

The Impact of Financial Literacy and Security Awareness on Digital Banking Adoption among Young Adults

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ABSTRACT

The rapid digitalization of the banking sector has transformed how individuals manage their finances; however, limited financial literacy and security concerns remain significant barriers to widespread and confident adoption. This study investigates the relationship between financial capability, security awareness, and the usage patterns of digital banking services, specifically focusing on a demographic of young adults. Data was collected through a structured survey assessing users' technical proficiency, their understanding of financial terminology, and their perception of fraud risks.

The findings reveal that while basic adoption is prevalent, a significant portion of users experience hesitancy due to complex interfaces and a fear of security breaches, often leading to a dependence on others for completing transactions. Crucially, the study identifies a strong positive correlation between financial education and user confidence. Respondents demonstrated a high willingness to increase their usage if provided with simplified app interfaces, local language support, and targeted literacy workshops. The research concludes that to enhance digital financial inclusion, institutions must move beyond technical infrastructure and prioritize user-centric education and intuitive design to build trust and competence.

KEYWORDS

Digital Banking, Financial Literacy, Security Awareness, User Adoption, Financial Inclusion, Mobile Banking, Fintech.

1. INTRODUCTION

The global financial landscape has undergone a paradigm shift in the last decade, transitioning from traditional brick-and-mortar banking to a dynamic, digitally driven ecosystem. In India, this transformation has been accelerated by the "Digital India" initiative, the demonetization of 2016, and the unprecedented success of the Unified Payments Interface (UPI). Today, digital banking is not merely a convenience but a fundamental component of economic participation, enabling instant transfers, seamless bill payments, and sophisticated wealth management through mobile applications. However, as financial tools become increasingly complex, the prerequisite for using them safely—financial literacy—has not necessarily kept pace with technological adoption.

The core problem lies in the distinction between "access" and "proficiency." While many individuals in Hyderabad possess the tools to bank digitally, a significant portion remains hesitant or anxious due to a lack of understanding regarding financial terminologies and security protocols. As highlighted by the rising number of cybercrime incidents reported in the city—ranging from phishing attacks to OTP fraud—the security risks associated with digital banking are a primary deterrent for many users. The fear of making operational errors, such as transferring funds to the wrong account or failing to recognize a secure connection, often leads to a reliance on third parties (friends, family, or bank staff) to complete transactions, thereby defeating the purpose of independent, secure banking.

This study aims to empirically investigate the level of digital financial literacy and security awareness among users in Hyderabad. By analyzing primary data collected from residents—specifically focusing on young adults and students who are often early adopters—this paper seeks to identify the specific psychological and technical barriers hindering usage. It further explores how targeted interventions, such as awareness workshops and simplified app interfaces, can mitigate the fear of fraud and enhance user confidence. Understanding these dynamics in the context of Hyderabad provides valuable insights for policymakers and financial institutions aiming to build a more resilient and inclusive digital economy.

1.1 STATEMENT OF THE PROBLEM

Digital banking has become popular among young adults due to the widespread use of smartphones and the internet. However, limited financial literacy, security concerns such as online fraud, and technical difficulties affect their ability to use digital banking confidently. These challenges may reduce the adoption and effective use of digital banking services. Therefore, this study examines the impact of financial literacy and security awareness on digital banking adoption among young adults.

1.2 RESEARCH OBJECTIVES

- Evaluate users' financial literacy levels and awareness of digital banking security measures.
- Examine the challenges users face, such as complex app interfaces, fear of errors, and dependence on others for transactions.
- Determine whether financial education programs and simplified digital banking applications can improve user confidence and adoption.

1.3 RESEARCH HYPOTHESIS

Hypothesis 1:

H₀: There is no significant relationship between financial literacy and digital banking adoption.

H₁: There is a significant relationship between financial literacy and digital banking adoption

1.4 SIGNIFICANCE OF THE STUDY

This study highlights the importance of financial literacy and security awareness in promoting digital banking adoption among young adults. The findings help banks and policymakers understand the challenges faced by users and develop effective awareness programs. The study also provides practical suggestions to improve user confidence, security practices, and digital financial inclusion. Additionally, it contributes to research on digital banking adoption in Hyderabad.

1.5 SCOPE AND LIMITATIONS OF THE STUDY

This study focuses on young adults in Hyderabad who use digital banking services such as mobile banking, internet banking, UPI payments, and online fund transfers. Data was collected through questionnaires and secondary sources. The study is limited to Hyderabad city only. The results are based on respondents' opinions and convenience sampling, which may introduce bias and affect the accuracy of the conclusions.

