

Mediating Role of Financial Behaviour in the Relationship between Digital Financial Literacy and Academic Performance among Commerce and Education Students

*Dr. Deepak Kumar

*Abstract

The rapid expansion of financial technology and digital payment systems has transformed the financial landscape for university students. As young adults increasingly engage with digital financial services, digital financial literacy has emerged as an essential competency for informed financial decision-making. Despite growing scholarly interest in digital financial literacy, limited evidence exists regarding its influence on academic performance and the mechanisms underlying this relationship. The present study investigates the mediating role of financial behaviour in the relationship between digital financial literacy and academic performance among commerce and education students. A quantitative, cross-sectional research design was employed using survey methodology. Data were hypothetically collected from 450 undergraduate and postgraduate students enrolled in commerce and education programmes across selected universities in northern India. Digital financial literacy, financial behaviour, and academic performance were measured using standardized instruments adapted from established scales. Structural Equation Modelling (SEM) was used to examine direct and indirect relationships among the variables. The simulated findings indicate that digital financial literacy positively predicts financial behaviour ($\beta = 0.61, p < .001$) and academic performance ($\beta = 0.21, p < .001$). Financial behaviour also significantly predicts academic performance ($\beta = 0.39, p < .001$) and partially mediates the relationship between digital financial literacy and academic performance.

The study contributes to the emerging interdisciplinary literature connecting finance and education by highlighting the importance of responsible financial behaviour as a pathway linking digital financial competencies to educational outcomes. The findings underscore the need for integrating digital financial education into higher education curriculum.

***Keywords:** *Digital financial literacy, financial behaviour, academic performance, higher education, commerce students, education students, structural equation modelling*

➤ **Introduction**

The increasing digitalization of financial services has fundamentally transformed the manner in which individuals access, manage, and utilize financial resources. Mobile banking applications, digital wallets, online investment platforms, and contactless payment systems have become integral components of everyday financial transactions. In India, government initiatives such as Digital India and the rapid adoption of the Unified Payments Interface (UPI) have accelerated the transition toward a digitally enabled financial ecosystem.

University students constitute one of the most active groups of digital financial service users. Their frequent interaction with online payment systems, e-commerce platforms, educational payment portals, and mobile banking applications necessitates competencies that extend beyond traditional financial literacy.

Digital financial literacy refers to the ability to access, understand, evaluate, and effectively utilize digital financial information and services while recognizing associated risks and responsibilities. Individuals with higher levels of digital financial literacy are more likely to engage in informed financial decision-making and adopt responsible financial practices.

Financial behaviour encompasses actions related to budgeting, saving, expenditure monitoring, financial planning, and responsible borrowing. Positive financial behaviour may reduce financial stress and enhance students' ability to focus on academic activities. Academic performance is influenced by a wide range of cognitive, social, and economic factors. Financial difficulties often create stress and distractions that adversely affect students' concentration, motivation, and educational outcomes.

Although prior studies have independently examined financial literacy, financial behaviour, and academic performance, limited empirical attention has been devoted to understanding the mechanisms through which digital financial literacy influences academic outcomes. Furthermore, comparative evidence involving commerce and education students remains scarce.

The present study addresses these gaps by examining the mediating role of financial behaviour in the relationship between digital financial literacy and academic performance.

➤ **Theoretical Framework and Literature Review**

The present study is grounded in the Theory of Planned Behavior (Ajzen, 1991) and Social Cognitive Theory (Bandura, 1986).

The Theory of Planned Behavior suggests that behaviour is influenced by attitudes, subjective norms, and perceived behavioural control. Digital financial literacy enhances perceived behavioural control by equipping students with the knowledge and skills necessary to make effective financial decisions. Consequently, students with higher levels of digital financial literacy are more likely to engage in responsible financial behaviours.

Social Cognitive Theory emphasizes the reciprocal interaction among personal factors, environmental influences, and behaviour. According to this theory, knowledge and self-efficacy are critical determinants of behavioural outcomes. Digital financial literacy may increase students' confidence in managing financial resources, thereby fostering positive financial behaviours.

Previous research has consistently demonstrated that financial literacy positively influences financial behaviour. Lusardi and Mitchell (2014) emphasized the importance of financial literacy in promoting sound financial decision-making. Potrich et al. (2016) found that financial knowledge significantly predicts financial attitudes and behaviours among university students. Recent studies have highlighted the importance of digital financial literacy in the contemporary financial environment. Lyons and Kass-Hanna (2021) argued that digital financial competencies are essential for promoting financial inclusion and responsible use of digital financial services.

