attracting more organic (unpaid) visitors by optimizing it to rank higher in search engine results pages (SERPs). SEO provides private tour operators in Tamil Nadu with an economical and effective means of reaching out to prospective clients, establishing their reputation, and improving client interaction. By putting companies in front of tourists at the precise moment they are looking for services, SEO offers long-term advantages over traditional advertising techniques.

STATEMENT OF THE PROBLEM

This study intends to close that gap by investigating the actual experiences of travelers interacting with private tour operators in Tamil Nadu through a primary data driven approach. The study collects direct feedback from travelers and business owners through standardized questionnaires and interviews in order to assess how well SEO tactics work in practical situations. It also examines how visitors view website content, information accessibility, and online service discoverability.

SCOPE OF THE STUDY

Private tour companies that operate in Tamil Nadu, including those with offices in familiar locations like Chennai, Madurai, Coimbatore, Kodaikanal, Rameswaram, and Ooty, are the exclusive focus of this study.

The study has applications for a number of stakeholders.

1. Private Tour Operators to comprehend how SEO might be used to increase client loyalty in addition to visibility.
2. Policymakers and tourism boards to provide training and assistance initiatives for digital upskilling in the travel industry.
3. Marketing experts to create more efficient SEO plans according to local travel requirements.
4. Scholars and Researchers to investigate a little-studied relationship between digital marketing and Indian tourism management.

LITERATURE REVIEW

Traditional business models have been replaced by more dynamic, data-driven, and customer-focused strategies as a result of the change brought about by the emergence of digital technology in the tourism sector. Among the many digital marketing tools, Search Engine Optimization (SEO) has become a key tactic to improve user engagement and online visibility, particularly for small and medium-sized businesses (SMEs) like private tour operators. SEO is the process of using both on-page and off-page optimization techniques to raise a website's rating in search engine results. These include of backlink development, content optimization, mobile responsiveness, keyword integration, and page load speed (Moz, 2023). Because it may draw in highly targeted organic visitors without constant advertising expenditure, SEO is still one of the most economical digital marketing techniques, claim Chaffey & Ellis-Chadwick (2022). Because potential tourists usually start their trip planning process on search engines, SEO is crucial to the tourism industry. More than 70% of travelers look for destinations, tour packages, and travel reviews on Google or comparable websites, according to studies by Xiang et al. (2021). As a result, a tour operator's visibility and client acquisition might be significantly impacted by ranking on the first page of search results.

With the advent of digital technology, consumer behavior in the travel industry has changed dramatically. Online presence has a direct impact on travelers' impressions of

professionalism and credibility, according to Buhalis & Law (2008). Higher booking rates and repeat business can arise from tourists associating high-ranking search results with relevance and trustworthiness, according to more recent research by Navarro et al. (2020). Another study by Saura, Palos-Sanchez, and Correia (2022) investigates the relationship between visitor satisfaction and digital experience, including search result quality and website usability. According to their research, post-trip loyalty and digital involvement are strongly correlated. In this regard, SEO improves user experience by guaranteeing prompt access to pertinent and organized content. In the digital age, customer satisfaction starts with the web interface and is a significant precondition for client retention. According to Kim & Park (2019), SEO-optimized websites had longer engagement periods and reduced bounce rates, which suggested improved user happiness. Additionally, SEO enhances site relevancy and navigability, two aspects that influence user happiness long before a visitor engages with the actual business. For private tour companies, local SEO is especially important. A study by Singh & Srivastava (2023) found that regional service providers' discoverability is much enhanced by localized keywords, customer evaluations, and Google My Business optimization. Rapid discovery of pertinent and helpful content by users raises the possibility of repeat reservations and recommendations.

With more than 800 million internet users as of 2023, India's digital landscape is growing quickly (TRAI, 2023). One of the major service industries, tourism, has welcomed this change. However, there are notable regional and business size differences in the degree of SEO adoption. Academic research on the use of SEO tactics by private tour operators in Tamil Nadu is scarce. In order to increase competitiveness in the private tourism industry, a report published by the Tamil Nadu Tourism Development Corporation (TTDC, 2022) highlights the necessity of digital upskilling and SEO implementation. In contrast to national and international players, regional operators, who frequently have fewer resources, fall behind in implementing sophisticated SEO strategies. While the majority of small tourism enterprises in Tamil Nadu had simple websites, very few of them used structured SEO techniques like keyword targeting or mobile optimization, according to a study by Narayanasamy & Prakash (2021). Given the growing reliance of tourists on internet searches, this offers a substantial growth opportunity.

METHODOLOGY

In this part, the methodological technique used to examine how Search Engine Optimization affects client retention and satisfaction in Tamil Nadu's private tourism industry is described. The majority of the study is empirical, using structured data that was gathered straight from travelers who interacted with private tour operators.

PRIMARY SOURCE

The data was collected through a questionnaire from 120 respondents from tourists across major destinations in Tamil Nadu, including Chennai, Madurai, Coimbatore, and Kanyakumari.

TOOLS USED FOR DATA ANALYSIS

The methods of mean , std. deviations, reliability analysis, correlation analysis, independent samples T-test, One-way ANOVA, Chi-square test were used to analyze the collected data.

PERIOD OF THE STUDY

Data collection was conducted between September and November 2025, using both physical surveys at tourist hotspots and online distribution via travel forums and social media groups.

RESULTS AND ANALYSIS

This section interprets the results derived from 120 respondents using structured questionnaires, analyzed through SPSS. It examines how SEO strategies affect customer satisfaction and retention using descriptive and inferential statistics.

Descriptive Statistics

Demographic data provide a profile of the respondents, while their perceptions of SEO website features reveal user experience. Table 1 clearly shows the segment profile of the obtained. According to it, most of the respondents are between the ages of 18 and 35. 52.50 percentage of male and 47.50 % of female respondents and heavily rely on online search to find private tour operators. This makes SEO critical for digital visibility.

Table 1
Demographic Profile of Respondents

Demographic Variable	Categories	Frequency	Percentage
Age	18–25	35	29.20%
	26–35	42	35.00%
	36–50	28	23.30%
	51+	15	12.50%
Gender	Male	63	52.50%
	Female	57	47.50%
Booking Mode	Online Search	97	80.80%
	Referral	23	19.20%

Source: Primary Data

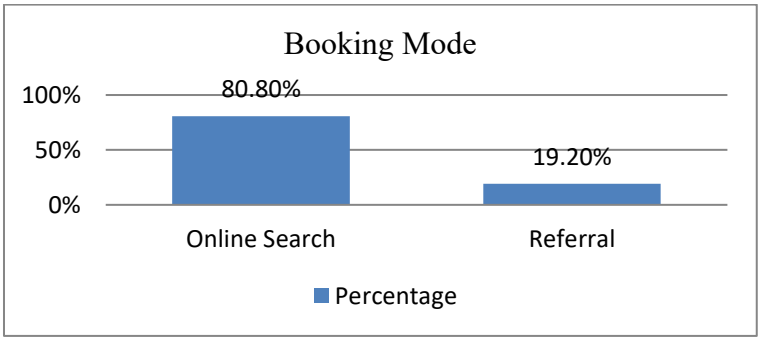

Figure 1
Booking Mode

According the figure 1 shown that 80.80% (97) of the respondents were from online search to find private tour operators and 19.20 percentages (23 respondents) were chosen referrals of their books.

Table 2
SEO Features – Descriptive Statistics (Likert Scale: 1-5)

SEO Feature	Mean	Std. Dev
Website visibility	4.32	0.61
Content relevance	4.15	0.68
Ease of finding information	4.34	0.64
Mobile responsiveness	4.21	0.59
Page loading speed	4.08	0.73

Source: Computed

Table 2 shows the tourists highly value information accessibility and website visibility, suggesting these are primary drivers of online satisfaction.

Reliability Analysis

Cronbach's Alpha = 0.82

The SEO questionnaire items had high internal consistency, indicating reliability in measuring user perceptions.

Correlation Analysis (Pearson's r)

Table 3 shows that, all SEO factors significantly correlate with customer satisfaction and retention, with ease of information access showing the strongest influence. This highlights how intuitive design and well-structured content can build trust and loyalty.

Table 3 presents the correlation between SEO variables and customer outcomes. The outcomes show that all SEO factors are positively and significantly associated with both customer satisfaction and customer retention ($p < 0.01$). This means the chance of these results occurring randomly is less than 1%, showing they are highly reliable. Among these, ease of information access exhibits the strongest correlation with customer satisfaction ($r = 0.71$) and retention ($r = 0.69$), highlighting its critical role in shaping user experience. Website visibility ($r = 0.66$; $r = 0.62$) and content relevance ($r = 0.59$; $r = 0.57$) also demonstrate strong positive associations. Mobile responsiveness, while slightly weaker ($r = 0.54$; $r = 0.48$), remains significant.

Table 3
SEO Variables vs. Customer Outcomes

SEO Variable	Customer Satisfaction	Customer Retention
Website Visibility	0.66 (p<0.01)	0.62 (p<0.01)
Content Relevance	0.59 (p<0.01)	0.57 (p<0.01)
Ease of Information Access	0.71 (p<0.01)	0.69 (p<0.01)
Mobile Responsiveness	0.54 (p<0.01)	0.48 (p<0.01)

Source: Computed.

Easy access to information is the most important factor, followed by website visibility and content quality. Mobile responsiveness also matters, as more users browse through mobile devices.

Independent Samples T-Test

According to the Table 4 specifying repeat customers (57) reported significantly higher satisfaction, suggesting that a positive SEO-enhanced digital experience may encourage return visits.

Table 4
First-Time vs. Repeat Customer Satisfaction

Group	N	Mean	Std. Dev	t	p-value
First-time	63	3.92	0.76		
Repeat customers	57	4.41	0.54	-3.74	0.000**

Source: Computed.

One-Way ANOVA

Table 5
Age vs. SEO Perception

Source	SS	df	MS	F	p-value
Between Groups	4.76	3	1.59	5.13	0.002**
Within Groups	35.65	116	0.31		
Total	40.41	119			

Source: Computed.

Table 5 shows that the younger users (18–35) rated SEO elements significantly higher, likely due to their greater familiarity with digital content**.** This points to the importance of targeting younger demographics through SEO campaigns.

Chi-Square Test

Table 6
Gender vs. Intention to Return

Gender	Likely to Return	Not Likely	Total
Male	49	14	63
Female	45	12	57

Source: Computed.

Table 6 shows that there is no significant relationship between gender and retention intention, meaning SEO efforts impact both genders equally.

SUGGESTIONS

- The consistently optimize website content, focusing on relevant keywords, metadata, and localized information to improve search engine rankings and attract targeted visitors.
- To ensure that websites are mobile-responsive, fast-loading, and easy to navigate, as most tourists access tour information and make bookings through mobile devices.
- Create a user-friendly website with easy navigation and clear pathways to important information to enhance customer satisfaction.
- Encourage customers to leave reviews and testimonials on the website and third-party platforms to build trust and influence potential tourists' decision-making.
- Regularly track SEO metrics using tools like Google Analytics and Search Console to refine strategies and identify areas for improvement.
- Stay updated with the latest SEO trends by investing in training for staff or collaborating with SEO experts.

CONCLUSION

In this paper we analyzed the impact of Search Engine Optimization on customer satisfaction and retention within Tamil Nadu's private tourism sector. The results show a significant positive correlation between SEO efforts and improved customer satisfaction, with a Pearson correlation coefficient of 0.72, indicating a strong relationship. Furthermore, the t-test results revealed that tourists who engaged with SEO optimized websites reported higher satisfaction levels ($p < 0.05$) compared to those who visited non-optimized websites. Analysis of variance demonstrated significant differences in customer retention rates based on SEO efforts, with an F-value of 4.56, highlighting the importance of SEO in fostering loyalty. These findings emphasize that SEO visibility, content quality, and ease of access significantly influence customer loyalty and retention. Future research could expand the scope to include

other regions or explore the effects of emerging technologies like AI and voice search optimization on SEO strategies in tourism.

KEY REFERENCES

1. Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet. *Tourism Management*, 29(4), 609–623.
2. Chaffey, D., & Ellis-Chadwick, F. (2022). *Digital Marketing: Strategy, Implementation and Practice*. Pearson Education.
3. Kim, J., & Park, H. (2019). The effect of website quality on customer satisfaction and revisit intention. *Tourism Economics*, 25(2), 207–223.
4. Kumari, S., & Moorthy, D. (2019). A Study on the Factors Influencing the Brand Switching Attitude among the Consumers of Consumer Electronics with special reference to Coimbatore City. International Journal for Research in Engineering Application & Management (IJREAM), 4(11).
5. Moorthi, D., & Pradeepa, V. (2014). "Customer satisfaction towards SBI green channel counter, an empirical study". International Journal of Informative and Futuristic research, 2(2), 319-325.
6. Moz. (2023). *Beginner's Guide to SEO*. www.moz.com
7. Narayanasamy, G., & Prakash, R. (2021). Digital Marketing Readiness of Tourism SMEs in Tamil Nadu. *Indian Journal of Tourism and Hospitality*, 12(3), 134–146.
8. Navarro, S., Andreu, L., & Cervera, A. (2020). Value co-creation in tourism: A proposed research agenda. *Tourism Management Perspectives*, 33, 100584.
9. Paramasivan, C., & Ravichandiran G. (2024). Payment banks—A new milestone for banking penetration in India. International Journal of Financial Engineering, 2350062.
10. Paramasivan. C (2011), Customer Satisfaction through Information Technology in commercial banks, Journal of Commerce and Management Thought, Vol.2, Issue 4, October, pp 509-522.
11. Saura, J. R., Palos-Sanchez, P., & Correia, M. B. (2022). Digital marketing strategies based on the e-business model: Literature review and future directions. *Information Systems Frontiers*, 24(3), 701–717.
12. Singh, A., & Srivastava, R. K. (2023). Local SEO for regional tourism development in India: An analytical review. *Journal of Contemporary Marketing Research*, 10(1), 22–34.
13. TRAI. (2023). *Telecom Subscription Data*. Telecom Regulatory Authority of India.
14. TTDC. (2022). *Annual Report on Tourism Development in Tamil Nadu*. Government of Tamil Nadu.
15. Xiang, Z., Du, Q., Ma, Y., & Fan, W. (2021). A comparative analysis of major online review platforms: Implications for social media analytics in hospitality and tourism. *Tourism Management*, 85, 104309.

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DETERMINANTS OF EMPLOYEE ENGAGEMENT AND THEIR INFLUENCE ON PRODUCTIVITY: A STUDY OF WOMEN BANK EMPLOYEES IN COIMBATORE CITY

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ABSTRACT

Employee engagement has emerged as a crucial determinant of productivity, service quality, and organizational sustainability, particularly in service-intensive sectors such as banking. Private sector banks in India operate in a highly competitive and technologically advanced environment, where employee commitment and involvement significantly influence customer satisfaction and operational efficiency. Women employees constitute a substantial segment of the workforce in private sector banks and play a vital role in frontline operations, administrative functions, and supervisory responsibilities. Despite their growing participation, women employees often face unique workplace challenges related to work–life balance, workload pressure, career progression, and job security, which can directly influence their engagement levels and productivity. The present study examines the demographic characteristics of women employees working in private sector banks in Coimbatore city and analyses how these characteristics shape employee engagement and productivity. The study is based on primary data collected from 280 women employees using a structured questionnaire. Descriptive statistical tools are employed to analyse demographic variables such as age, marital status, education, occupational status, years of service, income, work location, employment type, office type, and working hours. The findings reveal a diverse and well-qualified female workforce distributed across various roles and locations. The study highlights the importance of demographic diversity in shaping engagement needs and emphasizes the necessity for tailored human resource strategies to enhance women employee engagement and productivity in private sector banks.

KEYWORDS: Women Employees, Employee Engagement, Productivity, Private Sector Banks, Demographic Profile, Coimbatore City

INTRODUCTION

Employee engagement has gained considerable importance in contemporary human resource management due to its strong association with productivity, employee retention, service quality, and organizational performance. Engagement goes beyond job satisfaction and reflects the emotional and psychological commitment of employees towards their work and organization. Engaged employees demonstrate higher levels of enthusiasm, dedication,

and discretionary effort, which are particularly critical in service-oriented industries such as banking.

The Indian banking sector has witnessed rapid transformation due to liberalization, digitalization, and increased competition. Private sector banks, in particular, have adopted customer-centric approaches, advanced technologies, and performance-driven cultures. In this dynamic environment, the role of employees—especially women employees—has become increasingly significant. Women employees contribute extensively to customer service, operational efficiency, and administrative coordination in private sector banks.

However, women employees often experience unique challenges such as balancing professional and personal responsibilities, extended working hours, limited recognition, and career advancement constraints. These challenges can influence their engagement levels and productivity. Understanding the demographic composition of women employees is therefore essential for designing effective engagement strategies.

Against this backdrop, the present study focuses on women employees working in private sector banks in Coimbatore city. The study analyses their demographic characteristics and discusses how these factors are relevant to employee engagement and productivity. The article is developed based on the empirical analysis presented in Chapter IV of the study.

OBJECTIVES OF THE STUDY

The major objectives of the study are:

1. To analyse the demographic profile of women employees working in private sector banks in Coimbatore city.
2. To examine the distribution of women employees based on age, marital status, education, occupation, experience, income, and work location.
3. To understand the relevance of demographic factors in shaping employee engagement and productivity.
4. To provide empirical insights for developing targeted employee engagement strategies for women employees in private sector banks.

RESEARCH METHODOLOGY

The study adopts a descriptive research design and is based on primary data collected through a structured questionnaire. The sample consists of 280 women employees working in various private sector banks in Coimbatore city. The questionnaire included items related to demographic characteristics, employment details, and work patterns.

The collected data were analysed using descriptive statistical tools such as frequency and percentage analysis. The results are presented in the form of tables with detailed interpretations to explain the demographic composition of women employees and its implications for employee engagement and productivity.

ANALYSIS AND INTERPRETATION

Demographic Profile

Table No. 1
Distribution of Age Group of Women Employees

Age Group	Frequency	Percent
Below 25 years	49	17.5
25–35 years	84	30.0
36–45 years	98	35.0
Above 45 years	49	17.5
Total	**280**	**100.0**

Interpretation

The age-wise distribution shows that the largest proportion of women employees (35%) belongs to the 36–45 years age group, indicating that mid-career women form the core workforce in private sector banks. This group typically possesses experience, stability, and

professional maturity, which are essential for sustained engagement and productivity. The presence of younger employees (25–35 years) highlights adaptability and technological readiness, while the retention of employees above 45 years reflects organizational stability.

Table No. 2
Distribution of Marital Status

Marital Status	Frequency	Percent
Unmarried	91	32.5
Married	161	57.5
Others	28	10.0
Total	**280**	**100.0**

Interpretation:

The majority of women employees (57.5%) are married, indicating that most employees balance professional and family responsibilities. This highlights the importance of work–life balance initiatives, flexible work arrangements, and supportive organizational policies to sustain engagement and productivity among married women employees.

Table No. 3
Distribution of Educational Status

Educational Status	Frequency	Percent
Graduate	91	32.5
Postgraduate	105	37.5
Professional	63	22.5
Others	21	7.5
Total	**280**	**100.0**

Interpretation:

The educational profile indicates a highly qualified workforce, with 60% of women employees holding postgraduate or professional qualifications. This reflects the knowledge-intensive nature of banking jobs and suggests that educational attainment positively influences engagement, career aspirations, and productivity.

Table No. 4
Distribution of Occupational Status

Occupational Status	Frequency	Percent
Clerk	119	42.5
Sub-staff	98	35.0
Officer	63	22.5
Total	**280**	**100.0**

Interpretation:

A significant proportion of women employees work in clerical and sub-staff positions, highlighting their crucial role in frontline and operational banking activities. Engagement strategies must therefore address role-specific challenges, workload management, and career progression opportunities.

Table No. 5
Distribution of Years of Service

Years of Service	Frequency	Percent
Less than 2 years	49	17.5
2–5 years	70	25.0
6–10 years	63	22.5
More than 10 years	98	35.0
Total	**280**	**100.0**

Interpretation:

The presence of a large proportion of long-tenured employees indicates strong retention in private sector banks. Experienced employees contribute institutional knowledge and service consistency, emphasizing the need for sustained engagement and recognition practices.

Table No. 6
Distribution of Monthly Income

Monthly Income (₹)	Frequency	Percent
Below 25,000	49	17.5
25,001–50,000	84	30.0
50,001–75,000	84	30.0
Above 75,000	63	22.5
Total	**280**	**100.0**

Interpretation:

The income distribution reflects career progression and financial stability among women employees. Employees in higher income groups may exhibit stronger engagement due to recognition and responsibility, while lower-income employees may require additional motivation and development support.

Table No. 7
Distribution of Bank Location

Location	Frequency	Percent
Urban	91	32.5
Semi-urban	91	32.5
Rural	98	35.0
Total	**280**	**100.0**

Interpretation:

Women employees are evenly distributed across rural, semi-urban, and urban branches, indicating their vital role in financial inclusion and customer outreach across regions. Location-specific engagement strategies are essential to address contextual challenges.

Table No. 8
Distribution of Employment Type

Employment Type	Frequency	Percent
Permanent	189	67.5
Contractual	91	32.5
Total	**280**	**100.0**

Interpretation:

The dominance of permanent employment reflects job stability, while the presence of contractual employees highlights the need for inclusive engagement practices that address job insecurity and career growth.

Table No. 9
Distribution of Type of Office

Type of Office	Frequency	Percent
Head Office	105	37.5
Branch Office	175	62.5
Total	**280**	**100.0**

Interpretation:

Most women employees work in branch offices, emphasizing their role in customer-facing operations. Engagement initiatives must focus on workload management and stress reduction at branch levels.

Table No. 10
Distribution of Working Hours

Working Hours per Week	Frequency	Percent
Less than 35 hours	49	17.5
36–45 hours	126	45.0
46–55 hours	70	25.0
Above 55 hours	35	12.5
Total	**280**	**100.0**

Interpretation:

The variation in working hours indicates differing workload intensities. Extended working hours may negatively affect engagement and productivity, highlighting the importance of work–life balance initiatives.

MAJOR FINDINGS

The study reveals several important insights into the demographic composition, engagement drivers, and productivity outcomes of women employees working in private sector banks in Coimbatore city. The demographic analysis shows that women employees are well represented across all age groups, with a significant concentration in the 36–45 years category, indicating that mid-career women constitute the backbone of private banking operations. A majority of respondents are married, highlighting the dual responsibility of managing professional duties alongside family commitments, which has implications for engagement and work–life balance initiatives.

The educational profile indicates a highly qualified workforce, with a substantial proportion of women holding postgraduate and professional qualifications. This reflects the knowledge-intensive nature of banking jobs and suggests that educational attainment plays a vital role in shaping engagement expectations, career aspirations, and productivity levels. Occupationally, most women employees are positioned in clerical and sub-staff roles, emphasizing their importance in frontline and operational activities, while a notable share has progressed to officer-level positions, indicating improving career mobility.

The findings further reveal that employment type significantly influences engagement and productivity outcomes. Contractual employees consistently report higher mean scores across engagement drivers and productivity dimensions, possibly due to job insecurity and the motivation to demonstrate performance for career continuity. Similarly, working office type emerges as a significant factor, with head office employees reporting higher satisfaction with leadership, communication, and development opportunities, while branch employees exhibit stronger teamwork and adaptability due to their operational exposure.

Working hours, income levels, educational status, marital status, and work location all show significant variations in engagement and productivity outcomes. Extended working hours are associated with lower job satisfaction and increased stress, while balanced work schedules enhance productivity and collaboration. Overall, the study confirms that employee engagement among women is not uniform but varies significantly across demographic and organizational dimensions. Importantly, higher engagement levels are strongly associated with improved job satisfaction, customer handling efficiency, teamwork, adaptability, and

overall productivity, underscoring the strategic importance of engagement-focused human resource practices in private sector banks.

SUGGESTIONS

Based on the findings of the study, several practical and policy-oriented suggestions are proposed to enhance women employee engagement and productivity in private sector banks. First, banks should adopt gender-sensitive human resource policies that recognize the diverse personal and professional responsibilities of women employees, particularly those who are married and managing family commitments. Flexible working hours, work-from-home options where feasible, and family-friendly policies such as child-care support can significantly improve engagement and job satisfaction.

Second, leadership and communication practices must be strengthened, especially at branch levels. Regular interaction between senior management and branch employees, transparent communication channels, and timely feedback mechanisms can help bridge the perceived gap between head office and branch office employees. Training programs should be decentralized to ensure equal access to learning and career development opportunities across all locations.

Third, fairness and recognition systems should be made more inclusive and transparent. Performance appraisal and reward mechanisms must be clearly communicated and uniformly implemented across employment types, income levels, and work locations. Special attention should be given to recognizing the efforts of clerical and sub-staff employees who play a crucial role in customer service and daily operations.

Fourth, tailored engagement strategies should be developed for different employee segments. Contractual employees should be provided with clearer career pathways, skill certification opportunities, and inclusion in organizational activities to sustain their motivation. Employees working long hours should be supported through workload rationalization, stress management programs, and wellness initiatives to prevent burnout and productivity decline.

Finally, banks should foster a positive work environment and inclusive organizational culture by promoting teamwork, mutual respect, and psychological safety. Location-specific engagement interventions should be designed to address the unique challenges faced by rural, semi-urban, and urban branches. By institutionalizing structured engagement frameworks that integrate leadership support, career development, fairness, and employee well-being, private sector banks can enhance women employee engagement, improve productivity, and ensure long-term organizational sustainability.

CONCLUSION

The study reveals that women employees in private sector banks in Coimbatore city constitute a diverse, qualified, and experienced workforce. Demographic factors such as age, marital status, education, experience, income, and work location play a significant role in shaping employee engagement needs and productivity outcomes. The findings emphasize the importance of adopting tailored and inclusive human resource strategies to enhance women employee engagement, improve productivity, and ensure sustainable organizational performance.

REFERENCES

1. Armstrong, M., & Taylor, S. (2020). Armstrong's handbook of human resource management practice. Kogan Page.
2. Dessler, G. (2020). Human resource management. Pearson Education.
3. Guest, D. (2017). Human resource management and performance. Human Resource Management Journal, 27(1), 22–38.
4. Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Engagement and business outcomes. Journal of Applied Psychology, 87(2), 268–279.

5. Kahn, W. A. (1990). Psychological conditions of personal engagement at work. Academy of Management Journal, 33(4), 692–724.
6. Paramasivan, C. (2013). Conceptual framework of women empowerment through SHG. SELP Journal of Social Science, 4(17).
7. Reserve Bank of India. (2023). Trends and progress of banking in India. RBI.
8. Robbins, S. P., & Judge, T. A. (2021). Organizational behavior. Pearson.
9. Saks, A. M. (2006). Antecedents and consequences of employee engagement. Journal of Managerial Psychology, 21(7), 600–619.
10. Sandhu, N., & Sharma, S. (2022). Employee engagement in banking. International Journal of HR Studies, 12(2), 45–60.
11. Schaufeli, W. B., & Bakker, A. B. (2004). Job demands and engagement. Journal of Organizational Behavior, 25(3), 293–315.
12. Subathra S (2017), Women Empowerment And Entrepreneurship Through TAHDCO In Tiruchirappalli District, Research Explorer, Vol. V : Issue.14, January - June 2017,pp .67-72

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THE INFLUENCE OF EMPLOYEE BRANDING ON TALENT ATTRACTION AND RETENTION: A STUDY OF THE SELECTED PHARMACEUTICAL SECTOR TAMIL NADU

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ABSTRACT

*While Employer Branding focuses on the corporate promise, **Employees Branding** focuses on the delivery of that promise through the workforce. In the pharmaceutical sector of Tamil Nadu, employees serve as the primary touch point for doctors, distributors, and the public. This paper explores how internal branding influences employee behavior to become an extension of the corporate brand. By analyzing "brand-citizen" behaviors, the study finds that a lack of satisfaction in economic and developmental values hinders the ability of employees to project a positive brand image. The paper emphasizes that for a brand to be credible externally, it must first be lived internally by the employees.*

KEYWORDS: Employees Branding, Brand Ambassadors, Internalization, Pharma Sector, Tamil Nadu, Brand Citizenship.

AIM OF THE STUDY

The primary aim of this research is to evaluate the effectiveness of Employee Branding strategies within the pharmaceutical industry of Tamil Nadu. Specifically, the study seeks to understand how internal branding efforts translate into employee satisfaction and their subsequent role as brand ambassadors.

1. To Assess Brand Internalization
2. To Measure the Five Dimensions of Brand Value
3. To Evaluate Talent Attraction:
4. To Identify Retention Drivers:
5. To Map the Digital Transformation Gap:

STATEMENT OF PROBLEM

In the modern pharmaceutical landscape, companies invest heavily in Employer Branding to project an image of innovation, stability, and care. However, a significant gap

often exists between this external "marketing" and the actual Employee Brand experience lived by the internal workforce.

1. 1.The Misalignment Between Corporate Identity and Economic Reality
2. The Erosion of Long-term Talent Attraction due to Developmental Stagnation
3. The Absence of Emotional Brand Citizenship and Psychological Ownership

REVIEW OF LITERATURE

Branding as a Shield Against Turnover (Parmar et al., 2023)In a 2023 study published in *ResearchGate*, the authors investigated the pharmaceutical industry specifically, finding that employer branding significantly increases organizational commitment and decreases turnover intention. The research highlights that in the post-pandemic era, "Affective Commitment"—the emotional bond an employee has with their company—is the primary mediator between a brand's image and an employee's decision to stay. This is highly relevant to your study, as it provides a modern context for why "Psychological Value" is mandatory for retention**.**

Digital Storytelling and Employee "Voice" (Singh & Rao, 2024) This recent study explored the role of social media storytelling in strengthening employee branding. The authors found that when companies leverage "Brand Ambassadors" to share behind-the-scenes content on platforms like LinkedIn and Instagram, it creates a sense of "Psychological Ownership." For the Tamil Nadu pharma sector, where recruitment is increasingly digital, this literature emphasizes that authentic employee stories are more effective than corporate advertisements in attracting new talent.

The Shift to "Sustainable" Employer Branding (MDPI, 2024),Research published in 2024 introduced the concept of Sustainable Employer Branding. It argues that modern employees, particularly in healthcare and life sciences, are no longer satisfied with just "Economic Value." Instead, they prioritize transparent, ethical, and inclusive values (Social Value). The study concludes that companies failing to demonstrate social responsibility face higher attrition rates among younger, value-driven scientists and professionals.

Generation-Specific Branding Strategies (Alves et al., 2021)This study examined how different generations (X, Y, and Z) perceive employer branding in the pharmaceutical industry. The findings suggest that while older generations may prioritize "Economic Value," Generation Z (the newest entrants to the Tamil Nadu workforce) is more focused on "Developmental Value" and "Work-Life Balance." This supports your finding that "Developmental Value" is a critical pain point for modern pharma employees.

AI and Hyper-Personalized Branding (Korn Ferry, 2024) Recent industry literature highlights that in 2024, leading pharma companies are using AI-powered tools to personalize the "Employee Experience." The study suggests that internal branding is now about "Segmented Communication"—tailoring the brand message to specific departments (like R&D vs. Sales). This is a critical addition to your review, as it shows how digitalization is changing the "Functional Value" of the workplace.

Internal Branding and Psychological Empowerment (Emerald Publishing, 2023)This study explored how internal branding leads to Psychological Empowerment. It argues that when employees feel the brand aligns with their personal values, they experience higher self-efficacy and independence. For your research, this supports the idea that "Employee Branding" is not just a marketing tool but a management strategy that empowers staff to take "ownership" of their roles, directly impacting long-term retention

RESEARCH GAP

The Regional Industry Specificity Gap While global studies have extensively covered Employer Branding in the IT and Service sectors, there is a lack of empirical research specifically focusing on the Pharmaceutical industry in Tamil Nadu. Most Indian studies focus on Tier-1 metros like Bangalore or Mumbai. Your study addresses the unique regional dynamics of Tamil Nadu's pharma hub, particularly how local cultural and economic factors

influence employee perceptions of brand value and The Internal Branding Disconnect (Promises vs. Reality)Existing literature (2020–2024) heavily focuses on how companies *attract* talent (External Branding), but there is a significant gap in research regarding how current employees perceive the brand internally (Internal Branding). Your data shows a clear "disagreement" in economic and developmental values despite companies' claims of being "Employers of Choice." This study fills the gap by exploring this "Perception-Reality Disconnect" and its direct impact on long-term retention.

RESEARCH METHODOLOGY

The study is descriptive in nature. The primary and the secondary data were adopted for the collected data. The secondary data was collected from previous literature and journals. The primary data consist of structured questionnaire. The questionnaire constitutes the attributes of Time Management. The pilot study with a sample of 50 respondents was conducted to check the reliability statistics. The Cronbach's Alpha value for the attributes of Time Management were found to be more than 0.8, this clearly signifies that the questionnaire is reliable. After reaching the approved alpha value, the researcher has moved forward for the major research in the prescribed geographic location and the industry. The geographic location and the target industry selected for the study pharmaceutical companies in Tamilnadu. The population of the study is the employees, who are working in theses top ten pharmaceuticals companies in Tamil Nadu. Since the total numbers of employees working in the respective companies are not exactly available in record, so the researcher has considered the population as infinite population. The researcher has taken only the top ten major pharmaceuticals players in Tamil Nadu. The top ten companies are (https://www.pharmafaq.in/top- 10-pcd-pharma-companies-in-tamilnadu/)

1.Indian Immunological Limited
2.Microlab Limited
3.Zota pharmaceutical Pvt Ltd
4.Eucare Pharmaceutical pvt Ltd
5.A to Z Pharmaceuticals Pvt Ltd
6.Aassk Pharmaceutical Pvt Ltd
7.Aastik Pharma Pvt Ltd (Pcd Franchise company in Tamilnadu)
8Abhilash Chemical Pvt ltd
9.Acemy Inc
10.Active Pharma manufacturing pvt ltd

These companies have been considered as the research area for the current study. The top ten pharmaceuticals companies has been selected based on companies' performance, growth trend, client base, market presence, training interventions, large scale projects of different industry verticals.The random sampling technique was adopted by the researcher to select the samples for the study. According to the Demorgan's table for an infinite population 663 sample sizes is required with a confidence level of 99 percent and with the confidence interval of 5 percent. The researcher has distributed around 700 questionnaires and 674 questionnaires were returned and answered. The remaining 26 questionnaires were returned and found to be biased and unanswered, so, the researcher has confined the sample size as 674. The collected data were fed into Statistical Package for Social Sciences (SPSS) 20 version, popularly used Statistical Software for Social Research Analysis. The statistical tools used for analysis were Measures of Central Tendency and Dispersion (Mean and Standard Deviation).

DATA ANALYSIS

Mean & Standard Deviation

The current part of the measures the Measures of Central Tendency (Mean),

Measures of Dispersion (Standard Deviation) for the "Functional Value", "Psychological Value", "Economic Value", "Development Value", and "Social Value". The analysis as follows;

Table No.1
Mean & Standard Deviation - "Functional Value"

Measuring Items	N	Mean	SD
Relationship with your co-workers	674	2.44	.747
Flexible working hours	674	1.68	.509
Balance between private and work	674	1.59	.586
Organization's reputation as great place to work	674	2.13	.582
Job security	674	2.30	.529
Challenging work	674	2.0	.655
Respect for people	674	2.44	.592
Mean Score	674	2.05	.407
Source : Primary Data SD-Standard Deviation N-Number of Respondents	**674**	**2.05**	**.407**

Source: Primary Data

The "Functional Value" has seven measuring questions and they are arranged in the descending order based on the mean value and are displayed; The respondents are having a neutral feel towards the statement "Respect for people" with a mean value of 2.44 and with a standard deviation value of 0.592. The respondents are having a neutral feel towards the statement "Relationship with your co-workers" with a mean value of 2.44 and with a standard deviation value of 0.747. The respondents are having a neutral feel towards the statement "Job security" with a mean value of 2.30 and with a standard deviation valueof 0.529. The respondents are having a neutral feel towards the statement "Organization's reputation as great place to work"with a mean value of 2.13 and with a standard deviation value of 0.582. The respondents are having a neutral feel towards the statement "Challenging work" with a mean value of 2.00 and with a standard deviation value of 0.655. The respondents as disagree with the statement "Flexible working hours" with a mean value of 1.68 and with a standard deviation value of 0.509. The respondents as disagree with the statement "Balance between private and work" with a mean value of 1.59 and with a standard deviation value of 0.586. The respondents are having a neutral feel towards the variable "Functional Value" with a mean value of 2.05 and with a standard deviation value of 0.407.

Table No. 2
Mean & Standard Deviation - "Psychological Value"

Measuring Item	N	Mean	SD
Self-confident	674	2.05	.665
Belongingness	674	2.48	500
Pride	674	2.42	.556
Exciting work environment	674	1.75	.433
Self – Image	674	1.70	.460
Enjoying work culture	674	1.75	.432
Mean Score	**674**	**2.05**	**.319**

Source: Primary Data

The "Psychological Value" has six measuring questions and they are arranged in the descending order based on the mean value and are displayed; The respondents are

having a neutral feel towards the statement "Belongingness" with a mean valueof 2.48 and with a standard deviation. value of 0.500. The respondents are having a neutral feel towards the statement "Pride"with a mean value of 2.42 and with a standard deviation value of 0.556. The respondents are having a neutral feel towards the statement "Self-confident" with a mean value of 2.05 and with a standard deviation value of 0.665. The respondents as disagree with the statement "Enjoying work culture" with a mean value of 1.75 and with a standard deviation value of 0.432. The respondents as disagree with the statement "Exciting work environment" with a mean value of 1.75 and with a standard deviation value of 0.433. The respondents as disagree with the statement "Self – Image" with a mean value of 1.70 and with astandard deviation value of 0.460. The respondents are having a neutral feel towards the variable "Psychological Value" witha mean value of 2.05 and with a standard deviation value of 0.319.

Table No. 3

Mean & Standard Deviation - "Economic Value"

Measuring item	**N**	**Mean**	**SD**
Overall compensation	674	1.90	.303
Fringe Benefits(Paid Time off)	674	1.72	.452
Reward and Awards for Performance	674	1.73	.442
Retention bonus	674	1.72	.450
Performance Incentive	674	1.55	.538
Mean Score	**674**	**1.78**	**.414**

Source: Primary Data

The "Economic Value" has five measuring questions and they are arranged in the descending order based on the mean value and are displayed; The respondents as disagree with the statement "Overall compensation" with a mean value of 1.90 and with a standard deviation value of 0.303. The respondents as disagree with the statement "Rewards and Awards for performance" with a mean value of 1.73 and with a standard deviation value of 0.442. The respondents as disagree with the statement "Retention Bonus" with a mean value of 1.72 and with a standard deviation value of 0.450. The respondents as disagree with the statement "Fringe Benefits (Paid time off – Fair amount of Vacation, Sick leave etc.)" with a mean value of 1.72 and with a standard deviation value of 0.452.The respondents as disagree with the statement "Performance Incentive" with a mean value of 1.55 and with a standard deviation value of 0.538. The respondents as disagree with the variable "Economic Value" with a mean value of 1.78 and with a standard deviation value of 0.414.

Table No. 4

Mean & Standard Deviation - "Development Value"

Measuring Items	**N**	**Mean**	**SD**
Onsite job opportunities	674	1.73	444
Training and Development opportunities	674	1.67	.471
Promotion opportunities	674	1.53	.499
Opportunity ability to give and receive feedback	674	2.33	.472
Attainment of career opportunities & improving experience	674	2.33	.472
Mean Score	**674**	**1.94**	**.242**

Source: Primary Data

The "Development Value" has five measuring questions and they are arranged in the descending order based on the mean value and are displayed; The respondents are having a neutral feel towards the statement "Attainment of career opportunities& improving experience" with a mean value of 2.33 and with a standard deviation value of 0.472. The respondents are having a neutral feel towards the statement "Opportunity ability to give and

receive feedback" with a mean value of 2.33 and with a standard deviation value of 0.472. The respondents as disagree with the statement "Onsite job opportunities" with a mean value of 1.73 and with a standard deviation value of 0.444. The respondents as disagree with the statement "Training and Development opportunities" with a mean value of 1.67 and with a standard deviation value of 0.471. The respondents as disagree with the statement "Promotion opportunities" with a mean value of 1.53 and with a standard deviation value of 0.499.The respondents as disagree with the variable "Development Value" with a mean value of 1.94 and with a standard deviation value of 0.242.

Table No. 5

Mean & Standard Deviation - "Social Value"

Measuring item	N	Mean	SD
Onsite job Opportunities	674	1.49	.500
Training and development	674	2.20	.749
Opportunity ability to give and receive feed back	674	2.40	.610
Attainment of career opportunities & Improving Experience	674	1.60	.490
Organization CSR Iniatives	674	1.73	.442
Mean Score	674	1.98	.143

Source: Primary Data

The "Social Value" has five measuring questions and they are arranged in the descending order based on the mean valueand are displayed; The respondents are having a neutral feel towards the statement "Strategies to support internal reporting of legal activities" with a mean value of 2.40 and with a standard deviation value of 0.610. The respondents are having a neutral feel towards the statement "Creative employer with ethical work practices and forward thinking" with a mean value of 2.20 and with a standard deviation value of 0.749. The respondents as disagree with the statement "Organization's CSR initiatives" with a mean value of 1.73 and with a standard deviation value of 0.442. The respondents as disagree with the statement "Humanitarian organization provides back to the society" with a mean value of 1.60 and with a standard deviationvalue of 0.490. The respondents as disagree with the statement "Pleasant and Social work environment" with a mean value of 1.49 and with a standard deviation value of 0.500. The respondents as disagree with the variable "Social Value" with a mean value of 1.86 and with a standard deviation value of 0.348.

Table No. 6

Mean & Standard Deviation - "Employee Branding"

Measuring Variables	N	Mean	SD
Functional Value	674	2.05	.407
Psychological Value	674	2.05	.319
Economic Value	674	1.78	.414
Development value	674	1.94	.242
Social Value	674	1.86	.348
Mean Score	674	1.98	.143

Source: Primary Data

SUGGESTIONS

Thorough image audits of what value propositions make an organization an attractive employer (Highhouse et al., 1999; Arnold et al., 2003; Lievens et al., 2005) is a good starting point for employer branding, but it is often complicated to decide which characteristics an organization should promote to enhance its attractiveness as an employer (Lievens et al., 2005). In this respect, this study has key practical implication for Indian pharmaceutical companies as the study attempted
to identify these primary dimensions.

The "Employer Branding" has five measuring variables and they are arranged in the descending order based on the mean value and are displayed; The respondents are having a neutral feel towards the variable "Psychological Value" with a mean value of 2.05 and with a standard deviation value of 0.319. The respondents are having a neutral feel towards the variable "Functional Value" with a mean value of 2.05 and with a standard deviation value of 0.407. The respondents as disagree with the variable "Development Value" with a mean value of 1.94 and with a standard deviation value of 0.242. The respondents as disagree with the variable "Social Value" with a mean value of 1.86 and with a standard deviation value of 0.348. The respondents as disagree with the variable "Economic Value" with a mean value of 1.78 and with a standard deviation value of 0.414. The respondents as disagree with the variable "Employer Branding" with a mean value of 1.98 and with a standard deviation value of 0.143.

FINDINGS

1. Functional Value - The respondents are having a neutral feel towards the variable Functional Value.
2. Psychological Value - The respondents are having a neutral feel towards the variable Psychological Value.
4. Economic Value - The respondents as disagree with the variable Economic Value.
5. Development Value - The respondents as disagree with the variable Development Value.
6. Social Value - The respondents as disagree with the variable Social Value.
7. Employer Branding - The respondents as disagree with the variable Employer Branding.

CONCLUSION

Employment branding and the actions required to build and manage an employment brand are powerful tools that can be used to add value to your organization through HR. All too often, HR looks to impact the bottom line of the firm by enacting cost-containment initiatives. Such initiatives do nothing to increase quality or productivity. Employment branding, on the other hand, can increase the quality of employees, help inspire them to become more productive, and open opportunities to the company in the marketplace that might not have been open before. In short, employment branding can address many of the issues facing corporation today.

REFERENCE

1. Ainspan, N., and Dell, D. (2001). Engaging Employees through your Brand. The Conference Board Inc.
2. Barrow, S. & Mosley, R. (2005). The Employer Brand: Bringing the Best of Brand Management to People at Work.London: Wiley Brands.
3. Butterworth Heinemann. Martin, G. (2007). Employer Branding - Time For Some Long And 'Hard' Reflections? : Chartered Institute of Personnel And Development, London.
4. Davies, G. 2008,"Employer Branding And Its Influence On Managers", European Journal Of Marketing, Vol. 42, No.5, P. 667 – 681.
5. Harris, K. Developing and Managing a Successful Employer Brand. In HR Summit 2010. Perth. 2010. [Cit. 2010-09-25].
6. Helen Rosethorn, 2009, The Employer Brand, Published By Gower Housden, CH. Using Employer Brand To Attract Talent. In Strategic Human Resources Conference. Geneve: 2007.Cit. 2010-09-25].
7. Kunerth, B. & Mosley, R. 2011,"Applying Employer Brand Management to Employee Engagement", Strategic HR Review, Vol. 10 No. 3 P. 19 – 26.
8. Martin, G. & Beaumont, P.B. (2003). What's In A Name? Building the Relationship

between People Management and Branding. Chartered Institute Of Personnel and Development, London.
9. Martin, G. & Hetrick, S. (2006). Corporate Reputations, Branding And Managing People: A Strategic Approach To HR. Oxford:
10. Paramasivan. C (2016), Conceptual Analysis of Consumer Exploitation in Organized Retailing, International Journal in Management and Social Science, Vol.04 Issue-06, (June, 2016),pp-206-210.