2. LITERATURE REVIEW

- F. D. Davis (1989) introduced the Technology Acceptance Model (TAM) and found that perceived usefulness and ease of use strongly influence technology adoption.
- R. Safeena, A. Kammani, & N. Hundewale (2011) concluded that security concerns, trust, and ease of access are key factors affecting internet banking adoption in India.
- G. Sharma (2016) highlighted that while digital banking usage increased through the Digital India initiative, low financial literacy and lack of awareness continued to limit adoption.
- S. Singh & R. K. Srivastava (2018) and V. Kumar & A. Mukherjee (2019) found that financial knowledge positively influences the adoption of mobile banking and digital payment services.
- P. Gupta & S. Arora (2020), R. Narayan & P. Rao (2022), and K. S. Sawarni, S. Narayanasamy & S. Ramasamy (2022) emphasized that cybersecurity awareness, financial education, and simplified digital banking services are essential for increasing digital banking adoption among young adults.

RESEARCH GAP

Existing studies on digital banking adoption mainly focus on financial literacy or security awareness separately, with limited research examining both factors together. Most studies target general banking customers rather than young adults, who are major users of digital banking services. There is also a lack of region-specific research in Hyderabad on this topic. Additionally, many studies identify challenges but provide few practical solutions. Therefore, this study aims to analyze the impact of financial literacy and security awareness on digital banking adoption among young adults and suggest measures to improve user confidence.

3. RESEARCH METHODOLOGY

Research Design: The study adopted a quantitative and descriptive research design to analyze respondents' opinions using numerical data.

Sources of Data: Primary data was collected through a Google Forms questionnaire, while secondary data was gathered from journals, articles, government reports, websites, and previous studies.

Sampling Design: Convenience sampling was used to select 100 young adults (18–29 years) from Hyderabad, including students, professionals, and self-employed individuals.

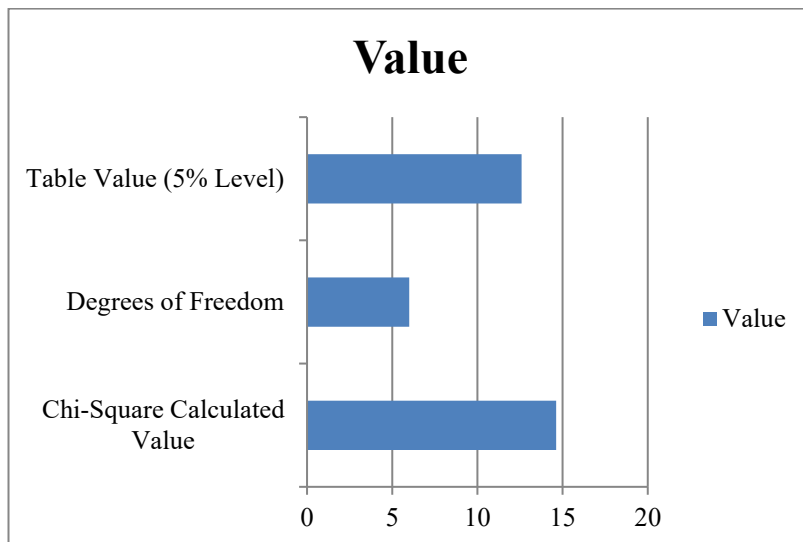
Area & Period of Study: The study was conducted in Hyderabad from 4th January 2026 to 15th February 2026.

Tools for Data Analysis: Percentage analysis, frequency distribution, tabular analysis, charts, graphs, MS Excel, Chi-square test, correlation analysis, and regression analysis were used.

4. DATA ANALYSIS AND INTERPRETATION

1. Chi-Square Test Results

Particulars	Value
Chi-Square Calculated Value	14.62
Degrees of Freedom	6
Table Value (5% Level)	12.592
Decision	Reject H_0
Result	Significant Relationship Exists

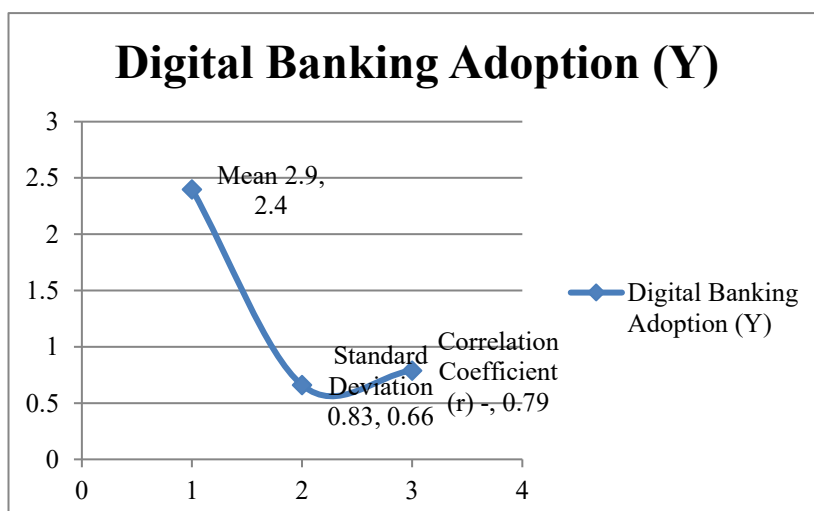


Interpretation:

The calculated Chi-Square value (14.62) is greater than the table value (12.592) at 5% significance level. Therefore, the null hypothesis is rejected. This indicates that there is a significant relationship between financial literacy and digital banking adoption among young adults. Higher financial literacy is associated with greater adoption of digital banking services.

