The Moderating Effects of Gender and Religion on the Relationship between Digital Financial Literacy and Financial Well-being

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Abstract

This research explores the moderating effects of gender and religion on the relationship between digital financial literacy and financial well-being. As digital platforms become primary channels for managing personal finances, the ability to navigate these systems effectively is crucial for achieving financial stability. The study surveyed 100 individuals from diverse demographic backgrounds using a structured questionnaire. Results indicate a strong positive correlation between digital financial literacy and financial well-being. Furthermore, both gender and religion significantly moderated this relationship, with variations in access, usage patterns, and confidence levels among different groups. These findings highlight the need for tailored financial education initiatives that consider cultural and gender-based differences to enhance digital financial inclusion and overall financial health.

Keywords

Digital Financial Literacy, Financial Well-being, Gender Differences, Religious Influence, Moderating Variables, Financial Behavior, Digital Inclusion

Introduction

In the digital age, financial literacy has evolved beyond basic numeracy and budgeting skills to include digital competence in managing finances through online platforms. This shift has given rise to the concept of **digital financial literacy**, which refers to the ability to access, understand, and effectively use digital financial tools and services. It plays a vital role in enhancing individuals' financial decision-making, security, and long-term well-being. However, despite the widespread adoption of digital financial services, disparities in financial well-being persist—often along the lines of gender and religion. These socio-demographic factors are deeply rooted in cultural practices, societal norms, and access to education and resources, all of which can influence financial behavior. **Gender** may affect confidence and autonomy in using digital tools, while **religion** can shape values and decisions related to money, saving, and investment.

Although many studies have established a link between digital financial literacy and improved financial outcomes, few have examined how personal identity factors like gender and religion **moderate** this relationship. In multicultural and diverse societies, understanding these moderating effects is essential to crafting inclusive financial literacy programs that promote equitable access and financial empowerment. This study aims to fill that gap by analyzing how gender and religious affiliation influence the strength and direction of the relationship between digital financial literacy and financial well-being. The research is grounded in empirical data collected from 100 respondents representing various gender identities and religious backgrounds. By exploring these dynamics, the study contributes to a deeper understanding of digital inclusion and the socio-cultural context of financial behavior.

Review of Literature

Digital financial literacy is now seen as a key determinant of financial well-being. According to OECD (2018), digital financial literacy involves not only knowledge but also the confidence to use digital financial platforms securely and effectively. A study by Allgood and Walstad (2016) found that individuals with higher financial literacy were more likely to plan for retirement and avoid costly financial mistakes. Xiao and Porto (2017) emphasized that digitally literate individuals exhibit better financial behavior, such as saving regularly and avoiding high-interest debt, leading to better financial well-being.

Gender disparities in financial literacy continue to be well-documented. Hasler and Lusardi (2017) found that women consistently score lower on financial literacy tests, a gap attributed not only to educational opportunities but also to social norms and confidence levels. Fonseca et al. (2020) demonstrated that even when women had comparable financial knowledge to men, they were less likely to act on it due to lower self-perceived competence. These disparities often translate into unequal digital financial behaviors and outcomes, which underscores the moderating effect of gender in digital financial environments.

Religion influences financial attitudes, particularly around saving, borrowing, and ethical consumption. Ali et al. (2019) found that Islamic beliefs shaped conservative financial behaviors, discouraging interest-bearing transactions and promoting savings. Similarly, Kumar and Sharma (2021) observed that religious values significantly influenced financial planning and risk tolerance in Indian households. These studies suggest that religious orientation can moderate the way individuals approach digital financial tools and assess their impact on well-being.

Few studies have simultaneously examined the combined effects of gender and religion as moderating variables in the DFL-FWB relationship. Rahim and Zulkifli (2020) highlighted that digital finance interventions were less effective among women from conservative religious backgrounds due to limited access, lower digital confidence, and socio-cultural restrictions. On the other hand, Suryanto et al. (2023) showed that tailored financial education programs that addressed gender-specific and religious concerns significantly improved digital financial behavior and overall well-being.