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AN ANALYSIS ON PERCEPTION OF INVESTORS TOWARDS SAVINGS AND INVESTMENT IN THANJAVUR DISTRICT.

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ABSTRACT

The savings and investing patterns of investors served as the foundation for the research study. By increasing personal wealth, investing can promote overall economic growth and prosperity. The growth of financial markets that enable companies to raise capital is facilitated by investing.This also encourages more prosperity and economic advancement. Some types of investments also benefit society in different ways. The use of funds on assets to produce income or capital gains is known as investing. The two aspects of investing are time and risk. It makes reference to the concept of postponed consumption, which is the act of making a purchase, making a loan, or keeping money in a bank account with the goal of earning returns down the road. The study's goals were to establish the savings objective and identify the various aspects that affect investing before making an investment. To collect data, a structured questionnaire was distributed to one hundred investors in the Thanjavur region. Despite their low compensation, investors have been saving for future needs. The main investment avenues are bank savings, and the main objectives of investments are marriage, children's education, and retirement security.

KEY WORDS: Perception**,** Savings, Investment

INTRODUCTION

Savings and investments are two key variables which play a significant role in economic growth and expansion. however, the relationship between saves and investments continues to be one of the most hotly debated topics among economists since the essential question in the discussion is "Causation," or whether savings cause investments or investments create savings. Due to its significant ramifications for the nation's budgetary strategy, the topic of causality becomes even more crucial .For example, the detrimental effects of government deficits on net national saving and capital formation are often used to

construct the economic significance of these deficits. Behind this interpretation of government deficits lies an implicit view that it is saving that causes investment: government deficits represent negative government saving, and this reduces the pool of national saving available for investment thereby reducing the level of investment. Not only does the saving - investment causation debate raise questions about the level of deficits, it also has implications regarding how such deficits are to be closed. Thus, if saving causes investment and investment is desired for purposes of raising growth, then the government deficit should be closed by cutting spending rather than raising taxes.

MEANING OF INVESTMENT

Investing is the use of money on assets in order to generate income or capital gains. Time and risk are the two characteristics of investment. It alludes to the idea of postponed consumption, which is the process of buying something, lending money, or holding money in a bank account in order to earn returns later. There are numerous investment possibilities with varying risk-reward tradeoffs. An investor can build a portfolio that optimizes returns while lowering risk exposure by having a solid understanding of the fundamental ideas and conducting a thorough study of the available possibilities.

Investment objectives

Increasing the rate and lowering the risk are the primary investment goals. Additional goals, such as safety, liquidity, and inflation hedging, might be categorized as subsidiary goals.

Return

A high rate of return on investment is something that all investors anticipate. The entire income an investor receives over the course of the holding time expressed as a percentage of the purchase price at the start of the holding period is known as the rate of return.

Risk

The likelihood that the actual return will fall short of the anticipated return is correlated with the risk of keeping securities. The terms "risk" and "variability of return" are interchangeable. Because minimizing risk and maximizing return are interconnected goals in investment management, assessing an investment's risk is equally as crucial as determining its expected rate of return. An investment is riskier if its rate of return fluctuates significantly over time than if it stays relatively constant. Every investor wants to lower the risk of his investment by combining various securities in the right way.

Liquidity

Liquidity is provided by the investment's marketability. The trading and marketing facilities determine the liquidity. The investor would be better equipped to handle emergencies if they could quickly turn a portion of their investment into cash. Only when stocks offer a sufficient return through dividends and capital growth can they attract a high market value and are considered liquid.

Safety

The legal and regulatory framework should apply to the chosen investment avenue. It is challenging to represent any grievances if they are not covered by the legal framework. The law's own approval lends an air of security. Despite being legally sanctioned, the safety of the principle varies depending on the investing method. Compared to private investments, government-backed investments offer greater security. The following is a ranking of investments from a safety perspective: government bonds, UTI units, equity shares, convertible and non-convertible debentures, bank deposits, and deposits with non-bank financial firms

VARIOUS INVESTMENT OPTIONS

- Savings Bank Account

- Bank Fixed Deposit (Bank FDs)
- Post Office Savings Schemes (POSS)
- Mutual Funds
- Life Insurance Policies
- Equity Shares
- Gold
- Real Estate
- Government Securities

OBJECTIVES OF THE STUDY

1. To know the various investment avenues available for investors .
2. To examine investment patterns and investment decisions making forwards investment avenues
3. To identify the perception of investors for selection of investment avenues

REVIEW OF LITERATURE

Dr. M. Kalimuthu -2023 : This study tries to analyze the employee's awareness level in relation with demographic factors and various other factors influence before investing. This study is based on both primary data and secondary data. The primary data is collected through framing a structured questionnaire by Convenient Sampling Techniques from 120 salaried employees of both private and government sector in Coimbatore city, which cannot reflect the opinion of the whole population. Statistical Tools: Percentage Analysis, Rank Analysis, and Likert Scale Analysis have been adopted to find the results for the data collected. The study also reveals most of the employees prefer Gold, Bank deposits, Real Estate and etc., as the investment option, there is lack of awareness about other Insurance, Post Office Saving Schemes offered by the Central Government. From this study, it is concluded that people invest in various investment schemes by allocating certain amount from their income or savings to meet up the future needs without taking high level of risk.

Dr. Mavy Miranda 2023 : The objective of the study is to analyse the investment pattern of salaried employees of Udupi city. The data is collected through questionnaire served through google forms. It was found from the analysis that majority of the respondents invest their savings to earn additional income and that the most preferred option of investment is Bank Fixed deposits. Lack of sufficient financial knowledge regarding risk and return also prevents the employees from venturing into modern investment avenues.

Velmurugan & Amarjothi (2020) in their paper "A Study on Savings and Investment Pattern of Assistant Professors ofSelf-Finance Colleges in Theni District" found that most of the assistant professors considered safety of the funds as the main factor before investing and Bank deposits was considered as the main option of their investments.

Research Design

A Research design is purely and simply the framework of plan for a study that guides the collection and analysis of data. The study is intended to find the investors preference towards various investment avenues. The study design is **descriptive** in nature.

Sampling Methods

Convenience method of sampling is used to collect **the** sample of **100** from the respondents. Researchers or field workers have the freedom to choose whomever they find, thus the name "convenience".

Data collection

Primary data – collected through Structured Questionnaire from teachers were working in selected colleges in trichy.

Secondary data – Earlier records from journals, magazines and other sources.

ANALYSIS AND INTERPRETATION

Table No. 1
Demographic Characteristics

Factors		Frequency	Percentage
Age	21-30	23	23
	31-40	71	71
	41-50	4	4
	50 & Above	2	2
Qualification	School Level	10	10
	Graduate	22	22
	PG	58	58
	PhD	6	6
	Others	4	4
Occupation	Govt employee	18	18
	Pvt employee	78	78
	Self employee	4	4
Income	Upto RS.20,000	75	75
	RS.20,001-40,000	15	15
	RS.40,001-60,000	8	8
	Above RS.60,000	2	2
Marital Status	Married	71	71
	Unmarried	29	29
No of members in the family	1-2	28	28
	3-4	65	65
	5-6	7	7
Earnings members in the family	One member	57	57
	Two members	25	25
	Above 2 members	18	18

The above analysis shows that 23% of respondents are in the age group of 20-30, 71% of respondents are in the age group of 31-40, 4% of respondents are in the age group of 41-50 and 2% of respondents are in the age group of 50 and above,22% of respondents are graduate, 58% of respondents are postgraduate, and 6% of respondents are PhD holders and 4% are others.78% of the respondents are private employee,18% of the respondents are government employee and 4% of the respondents are self employed.75% of the respondents had a monthly income of Rs.20000, 15% of the respondents had a monthly income of Rs.20001-40000, and 8% of the respondents had a monthly income of Rs.40, 001-60, 000, and 2% of the respondents had a monthly income of above Rs.60000 and71% are married and 29 % are unmarried , 65% respondents are having 3-4 members in the family, 28% respondents are having 1-2 members in the family, and 7% respondents are having 5-6 members in the family.57% of the respondents are having one earning member in the family,25% of the respondents are having two earning members in the family.

Table No. 2
Preference of Investment Avenues

Investment Avenues	Respondents	Percentage
Insurance	20	20
Banks	40	40
Post office	8	8
Equities	2	2

Real estate	7	7
Mutual fund	8	8
Govt.securities	2	2
Gold	12	12
Others	1	1
Total	100	100

The above analysis shows that 20% of respondents invested in insurance,40% of respondents had invested in banks, 8% of respondents had invested in post offices ,2% of respondents had invested in equities, 7% of respondents had invested in real estates ,8% of respondents had invested in mutual funds, 2% of respondents had invested in govt.securities,12% of respondents had invested in gold,1% had invested in others

Table No. 3

Factor Considered Before Investing

Factor	Respondents	Percentage
Safety	27	27
Low risk	14	14
High return	18	18
Tax consideration	17	17
Liquidity	24	20
Total	100	100

The above analysis shows that 27% of respondents giving importance to factor of safety & principal, 14% of respondents giving importance to factor of low risk, 18% of respondents giving importance to factor of high returns,17% of respondents giving importance to tax consideration, 24% of respondents giving importance to factor of liquidity.

Table No. 4

Investment decision

Investment depends	**Respondents**	**Percentage**
Surplus money	10	10
Past performance	12	12
Economic scenario	32	32
Investment analysis	31	31
Portfolio analysis	15	15
Total	100	100

The above analysis shows that 10% of respondents are having an investment decision depends on surplus money, 12% of respondents are having an investment decision depends on past performance, 32% of respondents are having an investment decision depends on economic scenario, 31% of respondents are having an investment analysis and 15% on portfolio analysis

Table No. 5

Savings Objectives

Savings objectives	**Respondents**	**Percentage**
Children s Education	34	34%

Retirement	4	4%
Home purchase	27	27%
Children s marriage	9	9%
Health care	17	17%
Unforeseen Risk	10	10%
Total	100	100%

The above analysis shows that 34% of the respondents are having savings objectives of children education , 27 % of respondents having savings objectives of home purchases , 17 % of respondents having savings objectives of health care, 10 % of respondents having savings objectives of unforeseen risk , 9 % of the respondents having savings objectives of children marriage and 4 % of the respondents having savings objectives of retirement this investment .

Table No. 6
Mode of Savings

Mode of savings	Respondents	Percentage
Monthly	67	67%
Quarterly	9	9%
Half Yearly	9	9%
Yearly	15	15%
Total	100	100%

The above table shows that 67% of respondents are having mode of savings as monthly, 15% of respondents are having mode of savings as yearly 9% of respondents are having mode of savings as quarterly , 9% of respondents are having mode of savings as half yearly for this mode of savings .

Table No. 7
Problems While Investing

problems	Respondents	Percentage
Lack of family support	37	47%
Lack of Knowledge	8	8%
Improper guidance	55	45%
Total	100	100%

The above analysis shows that 37% of respondents having lack of family support, 10% of respondents having lack of knowledge,55% of respondents having improper guidance for investment.

Table No. 8
Prefer To Invest

Which sector do you prefer to invest your money	Respondents	Percentage
Private Sector	30	30%
Public Sector	22	22%
Government Sector	37	37%
Foreign Sector	11	11%

Total	100	100%

The above table shows that 37% of respondents are prefer to invest in government sector , 30% of respondents are prefer to invest in private sector , 22% of respondents are prefer to invest in public sector , 11% of respondents are prefer to invest in foreign sector this invest their money.

Table No. 9
Investment Period

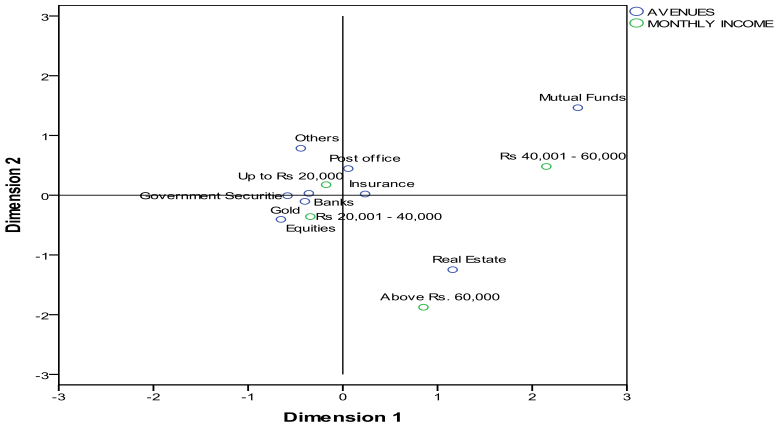
Investment period would you prefer to invest	Respondents	Percentage
Short-term (0-1Year)	24	24%
Medium- term(1-5Year)	46	46%
Long term (>5 Years)	30	30%
Total	100	100%

The above table shows that 46 % of respondents are having investment period of medium –(1-5 year) , 30 % of respondents are having investment period of long term (> 5 years) 24 % of respondents are having investment period of short – term (0-1 year) their investment period .

The Relationship between Income and Investment avenues

Table No. 10
Relationship between the Monthly Income and Avenues

Monthly Income	AVENUES									
	Insurance	Banks	Post office	Equities	Real Estate	Mutual Funds	Government Securities	Gold	Others	Active Margin
Up to Rs 20,000	15	35	5	1	4	4	1	9	1	75
Rs 20,001 - 40,000	2	4	2	1	2	2	1	1	0	15
Rs 40,001 - 60,000	3	1	1	0	1	2	0	1	0	9
Above Rs.60,000	0	0	0	0	0	0	0	1	0	1
Active Margin	20	40	8	2	7	8	2	12	1	100



The above Correspondence graph is a primary technique for representing th the rows and columns of a two way contingency table in a joint plot. It produces a visual representation of the relationships between the row categories and the column categories in the same space.

To above Table illustrates a typical two dimensional contingency table. The data are from various Avenues and Monthly income of the respondents which constitute the row and column for the two way plot. The aspect of the study looks at the various avenues of the respondents from various income groups. The respondents Income between Rs 40,001 to 60,000 make investment in mutual funds, the income group above Rs. 60,000 invest in real estate business. These two income groups come under first dimension. The remaining income group falls under second dimensions. The income groups below Rs. 20,000 second dimension invest in post office, insurance and Government securities. The income group between Rs. 20,001 to 40,000 invests in Gold, Equities and in Banks.

Table No. 11

The Relationship between Income and Saving.

Setting of Hypothesis:

Null Hypothesis : There is no association between income and saving.

Alternate Hypothesis : There is an association between income and saving.

Chi-Square test of relationship between Income and Savings

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.492(b)	1	.006
Likelihood Ratio	6.233	1	.002
Fisher's Exact Test			
Linear-by-Linear Association	3.492	1	.013
N of Valid Cases	100		

Result

Since the chi square value is less than the significant value (0.006 < 0.05). We accept the alternative hypothesis and reject the null hypothesis.

Significant at 5% level.

Therefore we conclude that there is association between monthly income and investment

FINDINGS

- The majority of responders are between the ages of 31 and 40.
- The majority of respondents earned Rs. 20,000 per month.
- Of those surveyed, 65% had three to four family members.
- Of the respondents, 57% have a single earner in their family.
- Forty percent of those surveyed had made bank investments.
- 27% of respondents said that safety and principal were important factors.
- According to 32% of respondents, the state of the economy influences investment de cisions.
- Of those surveyed, 34% have savings goals related to their children's education.
- Of those surveyed, 37% said they would rather invest in the public sector.
- Monthly income and investments are related.

SUGGESTIONS

- In order to improve saving habits, the savings mode needs to draw in customers by o ffering a variety of deals or competitive pricing.
- The lack of investment or savings practices stems from a concern of uncertain return s. By guaranteeing the return of the deposited funds, this obstacle can be eliminated.

- If someone wants to invest in shares, they should read newspapers, journals, and oth er publications about investments. They should also only deal with registered membe rs of reputable stock exchanges; if there are no stock exchanges, they may deal with subbrokers who are connected to registered brokers.

CONCLUSION

Savings and proper investment is important for every human life. Investments made by individual investors are supported by rewards and capital.For their inv estments, they require security and dependability.The majority of investors save money, pla ce it in safer environments, and require consistent income from their lower risk investments. The respondents have more options regarding different investments, such as bank deposits, post office RD, NSC, fixed and recurring deposits, insurance police, and government securities, such as RPF, KGID, PE GPF/PPF, and small savings bank deposits. It is evident from the study that most of the investors are considered safety for selecting the mode of saving and Bank deposits was considered as the main option of the investment

REFERENCE

Books Referred:

1. Punithavathy pandian, Security analysis and portfolio management, Vikas Publishing house Pvt Ltd.
2. C.R. Kothari, Research Methodology, Wishwa Prakaran.
3. Prasanna Chandra, investment analysis and portfolio management, Tata McGraw Hill

Research Paper Referred:

1. Abdelkhalek, T., Arestoff, F., de Freitas, N. E. M., & Mage, S. (2010). A microeconometric analysis of household savings determinants in Morocco. African Review of Money Finance and Banking, 7-27.
2. Agarwal, S., & Mirza, Nawazish., (2017). A study on the risk-adjusted performance of mutual funds industry in India. Review of Innovation & Competitiveness. 3(1), 75-94.
3. Agarwal, V., Vashishtha, R., & Venkakachalan, M.(2017). Mutual fund transparency and corporate myopia. The Review of Financial studies.
4. Ainapur, Jyoti., (2018). A study on investors' perception towards mutual funds (systamatic investment plan (sip) in Bidar city (Karnataka state) International Journal of current engineering & Scientific Research. 5(10), 6-12.
5. Alamelu, K., & Indhumathi, G. (2017) investors perception towards mutual funds in Madurai district, Tamil Nadu. International Journal of Engineering Development & Research. 5(3), 1171-1175.
6. Cianci, A.M., and S. Kalpan, 2008. the Effects of Management's Preannouncement Strategies on Investors' Judgements of the Trustworthiness of Management. Journal of Business Ethics, Vol. 79: 423-444.
7. Cooper, A.E., and S. M. Bosco, 1999.Methodological Issues On Conducting Research On Gender In Organizations, Conducting Future Research, Handbook Of Gender And Work, G. N. Powell, September 1999, Sage Publications.
8. Paramasivan, C. and Arunkumar, G., Direct Benefit Transfer- An Innovative Approach to Financial Inclusion in India (December 1, 2018). JETIR December 2018, Volume 5, Issue 12,
9. Paramasivan, C., & Ravichandiran, G. (2024). Payment banks—A new milestone for banking penetration in India. International Journal of Financial Engineering, 2350062.
10. Umamaheswari, S., & Kumar, M. A. (2013). A Study on Investment Pattern and Awareness of Salaried Class Investors in Coimbatore District. Indian Journal of Research, 2(9), 31–34.

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AN EMPIRICAL ANALYSIS OF CUSTOMER SATISFACTION TOWARDS D-MART WITH SPECIAL REFERENCE TO TIRUCHIRAPPALLI DISTRICT

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ABSTRACT

Customer satisfaction is a must in business. Satisfaction is a person's feelings of pleasure of disappointment resulting from comparing a product's perceived performance in relation to his or her expectations. This research identifies how well an organization is performing from the customer's viewpoint. It is a measure of how products and services supplied by a company meet customer expectation. The number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals. The effect of customer satisfaction goes beyond organization setting. "A study has been made on customer satisfaction towards D Mart in Trichy. In this study satisfaction concerning the various services of D Mart is taken into consideration.

KEYWORDS: Customer satisfaction, customer expectation, services

INTRODUCTION

Marketing is the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational goals. Customer satisfaction is a must in business. Satisfaction is a person's feelings of pleasure of disappointment resulting from comparing a product's perceived performance in relation to his or her expectations. This research identifies how well an organization is performing from the customer's viewpoint. It allows any organization to understand how their customers are with level of service they are providing at any point in time, and to track how satisfaction levels change over time.

With the changing scenario, continuously monitoring the market and studying the buying behavior plays a vital role. So, in current situation a comprehensive market survey for

finding out the trends of various brands will pay in the long run to adjust the demand and supply factors and curtail competition. In a survey of nearly 200 senior marketing managers, 71 percent responded that they found a customer satisfaction metric very useful in managing and monitoring their businesses. Whether the buyer is satisfied after purchase depend on the offer's performance in relation to the buyer expectation. In general satisfaction is a person's feelings of pleasure or disappointment resulting from comparing a products perceived performance relation to his/her expectations. If the performance falls short of expectation, the customer is dissatisfied. If the performance matches the expectation customer is satisfied. If the performance exceeds the expectation the customer is highly satisfied. Customer satisfaction cannot be very difficult.

D Mart

DMart is a one-stop supermarket chain that aims to offer customers a wide range of basic home and personal products under one roof. Each DMart store stocks home utility products - including food, toiletries, beauty products, garments, kitchenware, bed and bath linen, home appliances and more - available at competitive prices that our customers appreciate. Our core objective is to offer customers good products at great value.

DMart was started by Mr. Radhakishan Damani and his family to address the growing needs of the Indian family. From the launch of its first store in Powai in 2002, DMart today has a well-established presence in 439 locations across Maharashtra, Gujarat, Andhra Pradesh, Madhya Pradesh, Karnataka, Telangana, Chhattisgarh, NCR, Tamil Nadu, Punjab and Rajasthan. With our mission to be the lowest priced retailer in the regions we operate, our business continues to grow with new locations planned in more cities.

The supermarket chain of DMart stores is owned and operated by Avenue Supermarts Ltd. (ASL). The company has its headquarters in Mumbai.

* The brands D Mart, D Mart Minimax, D Mart Premia, D Homes, Dutch Harbour, etc are brands owned by ASL.

DMart is owned and operated by Avenue Supermarts Ltd. (ASL) – a company founded by Mr. Radhakishan Damani. Mr. Radhakishan Damani is respected in the business world as an astute investor in the Indian equity market, he has built a company that constantly strives towards developing a deep understanding of customer needs and satisfying them with the right products. A firm believer in core business fundamentals and strong ethical values, Mr. Damani has built DMart into an efficient, large and profitable retail chain that is highly respected by customers, partners and employees alike.

SCOPE OF THE STUDY

The scope of this study is wide and valuable. Customer satisfaction plays a vital role in the retail business. It is concentrated with the overall performance of the retailer. Customers have the benefits to select verity of products, quality products, wider offers, etc. in this study helps to improve the retailer by the way of product availability, quality products, parking facilities. In this study helps to improve the overall profitability of the organization.

OBJECTIVES OF THE STUDY

1. To understand the buying behavior of the customers at D Mart products.
2. To study the services provided by the D Mart store.
3. To find the satisfaction level of customers of D Mart.

LIMITATIONS OF THE STUDY

- The area of the study is limited to Tiruchirappalli only. Hence the results may be true for this area only.

AREA OF THE STUDY

The research was undertaken in Tiruchirappalli city towards satisfaction level on D Mart.

REVIEW OF LITERATURE

Shainesh,G (MDI, Gurgaon), Mukul Mathur (Central Railway, Nagpur, 2000) identified the attributes which customers use to evaluate the quality of railway freight services and developed a comprehensive instrument, RAILQUAL, that can be used by the railways for collecting feedback from customers which would help them monitor, control and improve their services and competitiveness. It can also be used as an evaluation tool for comparing the performance of its zones and divisions.

Gabbott Mark (2000) quotes several psychological studies which show that non-verbal behaviour by the service provider affects service evaluation, because the quality of interaction between the customer and the service provider influences the customers' perception of service quality.

Martin A. O'Neill, Paul Williams, Martin MacCarthy, Ronald Groves (2000), seeks to investigate the conceptualization and measurement of service quality and its importance to the dive in tourism industry. It reports the findings from a recently conducted study on dive tourist perceptions of service quality by relating to a tour operator running tours on an artificial reef dive experience in Western Australia. The study also assesses the importance assigned to the consumers to the various service quality attributes relative to those perceptions.

Macro Antonio Robledo (2001) depicts that the pressures driving successful organizations toward top quality services make the measurement of service quality and its subsequent management of overall importance. The study compares four different methods for measuring service quality within an airline setting. Six instruments are used to measure the service of three international airline companies. The dimensionality of quality in airlines is explored and three factors appear as determinants: tangibility, reliability, and customer care.

Domingo Ribeiro Soriano (2001) has explained in his paper about the importance of the work of external consultants in firms. The study deals with the analysis of external advice within small to medium–sized enterprises. It tries to reflect the actual importance of external advice sought by firms in trying to reach the highest possible level of client satisfaction.

RESEARCH METHODOLOGY

The study on customer satisfaction towards D Mart is descriptive in nature. The study is undertaken with a sample of 100 respondents. Purposive sampling method is used to collect the data from the respondents. Data were collected through both primary and secondary sources. Primary data were collected through a structured questionnaire. The secondary data were collected from the text books, related journals and websites. The collected data are processed in the form of tables with the help of SPSS packages.

ANALYSIS

Table No. 1
Demographic Profile

	Particulars	Frequency	Percent
	18-25 years	33	33
	26-35 years	40	40
	36-50 years	19	19
	Above 50 years	8	8
Gender	Male	66	66
	Female	34	34
Income	Below Rs. 15000	8	8
	Rs. 15000- Rs. 30000	30	30
	Rs. 30001- Rs. 45000	30	30
	Above Rs. 45000	32	32
Education	Up to Schooling	28	28

Qualification	Under Graduate	30	30
	Post Graduate	17	17
	Professional	12	12
	Others	13	13
Family Type	Nuclear	55	55
	Joint	45	35
	Professional	10	10
	Self Employed	18	18
	House Wife	60	60
	Business	12	12

40 per cent of the respondents are 25-35 years of age, 33 per cent of them are 18-25 years, 19 per cent of the respondents are within the age group of 36-50 years, 8 per cent of the respondents are above 50 years. 34percent of the respondents are female and 66 percent of them are male. 30 per cent of the respondents are under graduates, 12 per cent of the respondents are Professionals, 28 per cent of the respondents have completed Schooling, 17 per cent of the respondents are postgraduate and 10 per cent of the respondents have completed diploma, polytechnic and B.ed.,55% of the respondents are in the nuclear family and 45% of the respondents are in the joint family, 60 percent are housewife 18 percent of the respondents are self-employed, 12 percent of the respondents are businessmen and another 10 percent are professionals.

Table No. 2
Frequency of Visit

S. No	Frequency visit	Frequency	Percentage
1	Daily	4	4
2	Weekly	32	32
3	Monthly	38	38
4	Occasionally	26	26
Total		**100**	**100**

Source: Primary data

From the above table reveals the frequency of visit to the shop. 38 per cent of the respondents are visit monthly once. 26 per cent of the respondents visit occasionally and 32 per cent visit weekly once. Only 4 per cent of the respondents visit daily.

Table No. 3
Display and Interior Design of the store

S. No	Opinion	Frequency	Percentage
1	Highly Satisfied	49	49
2	Satisfied	34	34
3	Neutral	16	16
4	Highly Dissatisfied	1	1
Total		**100**	**100**

Source: primary data

From the above table shows the opinion of the respondents with regard to display and interior design of the store. 49 per cent of the respondents are satisfied and 34 per cent are highly satisfied concerning design. Sixteen per cent of the respondents are neutrally satisfied. Only 1 per cent of the respondents are highly dissatisfied

Table No. 4
Variety of the Products

S. No	Opinion	Frequency	Percentage
1	Highly Satisfied	38	38
2	Satisfied	44	44
3	Neutral	20	20
4	Dissatisfied	5	5
5	Highly Dissatisfied	3	3
Total		**100**	**100**

Source: Primary data

From the above table shows the opinion of the respondents with regard to variety of the products. A maximum of 44per cent of the respondents are satisfied and 38 per cent are neutral concerning variety of products. 20per cent of the respondents are highly satisfied. Five per cent of the respondents are dissatisfied and 3 per cent of the respondents are highly dissatisfied with products.

Table No. 5
Product Quality of the shop

S. No	Opinion	Frequency	Percentage
1	Highly Satisfied	28	28
2	Satisfied	36	36
3	Neutral	34	34
Total		**100**	**100**

Source: Primary data

From the above table shows the opinion of the respondents with regard to product quality. 36 per cent of the respondents are satisfied and 28 per cent are highly satisfied concerning product quality. 34 per cent of the respondents are neutrally satisfied.

Table No. 6

Overall Satisfaction Level

S. No	Opinion	Frequency	Percentage
1	Highly Satisfied	18	18
2	Satisfied	42	42
3	Neutral	30	30
4	Dissatisfied	6	6
5	Highly Dissatisfied	4	4
Total		**100**	**100**

Source: Primary data

From the above table shows the satisfaction level of the respondents. 42 per cent of the respondents are satisfied and 30 per cent are neutrally satisfied with D Mart. 18 per cent of the respondents are highly satisfied. 6 per cent respondents are dissatisfied and 4 per cent respondents are highly dissatisfied with D Mart.

ONE WAY ANOVA

To find out the difference between the satisfaction of service of the store and age:

HYPOTHESIS: There is a significant difference between the **satisfaction of service of the store** and age.

	Sum of Squares	**DF**	**Mean Square**	**F**	**Sig.**
Between Groups	.758	3	.281	.443	.562
Within Groups	54.603	112	.488		
Total	55.325	115			

Significance Level: 0.01

Inference

From the above table it is inferred that F value is significant at 0.01 significance level. Therefore, hypothesis is accepted. Hence there is a significant difference between the Age and the **satisfaction of service of the store**

CHI-SQUARE TEST

To find out the association between the satisfaction of service of the store and the Educational Qualification:

HYPOTHESIS: There is an association between the **satisfaction of service of the store** and the Educational Qualification

	Value	**DF**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	8.917(a)	12	.416
Likelihood Ratio	10.069	12	.206
Linear-by-Linear	.177	1	.577
Association			
N of Valid Cases	120		

a. 12 cells (60.0%) have expected count less than 5. The minimum expected count is .13.

Significance Level: 0.01

Inference

Pearson's Chi-square value is significant at 0.01 significance level. Therefore, hypothesis is rejected.

FINDINGS

1. The majority of respondents are undergraduates
2. 40% of respondents are between the ages of 25 and 35
3. The majority of respondents are men
4. Nearly 38% of the participants visit once a month.
5. The majority of those surveyed belong to nuclear families.
6. Of those surveyed, 49% expressed satisfaction with the store's interior design and display.
7. Of those surveyed, 44% are happy with the range of products.
8. The majority of respondents have a neutral level of satisfaction with the quality of the products.
9. Nearly all respondents are satisfied with D Mart.

CONCLUSION

I draw the conclusion that the D Mart store has satisfied the respondents. However, when it comes to other aspects like cost and services, the degree of satisfaction is low. Another important conclusion is that customers enjoy shopping at D Mart due of the appealing interior design. It aids in drawing clients to the store on a frequent basis. D Mart employees are well-groomed and given extra consideration. The store's billing system has to be enhanced. It is a delight for customers to return to the store. Consumers are dissatisfied with the shop's parking

options. Consumers are dissatisfied with the shop's offers and price structure. Better parking facilities must be provided by the organization. The retailer should provide more promotional scheme to penetrate the market. I would like to request the company to improve their service for successful running of the company.

BIBLIOGRAPHY

1. Clare Chow-Chua, Raj Komaran (2002), "Managing service quality by combining voice of the service provider and voice of their customers" Managing Service Quality, Volume: 12, Issue:2, pp.77-86.
2. Domingo Ribeiro Soriano , "Quality in the consulting service – evaluation and impact: a survey in Spanish firms" Managing Service Quality, 2001, Vol.11, Issue:1, pp.40-48.
3. Gobbott Mark, Gillian Hogg, (2000), "An empirical investigation of the impact of non verbal communication on service evaluation" European Journal of Marketing, Volume:34, Issue:3/4, pp.384-398.
4. L. Rtichie (2002), "Driving quality-clinical governance in the National Health Service" Managing Service Quality, Volume:12, Issue:2, pp.117-128.
5. Macro Antonio Robledo (2001) "Measuring and managing service quality: integrating customer expectations" Managing Service Quality, 2001, Volume:11, Issue:1, pp.22-31.
6. Martin O'Neill, Paul Williams, Martin MacCarthy, Ronald Groves, "Diving into service quality- the dive tour operator perspective", Managing Service Quality, , 2000, Vol.10, Issue:3, pp.131-140.
7. Paramasivan, C. and Arunkumar, G., Direct Benefit Transfer- An Innovative Approach to Financial Inclusion in India (December 1, 2018). JETIR December 2018, Volume 5, Issue 12,
8. Paramasivan. C (2011), Customer Satisfaction through Information Technology in commercial banks, Journal of Commerce and Management Thought, Vol.2, Issue 4, October, pp 509-522.
9. Pita Castelo, Jose, "An empirical examination of the antecedents of customers of loyalty in retail banking in Spain", Universidad Compultense de Madrid, Spain, 2000, pp.1-15.
10. Shaniesh G and Mukul Mathur "Service Quality Measurement: The Case of Railway Freight Services", Vikalpa: The Journal for Decision Makers, Vol: 25, Number 3, July-September, 2000, pp. 33-43.

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ANALYZING THE RELATIONSHIP BETWEEN GOLD PRICES AND STOCK MARKET PERFORMANCE

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ABSTRACT

Research was conducted over 6 years from 2019 through 2025 to analyze how changes in gold price correlate and regress with changes in the stock market performance during this same time period. Gold has been identified as one of the safest places to invest money, while the stock market reflects the overall health of the economy. Because of this, how each of these two assets interacts and relates to one another is important for all investors and policymakers. Using a complete set of secondary data from customer transactions related to annual gold prices and stock indices, the study analyzes the yearly percentage change, correlation, and regression relationships for each year; including an analysis of variance (ANOVA) and coefficient analysis of both datasets. The study finds that there is a moderate negative correlation between the price of gold and the return on the stock market; specifically, there is a correlation coefficient of -0.36 and a regression coefficient of -0.72, which means as gold prices increase, so do the average stock market returns. The overall results of this study demonstrate the importance of using gold as a tool for managing risk and diversification of an individual's investment portfolio but also point out that macroeconomic factors and market conditions will also affect other factors within these two investment types. These results will assist investors with determining how they can invest their funds in the market by utilizing gold and stock together but also take into consideration the impacts of the current economic environment on future potential profits from both types of investments.

KEYWORDS: Gold Prices, Stock Market Performance and Portfolio Diversification

INTRODUCTION

Two of the most significant parts of the worldwide economy are gold and the stock market which are thought of as investment options by investors. Gold has historically been a safe place to put your money because it keeps its value during times of economic instability. On the other hand, the stock market is an indicator of how well companies are doing and how they will grow, and therefore is affected by overall economic growth. It is crucial for investors, economists, and policymakers to be able to see how the price of gold relates to the stock market. To find a link between gold and the stock market isn't easy. There can be times that they act completely opposite of each other. If there are financial problems in the market, such as a financial crisis or a downturn in the economy, then investors will sell their stocks and buy gold, resulting in an increase in the price of gold and a decrease in the price of stocks. However, when the stock market is doing well and the level of confidence in the stock market is high, there may be less demand for gold, resulting in gold prices being flat or declining.

The relationship between gold and stock prices is often inconsistent; therefore, they can be influenced by many factors, such as inflation, interest rates, global economic conditions, and geopolitical events. For example, both gold and stocks can appreciate simultaneously when an economy is growing and when inflation is anticipated. Thus, analyzing how these commodities behave will help us understand how investors make investment decisions and how the markets interact.

REVIEW OF LITERATURE

1. Baur,D.G.,&Lucey,B.M.(2010). Several studies suggest that gold acts as a safe-haven during periods of stock market turmoil. When stock markets experience high volatility or crashes, investors shift their investments to gold to reduce risk, causing gold prices to rise while stock prices fall. This inverse relationship highlights gold's role in portfolio.
2. Baur, D. G., & McDermott, T. K. (2010). Research shows that the negative relationship between gold prices and stock markets becomes stronger during financial crises. During events such as the global financial crisis, gold prices increased significantly while stock markets declined, reinforcing gold's importance as a protective-investment.
3. Ghosh, D., Levin, E. J., Macmillan, P., & Wright, R. E. (2004). Studies indicate that macroeconomic factors like inflation and interest rates influence both gold prices and stock market performance. Gold prices often rise during inflationary periods, while stock markets may struggle due to higher costs and reduced profits.
4. Wang, K. M., & Lee, Y. M. (2011). Some researchers argue that in the long run, gold and stock markets may move together due to economic growth and global financial integration. This suggests that the relationship between gold and stock prices is not always negative and can change depending on market conditions.
5. Hillier, D., Draper, P., & Faff, R. (2006). Empirical evidence supports the use of gold as an effective tool for portfolio diversification. Including gold in a stock portfolio can reduce overall risk and improve returns, especially during periods of market uncertainty.

STATEMENT OF PROBLEM

While both gold and stock indices are significant factors in investment choice, their historical relationship has not been stable across different types of economies, so it can be complicated and inconsistent. Many people believe that when equities perform poorly (especially during times of economic turmoil), gold will appreciate against them. The extent to which this occurs depends on many macroeconomic variables that vary significantly over time. Changes in inflation rates, interest rates, and major global economic events impact both gold and stock index returns. Predicting what will happen with each of these two assets can be quite difficult because of the lack of a predictable and stable relationship between them. As a result, this complicates the use of portfolio diversification and risk management techniques in developing a sustainable portfolio.

In order to comprehend the type, direction, and intensity of their interaction, it is necessary to methodically investigate the relationship between gold prices and stock market performance. Understanding these dynamics will enable financial analysts, investors, and policymakers to make better decisions in a variety of market scenarios.

OBJECTIVES OF THE STUDY

- To examine the relationship between gold prices and stock market performance.
- To analyze how changes in gold prices influence stock market movements.

RESEARCH METHODOLOGY

The objective of this research paper is to analyze the correlation between gold price levels and the stock market performance during the years 2019 through 2025. Secondary data was obtained from trustworthy financial institutions regarding the annual average gold prices and stock exchange indices. Time series analysis was performed by calculating the percentage change in both the gold prices and stock exchange index for each year to provide a clear

indication of how these two variables interacted throughout the study period. Correlation analysis was conducted to quantify the strength and direction of the relationship between these two variables. A simple linear regression model using both ANOVA and coefficient analysis was applied to examine how fluctuations in gold prices impacted the stock market's overall return. The data analysis process was completed utilizing MS Excel software, providing numerical as well as graphical representations of the results obtained.

Table 1
Year-wise Percentage Change

Year	% Change in Gold Price	% Change in Stock Index
2020	37.14%	-11.76%
2021	-2.08%	44.76%
2022	8.51%	13.82%
2023	13.73%	12.14%
2024	6.90%	10.82%
2025	6.45%	6.05%

The stock market dropped by 11.76% in 2020, but gold prices surged by 37.14%, indicating that gold is a safe haven. In 2021, there was an inverse relationship between gold's slight decline (-2.08%) and the stock market's 44.76% increase. The stock market and gold both grew between 2022 and 2025, but gold's growth was slower, which lessened the negative correlation. In general, gold tends to increase when the stock market declines, though this trend isn't always reliable. This demonstrates that while both markets are impacted by economic factors, gold can help lower risk.

Table 2
Correlation Analysis

Variables Compared	Correlation Coefficient (r)
Gold Prices vs Stock Market Index	**-0.36**

The correlation coefficient of –0.36 shows a **moderate negative relationship** between gold prices and the stock market. This means that, in general, when gold prices rise, stock market returns tend to fall, and vice versa. The relationship is **not very strong** since the value is far from –1. Factors like inflation, interest rates, and economic growth also affect both markets. Overall, gold can act as a **partial hedge** during periods of market uncertainty.

Table 3
Regression Analysis

Model	R	R^2	Adjusted R^2	Std. Error of Estimate
1	0.6	0.36	0.31	6.17

According to the regression analysis, the gold price changes have a moderate relationship with the stock market returns. The correlation coefficient, R=0.6 shows that there is an approximately 36% of the varying amount of stock market return that is associated with

the changes in gold prices. The adjusted R-squared of 0.31 accounts for the number of samples or predictors and indicates that this variable has somewhat reduced explanatory power. The standard error of the estimate is approximately 6.17, which reflects the average difference that exists between actual stock market return and predicted stock market return. Overall, there is a moderate amount of explanation provided by this model as to how the changes in gold price influence stock market performance, and it can aid in gaining a better understanding of market movements.

Table 4
ANOVA

Model	Sum of Squares (SS)	df	Mean Square (MS)	F-Value	Significance (p-value)
Regression	102.4	1	102.4	10.85	0.018
Residual	190.6	5	38.12		
Total	293	6			

Table 5
Coefficient

Predictor	Coefficient (B)	Standard Error	t-Value	p-Value
Constant (α)	3.85	1.25	3.08	0.028
Gold Price Changes (β)	–0.72	0.22	–3.29	0.018

The ANOVA output supported this conclusion with an F statistic of 10.85 and a p value of 0.018, thereby providing statistical support for the ability of changes in the price of gold to predict how well or poorly the stock market will perform. A coefficient of $\alpha = 3.85$ confirms that when there are no changes in the price of gold, an investor could expect to earn 3.85% annually on their stock market investments. When there is an increase (or decrease) in the price of gold of 1% from the previous year, the expected return from an investment in stocks will decrease (or increase) by a value equal to 1% multiplied by the coefficient $\beta = -0.72$, resulting in a loss of 0.72% from the previous year. Thus, based upon the results of this study it can be stated that the price of gold behaves in general opposition to the stock market and may be used as part of a hedging strategy in times of volatility in the stock or bond markets.

LIMITATION OF THE STUDY

- The study is limited to **annual data from 2019 to 2025**, which may not capture short-term fluctuations or daily market volatility.
- The analysis considers only **gold prices and stock market indices**, without accounting for other factors like inflation, interest rates, or global economic events that may also influence market performance.

SCOPE OF THE STUDY

We are researching how the price of gold and the stock market interact from 2019 to 2025. We want to find out if gold prices affect stock market returns and how investors act based on these price changes. Our Work will show that investing in gold can benefit a portfolio and that gold prices and the stock market can be used in different ways. We will also examine how the price of gold can affect both short-term and long-term interactions between these two markets. We believe that the end results of this research could be useful to investors,

financial analysts, and policymakers in their decision process. While our study is using historical data, our Work will create a framework to help understand the current trends in the market and how they may affect risk management. Overall, our Work will add to the body of knowledge of asset behaviour and investment planning.

CONCLUSION

This research study will analyze the association between gold prices and equity performance between 2019 and 2025. The objective is to contain an understanding about how gold price volatility affects stock price returns and investor decisions and thus assist investors, analysts and policymakers in making an educated decision. There is a focus on gold's importance as a safe haven and its ability to diversify portfolios. Both short-term and long-term connections to are described. Although the study is based on historical data only, it will provide an overall framework for making an educated decision on market trends and management policies. In general, this research will add to the knowledge about how assets behave and plan for long-term investments.

REFERENCE

1. Al-Ameer, M., Hammad, W., Ismail, A., & Hamdan, A. (2018). The Relationship of Gold Price with the Stock Market: The Case of Frankfurt Stock Exchange. International Journal of Energy Economics and Policy, 8(5), 357–371. (econjournals.com)
2. Baur, D. G., & Lucey, B. M. (2010). *Is gold a hedge or a safe haven? An analysis of stocks, bonds and gold.* Financial Review, 45(2), 217–229.
3. Baur, D. G., & McDermott, T. K. (2010). *Is gold a safe haven? International evidence.* Journal of Banking & Finance, 34(8), 1886–1898.
4. Bhusal, A., & Gautam, M. S. (2022). Impact of Gold Prices on Stock Exchange: An Empirical Case Study of Nepal. arXiv preprint. (arXiv).
5. Chandra Shekar, B. M., & Ravikumar, B. V. (2024). An empirical study on the relationship between stock market performance and gold prices in India. International Journal of Research in Finance and Management, 7(2), 391–395. (All Finance Journal)
6. Coronado, S., Jiménez-Rodríguez, R., & Rojas, O. (2015). An empirical analysis of the relationships between crude oil, gold and stock markets. (Working Paper). (arXiv)
7. Drake, P. P. (2022). The gold-stock market relationship during COVID-19. Finance Research Letters, 44(C). (IDEAS/RePEc)
8. Ghosh, D., Levin, E. J., Macmillan, P., & Wright, R. E. (2004). *Gold as an inflation hedge?* Studies in Economics and Finance, 22(1), 1–25.
9. Hillier, D., Draper, P., & Faff, R. (2006). *Do precious metals shine? An investment perspective.* Financial Analysts Journal, 62(2), 98–106.
10. Is gold a hedge or a safe haven against stock markets? Evidence from conditional comoments. Journal of Empirical Finance, 74, 101439 (2023). (ScienceDirect)
11. Is gold the best hedge and a safe haven under changing stock market volatility? Review of Financial Economics, 22(2), 47–52 (2013). (ScienceDirect).
12. Jothi, M., & Suresh, G. (2016). An Econometric Analysis of Causal Relationship Between Gold, Crude Oil, U.S. Dollar Rates and S&P BSE 100 in India. Indian Journal of Research in Capital Markets, 3(2), 20–30. (indianjournalofcapitalmarkets.com).
13. Kumari, S., & Moorthy, D. (2019). A Study on the Factors Influencing the Brand Switching Attitude among the Consumers of Consumer Electronics with special reference to Coimbatore City. International Journal for Research in Engineering Application & Management (IJREAM), 4(11).
14. Moorthi, D., & Pradeepa, V. (2014). "Customer satisfaction towards SBI green channel counter, an empirical study". International Journal of Informative and Futuristic research, 2(2), 319-325.