2. Correlation Analysis Between Financial Literacy and Digital Banking Adoption

Particulars	Financial Literacy (X)	Digital Banking Adoption (Y)
Mean	2.90	2.40
Standard Deviation	0.83	0.66
Correlation Coefficient (r)	-	0.79
Nature of Relationship	-	Strong Positive
Significance Level	-	5%
Null Hypothesis (H_0)	-	No Correlation Exists
Alternative Hypothesis (H_1)	-	Correlation Exists
Decision	-	Reject H_0
Result	-	Significant Positive Correlation

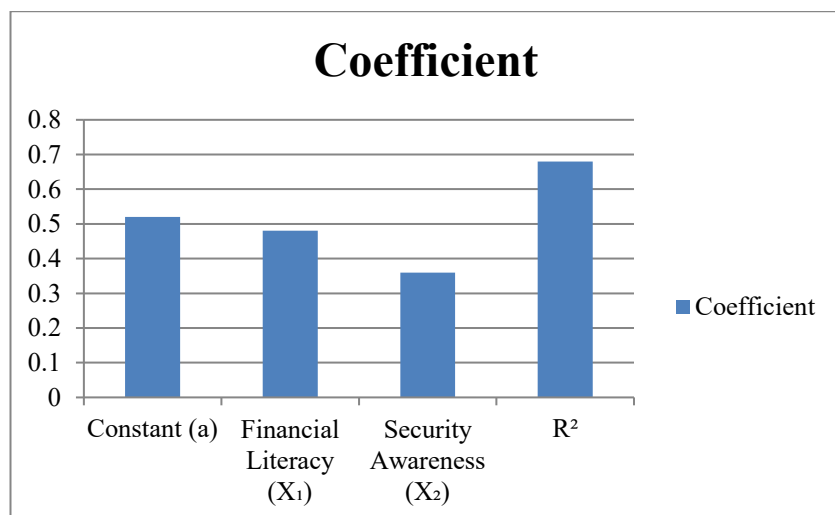


Interpretation

The correlation analysis shows that the correlation coefficient ($r = 0.79$) is positive and close to +1, indicating a **strong positive relationship** between financial literacy and digital banking adoption. This means that respondents with higher financial literacy are more likely to adopt and use digital banking services effectively. Since the relationship is statistically significant at the 5% level, the null hypothesis is rejected and the alternative hypothesis is accepted. Therefore, financial literacy has a significant positive influence on digital banking adoption among young adults.

3. Regression Analysis Results

Variable	Coefficient
Constant (a)	0.52
Financial Literacy (X_1)	0.48
Security Awareness (X_2)	0.36
R^2	0.68



Interpretation

The regression analysis shows that **financial literacy** and **security awareness** have a positive impact on digital banking adoption among young adults. The coefficient of financial literacy (**0.48**) indicates that a one-unit increase in financial literacy increases digital banking adoption by 0.48 units, while the coefficient of security awareness (**0.36**) indicates that a one-unit increase in security awareness increases adoption by 0.36 units. The **R^2 value of 0.68** shows that 68% of the variation in digital banking adoption is explained by these two factors. Therefore, financial literacy and security awareness significantly contribute to higher adoption of digital banking services.

5. FINDINGS

1. **Demographic Influence:** The study is dominated by young, educated adults (18–29 years, Degree holders). Despite their high general literacy, their *financial* confidence is largely "Moderate" rather than "High."
2. **Security Paradox:** While 98% of users are *aware* of security measures like OTPs, nearly 30% still feel significant hesitancy due to fear of fraud. Awareness of the tool does not equate to trust in the system.
3. **Operational Friction:** Technical difficulties (poor design, complex terms) are a barrier for over 44% of users. This friction leads to a lack of independence, with 67% of users relying on others to assist with transactions at times.
4. **Demand for Education:** There is a robust demand for intervention, nearly 80% of users agreed that financial literacy workshops and simplified, local-language interfaces would directly increase their willingness to use digital banking.

6. CONCLUSION

The study concludes that financial literacy and security awareness play a significant role in digital banking adoption among young adults. Although most respondents have access to digital banking services, many still lack confidence due to security concerns and limited financial knowledge. The statistical analyses (Chi-square, Correlation, and Regression) confirmed a positive relationship between financial literacy, security awareness, and digital banking adoption. Therefore, improving financial education, security awareness, and user-friendly banking platforms can enhance digital banking usage and promote financial inclusion.

Suggestions and Recommendations

Improve financial literacy and security awareness through education programs. Develop simple and user-friendly digital banking applications with regional language support. Provide in-app guidance and strengthen customer support and cybersecurity measures. Government and banking institutions should work together to promote safe and effective digital banking adoption.

7. REFERENCES

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