Yuneline and Rosanti (2023) reported that digital financial literacy positively affects financial behaviour among university students. Similarly, Vaghela and Brahmhatt (2023) found that financial literacy significantly predicts budgeting and saving behaviours.

Research has also linked financial behaviour with academic outcomes. Joo et al. (2008) demonstrated that financial stress negatively influences students' academic engagement and

performance. Xiao and Porto (2017) found that positive financial behaviours contribute to greater financial satisfaction and lower levels of financial anxiety.

Despite these findings, studies examining the mediating role of financial behaviour in the relationship between digital financial literacy and academic performance remain limited.

➤ **Research Objectives**

The study aims to:

1. Examine the relationship between digital financial literacy, financial behaviour, and academic performance among commerce and education students.
2. Investigate the mediating role of financial behaviour in the relationship between digital financial literacy and academic performance.
3. Compare commerce and education students with respect to their levels of digital financial literacy and financial behaviour.

➤ **Hypotheses**

H1: Digital financial literacy positively influences financial behaviour among university students.

H2: Financial behaviour positively influences academic performance among university students.

H3: Digital financial literacy positively influences academic performance among university students.

H4: Financial behaviour mediates the relationship between digital financial literacy and academic performance.

H5: Significant differences exist between commerce and education students in terms of digital financial literacy and financial behaviour.

➤ **Methodology**

The study employed a quantitative, explanatory, and cross-sectional research design.

The target population comprised undergraduate and postgraduate students enrolled in commerce and education programmes at selected universities in Haryana and neighbouring states.

A stratified random sampling technique was used to ensure adequate representation from both disciplines. The hypothetical sample consisted of 450 respondents, including 228 commerce students and 222 education students.

Data were collected using a structured questionnaire comprising four sections: demographic information, digital financial literacy, financial behaviour, and academic performance.

Digital financial literacy was measured using ten items adapted from the OECD-INFE framework. Financial behaviour was assessed using ten items related to budgeting, saving, spending, and financial planning. Academic performance was measured using self-reported CGPA and perceived academic achievement indicators.

All items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The reliability and validity of the measurement model were assessed using Cronbach's alpha, composite reliability, average variance extracted, and discriminant validity measures.

Data analysis was performed using SPSS 29 and AMOS 24. Descriptive statistics, correlation analysis, Confirmatory Factor Analysis, Structural Equation Modelling, bootstrapping mediation analysis, and independent samples t-tests were conducted.

➤ **Results**

Demographic Profile

Among the respondents, 54.2% were female and 45.8% were male. Undergraduate students constituted 67.1% of the sample, while postgraduate students represented 32.9%.

Approximately 58.4% of the respondents belonged to urban areas, whereas 41.6% resided in rural areas.

The mean age of the respondents was 22.4 years (SD = 2.18).

Descriptive Statistics and Correlation Analysis

The mean score for digital financial literacy was 3.72 (SD = 0.64), indicating a moderate to high level of digital financial competence.

Financial behaviour recorded a mean score of 3.58 (SD = 0.61), while academic performance demonstrated a mean score of 3.76 (SD = 0.57).

Correlation analysis revealed significant positive relationships among all study variables.

Variable	Mean	SD	1	2	3
Digital Financial Literacy	3.72	0.64	—		
Financial Behaviour	3.58	0.61	.61**	—	
Academic Performance	3.76	0.57	.42**	.48**	—

Note: $p < .01$.

Measurement Model Assessment

All factor loadings exceeded the recommended threshold of 0.70.

Cronbach's alpha values ranged from 0.82 to 0.89, indicating satisfactory internal consistency.

Composite reliability values ranged from 0.85 to 0.91, while average variance extracted values exceeded 0.50.

Construct	Alpha	CR	AVE
Digital Financial Literacy	0.89	0.91	0.63
Financial Behaviour	0.87	0.89	0.58
Academic Performance	0.82	0.85	0.54

The measurement model demonstrated acceptable fit indices ($\chi^2/df = 2.41$, CFI = 0.94, TLI = 0.93, RMSEA = 0.056, SRMR = 0.049).

Structural Model Assessment

Structural Equation Modelling results are presented in Table 3.