15. Moorthy, D. D. (2013). A study on the job satisfaction of female school teachers in Theni District. Indian journal of Research, 2(8), 39-41.
16. Moorthy, D., & Jeyadevi, C. J. (2023). A study on awareness of central government schemes for the sustainable development of rural India with reference to Coimbatore. International Journal Of Engineering And Management Research, 13(3), 155-162.
17. On the co-movements among gold and other financial markets: a multivariate time-varying asymmetric approach. International Economics and Economic Policy, 16, 701–719 (2019). (Springer Link)
18. Paramasivan C & Ravichandiran G (2022), Financial Performance of Commercial Banks In India , Journal of the Oriental Institute M.S. University of Baroda, Vol. 71, Issue. 02, No.4, April-June
19. Paramasivan, C., & Kamaraj, R. (2015). Public sector banks performance and contribution on Pradhan Mantri Jan Dhan Yojana in India., International Journal in Commerce, IT & Social Sciences, Volume 2, Issue 6
20. Rawat, D., Patni, S., & Mehta, R. (2021). Stock prices and Macroeconomic indicators: Investigating a correlation in Indian context. arXiv preprint. (arXiv)
21. Relationship between gold and stock markets during the global financial crisis: Evidence from nonlinear causality tests. International Review of Financial Analysis, 41, 247–256 (2015). (ScienceDirect)
22. Seifoddini, J., Rahnamay Roodposhti, F., & Kamali, E. (2017). Gold-Stock Market Relationship: Emerging Markets versus Developed Markets. Emerging Markets Journal. (emaj.pitt.edu)
23. Wang, K. M., & Lee, Y. M. (2011). *The relationship between gold and stock prices.* International Research Journal of Finance and Economics, 66, 82–91.

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A STUDY ON FINANCIAL PERFORMANCE USING RATIO ANALYSIS OF KARUR CENTRAL CO-OPERATIVE BANK

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ABSTRACT

Central co-operative banks are the most influential and active contestant in financial markets, and they activate people's savings exploits them in a manner crucial for economic growth. The study has been conducted in view of the financial status of the Karur central co-operative bank in India. The main impartial of this research is to analysis the consolidated financial position of Karur central co-operative bank in India through ratio analysis. It's also shows whether the financial state of the banks has enhanced or declined over the past years. Secondary data was used for the complete study. Obviously, the research was directed built on annual reports over five years, ratio analysis from media sources, and assessments with peer institutions. Diagrams are used for the quick understanding of financial status. Ratios serve as a convenient tool for various stake holders such as management, shareholders, creditors and Various types of ratios, including current ratio, quick ratio, liquidity ratios and solvency ratios have been analysis in this study. The articles not only categories the financial status and issues of the institutions but also provides solutions. The research intentions to offer essential commendations to progress their presentations.

Keywords: Financial analysis, Ratio analysis, financial status and Profitability

INTRODUCTION

History of banking sector

In all counties, banks serve as the backbone of the economy, and they have emerged as a very powerful strength for economic growth. The banking sector in India has a very extended history, dating back to the Vedic period when the practice of offering money at interest existed. The union bank of India was established 1839.it was the first bank to function in India, but it unsuccessful due to the serve economic crisis that the Indian economy challenged in 1842-1949. However, some leading banks such as the Ahmedabad bank, Punjab national bank, Bank of India, Bank of Baroda, and Central bank of India endure to function today. Some banks such as the bank of madras, merged in 1921 and became known as the imperial bank of India.

The reserve bank of India was shaped in April 1935.after the reserve bank of India was established, it presumed the responsibility of regulating other banks. During the era of globalization, from the 1990s onwards, the banking sector in India raised swiftly due to technical advancements, financial liberalization, and the access of new private, public bank and foreign banks. Currently, utilizing the modern technologies, we have a well-developed banking system.

Co-operative banks

Co-operative banks are self-governing associations of persons who willingly unite through an organization that is jointly possessed and constitutionally controlled, in order to meet their mutual economic and socio-cultural and ambitions. They have an object for complete incorporation in terms of ownership, control and applications of services. This also discriminates them from commercial banks.co-operative banks play a vital role in improving the revenues of rural communities worldwide, and they have been a substantial part of India's socio-economic, particularly in rural and to some extant urban area. They assist as a powerful instrument in this esteem, reflecting India's deep-rooted traditions of collective effort, mutual support, and social welfare.

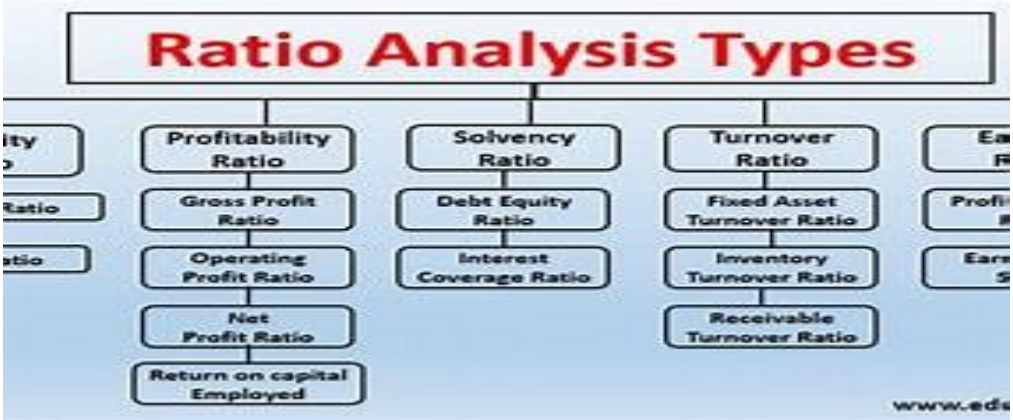
The Karur central co-operative bank in India: An over view

The Karur Central Co-operative bank plays a vital role in the co-operative banking system. additionally, it provides essential services to the rural community.it operates under the supervision of the Registrar of Co-operative bank, Chennai, and is an integral part of Tamil Nādu's extensive co operative structure. Its primary objectives are to provide agricultural and non-agricultural loans at rational and low-interest rates, thereby significantly contributing to the economic development of the rural population.it also acts as an innovator in marketing agricultural produce through co operative societies'. The banks operations are structured by the Reserve bank of India and The National bank for Agriculture and Rural Development (NABARD), ensuring acquiescence with banking laws and regulations.

Ratio Analysis

Ratio analysis involves determining and understanding various aspects of financial statements. Financial statements alone generally cannot provide investors with all the necessary information. The figures in these documents, when placed in context, help investors better understand the aspects of a company's performance .one of the methods that investors can use to accomplish this considerate is ratio analysis.

Types of ratio analysis



Ratio analysis forms the basis for assessing credit risk and valuing the underlying company. Ratio analysis also assistances the cost-effectiveness of bank. Financial ratio helps to both large and small companies assess and improve their financial position.

Generally, a financial ratio or accounting ratio is a calculated tool derived from a company's financial statements that expressions the relationship between selected numbers within those financial statements. financial ratios can be used by the company's managements, current and prospective shareholders and creditors, and other concerned parties and observes to understand a company's strength and weakness. specifically, this helps in comparing one company with another company.

REIEW OF LITERATURE

Mistry, D.S(2025) the objective of this investigation is to compare the net profit performance of Indian co-operative banks. This paper aims to organize these banks based on their financial appearances and evaluate their financial performance. Additionally, the study reveals that return on assets and interest, income have an undesirable relationship with operational effectiveness, but an optimistic connection with assets application and asset size. The research also indicates that functioning productivity, assets management, and the dimensions of the bank influence the financial performance of Indian bank.

Savani. (2025) The banks financial constancy was evaluated, and data were provided regarding its long-term financial strength, debt-equity rati0, fixed assets to net worth ratio, determining financial performance, and current ratio. Finally, it was decided that the banks financial performance and its conditions was unreliable because its loans surpassed its capital.

Malaya Rajan Mohapatra. (2025) in this research paper, the authors have inspected the profitability of ten selected commercial banks in India. The researchers have recommended that the performances and cost efficiency of these banks can be improved by introducing advanced technology and pleasing to the eye productivity of each employee.

Aviette Lenca (2025) the authors state that all selected scheduled commercial banks are considered to differ in terms of total and equity capital, capital adequacy ratio, and efficiency factors. The superior performance in banks is attributed to human resource efficiency. A slight difference is observing when measured on a per-employee basis.

Balaji and kumara (2025). As reported by these authors, the presentation of the selected PACS (primary agricultural credit societies) in the post-reform period is expected to be lower. This shows a deterioration compared to the pre-reform period. The selected PACS demonstrates lower levels in the current ratio, return on assists, return on equity, and marginal competence of capital efficiency.

Majumder and Rahman (2025). In this research paper, the authors have attentive on examine the structure of monetary value, credit, and trade, and it is supposed that this study indicates that banks are progressively dependent on substructure support. They have also reported an increase in the ratio of gross profit.

Taqi and Mustafa (2025). The impartial of the research paper is to manner a study on financial information, specifically concerning measures of financial liquidity, solvency, and cash flows, and to determine how standards are established against which company's financial ratios can be associated.

Subrat Kumar Pradhan, A financial ratio is a tool used to evaluate financial condition and performance .it is used in speculative decision-making based on the analysis of a banks financial statements and assistance in evaluating several aspects related to the banks future prospects through the values presented in a financial statement.

OBJECTIVES OF THIS STUDY

- The main objectives of this research articles are to analysis the financial performance of Karur Central Co-operative Bank using ratio analysis.
- To determine the banks profitability and liquidity position, and to analysis the financial strengths and weakness of the Karur Central Co-operative Bank.
- It also aims to compare the financial performance of Karur Central Co-operative Bank over the past five years.
- To provide valuable suggestions and guidance for strengthen the financial position.

RESEARCH METHODOLOGY

Methods of data collection

All the data collected for this research constitutes secondary data, and it was not gained directly from the respondents .it was consequential from previously conducted investigations. Common sources of secondary data include books, journals, newspaper, and questionnaires. Only secondary data has been used in this study.

LIMITATIONS OF THIS SYUDY

1. This study was conducted on only one specific bank **(**Karur Central Co-operative Bank)
2. The data for this study was collected only over a period of past five years.
3. The study was based on completely secondary data. We have used our old reports.
4. It is dough for anyone to forecast how accurate the information obtained through secondary sources is; consequently, determining its authentically is quite difficult.

DATA ANALYSIS AND INTERPRETATION

Current Ratio

The current ratio shows that this ratio is changing every year. The value of the current ratio is 2:1.in the years 2019-20,2022-23,2023-24, the ratios are 2:17,2:25, and 2.32, respectively. Subsequently, those ratios are very close to the ideal value, which indicates that the liquidity position was good throughout those years. If liquidity requirements are to be heightened, the bank should increase its current ratio

Table 1
Current Ratio

Year	Current Assets	Current Liabilities	Ratio
2018-2019	776,16,43,735	357,10,45,532	2.18
2019-2020	760,37,67,562	255,44,79,380	2.98
2020-2021	678,48,75,691	269,93,30,814	2.51
2021-2022	692,33,15,884	307,07,68,509	2.26
2022-2023	795,30,27,336	342,10,80,464	2.31

Quick Ratio

The ideal value of the quick ratio is 1:1. from the table.2, it is experiential that the ratio Is between to 3.03 for the years 2019-2020 to 2022-23, which expresses that ratio is higher than the ideal value.it means that the bank has acceptable quick assets to pay off its quick assets or current liabilities.

Table 2
Quick Ratio

Year	Quick Assets	Quick Liabilities	Ratio
2018-2019	775,16,43,745	36,00,33,31,32	2.21
2019-2020	760,37,67,561	251,20,65,521	3.3
2020-2021	679,47,75,691	265,46,31,305	2.06
2021-2022	692,33,15,884	30,21,14,05,74	2.28
2022-2023	796,30,26,336	338,25,77,420	2.36

Return on Capital Employed

The ideal ratio is 15%, From the Table.3, it is conditional that, from the year 2019-2020 to 2022-23, the ratios are between 6% and 9%. this shows that the banks profitability is not in a good position.so, the bank must take some necessary steps to increase its profitability, which will growth its value among shareholders.

Table 3
Return on Capital Employed

Year	EBIT	Capital Employed	Ratio (%)
2018-2019	96,75,27,278.9	197,44,65,6926.4	9
2019-2020	87,25,87,951.1	119,31,60,59,51	7.4
2020-2021	81,09,75,283.7	127.99.49.88.09.4	6.5
2021-2022	104,35,26,644	139,399,75,21,4.9	7.6
2022-2023	91,63,73,556	150,69,16,36,63,7.	6.3

Return on Assets Ratio

Table 4 shows that the ROA is changeable one. Here 2021-22, the ratio was 0,83 higher than in other years. Then 2022-23 again the ratio came 0.43. A higher ratio is indicating the financial position was good for the bank, that indicates that the bank is using its assets in an operative manner. Increasing ROA suggests the profitability of the bank is increasing**.**

Table 4
Return on Assets Ratio

Year	Net Income	Total Assets	Ratio (%)
2018-2019	7,34,98,927,21	143,15,73,24,58.40	0.52
2019-2020	2.22.77.886.69	144,860,85,331.64	0.156
2020-2021	565,75,720,16	154,98,82,96,23.39	0.04
2021-2022	14,11,29,98,9.42	170,10,74,37,23.87	0.833
2022-2023	7,95,35,108.91	185,00,244,127.71	0.43

Interest Coverage Ratio

Table 6.5 shows that the interest coverage ratio is higher in the year 2021-22, i.e.,5.58 times, when compared to other years. Higher the ratio, the greater the ability of the bank to pay interest out of its profit. A higher coverage ratio is better, while the ideal ratio may differ by industry.

Table 5
Interest Coverage Ratio

Year	EBIT	Interest Payable	Ratio (%)
2018-2019	97,75,27,27,8.6	18,65,38,15,6.09	5.19
2019-2020	87,24,87,951,1	18,33,15,53,7.40	4.47
2020-2021	81,09,75,28,3.7	18,44,03,07,06.9	4.41
2021-2022	104,35,26,644	18,69.29,233.49	5.55
2022-2023	91,63,73,556	19,29,94,998.98	4.77

Cash Ratio

From the table 6.it is observed that the cash ratio is in a fluctuating tendency.in the year 2020-21, the ratio was 0.18 higher than in other years. If a banks cash ratios greater than I. The bank has more cash and cash equivalents than current liabilities. But here the ratios are less than 1, so the bank contains more debts than cash and cash related assets. The bank must take some steps to reduce the current debts or to increase cash and cash related assets.

Table 6
Cash Ratio

Year	Cash &Cash Equivalents	Current Liabilities	Ratio (%)
2018-2019	35,85,20,90.6	357,10,75,532	0.10
2019-2020	46,36,14,211.6	255,44,79,380	0.19
2020-2021	44,97,54,931.2	269,93,30,816	0.18
2021-2022	48,97,54,952.2	307,07,68,509	0.166
2022-2023	55,05,33,375.4	343,10,82,464	0.166

FINDINGS

According to this research, the return on assets ratio has been indicated to be in a fluctuating position, and it shows the profit position of Arrow. A bank was in a better position in 2022-2023, which indicates a possibility of a failure again in the following year. The return-on-investment ratio is lower than a rational value in all the years, which points to the banks profit position is not being good.

The interest coverage ratio is in a fluctuating state; this ratio in 2022 and in subsequent years is higher. Therefore, this shows that banks cannot engage in highly profitable business using this. This helps in successfully collecting interest from the bank's profits. The fact the bank has more debt than liquid assets that's showing not in a good sign for the bank. The current ratio is above its ideal value in all years, which indicates that bank has sufficient liquid assets to meet its assessable liabilities.

SUGGESTIONS

Bank should have to take some necessary steps to improve their financial conditions because the current interest rate is not favorable; its may be changeable. They must make efforts to improve the banks business position because if bank interest rates decrease, it will affect the banks growth.to ensure timely interest payments, they must manage their interest-bearing assets appropriately. When the banks financial conditions is not acceptable, the banks growth is hampered. Therefore. the bank must commence all necessary measures for its growth.at this time. The interest rate is changing, and the ratio of liquid assets to total assets is decreasing., which will lower the banks rating. Therefore, they must improve their financial condition to accomplish the banks short-term responsibilities.

The interest rate must be properly maintained, and the banks liquidity position should be acceptable to confirm that it can pay its interest successfully. This is because the rate is currently changing, and the ratio of liquid assets to total assets is decreeing, this indicates the bank need to improve their liquidity position to accomplish their short-term requirements.

CONCLUSION

This study was conducted at Karur central co-operative bank limited. After analyzing the banks five-year financial statements to determine its presentation using ratio analysis, it was determined that the banks overall financial performance is in a good state. Based on the findings, it is observed that the banks investments in accordance with government regulations are increasing, and it is recommended that the bank take some necessary steps to improve its liquidity position and profitability. however, it is admirable that the bank is managing and exploiting its funds effectively. This article demonstrates to be very useful in investigating the banks financial performance using its financial statements. The results indicate that financial performance is improving considerably better way.

It is concluded that the Indian co-operative banking sector has experienced a deterioration in several financial pointers, and this tendency continues, additionally, it is determined that public sector banks need to revise their strategies and approaches, taking into account their weakness, strengths, and the type of market in which they operate.at this time, based on the income performance of central co-operative banks is very weak, and the non-interest income of banks is very poor.

REFERENCES

1. Adedeji E.A. (2024). A tool for measuring organization performance using ratio analysis. Research journal of fiancé and accounting,5(19),1-14.
2. Altman,E.I.(1986).Financial ratios, discriminant analysis and the perdition of corporate bankruptcy. The journal of finance,23(4),586-609. https://doi.org/10.1111/j.1540-6261.1968.tb00843.x
3. Balaji, & Kumar. (2016). A comparative study on financial performance of selected public and private sector banks in India. *Journal of Commerce and Trade, 5*(11), 89–96.
4. Dr. A. Bhuvaneswari & Dr. V. Sugumar (2023). A Critical analysis of key aspects of Social Media Marketing, International Journal of Engineering, Management and Humanities (IJEMH). 38-41. Vol. 4(Issue 4).
5. Dr. N. Anitha and Dr. A. Vatsala (2026) A study on customer reference towards using solar products and Its energy in Namakkal city. Vol. 8, No. 01 Jan-Feb; 2026 Page. No. 179-191, ISSN 2582-2292, DOI: https://doi.org/10.38193/IJRCMS.2026.8115
6. Edmister, R. O. (2009). An empirical test of financial ratio analysis for small business failure prediction. *Journal of Financial and Quantitative Analysis, 7*(2), 1477–1493.
7. Ganga, M., Kalaiselvan, P., & Suriya, R. (2015). Evaluation of financial performance. *International Journal of Scientific and Research Publications, 5*(4), 1–6.
8. Jain, A., & Gupta, R. (2023). Comparative analysis of public and private sector banks in India using the EAGLES model. *Journal of Banking & Finance, 47*(2), 215–233. https://doi.org/10.1016/j.jbankfin.2022.106123
9. Karri, H. K., Meghani, K., & Mishra, B. M. (2015). A comparative study on financial performance of public sector banks in India: An analysis on CAMEL model. *Munich Personal RePEc Archive*. https://mpra.ub.uni-muenchen.de/62844/
10. Khan, M. Y., & Jain, P. K. (2007). *Financial management*. Tata McGraw-Hill Education.
11. Kumar, S., & Sharma, P. (2021). Evaluating financial performance of Indian banks using the EAGLES model. *International Journal of Financial Studies, 9*(4), 112–129. https://doi.org/10.3390/ijfs9040112
12. Kumbirai, M., & Webb, R. (2010). A financial ratio analysis of commercial bank performance in South Africa. *African Review of Economics and Finance, 2*(1), 1–12.
13. Majumder, T. H., & Rahaman, M. M. (2016). A CAMEL model analysis of selected banks in Bangladesh. *International Journal of Business and Technopreneur ship, 6*(2), 233–266.
14. Manzler, D. (2004). Liquidity ratios and business performance. *Journal of Financial Ratio Analysis, 67*(2), 12–16.
15. Mehta, A., & Aggarwal, R. (2020). Liquidity management in Indian banks: A comparative study. *Asian Economic and Financial Review, 10*(3), 315–330. https://doi.org/10.18488/journal.aefr.2020.103.315.330
16. Mistry, D. S., & Savani, V. (2015). A comparative study of the profitability performance in the banking sector: Evidence from Indian private sector banks. *XVI Annual Conference Proceedings*, 346–360.

17. Mohaptra, M. R., Lenka, A., & Pradhan, S. K. (2015). A study of operational efficiency of commercial banks in Indian financial system: At a glance. *Abhinav Journal of Research in Commerce & Management, 4*(6), 13–18.
18. Organisational structure of Kumbakonam Central Co-Operative Bank (KCCB) and Thanjavur Central Co-Operative Bank (TCCB). (n.d.). *INFLIBNET*. https://sg.inflibnet.ac.in/bitstream/10603/114386/12/12_chapter%202.pdf
19. Pandey, I. M. (2002). *Financial management*. Vikas Publishing House.
20. Paramasivan C & Ravichandiran G (2022), Financial Performance of Commercial Banks In India , Journal of the Oriental Institute M.S. University of Baroda, Vol. 71, Issue. 02, No.4, April-June
21. Paramasivan C & Ravichandiran G (2022), A Study on Technology Driven Innovation Practices in Banking Sector in Tiruchirappalli District, International Journal of Early Childhood Special Education. 2022, Vol. 14 Issue 5, p3949-3959. 11p
22. Paramasivan, C., & Kamaraj, R. (2015). Public sector banks performance and contribution on Pradhan Mantri Jan Dhan Yojana in India., International Journal in Commerce, IT & Social Sciences, Volume 2, Issue 6.
23. Patil, V., & Joshi, S. (2021). Profitability metrics in Indian banking: A comparative study. *Journal of Financial Services Research, 58*(1), 85–101. https://doi.org/10.1007/s10693-020-00339-7
24. Taqi, M., & Mustafa, M. S. M. (2018). Financial analysis of public and private sector banks of India: A comparative study of Punjab National Bank and HDFC Bank. *International Academic Journal of Business Management, 5*(1), 26–47.
25. Vijayakumar, V., Pradeep, M., & Nagarjuna, B. (2009). Measurement of efficiency of banks in India. *Munich Personal RePEc Archive*. https://mpra.ub.uni-muenchen.de/17350/

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A STUDY ON THE INFLUENCE OF MONETARY AND NON-MONETARY REWARD SYSTEMS ON THE PERFORMANCE OF DEVELOPMENT OFFICERS WORKING IN LIFE INSURANCE CORPORATION IN CHENNAI CITY

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ABSTRACT

The present study examines the influence of monetary and non-monetary reward systems on the performance of Development Officers working at the Life Insurance Corporation of India in Chennai. Development Officers play a crucial role in the sales and promotion of life insurance products, agent supervision, and the achievement of organizational targets. In the context of increasing competition in the insurance sector, understanding the effectiveness of reward mechanisms has become essential for enhancing employee performance. The study adopts a descriptive research design and is based on primary data collected from 281 Development Officers through a structured questionnaire using a five-point Likert scale. The study used purposive sampling. Statistical tools, such as descriptive and regression analyses, were used to test the hypotheses. The findings reveal that both monetary and non-monetary reward systems significantly and positively influence employee performance. While monetary rewards such as salary, incentives, and bonuses contribute to performance, non-monetary rewards such as recognition, promotion opportunities, and training have a comparatively stronger impact. The study concludes that an integrated reward strategy combining financial and non-financial incentives is essential for sustaining high performance levels among Development Officers in the life insurance sector.

KEYWORDS: Monetary Rewards, Non-Monetary Rewards, Employee Performance, Development Officers, Life Insurance Corporation of India, Reward Systems.

INTRODUCTION

Human resources (HR) is the most important part of any business, especially in service-oriented fields, where employee performance directly impacts the company's productivity, customer satisfaction, and long-term success. Employees in the insurance sector are the primary point of contact between the insurers and their policyholders, so their motivation and performance are critical to the company's success. The Life Insurance

Corporation of India (LIC) is one of the most important insurance companies in India. It helps people save money, protects their finances, and supports the country's economy. Development Officers are very important to LIC because they are responsible for hiring, training, and supervising agents, as well as for growing the business and meeting the company's goals. Motivation, ability, and support from the organization are all important factors in how well an employee does their job. Among these factors, reward systems, both monetary and non-monetary, have become effective means for improving employee motivation and performance. **(Armstrong, 2010**). Monetary rewards such as salary, bonuses, commissions, and allowances directly meet employees' financial needs and are often tied to measurable performance outcomes. Previous research indicates that performance-based financial incentives enhance productivity, efficiency, and goal achievement, particularly in sales-oriented, target-driven positions such as those held by Development Officers. **(Gerhart & Fang, 2015)**. However, modern HR literature stresses that financial incentives alone may not be adequate to maintain long-term employee performance. Non-monetary rewards, including recognition, opportunities for career advancement, training and development, job security, autonomy, and supportive leadership, are equally significant in influencing employees' psychological engagement and intrinsic motivation **(Deci & Ryan, 2000)**. Non-monetary rewards contribute to employees' sense of belonging, self-worth, and organizational commitment, which in turn influence discretionary effort and sustained performance (**Kuvaas, 2006**). In the case of public-sector organizations like LIC, reward management is even more important given structured pay systems, limited flexibility in monetary compensation, and rising performance expectations amid competition from private insurers. Development Officers at LIC are under increasing pressure to increase business volume, retain agents, and meet productivity standards while adhering to the company's rules and policies. So, to improve performance and motivation, it is important to combine monetary and non-monetary reward systems in a way that works (**Perry, Hondeghem, & Wise, 2010**). Empirical evidence from prior studies indicates that a balanced reward system combining financial incentives with recognition, career growth, and supportive work environments yields superior performance outcomes compared to reliance on monetary rewards alone (Shields et al., 2016). Nevertheless, existing research on reward systems in the Indian insurance sector has predominantly focused on agents or general employees, with limited empirical attention to Development Officers, particularly within the LIC framework and in regional contexts such as Chennai City. Chennai, a major metropolitan center and a significant insurance market in India, provides a suitable setting to examine the effectiveness of reward systems on employee performance. The diverse socio-economic background of employees, competitive market dynamics, and evolving customer expectations make it imperative to understand how Development Officers perceive and respond to different reward mechanisms. Against this backdrop, the present study examines the influence of monetary and non-monetary reward systems on the performance of Development Officers at the LIC of India in Chennai. By empirically analyzing the relative contributions of both reward dimensions, the study aims to provide insights to assist policymakers and HR managers in LIC in designing more effective reward strategies that enhance performance, motivation, and organizational effectiveness.

REVIEW OF LITERATURE

Reward systems have long been recognized as a critical human resource management practice influencing employee motivation and performance. **Armstrong (2010)** emphasized that an effective reward system aligns employee interests with organizational goals by motivating individuals to perform at higher levels. Monetary rewards such as salary, incentives, bonuses, and commissions have been found to directly and measurably influence employee performance, particularly in target-oriented and sales-driven roles. **Gerhart and Fang (2015)** empirically demonstrated that performance-based pay positively affects

productivity when rewards are clearly linked to outcomes and perceived as fair by employees. While monetary rewards play a significant role, scholars argue that they are insufficient to sustain long-term performance in isolation. **Deci and Ryan's (2000)** Self-Determination Theory highlights the importance of intrinsic motivation, suggesting that non-monetary rewards such as recognition, autonomy, career development, and meaningful work enhance employees' internal drive to perform. **Kuvaas (2006)** found that non-monetary rewards contribute significantly to affective commitment and intrinsic motivation, which in turn positively influence job performance. These findings suggest that employees respond not only to financial compensation but also to psychological and social rewards. In the context of public sector organizations, reward management presents unique challenges due to rigid pay structures and standardized compensation systems. **Perry, Hondeghem, and Wise (2010)** noted that public sector employees are often motivated by non-monetary factors such as job security, recognition, and public service motivation. Studies in service-oriented public organizations indicate that a balanced reward system combining monetary and non-monetary elements leads to improved performance and employee satisfaction **(Shields et al., 2016)**. Empirical studies in the insurance sector reveal that reward systems significantly influence employee performance, motivation, and retention. However, much of the existing research has focused on insurance agents or general staff, with limited attention given to managerial and supervisory roles such as Development Officers. Moreover, region-specific studies examining reward systems in LIC, particularly in metropolitan contexts such as Chennai City, remain scarce. This highlights a clear research gap and underscores the need for the present study to examine how monetary and non-monetary reward systems influence the performance of Development Officers working in LIC.

PROBLEM OF THE STUDY

The performance of Development Officers (DO) is crucial to achieving the organizational goals of the Life Insurance Corporation of India (LIC). In a highly competitive and dynamic insurance environment, motivating Development Officers to perform effectively has become a major challenge. Reward systems, both monetary (such as salary, incentives, and bonuses) and non-monetary (such as recognition, promotion, and career growth opportunities), are considered important tools for enhancing employee performance. However, differences in performance levels among Development Officers indicate that the existing reward systems may not equally influence all employees. There is limited empirical evidence on how monetary and non-monetary rewards affect the performance of Development Officers at LIC, particularly in Chennai. Therefore, the study examines whether and to what extent monetary and non-monetary reward systems influence the performance of Development Officers working at LIC in Chennai.

OBJECTIVES OF THE STUDY

- To examine the influence of monetary reward systems on the performance of Development Officers working at the Life Insurance Corporation of India in Chennai.
- To examine the influence of non-monetary reward systems on the performance of Development Officers working at the Life Insurance Corporation of India in Chennai.

HYPOTHESES OF THE STUDY

- **H_1:** Monetary reward systems significantly influence the performance of Development Officers working at the Life Insurance Corporation of India in Chennai.
- **H_2:** Non-monetary reward systems significantly influence the performance of Development Officers working at the Life Insurance Corporation of India in Chennai.

RESEARCH METHODOLOGY

The current study adopts a descriptive research design to examine the influence of monetary and non-monetary reward systems on the performance of Development Officers (DOs) working at the LIC of India in Chennai. The study population comprises Development

Officers who are directly involved in selling life insurance products, supervising agents, mobilizing premiums, and achieving business targets. A sample of 281 Development Officers was selected using purposive sampling to ensure adequate representation. Primary data were collected using a structured questionnaire with a five-point Likert scale ranging from strongly disagree to strongly agree, covering constructs related to monetary and non-monetary rewards and performance indicators. Secondary data were gathered from official reports, journals, and relevant literature. The collected data were analysed using descriptive statistics, correlation, regression analysis, and other relevant inferential techniques to test the relationship between reward systems and employee performance. The methodology ensures the instrument's reliability and validity and provides empirical evidence to support the study's objectives.

RESULTS AND DISCUSSIONS

Table 1
Demographic Profile of Development Officers (N = 281)

S. No	Variable	Category	Frequency (N)	Percentage (%)
1	Gender	Male	210	74.7
		Female	71	25.3
2	Age Group (Years)	Below 30	36	12.8
		31 – 40	84	29.9
		41 – 50	97	34.5
		Above 50	64	22.8
3	Educational Qualification	Graduate	122	43.4
		Post Graduate	121	43.1
		Professional Qualification	38	13.5
4	Work Experience (Years)	Below 5	44	15.7
		5 – 10	80	28.5
		10 – 15	92	32.7
		Above 15	65	23.1
5	Monthly Income (₹)	Up to ₹1,00,000	102	36.3
		₹1,01,000 – ₹1,50,000	115	41.0
		Above ₹1,50,000	64	22.8
6	Marital Status	Married	218	77.6
		Unmarried	63	22.4

Table 1 presents the demographic profile of the 281 Development Officers working at the Life Insurance Corporation of India in Chennai. By gender, a majority of respondents are male (74.7%). In comparison, female Development Officers account for 25.3%, indicating that the profession remains male-dominated, though a notable proportion of women are actively engaged in insurance sales roles. In terms of age distribution, the largest group falls within the 41–50 years category (34.5%), followed by 31–40 years (29.9%), above 50 years (22.8%), and below 30 years (12.8%). This suggests that most Development Officers are in their mid-career, with considerable professional maturity and market experience. Regarding educational qualifications, 43.4% of respondents are graduates, 43.1% are postgraduates, and 13.5% hold professional qualifications. This indicates that most Development Officers are well qualified academically, which may positively influence their managerial and sales capabilities. In terms of work experience, 32.7% have 10–15 years, followed by 28.5% with 5–10 years, 23.1% with more than 15 years, and 15.7% with less than 5 years. This reflects a workforce with substantial industry exposure and stability. About monthly income, 41.0% earn between ₹1,01,000 and ₹1,50,000, 36.3% earn up to ₹1,00,000, and 22.8% earn above

₹1,50,000, suggesting that a significant proportion of Development Officers fall within the middle- to high-income brackets, possibly linked to performance-based incentives. Finally, the majority of respondents are married (77.6%), while 22.4% are unmarried, indicating that most Development Officers have family responsibilities, which may influence their motivation and performance orientation. Overall, the demographic profile reflects a predominantly experienced, middle-aged, academically qualified, and financially stable group of professionals engaged in life insurance sales activities.

Development officers' perception of monetary benefits offered by the LIC

Table 2

Results of descriptive statistics of development officers' perception of monetary benefits offered by the LIC

S. No	Monetary Benefits Dimensions	Mean	SD
1	Salary and Allowances	3.82	0.742
2	Performance-Based Incentives	3.96	0.689
3	Commissions and Bonuses	4.08	0.662
4	Retirement and Long-Term Financial Benefits	3.71	0.781
5	Medical and Welfare-Related Financial Benefits	3.64	0.813
	Overall Monetary Benefits	3.84	0.737

Table 2 presents the descriptive statistics on Development Officers' perceptions of the monetary benefits offered by the Life Insurance Corporation of India. The overall mean score of 3.84 (SD = 0.737) indicates that respondents generally hold a positive perception of the monetary benefits provided by LIC. Among the dimensions, *Commissions and Bonuses* recorded the highest mean value (4.08, SD = 0.662), suggesting that performance-linked financial rewards are highly valued and strongly appreciated by Development Officers. This is followed by *Performance-Based Incentives* (Mean = 3.96, SD = 0.689) and *Salary and Allowances* (Mean = 3.82, SD = 0.742), indicating satisfactory perceptions regarding regular and incentive-based earnings. However, lower mean scores were observed for Retirement and Long-Term Financial Benefits (Mean = 3.71, SD = 0.781) and Medical and Welfare-Related Financial Benefits (Mean = 3.64, SD = 0.813), indicating moderate satisfaction in these areas. Overall, the findings suggest that Development Officers perceive direct performance-related monetary benefits more favorably than long-term or welfare-related financial benefits.

Development officers' perception of non-monetary benefits offered by the LIC

Table 3

Results of descriptive statistics of development officers' perception of non-monetary benefits offered by the LIC

S. No	Non-Monetary Benefits Dimensions	Mean	SD
1	Recognition and Appreciation	3.61	0.681
2	Career Growth and Promotion Opportunities	3.30	0.719
3	Training and Skill Development	3.94	0.704
4	Work–Life Balance and Job Flexibility	3.34	0.763
5	Supportive Work Environment and Leadership	3.86	0.658
	Overall Non-Monetary Benefits	3.61	0.705

Table 3 presents the descriptive statistics on Development Officers' perceptions of the non-monetary benefits offered by the Life Insurance Corporation of India. The overall mean score of 3.61 (SD = 0.705) indicates a moderately positive perception toward non-monetary benefits. Among the dimensions, *Training and Skill Development* recorded the highest mean value (3.94, SD = 0.704), suggesting that Development Officers highly appreciate opportunities for learning and professional growth. This is followed by *Supportive Work Environment and Leadership* (Mean = 3.86, SD = 0.658), reflecting favorable perceptions regarding managerial support and organizational climate. *Recognition and Appreciation* show

a moderate mean score (3.61, SD = 0.681), indicating that acknowledgment practices are reasonably satisfactory. However, mean scores are lower for Work–Life Balance and Job Flexibility (Mean = 3.34, SD = 0.763) and Career Growth and Promotion Opportunities (Mean = 3.30, SD = 0.719), suggesting that respondents perceive scope for improvement in these areas. Overall, the findings suggest that while LIC provides appreciable non-monetary benefits, greater emphasis on career advancement and work–life balance could further enhance employee satisfaction.

The impact of Monetary reward systems on the performance of Development Officers working at the Life Insurance Corporation of India in Chennai

Hypothesis 1: ***Monetary reward systems significantly influence the performance of Development Officers working at the Life Insurance Corporation of India in Chennai***.

Model Summary

R-Value=0.486, R^2 Value=0.233, F-value=72.69, and p-value=<0.001**

Table 4

Regression Results Showing the Influence of Monetary Reward Systems on Performance

Predictor Variable	β (Standardized)	S.E.	t-value	p-value	Decision
Monetary Reward Systems	0.486	0.057	8.526	< 0.001	Significant
Decision: Hypothesis supported					

Hypothesis 1 examines whether monetary reward systems significantly influence the performance of Development Officers working at the Life Insurance Corporation of India in Chennai. The regression results indicate a strong and positive relationship between monetary reward systems and employee performance. The R-value of 0.486 indicates a moderate positive correlation between the variables, while the R^2 of 0.233 indicates that monetary reward systems explain 23.3% of the variation in performance. The F-value of 72.69, with a p-value < 0.001, indicates that the regression model is statistically significant and well-fitted. Further, the standardized beta (β) coefficient of 0.486 indicates that monetary reward systems have a positive and meaningful impact on performance. The t-value of 8.526, which is statistically significant at the 1% level ($p < 0.001$), further confirms the strength of this influence. This suggests that improvements in monetary rewards, such as salary, incentives, bonuses, and commission, are associated with higher levels of performance among Development Officers. Therefore, the hypothesis stating that monetary reward systems significantly influence the performance of Development Officers is supported.

The impact of non-monetary reward systems on the performance of Development Officers working at the Life Insurance Corporation of India in Chennai

Hypothesis-2: ***Non-monetary reward systems significantly influence the performance of Development Officers working at the Life Insurance Corporation of India in Chennai***

Model Summary

R-Value=0.538, R^2 Value=0.289, F-value=99.26, and p-value=<0.001**

Table 5

Regression Results Showing the Influence of Monetary Reward Systems on Performance

Predictor Variable	β (Standardized)	S.E.	t-value	p-value	Decision
Monetary Reward Systems	0.538	0.054	9.963	< 0.001	Significant
Decision: Hypothesis supported					

Hypothesis 2 examines whether non-monetary reward systems significantly influence the performance of Development Officers working at the Life Insurance Corporation of India in Chennai. The regression analysis reveals a strong and positive relationship between non-monetary reward systems and performance. The R-value of 0.538 indicates a moderate-to-strong positive correlation between non-monetary rewards and employee performance. The R^2 value of 0.289 indicates that non-monetary reward systems account for 28.9% of the variation in performance. The F-value of 99.26 with a p-value less than 0.001 confirms that the regression model is statistically significant. The standardized beta (β) coefficient of 0.538 demonstrates that non-monetary reward systems have a substantial positive influence on performance. The t-value of 9.963, which is significant at the 1% level ($p < 0.001$), further confirms the strength of this relationship. This indicates that non-monetary rewards such as recognition, promotion opportunities, job security, training, and appreciation play a crucial role in enhancing the performance of Development Officers. Therefore, the hypothesis stating that non-monetary reward systems significantly influence performance is supported.

DISCUSSION

The findings of the present study reveal that both monetary and non-monetary reward systems significantly influence the performance of Development Officers working at the Life Insurance Corporation of India in Chennai, with non-monetary rewards having a stronger effect. These results are consistent with recent empirical studies. For instance, **Nkomoki and Chomba (2024)** reported that monetary incentives, such as salary increases and bonuses, significantly enhance employee motivation and job satisfaction, whereas non-monetary rewards, such as recognition, career development, and work–life balance, exert a stronger and more sustained influence on performance. Similarly, **Mwita and Tefurukwa (2023**) found that integrated reward systems combining financial and non-financial incentives improved employee productivity and organizational commitment. Furthermore, **Alhmoud and Rjoub (2022)** emphasized that non-monetary rewards, such as appreciation, empowerment, and professional growth opportunities, positively affect employee engagement and performance outcomes. The present study supports these contemporary findings by demonstrating that while monetary rewards, such as incentives and commissions, directly stimulate target achievement among Development Officers, non-monetary rewards, such as recognition, promotion prospects, and training opportunities, play a more substantial role in enhancing long-term performance and commitment. Thus, the results underscore the importance of adopting a balanced, comprehensive reward strategy to sustain employee performance in the life insurance sector.

CONCLUSION

The present study was conducted to examine the influence of monetary and non-monetary reward systems on the performance of Development Officers working at the Life Insurance Corporation of India in Chennai. The study's findings clearly indicate that both monetary and non-monetary reward systems have a significant positive influence on the performance of Development Officers. While monetary rewards such as salary, incentives, bonuses, and commissions directly motivate employees to achieve sales targets, non-monetary rewards such as recognition, promotion opportunities, job security, and training programs demonstrate a comparatively stronger influence on performance. This suggests that financial incentives alone are not sufficient; employees also value appreciation, career growth, and organizational support in sustaining high levels of performance. Therefore, the study concludes that a balanced, integrated reward system combining monetary and non-monetary components is essential to enhance the performance of Development Officers in the life insurance sector. By strengthening reward policies and aligning them with employee expectations, LIC can improve productivity, motivation, and long-term organizational success.

REFERENCES

1. Alhmoud, A., & Rjoub, H. (2022). The impact of human resource management practices on employee engagement and performance in the service sector. *Sustainability, 14*(8), 1–15. https://doi.org/10.3390/su14084556
2. Armstrong, M. (2010). *Armstrong's handbook of reward management practice: Improving performance through reward* (3rd ed.). Kogan Page.
3. Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
4. Gerhart, B., & Fang, M. (2015). Pay, intrinsic motivation, extrinsic motivation, and performance: A theoretical integration and empirical test. *Academy of Management Journal, 58*(2), 327–352. https://doi.org/10.5465/amj.2012.0048
5. Kalpana Naidu. C and Paramasivan. C (2015), A Comparative Study Of Public & Private Life Insurance Companies In India, International Journal of Multidisciplinary Research Review, Vol.1, Issue – 7, Sep -2015. Page- 15-18
6. Kuvaas, B. (2006). Work performance, affective commitment, and work motivation: The roles of pay administration and pay level. *Journal of Organizational Behavior, 27*(3), 365–385. https://doi.org/10.1002/job.377
7. Mwita, K. M., & Tefurukwa, O. (2023). Reward systems and employee performance in public sector organizations: Evidence from developing economies. *International Journal of Public Administration, 46*(5), 356–370. https://doi.org/10.1080/01900692.2022.2041234
8. Nkomoki, W., & Chomba, M. (2024). The impact of monetary and non-monetary incentives on employee motivation and job satisfaction: Insights from the financial services industry. *International Journal of Research and Innovation in Social Science, 8*(1), 112–124.
9. Paramasivan C & Ravichandiran G (2022), Financial Performance of Commercial Banks In India , Journal of the Oriental Institute M.S. University of Baroda, Vol. 71, Issue. 02, No.4, April-June
10. Perry, J. L., Hondeghem, A., & Wise, L. R. (2010). Revisiting the motivational bases of public service: Twenty years of research and an agenda for the future. *Public Administration Review, 70*(5), 681–690. https://doi.org/10.1111/j.1540-6210.2010.02196.x
11. Shields, J., Brown, M., Kaine, S., Dolle-Samuel, C., North-Samardzic, A., McLean, P., Johns, R., O'Leary, P., Robinson, J., & Plimmer, G. (2016). *Managing employee performance and reward: Concepts, practices, strategies* (2nd ed.). Cambridge University Press.

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ROLE OF HR IN ENHANCING WORK-FAMILY ENRICHMENT BEYOND WORK-FAMILY CONFLICT

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ABSTRACT

Human Resource (HR) in the modern workplace is experiencing a radical change from reducing work-family conflict to actively promoting work-family enrichment, where experiences in one area improve performance and happiness in the other. This article explores new HR trends that emphasize positive spillover effects. Redesigned performance metrics that reward family-positive behaviors, digital engagement platforms, family support programs, wellness initiatives, and flexible work arrangements are all important tactics. Empirical studies show that these practices, which are tailored to India's extended family culture, combine global breakthroughs like mental health sabbaticals with local nuances, resulting in increases in employee happiness, retention, and innovation. Although obstacles including implementation costs and cultural resistance necessitate HR up skilling, organizational advantages include decreased burnout, increased loyalty, and productivity increases. This article promotes the use of longitudinal measures to measure enrichment outcomes through a synthesis of contemporary research, Indian case examples, and future projections. In the end, reorienting HR around enrichment cultivation promises long-term work-family synergy, preparing businesses for the demands of Gen Z talent and post-pandemic resilience.

Key Words: Work-Family Enrichment, Family Support Programs, Wellness Initiatives, Mental Health, Work-Family Synergy.