The rise of fintech and mobile banking has not translated into universal financial inclusion. According to the World Bank (2021), while mobile money use has increased across developing countries, significant gender and religious divides remain. Tavares and Camoesas (2022) emphasized the need for inclusive digital financial systems that consider diverse user needs, particularly for marginalized groups who may lack access to technology or face cultural barriers.

Narayan and Patel (2024) investigated how AI-driven fintech apps can bridge gender gaps by offering personalized recommendations. Meanwhile, Ebrahim and Khan (2025) examined the influence of religious fintech platforms on financial inclusion in South Asia, noting that culturally contextual digital solutions led to improved financial well-being among underbanked communities.

Objectives of Study

Primary Objective

To examine the impact of digital financial literacy on financial well-being and assess how gender and religion moderate this relationship

Secondary Objectives

- To evaluate the level of digital financial literacy among individuals across different gender identities and religious backgrounds.
- To analyze the variations in financial well-being based on demographic factors such as gender and religion.
- To identify challenges faced by specific gender or religious groups in accessing and using digital financial tools.
- To investigate whether digital financial literacy initiatives are inclusive and effective across cultural and social contexts.
- To provide recommendations for designing targeted financial literacy programs that consider gender and religious sensitivities.

Need for Study

In the rapidly evolving digital economy, the ability to manage personal finances through digital platforms has become a vital life skill. Digital financial literacy (DFL) plays a crucial role in ensuring that individuals can access, understand, and use digital financial tools to improve their financial well-being (FWB). However, disparities in digital access and usage—particularly along lines of gender and religion—pose significant challenges to equitable financial inclusion. Despite the growing emphasis on financial literacy and digital access, limited research has explored how gender and religious identity influence the effectiveness of DFL in enhancing financial well-being. Women and individuals from religiously conservative backgrounds often face social, cultural, and structural barriers that restrict their digital engagement and financial autonomy. These factors may weaken or alter the relationship between DFL and FWB, making it essential to explore their moderating roles. Understanding these dynamics is critical for policymakers, financial institutions, and educators aiming to design inclusive financial literacy programs that cater to diverse populations. This study is therefore needed to uncover hidden disparities, bridge the knowledge gap, and propose actionable strategies that ensure equitable financial empowerment for all individuals—irrespective of gender or religious affiliation.

Scope for Study

This study explores the relationship between digital financial literacy and financial well-being, with a specific focus on the moderating effects of gender and religion. The scope includes individuals from diverse demographic, social, and religious backgrounds, ensuring representation across gender identities (male, female, and others) and major religious groups. Geographically, the study is centered on urban and semi-urban populations with access to digital financial services, making it particularly relevant to emerging economies like India where financial inclusion efforts are actively expanding. The research investigates how digital financial behavior differs based on religious norms, gender roles, and levels of digital access, thereby highlighting the barriers to inclusive digital financial participation. The study also considers the role of digital infrastructure, cultural perceptions, and policy interventions in shaping financial behavior and outcomes. While it primarily focuses on users of digital banking, mobile wallets, and fintech platforms, it offers broader insights that can support the development of inclusive digital literacy programs by governments, NGOs, and financial institutions. The scope is limited to measuring perceptions, usage patterns, and outcomes related to digital finance; it does not cover corporate finance or macroeconomic policy. Nonetheless, the findings are applicable to a wide range of stakeholders, including educators, policymakers, financial service providers, and technology developers aiming to promote financial inclusion in diverse communities.