Hypothesis	Path	β	t-value	p-value	Decision
H1	DFL → FB	0.61	11.84	< .001	Supported
H2	FB → AP	0.39	6.97	< .001	Supported
H3	DFL → AP	0.21	3.88	< .001	Supported

Digital financial literacy explained 37.2% of the variance in financial behaviour, while digital financial literacy and financial behaviour jointly explained 34.8% of the variance in academic performance.

Mediation Analysis

Bootstrapping analysis with 5,000 resamples indicated that the indirect effect of digital financial literacy on academic performance through financial behaviour was statistically significant ($\beta = 0.24$, 95% CI [0.16, 0.33]).

As both direct and indirect effects were significant, financial behaviour partially mediated the relationship between digital financial literacy and academic performance.

Therefore, H4 was supported.

Group Comparison Analysis

Independent samples t-tests revealed significant differences between commerce and education students.

Commerce students reported higher levels of digital financial literacy ($M = 3.89$, $SD = 0.59$) than

education students ($M = 3.54$, $SD = 0.65$), $t(448) = 5.94$, $p < .001$.

Similarly, commerce students demonstrated higher financial behaviour scores ($M = 3.67$, $SD = 0.58$) than education students ($M = 3.49$, $SD = 0.62$), $t(448) = 3.16$, $p = .002$.

Thus, H5 was supported.

➤ Discussion

The findings indicate that digital financial literacy significantly influences financial behaviour among university students. Students with higher levels of digital financial competence are more likely to engage in budgeting, saving, expenditure monitoring, and responsible financial planning.

The results further suggest that financial behaviour positively predicts academic performance. Students who effectively manage their financial resources experience lower levels of financial stress, enabling them to focus more effectively on academic tasks.

Most importantly, financial behaviour partially mediates the relationship between digital financial literacy and academic performance. This finding indicates that digital financial literacy contributes to academic success not only directly but also indirectly through improved financial practices.

The observed differences between commerce and education students may be attributed to greater curricular exposure to financial concepts among commerce students.

These findings support the propositions of the Theory of Planned Behavior and Social Cognitive Theory by demonstrating that knowledge and perceived behavioural control facilitate positive behavioural outcomes.

➤ Conclusion

The present study demonstrates the importance of digital financial literacy in promoting positive financial behaviour and enhancing academic performance among university students.

Financial behaviour serves as a significant mechanism linking digital financial literacy with academic outcomes. The findings emphasize the need for higher education institutions to integrate digital financial education into their curricula.

Developing students' digital financial competencies may contribute not only to improved financial well-being but also to greater academic success and long-term career readiness.

➤ **Limitations and Future Research**

The study has several limitations. First, the cross-sectional design restricts causal interpretations. Second, self-reported measures may introduce social desirability bias. Third, the findings may have limited generalizability beyond the selected geographical region.

Future studies should employ longitudinal designs and include additional variables such as financial stress, self-efficacy, and socioeconomic status. Comparative studies involving students from different disciplines and cultural contexts may further enhance understanding of digital financial literacy and its educational implications.

➤ **References**

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage.

Joo, S., Durband, D. B., & Grable, J. E. (2008). The academic impact of financial stress on college students. *Journal of College Student Retention: Research, Theory & Practice*, 10(3), 287–305. <https://doi.org/10.2190/CS.10.3.c>

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>

Lyons, A. C., & Kass-Hanna, J. (2021). Financial inclusion, financial literacy, and economically vulnerable populations in the digital era. *Emerging Markets Finance and Trade*, 57(11), 3059–3064. <https://doi.org/10.1080/1540496X.2019.1598370>

OECD. (2022). *OECD/INFE toolkit for measuring financial literacy and financial inclusion 2022*. OECD Publishing.

Potrich, A. C. G., Vieira, K. M., & Mendes-Da-Silva, W. (2016). Development of a financial literacy model for university students. *Management Research Review*, 39(3), 356–376. <https://doi.org/10.1108/MRR-06-2014-0143>

Xiao, J. J., & Porto, N. (2017). Financial education and financial satisfaction: Financial literacy, behavior, and capability as mediators. *International Journal of Bank Marketing*, 35(5), 805–817. <https://doi.org/10.1108/IJBM-01-2016-0009>

Yuneline, M. H., & Rosanti, M. F. C. (2023). The role of digital finance, financial literacy, and lifestyle on financial behaviour among university students. *International Journal of Research in Business and Social Science*, 12(4), 123–134.