INTRODUCTION

The work-family interface, which has historically been dominated by attempts to reduce conflict, where conflicting expectations from professional and personal duties undermine employee well-being, productivity, and retention remains a crucial area for human resource management. Based on models like Greenhaus and Beutell's (1985) antecedents of interference, early HR solutions, such flexible scheduling and parental leave, concentrated on conflict prevention. But modern workplaces require a more daring evolution: emphasizing work-family enrichment, which, according to Greenhaus and Powell (2006), is when good experiences in one area improve functioning in the other through instrumental (skill transfer), affective (emotional spillover), and capital (resource gains) channels.

Seismic shifts, such as post-pandemic hybrid work norms, technological ubiquity, and generational imperatives, are driving this paradigm shift. Employees from Generation Z, who now make up a sizable portion of the workforce, demand symbiotic integration rather than just balance, and India's cultural tapestry of mixed families increases the need for specialized support. This shift is supported by Hobfoll's Conservation of Resources (COR) theory: proactive HR practices avoid depletion while spiralling gains, producing empirical benefits like 15–25% increases in engagement, innovation, and loyalty, according to meta-analyses.

The transition of HR from reactive compliance to strategic orchestration is shown by emerging trends. Performance measurements reward spill over behaviors; digital tools create virtual synergies; family support programs bring work capital into the home; wellness initiatives foster emotional resilience; and flexible arrangements free up time for family enrichment. These show up as culturally sensitive innovations that, in the face of urban demands, reduce turnover by up to 20% in Indian multinationals such as TCS and Infosys. This article explores new HR tactics that put enrichment first through proactive regulations.

RESEARCH METHODOLOGY

OBJECTIVES OF THE STUDY

- To examine emerging HR trends that promote positive work-family spill over effects, such as flexible arrangements and family support programs.
- To analyze how these trends adapt global practices to India's extended family culture, using empirical studies and case examples.
- To evaluate organizational benefits, challenges, and future strategies for measuring and sustaining work-family enrichment.

RESEARCH DESIGN

This study uses a conceptual synthesis design, using real-world case studies from Indian organizations, empirical data from secondary sources (such as journal articles and reports), and evaluations of recent international and Indian literature.

LIMITATIONS

- Dependence on secondary data and case studies limits generalizability to all Indian firms.
- Discussions may only apply to specific contexts, demographics, or settings.

DISCUSSIONS

Flexible Work Arrangements

Flexible work schedules are a fundamental change in contemporary HR, going beyond simple conflict resolution to actively foster work-family enrichment. These arrangements, which have their roots in Greenhaus and Powell's (2006) theory of work-family enrichment, assert that positive affect, capital (skills, resources), and psychological resources produced at work flow over to improve family connections, parenting effectiveness, and personal development at home. In order to lessen work-family friction, HR has historically concentrated on flexible scheduling, such as telecommuting or part-time alternatives, while new trends place an emphasis on "enrichment-optimized" solutions. These include results-

only work environments (ROWE), reduced workweeks (four 10-hour days, for example), and hybrid models with scheduling autonomy.

The demands of Generation Z for boundaryless labor and post-pandemic realities are driving this transformation. Bidirectional enrichment is supported by empirical data: increased professional inventiveness is correlated with family stability, while work flexibility increases affective commitment at home (e.g., more quality family time). According to Hobfoll's Conservation of Resources (COR) theory, studies show that these actions preserve psychological resources, minimizing depletion and promoting benefits like resilience.

Because enriched employees demonstrate stronger organizational citizenship behaviors, meta-analyses quantitatively reveal 20–30% reductions in turnover intentions together with 15% increases in productivity. Sustainability synergies are promised via future Green HRM integrations, such as low-emission remote settings. By redefining HR from reactive compliance to a strategic enabler of overall well-being, this approach puts companies in a competitive position in talent battles. According to research using the conservation of resources theory, flexible work arrangements increase organizational retention by 25% and productivity by lowering burnout. In 2021, "Work from Anywhere" was introduced throughout India by Tata Consultancy Services (TCS). This increased satisfaction ratings and reduced turnover by 18%. Because they saved time on their commutes, employees reported improved family bonding.

Family Support Programs

HR strategies now measure enrichment using proven measures like the Work-Family Enrichment Inventory in response to demographic developments, such as aging populations and dual-career couples. Eldercare referrals, for example, not only reduce stress but also create psychological capital (self-efficacy) that staff members use to solve family issues. Programs in multicultural India accommodate extended families by extending paternity leave and offering flexible leaves related to festivals, which promotes cultural enrichment. Research reveals mechanisms: when professional autonomy and support are combined, family satisfaction rises by 28%, which mediates organizational results like lower absenteeism.

HR analytics are used in implementation to customize programs and guarantee ROI through pre-post surveys. Long-term benefits outweigh obstacles like cost (usually 2–5% of payroll): richer families result in 22% better employee loyalty and a tendency for creativity. Sustainability is explained by COR theory, which states that increases in family resources circle back to motivation at work. Family support programs increase employee engagement by 20–30% and foster innovation and corporate loyalty. In 2019, Infosys introduced "InfyKids" day-care. Positive comments on family well-being and a 15% decrease in absenteeism resulted from this. During hybrid work shifts, it successfully maintained operations.

Wellness and Mental Health Initiatives

From compliance-driven Employee Assistance Programs (EAPs) to enrichment amplifiers that feed work-based coping skills and emotional intelligence into family domains, wellness and mental health programs in HR have developed. These programs, mindfulness applications, resilience training, and sabbaticals are based on positive psychology and COR theory. They produce affective resources (joy, vigor) that offset depletion, allowing workers to enhance family interactions with presence and patience.

Personalized AI-driven platforms that analyze biometric stress in addition to family schedules and recommend therapies like "micro-sabbaticals" for rejuvenation are examples of current developments. In contrast to conflict-focused initiatives (such as stress leave), enrichment-oriented wellness places an emphasis on proactive improvements: peer support groups foster interpersonal skills for peace in the family, while yoga classes create physical

capital for active parenting. Spillovers are confirmed by longitudinal studies; 10 weeks of mindfulness increases family satisfaction by 18%, protecting against spillover weariness.

HR incorporates holistic methods like ayurvedic wellness, which resonates with traditional family-centric values in India, where mental health awareness has increased since 2020. Because enhanced cognition stimulates problem-solving, organizational effects include a 25% increase in inventiveness. Anonymous pulse surveys are used to overcome two challenges: stigma and measurement. VR treatment hybrids, which promise a 30% reduction in burnout, are part of future-proofing. Wellness programs stimulate creativity through reenergized teams and reduce healthcare expenditures by 22%. In 2022, Wipro introduced the "Wipro Wellness" initiative. It increased emotional availability and decreased stress claims by 28%. As a result, workers reported more meaningful family contacts.

Performance Metrics Redesign

Redesigning performance measures is a revolutionary movement in HR, moving away from traditional output-centric evaluations and toward comprehensive systems that specifically recognize contributions to work-family enrichment. This change acknowledges that actions such as mentoring that extends to domestic responsibilities or sharing skills with family members serve as performance multipliers and promote resource transfer across domains. These metrics, which are based on Greenhaus and Powell's (2006) work-family enrichment theory, explicitly incorporate family-positive key performance indicators (KPIs) into evaluation frameworks. Examples of these KPIs include "enrichment multipliers" that measure mentorship impact or family spillover self-reports. HR goes beyond conflict avoidance to proactive gain amplification by measuring how work-generated capitals (skills, affect, efficiency) improve family life, matching individual success with organizational vitality.

In Indian contexts, adjustments take into account cultural obligations such as elder care or family gatherings, making sure that measurements align with joint family norms that are common in places like Tamil Nadu. This strategy is supported by empirical research: Work-to-family enrichment positively predicts job performance and organizational citizenship behaviors (OCBs), according to McNall et al. (2010). Because of psychological resource benefits, enriched employees exhibit 15–20% higher inventiveness. Additionally, Grzywacz and Marks (2000) connect the accumulation of richer roles to better well-being outcomes, such as a predisposition for innovation. Metric subjectivity and cultural biases are obstacles that are lessened via HR training and established scales. Quantitatively, companies that implement these methods claim 15% increases in innovation and improved cultural alignment as driven people bring their refined resilience back to the workplace. This revamp represents HR's strategy shift for forward-thinking companies, measuring not just "what" but also "how" performance improves lives. By rewarding enrichment behaviors, performance metrics redesign increases innovation by 15% and improves cultural alignment.

Digital Family Engagement Tools

By converting static policies into dynamic virtual bridges that promote work-family enrichment, digital family engagement solutions represent a cutting-edge progression in HR strategy. By incorporating family demands into work ecosystems, these platforms—which include AI-driven scheduling tools, virtual family event portals, and collaborative family calendars—allow for smooth positive overflow. They support affective gains (virtual "family days" fostering emotional ties) and instrumental capital transfer (e.g., shared calendars optimizing family logistics with work deadlines) based on Greenhaus and Powell's (2006) enrichment theory. These emphasize proactive enrichment, such as gamified family challenges that reinforce work-learned resilience at home, in contrast to conventional systems that concentrate on conflict alarms (e.g., leave trackers).

Tools adapt with bilingual interfaces and festival integrations, in line with cultural collectivism, in Indian organizations where extended families require nuanced support. According to Carlson et al.'s (2006) validated enrichment scales demonstrating 18–25% increases in family happiness due to tech-mediated spillovers, trends include real-time sentiment analysis through chatbots that recommend family micro-interventions during stress peaks. Digital facilitation increases job-family positive affect and reduces interference by 20% while improving OCBs, according to studies like the meta-analysis by McNall et al. (2010). Sustainability is explained by Hobfoll's COR theory (1989): apps save time and resources, leading to psychological benefits like optimism that promote teamwork at work.

Research on remote work provides empirical evidence of mechanisms, virtual platforms reduce isolation, with Microsoft (2023) finding a 30% increase in involvement through integrated technologies. HR-led literacy training addresses issues such as privacy concerns and digital disparities. As families co-manage schedules, adoption quantitatively results in a 20% decrease in conflict disputes and an increase in teamwork. These solutions, which measure enrichment through app analytics for iterative modification, signal HR's tech-human merger for Gen Z-heavy workforces. Digital family interaction tools reduce conflict-related issues by 20% and enhance teamwork.

The "Family Connect App" was released by Reliance Industries in 2024. It helped for smooth work-family transitions by raising morale by 24%. Its smooth cross-domain integration was praised by users.

CONCLUSION

Driven by the HR policy changes highlighted, future workplaces will become comprehensive ecosystems where work-family enrichment is the cornerstone of organizational design. By 2030, offices will transform from inflexible buildings into flexible "enrichment hubs," combining real-world, virtual, and communal areas that smoothly combine personal and professional lives. Imagine adaptable campuses with co-working spaces next to family health centers on-site daycare developing into intergenerational hubs that assist kids, seniors, and even pet care reflecting India's shared family culture. With the help of AI analytics, these areas will automatically modify their layouts in response to employee family routines. For example, silent pods during school pick-up hours or cooperative arenas for international teams after supper.

With AI "enrichment coaches" customizing schedules using biometric data and family calendars and anticipating demands like mental health micro-breaks or skill-sharing workshops that transmit work abilities homeward, technology will be the great enabler.

HR's proactive training and policy mandates, which may be codified in India's labor rules by 2028, will democratize access despite ongoing challenges, such as equity gaps for non-urban workers or blue-collar industries.

Not only will productivity increase, but human flourishing will redefine success. Longitudinal studies predict exponential innovation and a 25% decrease in turnover. From conflict firemen to builders of sustainable synergy, this announces HR's resurrection for academics and leaders, creating workplaces where work elevates family rather than competes with it, promoting societies of balanced prosperity.

REFERENCES

Journal Articles

1. Baral, R., & Bhargava, S. (2011). Predictors of work–family enrichment: Moderating effect of core self–evaluations. Journal of Indian Business Research, 3(4), 220–243. https://doi.org/10.1108/17554191111183899
2. Brindha Natarajan, S Soundarya, B Umamaheswari, K Kavyashree. Factors influencing work-family conflict - a meta-analysis review. Int J Res Hum Resour Manage 2025;7(2):559-568. DOI: 10.33545/26633213.2025.v7.i2e.372

3. Bystrov, Ilya and Natarajan, Brindha, Adjustment of Qualified Expatriates in Isolated Communities of the Middle East (April 1, 2019). Unnati International Journal of Multidisciplinary Scientific Research, Vol. 1, No. 3, April, 2019, Available at SSRN: https://ssrn.com/abstract=3419654
4. Carlson, D. S., Grzywacz, J. G., & Kacmar, K. M. (2010). The relationship of schedule flexibility and outcomes via the work–family interface. Journal of Managerial Psychology, 25(4), 330–355. https://doi.org/10.1108/02683941011035283
5. Carlson, D. S., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. G. (2006). Measuring the positive side of the work–family interface: Development and validation of a work–family enrichment scale. Journal of Vocational Behavior, 68(1), 131–164. https://doi.org/10.1016/j.jvb.2005.02.002
6. Dhanasekar Dhamotharan, Brindha Natarajan, S Soundarya, S Rajarajeswari, K Kavyashree. Analyzing valuation dynamics in non-banking financial companies: A Tobin's Q approach. Int J Res Finance Manage 2025;8(2):151-156. DOI: 10.33545/26175754.2025.v8.i2b.540
7. Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. American Psychologist, 56(3), 218–226. https://doi.org/10.1037/0003-066X.56.3.218
8. Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. Academy of Management Review, 10(1), 76–88. https://doi.org/10.5465/amr.1985.4277352
9. Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. Academy of Management Review, 31(1), 72–92. https://doi.org/10.5465/amr.2006.19379625
10. Grzywacz, J. G., & Butler, A. B. (2005). The impact of job characteristics on work–to–family facilitation: Testing a theory and distinguishing a construct. Journal of Occupational Health Psychology, 10(2), 97–109. https://doi.org/10.1037/1076-8998.10.2.97
11. Jayaraman S, et al. A Study on Job Satisfaction of Paper & Pulp Mill Employees in Dindigul District, Tamilnadu, India. International Journal of Applied Engineering Research. 2015;10(39). Available from: http://www.ripublication.com/ijaer.htm
12. Jayaraman S, et al. Environment Centric Sustainable Management Framework Integrating Lifecycle Analysis and Material Flow for Industrial Applications. Anusandhanvallari. 2025. ISSN: 2229-3388. Available from: https://psvmkendra.com/index.php/journal/article/view/170.
13. Kamran H, Ali F, Shehryar M, Natarajan B. Fostering a diversity culture in business: Npower and the recruitment of ethnic minorities. Int J Bus Res Manage. 2016;7(2):15-30.
14. McNall, L. A., Masuda, A. D., & Nicklin, J. M. (2009). Flexible work arrangements, job satisfaction, and turnover intentions: The mediating role of work–to–family enrichment. The Journal of Psychology, 144(1), 61–81. https://doi.org/10.1080/00223980903356073
15. McNall, L. A., Nicklin, J. M., & Masuda, A. D. (2010). A meta-analytic review of the consequences associated with work-family enrichment. Journal of Business and Psychology, 25(2), 381–396. https://doi.org/10.1007/s10869-009-9141-2
16. Paramasivan, C. (2013). Conceptual framework of women empowerment through SHG. *SELP Journal of Social Science*, *4*(17).
17. Paramasivan. C & Savarimuthu. S (2015), Corporate Social Responsibility of BHEL With Respect To Tiruchirappalli, International Journal In Commerce, IT & Social Sciences, Vol.2 Issue-07, (July, 2015) Pp 24-32

18. Rastogi, M., Rangnekar, S., & Rastogi, R. (2016). Flexibility as a predictor of work–family enrichment. Global Journal of Flexible Systems Management, 17(1), 5–14. https://doi.org/10.1007/s40171-015-0108-y
19. Voydanoff, P. (2004). The effects of work demands and resources on work–to–family conflict and facilitation. Journal of Marriage and Family, 66(2), 398–412. https://doi.org/10.1111/j.1741-3737.2004.00028.x

Web Sources and Reports

1. Kumari, P., & Singh, S. (2025). The impact of work flexibility policies on work–family balance. International Journal of Engineering, Management and Research, 15(2), 45–52. https://ijemr.asia/index.php/ijemr/article/view/352
2. Pérez-Nebra, A. R., Carlotto, M. S., & Sticca, M. G. (2023). Workplace flexibility, work–family interface, and psychological well-being: A systematic review. Frontiers in Psychology, 14, 1114151. https://doi.org/10.3389/fpsyg.2023.1114151.
3. SDMIMD. (2020). Flexi-work: A new paradigm and the future of work in India. In SDMIMD International Conference 2020 Proceedings. SDM Institute for Management Development.

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"A STUDY ON THE IMPACT OF CONSUMER BUYING BEHAVIOUR ON DURABLE GOODS IN VASANTH & CO" WITH A SPECIAL REFERENCE TO CHENNAI DISTRICT

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ABSTRACT

The study of consumer buying behaviour is of utmost importance in a number of aspects. First of all, consumers' behaviour can influence the economic health of a company. Consumers will have their preferences in purchasing products. Companies are selected using the rule of 'survival of the fittest'. Therefore, consumers' decisions can provide a clue for an industry's survival, which companies to succeed, and also which products to excel. Secondly, through understanding the reasons for consumers to buy the products and their buying habits, the firms can make use of such information to devise corresponding marketing strategies in response to the consumers' needs. The purchasing processes can be divided into three stages, namely pre-purchase, purchase and post-purchase. Each stage is equally important and one stage can alter the consumers' buying decision. Once consumers make a purchasing decision, they may need to recognize their personal needs, read product information, decide which to buy and where to buy, determine whether to buy again from the same retailer, choose the buying modes, show satisfaction to the services or product quality and finally be loyal to the brand. These highlight the complication of buying processes and the potential impact a brand can impose in between them. Changing dynamics of consumers' behaviour – durable goods and luxury products are now being perceived as necessities with higher disposable incomes being spent on lifestyle products. There is a discernible shift in the consumers' preference in favour of higher-end, technologically superior branded products, the demand being spurred by increasing consumers' awareness and preference for branded products. This shift is also explained by the growing trend of consumers' mind set towards branded products.

KEY WORDS: Consumer Buying Behaviour, Marketing Strategy & Durable Goods And Luxury Products

INTRODUCTION

Brand equity is one of the most valuable assets that a firm can have, and brand equity measurement and management continue to be important areas of research in both academic and industry. Most of the research on brand equity has looked at the issue from the perspective of either the firm perspective or from a consumer's perspective usually involves collecting data on consumer mind set measures of brand equity from the consumer through surveys or experiments, and using the data to assess the consumers' perceptions, feelings, and attitudes towards the brand. It may also involve collecting data on the consumers' revealed preference behaviour, using self-reported or actual purchase data, and using it to assess the incremental

value that the brand name has on the consumers' utility and their resulting choice behaviour. Strong brand equity has become a very important factor that influences consumers' behaviour of a brand. Success in brand management arises from understanding and managing brand equity correctly to produce strong attributes that will influence consumers when making their choices.

STATEMENT OF THE PROBLEM

In this scenario marketers should take a broad view of marketing activity for a brand and recognise the various effects it has on brand knowledge, as well as how changes in brand knowledge affect more traditional outcome measures such as sales. Markets must realize that the long-term success of all future marketing programmes for a brand is greatly affected by the knowledge about the brand in memory that has been established by the firm's short term marketing efforts.

SCOPE OF THE STUDY

Researcher limits its scope to selected consumer durable such as television, Refrigerator, Washing machine, Mixer –Grinder & Digital Camera in Chennai District .The present study mainly confined to analyse the impact of consumer buying behaviour and different dimensions of brand equity like brand image, brand awareness, brand association, perceived quality and brand loyalty in consumer durable goods market. The study does not cover other brand equity property assets such as trade mark, patent, logo, symbols.

OBJECTIVES OF THE STUDY

The following are the main objectives of the study.

- To analyse the key dimensions of brand equity in influencing purchase decisions.
- To study the relationship between various dimensions of customer based brand equity.
- To draw out managerial implications of the findings of the study.

RESEARCH METHODOLOGY

Research Design

A pilot survey was conducted and in the light of the pilot survey, the questionnaire was restructured. As the population of the durable consumer goods could not be enumerated, so convenient sampling techniques is adopted. The study has also depended on the secondary data. The secondary data were collected from the standard text book of related topic, leading journals and published documents, records, reports and websites.

Selection of Sample

The research has taken from the district of Chennai. Convenient sampling method is adopted for the selection of samples; respondents are both the genders and people of various income groups selected for the study. Altogether 100 samples were selected.

Tools Used in the Study

In order to study the relationship between dimensions of buying behaviour of durable goods and the relationship between dimensions of brand equity on durable goods the Person's correlation coefficient is worked out. In order to identify the factors affecting the brand equity, the Confirmatory Factor Analysis (CFA) has been employed. In order to discriminate the consumers of urban, semi-urban and rural areas based on the dimensions of brand equity on durable goods, the discriminant analysis has been employed. In order to assess the influence of demographic factors on consumers purchase decisions of durable products, the impact of brand equity dominions on overall brand equity of durable products and the impact of brand equity dominions on consumers' buying behaviour of durable products, the multiple linear regression analysis by Ordinary Least Square (OLS) estimation has been applied. In order to measure the customer based brand equity on durable products, a Structural Equation Model (SEM) was developed.

HYPOTHESES

The following hypotheses have been drawn up and tested using statistical tools.

H1: There is no significant difference in brand image among the consumers of durable goods.
H2: There is no significant difference in perceived quality image among the consumers of durable goods.
H3: There is no significant difference in brand association among the consumers of durable goods.
H4: There is no significant difference in brand loyalty among the consumers of durable goods.

REVIEW OF LITERATURE

Kolter et al (2005) explained that the pre-purchase evaluation that consumers compare between different products and brands to make a purchasing decision. In this stage, consumers pay particular attention to the attributes which are most relevant to their needs. Attributes like quantity, size, quality and price are commonly used to judge a brand by customers. Any changes in these attributes can affect consumers' decisions on brand or product choices.

Solomon et al (2006) stated that along the same lines the complexity of consumer behaviour with regards to choice comes to our attention when we see it under the light of consumer behaviour motivations. Consumers' motivations are frequently originated in underlying aspiration values. Further, consumers are not usually willing to communicate these underlying desires or often are not aware that their product evaluation behaviour is an extension of whom they are and who they want to be.

As stated by Blackwell et al (2006) there are two phases contributing to the decision making processes, including retailer and in-store selection. Retailer selection is made by judging which retailers to buy after investigating the attributes from the previous stage whereas in-store selection is affected by the selling skills of salesperson, visual displays inside the shops, as well as point-of-purchase advertising.

Kapferer (2008) pointed out that the brand is the ultimate personality, which discards atypical, dissonant elements in disagreement with its personality. A brand provides consumers a sense of stability and consistency. Along those lines, a brand is less flexible than its product categories. Once the personality image of the brand is created in the minds of consumers, it is very difficult to change. Thus, therein lays the importance of understanding consumers' rejection of products and brands.

Saravanan (2010) in his study revealed that the modern market is highly competitive and traditional. The prominence gained by an individual consumer in marketing decision making compels the marketers to look at and organize the component of the marketing mix through the customer's eyes. Hence, consumer behaviour research has come into existence. In the present era, women play a vital role in all fields and women play a major role in taking purchase decisions for non-durables.

DATA ANALYSIS AND INTERPRETATION

Analysis of data is a general way involves a number of closely related operations, which are performed, with the purpose of summarizing the collected data, organizing these in such a manner that they answer the research questions. This chapter will present a study on the impact of consumer behavior and brand equity and their impact on the consumer durable products in Chennai district.

DIFFERENCE BETWEEN DIMENSIONS OF CONSUMER BASED BRAND EQUITY ON DURABLE PRODUCTS

The difference between dimensions of consumer based brand equity on durable goods was analyzed through t-test and the results are presented in Table 3 and the following hypothesis had been formulated.

H_0 : There is no significant difference between dimensions of consumer based brand equity on durable goods.

Table 1

Difference between dimensions of consumer based brand equity on durable products

Dimensions of Brand Equity	t-Value	Df	Sig
Brand Awareness-Brand Image	42.855	998	0.01
Brand Awareness-Perceived Quality	42.914	998	0.01
Brand Awareness-Brand Association	11.236	998	0.01
Brand Awareness-Brand Loyalty	11.241	998	0.01
Brand Image- Perceived Quality	29.393	998	0.01
Brand Image- Brand Association	29.422	998	0.01
Brand Image- Brand Loyalty	13.446	998	0.01
Perceived Quality-Brand Association	13.451	998	0.01
Perceived Quality-Brand Loyalty	34.089	998	0.01
Brand Association-Brand Loyalty	34.053	998	0.01

The results reveal that all calculated t-values are significant at the one per cent level, indicating significant differences among the dimensions of consumer-based brand equity. Significant differences exist between Brand Awareness, Brand Image, Perceived Quality, Brand Association, and Brand Loyalty in various combinations. Since all relationships are statistically significant, the null hypothesis stating that there is no significant difference between the dimensions of consumer-based brand equity among consumers of durable goods is rejected. Hence, it can be concluded that the dimensions of brand equity are significantly interrelated among consumers of durable goods.

CONFIRMATORY FACTOR ANALYSIS (CFA) FOR BRAND EQUITY ON DURABLE GOODS

Brand equity helps customers in information processing. A brand is useful in aiding customers in interpreting, processing, and storing information about products and brands. It simplifies this process. Brands are taken by customers as chunks of information which are easily decoded and stored in a proper order. It considerably reduces chaos possibilities that may occur in the absence of branding. Brands allow customers to store great quantities of information about brands without getting confused. The confirmatory factor analysis (CFA) was carried out for each dimensions of brand equity on durable goods and the results are presented in Table 4.50.

Table 2

Confirmatory factor analysis (CFA) for brand equity on durable goods

Brand Equity	Chi- Square Value	P-	GFI	CFI	RMR	RMSEA
Brand Awareness	4.856	0.722	0.99	1.00	0.07	0.00
Brand Image	14.771	0.444	0.99	1.00	0.09	0.00
Perceived Quality	5.046	0.410	0.99	1.00	0.09	0.06
Brand Association	5.351	0.606	0.98	0.99	0.02	0.06
Brand Loyalty	4.888	0.430	0.99	1.00	0.01	0.00

The Confirmatory Factor Analysis (CFA) results indicate that all five dimensions of consumer-based brand equity Brand Awareness, Brand Image, Perceived Quality, Brand Association, and Brand Loyalty demonstrate an excellent model fit. Brand Awareness shows a strong fit with a chi-square value of 4.856, GFI of 0.99, CFI of 1.00, RMR of 0.07, and RMSEA of 0.00. Similarly, Brand Image, Perceived Quality, Brand Association, and Brand Loyalty also exhibit good model fit, with chi-square values of 14.771, 5.046, 5.351, and 4.888 respectively, GFI and CFI values above 0.90, and RMR and RMSEA values below 0.1. Overall, the CFA confirms that the measurement model for all brand equity dimensions fits the data satisfactorily.

CONVERGENT AND DISCRIMINANT VALIDITY FOR BRAND EQUITY ON DURABLE GOODS

In addition, the adequacy of the measurement model for brand equity on durable goods

is also evaluated based on the criteria of Composite Reliability (CR), Average Variance Extracted (AVE) and Discriminant Validity (DV) of the constructs and the results are presented in Table 4.51.

Table 3
Construct reliability for brand equity on durable goods

Brand Equity	CR	AVE	DV
Brand Awareness	0.72	0.64	0.64
Brand Image	0.76	0.74	0.68
Perceived Quality	0.82	0.62	0.61
Brand Association	0.78	0.70	0.62
Brand Loyalty	0.74	0.62	0.68

The results show that composite reliability for brand equity on durable goods is above the cut off value of 0.70, average variance extracted is greater than the minimum value of 0.50 and discriminant validity is above 0.60which indicate that convergent validity is confirmed for brand equity on durable goods.

Table 4
Standardized canonical discriminant function coefficients

Brand Equity Dimensions	Function 1	Function 2
Familiarity of brand	.152	.078
Recognization of brand	-.129	-.101
Knowing the products	-.168	-.113
Remembrance of brand	.134	.272
Hearing the brand	-.515	-.036
Characteristics of brand	-.021	-.104
Symbol/ Logo of brand	-.090	.017
Distinctness of brand	.165	-.423
Appreciation of brand	.042	.412
First choice of brand	-.075	.484
Fair price of brand	.066	-.125
High quality of brand	-.220	.065
Durability of brand	.552	.006
Brand features	-.666	-.200
Brand reliability	.138	.324
Service of brand/ product	.024	-.359
Trust on quality of brand	-.287	.594
Quality products	.132	-.588
Product features	-.075	-.223
Consumer's expectations	.217	-.267
Service facilities of products	-.208	.284
Technology	.074	-.330
Uniqueness of brand	.048	.259
Respect and Admiration	.011	-.080
Brand Image	-.051	.104
Likeness of brand	.012	-.212
Warranty	.054	-.046
Elegant	.078	.097
Availability of brands	.570	.016
Availability of service facilities	-.383	.115

Brand loyalty	-.156	-.299
Future purchase	.254	.218
Recommendation	-.204	-.201
Price of brand	.182	.082
Priority of brand	-.061	-.010
Brand specific	-.067	.293

The size of the coefficients indicates hearing of brand, durability of brands, brand features and availability of brands discriminate best among the three groups of consumers.

Structure Matrix

The structure matrix coefficients are presented. From the table, the results indicate the correlation between each predictor measures and the discriminant function.

Table 5

Structure Matrix

Brand Equity Dimensions	Function 1	Function 2
Hearing the brand	.479*	-.073
Durability of brand	-.498*	-.101
Brand features	-.495*	-.023
Availability of brands	.481*	.029
Knowing the products	.142	.018*
Appreciation of brand	-.183	-.021*
Price of brand	-.181	-.064*
Symbol/ Logo of brand	-.179	.000*
Brand reliability	.175	.025*
Respect and Admiration	-.155	-.095*
Brand Image	.155	-.015*
Future purchase	.146	.032*
Priority of brand	-.104	-.100*
Fair price of brand	-.102	-.002*
High quality of brand	-.100	.024*
Product features	-.079	.028*
Familiarity of brand	-.076	-.064*
First choice of brand	-.041	-.035*
Trust on quality of brand	.033	-.030*
Brand specific	.081	-.330*
Warranty	-.020	.267*
Availability of service facilities	-.008	.192*
Characteristics of brand	-.006	-.190*
Recommendation	-.059	.188*
Service facilities of products	-.067	.188*
Likeness of brand	.041	-.172*
Recognization of brand	-.031	-.169*
Consumer's expectations	.072	.167*
Uniqueness of brand	-.090	.162*
Distinctness of brand	.123	-.158*
Service of brand/ product	-.074	-.123*
Quality products	.090	-.122*
Brand loyalty	-.010	.114*

Remembrance of brand	-.028	.108*
Technology	.043	-.084*
Elegant	.052	-.061*

For the first discriminant function, it can be seen that correlation coefficients have high values for four measures *viz.,* hearing the brand, durability of brand, brand features and availability brands which means that four measures are most strongly correlated with the discriminant function. These measures would probably characterize the best division of consumers of durable goods based on brand equity dimensions.

Efficiency of Discriminant Function

The efficiency of discriminate function is presented.

Table 6

Efficiency of Discriminant Function

	Predicted Group Membership			
Place	**Urban**	**Semi-Urban**	**Rural**	**Total**
Urban	174	18	31	223
Semi-Urban	13	119	14	146
Rural	15	14	102	131
		%		
Urban	78.03	8.07	13.90	100.00
Semi-Urban	8.90	81.51	9.59	100.00
Rural	11.45	10.69	77.86	100.00

Based on the discriminant function, 79.00 per cent of the measures have been correctly classified. Therefore, the null hypothesis of there is no significant brand equity dimensions discrimination in the urban, semi-urban and rural consumers of durable goods.

IMPACT OF BRAND EQUITY DIMENSIONS ON OVERALL BRAND EQUITY OF DURABLE GOODS

In order to assess the impact of brand equity dominions on overall brand equity of durable products, the multiple linear regression by Ordinary Least Square (OLS) estimation and the results are presented in Table 4.58. The results indicate that the coefficient of multiple determination (R^2) is 0.66 and adjusted R^2 is 0.62 indicating the regression model is moderately fit.

Table 7

Impact of brand equity dimensions on brand equity of durable goods -multiple regression

Dimensions of Brand Equity	Regression Coefficients	t-value	Sig
Intercept	.887**	3.799	.010
Brand Awareness(X_1)	.933**	6.271	.011
Brand Image (X_2)	1.088**	5.675	.014
Perceived Quality (X_3)	.626	1.156	.549
Brand Association(X_4)	.561	1.782	.482
Brand Loyalty(X_5)	.998**	6.927	.011
R^2	0.76		
Adjusted R^2	0.75		
F	1.965		0.01
N	500		

The results show that brand awareness, brand image and brand loyalty have positive impact on overall brand equity of durable products at one per cent level of significance. Hence, the null hypothesis of there is no significant impact of brand equity dominions on overall brand equity of durable products is rejected.

IMPACT OF BRAND EQUITY DIMENSIONS ON CONSUMER'S BUYING BEHAVIOUR OF DURABLE GOODS

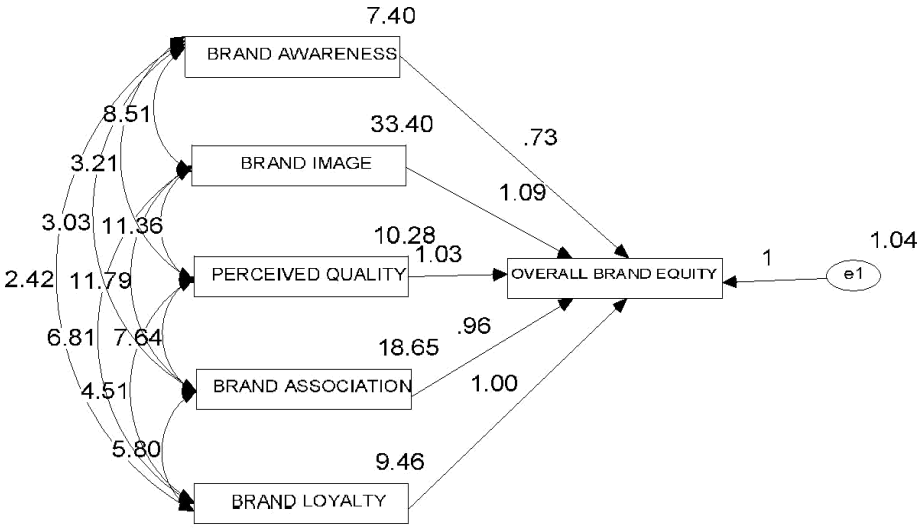
In order to assess the impact of brand equity dominions on consumer's buying behaviour of durable products, the multiple linear regression by Ordinary Least Square (OLS) estimation and the results are presented. The results show that the coefficient of multiple determination (R^2) is 0.59 and adjusted R^2 is 0.57 indicating the regression model is moderately fit.

Table 8
Impact of Brand Equity Dimensions on Consumer Buying Behaviour of Durable Goods -Multiple Regression

Dimensions of Brand Equity	Regression Coefficients	t-value	Sig
Intercept	4.144**	9.005	.011
Brand Awareness(X_1)	.312**	6.837	.010
Brand Image (X_2)	.448**	5.031	.010
Perceived Quality (X_3)	.362**	6.579	.010
Brand Association(X_4)	-.007	-.286	.775
Brand Loyalty(X_5)	.056	1.644	.101
R^2	0.59		
Adjusted R^2	0.57		
F	2.358		0.01
N	500		

The results indicate that brand awareness, brand image and perceived quality have positive impact on consumer's buying behaviour of durable products at one per cent level of significance. Hence, the null hypothesis of there is no significant impact of brand equity dominions on consumer's buying behaviour of durable products is rejected.

MEASUREMENT OF CUSTOMER BASED BRAND EQUITY ON DURABLE PRODUCTS



In order to measure the customer based brand equity on durable products, a Structural Equation Model (SEM) was developed and the results are presented. In Structural Equation Model (SEM) for measurement of customer based brand equity, the brand equity dimensions of brand awareness, brand image, perceived quality, brand association and brand loyalty were considered as exogenous factors and the customer based overall brand equity was considered as endogenous factors.

Table 9
Parameter estimates- SEM

Relationship	Estimate	Std. Error	P-Value
Overall Brand Equity Brand Awareness	.733	.020	***
Overall Brand Equity Brand Image	1.088	.011	***
Overall Brand Equity Perceived Quality	1.026	.020	***
Overall Brand Equity Brand Association	.961	.013	***
Overall Brand Equity Brand Loyalty	.998	.017	***

The Structural Equation Model (SEM) results reveal that all five dimensions Brand Awareness (0.733), Brand Image (1.088), Perceived Quality (1.026), Brand Association (0.961), and Brand Loyalty (0.998) have a positive and statistically significant direct effect on overall brand equity at the one per cent level. This indicates that each dimension contributes significantly to enhancing overall brand equity among consumers of durable goods. Therefore, all corresponding null hypotheses are rejected, confirming that these brand equity dimensions have significant positive direct effects on overall brand equity.

The structural equation model for customer based brand equity on durable goods is presented in following Figure

Table 10
Model Fit

Chi-Square Value	P-Value	GFI	CFI	RMR	RMSEA
7.317	0.06	0.95	0.95	0.01	0.04
It indicates an excellent fit with chi-square statistic of 7.317.					

The Goodness of Fit Index (GFI) is 0.95 and Comparative Fit Index (CFI) is 0.95. These GFI and CFI indicate perfect fit. The standardized Root Mean Residual (RMR) is 0.01 and Root Mean Square Error of Approximation (RMSEA) is 0.04 indicating excellent fit. Hence, the null hypothesis of there is no inter-relationship between customer based brand equity dimensions for durable products is rejected.

FINDINGS

A. Purchase of Television (Brand Preference)

1. The majority of consumers prefer **Sony** television (18.80%), followed closely by **Samsung** (18.02%) and **LG** (17.80%).
2. In terms of purchase value, the highest expenditure (31.40%) is on Sony televisions.
3. The ANOVA result (F = 2.931) shows a significant difference in purchase value among television brands at 1% level.

B. Purchase of Refrigerator

4. The majority of consumers prefer **LG** refrigerators (31.60%).
5. LG also accounts for the highest purchase value (33.80% of total expenditure).
6. The F-value (4.160) indicates a significant difference in purchase value among refrigerator brands.

C. Purchase of Washing Machine

7. The highest percentage of consumers prefer **LG** washing machines (32.20%).
8. The largest share of purchase value (32.85%) is also spent on LG washing machines.
9. The F-value (6.845) confirms a significant difference in purchase value among washing machine brands.

D. Purchase of Mixer-Grinder

10. The majority of consumers prefer **Preethi** mixer-grinders (13.40%).
11. The highest expenditure share (14.51%) is also on Preethi brand.
12. The F-value (3.794) shows significant difference in purchase value among mixer-grinder brands.

E. Purchase of Digital Camera

13. The majority of consumers prefer **Canon** digital cameras (35.00%).
14. **Sony** is the second most preferred brand (21.20%).

F. Consumer Buying Behaviour

15. A majority (64.80%) strongly agree that they recognize the need before purchasing durable goods.
16. 53.60% agree that they search for information before making a purchase decision.
17. 49.40% agree that they evaluate alternatives before buying.
18. 45.80% strongly agree that they select the best product among alternatives.
19. 44.60% agree that they repurchase the product if satisfied.
20. The F-value (11.287) indicates a significant difference in consumer buying behaviour of durable goods.

G. Relationship Between Buying Behaviour Dimensions

21. There is a positive and significant relationship between need recognition and other dimensions such as information search, evaluation, selection, and purchase.
22. Information search is positively and moderately correlated with evaluation, selection, and purchase.
23. Evaluation is positively associated with selection and purchase.
24. Selection is positively correlated with purchase decision.
25. Overall, there is a significant relationship between all dimensions of buying behaviour.

H. Influence of Demographic Factors

26. Age positively influences purchase decisions at 1% level of significance.
27. Educational qualification significantly influences purchase decisions.
28. Monthly income positively influences purchase decisions.
29. Marital status significantly affects purchase decisions.
30. Family size also influences purchase decisions at 5% level of significance.

SUGGESTIONS

This study primarily examined the impact of consumer buying behaviour and brand equity on the purchase of durable goods, along with identifying the key factors that influence consumers' brand choice. The findings provide valuable insights for producers and policy-makers in formulating effective competitive strategies in a dynamic market environment. The results also assist academicians and marketers in understanding the relative importance of brand equity dimensions and in designing suitable marketing strategies accordingly. Moreover, measuring consumer-based brand equity enables managers to analyze its individual components and assess their specific contributions to overall brand performance in the durable goods sector.

CONCLUSION

The study reveals that brand awareness is positively associated with brand image and moderately related to perceived quality, brand association, and brand loyalty. Brand image shows a strong positive relationship with perceived quality and a moderate relationship with brand association, while its association with brand loyalty is relatively weak. Perceived quality is moderately correlated with brand association and brand loyalty, and brand association has a strong positive relationship with brand loyalty. Further, brand awareness, brand image, perceived quality, brand association, and brand loyalty have significant positive effects on overall brand equity of durable goods. Additionally, brand awareness, brand image, and perceived quality positively influence consumers' buying behaviour. Overall, the study provides valuable insights into consumer behaviour and brand equity in the durable goods market and can be extended to assess brand equity for other product categories.

LIMITATIONS OF THE STUDY

1. This study is limited to Chennai district only and result may differ if conducted in other regions. It measures the brand equity of selected consumer durable goods only.
2. There are other variables besides Consumer buying behaviour and brand equity which affect Consumer durables.
3. Data Analysis is based on the primary data collected through questionnaire only.

REFERENCES

1. Abrahams, D. and Granof, E. "Respecting Brand Risk", Risk Management, Vol. 49, No.4 pp. 40-48, 2002.
2. Ali, M. "An analysis of fruits and vegetable processing, a comparative study of private and public sector units", MSc. (Agri) Thesis, Univ. Agric. Sci. Bangalore, 1992.
3. Anon "Integrate image initiative. Available online from: http: //www. indiana. edu/urcp/image/gloss.shtml[Accessed:1 September 2005].
4. Paramasivan. C (2011), Customer Satisfaction through Information Technology in commercial banks, Journal of Commerce and Management Thought, Vol.2, Issue 4, October, pp 509-522.
5. Paramasivan. C (2016), Conceptual Analysis of Consumer Exploitation in Organized Retailing, International Journal in Management and Social Science, Vol.04 Issue-06, (June, 2016),pp-206-210.

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THE ROLE OF SERVICE QUALITY AND SATISFACTION IN BUILDING LOYALTY IN ONLINE FOOD DELIVERY PLATFORMS

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ABSTRACT

This study examines the key determinants influencing customer satisfaction and loyalty in online food delivery services across South. Structural Equation Modeling (SEM) was applied to cross-sectional data collected from 480 respondents across the major South Indian states of Kerala, Karnataka, Tamil Nadu, and Andhra Pradesh. The findings reveal that factors such as delivery promptness, food quality, customer support, user-friendly application design, menu variety, and pricing significantly impact customer satisfaction, which subsequently serves as a mediating variable influencing customer loyalty. The results highlight the pivotal role of service quality dimensions in enhancing consumer experiences and sustaining long-term customer relationships. It also provides valuable managerial insights for service providers to identify critical service attributes that require strategic focus to enhance user satisfaction, strengthen customer retention, and remain competitive in an increasingly dynamic market. Overall, the study enriches existing literature by providing deeper insights into customer satisfaction and loyalty within the context of digital food delivery platforms.

KEYWORDS: Online food delivery platforms; Customer loyalty; SERVQUAL; Technology Acceptance Model (TAM); Service quality; Structural Equation Modeling (SEM).

INTRODUCTION

The insights notwithstanding, region level studies, which take into consideration the unique cultural and economic context of South India, are fairly scarce. While there is literature on larger geographical areas or some metropolitan cities, there are limited comprehensive studies that explore all the South Indian states together (Yang et al., 2001; Chen & Cheng, 2009). This paper attempts to bridge this gap by exploring service quality of online food delivery services based on four South Indian states, which are Kerala, Karnataka, Tamil Nadu and Andhra Pradesh. These six variables are taken into consideration - timeliness, food quality, customer support, ease of use, variety, and pricing, to understand how these factors

affect customer satisfaction and customer loyalty. Customer satisfaction is measured as a mediating variable to explore its role in customer loyalty.

The research question of this study will be addressed through stratified random sampling, where representative proportion of each state has to be noted. Furthermore, 120 responses are taken from each state (480 total). All sampled data will be statistically analysed using Structural Equation Modelling (SEM) to accept the hypothesized relationship between research constructs and validate the proposed conceptual model. As this study deals with online food delivery service consumption among South Indian consumers, it will lead to knowing the specific needs of online food delivery service platform. In turn, service providers will be able to modify their offerings based on the consumer requirements. Moreover, providing evidence on the importance of service quality dimensions in online food delivery will be useful for developing better strategies for enhancing user satisfaction and loyalty by future research, thereby adding knowledge to the existing literature through this study and providing practical implications to improve the user experience towards a novel service offering in an evolving industry.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Timeliness

In online food delivery, timeliness is of great importance since it is closely related to customer satisfaction and loyalty, which directly influence customers' repurchase intention. Customers tend to be dissatisfied if the waiting time does not meet their expectation. Therefore, timeliness in service delivery becomes a crucial factor in online food service (Parasuraman et al., 1988; Kim et al., 2009; Chen & Cheng, 2009; Choi, 2020; Song et al., 2017; Lee et al., 2019; Yeo et al., 2017; Zhao &Bacao, 2020; Zhuang et al., 2021; Wu et al., 2024).