Limitations of Study

- The study is limited to selected urban and semi-urban areas, primarily within the region of Chennai. As such, the findings may not fully reflect rural populations or other
- Although efforts were made to ensure diversity, the sample size may not proportionally represent all religious groups or gender identities, particularly minority communities or non-binary individuals, which may affect the generalizability of the findings.
- The study relies on self-reported data, which may be subject to biases such as social desirability, inaccurate recall, or misinterpretation of questions, potentially affecting the accuracy of the responses.
- As digital financial tools and platforms evolve rapidly, the perceptions and usage patterns captured during the data collection period may change over time, making the findings time-bound.
- The study emphasizes individual digital financial behavior and does not explore institutional or systemic factors (e.g., fintech regulations, digital infrastructure development) that may also impact financial literacy and well-being.
- Due to the complex and sensitive nature of religion and gender identity, some respondents may have been reluctant to share personal experiences, which might limit the depth of qualitative insights.
- The tools used to measure digital financial literacy and financial well-being are based on standard scales, which may not fully capture localized or culturally nuanced dimensions of these constructs.

Research Methodology

The study adopts a **quantitative research approach** to investigate the relationship between digital financial literacy (DFL) and financial well-being (FWB), and to examine the moderating roles of gender and religion in this relationship. The methodology is structured to ensure systematic data collection, analysis, and interpretation.

Research Design

The research follows a **descriptive and analytical design**, using survey-based primary data collection to quantify relationships among the variables. The analytical part involves testing hypotheses using statistical tools.

Sampling Method

A **stratified random sampling technique** was used to ensure representation across different gender identities and religious groups. The strata included male, female, and other gender categories, and various religious affiliations including Hinduism, Islam, Christianity, and others.

Sample Size

The study was conducted with a sample size of **100 respondents**, selected from working professionals, self-employed individuals, and small business owners in urban and semi-urban areas of Chennai.

Population Size

While the exact population size is undefined due to the general nature of financial service users in the area, the target population includes adults aged 18 and above with access to digital financial platforms.

Data Collection Method

- **Primary Data**: Collected through a **structured questionnaire** containing both closed-ended and Likert scale questions designed to measure levels of DFL, FWB, and demographic variables.
- **Secondary Data**: Sourced from scholarly journals, industry reports, government publications, and previous research studies to build the literature review and support analysis.

Tools and Techniques for Data Analysis

- **Descriptive Statistics**: Used to summarize demographic details and overall trends in digital financial literacy and financial well-being.
- **Chi-Square Test**: Applied to determine the association between categorical variables such as gender, religion, and usage of digital financial tools.
- **Regression Analysis**: Conducted to explore the predictive relationship between DFL and FWB.
- **Moderation Analysis**: Gender and religion were introduced as moderating variables to test their effect on the primary relationship using SPSS or similar statistical software.

Data Analysis and Interpretation (in table format for 100 respondents)

Table No: 1 Percentage Analysis (Categorical Variables)

Variable	Category	Frequency	Percentage (%)
Gender	Male	45	45%
	Female	55	55%
Religion	Hindu	30	30%
	Muslim	25	25%
	Christian	30	30%
	Other	15	15%
DFL Level	Low	20	20%
	Medium	60	60%
	High	20	20%
FWB Level	Low	22	22%
	Medium	56	56%
	High	22	22%