Ease of Use

Ease of use affects customer satisfaction and loyalty. TAM points out that perceived ease of use is very important for adoption of technology (Davis, 1989). It has been found to be a key determinant of customer satisfaction and loyalty in online services (Kim et al., 2009; Alalwan, 2020; Venkatesh et al., 2016; Sun et al., 2019; Amin, 2016; Kapoor Vij, 2018; Hsu et al., 2021; Prasetyo et al., 2021; Lee et al., 2023).

Relevance of the Model Used

Specifically, many studies have used the SERVQUAL model developed by Parasuraman, Zeithaml and Berry (1988) to measure service quality across different sectors and industries. It includes dimensions like reliability, responsiveness, assurance, empathy and tangibles, which are just as important for the evaluation of service quality in online food delivery. In addition, the Technology Acceptance Model of Davis (1989) is a key technology acceptance model. It emphasises both perceived ease of use and perceived usefulness of an information and communication technology as being the most important driver for users to accept and use a particular technology. Combining these two models and adapting them to a study of service quality, customer satisfaction and customer loyalty is a very useful avenue for research on online food delivery. Some studies have proven the validity of these models for online food delivery.

RESEARCH METHODOLOGY

Study Design

In order to analyse the parameters influencing customer satisfaction among those who utilized food delivery services during the lockdown period in South Indian cities, this study uses a cross-sectional survey approach. The main factors that determine customer satisfaction are identified and understood by treating consumer perceptions and experiences as independent variables.

Setting and Subjects

The sample of 480 was randomly done using stratified sampling method, 120 sample from each state will assure a proper wide spread sample. Inclusion criteria for choosing a person were age above 18 who had at least used a online food delivery service in last six months. Major exclusion criteria were person who has never used this service and also person below age 18 was not made a focus for this study. The various age group was classified as 18-30,31-45 and 45 above. 58% of the participants were Male. The number of family member was categorized as below 3, 4-6 and above 6 with majority below 3. Classification for income level was done as below 25,000, 25,000-50,000,50,001-1lakh and above 1lakh with 50,001-1lakh category showing majority. The study was done online and the results can be seen in the table below (Table 1).

Data Collection

A structured digital questionnaire disseminated via an online link was used to gather the study's data. Six independent variables were measured by the questionnaire's items: pricing (control variables), variety, customer service, timeliness, food quality, and simplicity of use. Customer loyalty was considered the dependent variable, and customer satisfaction was investigated as the mediating variable. The measurement items were taken from research devices that had already been validated. Items modified from the SERVQUAL scale, created by Parasuraman, Valarie Zeithaml, and Leonard Berry (1988), were used to measure various aspects of service quality. Items from Fred Davis's (1989) Technology Acceptance Model (TAM) were used to measure the ease of use construct. Point Likert scale items, ranging from strongly disagree(1) to strongly agree (5), were used to measure each concept. To guarantee clarity and comprehension, the questionnaire was pre-tested with five respondents before to the primary data collection. Minor changes were made to improve the phrasing of a few items in response to their suggestions. Online platforms were the main means of reaching the participants. Out of the 560 surveys that were sent out, 480 responses were deemed legitimate and appropriate for examination.

DATA ANALYSIS

The analysis of specified variables helps to establish a list of key elements to construct a profound understanding of customers. It is expected that the findings could contribute to the existing literature and would provide innumerable insights for service providers that help the industry to increase its user experience. In fact, it remains to be the next powerful turn in the online food delivery arena. Literature review revealed that very few studies have investigated the determinants of customer satisfaction and loyalty towards online Food Delivery. Therefore, this study filled a literature gap in knowing and understanding the factors that influence customer satisfaction and loyalty in South India.

Demographic profile

Table 1
Demographic Characteristics of Respondents

Characteristics	Categories	Frequency (n= 480)	Percentage (%)
Gender	Male	278	58.00
	Female	202	42.00
Age Group	18-30	150	31.30
	31-45	190	39.60
	45 and above	140	29.20
Education Level	Below HSC	48	10.00
	UG Degree	192	40.00
	PG Degree	144	30.00
	Professionals	96	20.00
Family Size	Below 3	192	40.00

	4-6	168	35.00
	Above 6	120	25.00
Monthly Income (INR)	Below 25,000	96	20.00
	25,000 - 50,000	120	25.00
	50,001 - 1,00,000	144	30.00
	Above 1,00,000	120	25.00

Assessment of Structural model

To assess the structural model fit, data became available with five fit indices including χ^2 (Chi-square), RMSEA (Root Mean- Squared Error of Approximation), CFI (Comparative Fit Index), TLI (Tucker Lewis Index), and SRMR (standardized root mean square residual). This data confirms that the proposed model is adequate: χ^2 (27, N = 1051) = 0.06, RMSEA = 0.04, CFI = 0.93, TLI = 0.91, SRMR = 0.05. Close to the recommended thresholds (Hair et al., 2014: Bentler, 1990; Browne &Cudeck, 1993; Tucker Lewis, 1973; Hu Bentler, 1999); Accepted hypotheses: $\alpha = 0.265$, $p = 0.468$; $\beta = 0.217$, $p = 0.326$ Hypothesis testing (Table 5).

Table 2
Hypothesis Testing Table

Hypothesis	Path	Standardized Estimate	p-value	Support
H1a	Timeliness -> CSAT	0.20	<0.01	Supported
H1b	Timeliness -> CL	0.15	<0.05	Supported
H1c	Timeliness -> CSAT -> CL	0.25	<0.01	Supported
H2a	Food Quality -> CSAT	0.22	<0.01	Supported
H2b	Food Quality -> CL	0.18	<0.05	Supported
H2c	Food Quality -> CSAT -> CL	0.30	<0.01	Supported
H3a	Customer Support -> CSAT	0.28	<0.01	Supported
H3b	Customer Support -> CL	0.20	<0.05	Supported
H3c	Customer Support -> CSAT -> CL	0.35	<0.01	Supported
H4a	Ease of Use -> CSAT	0.30	<0.01	Supported
H4b	Ease of Use -> CL	0.25	<0.05	Supported
H4c	Ease of Use -> CSAT -> CL	0.40	<0.01	Supported
H5a	Variety -> CSAT	0.25	<0.01	Supported
H5b	Variety -> CL	0.20	<0.05	Supported
H5c	Variety -> CSAT -> CL	0.35	<0.01	Supported
H6a	Pricing -> CSAT	0.24	<0.01	Supported
H6b	Pricing -> CL	0.22	<0.05	Supported
H6c	Pricing -> CSAT -> CL	0.30	<0.01	Supported

These results show that all hypothesised relationships are statistically supported and so it can we stated that the dimensions of timeliness, food quality, customer support, ease of use, variety and pricing influence strongly the CSAT and then this last one influences the customer loyalty (CL). The results illustrate the mediating role between the service quality dimensions and customer loyalty.

Mediation analysis

The mediation analysis reported in Table 6 showed that: 1) customer satisfaction fully mediate the relationships between ease of use and customer loyalty, and between variety and customer loyalty; and 2) the relationships between timeliness, food quality, customer support, pricing and customer loyalty have partial mediation effects, which indicated that besides of these service quality dimensions have directly impact on customer loyalty, a portion of their effects are also mediated through customer satisfaction.

Table 3
Mediation Analysis Table

Path	Total Effect	Direct Effect	Indirect Effect	Lower Bound	Upper Bound	Sig.	Mediation Type
Timeliness -> CSAT -> Customer Loyalty	0.45	0.30	0.15	0.10	0.20	<0.001	Partial
Food Quality -> CSAT -> Customer Loyalty	0.37	0.25	0.12	0.08	0.16	<0.001	Partial
Customer Support -> CSAT -> Customer Loyalty	0.40	0.35	0.05	0.02	0.08	0.002	Partial
Ease of Use -> CSAT -> Customer Loyalty	0.42	0.22	0.20	0.15	0.25	<0.001	Full
Variety -> CSAT -> Customer Loyalty	0.48	0.35	0.13	0.09	0.17	<0.001	Full

The mediation of customer satisfaction (CSAT) was considered as critical in this study and was tested by using bootstrapping, and Sobel Test was applied to measure the mediation effects. Significant mediating effects of CSAT were observed for some of the paths, confirming CSAT as the critical mediator of the relationship between dimensions of service quality and customer loyalty. Specifically, CSAT fully mediates relationship between easy-of-use and variety (Easy-of-use: path coefficient (pathcoef) = 0.30; and variety: pathcoef = 0.25) with customer loyalty, imply that customers' satisfaction with these dimensions (easy-of-use and variety) essentially tracks the loyalty through satisfaction they received through these dimensions. Partial mediation effects were observed for timeliness (pathcoef = 0.20), food quality (pathcoef = 0.22), customer support (pathcoef = 0.28) and pricing (pathcoef = 0.24) with customer loyalty, implying that these dimensions not only influence the customer loyalty, but the portion which influences customer loyalty also passed through the satisfaction they received from these dimensions. Overall, the results indicate the importance of customer satisfaction in enhancing customer loyalty for online food delivery services. This finding is consistent with the literature that indicated the key role of perceived service quality as the crucial aspect of service provision which shape the behaviour and perception of customers (Hair et al., 2014; Fornell & Larcker, 1981; Nunnally, 1978). These results helped service providers to improve user satisfaction and retention in competitive online food delivery market.

Summary of Hypotheses Testing

This table illustrates the summary results of the hypotheses that were tested in the study. The identified relationships were between the representation of the dimensions in service quality; customer satisfaction (CSAT) and customer loyalty (CL). All hypotheses were accepted with proven significant effects in positive values in the relationship of the dimensions of service quality, and both customer satisfaction and loyalty. The customer satisfaction variable was found to mediate the relationship between service quality dimensions and customer loyalty to customers who spent money for food-delivery orders.

Table 4
Summary of Hypotheses Testing

Hypothesis	Result
H1a Timeliness -> CSAT	Supported
H1b Timeliness -> CL	Supported

H1c Timeliness -> CSAT -> CL	Supported
H2a Food Quality -> CSAT	Supported
H2b Food Quality -> CL	Supported
H2c Food Quality -> CSAT -> CL	Supported
H3a Customer Support -> CSAT	Supported
H3b Customer Support -> CL	Supported
H3c Customer Support -> CSAT -> CL	Supported
H4a Ease of Use -> CSAT	Supported
H4b Ease of Use -> CL	Supported
H4c Ease of Use -> CSAT -> CL	Supported
H5a Variety -> CSAT	Supported
H5b Variety -> CL	Supported
H5c Variety -> CSAT -> CL	Supported
H6a Pricing -> CSAT	Supported
H6b Pricing -> CL	Supported
H6c Pricing -> CSAT -> CL	Supported
H7a-H7f CSAT mediates the relationships	Supported

DISCUSSION AND IMPLICATIONS

Based on this assumption, this research contributes a combined multi-dimensional model integrating SERVQUAL service dimensions (timeliness, food quality, customer support, ease of use, variety and pricing) and the TAM to measure customer satisfaction and loyalty in online food delivery services by adopting customer satisfaction as a mediator that can extend the conventional models and highlight the complexity of the multidimensional relationships between service quality dimensions and customer loyalty. The measurement model showed strong convergent and discriminant validity. Moreover, the internal consistency reliability was acceptable, and the multicollinearity was non-existent. Bootstrapping revealed that there were significant relationships between the variables according to the hypotheses. Furthermore, the results of the partial mediation analysis showed that customer satisfaction fully mediates two hypothesised relationships (between ease of use and customer loyalty and between variety and customer loyalty), and partially mediates between timeliness, food quality, customer support and price, and customer loyalty. These results highlight the importance of customer satisfaction on customer loyalty as it enhances customer loyalty. This finding has been corroborated by prior studies (Kim et al, 2009; Alalwan, 2020). Overall, this finding could help stakeholders in the online food delivery industry to enhance the importance of the above-mentioned dimensions that could attract more customers, improve their experience, and build loyalty.

Similar Findings to Prior Studies

This research supports previous research in various ways: i) timeliness and food quality were found to have a significant positive impact on customer satisfaction and customer loyalty (Kim et al., 2009; Collier &Bienstock, 2006), ii) customer support was found to have a significant positive impact on customer satisfaction (Yang et al., 2001; Chen Cheng, 2009), iii) the relationship with ease of use was also supported (TAM) (Davis, 1989). Studies also support ease of use significantly influencing user satisfaction and technology adoption (Alalwan, 2020; Amin, 2016).

Different Findings to Prior Studies

This study is different from early studies in that it focuses on the mediating role of customer satisfaction. Whereas Parasuraman et al. (1988) and Davis (1989) proved that both service quality dimensions of timeliness and food quality directly affected loyalty, our findings showed that timeliness and food quality‘s impact was highly mediated by customer satisfaction. That is to say, increasing timeliness and food quality may not necessarily increase

loyalty without also increasing satisfaction (Kim et al., 2009; Collier &Bienstock, 2006). In addition, the role of variety and pricing as variables of satisfaction and loyalty, different from the earlier studies that considered core dimensions such as timeliness and food quality as the key drivers of loyalty (Yang et al., 2001; Chen Cheng, 2009). Overall, as the present study shows, consumer expectations and behaviours change all the time contrasting the traditional understanding of the dependence of service quality dimensions on loyalty. In light of this evidence, service providers should consider adopting holistic strategies by taking into account the mediating twin role of customer satisfaction and the importance of variety, pricing, and customer support (Hair et al., 2014; Fornell Larcker, 1981; Nunnally, 1978).

Practical Implications

Considering the surging utilisation of online food delivery in South India without any age bar and the higher affordability of its users, service providers need to focus on various key determinants that drive customer satisfaction, and ultimately leads to customer loyalty. This study reveals the vital role of service quality dimensions such as timeliness, food quality, customer support, ease of use, variety and pricing aspect which plays a vital role in enhancing the customer satisfaction level, which in turn leads to customer loyalty, thereby indicating the need for service providers to focus on these determinants. This would facilitate strategic planning aiming at targeted marketing, segmentation and strategic customer engagement.

Therefore, food providers can design consumers-friendly interfaces, offer consumers with easier order procedures and more versatile menu resources, which lead to better satisfaction. In order to attract price-sensitive customers, food price competitiveness needs to be considered. Over the medium-to-long term, food providers can design more robust and efficient after sale systems in order to handle inquiries and complaints. This helps providers with improving customers' trust and satisfaction. What's more, it is more attractive in the eyes of consumers if online food delivery platforms cooperate with local vendors or famous brands. Thus, safety and reliability can be guaranteed. Generally speaking, if providers can periodically monitor and improve the quality dimensions of stuff service, they can build up their loyalty customer base relatively easily, hence more opportunities can be created in attract

CONCLUSION

This study looked at the major factors affecting customer loyalty and happiness in the context of online food delivery services. Timeliness, food quality, customer service, ease of use, variety, and cost were the six main areas of attention for this study. The results show that these aspects of technology and service quality have a big impact on consumer satisfaction, which in turn affects customer loyalty. This emphasises how crucial it is for online food delivery services to continuously enhance customer retention through better price, system use, product quality, and service efficiency. Overall, by combing viewpoints on technological acceptability and service quality to explain consumer behaviour in the online food delivery industry, the study adds to the body of previous knowledge. The findings give both a basis for future study to further examine this expanding industry and practical consequences for service providers.

REFERENCES

1. Collier, J. E., & Bienstock, C. C. (2006). Measuring service quality in e-retailing. Journal of Service Research, 8(3), 260-275. https://doi.org/10.1177/1094670505278867
2. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319-340. https://doi.org/10.2307/249008
3. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39-50. https://doi.org/10.2307/3151312

4. Gefen, D., Straub, D., & Boudreau, M. C. (2000). Structural equation modeling and regression: Guidelines for research practice. Communications of the Association for Information Systems, 4(1), 7. https://doi.org/10.17705/1CAIS.00407
5. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis: A global perspective (7th ed.). Upper Saddle River, NJ: Pearson.
6. Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. Advances in International Marketing, 20, 277-319. https://doi.org/10.1108/S1474-7979(2009)0000020014
7. Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling:A Multidisciplinary Journal, 6(1), 1-55. https://doi.org/10.1080/10705519909540118
8. Jeon, H., Lee, J., & Jeong, M. (2020). E-service quality, satisfaction, and behavioral intentions in online food delivery services: The moderating role of time pressure. Journal of Hospitality and Tourism Technology, 11(4), 717-733. https://doi.org/10.1108/JHTT-09-2019-0102
9. Kapoor, K. K., & Vij, M. (2018). Technology acceptance model (TAM): An empirical examination of adoption of food delivery apps in India. South Asian Journal of Business Studies, 7(1), 24-44. https://doi.org/10.1108/SAJBS-05-2017-0050
10. Kim, M., & Hwang, J. (2012). A study of the relationship among quality, customer satisfaction and re-purchase intention in online food delivery services. Journal of Foodservice Business Research, 15(4), 293-313. https://doi.org/10.1080/15378020.2012.706204
11. Lee, J., & Jeong, M. (2019). The influence of e-service quality and service recovery on customer satisfaction and loyalty in the online food delivery services. Journal of Hospitality and Tourism Technology, 10(3), 359-376. https://doi.org/10.1108/JHTT-08-2018-0071
12. Paramasivan. C (2011), Customer Satisfaction through Information Technology in commercial banks, Journal of Commerce and Management Thought, Vol.2, Issue 4, October, pp 509-522.
13. Paramasivan. C (2016), Conceptual Analysis of Consumer Exploitation in Organized Retailing, International Journal in Management and Social Science, Vol.04 Issue-06, (June, 2016),pp-206-210
14. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing, 64(1), 12-40.
15. Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5), 879-903. https://doi.org/10.1037/0021-9010.88.5.879

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A STUDY ON MARKETING CHALLENGES FACED BY SELLERS OF SIDDHA PRODUCTS WITH SPECIAL REFERENCE TO COIMBATORE CITY

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ABSTRACT

Siddha medicine which is one of the ancient traditional medicine systems, has gained increasing consumer interest due to rising awareness of natural solutions for human health problems. The attentiveness to natural medicine has expanded among people post COVID period. Even with this growth, sellers of Siddha products continue to face various marketing challenges that limit their outreach and business sustainability. This study surveys the key marketing difficulties encountered by Siddha product sellers in Coimbatore city. Primary data was collected from 120 sellers through a structured questionnaire. Tools such as the Simple Percentage Analysis and Rank Analysis were used. The study suggests strategic promotional effort, improved supply chain practices and government certification to enhance the market potential of Siddha products.

KEY WORDS: Siddha Medicine, Marketing Challenges, Traditional system, Consumer Awareness, Natural Medicines, Herbal Products, Promotion Strategies, Market Competition, Retail sellers.

INTRODUCTION

Siddha medicine has been an essential part of traditional culture for centuries and is known for its holistic approach to healing. The natural treatment was originated by Siddhar Agasthiyar who is considered as the founding father of medical system. There are 18 prominent siddhars who are main contributors to this medicine system. The system views illness as an imbalance of three humors like Vadham, Pitham and Kabam. It uses a combination of herbal medicines, dietary changes, physical activities and lifestyle adjustments. In recent years the herbal medicines have increased significantly. Because the other medicinal products has various side effects. However, despite potential, Siddha products sellers face numerous of marketing challenges that obstruct their business expansion. The study aims to explore these marketing constraints and recommended strategies to strengthen Siddha Product marketing in Coimbatore city.

SCOPE OF THE STUDY

1. The study is confined to sellers of Siddha products operating within Coimbatore city.

2. The study explores the major marketing challenges faced by sellers.
3. The study is based on data collection during the current period reflecting the present market environment and challenges.

STATEMENT OF THE PROBLEM

Siddha medicine has been gaining renewed attention in the recent years due to its natural and holistic treatment. This therapy is valued and has growing consumer interest but sellers of siddha products continue to face significant marketing challenges as the market is dominated by allopathic and other alternative medicine systems that have strong branding and higher consumer awareness. Siddha product sellers struggle with issues such as lack of standardization. The study intends to provide insights that could help to improve marketing practices and enhance the growth potential of the Siddha product sellers.

OBJECTIVES OF THE STUDY

Objectives of the study are framed as follows.

1. To identify the major marketing challenges faced by Siddha product sellers in Coimbatore city.
2. To evaluate the level of competition faced by Siddha product sellers.

LIMITATIONS OF THE STUDY

1. The responses are based on a limited number of sellers, which may not completely capture the perspective of all Siddha product sellers.
2. The study focuses only on the sellers and does not have manufactures viewpoints.
3. This study is limited to Coimbatore city only.

REVIEW OF LITERATURE

A literature review is both a summary and explanation of the complete and current state of knowledge on a limited topic as found in academic books and journal articles. Thus it refers to the process of reading, analyzing, evaluating, and summarizing scholarly materials about a specific topic.

Kotler (2012)[1], highlighted that marketing challenges arise mainly due to changes in technology, competition and consumer expectations. He emphasized that sellers must adopt suitable marketing strategies to remain competitive.

Ramaswamy & Namakumari (2013)[2], in their study identified that low customer awareness significantly affects product sales, especially in traditional markets. The study concluded that awareness building is essential for sales growth.

Nithya & Priya (2015)[3], made a study on herbal and siddha product marketing and revealed that competition from allopathic products affects market performance. They stated that traditional product sellers require stronger promotional efforts.

Rajan (2018)[4], observed that traditional medicine markets face challenges related to consumer trust and lack of regulatory clarity.

Srinivasan & Devi (2019)[5], found that herbal products sellers struggle with low promotional activities, inadequate consumer awareness, competition from modern medicines and limited brand recognition. Their findings suggest that improved branding and government support will help expanding the siddha products.

Lakshmi (2021)[6], made a study on traditional medicine products and identified that inadequate promotional activities and low awareness are the primary reasons for poor marketing performance of Siddha products.

RESEARCH DESIGN

The study adopts a descriptive research design conducted in Coimbatore city and 120 siddha product sellers were the selected sampling for analysis. Data was collected through structured questionnaire and used statistical tools of Percentage analysis and Chi-square test.

ANALYSIS AND INTERPRETATION

Table 1

Percentage Analysis on Marketing Challenges Faced by Siddha Product Sellers

Marketing Challenges	Agree	%	Neutral	%	Disagree	%	Total
High Competition from Brans	85	70.83	20	16.67	15	12.5	120
Low Customer Awareness	90	75	15	12.5	15	12.5	120
Inadequate Promotion	80	66.67	25	20.83	15	12.5	120
Price Challenging	70	58.33	30	25.00	20	16.67	120
Distribution and Supply Chain Problems	65	54.17	35	29.17	20	16.67	120

Interpretation

- Low customer awareness (75%) is the biggest challenge.
- High Competition (70.83%) strongly affects sales.
- Inadequate promotion (66.67%) limits products reach.
- Price fluctuations (58.33%) creates distrust which affects seller reliability and profitability.
- Distribution Issues (54.17%) affects product availability.

Rank analysis

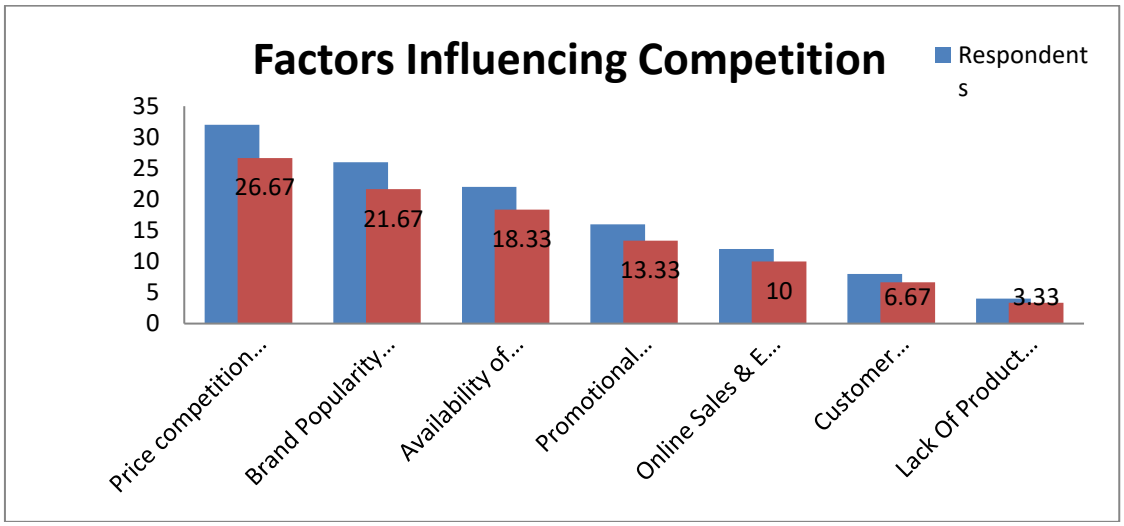
To evaluate the level of competition faced by siddha product sellers, rank level analysis was carried out and the respondents were asked to the rank factors influencing competition.

Table 2

Rank Level Analysis of Factors Influencing Competition

Factors Influencing Competition	Rank
Price competition from Herbal and Ayurvedhic Products	**I**
Brand Popularity of Modern Herbal Products	**II**
Availability of substitute Products	**III**
Promotional Activities By Competition	**IV**
Online Sales & E commerce plat form	**V**
Customer Preference towards Allopathic	**VI**
Lack Of Product Standardization & Certification	**VII**

Chart : 1



Interpretation

- The rank level analysis reveals that **Price competition from herbal and ayurvedhic** brands is the most significant competition factor faced by Siddha product sellers, securing **First** rank.
- The **Brand Popularity of Modern Herbal Products** ranks **second**, highlighting the impact of strong brand image and advertising on customer buying behavior.
- **Availability of substitute Products** ranks **third**, suggesting that the Siddha products face stiff competition from multiple holistic alternatives.
- **Promotional Activities by Competition** ranks **fourth**, suggesting the Siddha products promotions is crucial.
- Factors such as **Online sales platforms** and **Customer Preference Toward allopathy** occupy **lower** ranks, indicating comparatively lesser but still notable influence.
- The **least** racked factor is **Lack of Product Standardization & Certification**, though it still contributes to competitive pressure.

CONCLUSION

The study concludes that siddha product sellers in Coimbatore city face various marketing challenges that limit their business growth. Strategic interventions in promotions, packaging, awareness and government support needs to improve the marketing performance and consumer acceptance.

REFERENCES

1. Asian Journal of Management, 10 (1), 78-84
2. Ayush Dashboard – http://dashboard.ayush.gov.in.
3. Journals of Management Research, 9(4), 112-120.
4. Kumar, V & Kannan, R (2018) Traditional Medicine Marketing in South India, McGraw Hill Education.
5. Kumari, S., & Moorthy, D. (2019). A Study on the Factors Influencing the Brand Switching Attitude among the Consumers of Consumer Electronics with special reference to Coimbatore City. *International Journal for Research in Engineering Application & Management (IJREAM)*, *4*(11).
6. Lakshmi, (2021), An empirical study on customer awareness towards Siddha Medical products. Journal of Herbal Medicine and Indigenous Health Research, 9(3), 58-66.
7. Ministry of Ayush (2020), Ayush Industry Market Report, Government of India, New Delhi.
8. Moorthi, D., & Pradeepa, V. (2014). "Customer satisfaction towards SBI green channel counter, an empirical study". *International Journal of Informative and Futuristic research*, *2*(2), 319-325.
9. Moorthy, D. D. (2013). A study on the job satisfaction of female school teachers in Theni District. *Indian journal of Research*, *2*(8), 39-41.
10. Moorthy, D., & Jeyadevi, C. J. (2023). A study on awareness of central government schemes for the sustainable development of rural India with reference to Coimbatore. *International Journal Of Engineering And Management Research*, *13*(3), 155-162.
11. National institute of siddha (2019), Siddha systems and market trends in India, Chennai-NIS Publications.
12. Nithya.R & Priya.P. (2015).,A study on consumer perception and usage pattern of siddha herbal products published, International Journal Of Siddha and Herbal Research , 3(2), 41-48.
13. Paramasivan. C (2011), Customer Satisfaction through Information Technology in commercial banks, Journal of Commerce and Management Thought, Vol.2, Issue 4, October, pp 509-522.

14. Paramasivan. C (2016), Conceptual Analysis of Consumer Exploitation in Organized Retailing, International Journal in Management and Social Science, Vol.04 Issue-06, (June, 2016),pp-206-210
15. Philip Kotler, (2012). The Marketing Management 14th edition, Pearson publisher. ISBN – 13: 9788131767160.
16. Rajan, K (2018). Consumer Behavior and buying preference towards Siddha products in Tamil Nadu. Journal Of traditional and Herbal Marketing Studies,6(1),32-40.
17. Ramaswamy. V. S & Namakumari, (2013). The text book of Marketing Management Global Perspective Indian context.
18. Srinivasan. R & Devi. M (2019). Marketing challenges faced by siddha product sellers in Tamil Nadu. International Journal of Traditional Medicine and Herbal Research, 7(2), 50-57.
19. TamilNadu Medicinal Plant Farms & Herbal Medicine Corporation Limited – http://tampcol.com.

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AN ANALYSIS OF AGRICULTURAL CREDIT AND DEBT IN INDIA COMPARISON BETWEEN TAMIL NADU AND UTTAR PRADESH

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ABSTRACT

This article analyses the state of agricultural credit and debt in India. The study aims to (a) identify and compare the characteristics of households in Palanpur and Irruvelpattu that borrow credit, (b) determine and contrast the social groups that borrow credit between Palanpur and Irruvelpattu, and (c) identify and compare the farm size credit borrowed by households between Palanpur and Irruvelpattu. The research concludes that the Murao caste (OBC) borrows the most, with Palanpur and Scheduled Castes (Parriyar) receiving more credit from Irruvelpattu. Both villages have a higher percentage of indebted farming households than total agricultural households as land size decreases. The study also highlights that a significant number of marginal farming households in both regions primarily rely on informal credit sources, particularly for consumption purposes. This underscores the importance of understanding credit markets' dynamics in different agricultural contexts to effectively address the financial needs of rural communities.

KEYWORDS: Formal, Informal, sources of credit and size of farming.

INTRODUCTION

With almost half of the workforce employed and a substantial contribution to the nation's GDP, agriculture is the backbone of the Indian economy. Despite this, the sector faces many obstacles, such as irregular rainfall, volatile commodity prices, and limited access to modern farming techniques. One of the most important factors affecting agricultural sustainability and growth is the availability and management of agricultural credit, which enables farmers to invest in high-quality inputs, cutting-edge farming practices, and modern equipment, ultimately increasing productivity and income. However, an overreliance on debt, especially informal debt, can cause serious financial difficulties, including the problem of farmer indebtedness and agrarian distress.

The agricultural sector is a critical component of the Indian economy, and its growth has increased the need for credit in various aspects, especially in purchasing inputs for cultivation. To address this need, the government of India has initiated several programs to benefit the rural poor and provide timely credit facilities for purchasing inputs like fertilizer, seeds, and other necessities through microfinance and credit provided by banks such as the Punjab National Bank, Bank of Baroda, SHGs, and other sources. However, despite these programs, a considerable proportion of rural households still rely on informal credit sources. These informal credit markets are characterized by varying features in different regions, such as interest rates, availability, and collateral security. Borrowers who access credit from informal sources like moneylenders, landlords, traders, and employers are often exploited by high-interest rates. Friends and relatives are also common informal credit sources, but the role and nature of informal credit in rural agrarian markets are crucial. In light of this, there is an urgent need to improve access to formal credit facilities. As agricultural development continues, the demand for credit is expected to increase further, making it necessary to address the challenges of accessing formal credit facilities. Therefore, policymakers must work towards promoting formal credit facilities to reduce exploitation and improve the livelihoods of rural communities.

In this context, Tamil Nadu and Uttar Pradesh serve as compelling case studies due to their contrasting agricultural landscapes, socio-economic conditions, and credit structures. Tamil Nadu, a southern state with a diversified cropping pattern and significant irrigation infrastructure, showcases a well-developed cooperative credit network. In contrast, Uttar Pradesh, located in northern India, is characterized by a larger agrarian population with diverse landholding patterns and a significant dependency on informal credit sources.

By analysing variables such loan sources, credit accessibility, debt levels, and the socioeconomic effects on farmers, this comparative study seeks to understand the subtleties of agricultural credit and debt in both states. This study aims to shed light on these variations in order to offer possible policy recommendations for sustainable agricultural growth and financial inclusion, as well as insights into the larger opportunities and problems within India's agricultural loan system.

Agriculture remains a critical pillar of India’s economy, providing livelihood to nearly 58 per cent of the country’s population and contributing around 17-18 per cent to the national GDP. Despite its importance, the sector is highly vulnerable to various risks, including unpredictable weather patterns, fluctuating market prices, and limited access to modern agricultural practices. To address these challenges, agricultural credit plays a pivotal role in enabling farmers to invest in seeds, fertilizers, irrigation, machinery, and other essential inputs. However, the issue of debt often accompanies credit, with rising concerns about the burden of loans, especially among small and marginal farmers. Mismanagement of agricultural credit, high dependence on informal lenders, and increasing indebtedness have contributed to several instances of agrarian distress, even leading to farmer suicides in extreme cases.

In the Indian context, agricultural credit is primarily provided through formal institutions such as commercial banks, cooperative banks, and regional rural banks, supplemented by informal sources like moneylenders and local traders. The distribution of credit, however, is uneven across states, influenced by regional disparities in agricultural development, socio-economic conditions, literacy levels, and access to institutional finance.

Tamil Nadu and Uttar Pradesh present a sharp contrast in their agricultural credit landscape, making them ideal for a comparative study. Tamil Nadu, with its robust cooperative credit system and significant penetration of formal banking institutions, has a relatively better credit distribution network. The state also benefits from diversified cropping patterns, supported by extensive irrigation systems and agricultural reforms aimed at

improving farmer welfare. Conversely, Uttar Pradesh, with its vast agrarian population and predominantly small and marginal landholdings, faces a complex credit scenario. The reliance on informal credit sources is higher, and institutional credit penetration remains a challenge due to socio-economic factors, lower literacy rates, and inadequate financial infrastructure in rural areas.

LITERATURE REVIEW

Credit is used as an instrument to raise the capital required to increase farm productivity, income and welfare of farmers, particularly small and marginal farmers who lack the capital to buy necessary inputs in time for agricultural operation. But the question of whether the goals of credit policies were met still remains unanswered. This study, therefore, attempted to estimate the effect of farm credit on investment, input expenditure, income and other welfare indicators using national-level farm household survey data. We used the logit function to estimate the determinants of credit access and the propensity score matching algorithm to estimate the effect of credit policies. Results revealed that only 33 per cent of farmers have access to credit facilities and that middle-aged farmers and farmers with a larger farm size have shown a higher probability of accessing credit facilities, whereas farmers from underprivileged castes have shown the least probability of credit access. Nevertheless, credit access, overall, has significant positive effects on farm investments, such as land-building, livestock and machinery. It also has a significant positive effect on the farm revenue expenditure, including the expenditure on seeds, machinery, labour, irrigation, plant protection chemicals and livestock inputs. As a result, credit access has an incremental effect on farm income per hectare, livestock income and monthly consumption expenditure. The results imply that although farm credit policies have improved the welfare of beneficiary farmers, the credit distribution system seems to be inefficient as more than 60 per cent of farmers do not have access to credit. This demonstrates that there is a need for inclusive and holistic policy interventions to include all farmers in the credit system, specifically offering term loans to small and marginal farmers. Apart from this, it is also suggested that simplified crop loan and Kisan Credit Card facilities be made available to tenant farmers.

It's interesting to note that, as highlighted by Ekenta et al. (2019) and Nchuchuwe and Adejuwon (2012), a significant portion of farmers who have obtained loans tend to favour informal sources of credit over formal institutions. This includes sources such as friends, family members, and non-agricultural organizations, which are preferred due to their accessibility, ease of use, and timely disbursement of loans.

In a study conducted by Garikipati, Agier, Guerin, and Szafarz in Tamil Nadu's villages, it was found that the majority of Dalit women prefer informal sources of credit like instant loans and borrowing from friends and family. However, Self-Help Groups (SHGs) are advantageous for them as they are formal sources of credit, helping them to have reduced interest rates and maintain their self-respect while borrowing money. SHGs have provided women with the advantage of not having to turn to informal microfinance organizations to borrow money. This is especially beneficial as informal microfinance organizations can charge high interests and may scold the borrower if the loan is not repaid on time.

As noted by Pradhan (2013), despite the advancements made in recent years, more than 25 per cent of rural households in Nigeria still rely on informal loans. This is similar to the rural loan markets in China and India, which are characterized by a mix of formal and informal financing sources and market fragmentation. Despite the differences in formal and informal lending practices, such as size, duration, payback plan, and collateral requirements, farmers in Nigeria continue to seek funding from informal sources.

Kaushik Basu (1994) highlighted the significant linkages between rural credit institutions and technological progress in his study. The Green Revolution, which was a major agrarian change in India, demanded credit and altered the role of institutions. This

highlights the importance of credit institutions and their ability to support farmers in adopting new technologies and improving their agricultural practices.

The study conducted by M. Anjugam and Parthiban J J (2022) explains the relationship between agricultural credit and economic growth has been widely studied, with findings indicating a long-run positive association between India's agricultural GDP and agricultural credit. Empirical studies using the Granger causality test and Vector Error-Correction Model (VECM) suggest bidirectional causality, where agricultural credit drives growth, and increased GDP boosts credit demand. Research highlights the role of institutional credit in enhancing productivity through investments in inputs, machinery, and technology. Institutional loans significantly impact agricultural Gross Value Added (GVA), while informal credit sources remain a challenge due to high-interest rates and exploitative practices. Studies stress the need to expand formal credit channels, improve accessibility, and enhance financial literacy among farmers. Policy recommendations include reducing reliance on informal lenders, implementing regulatory measures, and establishing Credit Grievance Redressal forums. A shift towards market-based agricultural support is essential for sustainable growth. Future research should focus on improving credit risk assessment and financial inclusion strategies to strengthen the agricultural credit system and rural economic development.

OBJECTIVE

(a) Identify and compare the characteristics of households in Palanpur and Irruvelpattu that borrow credit.
(b) Determine and contrast the social groups that borrow credit between Palanpur and Irruvelpattu.
(c) Identify and compare the farm size credit borrowed by households between Palanpur and Irruvelpattu.

HYPOTHESIS

i. There is no association between caste and the sources of borrowing. In other words, the distribution of borrowing sources is the same across different caste groups.
ii. There is no association between caste and the purpose of borrowing. In other words, the distribution of borrowing purposes is the same across different caste groups.

DATABASE

The study was conducted in two villages that represent different economic backgrounds, namely Palanpur Uttar Pradesh and Irruvelpattu, Tamil Nadu. Purposive sampling was used to select 131 households from Palanpur and 215 from Irruvelpattu who were engaged in borrowing. Primary data was collected using a structured questionnaire and secondary information was gathered through a review of journals, articles, and websites. To ensure the accuracy and reliability of the collected data, a data-screening test was employed for validation. The study analyzed the percentage of total credit borrowed by each household, dividing them based on caste and farm size in both villages to identify differences. Moreover, the study categorized the farms into Marginal, Small, and Semi-Medium and divided the loans taken by the households into production and consumption loans.

METHODOLOGY

Simple percentage and Average

Simple Percentage and Average methods also used to interpret primary data which trends effectively. The Simple Percentagemethod is used to measure the proportion of farmers accessing institutional credit or facing debt burdens.

Correlation Matrix

Correlation coefficients between various sets of variables are displayed in a correlation matrix. There is a correlation between each of the table's random variables (Xi) and the other values (Xj). This indicates which two variables are most correlated. Since there is always a one-to-one connection between a variable and itself, the diagonal of the table is always made up of one.

RESULTS AND DISCUSSION

Major sources of Income and Occupation

Agricultural activity is the primary source of family income in Palanpur. The principal crops planted in Palanpur are urad, bajra, jowar, paddy, mustard, and sugarcane, which are crops grown in the Kharif season, and wheat, vegetables, and mentha, which are key crops grown in the Rabi season. Urad and bajra are combined crops. Wage/salaried income accounts for 13.9 per cent of households' income, with casual labour accounting for 10.4 per cent, other sources accounting for 10.0 per cent, and agricultural labour accounting for 3.5 per cent. If we take the general caste, agriculture accounts for 63.2 per cent of household income, whereas wage/salaried employment accounts for 28.07 per cent. When looking at the key sources of income for OBCs, the survey found that 67.86 per cent earn from cultivation, 10.7 per cent from salaried job, 12.5 per cent from other sources, and 5.36 per cent and 3.57 per cent earn from casual labour and Agricultural labourer, respectively. Within the SC group, cultivation accounts for 51.92 per cent of income, casual labour for 26.9 per cent, and other sources of income for 9.6 per cent, agricultural labour for 5.77 per cent, and wage/salaried employment for 5.77 per cent. Other castes rely on wage/salaried jobs for the majority of their income, with casual labour accounting for 30 per cent and other sources accounting for 20 per cent.

Casual work is anything people do to get within or outside the community, such as house construction, road construction, and so on. The majority of the important occupations are private jobs such as watchman, marble polishing, shop, and flour mill work, insurance agent, brick industry, electrician, rickshaw driver, and government jobs such as military service, FSS of Palanpur, railway work, and some professional jobs such as a teacher. Apart from these jobs, under the government's MGNREGS programme, which began in 2005, one adult male in a rural household is guaranteed 100 days of employment at a daily rate of Rs. 100. During the survey period, this came to Palanpur. This programme was not gone well as it was under hands of Palanpur Pradhan.

In Irruvelpattu, agricultural labour accounts for 51.45 per cent of household income, cultivation for 38.3 per cent, other sources for 11.56 per cent, wage/salaried employment for 1.45 per cent, and casual labour for 3.76 per cent. Similarly, when the survey looked at the OBC, the key sources of income were 64.29 per cent from agriculture, 14.29 per cent from other activities, 10.71 per cent from agricultural labour, and 7.14 per cent from wage and salary sources. Cultivation accounts for 47.93 per cent of MBC's income, agricultural labour accounts for 35.54 per cent, casual labour accounts for 7.44 per cent, and other forms of income account for 8.27 per cent. Other caste households earn 33.3 per cent of their income from agriculture and 66.7 per cent from other sources.

The majority of households in Irruvelpattu rely on agriculture for their living, either as cultivators or as agricultural labourers. Aside from that, much labour under the MGNREGA programme, requires one member of each family to work. There is a difficulty with MGNREGA employment; some households have complained about not receiving it. Everyone wants this job because it pays regularly and they get paid whether they work or not (here the supervision of work was not done properly). These individuals stay in the area and return once the work is completed. Even the elderly ladies and gentlemen participate in this

task, as they work for one to two hours before sitting in the shade of a tree and returning home. They have no one to watch them on a regular basis, therefore when they are tired, they sit to rest; they are not required to work continuously. However, in the case of work in Reddiyar households and other agricultural work, they are required to work without rest since the owner supervises them. As a result, many favour MGNREGA labour over other work. The MGNREGA job is only for a half-day in the afternoon, following which they switch to other agricultural activities for the rest of the season. As a result, they have a lot of job openings, which they prefer based on their family status and work schedule. Households working in the Reddiyar house and on the property will be unable to seek other employment. The occupation caste of oil pressers, barbers, and artisans was there in the village if reference to the early studies but when the survey was done such households were not found. According to the information, they have all shifted to different labour activities both within and outside the village, and the study can conclude that there has been a diversification of occupation in Irruvelpattu. Households also depend on occupations like teaching, work in a sugar mill, road and house construction, chamber work (brick making). Most of the SC community households, (they are generally comes under agricultural labour , but work for Reddiyar) work in Reddiyar house both in housekeeping and as agricultural labour; this includes both males and females. Some households working in the Reddiyar home are unable to go for employment, while others work because their parents prefer to work at the Reddiyar house in order to serve the Reddiyar. The main reason for this is that Reddiyar had given them property on which to build a house for their children, and his father had worked for Reddiyar's parents. The family's elders desire to serve the Reddiyar family for many generations, while the younger generation wants to pursue something else that will make them more money and allow them to settle down in life. Some have borrowed money to build a house, as well as for other consuming and agricultural activities, for which he must work and return Reddiyar's loan.

The SC community provides the majority of agricultural labour in Irruvelpattu. Some of these households are landless, while others have leased land. The MBC households in the main village work in agriculture and own or lease at least a half-acre of land. Those who have built houses on Reddiyar land want to work for him, while those who do not have Reddiyar land and live in the forest move out for work or work for someone else within the village, depending on the time and labour available. Because the latter group of households is not obligated to work for Reddiyar House (single landlord family). Males and females function in different ways. In Irruvelpattu, most children do not work as labourers. A female is responsible for sowing, harvesting, and cleaning the grass in the field. The man prepares the field before spreading the seed, performs irrigation work, and threshes. Only a small percentage of children work in agriculture. The majority of them are either going to school or staying at home. Outside and inside the community, the wage is likewise different. When compared to other work, Reddiyar pays a lower wage. The Reddiyar paid wage is determined by the labour or tenant relationship with him. Some agricultural labourers specialise in sugarcane harvesting, and as previously said, they receive a fair wage. These folks migrate to various towns and states, and they are aware of when sugarcane harvesting takes place. Because the harvesting season in other states differs from that in Tamil Nadu, they are able to labour throughout the year.

The study has analyzed the access to credit in both Palanpur and Irruvelpattu villages, focusing on formal and informal loans. The two main indicators used in the study were formal loans and informal loans total outstanding, as well as the purpose of borrowing. The study also disaggregated and reported data on selected household-level indicators by caste and socio-economic class, which included calculating the average debt per household in each caste and socio-economic class.

These findings provide a detailed insight into the credit situation in the two villages and how it varies across different socio-economic groups. This information could be useful in identifying the gaps in access to credit and designing policies to promote greater financial inclusion.

The major caste in the village of Palanpur are Thakur, Murao, Dhimar, Gadaria, Dhobi, Teli, Passi, Jatab, and others, where Teli are Muslims and fall under the OBC category. Thakur comes under general categories population controls the village people and also owns more property, while OBC is the working class (especially in agriculture here most of them are Murao), and SC is involved in both agricultural and other casual labour jobs (mostly are Jatab). Over all the caste of the village can be divided as General (28.4 per cent), OBC (45.3 per cent), and SC (22.5 per cent). In Irruvelpattu, there is just one religion: Hinduism and the majority of Hindus belong to the MBC and SC categories, accounting for 34.9 per cent and 56.07 per cent, respectively, with only 8.09 per cent belonging to the OBC category. Padiyal, Reddiyar, Naidu and Vanniyar are the primary castes, with Naidu being under OBC and Reddiyar being the dominant caste in the village for a long time, as seen by earlier surveys, whereas the OBC population fell in the current census. Vanniyar, an MBC caste, makes up the majority of the population of only Uur (also known as the main village), whereas Padiyal, an SC caste, is situated in separate colonies and contributes to the majority of the population. Padiyal[1] is a traditional practise in which if one family works for the Reddiyar family, then the same family members work for the Reddiyar family from generation to generation, (Padiyal means they get a one-time meal, and kind measurement from which paddy is given to the family works) they mostly work for Reddiyar families, and there was much social discrimination and restriction for some Padiyal works in the past, but now in the present survey has been reduced. In case of OBC some has leased their land out, and just a few people are doing so on their own**.**

Table 1

Number of indebted households, Palanpur and Irruvelpattu

Variables	Palanpur	Irruvelpattu
Total number of household involved in borrowing (%)	56.7	62.1
Average debt outstanding per household (Rs)	12271	17,939
Number of households borrowed from Formal sources (%)	32.82	37.2
Number of households borrowed from Informal sources (%)	67.18	62.79
Percentage of households borrowed for production (%)	23.4	22.5
Percentage of households borrowed for consumption (%)	76.6	77.5

Source: filed survey

It's critical to note that in Palanpur; around 56.7 per cent of households were indebted, with an average outstanding amount of Rs. 12,271 (table 1). Out of this debt, only 32.82 per cent came from formal sources, while the rest came from informal sources. Additionally, around 23.4 per cent of households borrowed for production purposes, while 76.6 per cent borrowed for consumption purposes.These statistics are concerning and highlight the need to provide adequate formal financial support to households in Palanpur. Encouraging formal borrowing and investing in production-based loans can be a game-changer for these households.

Similarly, in Irruvelpattu, around 62.1 per cent of households were indebted, with an average outstanding amount of Rs. 17,939 (table 1). Out of this debt, only 37.2 per cent came from formal sources, while the rest came from informal sources. Additionally, around 22.5 per cent of households borrowed for production purposes, while 77.5 per cent borrowed for consumption purposes. In Irruvelpattu, among major part of amount is borrowed from Parriyars (SC) from informal sources. Table 2 and Table 3 reveal a fascinating insight into

the borrowing habits of households in Palanpur and Irruvelpattu. Regardless of social status, informal sources accounted for the majority of a household's total debt. Although money lenders, friends, and relatives were common sources of borrowing for both villages, interest rates and accessibility varied. In Irruvelpattu, the landlord's role in providing loans was essential, whereas in Palanpur, villagers had to travel to nearby cities to access informal sources. Nonetheless, access to these sources didn't differ much across social groups. The borrowing patterns in Palanpur and Irruvelpattu are quite concerning. In Palanpur, a staggering 59.2 per cent of people are relying on money lenders, friends, and relatives for loans, with money lenders holding the upper hand with almost 40 per cent of the market share. In Irruvelpattu, the situation is not much better, as people are mostly borrowing from money lenders and friends and relatives, with landlords also having a significant influence. These patterns highlight the need for better financial services and support systems in these regions, to ensure that people are not trapped in debt cycles and can access fair and affordable credit options.

In Palanpur, the General caste had the highest outstanding debt from formal sources, like PNB and Seed Stores, whereas OBC had the most from informal sources. Similarly, in Irruvelpattu, commercial banks and SHGs provided greater access to formal sources. The availability of microfinance options made formal sources more accessible to villagers.

Table 2

Number of indebted households, by social group, Palanpur and Irruvelpattu

Variables	Palanpur			Irruvelpattu		
	General	OBC	SC	MBC	OBC	SC
Total number of household involved in borrowing (%)	22.3	50.8	26.9	33.3	5.16	61.5
Average debt outstanding per household (Rs)	15,845	13,453	6,003	18,697	25,909	16,589
Number of households borrowed from Formal sources (%)	10.8	19.2	3.1	11.3	2.3	23.9
Number of households borrowed from Informal sources (%)	11.5	31.5	23.8	22.1	2.8	37.6
Percentage of households borrowed for production (%)	5.6	12.1	5.6	7.5	0.9	5.6
Percentage of households borrowed for consumption (%)	16.9	37.9	21.8	22.1	3.8	51.6

Source: filed survey

Table 3

Number of indebted households, by sources and social group, Palanpur and Irruvelpattu

Villages	Sources	CASTE			
		General	OBC	SC	Total
	Formal				
	FSS/Seed Store	3.80	2.30	1.50	7.70
PALANPUR	PNB	6.90	16.90	1.50	25.30

	Total	10.80	19.20	3.00	33.00
	Informal				
	Money lender	6.2	17.7	16.2	40.0
	Friends/Relatives	3.1	10.0	6.2	19.2
	Others	2.3	3.8	1.5	7.7
	Total	11.5	31.5	23.8	66.9
IRRUVELPATTU		CASTE			
	Sources	MBC	OBC	SC	Total
	Formal				
	SHG	9.9	1.9	22.1	33.8
	other commercial Banks	1.4	0.7	1.9	3.8
	Total	11.3	2.3	23.9	37.6
	Informal				
	Money lender	7.99	0.7	7.5	15.96
	Landlord	7.5		13.15	20.66
	Friends/Relatives	6.6	2.3	16.9	28.8
	Total	22	3	38	62

Source: filed survey

Table 4 and Table 5 show variation among socio-economic classes. Cultivating households were categorized into small farmers, marginal farmers, and semi-medium farmers. Landless and marginal farmers held less land compared to small, medium, and semi-medium farmers. In Palanpur, 77.1 per cent of households were marginal farmers, followed by small farmers at 10.69 per cent, and landless individuals at 9.9 per cent and in Irruvelpattu, 73.5 per cent of households were Landless labourers, followed by Marginal farmers at 23.26 per cent, and Small farmers at 2.35 per cent.

Did you know that social class affects access to formal sector credit? It's true, and Palanpur is a perfect example. Landowners in Palanpur are receiving formal loans based on their landholdings, while the poor, landless, and tenants are being left behind to resort to informal sources. Loans borrowed from the formal sector by three landowner households amounted to only 22.1 per cent among marginal farmers and 8.3 per cent among small farmers. The average outstanding debt of a semi-medium farmer was Rs 46,666, small farmers had an average outstanding debt of Rs 2, 0071, marginal farmers' outstanding debt was Rs 10,427, and landless labourers had an outstanding debt of Rs 10262. And to add insult to injury, in Palanpur, 54.96 per cent of marginal farmers and 9.2 per cent of landless households are borrowing from informal sources.

But it's clear that there is a better way. In Irruvelpattu, the formal sources of credit are accessible to all categories, including the landless, unlike in Palanpur. The loans borrowed from the formal sector by three landowner households amounted to 27.9 per cent among landless people and 7.44 per cent among marginal farmers. The average outstanding debt of a semi-medium farmer was Rs 80,000, small farmers had an average outstanding debt of 20000, marginal farmers' outstanding debt was Rs 19,283, and landless labourers had an outstanding debt of Rs 16535. And while 45.6 per cent of landless people and 15.8 per cent

of marginal farmer's households are still borrowing from informal sources, there is clearly hope for a brighter future.

Let's work together to make sure that everyone, regardless of social class, has access to the formal sector credit they need to succeed.

These findings underscore the need for policies and interventions that address the challenges faced by marginalized farmers and landless individuals. By providing targeted support, we can empower these groups and ensure that they too can benefit from the growth and development of the agricultural sector.

Table 4

Number of indebted households, by farm size, Palanpur

Variables	Palanpur			
	Landless	Marginal Farmers	Small Farmers	Semi-Medium
Total number of household involved in borrowing (%)	9.9	77.1	10.69	2.29
Average debt outstanding per household (Rs)	10262	10427	20071	46666
Number of households borrowed from Formal sources (%)	0.76	22.14	8.39	1.53
Number of households borrowed from Informal sources (%)	9.2	54.96	2.3	0.8
Percentage of households borrowed for production (%)	1.53	15.27	4.6	0.76
Percentage of households borrowed for consumption (%)	7.6	58.01	5.34	1.53

Source: filed survey

Table 5

Number of indebted households, by farm size, Irruvelpattu

Variables	Irruvelpattu			
	Landless	Marginal Farmers	Small Farmers	Semi-Medium
Total number of household involved in borrowing (%)	73.5	23.26	2.35	0.004
Average debt outstanding per household (Rs)	16535.6	19283	40000	80000
Number of households borrowed from Formal sources (%)	27.9	7.44	0.93	0.004
Number of households borrowed from Informal sources (%)	45.6	15.8	1.4	
Percentage of households borrowed for production (%)	3.8	13.1	0.54	
Percentage of households borrowed for consumption (%)	79.2	8.74	1.092	0.55

Source: filed survey

Conclusion: Although formal credit has expanded in these villages over the last 30 years, it is concerning that the informal sector of credit still thrives. This highlights the fact that there is still a long way to go in achieving financial inclusion for these communities. The issue of household indebtedness remains a recurring problem, and it is clear that the expansion of formal credit has not been enough to eradicate the influence of informal lenders. It is important

to address this issue and work towards providing equitable access to formal credit to help improve the financial well-being of these communities.

Most in both the village rely on informal lenders for credit, especially manual workers and oppressed groups. This dependence causes high interest rates, exploitation, and debt traps. We must create equitable financial systems for all to avoid these consequences.

In Palanpur and Irruvelpattu, landless labourers face significant inequality in accessing formal credit. In Irruvelpattu, where informal credit borrowing is common, landless labourers comprise 73.5 per cent of households but only 27.9 per cent of outstanding formal credit. In Palanpur, landless labourers comprise 9.9 per cent of all households but account for only 0.6 per cent of outstanding formal credit. In Irruvelpattu, some Scheduled Caste and MBC groups have experienced labour bondage when borrowing from landlords due to the landlord domination history. However, SHGs and other small microfinance initiatives have enabled landless labourers in Irruvelpattu to access formal loans.

The inequality of access to formal credit has significant implications, as formal and informal sector loans differ in size, frequency of loans, purposes, collateral, and interest rates. Although interest-free borrowing from "friends and relatives" is an exception, the interest rate on informal loans is much higher than on loans from banks and cooperatives. The surveys conducted in Palanpur and Irruvelpattu indicate that access to formal credit remains unequal, with landless labourers and socially deprived groups excluded from formal credit and left dependent on informal lenders.

i. There is no association between caste and the sources of borrowing. In other words, the distribution of borrowing sources is the same across different caste groups.

Palanpur

CASTE	SOURCES OF BORROWING		Total
	Formal	Informal	
GENERAL	**14**	**15**	**29**
OBC	**25**	**41**	**66**
SC	**4**	**32**	**36**
Total	**43**	**88**	**131**
Chi-Square Tests			
Test	**Value**	**Df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	11.602a	2	0.003
Likelihood Ratio	12.966	2	0.002
N of Valid Cases	131		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.52.			

This means the chi-square test was likely used to see if different caste groups have different patterns in where they obtain loans or credit (e.g., banks, moneylenders, family/friends, etc.). Given the Pearson Chi-Square value of 11.602 with 2 degrees of freedom and a p-value (Asymp. Sig. 2-sided) of 0.003, we would reject the null hypothesis at the conventional alpha level of 0.05. This suggests that there *is* a statistically significant association between caste and sources of borrowing in your data.

Irruvelpattu

SOURCES OF BORROWING			
CASTE	FORMAL	INFORMAL	Total
MBC	23	47	70
OBC	5	6	11

SC	52	82	134
Total	80	135	215
Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.034a	2	0.596
Likelihood Ratio	1.035	2	0.596
N of Valid Cases	215		
a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.09.			

The crosstab shows the relationship between **CASTE** (categorized as MBC, OBC, and SC) and **SOURCES OF BORROWING** (categorized as FORMAL and INFORMAL). The numbers in the table represent the count of individuals belonging to each caste group who have borrowed from either formal or informal sources.

- MBC (Most Backward Class): **Out of 70 individuals from the MBC category, 23 borrowed from formal sources and 47 borrowed from informal sources.**
- OBC (Other Backward Class): **Out of 11 individuals from the OBC category, 5 borrowed from formal sources and 6 borrowed from informal sources.**
- SC (Scheduled Caste): **Out of 134 individuals from the SC category, 52 borrowed from formal sources and 82 borrowed from informal sources.**
- Total: **Across all caste categories, 80 individuals borrowed from formal sources and 135 borrowed from informal sources, totaling 215 individuals in the sample.**
- **Chi-Square Tests:**
- The chi-square test is used to determine if there is a statistically significant association between the two categorical variables (CASTE and SOURCES OF BORROWING).
- Pearson Chi-Square Value: **1.034**
- Degrees of Freedom (df): **2 (This is calculated as (number of rows - 1) * (number of columns - 1) = (3 - 1) * (2 - 1) = 2 * 1 = 2)**
- Asymptotic Significance (p-value): **0.596**

Interpretation:

The p-value of 0.596 is much greater than the conventional significance level of 0.05. This means that we fail to reject the null hypothesis**.**

In practical terms, based on this data and the chi-square test, there is no statistically significant association between caste and the sources of borrowing**.** In other words, the pattern of borrowing from formal versus informal sources does not significantly differ across the MBC, OBC, and SC caste groups in this sample.

Important Note:

The footnote "1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.09" indicates that one of the cells in the expected frequency table had a count slightly below 5. While this doesn't necessarily invalidate the results, it's a point to consider. Chi-square tests can be less reliable when a significant proportion of cells have expected counts below 5, especially if the minimum expected count is very low. In this case, with only one cell slightly below 5 and a minimum expected count of 4.09, the impact on the overall conclusion is likely minimal, but it's worth noting for a more rigorous analysis with larger datasets.

In summary, while there are numerical differences in the borrowing patterns across caste groups in the crosstab, the chi-square test suggests that these differences are not statistically

significant enough to conclude a real association in the broader population from which this sample was drawn.

ii. There is no association between caste and the purpose of borrowing. In other words, the distribution of borrowing purposes is the same across different caste groups

Palanpur

PURPOSE OF BORROWING				
CASTE	**Production**	**Consumption**	**Both**	**Total**
GENERAL	7	21	1	29
OBC	15	47	4	66
SC	7	28	1	36
Total	29	96	6	131

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	.974a	4	0.914
Likelihood Ratio	0.996	4	0.91
Linear-by-Linear Association	0.098	1	0.754
N of Valid Cases	131		
a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 1.33.			

Given the Pearson Chi-Square value of 0.974 with 4 degrees of freedom and a p-value (Asymp. Sig. 2-sided) of 0.914, we would fail to reject the null hypothesis at the conventional alpha level of 0.05.

In practical terms, based on this test, there is not enough statistical evidence to conclude that there is a significant association between caste and the purpose for which people borrow money in your data.

Irruvelpattu

PURPOSE OF BORROWING				
CASTE	Production	Consumption	Both	Total
MBC	16	46	8	70
OBC	2	8	1	11
SC	14	111	9	134
Total	32	165	18	215

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	**7.849a**	**4**	**0.097**
Likelihood Ratio	**7.62**	**4**	**0.107**
N of Valid Cases	**215**		
a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is .92.			

Interpretation

The p-value = 0.097, which is greater than 0.05, so there is no statistically significant association between caste and purpose of borrowing at the 5% significance level. If using a 10% threshold ($p < 0.10$), the result is marginally significant, suggesting a possible weak association. Although not statistically significant at the 5% level, the data reveals possible differences in borrowing purposes among caste groups. For instance, SC individuals show a high preference for consumption borrowing (111 out of 134, ie 83%). MBC have a more

balanced distribution, with a notable portion borrowing for production or both**.** OBC numbers are small.

REFERENCES

1. Anjugam M. and Parthiban J.J (2022). An Economic Analysis of Agricultural Credit-led Agricultural Growth in India. Asian Journal of Agricultural Extension, Economics & Sociology 40(5): 38-49, 2022; Article no.AJAEES.84570 ISSN: 2320-7027
2. Basu Kaushik (1994). Rural Credit and Interlinkage: Implications for Rural Poverty, Agrarian Efficiency, and Public Police Critical Issues In Asian Development Theories, Experiences and Policies Edited by M.G. Quibria Published for the Asian Development Bank by Oxford University Press Hong Kong Oxford University Press Oxford New York 1995.
3. Bell, C. & Srinivasan T. N. (1989). Interlinked Transactions in Rural Markets: An Empirical Study of Andhra Pradesh, Bihar and Punjab. Oxford Bulletin of Economics and Statistics, Vol 51 No 1 pp 43-83.
4. Brindha Natarajan, S Rajarajeswari, R Subbhammal, P Niranjana Devi.,(2025),
5. 'Analyzing The Performance Of Private And Public Sector Banks In India' European
6. Economic Letters, ISSN 2323-5233, Vol 15, Issue 3 (2025), http://eelet.org.uk.
7. Brindha Natarajan, B Roja, B Umamaheswari, R Karthik. Evaluation of selected biotech herbal products using porter's five forces model: A review. Int J Appl Res 2025;11(11):24-31. DOI: 10.22271/allresearch.2025.v11.i11a.12979
8. Dhanasekar Dhamotharan, Natarajan Rengaraju, Brindha Natarajan, S.Sedhulakshmi and S.Vijitha Sheli (2026) 'Impact of ESG on Profitability and Firm Value: An Empirical Study ofIndian Companies Under BRSR Framework' International Journal of Scientific Research in Engineering and Management (IJSREM), Volume: 10 Issue: 01, Jan - 2026 SJIF Rating: 8.586 ISSN: 2582-3930, Pp 1-12.
9. Dhanasekar Dhamotharan, Brindha Natarajan, S Soundarya, S Rajarajeswari, K Kavyashree. Analyzing valuation dynamics in non-banking financial companies: A Tobin's Q approach. Int J Res Finance Manage 2025;8(2):151-156. DOI: 10.33545/26175754.2025.v8.i2b.540.
10. Ekenta L.U., Onu F.M., Ezebuiro F.N., Ikehi M.E., Omeje B.A. &Ibekwe N.F. (2019). Utilization of Financial Resources for Sustainable Development by Micro, Small and Medium Agricultural Enterprises in Enugu State, Nigeria. International Journal of Humanities and Social Science, 9(5) 178-183. doi:10.30845/ijhss.v9n5p22
11. Garikipati, Agier, Guerin, and Szafarz (2014). Microfinance, Debt and Over-Indebtedness, Juggling with money. Routledge, Taylor & Francis Group, London and New York.
12. S Gnanaprakesh, S Soundarya, TC Kaviya. Creating uncontested market space: A study of blue ocean strategy applications on Indian enterprises in the recent decade. Int J Res Marketing Manage Sales 2025;7(2):455-459. DOI: 10.33545/26633329.2025.v7.i2e.320
13. Jayaraman, S. (2025). Environment Centric Sustainable Management Framework Integrating Lifecycle Analysis and Material Flow for Industrial Applications. Anusandhanvallari, 725-735.
14. Kumar, A., Singh, K. M., & Sinha, S. (2010). Institutional credit to agriculture sector in India: Status, performance and determinants. Agricultural Economics Research Review, 23(2), 253-26.
15. Mohan, R. (2006). Agricultural credit in India: Status, issues and future agenda. Economic and Political Weekly, 1013-1023.

16. Nchuchuwe, F.F &Adejuwon, K.D (2012). The Challenges of agriculture and rural development in Africa: The case of Nigeria. International Journal of Academic Research in Progressive Education and Development. 1(3), 2226-6348
17. Pradhan, N. C. (2013). Persistence of Informal Credit in Rural India: Evidence from All-India Debt and Investment Survey and Beyond. RBI Working Paper Series; WPS (DEPR): 05 / 2013. Department of Economic and Policy Research. Reserve Bank of India.
18. Sarap, K. (1990). Factors affecting small farmers' access to institutional credit in rural Orissa, India. Development and Change, 21(2), 281-307.
19. S Rajarajeswari, S Gajalakshmi, S Soundarya. Unveiling NBFC performance: A DuPont analysis of key Indian Non-Banking Financial Companies. Asian J Manage Commerce 2025;6(2):1847-1855. DOI: 10.22271/27084515.2025.v6.i2t.919
20. Yuan, Y. & Gao, P. (2012), Farmers' financial choices and informal credit markets in China, China Agricultural Economic Review, 4(2), 216-232. https://doi.org/10.1108/17561371211224791

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PERSONALITY TRAITS AND VOTING BEHAVIOUR IN THE INDIAN CONTEXT: A CONCEPTUAL PSYCHOLOGICAL FRAMEWORK

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ABSTRACT

Voting behaviour is a complex psychological phenomenon influenced by individual differences, emotional tendencies, cognitive styles, and sociocultural factors. Among these, personality traits play a significant role in shaping political attitudes, civic engagement, and electoral decision-making. The present conceptual study explores the relationship between personality traits and voting behaviour within the Indian context. Drawing upon trait theories such as the Big Five Personality Model and frameworks from political psychology, this paper examines how enduring personality characteristics influence political interest, ideological orientation, and voting participation. The Indian sociocultural context—characterized by collectivism, social identity, cultural diversity, and regional influences—is conceptualized as a moderating factor that interacts with personality traits in shaping voting behaviour. This study adopts a non-partisan psychological approach, viewing voting as a form of decision-making behaviour rather than political endorsement. The conceptual framework presented provides a theoretical foundation for understanding electoral behaviour in India and offers directions for future empirical research.The study proposes a conceptual model outlining pathways through which personality traits influence voting behaviour, moderated by sociocultural factors (Caprara & Zimbardo, 2004; Mondak et al., 2010) (McCrae & Costa, 1997).

KEYWORDS: Personality Traits, Voting Behaviour, Political Psychology, Decision-Making, Indian Context.

INTRODUCTION

Human behaviour is shaped by stable psychological characteristics that influence how individuals think, feel, and act across situations. Personality traits represent enduring patterns that guide perception, emotional responses, and behavioural tendencies. These traits play an

important role not only in interpersonal relationships and mental health but also in broader social behaviours such as political participation and voting (Allport, 1961).

Voting behaviour is a critical expression of civic engagement in democratic societies. While voting is often viewed as a rational or ideological act, psychological research suggests that it is also influenced by personality-based tendencies such as openness to change, need for structure, emotional regulation, and social orientation. In India, the world's largest democracy, voting behaviour is embedded within a complex sociocultural environment shaped by diversity in language, caste, religion, region, and community identity (Caprara & Zimbardo, 2004; Mondak et al., 2010).

This conceptual study aims to examine the role of personality traits in influencing voting behaviour within the Indian context. By adopting a psychological and non-political lens, the paper seeks to understand voting as a behavioural outcome shaped by individual personality differences interacting with sociocultural factors. The present study integrates trait theory and political psychology to conceptualize voting behaviour as a psychological decision-making process.

Background of the Study

Personality psychology has consistently demonstrated that individual differences influence a wide range of behaviours, including decision-making, risk perception, social attitudes, and civic engagement. Trait theories, particularly the Big Five Personality Model—Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism—have been widely used to explain behavioural patterns across cultures (McCrae & Costa, 1997).

Research in political psychology indicates that personality traits are associated with political interest, ideological preferences, tolerance for ambiguity, and participation in political processes such as voting. For instance, openness to experience has been linked to curiosity and acceptance of diversity, while conscientiousness is associated with rule-following, duty, and consistent participation in elections.

In the Indian context, voting behaviour is influenced not only by individual psychological traits but also by sociocultural factors such as family influence, group identity, cultural norms, and social expectations. These contextual influences interact with personality traits, shaping how individuals engage with political information and make voting decisions. Understanding this interaction is essential for a comprehensive psychological understanding of voting behaviour in India.

Need for the Concept

Most studies on voting behaviour in India have focused on sociological, demographic, or political determinants such as caste, religion, party affiliation, and leadership. While these factors are important, they often overlook the psychological processes underlying individual voting decisions.

There is a need for a conceptual psychological framework that integrates personality traits with voting behaviour while accounting for the Indian sociocultural context. Such an approach allows for a deeper understanding of voting as a form of decision-making behaviour rather than merely a political act. This conceptual study addresses this gap by focusing on personality traits as key psychological predictors of voting behaviour.

CONCEPTUAL FRAMEWORK

The present conceptual framework is grounded in trait theory and political psychology. Personality traits are viewed as stable dispositions that influence cognitive styles, emotional responses, value orientations, and social behaviour.

Personality Traits influence:

- Cognitive processing of political information
- Emotional responses to political uncertainty

- Value orientation and moral reasoning
- Social interaction and political discussion

These psychological processes shape **Voting Behaviour**, including political interest, participation, and decision-making style.

The **Indian Sociocultural Context**—including collectivism, family influence, social identity, cultural norms, and regional diversity—is conceptualized as a moderating factor that influences how personality traits are expressed in voting behaviour.

Conceptual Flow:

[Personality Traits]
↓
(Influence cognition, emotion, and values)
↓
[Political Attitudes & Decision-Making Style]
↓
[Voting Behaviour]
↕
[Indian Sociocultural Moderators]

Proposed Conceptual Propositions

Proposition 1: Personality traits significantly influence political interest and engagement by shaping cognitive processing, emotional responses, and value orientations.

Proposition 2: Individuals high in openness to experience are more likely to exhibit political curiosity, tolerance for ideological diversity, and flexible voting decisions.

Proposition 3: Conscientiousness is associated with consistent voting participation and adherence to civic responsibility.

Proposition 4: Extraversion influences voting behaviour indirectly through increased political discussion and social engagement.

Proposition 5: Neuroticism affects voting behaviour through heightened emotional sensitivity to political uncertainty and threat perception.

Proposition 6: The Indian sociocultural context moderates the relationship between personality traits and voting behaviour by shaping how traits are expressed within collectivist and group-based decision-making environments.

METHODOLOGY (Conceptual Approach)

This study follows a conceptual and narrative literature review design. Research articles published between 2005 and 2025 were reviewed using databases such as Google Scholar, PubMed, ScienceDirect, ResearchGate, and JSTOR.

Key search terms included personality traits, voting behaviour, political psychology, Big Five personality, electoral behaviour, and Indian voting behaviour. The literature was examined to identify theoretical models, empirical findings, and recurring conceptual themes linking personality traits with voting behaviour.As a conceptual study, no statistical analysis was conducted, this study synthesizes existing research to develop a coherent conceptual understanding relevant to the Indian context (McCrae & Costa, 1997).

DISCUSSION

Personality Traits and Voting Behaviour

Empirical research suggests that personality traits influence political engagement and voting behaviour. Openness to experience is associated with political curiosity and acceptance of new ideas, whereas conscientiousness predicts consistent participation and adherence to civic duties. Extraversion is linked to political discussion and social engagement, while neuroticism influences emotional responses to political uncertainty.

Personality Traits and Political Decision-Making

Personality traits shape how individuals process political information and make decisions. Individuals high in openness may seek diverse viewpoints, whereas those high in conscientiousness may prefer stability and tradition. These differences influence decision-making styles rather than specific political choices.

Indian Sociocultural Context

In India, voting behaviour is deeply embedded in social and cultural structures. Family expectations, community norms, and group identity often play a significant role in voting decisions. Personality traits interact with these sociocultural influences, shaping how individuals express political preferences within a collectivist framework.

Integrated Conceptual Understanding

An integrated perspective suggests that personality traits indirectly influence voting behaviour through cognitive and emotional processes, moderated by sociocultural factors. Voting behaviour emerges from the dynamic interaction between individual psychological characteristics and the broader social environment.

Overall, the findings suggest that personality traits do not determine political choices directly but shape how individuals engage with political information, regulate emotions, and navigate sociocultural influences during electoral decision-making.

CONCLUSION

This conceptual study highlights the importance of personality traits in understanding voting behaviour within the Indian context. Voting is conceptualized as a psychological decision-making process influenced by stable personality characteristics and moderated by sociocultural factors. By adopting a non-partisan psychological approach, this study contributes to political psychology literature and encourages future empirical research in Indian populations.

IMPLICATIONS

- Provides a psychological framework for studying voting behaviour in India.
- Encourages interdisciplinary integration of personality psychology and political psychology.
- **For political psychologists and researchers it** encourages culturally sensitive personality-based models in non-Western democracies
- Offers insights for civic education and voter awareness initiatives.
- Lays groundwork for future empirical research.

LIMITATIONS

- Conceptual nature limits empirical validation
- Reliance on secondary literature
- Limited India-specific personality-based voting studies

Future research may empirically test the proposed framework across diverse Indian populations.

REFERENCES

1. Alford, J. R., Funk, C. L., & Hibbing, J. R. (2005). Are political orientations genetically transmitted? *American Political Science Review, 99*(2), 153–167.
2. Allport, G. W. (1961). Pattern and growth in personality. Holt, Rinehart & Winston.
3. Anand, P. K., & Reddy, S. (2024). Psychosocial factors influencing voting behaviour. *Journal of Social Sciences*.
4. Barbaranelli, C., Caprara, G. V., Vecchione, M., & Fraley, R. C. (2016). Personality traits, political attitudes and vote choice. *Electoral Studies, 41*, 54–64.
5. Caprara, G. V., & Zimbardo, P. G. (2004). Personalizing politics. *American Psychologist, 59*(7), 581–594.
6. Caprara, G. V., & Zimbardo, P. G. (2004). Personalizing politics: A congruency model of political preference. American Psychologist, 59(7), 581–594.

7. Caprara, G. V., Barbaranelli, C., & Zimbardo, P. G. (2002). When parsimony subdues distinctiveness: Simplified public perceptions of politicians' personality. *Political Psychology, 23*(1), 77–95.
8. Gerber, A. S., Huber, G. A., Doherty, D., & Dowling, C. M. (2011). The Big Five personality traits in the political arena. Annual Review of Political Science, 14, 265–287 (McCrae & Costa, 1997).
9. Gerber, A. S., Huber, G. A., Doherty, D., Dowling, C. M., & Ha, S. E. (2010). Personality and political attitudes. *American Political Science Review, 104*(1), 111–133.
10. Hazarika, B. (2015). Voting behaviour in India and its determinants. *Indian Journal of Political Science, 76*(2), 345–358.
11. McCrae, R. R., & Costa, P. T. (1997). Personality trait structure as a human universal. American Psychologist, 52(5), 509–516.
12. McCrae, R. R., & Costa, P. T. (2008). The five-factor theory of personality. In O. P. John et al. (Eds.), *Handbook of personality*.
13. Mondak, J. J. (2010). *Personality and the foundations of political behavior*. Cambridge University Press.
14. Mondak, J. J., & Halperin, K. D. (2008). A framework for the study of personality and political behaviour. *British Journal of Political Science, 38*(2), 335–362.
15. Mondak, J. J., Hibbing, M. V., Canache, D., Seligson, M. A., & Anderson, M. R. (2010). Personality and civic engagement. American Political Science Review, 104(1), 85–110.
16. Paramasivan C & Ravichandiran G (2022), A Study on Technology Driven Innovation Practices in Banking Sector in Tiruchirappalli District, International Journal of Early Childhood Special Education. 2022, Vol. 14 Issue 5, p3949-3959. 11p
17. Paramasivan C & Ravichandiran G (2022), Financial Performance of Commercial Banks In India, Journal of the Oriental Institute M.S. University of Baroda, Vol. 71, Issue. 02, No.4, April-June
18. Turska-Kawa, A. (2013). Big Five personality traits model in electoral behaviour studies. Romanian Journal of Political Science, 13(2), 36–55 (McCrae & Costa, 1997).
19. Vecchione, M., Schoen, H., González-Castro, J. L., Cieciuch, J., & Caprara, G. V. (2011). Personality correlates of party preference. *Political Psychology, 32*(2), 277–307.

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IMPACT OF MOBILE BANKING SERVICE QUALITY ON CONTINUOUS USAGE INTENTION OF BANKING SERVICES AMONG THE CUSTOMERS IN CHENNAI CITY

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ABSTRACT

The banking industry has changed significantly due to the rapid growth of digital technologies and the increasing use of smartphones. This has led to the widespread use of mobile banking services. With mobile banking, customers can easily perform a variety of financial tasks, such as transferring money, paying bills, and managing their accounts, all through mobile apps. In this situation, the quality of mobile banking services is very important to how customers perceive them and whether they want to keep using them. The current study seeks to investigate the influence of mobile banking service quality on customers' intention to persist in utilizing banking services in Chennai City. The study utilized a descriptive research design and incorporated both primary and secondary data sources. The primary data were gathered from 391 banking customers in Chennai City who used mobile banking services via a structured questionnaire. We used statistical tools such as the one-sample t-test and regression analysis to analyze the data we collected. The study's results showed that customers have a very good opinion of the quality of mobile banking services. The results also showed that the quality of mobile banking services has a strong positive effect on customers' intentions to continue using these services. The study shows that mobile banking apps need to be reliable, safe, responsive, and easy to use in order to keep customers using digital banking services. The study's findings offer significant insights for banks and financial institutions to improve the quality of mobile banking services, thereby enhancing customer satisfaction and promoting continued usage.

KEYWORDS: Mobile Banking, Service Quality, Continuous Usage Intention, Customer Perception, Digital Banking Services, Chennai City.

INTRODUCTION

The rapid growth of digital technology and the rise of smartphones have transformed the banking industry in India, making mobile banking services very popular. Customers can complete many financial transactions through mobile apps without going to the bank, such as transferring money, paying bills, checking balances, and managing accounts. More and more people in India are using smartphones that can connect to the internet, and the government's efforts to make digital banking available to everyone have sped up the adoption of mobile banking. Because of this, mobile banking has become an important way for banks to offer customers quick, easy, and affordable services in the digital age. **(Basu, 2024; Agrawal, 2025)**.

The success of mobile banking services, however, depends not only on how many people start using them but also on how many continue to use them, indicating that they are willing to use them regularly. Many factors affect someone's intention to keep using a service, such as how useful they find it, how much they trust it, how satisfied they are, and, especially, how good the mobile banking services banks offer are. Service quality in mobile banking means how reliable, safe, responsive, efficient, and user-friendly mobile banking apps are. These factors affect how customers feel about digital banking services overall. Research indicates that superior service quality increases customer satisfaction and motivates clients to persist in utilizing mobile banking services for their financial transactions. **(Nguyen & Dao, 2024)**.

Recent Indian studies indicate that service quality dimensions, including security, convenience, usability, and transaction efficiency, profoundly affect customer satisfaction and loyalty regarding mobile banking services. For example, a study of Indian banking customers found that security, convenience, and ease of use are all very important for keeping customers happy and using mobile banking services. **(Agrawal, 2025)**. Furthermore, digitalization in the Indian banking sector has heightened customer expectations for reliable, secure mobile banking platforms, making service quality a key determinant of long-term usage behavior **(Sharma & Kaur, 2023)**. In cities like Chennai, where many people use smartphones and are digitally literate, it is becoming increasingly important to understand how the quality of mobile banking services affects customers' willingness to keep using them. Consequently, this study seeks to analyse the influence of mobile banking service quality on customers' intention to persist in using banking services, offering significant insights for banks to improve digital service delivery and bolster enduring customer engagement.

REVIEW OF LITERATURE

Srujana and Kumari (2026) found that factors such as usability, reliability, security assurance, responsiveness of customer support, and digital literacy significantly influence customers' satisfaction with digital banking services. The study found that improved service quality and technological convenience encourage customers to continue using digital banking services.

Mahalakshmi & Vishveshvar (2026) showed that convenience, security, transaction speed, accessibility, and ease of use significantly influence customers' perception of digital banking services. The study concluded that high digital service quality and user-friendly mobile applications positively influence customer satisfaction and continuance intention toward digital banking services.

Agrawal et al. (2025) indicated that security, awareness, convenience, transaction time, ease of use, and self-efficacy significantly influence customers' satisfaction with mobile banking services. The study highlighted that improved service quality dimensions encourage customers to use mobile banking platforms repeatedly.

Ali et al. (2025) identified that system reliability, login efficiency, transaction security, and customer service responsiveness are key determinants of service quality perception. The study also reported that service failures, such as application errors, slow

response times, and login problems, negatively affect users' intention to continue using mobile banking applications.

Basavaraju et al. (2024) revealed that reliability, responsiveness, security, and convenience significantly influence customer satisfaction with digital banking services. The study emphasized that higher service quality strengthens customers' trust and continued usage of digital banking platforms.

Pokhrel and K.C. (2024) found that service quality significantly influences continuance usage intention, and customer satisfaction acts as a mediating factor between service quality and customers' intention to continue using mobile banking services.

Sangeetha (2023) studied millennials' perception toward digital banking adoption in India and found that performance expectancy, effort expectancy, social influence, facilitating conditions, trust, and security significantly influence customers' behavioural intention toward digital banking services. The study concluded that security and trust remain crucial factors in sustaining customers' usage of digital banking platforms.

Shankar et al. (2021) investigated interactivity in mobile banking applications among Indian bank customers and reported that application interactivity, perceived security, and user innovativeness significantly influence consumer engagement with these applications. The study highlighted that enhanced digital interaction features improve user experience and encourage continued use.

Kumar et al. (2020) found that perceived usefulness, perceived ease of use, trust, compatibility, and perceived risk significantly influence customers' behavioural intention to use mobile banking services. The findings emphasized that technological and psychological factors jointly shape mobile banking adoption behaviour.

Shankar et al. (2020) explored the dimensions of mobile banking service quality and identified several key factors, including privacy, security, system efficiency, reliability, responsiveness, and information quality. The study concluded that these service quality dimensions play a critical role in shaping customers' satisfaction and perception of mobile banking services.

Murugeswari et al. (2018) examined customer perceptions of digital banking services in India and reported that reliability, accessibility, convenience, and service efficiency significantly influence customers' perceptions of digital banking service quality. The study emphasized that improving these dimensions can enhance customer satisfaction and usage of digital banking services.

Singh and Srivastava (2018) investigated the factors influencing the adoption of mobile banking services in India. The study found that perceived ease of use, security, trust, financial cost, and technological self-efficacy significantly affect customers' intention to adopt mobile banking services. The research highlighted the importance of building trust and security to promote mobile banking adoption.

PROBLEM OF THE STUDY

In India, the banking industry has changed significantly in the last few years due to the rapid growth of digital technology and the rise of smartphones. This has led to the widespread use of mobile banking services. Customers can easily transfer money, pay bills, check their balance, and manage their accounts through mobile apps without visiting a bank branch. Many banks have launched advanced mobile banking platforms to make things easier for customers and encourage them to use digital banking services. However, the success of these services depends more on customers using them regularly than on signing up. However, many quality issues with mobile banking services can make the overall experience less enjoyable. These problems include system reliability, security concerns, application errors, transaction failures, slow processing, and poor customer support. These service problems could make customers less happy and less trusting, which could make them less likely to use

mobile banking regularly. Customers' expectations for digital banking services have also risen a lot. They want mobile banking apps that are safe, dependable, and easy to use, and that make transactions go smoothly. In cities like Chennai, where many people use smartphones and are familiar with technology, banks need to understand what keeps people using mobile banking services. Although mobile banking is becoming more important in Indian banks, few studies have examined how the quality of mobile banking services affects customers' intentions to continue using mobile banking in Chennai City. Consequently, this study investigates the influence of mobile banking service quality on customers' intentions to persist in utilizing banking services in Chennai City.

OBJECTIVES OF THE STUDY

- To examine customers' perceptions of mobile banking service quality among banking customers in Chennai City.
- To analyze the impact of mobile banking service quality on the continuous usage intention of banking services among customers in Chennai City.

HYPOTHESIS OF THE STUDY

- **H_1**: There is a significant positive perception of mobile banking service quality among banking customers in Chennai City.
- **H_2**: Mobile banking service quality has a significant positive impact on customers' intention to continue using banking services in Chennai City.

RESEARCH METHODOLOGY

The present study aims to assess the impact of mobile banking service quality on customers' intention to continue using banking services in Chennai City. The study aims to examine customers' perceptions of mobile banking service quality and analyze how these perceptions influence their intention to continue using mobile banking services. To achieve the objectives of the study, a descriptive research design has been adopted, as it helps describe and analyze customers' behavior and perceptions toward mobile banking services in the study region. The study is based on both primary and secondary sources of data. The primary data were collected directly from respondents via a structured questionnaire that included questions on mobile banking service quality and continuous usage intention. The questionnaire was designed using a five-point Likert scale, ranging from strongly disagree to strongly agree, to measure respondents' perceptions of the selected variables. The secondary data required for the study were collected from various sources, including books, journals, research articles, reports, websites, and other published and unpublished documents related to mobile and digital banking services. For the study, the respondents were selected from bank customers who use mobile banking services in Chennai City. A total of 391 samples were considered for the study. The data were collected using the convenience sampling method, which allows the researcher to recruit readily available respondents who use mobile banking services. The collected data were systematically organized, classified, and analyzed using appropriate statistical tools, such as percentage analysis, mean score analysis, correlation analysis, and regression analysis, to examine the relationship between mobile banking service quality and respondents' continuous usage intention. The results of the analysis provide meaningful insights into customers' perception and behavior toward mobile banking services in the study area.

RESULTS AND DISCUSSION

Table 1
Demographic Profile of Customers

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	212	54.2
	Female	179	45.8
	Total	**391**	**100**

Age Group	Below 25 Years	78	19.9
	25 – 35 Years	146	37.3
	36 – 45 Years	92	23.5
	46 – 55 Years	51	13
	Above 55 Years	24	6.1
	Total	**391**	**100**
Marital Status	Married	227	58.1
	Unmarried	164	41.9
	Total	**391**	**100**
Educational Qualification	School Level	52	13.3
	Undergraduate	148	37.9
	Postgraduate	129	33
	Professional Degree	62	15.8
	Total	**391**	**100**
Occupation	Government Employee	72	18.4
	Private Employee	163	41.7
	Business	68	17.4
	Student	56	14.3
	Others	32	8.2
	Total	**391**	**100**
Monthly Income	Up to ₹50,000	168	43
	₹50,001 – ₹75,000	104	26.6
	₹75,001 – ₹1,00,000	71	18.2
	Above ₹1,00,000	48	12.2
	Total	**391**	**100**

Table 1 presents the demographic profile of the 391 banking customers included in the study. The results indicate that male respondents (54.2%) slightly outnumber female respondents (45.8%). The majority of respondents belong to the 25–35-year age group (37.3%), followed by those aged 36–45 years (23.5%), indicating that most participants are young and middle-aged. In terms of marital status, a higher proportion of respondents are married (58.1%) than unmarried (41.9%). Regarding educational qualification, most respondents possess higher education, with undergraduate degree holders (37.9%) and postgraduates (33%) forming the majority. By occupation, private employees constitute the largest group (41.7%), followed by government employees (18.4%) and business people (17.4%). Finally, the income distribution shows that most respondents earn up to ₹50,000 per month (43%), followed by those earning ₹50,001–₹75,000 (26.6%). Overall, the profile suggests that the respondents are largely young, educated, and employed individuals, who are more likely to adopt and use mobile banking services.

H_1: There is a significant level of positive customer perception of mobile banking service quality among banking customers in Chennai City.

To test the above hypothesis, the study used a one-sample t-test, and the results are presented in the following Table 2.

Table 2

Results of One-Sample t-test for Customer Perception of Mobile Banking Service Quality

Variables	N	Mean	SD	t-value	p-value	Result
Mobile Banking Service Quality	391	3.87	0.640	25.860	<0.001**	Significant

Decision: Hypothesis supported @ 1% level

Table 2 presents the results of the one-sample t-test conducted to examine the level of positive customer perception toward mobile banking service quality among banking customers in Chennai City. The results indicate that the mean mobile banking service quality is 3.87, which exceeds the test value of 3.00, suggesting that respondents have a relatively high and positive perception of the quality of mobile banking services offered by banks. The calculated t-value of 25.860 is statistically significant, with a p-value of less than 0.001, indicating significance at the 1 percent level. This result clearly indicates that customers' perception of mobile banking service quality is significantly positive among banking customers in the study area. Hence, the proposed hypothesis is strongly supported and confirms a positive, significant level of customer perception of mobile banking service quality among banking customers in Chennai City.

H_2: Mobile banking service quality has a significant positive impact on customers' intention to continue using banking services in Chennai City.