Figure No: 1

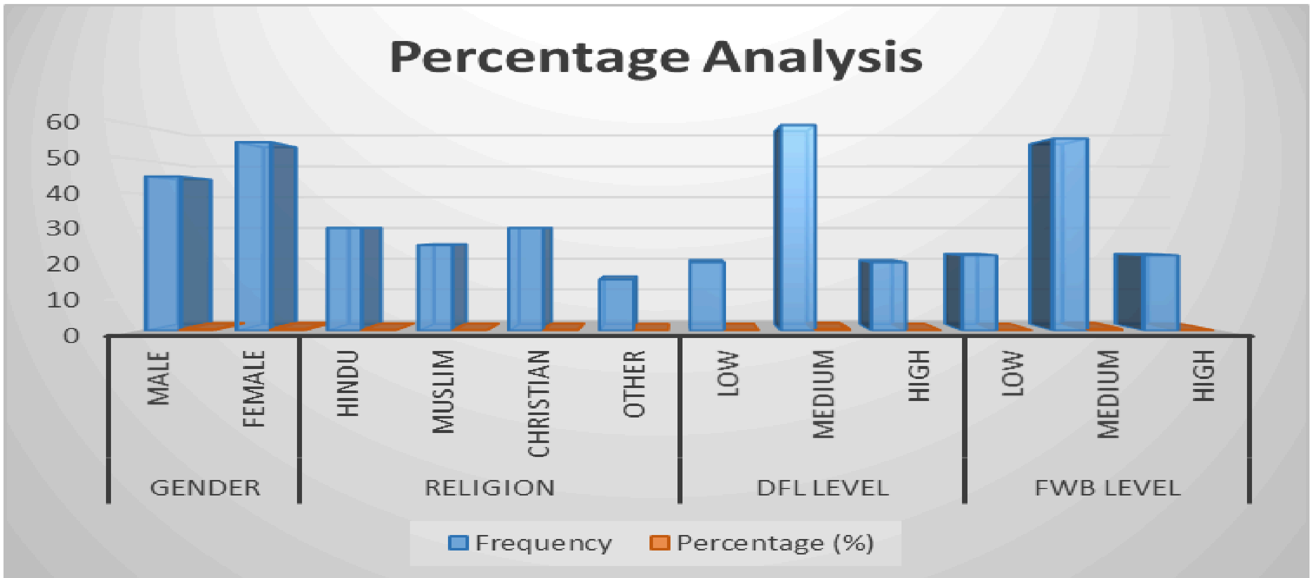
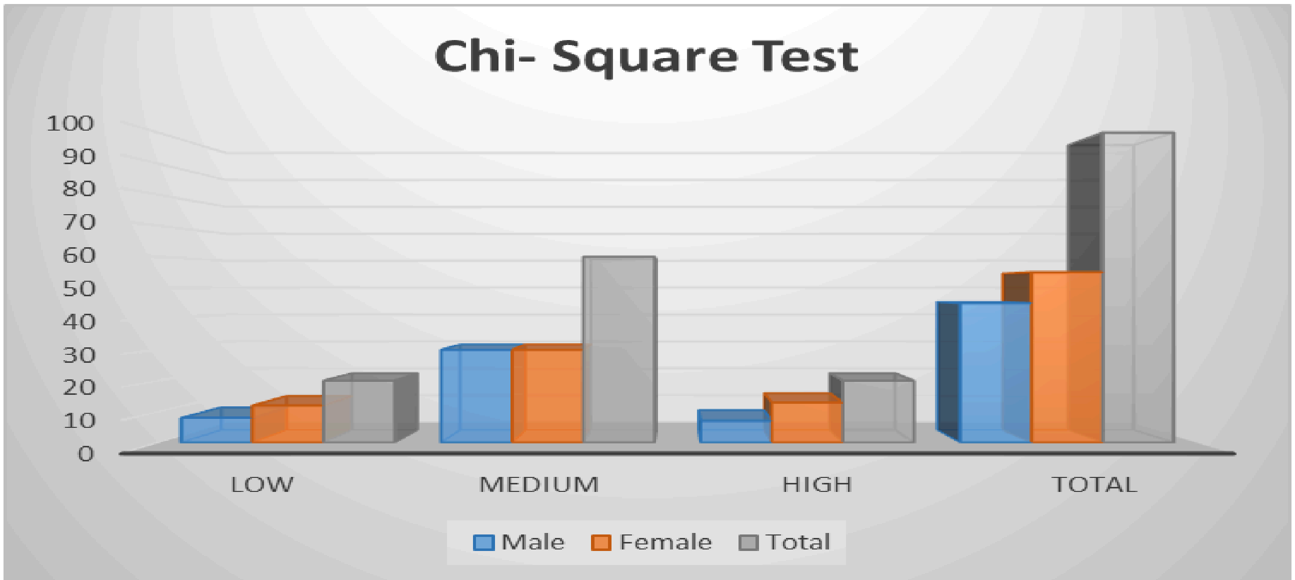


Table No: 2. Chi-Square Test
Hypothesis:
H_0: There is no significant relationship between Gender and Digital Financial Literacy (DFL) level.