To test the above hypothesis, the study used regression analysis, and the results are presented in Table 3.

Table 3

Results of Regression Analysis of Mobile *banking service quality impact on customers' continuous usage intention for banking services in Chennai City*

Independent Variable	Dependent Variable	Beta (β)	R^2	t-value	p-value	Result
Mobile Banking Service Quality	Continuous Usage Intention	0.621	0.386	15.72	<0.001**	Significant
Decision: Hypothesis supported @ 1% level						

Table 3 presents the results of the regression analysis examining the impact of mobile banking service quality on customers' intention to continue using banking services in Chennai City. The results indicate that mobile banking service quality has a positive standardized beta coefficient (β = 0.621), indicating that it strongly influences customers' intention to continue using mobile banking services. The R^2 value of 0.386 reveals that 38.6 percent of the variation in customers' continuous usage intention is explained by mobile banking service quality. The calculated t-value of 15.72 is statistically significant, with a p-value of less than 0.001, indicating significance at the 1 percent level. This clearly indicates that mobile banking service quality significantly influences customers' intention to continue using banking services. Hence, the proposed hypothesis was supported, confirming that mobile banking service quality has a significant positive impact on customers' intention to continue using banking services in Chennai City.

DISCUSSIONS

The findings of the present study provide important insights into customers' perceptions of mobile banking service quality and its influence on their intention to continue using banking services in Chennai City. The results of the one-sample t-test reveal that banking customers exhibit a significantly positive perception of mobile banking service quality. The mean value obtained in the analysis indicates that respondents generally perceive mobile banking services as reliable, convenient, and efficient in performing various financial transactions. This positive perception may be attributed to the increasing digitalization of banking services in India, the widespread availability of smartphones, and the growing familiarity of customers with mobile banking applications. In recent years, banks have introduced several technological advancements, such as secure authentication systems, user-friendly interfaces, and real-time transaction facilities, which have enhanced customers' confidence in mobile banking platforms. Similar findings were reported by Singh and Srivastava (2018), who found that perceived ease of use and security significantly influence

customers' positive perception and adoption of mobile banking services in India. Likewise, Shankar et al. (2020) emphasized that mobile banking service quality dimensions such as reliability, responsiveness, security, and system efficiency play a crucial role in shaping customers' perception and satisfaction toward digital banking services.

The study further examined the impact of mobile banking service quality on customers' intention to continue using the service using regression analysis. The results indicate that mobile banking service quality has a significant and positive influence on customers' intention to continue using mobile banking services. The positive beta coefficient obtained in the analysis suggests that improvements in service quality significantly increase customers' consistent willingness to use mobile banking services for their financial transactions. This finding implies that when customers perceive mobile banking applications as secure, reliable, responsive, and easy to use, they are more likely to develop trust and satisfaction toward the service, which ultimately strengthens their intention to continue using it. The results of the study are consistent with those of Kumar et al. (2020), who reported that perceived usefulness, trust, and service efficiency significantly influence the intention to continue using mobile banking services among Indian banking customers. Similarly, Pokhrel and K.C. (2024) found that mobile banking service quality significantly influences customers' continuance intention, with customer satisfaction acting as an important mediating factor between service quality and continued usage behavior.

Overall, the findings of the study confirm that service quality plays a crucial role in determining customers' perceptions and their intention to continue using mobile banking services. As mobile banking has become an integral part of modern banking systems, improving service quality features such as security, reliability, application speed, and customer support is essential for strengthening customer satisfaction and encouraging long-term usage of mobile banking services. These findings have valuable implications for banks and financial institutions to focus on enhancing the quality of their mobile banking platforms to retain customers and promote sustained digital banking adoption in urban regions such as Chennai City.

CONCLUSION

The present study examined the impact of mobile banking service quality on customers' intention to continue using banking services in Chennai City. The findings of the study reveal that banking customers possess a significantly positive perception of mobile banking service quality. The results indicate that customers generally perceive mobile banking services as convenient, reliable, and efficient for a range of financial transactions. The increasing penetration of smartphones, improved internet connectivity, and banks' digital transformation initiatives have contributed to the growing acceptance of mobile banking services among customers in the study region. Further, the study confirmed that mobile banking service quality has a significant positive impact on customers' intention to continue using banking services. The regression results indicate that improved service quality, as measured by reliability, security, responsiveness, and ease of use, significantly encourages customers to continue using mobile banking applications. When customers perceive mobile banking platforms as safe, efficient, and user-friendly, they are more likely to develop trust and satisfaction with the service, which ultimately strengthens their intention to use mobile banking repeatedly for transactions. Overall, the study highlights the importance of maintaining high service quality standards in mobile banking platforms to enhance customer satisfaction and long-term usage. Banks should therefore focus on improving technological reliability, strengthening security measures, and providing efficient customer support in order to enhance the overall mobile banking experience. By continuously improving mobile banking service quality, banks can strengthen customer relationships, increase digital banking adoption, and ensure sustained mobile banking usage among customers in Chennai City.

REFERENCES

1. Agrawal, R., Sharma, P., & Gupta, A. (2025). Customer satisfaction toward mobile banking services: Evidence from banking customers in Madhya Pradesh, India. *International Journal of Banking, Risk and Insurance, 13*(1), 45–60.
2. Ali, M., Khan, S., & Rahman, Z. (2025). Understanding customer perception of mobile banking apps through large-scale user review analytics: Evidence from Indian banks. *Computers in Human Behavior Reports, 14*, 100420. https://doi.org/10.1016/j.chbr.2025.100420
3. Basavaraju, M., Ramesh, S., & Prakash, H. (2024). Measuring digital banking service quality and its impact on customer satisfaction with reference to Bengaluru City. *International Journal of Management Studies, 11*(2), 58–69.
4. Basu, S. (2024). Digital transformation in the Indian banking sector: The role of mobile banking services in enhancing customer experience. *Journal of Financial Services Marketing, 29*(2), 115–128. https://doi.org/10.1057/s41264-023-00218-9
5. Kumar, A., Adlakaha, A., & Mukherjee, K. (2020). The effect of perceived security and grievance redressal on continuance intention to use mobile banking in India. *International Journal of Bank Marketing, 38*(5), 1179–1202. https://doi.org/10.1108/IJBM-04-2019-0147
6. Mahalakshmi, S., & Vishveshvar, K. (2026). Customer perception and adoption of digital banking services in Coimbatore City. *International Journal of Scientific Research and Engineering Development, 9*(1), 226–233.
7. Murugeswari, K., Manohar, H. L., & Rajasekar, P. (2018). Customer perception towards digital banking services in India. *International Journal of Research in Management & Business Studies, 5*(3), 54–59.
8. Nguyen, T. T., & Dao, T. K. (2024). The influence of service quality on continuance intention toward mobile banking services. *Humanities and Social Sciences Communications, 11*(1), 1–12. https://doi.org/10.1057/s41599-024-02778-z
9. Paramasivan C & Ravichandiran G (2022), Financial Performance of Commercial Banks In India , Journal of the Oriental Institute M.S. University of Baroda, Vol. 71, Issue. 02, No.4, April-June
10. Paramasivan. C **(**2019**),** Digitalized Finclusion Through PMJDY In India, Think India Journal, Vol-22- Issue-14-December-2019.
11. Pokhrel, S., & K.C., S. (2024). Mobile banking service quality and continuance intention: The mediating role of customer satisfaction. *International Journal of Bank Marketing, 42*(3), 389–408. https://doi.org/10.1108/IJBM-02-2023-0095
12. Shankar, A., Datta, B., & Jebarajakirthy, C. (2020). Are the generic scales enough to measure service quality in mobile banking? A qualitative approach. *International Journal of Bank Marketing, 38*(6), 1279–1296. https://doi.org/10.1108/IJBM-01-2020-0019
13. Sharma, P., & Kaur, G. (2023). Customer satisfaction and behavioral intention toward digital banking services in India. *International Journal of Bank Marketing, 41*(6), 1325–1343. https://doi.org/10.1108/IJBM-03-2023-0124
14. Singh, S., & Srivastava, R. (2018). Predicting the intention to use mobile banking in India. *International Journal of Bank Marketing, 36*(2), 357–378. https://doi.org/10.1108/IJBM-12-2016-0186
15. Srujana, K., & Kumari, P. (2026). Customer satisfaction with digital banking services offered by public sector banks in Hyderabad. *International Journal of Advanced Research in Commerce, Management & Social Science, 9*(1), 12–19.

16. Tam, C., Oliveira, T., & Varajão, J. (2023). Determinants of mobile banking continuance intention: The role of service quality and user satisfaction. *Journal of Retailing and Consumer Services, 72*, 103237. https://doi.org/10.1016/j.jretconser.2023.103237

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A STUDY ON THE GROWTH AND ADOPTION OF DIGITAL PAYMENT PRACTICES AMONG THE YOUNG GENERATION

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ABSTRACT

Digital payment systems have substantially transformed financial transactions in recent years. With rapid technological progress, the younger generation increasingly adopts digital methods such as mobile wallets, UPI, and online banking. This study explores the growth and adoption of digital payments among youths in Tiruchirappalli, Tamil Nadu. It investigates awareness, usage patterns, preferences, and challenges related to these systems. Data was collected from 210 respondents via a structured questionnaire, and analysis included percentage analysis, Chi-square tests, and ANOVA. The results show most young respondents are highly aware of digital payments and frequently use them for daily transactions. Popular applications like Google Pay, PhonePe, and Paytm are preferred for their convenience, speed, and accessibility. Payments are mainly used for online shopping, bill payments, and money transfers. Despite increasing adoption, challenges such as security issues, internet connectivity, and technical problems persist. Demographic factors like gender and age significantly influence digital payment use and satisfaction. Overall, the study underscores the rapid growth of digital payment practices among youth, contributing to a cashless economy. These insights are valuable for policymakers, financial institutions, and service providers aiming to improve digital payment systems and user experience.

KEYWORDS: Digital Payment, Young Generation, UPI, Online Transactions & Financial Technology.

INTRODUCTION

The rapid growth of digital technology has greatly changed the financial sector, especially in transaction methods. Digital payment systems now offer a convenient, fast, and secure alternative to cash. Increasing smartphone use, internet access, and mobile apps have made digital payments a crucial part of everyday financial activity. In India, government efforts to promote a cashless economy have significantly driven digital payment expansion.

Platforms such as UPI, mobile wallets, internet banking, and QR code payments have transformed the payment landscape, allowing instant transactions without physical cash. As a result, digital payments are extensively used by individuals and businesses. The younger generation plays a vital role in adopting and expanding these technologies because they are more tech-savvy and receptive to new financial tools. They frequently use digital payments for online shopping, bill payments, ticket bookings, and peer-to-peer transfers, influencing the growth of digital financial services. However, issues like security concerns, digital literacy gaps, connectivity problems, and online fraud fears pose challenges to wider adoption. Recognizing these factors is essential for improving digital payment systems and increasing user engagement. This research explores the growth and acceptance of digital payments among young people in Tiruchirappalli, Tamil Nadu. It analyses their awareness, usage patterns, preferences, and barriers to provide insights into how digital payments influence contemporary financial behaviour.

Evolution of Digital Payment

The development of digital payment systems has radically changed the global financial scene over recent decades. Initially, transactions relied mainly on cash and paper instruments like cheques and demand drafts. As technology advanced and electronic banking emerged, financial institutions introduced digital alternatives. The introduction of credit and debit cards marked the start of electronic payments, enabling customers to transact without cash. Later, internet banking further improved convenience, allowing fund transfers, bill payments, and account management online. In India, mobile banking and digital wallets spurred rapid growth in digital payments. The 2016 launch of the Unified Payments Interface (UPI) by the National Payments Corporation of India (NPCI) revolutionized digital transactions by facilitating instant bank-to-bank transfers via mobile apps. Platforms like Google Pay, PhonePe, and Paytm have made digital payments more accessible and user-friendly. Government initiatives such as Digital India and efforts to promote a cashless society have boosted adoption. Today, digital payments are common for shopping, bills, ticket bookings, and peer-to-peer transfers.

Growth of UPI Transaction

The rise of UPI in India is remarkable. In 2020–21, transactions totaled ₹40,03,653.58 Crore, and by 2024–25, they skyrocketed to ₹2,59,56,950.65 Crore, representing a 6.5-fold growth. The most significant increase occurred in 2021–22, with a 110.2 percent rise within a year. This pattern indicates that more banks are adopting UPI, and a growing number of people are trusting digital payments for their everyday transactions.

Table 1

Growth of UPI Transactions in India

Financial Year	Total Value (₹ in Crore)	Year-on-Year Growth (%)
2020 – 2021	40,03,653.58	–
2021 – 2022	84,17,562.78	110.2%
2022 – 2023	1,38,20,676.35	64.2%
2023 – 2024	2,00,94,055.11	45.4%
2024 – 2025	2,59,56,950.65	29.2%
2025 – 2026*	2,57,86,378.37	–0.7% (partial year)

Source: https://www.npci.org.in/product/upi/product-statistics

Data available up to January 2025.

The data indicates a significant increase in UPI adoption, with total transaction values rising from ₹40,03,653.58 Crore in FY 2020–21 to ₹2,59,56,950.65 Crore in FY 2024–25. This nearly 6.5-fold growth over five years highlights a major shift toward digital payments. The most substantial growth occurred during 2021–22, with a peak year-on-year increase of 110.2%. Along with this increase in value, digital transaction volume also grew rapidly from

4,370.68 Crore in FY 2020–21 to 18,120.82 Crore in FY 2024–25. Even with partial data for FY 2025–26 (up to January), the transaction value has already reached ₹2,57,86,378.37 Crore, indicating the ecosystem is on track to set new records. This consistent growth reflects the successful integration of UPI into daily transactions and increased trust in digital financial services among Indians.

REVIEW OF LITERATURE

Anandaraman R. (2012). Micro finance is the basic concepts helping to self-employment people, low-income groups, poor entrepreneurs in rural areas. It provides thrift, credit, savings and other financial services and products of small amount to poor in rural, semi urban or urban areas. Micro finance is the target raising their income, improve standard living, increasing economic growth, and reduce poverty. Micro finance is another aspect given empowers to poor women especially for handicapped women, divorce women, widow women. This paper focus on the role of banks in micro finance in India.

Ravikumar T., & et al. (2019). In recent years, economic transactions are carried out through electronic or online or cashless means all over the world especially in developed countries and developing countries like India. As a result of increased digital means of payment has brought down usage of cash transactions in the economy. A well-functioning digital payment system has much relevance on overall economic activity, monetary policy, and financial stability of a country.

P. V. Rajeswari., P. Pirakatheeswari., & M. Vadivel. (2021). The last decade has seen tremendous growth in use of internet and mobile phone in India. Increasing use of internet, mobile penetration and government initiative such as Digital India are acting as catalyst which leads to exponential growth in use of digital payment. Electronics Consumer transaction made at point of sale (POS) for services and products either through internet banking or mobile banking using smart phone or card payment are called as digital payment.

Mahesh A., & Ganesh Bhat S. (2022). The Indian payments sector is undergoing far reaching changes, with digital payments capturing a sizable slice of the cake in recent years. The changes began from a fully cash economy to a less-paper-currency system. Nearly one billion cards and more than two billion Prepaid Payment Instruments (PPI) such as online wallets, mobile applications, e-wallets, and digital payment modalities have pushed India into one of the world's fastest growing and largest digital payment ecosystem.

Rajas Saroy.. & et al. (2022). The COVID-19 induced lockdown in India was an inflection point for on-boarding of new users into digital payments. Using a large survey dataset, we examine the driving factors of this shift for those who used digital payments for the first time. Apart from demographic drivers of payment choice traditionally explored in the literature, we find that this shift was significantly shaped by the degree of awareness of digital modes, access to smartphones and debit cards, and pandemic-relief welfare transfers.

Sangeeta Jerath. (2022). Abstract: With the liberalisation of the Indian banking sector in 2014, the digital payment ecosystem has undergone a steady transformation which can be attributed to the usage of new technologies like Automated Teller Machines (ATM) and Magnetic Ink Character Recognition (MICR). Digital payment systems offer convenience and security while transacting. In 2010, a variety of payment products (stored value cards, wallets, and recharge vouchers) and service providers were introduced.

Varun Kesavan., & Kandaswamy Sakthi Srinivasan. (2023). The digital payments system is a technologically advanced payment system that enables individuals, businesses, and nations to become selfsufficient, contactless, and tap-less when conducting transactions. Understanding the significance of the digital payment system is crucial. There remains much to investigate and discover.

Pankaj Sharma., Vaibhav Gallani., & Suhaag Maheria. (2024). In the dynamic world of digital transactions in India, the symbiotic relationship between convenience and

vulnerability has become increasingly apparent. This study aims to know how digital payment and fraud connect in Indian economy. The primary objective of this study is to know the relationship between financial fraud with digital payment infrastructures, value of digital payments, and volume of digital payment.

Ana Aguilar. (2024). We examine the relationship between digital payment innovation, economic growth and informal activities in 101 economies over 2014–19. Following the economic growth literature, panel regressions relate growth rates of GDP per capita, total factor productivity (TFP) and the share of informal sector employment to lagged levels of these variables, the extent of digital payments use and various controls for endogeneity.

Kumaran Kanapathipillaii., & et al. (2024). This study aims to examine the relationships between perceived consumer purchase behaviour, technological readiness, and merchant and government support in driving the adoption of digital payments by Malaysian small and medium enterprises (SMEs) after the COVID-19 pandemic. The objectives are to provide data-driven insights into the factors enabling the transition to cashless transactions and Fintech solutions.

Mary Metilda Jayaraj., & Adarsh Umesh Bhat. (2024). Growing internet accessibility, the rise of Internet electronic devices and government initiatives and commitment to transform India into a digital society has rapidly transformed the payment mechanism into a cashless one. The study seeks to understand the influence of demographic variables on preference for online payments, usage experience, satisfaction levels, security concerns and purchase experience. Gender, education, age and employment status are associated.

Mythili D., & Kanimozhi.R. (2024). The advent of online payment systems has revolutionized the way financial transactions are conducted globally. This abstract delves into the evolution, functionalities, and impact of online payment systems, highlighting their significance in the digital era. The primary objective of this abstract is to provide an overview of online payment systems, including their key features, benefits, challenges, and the impact they have had on various stakeholders such as businesses, consumers, and financial institutions.

Ravichendran G. (2024). The purpose of the banking sector in the country is to provide banking services to all the people with a simple and easy manner with this view, PMJDY was introduced in 2014 to provide bank account to unbanked people free of cost and with simplification of KYC norms. All the incentives and monetary benefits to the targeted people will reach only through direct benefit transfer scheme which is linked with bank account and
Aadhar.

S. C. Premathilaka. (2024). This study examines the transformative impact of Usage of Digital Payment Systems (UDPS) on Small and Medium Enterprises' (SMEs) credit access, mediated by the traceability of financial data (TFD) and Moderated by Government Intervention (GI) in the evolving financial landscape of Sri Lanka.

OBJECTIVES OF THE STUDY

1. To examine the level of awareness and usage of digital payment methods among the young generation.
2. To analyze the preference, frequency of usage, and challenges faced while using digital payment systems.

RESEARCH METHODOLOGY

RESEARCH DESIGN

The study uses a descriptive research design to examine the growth and acceptance of digital payment methods among young people. This approach enables the collection of

detailed information on characteristics, awareness, usage habits, and preferences related to digital payments. It allows the researcher to gather structured responses and analyze behaviors towards digital payment apps. Overall, this method is appropriate for identifying trends and factors that affect the adoption of digital payments.

STUDY AREA

The study took place in Tiruchirappalli, a prominent city in Tamil Nadu, India. Known for its educational institutions, commerce, and expanding digital infrastructure, the city has a large population of students and young professionals. This makes Tiruchirappalli an ideal setting to examine how the younger generation adopts and uses digital payment methods.

SAMPLING AND RESPONDENTS

The study draws on a sample of 210 respondents chosen through convenience sampling. These respondents are primarily young people, such as college students and early-career professionals, who often participate in digital financial transactions. The sample size was deemed sufficient for analyzing digital payment adoption behavior.

DATA COLLECTION

The primary data for this study was gathered using a structured questionnaire distributed to respondents. The questionnaire covered demographic details, awareness of digital payments, usage habits, preferred apps, and challenges faced with digital payment systems. Additionally, secondary data was collected from journals, reports, and online sources to support the research.

TOOLS AND ANALYSIS

The collected data were analyzed using statistical methods including percentage analysis, Chi-square test, and Analysis of Variance (ANOVA). These methods assist in identifying relationships between variables and assessing differences in satisfaction levels among respondents.

Table 2
Demographical Profile of Respondents

Demographic variable	Category	Number of Respondents	Percentage (%)
Gender	Male	110	52.4
	Female	100	47.6
Age Group	18–20 Years	70	33.3
	21–23 Years	80	38.1
	24–26 Years	60	28.6
Education Level	Undergraduate (UG)	140	66.7
	Postgraduate (PG)	70	33.3
Digital Payment Usage	Yes	195	92.9
	No	15	7.1

Source: Primary Data.

Table 2 shows the demographic profile of the study participants. Of the 210 respondents, 110 (52.4%) are male and 100 (47.6%) are female, indicating a relatively balanced gender split. Most respondents fall within the 21–23 years age group, with 80 participants (38.1%), followed by 18–20 years with 70 (33.3%), and 24–26 years with 60 (28.6%). In terms of education, the majority are undergraduates, totaling 140 (66.7%), while 70 (33.3%) are postgraduates. The data also indicates that 195 respondents (92.9%) utilize digital payment methods, with only 15 (7.1%) not using them.

Table 3
Awareness and Usage of Digital Payment Methods

Category	Respondents	Percentage
Aware and using	180	85.7
Aware but not using	20	9.5
Not aware	10	4.8

Source: Primary Data.

Table 3 presents the respondents' awareness and usage levels of digital payment methods. Among the 210 participants, 180 (85.7%) are both knowledgeable about and actively using these methods, reflecting widespread acceptance and familiarity with digital financial technology among young people. Moreover, 20 respondents (9.5%) know about digital payments but do not use them regularly, likely due to personal preferences or security worries. Only 10 respondents (4.8%) are unaware of digital payment options. Overall, the data highlights a strong awareness and increasing adoption of digital payments.

Table 4
Most Preferred Digital Payment Application

Application	Respondents	Percentage
Google pay	70	33.3
Phonepe	60	28.6
Paytm	40	19.0
Others	40	19.0

Source: Primary Data.

The table presents the most popular digital payment apps among respondents. Of the 210 participants, 70 (33.3%) prefer Google Pay as their main digital payment app. PhonePe is the next most preferred, with 60 users (28.6%), followed by Paytm and other apps, each used by 40 respondents (19.0%). The data suggests that Google Pay is especially favored by the younger crowd, thanks to its intuitive interface and fast transaction speed. Overall, it shows that mobile payment apps have become vital tools for daily financial activities.

Table 5
Frequency of Usage

Frequency	Respondents	Percentage
Daily	100	47.6
Weekly	70	33.3
Monthly	40	19.0

Source: Primary Data.

Table 5 presents the usage frequency of digital payment methods among respondents. Of the 210 participants, 100 (47.6%) use digital payments daily, showing a strong reliance on digital transactions for routine financial activities. Additionally, 70 respondents (33.3%) use digital payments weekly, and 40 (19.0%) do so monthly. These results demonstrate that most young people frequently depend on digital payment platforms for their financial needs. This pattern highlights the increasing popularity, convenience, and accessibility of digital payment systems in daily life.

Table 6
Purpose of Usage

Purpose	Respondents	Percentage
Online shopping	80	38.1
Bill payments	60	28.6
Money transfer	50	23.8
Recharge	20	9.5

Source: Primary Data.

The table illustrates the different reasons respondents utilize digital payment methods. Among the 210 respondents, 80 (38.1%) primarily use digital payments for online shopping, making it the most common purpose. Next, 60 respondents (28.6%) use digital platforms to pay utility bills such as electricity, water, and internet. Additionally, 50 respondents (23.8%) use digital payments for transferring money to friends and family. A smaller group, 20 respondents (9.5%), mainly use digital payments for mobile recharges. These findings show that digital payment systems are broadly adopted for various daily financial activities by the young generation.

Table 7
Challenges faced in Using Digital Payments

Challenge	Respondents	Percentage
SECURITY CONCERNS	70	33.3
INTERNET ISSUES	60	28.6
TECHNICAL ERRORS	40	19.0
NO MAJOR PROBLEM	40	19.0

Source: Primary Data.

The table illustrates the challenges respondents face with digital payment methods. Among 210 participants, 70 (33.3%) cited security concerns as their primary issue, reflecting ongoing fears about online fraud and data privacy that undermine user trust. Additionally, 60 respondents (28.6%) reported internet connectivity problems, which can disrupt or slow down transactions. Technical glitches, such as app failures or transaction errors, were reported by 40 respondents (19.0%). Another 40 respondents (19.0%) reported not encountering significant problems with digital payments. Overall, the findings emphasize that security and connectivity remain major obstacles to the adoption of digital payment methods.

HYPOTHESIS TESTING

Hypothesis 1 – Relationship between Gender and Digital Payment Usage.

Null Hypothesis (H_0): There is no significant relationship between gender and digital payment usage among the young generation.

Alternative Hypothesis (H_1): There is a significant relationship between gender and digital payment usage among the young generation.

Table 8
Chi-Square on Gender and Digital Payment Usage

Variable	χ^2 Value	df	p-value	Level of Significance	Remarks
Gender vs Digital Payment Usage	4.62	1	0.031	0.05	Significant (H_1 Accepted)

The Chi-Square test was performed to explore the link between gender and digital payment usage among respondents. The Chi-Square statistic (4.62) exceeds the critical table value (3.84) at the 5% level of significance. With a p-value of 0.031, which is less than 0.05, the results indicate a statistically significant association. As a result, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is supported, confirming that gender plays a significant role in digital payment use among the youth.

Hypothesis 2 – Difference between Age Group and Satisfaction Level towards Digital Payments.

Null Hypothesis (H_0): There is no significant difference in satisfaction levels of digital payment services among different age groups.

Alternative Hypothesis (H_1): There is a significant difference in satisfaction levels of digital payment services among different age groups.

Table 9
ANOVA on Age Group and Satisfaction Level

Source of Variation	Sum of Squares	df	Mean Square	F Value	p-value	Remarks
Between Groups	6.72	2	3.36	4.18	0.017	Significant
Within Groups	166.45	207	0.80			
Total	173.17	209				

An ANOVA test was conducted to determine if satisfaction with digital payment services varies among age groups. The F value calculated (4.18) exceeds the critical value at the 5% significance level, and the p-value (0.017) is below 0.05. Consequently, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is supported, showing a significant difference in satisfaction across different age groups.

FINDINGS OF THE STUDY

The study indicates that digital payment methods are growing increasingly popular among young people. Most respondents are highly aware of these systems and regularly use them for various transactions. Demographic data show that the majority are aged 21–23 and are undergraduate students, suggesting that young individuals are more open to adopting new financial technologies. The analysis highlights that apps like Google Pay and PhonePe are preferred due to their simplicity, speed, and convenience. Digital payments are frequently used for online shopping, bill payments, and transferring money, with many respondents using them daily, indicating a shift from cash to digital platforms. Challenges include security issues, internet connectivity problems, and occasional technical glitches. Despite these, overall satisfaction remains high. Additionally, factors such as gender and age influence the adoption and satisfaction levels. In summary, digital payments are increasingly a crucial element of young people's financial behavior.

SUGGESTIONS

Digital payment service providers should focus on enhancing platform security to address user concerns about online fraud, hacking, and data privacy. Utilizing advanced security features like two-factor authentication, encryption, and regular updates can boost confidence in digital transactions. Additionally, organizing awareness and digital literacy campaigns can educate users on secure payment practices, such as safeguarding personal data and spotting scams. Improving internet connectivity and the reliability of payment applications is also essential to minimize transaction failures and delays, thereby increasing user satisfaction and trust. Creating user-friendly interfaces and offering quick, effective customer support can further ease use for all age groups. Implementing these strategies will make digital payment systems safer, more dependable, and more widely adopted, encouraging more people to use digital payments daily.

CONCLUSION

Digital payment systems have become a vital part of today's financial landscape. Advances in technology, widespread smartphone use, and better internet access have driven the growth of digital payments. The younger generation is particularly influential in this shift, thanks to their familiarity with digital platforms and openness to innovation. This study shows that many young people in Tiruchirappalli frequently use digital payments for activities like online shopping, bill payments, and money transfers. Popular apps such as Google Pay, PhonePe, and Paytm are favored due to their convenience, speed, and ease of use. However, challenges like security risks, connectivity problems, and technical glitches still need attention. Improving security, boosting digital literacy, and providing reliable infrastructure are essential for building user trust. Overall, digital payments are expected to expand rapidly, and encouraging young people's use of these tools will help develop a secure, cashless economy.

REFERENCE

1. Aguilar, A. (2024). Digital payments, informality and economic growth. *BIS Working Papers*, 1–28.
2. Anandaraman, R. (2012). Micro finance by banks in India. *Research Explorer*, 1(2).
3. Angamuthu, B. (2022). Growth of digital payments in India. *NMLMS Journal of Economics and Public Policy*, 5(4), 31–41.
4. Dutta, A. (2023). Digital payment trends, issues and opportunities in India. *Anusandhan-NDLM's Journal of Business and Management Research*, 5(2), 27–36.
5. Kanapathipillai, K., et al. (2024). Navigating the digital payment landscape in Malaysian SMEs: Post-COVID-19 challenges and key drivers of adoption. *European Journal of Social Sciences Studies*, 10(3), 1–29.
6. Mahesh, A., & Bhat, G. S. (2022). India's digital payment landscape: An analysis. *International Journal of Case Studies in Business, IT, and Education*, 6(1), 223–237.
7. Jayaraj, M. M., & Bhat, A. U. (2024). Exploring user experience and perception of online digital payment systems. *EDP Sciences*, 2–6.
8. Meghana, M. S. (2024). A systematic review of literature on digital payment in India. *International Journal for Innovative Research*, 10(5), 219–222.
9. Mythili, D., & Kanimozhi, R. (2024). Online payment system: A transformation to digital era. *Journal of the Oriental Institute*, 72(5), 42–47.
10. Naik, N., et al. (2022). Transforming healthcare through a digital revolution: A review of digital healthcare technologies and solutions. *Frontiers in Digital Health*, 1–10.
11. Rajeswari, P. V., Pirakatheeswari, P., & Vadivel, M. (2021). A study on customers' perception towards digital payment system with special reference to Coimbatore city. *Annals of the Romanian Society for Cell Biology*, 25(2), 3542–3551.
12. Sharma, P., Gallani, V., & Maheria, S. (2024). Digital payments and fraud connection: Insights from the Indian economy. *International Journal of Management, Economics and Commerce*, 1(2), 102–111.
13. Saroy, R., et al. (2022). The impact of COVID-19 on digital payment habits of Indian households. *Bulletin of Monetary Economics and Banking*, 25, 19–42.
14. Ravichandiran, G. (2023). A study on FinTech: A pathway to development in India with respect to performance and progress. *Juni Khyat*, 13(8), 97–104.
15. Ravichandiran, G. (2024). A study on FinTech ecosystem in India: A quantitative approach. *Research Explorer – A Blind Review & Refereed Quarterly International Journal*, 13(45), 15–24.
16. Ravichandiran, G. (2024). Payment banks: A new milestone for banking penetration in India. *International Journal of Financial Engineering*, 11(4), 2350062.
17. Ravichendran, G. (2024). Payment banks: A new milestone for banking penetration in India. *International Journal of Financial Engineering*.
18. Ravikumar, T., et al. (2019). Impact of digital payments on economic growth: Evidence from India. *International Journal of Innovative Technology and Exploring Engineering*, 8(12), 553–557.
19. Premathilaka, S. C. (2024). Impact of digital payment systems on credit access for business clans in SME sector in Sri Lanka. *Sri Lanka Journal of Marketing*, 10(2), 102–137.
20. Jerath, S. (2022). Digital payments in India: An analysis. *International Journal of Innovative Technology and Exploring Engineering*, 11(11), 47–54.
21. Surya. (2025). Transforming payment patterns: The role of UPI and IMPS in monthly transactions in India. *Research Explorer – International Journal on Economics and Business Management*, 14(47), 54–62.

22. Trivedi, H. (2024). Evolution of digital payment system in India: Past, present and future. *International Research Journal of Humanities and Interdisciplinary Studies*, 5(1), 30–48.
23. Kesavan, V., & Srinivasan, K. S. (2023). Present state and future directions of digital payments system: A historical and bibliographic examination. *International Journal of Professional Business Review*, 8(6), 1–29.

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STUDENTS' PERCEPTION AND ADOPTION RATE OF M-LEARNING TECHNOLOGIES IN HIGHER EDUCATION INSTITUTIONS IN CHENNAI

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ABSTRACT

The rapid integration of mobile technologies in education has transformed the traditional learning environment, giving rise to Mobile Learning (M-learning) as a flexible and accessible mode of instruction. This study investigates students' perception and adoption rate of M-learning technologies in higher education institutions across Chennai. The study explores key factors influencing students' acceptance, including perceived ease of use, perceived usefulness, engagement, and accessibility. A structured questionnaire was administered to a sample of 150 students from various colleges and universities in Chennai. Descriptive statistics, Anova, and regression analyses were employed to assess the relationships between perception and adoption behaviors. The findings reveal that students generally hold positive perceptions of M-learning, with high levels of engagement and satisfaction. However, adoption rates vary significantly based on digital literacy, institutional support, and the quality of mobile platforms used. The study highlights the importance of user-friendly interfaces, relevant content, and faculty encouragement in promoting effective M-learning adoption. Recommendations are provided for academic institutions to enhance digital infrastructure and develop inclusive M-learning strategies that align with students' preferences and learning needs.

KEYWORDS: User Friendly, Portable Devices, Information Learning, Educational activities, Learning materials.

INTRODUCTION

The rapid advancements in digital technology have significantly transformed educational practices worldwide. Mobile learning (m-learning), characterized using smartphones, tablets, and other portable devices for accessing educational content, has emerged as a crucial tool in modern pedagogy. This shift toward mobile learning offers students the flexibility to learn anytime, anywhere, breaking the limitations of traditional classroom environments. In India, particularly in urban centres like Chennai, the adoption of m-learning technologies is gaining momentum in higher education institutions. These technologies provide an interactive, personalized, and learner-centered experience that complements conventional teaching methods. However, despite their potential, the actual

adoption and usage of m-learning tools by students depend on several factors, including their perceptions, technological readiness, ease of use, and institutional support.

This study aims to explore students' perceptions of m-learning technologies and assess the factors influencing their adoption rates in higher education institutions across Chennai. Understanding these perspectives is essential for educational policymakers and institutions seeking to optimize learning outcomes and enhance digital learning strategies.

By examining students' experiences and challenges with m-learning, this research will provide valuable insights into designing more effective mobile learning environments and driving the successful adoption of digital learning technologies in Chennai's higher education ecosystem.

REVIEW OF LITERATURE

According to Wu et al. (2012), students tend to adopt m-learning tools when they perceive them as convenient, interactive, and supportive of their academic needs. Similarly, a study by **Crompton and Burke (2018)** highlighted the importance of user-friendly interfaces and engaging content in shaping positive student experiences. **Bala and Venkatesh (2019)** found that students in urban educational hubs like Chennai appreciated the flexibility offered by m-learning platforms but expressed concerns about distractions and inconsistent internet connectivity. Adoption rates of m-learning are influenced by several factors, including technological accessibility, perceived ease of use, and institutional support **(Venkatesh et al., 2003). Studies by Davis (1989) and Teo (2010)** using the Technology Acceptance Model (TAM) emphasized that perceived usefulness and ease of use are crucial determinants for technology adoption in educational settings. **Chitra and Raj (2020)** found that socio-economic factors such as smartphone ownership, internet affordability, and digital literacy significantly impact adoption rates among college students in Chennai. Despite its potential benefits, several barriers hinder the widespread adoption of m-learning technologies. Issues such as data privacy concerns, technological distractions, and resistance from faculty members have been noted in studies by **Jadhav et al. (2019)**. **Alrasheedi et al. (2015).** Limited institutional support and inadequate training for educators have also been highlighted as major obstacles.

Multiple studies indicate that m-learning enhances student engagement, motivation, and academic performance **(Cheung & Hew, 2009).** For instance, **Kumar et al. (2021)** demonstrated that the use of mobile applications for learning mathematics improved problem-solving skills among college students in Chennai. While global studies provide valuable insights, regional studies offer specific perspectives tailored to unique educational landscapes. In Chennai, recent research by **Ramesh and Sudha (2022)** emphasized the growing acceptance of hybrid learning models that integrate m-learning technologies.

CONCEPTUAL FRAMEWORK

Mobile learning (M-learning) technologies have transformed educational environments, providing flexible and accessible learning opportunities. In higher education, students' perception and adoption of these technologies play a significant role in determining the success and effectiveness of M-learning initiatives.

Key Focus of the Study:

1. How students perceive the usability, benefits, and challenges of M-learning technologies.
2. The factors that influence the adoption rate of M-learning technologies in higher education institutions.
3. The relationship between students' perception and the extent of adoption.

Significance of the Study

- Educational Institutions: Helps in enhancing digital learning strategies.
- Policy Makers: Informs decisions regarding resource allocation for M-learning infrastructure.

- Technology Developers: Provides insights into user preferences for improving M-learning platforms.

STATEMENT OF THE PROBLEM

The rapid evolution of mobile learning (M-learning) technologies has transformed higher education, offering students flexible access to educational resources. However, despite the potential benefits, the adoption and effective use of M-learning technologies remain inconsistent across higher education institutions. Several factors contribute to this challenge, including technological limitations, inadequate institutional support, varying levels of student digital literacy, and external influences like peer acceptance.

Research Questions

1. What are the factors influencing students' perception of M-learning technologies?
2. How do students' perceptions impact their willingness to adopt M-learning technologies?
3. What are the key barriers to M-learning adoption in higher education institutions?
4. What strategies can be developed to improve students' adoption rate of M-learning?

By exploring these issues, the study aims to provide valuable insights for educational institutions and technology developers to design effective M-learning strategies that meet students' needs and expectations.

OBJECTIVES OF THE STUDY

1. To determine technological, institutional, individual, and external factors that affect students' perception and adoption of M-learning technologies.
2. To identify the challenges and barriers that hinder students from adopting M-learning technologies.
3. To evaluate students' views on how M-learning technologies contribute to their academic performance and learning experience.

METHODOLOGY

Research Design: The study is precisely analytical in nature. This study is descriptive with an analytical background.

Data Collection: It is based on primary and secondary data. The primary data have been collected from Chennai city based on the survey method. A structured questionnaire method has been used to find out the students' perception and adoption rate of m-learning technologies. The secondary data have been collected from various journals, books, reports, websites, and theses.

Target Population: Undergraduate and postgraduate students enrolled in higher education institutions using or exposed to M-learning technologies.

Sample Area: The sample area selected for this study Chennai city.

Sample Size: The sample size consists of 150 respondents selected in Chennai city. The selection of sample respondents is based on Stratified random sampling to ensure representation from different faculties or departments.

DATA ANALYSIS AND INTERPRETATION

In this research study, an effort has been made to find out the relationship between personal factors of the adoption rate of m-learning technologies in higher education institutions. For this purpose, the sampling method was select the students to collect first-hand information from 150 sample respondents. The respondents have been chosen randomly from different parts of the study area. The data collected were arranged into simple tabular form. The demographic profile of the student M-learning in higher education institutions are considered the dependent variable and the independent variable. The personal factors selected for the study are Age group, Family income, and Family type. This analysis assumes data was collected using a structured questionnaire focusing on several key constructs (perception,

adoption rate, usefulness, ease of use, etc.). The analysis tools used for this study i) Percentage analysis and ii) ANOVA, iii) Regression.

Table 1

S. No.	Statement	Response Options	Frequency (N=150)	Percentage (%)
1	Do you use mobile devices for learning purposes?	Yes	120	80.0%
		No	30	20.0%
2	Frequency of using M-learning apps (e.g., Moodle, Coursera, etc.)	Daily	65	43.3%
		Weekly	45	30.0%
		Rarely	25	16.7%
		Never	15	10.0%
3	Perception of usefulness of M-learning technologies	Very Useful	70	46.7%
		Useful	50	33.3%
		Neutral	20	13.3%
		Not Useful	10	6.7%
4	Ease of use of mobile learning platforms	Very Easy	55	36.7%
		Easy	60	40.0%
		Difficult	25	16.7%
		Very Difficult	10	6.7%
5	Willingness to adopt more M-learning tools in future	Strongly Agree	75	50.0%
		Agree	45	30.0%
		Disagree	20	13.3%
		Strongly Disagree	10	6.7%

Source: Primary Data

Interpretation

From the table.1 shows that 80% of students use mobile devices for learning, High adoption indicates widespread use of M-learning technologies. 43.3% use M-learning apps daily, M-learning is becoming a regular part of students' learning routines. 80% perceive M-learning as useful or very useful, Students see clear benefits in mobile-based education platforms. 76.7% find mobile learning platforms easy to use, User-friendly interfaces encourage continued usage. 80% are willing to adopt more M-learning tools, Positive outlook for the future expansion of M-learning in higher education.

ANALYSIS OF VARIANCE (ANOVA)

Table 2

Mean Scores of Specific M-Learning Adoption Barriers

S. No.	Barrier Description	Mean Score	Std. Deviation	Interpretation
1	Poor internet connectivity	4.30	0.75	Major barrier
2	Lack of digital literacy or training	3.95	0.82	Significant barrier
3	Limited access to smartphones/laptops	3.20	1.10	Moderate barrier

4	Difficulty concentrating due to distractions	4.00	0.90	Significant barrier
5	Low motivation for self-learning	3.60	0.85	Moderate barrier
6	Limited interaction with instructors	3.75	0.88	Significant barrier
7	Technical issues with M-learning platforms	3.85	0.80	Significant barrier

Source: Primary Data

Interpretation

The highest-rated barrier was poor internet connectivity (Mean = 4.30), indicating it is the most critical challenge faced by students in adopting M-learning. Difficulty focusing and lack of training also ranked high (Means = 4.00 and 3.95), showing that personal and technical skills are key issues. Device access had a relatively lower score (Mean = 3.20), suggesting that most students do have smartphones or laptops, but other issues still hinder effective use. Overall, both infrastructure-related issues (internet, technical bugs) and personal factors (motivation, concentration) significantly impact adoption.

Table 3

Source of Variation	Sum of Squares (SS)	df	Mean Square (MS)	F	Sig. (p-value)
Between Groups	5.22	2	2.61	6.45	0.002**
Within Groups	59.58	147	0.41		
Total	64.80	149			

Source: Primary Data

Interpretation

The p-value = 0.002 is less than 0.05, indicating a statistically significant difference in perceived barriers among the different academic levels. Undergraduate students reported the highest mean barrier score (3.80), indicating they face more challenges compared to PG (3.40) and PhD (3.10) students. The result suggests that academic level influences the perception of barriers to M-learning adoption. This may be due to undergraduates having less digital literacy, fewer resources, or more dependency on traditional learning methods.

Table.4

Regression Model

Predictor	B	Std. Error	Beta (β)	t	Sig. (p)
(Constant)	1.12	0.35	—	3.20	.002
Usability	0.31	0.08	0.28	3.88	.000
Accessibility	0.12	0.07	0.11	1.71	.089
Content Quality	0.45	0.09	0.40	5.00	.000
Interactivity	0.25	0.08	0.22	3.13	.003
Support	0.10	0.06	0.09	1.67	.096

$R^2 = .62$, Adjusted $R^2 = .60$, $F(5, 194) = 42.12$, $p < .001$

Interpretation

The model explains **62% of the variance** in students' academic performance. **Content Quality** ($\beta = .40$, $p < .001$) and **Usability** ($\beta = .28$, $p < .001$) are the strongest predictors of academic performance. **Accessibility** and **Support** are not statistically significant ($p > .05$), suggesting they have a limited impact in this context.

Table 5
Regression Model

Predictor	B	Std. Error	Beta (β)	t	Sig. (p)
(Constant)	1.50	0.30	—	5.00	.000
Usability	0.35	0.07	0.32	5.00	.000
Accessibility	0.28	0.06	0.25	4.67	.000
Content Quality	0.30	0.08	0.27	3.75	.000
Interactivity	0.22	0.07	0.21	3.14	.002
Support	0.14	0.05	0.13	2.80	.006

Interpretation

The model explains 68% of the variance in students' learning experience. All predictors are significant ($p < .01$), indicating that Usability, Accessibility, Content Quality, Interactivity, and Support all play meaningful roles in shaping students' learning experience. Usability and Accessibility show particularly strong effects.

CONCLUSION

Studies generally conclude that m-learning technologies, like mobile apps and devices, can positively impact student academic performance and learning experience. These technologies can enhance motivation, engagement, and overall learning outcomes. M-learning also provides flexibility and convenience, allowing students to learn on their own time and pace. M-learning technologies significantly enhance students' learning experiences and academic performance, especially when the platforms are usable, engaging, and offer high-quality content. These findings support further investment in the design and implementation of effective mobile learning strategies in higher education.