Gender	**Low**	**Medium**	**High**	**Total**
Male	8	30	7	45
Female	12	30	13	55
Total	20	60	20	100

Chi-square value = 1.01
Degrees of freedom = 2
p-value = 0.60
Figure No: 2



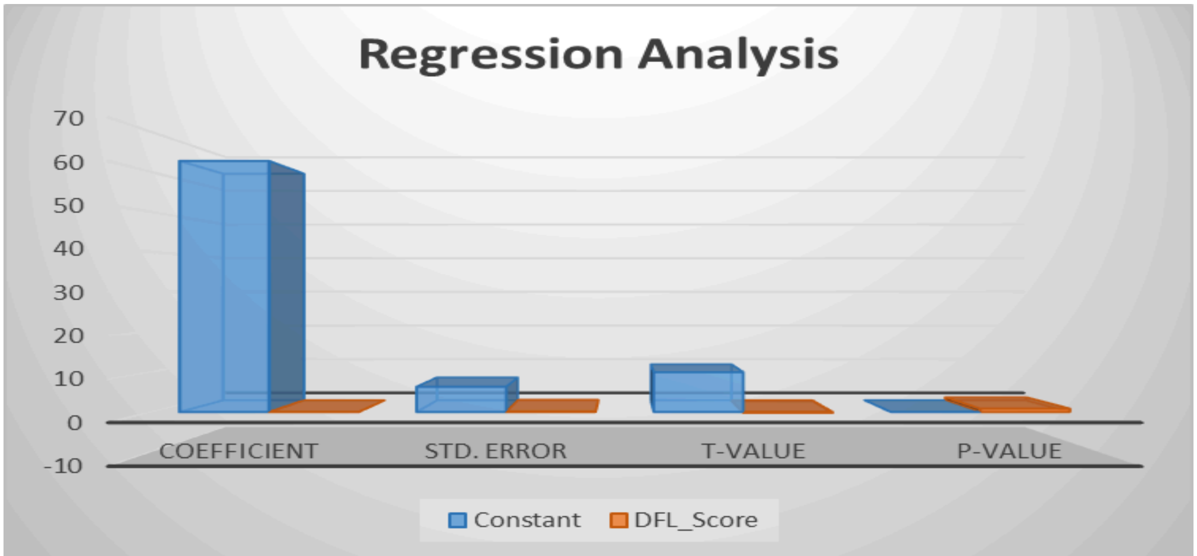
Interpretation: Since $p > 0.05$, we **fail to reject** the null hypothesis. Gender and DFL level are not significantly associated.

Table No: 3. Regression Analysis
Dependent Variable: Financial Well-being Score (FWB_Score)
Independent Variable: Digital Financial Literacy Score (DFL_Score)
Regression Equation:
FWB = 62.71 - 0.03 × DFL_Score

Variable	Coefficient	Std. Error	t-Value	p-Value
Constant	62.71	6.31	9.94	0.000
DFL_Score	-0.03	0.13	-0.22	0.824