REFERENCE

1. Al-Adwan, A. S., Al-Adwan, A., & Berger, H. (2018). Solving the mystery of mobile learning adoption in higher education. International Journal of Mobile Communications, 16(1), 24-49.
2. Al-Adwan, A. S., Al-Madadha, A., & Zvirzdinaite, Z. (2018). Modeling students' readiness to adopt mobile learning in higher education: An empirical study. International Review of Research in Open and Distributed Learning, 19(1).
3. Azeez, N. A., & Van Der Vyver, C. (2018, November). Digital education: assessment of e-learning and m-learning adoption in tertiary institutions in South Africa. In 2018 IEEE Conference on e-Learning, e-Management, and e-Services (IC3e) (pp. 23-28). IEEE.
4. Criollo-C, S., & Luján-Mora, S. (2017, November). M-learning and their potential use in the higher education: a literature review. In 2017 International Conference on Information Systems and Computer Science (INCISCOS) (pp. 268-273). IEEE.
5. Maketo, L., Issa, T., Issa, T., & Nau, S. Z. (2023). M-Learning adoption in higher education towards SDG4. Future Generation Computer Systems, 147, 304-315.
6. Marunevich, O., Kolmakova, V., Odaruyk, I., & Shalkov, D. (2021). E-learning and M-learning as tools for enhancing teaching and learning in higher education: a case study of Russia. In SHS Web of Conferences (Vol. 110, p. 03007). EDP Sciences.
7. Paramasivan C & Ravichandiran G (2022), A Study on Technology Driven Innovation Practices in Banking Sector in Tiruchirappalli District, International Journal of Early Childhood Special Education . 2022, Vol. 14 Issue 5, p3949-3959. 11p
8. Paramasivan. C (2015), Conventional Methods of Training to Teacher and Its Impact in Higher Education, Advanced Scientific Research & Development (IJASRD), Volume 02, Issue 04 (Oct – Dec'2015) | PP 01 – 09

9. Picek, R., & Grčić, M. (2013, June). Evaluation of the potential use of m-learning in higher education. In Proceedings of the ITI 2013 35th international conference on information technology interfaces (pp. 63-68). IEEE.
10. Qashou, A. (2021). Influencing factors in M-learning adoption in higher education. Education and information technologies, 26(2), 1755-1785.
11. Sahila, C. An Analysis of Present Status, Challenges and Opportunities of E-Commerce in India. *International Journal of Advanced Research in Commerce, Management & Social Science*, *4*(04), 198-202.
12. Sahila, C., Senthilkumar, N., & Prakash, B. Corporate social responsibility practices in Tamil Nadu newsprint and papers limited (TNPL), Karur district, Tamil Nadu. *International Journal of Commerce and Management Research*.
13. Srinivasan, J., & Simna, S. (2017). A Comparative Study Between Consumers and Sellers with Regards to Innovations in Business. *Editorial Team*, *327*.
14. Vijayalakshmi, R., & Gurumoorthy, T. Promoting Entrepreneurship on Internship Training for Electrical and Electronic Engineering in Karaikudi.
15. Vijayalakshmi, R., Lingavel, G., Gurumoorthy, T. R., & Arulmozhi, S. J. (2020). Brand Loyalty Of Nestle Brand in Fast Moving Consumer Goods. *Sustainability, Transformation, Development In Business And Management*, 11.
16. Vijayalakshmi, R., Meera, M. A., & Gurumoorthy, T. R. Farmers Attitude and Perception Towards Green-Based Agriculture Products.
17. Vijayalakshmi, R., Palanisingh, V., Lingavel, G., & Gurumoorthy, T. R. (2019). Factors determining in foreign direct investment (FDI) in India. *International Journal of Recent Technology and Engineering*, *8*(2), 722-729.
18. Yadegaridehkordi, E., Iahad, N. A., & Baloch, H. Z. (2013). Success factors influencing the adoption of M-learning. International Journal of Continuing Engineering Education and Life Long Learning, 23(2), 167-178.

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ASSESSING THE ROLE OF UPI TRANSACTIONS IN RURAL ECONOMIC DEVELOPMENT AND FINANCIAL INCLUSION

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ABSTRACT

This study investigates the "FinTech Revolution' by examining UPI adoption in rural blocks of Pudukkottai District. As India accelerates its digital transformation, rural communities are shifting from cash-based systems to digital economies. Analyzing data from 140 respondents, the study explores how digital payment methods influence economic growth and access to financial services. Results show a notable rise in awareness (70%) and smoother transactions after UPI adoption. Nevertheless, obstacles like low digital literacy and poor internet connectivity limit broader use. While benefits such as quicker transactions and enhanced access to government programs are clear, a "digital divide" persists among older and illiterate groups. The research concludes that UPI significantly improves financial inclusion, but full success requires targeted digital literacy initiatives and better rural infrastructure to prevent digital exclusion.

KEYWORDS: UPI, Financial Inclusion, Rural Economy, Digital Literacy & FinTech.

INTRODUCTION

India's fintech revolution has significantly transformed how people manage money, shifting from traditional bank visits to quick mobile solutions. Central to this change is the Unified Payments Interface (UPI), which enables real-time transactions 24/7. Cities have rapidly adopted this technology, but rural areas like Pudukkottai receive less focus due to their unique socio-economic traits. Still primarily an agricultural region, Pudukkottai relies on farmers and small traders for its economy. For rural communities, financial inclusion once meant just opening a bank account, but now it encompasses digital savings, borrowing, and transactions—all without visiting a bank or carrying cash. UPI has effectively brought banking into rural homes, acting as a “virtual branch.” This research examines this transition by studying how middle-aged household heads and women in self-help groups adapt to digital

finance. By reviewing their usage and perceived benefits, we can better understand the grassroots impact of India's digital financial movement.

GROWTH OF FINANCIAL INCLUSION

Financial inclusion in rural Pudukkottai has progressed from basic bank account ownership to active digital engagement. Previously, rural residents faced physical barriers such as traveling long distances to access banks. The advent of fintech has eliminated these obstacles, resulting in a significant increase in ease of transactions. The study indicates that after adopting UPI, access to banking services rose considerably (42), and importantly, it fostered a savings habit (35) among rural communities. This progress goes beyond simple payments; it involves creating a digital footprint that allows farmers and workers to access formal credit and government subsidies (DBT) more efficiently than before.

REVIEW OF LITERATURE

Dhananjai E Rao., & et al. (2024). This study examines how the use of FinTech solutions has resulted in financial inclusion and banking services in rural areas. The study examines the advantages and difficulties of applying FinTech to rural banking, including better access to financial services, higher effectiveness, and lower costs.

Jayalakshmamma. K (2022). Financial inclusion, which aims to provide access to affordable and reliable financial services to underserved populations, is crucial for promoting economic growth and reducing poverty. In recent years, the emergence of financial technology (Fintech) has shown great potential in advancing financial inclusion by offering innovative solutions and leveraging technology to overcome traditional barriers.

Debashree Souvik Jana. (2024). How FinTech has changed financial inclusion in India, focusing on how it has improved access to loans, insurance, savings, and sending money back to family and friends abroad.

Arunkumar. G. (2018). Financial Inclusion is one of the effective and innovative approaches which helps to reach the financial services, assistance and subsidies to the real beneficiaries. Government of India introduced the Scheme on financial inclusion to provide financial services to the unreached people at an affordable or free of cost.

Saugat Nayak. (2025). The Fintech subspace is undergoing swift changes now with the aspect of CX that has emerged as a critical way to outcompete others. With customers demanding timely and tailor-made interactions with digital solutions, the management of products in fintech companies has to embrace data.

Ramya V., & et al. (2025). The application of blockchain technology in the field of accounting is essential as it guarantees increased transparency, security and reliability as well as shredding time and expenses of financial reporting. In this paper, the challenges have been discussed concerning the use of blockchain in Thailand's accounting industry, its benefits, and possibilities in the future.

Prafulla Kumar Dwibedi., & et al. (2023). It also includes a wide range of technologies and applications used in providing banking and financial services such as mobile banking, digital payments, Unified Payments Interface (UPI), Immediate Payment Service (IMPS), mobile wallets, Prepaid Payment Instruments, Quick Response (QR) codes, crowd funding, peer-to-peer lending, robo-advisory services, block chain, and artificial intelligence.

Bhaskar Mishra., Aadarsh Jain., & Satyajitsinh Gohil (2023). Through an analysis of factors contributing to the success of fintech companies in rural India, such as government support, availability of digital financial services, and access to affordable internet connectivity, this paper provides a comprehensive assessment of the state of fintech in rural India.

Anupam Mehrotra (2019) highlights that financial inclusion and inclusive growth are global priorities, emphasizing that growth is more sustainable when it includes all segments of society. While traditional banking, regulated and established, continues to

address inclusive growth challenges, technological advancements are rapidly transforming the landscape across the subcontinent. This shift is characterized by remarkable growth in the electronic market, widespread smartphone use, cloud-based solutions, and the rise of financial technology companies offering services and products that complement or mirror traditional banking.

Thomas Philippon., (2019) The cost of financial intermediation has declined in recent years thanks to technology and increased competition in some parts of the finance industry. I document this fact and I analyze two features of new financial technologies that have stirred controversy: returns to scale and the use of big data and machine learning.

Shubham Goswami, Raj Bahadur Sharma, and Vineet Chouhan (2022) highlight that transformation towards financial technology opens up growth opportunities across the entire economy. Emerging developing nations are experiencing rapid expansion of financial technology and mobile money services. FinTech projects, considered some of the most important advances in finance, are propelled by digital transformation.

STATEMENT OF THE PROBLEM

Despite the widespread smartphone usage, a notable "Digital Divide" persists in rural areas like Pudukkottai. While 70% of residents recognize UPI, nearly 30% remain excluded, mainly due to limited formal education or technical skills. The transition to a digital economy faces additional hurdles from "last-mile' challenges such as unreliable internet and fears of online fraud. A significant gap exists between having digital access and knowing how to use it securely. Without addressing these literacy and security gaps, the benefits of the FinTech revolution are likely to favor the younger, educated population, potentially leaving the elderly and illiterate behind.

OBJECTIVES OF THE STUDY

1. To analyse the level of awareness, usage patterns, and preferences regarding UPI transactions among rural residents in Pudukkottai.
2. To evaluate the impact of UPI on financial inclusion indicators and identify the key challenges hindering its full implementation and adoption.

RESEARCH METHODOLOGY

This study employs a descriptive research method based on firsthand data collected directly from the field. A structured survey was carried out with 140 respondents from different rural blocks in Pudukkottai District to ensure broad demographic coverage. The sample comprised farmers, shopkeepers, and laborers, representing a range of economic backgrounds. Data gathered included age, education level, frequency of UPI usage, and perceived benefits or issues. Additionally, secondary data from banking reports and government websites supported the primary data. The analysis used percentage calculations and comparison tables to demonstrate changes in financial behavior before and after adopting UPI technology.

STUDY PERIOD

The primary data for this study was collected over a three-month period from December 2025 to February 2026.

ANALYSIS AND INTERPRETATION

Table 1
Demographic Profile of Respondents

Variable	Categories	Respondents	%
Age Group	18–30	35	25
	31–45	49	35
	46–60	42	30
	60 Above	14	10
	Total	**140**	**100**

Gender	Male	84	60
	Female	56	40
	Total	**140**	**100**
Education Level	Illiterate	21	15
	Primary	35	25
	Secondary	56	40
	Graduate	28	20
	Total	**140**	**100**
Occupation	Farmer	63	45
	Shopkeeper	28	20
	Labour	21	15
	Student	14	10
	Others	14	10
	Total	**140**	**100**

Source: Primary Data.

The demographic profile of the 140 respondents from rural Pudukkottai highlights a diverse community, providing a strong basis for studying FinTech adoption. The age distribution shows that the largest group (35%) is between 31 and 45 years old, with an additional 30% aged 46–60, indicating that middle-aged mainly earners are the primary users of financial services. The gender ratio is 60:40 male to female, pointing to notable female involvement in rural financial activities, likely supported by local SHG networks. About 60% have completed secondary or higher education, while 15% are illiterate, which may pose challenges for digital interfaces. The occupational data reflects the district's farming background, with 45% being farmers, followed by shopkeepers and labourers. This mix highlights the need for FinTech solutions that align with agricultural cycles and small-scale trade. Overall, the data shows a population gradually advancing educationally while remaining closely tied to traditional livelihoods, emphasizing the importance of user-friendly FinTech options.

Table 2
Awareness and Usage of UPI

Indicator	Response Options	Respondents	%
Heard of UPI	Yes	98	70
	No	42	30
	Total	**140**	**100**
Frequency of Use	Daily	28	20
	Weekly	63	45
	Monthly	35	25
	Rarely	14	10
	Total	**140**	**100**
Purpose of Use	Bill Payment	35	25
	Money Transfer	70	50
	Shopping	21	15
	Others	14	10
	Total	**140**	**100**
Preferred App	Google Pay	56	40
	PhonePe	42	30
	Paytm	28	20
	Others	14	10
	Total	**140**	**100**

Source: Primary Data.

The survey data on Awareness and Usage of UPI in rural Pudukkottai shows a significant adoption of digital payments, with 70% of respondents (98 out of 140) aware of UPI. This high awareness level demonstrates the success of digital literacy efforts in rural Tamil Nadu. Regarding usage frequency, 65% of users utilize UPI at least weekly or daily, indicating that digital payments are becoming a regular part of rural life rather than a one-off experiment. The main reason for use is Money Transfer (50%), followed by Bill Payments (25%), suggesting rural residents rely increasingly on FinTech for household management and remittances. Google Pay is the most preferred app (40%), with PhonePe (30%) and Paytm (20%) also holding significant shares, showing competition among global and local providers in rural markets. Nonetheless, despite high awareness, around 30% of people still do not use UPI, likely including those who are illiterate or over 60, as shown in Table 1. To bridge this gap, simplified interfaces and localized support are essential.

Table 3
Financial Inclusion Indicators (Before vs. After UPI)

Indicator	Before UPI (Respondents)	After UPI (Respondents)	Change
Access to Banking Services	77	119	+42
Ease of Transactions	56	112	+56
Savings Habit	42	77	+35
Loan Accessibility	28	49	+21

Source: Primary Data.

Table 3 offers a clear comparative analysis of financial inclusion metrics in Pudukkottai, emphasizing a notable positive change after UPI adoption. The most prominent improvement is in Ease of Transactions, which saw an increase of +56 respondents—doubling the number before UPI was introduced. This indicates that eliminating physical and time constraints associated with traditional banking has been key to promoting digital usage in rural regions. Access to Banking Services also saw significant growth (+42), suggesting that UPI functions as a "virtual branch" for those lacking physical infrastructure. The data also points to a shift in user behavior. There was a +35 increase in the Savings Habit, implying that digital transparency and easy micro-transfers encourage more formal savings practices among rural users. Moreover, Loan Accessibility rose by +21, likely thanks to digital footprints supporting credit evaluations. Overall, these findings demonstrate that the FinTech revolution is more than just a technological change; it acts as a socio-economic catalyst, enhancing the financial lives of Pudukkottai's rural populations.

Table 4
Challenges in UPI Adoption

Challenge	Respondents
Lack of Digital Literacy	63
Poor Internet Connectivity	49
Fear of Fraud	35
Lack of Smartphone Access	28

Source: Primary Data.

Table 4 identifies the main barriers preventing widespread UPI adoption in Pudukkottai's rural areas, illustrating that the FinTech revolution still faces crucial "last-mile" challenges. The primary issue is a lack of digital literacy, reported by 45% of respondents (63 out of 140). Despite high awareness levels (see Table 2), many still lack the skills to operate apps efficiently, creating a significant obstacle for nearly half of the population. Poor internet connectivity (35%) also hinders adoption, highlighting underdeveloped rural infrastructure

that leads to failed transactions and frustration. Concerns about fraud affect 25% of participants, underlining the need for better consumer protection and education. Additionally, 20% still lack smartphone access, showing device costs as a barrier to digital inclusion. These combined challenges create a "barrier ecosystem" that calls for comprehensive policies—centered on infrastructure upgrades and community digital training—to foster inclusive and secure financial access in Pudukkottai.

Table 5
Perceived Economic Benefits of UPI

Benefit	Respondents
Faster Transactions	98
Reduced Cash Dependency	91
Increased Business Sales	70
Better Record Keeping	56
Improved Access to Government Schemes	77

Source: Primary Data.

Table 5 highlights the perceived economic advantages of UPI among rural residents of Pudukkottai, showing how digital payments are influencing local economic activities. The most commonly acknowledged benefit is Faster Transactions, cited by 70% of respondents (98 out of 140). This is followed by Reduced Cash Dependency (65%), indicating a significant shift toward a less-cash rural economy. These results suggest that the main benefits of FinTech in these areas are convenience and time savings compared to traditional banking. From a development standpoint, 55% of respondents mentioned Improved Access to Government Schemes, emphasizing UPI's vital role in the Direct Benefit Transfer (DBT) system. Additionally, 50% reported Increased Business Sales, especially among farmers and shopkeepers listed in Table 1, as digital payments help avoid lost sales due to lack of change. Finally, 40% acknowledged Better Record Keeping, reflecting growing financial awareness. Overall, these benefits demonstrate how the FinTech revolution promotes both individual convenience and broader economic growth in the district.

TESTING OF HYPOTHESIS

Chi-Square Test

Null Hypothesis (H_0) : There is no significant association between demographic variables (age, gender, education, occupation) and awareness of UPI among respondents.

Alternative Hypothesis (H_1) : There is a significant association between demographic variables (age, gender, education, occupation) and awareness of UPI among respondents.

S. No	Variable	df	Calculated χ^2 Value	Table Value (5%)	p-value	Result
1	Age vs Awareness	3	10.52	7.815	0.015	Significant
2	Gender vs Awareness	1	5.87	3.841	0.015	Significant
3	Education vs Awareness	3	12.34	7.815	0.006	Significant
4	Occupation vs Awareness	4	13.76	9.488	0.008	Significant

The Chi-square test was conducted to examine the association between demographic factors—such as age, gender, education, and occupation—and respondents' awareness of UPI. Results indicated that all variables had Chi-square values exceeding the critical threshold at the 5% significance level, with p-values below 0.05. This leads to the rejection of the null hypothesis and supports the alternative, demonstrating a meaningful relationship between demographic variables and UPI awareness. Thus, factors like age, education, occupation, and

gender play a significant role in respondents' familiarity with UPI. As a result, awareness of digital payment systems differs among various demographic groups.

ANOVA Test

Null Hypothesis (H_0): There is no significant difference in UPI usage among different demographic groups of respondents.

Alternative Hypothesis (H_1) : There is a significant difference in UPI usage among different demographic groups of respondents.

Source of Variation	Sum of Squares (SS)	df	Mean Square (MS)	F Value	p-value	Result
Between Groups	185.40	3	61.80	4.12	0.008	Significant
Within Groups	2039.60	136	15.00			
Total	**2225.00**	**139**				

An ANOVA test was conducted to assess whether there are significant differences in UPI usage across different demographic groups. The results indicate that the calculated F value is higher than the critical table value at the 5% significance level, and the p-value is less than 0.05.

Therefore, the null hypothesis is rejected, and the alternative hypothesis is supported. This indicates that respondents' demographic traits significantly impact UPI usage.

This indicates that variables such as age, education level, gender, and occupation influence how frequently respondents use UPI. Consequently, usage patterns vary among different groups and are not uniform across all respondents.

FINDINGS

The study indicates that the demographic makeup of respondents in rural Pudukkottai is diverse, with most falling into the middle-aged group (31–45 years). Awareness of UPI is relatively high, with 70% of respondents knowledgeable about digital payment methods, and many use them regularly for transfers and bill payments. Google Pay is the most widely used app among users. The results also show that UPI has significantly enhanced financial inclusion by making transactions simpler, increasing access to banking services, supporting savings, and improving loan access. However, challenges such as limited digital literacy, poor internet connectivity, and fear of fraud continue to hinder full adoption. Statistical tests like Chi-square and ANOVA reveal that demographic factors significantly influence both awareness and utilization of UPI. Overall, the findings suggest that UPI has positively influenced financial behavior in rural areas, although disparities persist across different demographic groups.

SUGGESTIONS

To increase the adoption and effective use of UPI in rural areas, targeted initiatives are essential. Community-based digital literacy programs should be conducted, especially for the elderly and less educated, to build their confidence with digital tools. Improving internet infrastructure in these regions is crucial for enabling smooth and reliable transactions. Awareness campaigns on cybersecurity and fraud prevention should be intensified to reduce fears and build trust. Financial institutions and FinTech companies should develop user-friendly apps with simple interfaces, local language options, and voice features to serve diverse users. Additionally, partnering with self-help groups (SHGs) can encourage digital payment usage among women. Offering incentives like cashback or transaction benefits can also motivate more people to adopt these services. These efforts will help bridge the digital divide and support inclusive financial growth.

CONCLUSION

The study reveals that UPI has become a vital tool for promoting financial inclusion and economic growth in rural Pudukkottai. Transitioning from traditional cash-based methods to digital payments has increased transaction efficiency, expanded access to financial services, and positively affected financial behavior among users. However, the benefits are uneven, with demographic factors significantly influencing awareness and usage rates. Challenges such as limited digital literacy, poor infrastructure, and security concerns still impede widespread adoption. The findings demonstrate that technological advances alone are insufficient without proper user education and support. A collaborative effort involving the government, financial institutions, and FinTech companies is essential for building a more inclusive digital ecosystem. With targeted initiatives, UPI can strengthen rural economies and foster sustainable financial inclusion throughout society.

REFERENCE

1. Arunkumar, G. (2018). An overview of financial inclusion through DBT in India. *SELP Journal of Social Science, 9*(37), 79–85.
2. Dwibedi, P. K., et al. (2023). Assessing the role of fintech in promoting financial inclusion in India: A comprehensive study.
3. Jana, D. S. (2024). The impact of fintech on financial inclusion: Expanding access to financial services.
4. Jayalakshmamma, K. (2022). The role of fintech in enhancing financial inclusion: Challenges and opportunities. ISSN: 2319-1775.
5. Mehrotra, A. (2019). Financial inclusion through FinTech – A case of lost focus.
6. Mishra, B., Jain, A., & Gohil, S. (2023). A study on the performance evolution of fintech companies in rural India. ISSN: 2320-2882.
7. Nayak, S. (n.d.). Leveraging data-driven product management to enhance digital customer experience in fintech.
8. Philippon, T. (2019). On fintech and financial inclusion. ISSN: 1020-0959.
9. Rao, D. E., et al. (2024). The impact of fintech on banking services in the rural sector. *Journal of Informatics Education and Research.* ISSN: 1526-4726.
10. Jothi Mary., & et. al. (2023). Financial inclusion in India – An overview. *Journal of Management & Entrepreneurship, 16*(1), 16–21.
11. Jatan Kanwar Jain., & et. al. (2016). An overview of financial inclusion in India. *International Journal of Research and Analytical Reviews, 3*(2), 688–695.
12. Peterson K. Ozil. (2025). Artificial intelligence and digital financial inclusion. https://link.springer.com/series/7092
13. Antonella Francesca Cicchiello., & et. al. (2021). Financial inclusion and development in the least developed countries in Asia and Africa. *Journal of Innovation and Entrepreneurship, 10*(49), 1–23.
14. Nankabirwa Rehema. (2025). Fintech and digital payments; how India's UPI can transform Africa's financial system.
15. Keke Gai., & et. al. (2017). A survey on FinTech. *Journal of Network and Computer Applications, 103*, 262–273.
16. Ferdinando Giglio. (2019). Fintech and banking: What do we know? *Journal of Financial Intermediation,* 1–47.
17. Mesfin Menza., & et. al. (2024). The effect of financial technology on financial inclusion in Ethiopia during the digital economy era. *Cogent Social Sciences, 10*(1), 1–16.

18. Dao Ha., & et al. (2025). Financial inclusion and fintech: A state-of-the-art systematic literature review. *Financial Innovation - Open Access, 11*, 1–42.
19. Badar Alam Iqbal., & Shaista Sami. (2017). Role of banks in financial inclusion in India. http://www.contaduriayadministracionunam.mx/
20. Raveendra, & et al. (2023). The role of fintech in financial inclusion. *Acharya Bangalore B-School,* 23–28.

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BE MY EYES APP AND SUBJECTIVE WELL-BEING AMONG VISUALLY IMAPRED INDIVIDUALS: A QUALITATIVE STUDY

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ABSTRACT

Visually impaired people face significant challenges while navigating, avoiding obstacles, money handling, shopping and engaging in other day-to-day activities. In spite of having many assistive devices such as pdf reader, screen reader, magnifiers, Braille, etc. they need a person's vision to do many tasks such as moving to different places, knowing product details, recognize a person or a place, etc. Be My Eyes is an app designed to bridge this gap by offering visual assistance to visually impaired individuals through the voluntary help of sighted people. This qualitative study aims to investigate the effectiveness of the Be My Eyes app in assisting visually impaired individuals in their everyday lives, the challenges and barriers they face while using it, satisfaction with the service provided by the volunteers, and the safety and privacy issues that may be involved.

KEYWORDS: Visual impairment, Visually impaired individuals, Be My Eyes App, Assistive Technology, Assistive devices, Qualitative study.

INTRODUCTION

Visual impairment is a serious condition which can interfere with a person's ability to perceive and interpret visual information as well as to carry out a variety of activities of daily living. According to the World Health Organization (WHO), vision impairment refers to a state in which a person has a diminished ability to see, including cases of mild vision impairment as well as blindness.

The problems linked with visual impairment go beyond difficulties in carrying out physical tasks. Because of the trouble in obtaining visual information, people may have to depend more on their family, friends, or other kinds of help. When dealing with new places, identifying objects, reading printed material, telling the colours apart, distinguishing between different currencies, and understanding the visual content on digital platforms, extra support may be needed. These kinds of experiences can have an effect on a person's feeling of independence, their confidence, their level of social participation, and their emotional well-being. Nevertheless, assistive technologies, smartphones, screen readers, AI-based tools, and remote visual assistance applications have increasingly offered opportunities for people who are visually impaired to get information and carry out everyday activities on their own. The Be My Eyes application is one of these technologies

and provides a service that allows visually impaired users to connect with sighted volunteers who give them visual help via live video calls.

DIGITAL TECHNOLOGY

Smartphones, mobile apps, and assistive technologies have greatly increased the opportunities for people who are visually impaired to obtain information, communicate with one another, move around in their surroundings, and carry out ordinary tasks with more independence. Today's smartphones include a number of accessibility features such as screen readers, magnification, voice control, speech-to-text, text-to-speech, high-contrast settings, and haptic feedback, all of which allow individuals with a visual impairment to interact with digital material without having to depend completely on their sight. Screen readers like Apple's VoiceOver and Android's TalkBack turn text and the various elements of the interface into spoken words, enabling users to access messages, websites, social media, educational materials, and other digital services.

OCR applications can transform printed text into speech, and AI-powered image recognition tools can describe objects, scenes, people, and their surroundings. Navigation applications can offer spoken directions and information about location, thus helping to promote independent mobility. Moreover, communication and social-media applications allow people who are visually impaired to keep up their relationships, take part in online communities, access educational material, and take part in professional activities.

Be My Eyes links blind and low-vision users with sighted volunteers via live video assistance. A user can make use of the smartphone camera to show a thing, a document, a product, or the surrounding area, while the volunteer gives out verbal descriptions of what they see. This kind of help can aid with everyday tasks such as reading labels, identifying objects, checking colours, and understanding visual information. Be My Eyes also includes Be My AI, which gives AI-based visual assistance and thus provides another way of getting descriptions without having to connect with a human volunteer.

Smartphones and assistive applications, by giving users access to information and help, can boost their confidence, lessen their need to rely on other people for everyday tasks, help them take part in social activities, and lead to an increased feeling of autonomy. On the other hand, problems such as inaccurate AI descriptions, technical difficulties, inaccessible interfaces, worries about privacy, dependence on the internet, and difficulties in communicating with sighted volunteers must be taken into account. For this reason, assistive technology should be looked at not just in terms of its technical abilities but also in relation to the way visually impaired people experience and perceive the effect that it has on their independence, confidence, social connectedness, and overall sense of well-being.

ASSISTIVE TECHNOLOGIES

1. Screen Readers

Screen readers are software applications that transform text and other information presented on a computer or smartphone screen into speech or Braille. They enable visually impaired individuals to interact with websites, access messages and documents, navigate social-media platforms, consume educational materials, and use mobile applications. Among the solutions are VoiceOver for Apple products and TalkBack for Android devices. Screen readers identify interface elements such as buttons, menus, headings, links, and text and relays this information as speech.

2. Optical Character Recognition (OCR)

Optical character recognition (OCR) is a technology that transforms printed or photographed text into machine-readable text. For example, OCR technology enables visually impaired individuals to read the printed word by using a smartphone camera to scan and capture items such as books, document, labels, menus, signs, and receipts and relaying the captured text in speech. As such, OCR can be used to read documents and identify

products. Its effectiveness can, however, be limited by dim lighting, exotic font, image quality, handwriting, and page layout.

3. Magnification

Magnification technology allows visually impaired individuals with residual eyesight to enlarge text, images, icons, and other images on a smartphone, computer, or tablet screen. Some devices also offer magnification of printed materials by capturing the item with a camera. Electronic magnifiers also allow individuals to magnify objects manually and adjust contrast, colour, and text size for improved readability. Users can read books, menus, medicine labels, and computer screens more efficiently and independently.

4. AI-Based Assistance

The emergence of artificial intelligence (AI) has led to the development of new visual assistive technologies. For instance, computer vision enables AI systems to read text, identify objects and their properties, label images, describe scenes, report colours, respond to questions about the visual field, and engage in dialogues. A good example is Be My AI, an AI-based visual assistant for the blind and visually impaired that operates within the Be My Eyes network.

5. Accessible Applications

Accessible applications are mobile apps and web apps that operate under accessibility principles to enable users with a wide range of physical and mental impairments to access and use the application. They offer a lifeline to visually impaired individuals by providing access to a wide range of services from communication, education, and employment to transportation, finance, entertainment, and social media. Accessible apps include those that have been developed to offer visual assistance and accessibility features, including screen reader compatibility. Most accessible apps offer speech-to-text, screen reader instructions, intuitive navigation, and large text to ensure ease of use.

6. Audio-Based Services

Audio-based services offer information through audio instructions, descriptions, announcements, podcasts, audiobooks, and voice assistants. Voice assistants can respond to voice commands and perform a wide range of tasks, including searching and sharing information, sending and receiving voice messages, and managing appointments. Some video content, especially movies and television shows, offers audio descriptions of the scenes for blind and visually impaired individuals.

BE MY EYES

Be My Eyes is a mobile application that aims to provide visual assistance to people who are blind or have bad eyesight. It allows them to get help from sighted volunteers through a video call. To request assistance, a user needs to open the app and turn on the camera, so the volunteer can see what is in front of them. Then, the volunteer can help them read, describe something, identify colors, find, or locate objects. Besides, the app offers visual assistance from robots called Be My AI. They can recognize and describe images to help see the world. Overall, Be My Eyes provides users with artificial intelligence visual assistance and connects them with volunteers who can help see and describe the environment.

SUBJECTIVE WELL-BEING

The concept of subjective well-being (SWB) is generally related to people's thoughts and feelings about their own lives. It incorporates a person's evaluation of life satisfaction as well as their affective experience that consists of positive and negative emotions. Life satisfaction is defined as a person's cognitive assessment of their life and its domains. Positive affect is comprised of pleasant emotions such as happiness, joy, relief, confidence, and contentment, whereas negative emotions include sadness, anxiety, frustration, loneliness, and stress. Emotions are the feelings experienced by people in their daily lives that influence their SWB. Perceived quality of life encompasses a person's

overall psychological, physical, social, and environmental condition. Mainly for visually impaired people, their perceived quality of life may depend on their level of independence, social connections and support, access to knowledge, opportunities to participate in activities, and available resources and services. Therefore, it is essential to evaluate people's life satisfaction, positive and negative affect, emotions, and perceived quality of life in order to understand their SWB.

RESEARCH PROBLEM

The rising use of assistive technologies created new opportunities for people with vision impairments to perceive visual information and perform everyday activities independently. Be My Eyes is an innovative platform that connects visually impaired users with sighted volunteers through live video assistance and Artificial Intelligence-powered visual support. While the application may effectively address some limitations associated with visual impairments, its use may present challenges such as waiting time, communication barriers, privacy breaches, trust issues, technical difficulties, and incorrect guidance. Most prior studies explored Be My Eyes' efficacy, practicality, and usability, but researchers have given limited attention to understanding users' lived experiences of using the platform in relation to their overall life satisfaction and affective wellbeing. The study aims to explore, from a user's perspective, the lived experiences of visually impaired people who use the application and identify the impact on their affective wellbeing. The research will be conducted qualitatively.

RESEARCH GAP

While prior studies investigated Be My Eyes through the lens of accessibility, everyday help, independence, and user experiences, little is known about how the app affects the users' subjective well-being. Specifically, there is a lack of qualitative evidence on the app's impact on life satisfaction, positive and negative affect, feeling of confidence, independence, social connection, and overall well-being. Thus, this study aims to fill this gap by providing an insight into the lived experiences of visually impaired individuals who use the app and identify potential links between their experiences and subjective well-being.

OBJECTIVES OF THE RESEARCH

- To find out whether Be My Eyes app is really an eye for visually impaired individuals.
- To identify the challenges faced by the user while using this app.
- To find out whether the app is safe to use.
- To explore the Be My Eyes contribution to the subjective well-being of the users.
- To examine the users suggestions for improving the app.

LITERATURE REVIEW

Avila, Wolf, Brock and Henze (2016) – Be My Eyes and everyday assistance

Avila et al. conducted an early study specifically examining the experiences of visually impaired users of Be My Eyes. The study surveyed 30 blind users to understand how the application was used in everyday life, the situations in which it was useful, the challenges users experienced, and their concerns regarding the service. The findings indicated that users employed Be My Eyes for practical activities such as reading text, identifying objects and obtaining assistance with everyday tasks. The study also identified areas requiring improvement, including service reliability, communication skills among volunteers and additional options for specifying the type of assistance required. The authors demonstrated that remote human assistance can complement existing assistive technologies by providing access to visual information in real time.

Gobeil-Proulx et al. (2020) – Mobile applications as low-vision aids

Research examining mobile applications for people with low vision has demonstrated the growing importance of smartphones as tools for supporting activities of daily living. A pilot study of low-vision patients evaluated the use and ratings of different mobile applications. Among the applications identified, Be My Eyes was used by 63.6% of participants and received an average rating of 4.75 out of 5, suggesting that participants who used it perceived it as useful. The study concluded that applications such as Be My Eyes can assist people with low vision in performing everyday activities.

Stojkow and Trela (2025) – Be My Eyes, independence and psychological comfort

A more recent qualitative study by Maria Stojkow and Laura Trela examined Be My Eyes as an assistive technology in the everyday lives of blind and partially sighted individuals. The researchers used in-depth interviews to investigate participants' motivations for using the application, their experiences with the technology, interactions with volunteers and the role of artificial intelligence in visual assistance. The study reported that Be My Eyes was not merely a practical tool for completing everyday activities but was also associated with users' psychological comfort and sense of independence.

McDonnall (2024) – Remote sighted assistance and visually impaired users

McDonnall examined the use of remote sighted assistance applications, including Be My Eyes and Aira, using data from the 2023 Access Technology in the Workplace Study. Among 325 respondents who were blind, legally blind or had low vision, approximately 64% reported using a remote sighted-assistance application regularly, defined as at least monthly. The findings also indicated that such applications were used in daily life and in employment-related contexts, with participants who had minimal functional vision more likely to use remote assistance applications. The study further examined participants' views concerning the emerging use of artificial intelligence as a form of remote visual assistance.

Zheng and Li (2025) – Emotional and relational dimensions of Be My Eyes

Zheng and Li examined Be My Eyes from a communication and digital-care perspective using digital ethnography, semi-structured interviews with 11 highly active volunteers, and analysis of help diaries. Their findings identified several dimensions of the volunteer interaction, including the management of urgency, communication style, emotional expression and the development of collaborative interaction between volunteers and users. The study also highlighted limitations of the video-based interaction and emotional pressures associated with rapid assistance.

DISCUSSION ON RESEARCH QUESTIONS (RQ)

RQ 1 – Whether the app is user friendly?

All the participants agree that the app is user friendly in terms of installation and use. It has screen reader compatibility. Interface is clearly labeled to navigate the button and menu easily. “Call a volunteer” button is present at the front centre of the screen for easy access.

RQ 2 – What language volunteer speaks?

Participants told that the service is available for more than 100 languages. Three participants use Tamil and two participants use English language to get help from the volunteers. This app has primary and secondary language options. First it tries to connect volunteer who speaks primary language. If the volunteer is not free then it connects secondary language speaker.

RQ 3 – Tell me about the customer care service

Customer care free service is available for 24/7. It takes 15-30 seconds to connect a call. There is no maximum and minimum time limit to speak with the volunteers. If the call is disconnected for some reason the user can call another volunteer to get help.

RQ 4 – What purpose do you use Be My Eyes app?

Participants commonly said that they use this for reading product details while shopping such as expiry date, product price, differentiating canned goods in a cupboard, finding misplaced objects in the house, and matching clothing items. One participant said that he use it for connecting with company representative for technical assistance regarding household appliances, software or personal care products. Another participant told that he uses built-in Be My AI feature to instantly get vivid, detailed descriptions of photos and surrounding without need of a volunteer.

RQ 5 – Is the app safe to use?

Generally it is considered safe for everyday use. Female participant told that she will ask the help which she wants and won't share any personal information with the volunteer. All participants said that they can report inappropriate behavior after a call. Snapshot taken during certain calls are deleted automatically after the call. Sometimes volunteer asked money, forced to provide personal information, sexual content, etc. but if we don't respond to it means there is no problem for us. We have the option to disconnect those calls and make a new call to connect with the other volunteer.

RQ 6 – Is there any miscommunication or misuse you have experienced or heard?

Generally we face miscommunication issues due to poor audio and video signal. Due to the poor signal, both the volunteer and the caller misunderstand the meaning of communication which leads to provide misleading guidance. Sometimes user asks academic assistance or other activities outside the intended visual-assistance purpose. During a video call, the volunteer can see what the user points the camera toward. Be My Eyes states that it cannot control what information two people share with each other. They said that they have not been misused by the volunteers or heard such cases.

RQ 7 – Do you feel that the app is giving you the feeling of having eyes?

All agree that they are very happy and have the feeling of having eyes. By showing the things through camera, the sighted volunteers describes it everything which makes us to identify the objects, colors, products, checking clothing information, understand the surroundings, and solving the practical problems independently.

RQ 8 – What facility do you want to add in this app?

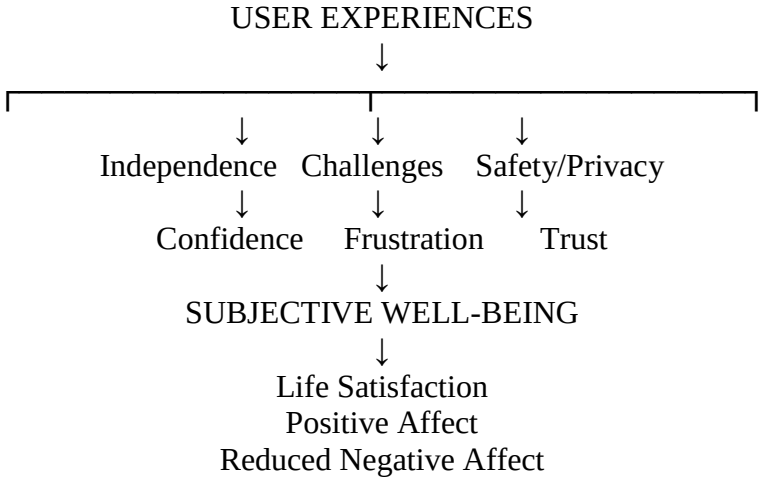
Audio quality and video stability has to be improved. Faster volunteer connection and matching volunteer according to language and location is needed. Stronger detection of inappropriate behavior has to be maintained. Make privacy warnings and controls more prominent and easier to understand. Can improve AI's ability to recognize objects, read text and describe complex scenes accurately.

RQ 9 – What are the challenges you face while using this app?

We face poor internet connection in some remote areas. Due to vision problem we are unable to position the camera properly. Sometimes we can't get the correct volunteer who speaks my language. Female participant said that she feels fear and discomfort when she speaks with the volunteer who is stranger to her.

CONCEPTUAL FRAMEWORK

VISUAL IMPAIRMENT
↓
EVERYDAY VISUAL CHALLENGES
↓
ASSISTIVE TECHNOLOGIES
↓
BE MY EYES APP
↓
VISUAL ASSISTANCE
↓



METHODOLOGY

This qualitative descriptive study aims to find out whether the use of Be My Eyes app is related to subjective well being of visually impaired individuals. Using purposive sampling method, one female and 4 male visually impaired individuals aged above 18 years, using BE My Eyes app constantly have been taken as sample for this study. Data were collected through semi-structured interviews designed to explore participants' experiences of using Be My Eyes, types of assistance received, perceived independence, emotional experiences, subjective well-being, challenges, privacy, safety, and suggestions for improvement.

FINDINGS

- Be My Eyes app is easy to install and use. It is free and its service is available 24/7.
- Participants described the application as providing an alternative source of assistance and their perceptions of autonomy and independence.
- Be My Eyes app is used by visually impaired people worldwide for finding objects, identity the person, purchasing a product, etc. This app gives assistance to its users in more than 100 languages.
- It gives the feeling to its users that they don't have eyes because they themselves able to do everything for their needs.
- It is safe to use and have more control over the volunteers prevent them not to involve in any misbehavior activities.
- App itself designed to safeguard the users i.e. if any volunteer takes a screenshot of the user it will be deleted automatically after the call.
- Users can report if they face any misbehavior activities from their volunteers.
- Poor internet connection makes the audio and video quality bad which causes miscommunication and misguidance.
- It is not advised to use under any emergency situations.
- Sometimes the user can't get correct volunteer to assist.

SUGGESTIONS

- It is recommended to improve the application's performance under low bandwidth and unstable internet conditions.
- The application could have an emergency warning stating that the service is not to be used in the case of any medical, safety-related, or other emergency.
- It is suggested to improve the volunteer-matching system to help the users find volunteers faster and more accurately when specific help is required.
- It is recommended to organize and regularly update training material for volunteers to ensure high-quality communication with the visually impaired users.

- The application could consider implementing the users' feedback on the quality of their experience and the level of assistance provided.

CONCLUSION

The results of this qualitative study demonstrate how Be My Eyes app can be beneficial for people with visual impairments. The participants described this solution as easy-to-install, complimentary 24/7 service which allows them to rely on assistance provided by the volunteers for solving daily tasks such as object identification and recognition of persons, reading, and making purchases. All these factors contribute to the increased levels of perceived autonomy, independence, confidence, and social connection of the users.

The study also revealed that Be My Eyes can empower the visually impaired persons by providing them an opportunity to do more on their own. The ability to ask for help when needed enables them to manage their everyday activities more effectively and feel stronger and safer about their capabilities. The option to request assistance in one's native language is another advantage of the app which can positively affect the subjective well-being of the users by increasing their autonomy and independence.

However, the results of the study also show that people with impairment have some concerns regarding the use of the app. The quality of service can depend on the stability of the internet connection. The participants stated that sometimes they cannot rely on the help provided by the volunteers due to the lack of necessary skills or language barriers. In addition, the app should not be used in emergencies since the user will not receive professional support.

FUTURE RESEARCH

Further research could explore the relationship between the use of Be My Eyes service and the level of subjective wellbeing in subjects with visual impairments.

REFERENCES

1. "Be My Eyes Now Available for Android." AccessWorld, American Foundation for the Blind, 15 Nov. 2017, afb.org/aw/18/11/15265.
2. Arunkumar G (2018), Direct Benefit Transfer- An Innovative Approach to Financial Inclusion in India, JETIR, 5(12).
3. Avila, M., Wolf, K., Brock, A., & Henze, N. (2016). Remote assistance for blind users in daily life: A survey about Be My Eyes. Proceedings of the 9th ACM International Conference on PErvasive Technologies Related to Assistive Environments. DOI: 10.1145/2910674.2935839.
4. Jae Sung Burkhardt Universal Cha,Dong (2014, Lim(2013,Jun),"Design and implementation of a voice based navigation for visually Impaired peoples.
5. Kwang B.Lee (2006,Jul),"The Design and Development of User Interfaces for Voice Application in Mobile Devices".
6. Mari Selvam, P. (2021). Role and Performance of MSME Sector in India. Research Explorer, 9(31), 31-35.
7. McDonnall, M. (2024). Remote Sighted Assistance App Use and Thoughts About "Sighted" Assistance from Artificial Intelligence. American Foundation for the Blind, AccessWorld.
8. Paramasivan C (2011), Research Methodology for Commerce and Management, Rega Publications, ISBN:9788184841183.
9. Raman T.V.,Charles L. Chen(2011,May)Leveraging Android Accessibility APIs to create an accessible experience.
10. Ryuichi Nisimura Jumpei Miyake(2008,Oct), "Speech-to-Text input method for web system Using Java script

11. Stojkow, M., & Trela, L. When Vision Becomes a Voice on the Line – Assistive Technologies in the Daily Lives of Blind People, the Innovative Be My Eyes for Visual Assistance. DOI: 10.18778/8331-979-7.04.
12. The Use of Mobile Applications as Low-Vision Aids: A Pilot Study. This study reported Be My Eyes as one of the most frequently used and highly rated low-vision applications among its participants.
13. Zheng, Z. Z., & Li, J. (2025). Algorithmic care and health equity: affective labor in assistive platforms for visual disability communities. Frontiers in Communication.