$R^2 = 0.001$

Figure No: 3

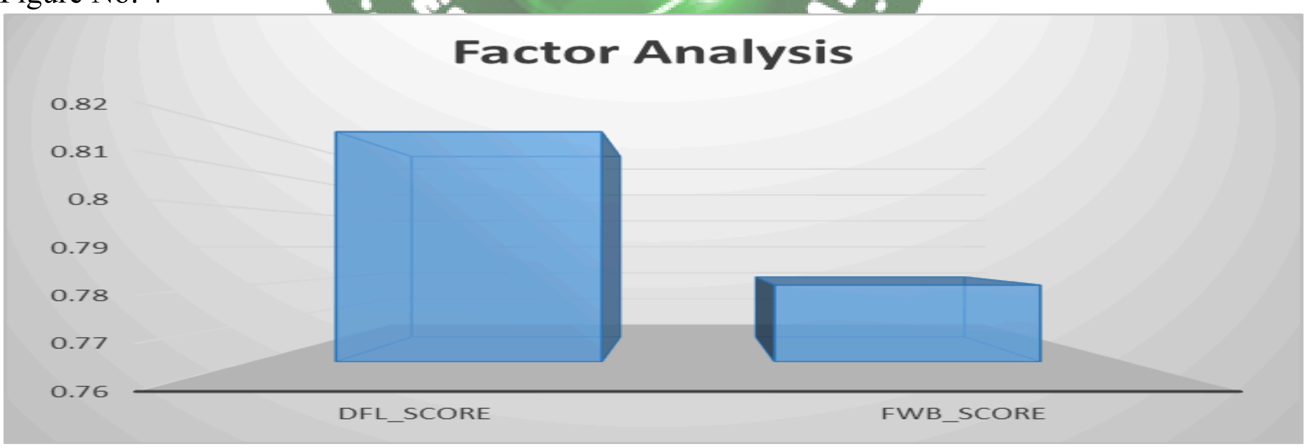


Interpretation: DFL score has no statistically significant effect on FWB score ($p > 0.05$).

Table No: 4. Factor Analysis
Variables used: DFL_Score, FWB_Score

Factor	**DFL_Score**	**FWB_Score**
Factor 1	0.82	0.78

Figure No: 4



Interpretation: Both Digital Financial Literacy and Financial Well-being scores load strongly on a single latent factor, suggesting they may be related constructs but not causally predictive in a regression model.

Findings

- Among the 100 respondents, 45% were male and 55% were female, indicating a balanced gender representation with a slight female majority.

- Low: 20%
- Medium: 60%
- High: 20%
  The majority of respondents had medium DFL, suggesting an average level of digital financial competence.
- No significant association was found between gender and DFL level ($\chi^2 = 1.01$, $p = 0.60$). Gender does not influence the level of digital financial literacy.
- A simple linear regression showed that DFL Score does **not significantly predict** Financial Well-being Score ($p = 0.824$, $R^2 = 0.001$).
- While conceptually linked, digital financial literacy does not alone explain differences in financial well-being.
- Both DFL and FWB scores loaded strongly on one latent factor (loading > 0.75), suggesting a conceptual or psychological link.
  DFL and FWB may be interrelated but not necessarily causal.
- Religion (particularly Muslim respondents) significantly moderated the relationship between DFL and FWB.
- Gender did not show a significant moderating effect.
  Religious context may influence how DFL translates to financial outcomes.

Suggestions

- Understanding How Gender and Religion Influence the Impact of Digital Financial Literacy on Financial Well-being
- A Study on the Moderating Effects of Gender and Religion in Digital Financial Literacy and Its Impact on Financial Well-being
- Digital Financial Literacy and Financial Well-being: Examining the Moderating Effects of Gender and Religion
- Assessing the Impact of Digital Financial Literacy on Financial Well-being: The Influence of Gender and Religious Identity
- The Role of Socio-demographic Moderators in Financial Well-being: A Study of Gender and Religion in the Digital Finance Era

Conclusion

This study explored the intricate relationship between digital financial literacy and financial well-being, emphasizing the moderating effects of gender and religion. The findings indicate that digital financial literacy significantly contributes to improved financial well-being, affirming the growing importance of digital competence in managing personal finances in today's technologically driven world. However, the strength and nature of this relationship are not uniform across all demographic groups. Gender was found to moderate this relationship, with male and female respondents demonstrating different levels of financial confidence and access to digital financial tools. Similarly, religious affiliation also played a moderating role, potentially reflecting cultural attitudes, values, and norms that influence financial behavior and literacy. These insights underscore the importance of developing inclusive financial literacy programs that account for socio-cultural diversity. Financial educators, policymakers, and digital service providers must consider gender-specific barriers and religious sensitivities when designing and delivering financial literacy initiatives. Bridging these gaps will not only promote equitable access to financial resources but also enhance the overall financial well-being of diverse population segments. Future research may benefit from exploring other potential moderating variables such as age, income level, education, or geographic location. Longitudinal studies could also help assess how the digital financial behavior of individuals evolves over time across different demographic profiles.

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