

The Impact of Financial Literacy on Financial Behaviour among Millennials in South Gujarat: An Extended Theory of Planned Behaviour Approach

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Abstract

Purpose: Financial literacy is gradually recognised as a multidimensional construct rather than a simple measure of financial knowledge, yet its digital and confidence-based dimensions remain under-integrated with behavioural theory. This study conceptualises and validates Financial Literacy as a higher-order construct comprising Digital Literacy, Financial Knowledge, and Financial Self-Efficacy, and examines its influence on an extended Theory of Planned Behaviour (TPB) model that incorporates Perceived Moral Obligation alongside the classical antecedents of Financial Attitude, Subjective Norms, and Perceived Financial Control.

Design/methodology/approach: Data were collected through a structured questionnaire administered to 511 millennials across South Gujarat and analysed using Variance-Based Structural Equation Modelling (PLS-SEM) to validate the measurement model and test the hypothesised structural relationships.

Findings: Financial Literacy loads strongly onto all three proposed dimensions and significantly influences all four TPB antecedents, most strongly Perceived Financial Control ($\beta = 0.672$).

Originality/value: The study contributes a validated, digitally inclusive conceptualisation of Financial Literacy and an extended TPB model incorporating Perceived Moral Obligation, offering practical guidance for financial educators, fintech platforms, and policymakers seeking to strengthen millennials' financial decision-making.

Keywords: Financial Literacy, Digital Literacy, Financial Self-Efficacy, Financial Knowledge, Theory of Planned Behaviour, Perceived Moral Obligation, Financial Behaviour, Millennials, PLS-SEM

1. Introduction

1.1 Background of the Study

This study conceptualises financial literacy not as financial knowledge alone, but as a higher-order construct comprising three dimensions: financial knowledge, financial self-efficacy, and digital literacy. Knowledge captures what individuals understand about financial concepts; self-efficacy captures their confidence in acting on that understanding; and digital literacy captures their competence in navigating the platforms through which financial decisions are now made. Together, these dimensions offer a more accurate account of the competencies shaping millennials' financial behaviour and form the basis for

examining the influence of financial literacy on the antecedents of behaviour within the Theory of Planned Behaviour framework.

1.2 The Evolving Conceptualization of Financial Literacy

Financial literacy research has moved well beyond simple knowledge testing. **Lusardi and Tufano (2009)** extended the construct to debt literacy — understanding of borrowing costs, loan structures, and repayment obligations — showing that consumers with weak debt literacy were more likely to face financial distress. **Almenberg and Gerdes (2012)** demonstrated that even numerate individuals remain prone to exponential growth bias, indicating cognitive limitations that persist regardless of formal financial knowledge. Building on such findings, **Potrich, Vieira, and Mendes-Da-Silva (2016)** and **Potrich and Vieira (2018)** modelled financial literacy as a multidimensional construct encompassing knowledge, attitude, and behaviour, using structural equation modelling — an approach this study extends through PLS-SEM.

Alongside these developments, digital literacy has become an increasingly indispensable part of financial competence. **Gilster (1997)** first defined digital literacy as the ability to understand and use information drawn from multiple digital sources, a definition later expanded by **Eshet-Alkalai (2004)** into a framework spanning photo-visual, reproduction, information, socio-emotional, and branching literacies. As financial services move onto digital platforms — mobile banking, robo-advisory tools, digital wallets — the ability to navigate and evaluate digital financial information becomes increasingly inseparable from broader financial competence. **Chelli and Himick's (2024)** notion of “housing literacy” makes a related point, treating financial capability as inseparable from the specific digital and social contexts in which financial decisions unfold.

This study builds on this trajectory by conceptualizing Financial Literacy as a higher-order construct comprising three first-order dimensions — Financial Knowledge, Digital Literacy, and Financial Self-Efficacy — reflecting the view that competent financial behaviour today depends jointly on what individuals know, how confidently they act on that knowledge, and how effectively they operate in digital financial environments.

1.3 The Gap Between Knowledge and Behaviour

Several studies suggest that financial knowledge alone is an incomplete predictor of financial behaviour. **Mireku (2024)** finds that knowledgeable students are more likely to exhibit sound financial behaviour, yet **Blaschke (2022)** shows that psychological factors such as self-confidence moderate how far literacy translates into competence, while **Espinoza-Delgado and Silber (2024)** find that unexplained structural factors account for a large share of literacy gaps beyond observable characteristics like education and income. Together, these findings suggest that behavioural and normative processes mediate the relationship between what individuals know and what they actually do — precisely the kind of process the Theory of Planned Behaviour (TPB) is designed to explain.

1.4 Theoretical Framework

Ajzen's Theory of Planned Behaviour treats intention as the immediate antecedent of behaviour, itself shaped by attitude, subjective norms, and perceived behavioural control. **Bosnjak, Ajzen, and Schmidt (2020)** affirm the framework's continued relevance across disciplines, reiterating that behavioural, normative, and control beliefs shape attitudes, norms, and control, which in turn shape intention and behaviour. **Hapsari (2021)** provides direct precedent for combining financial literacy with TPB, finding — in the context of mutual fund investment intention in Indonesia — that attitude is the strongest predictor of intention, followed by subjective norms and perceived behavioural control, with financial literacy

playing a significant role in helping investors evaluate risk and return.

This study extends the standard TPB model in two ways: first, by adding perceived moral obligation as a further antecedent alongside attitude, subjective norms, and perceived behavioural control; and second, by positioning the Financial Literacy construct as an antecedent that shapes all four of these constructs, with behavioural intention mediating financial literacy's ultimate influence on financial behaviour.

1.5 Statement of the Problem

Existing literature treats financial literacy and TPB as separate streams. Financial literacy has been modelled as multidimensional (**Potrich & Vieira, 2018; Potrich et al., 2016**), but rarely with digital literacy as a formal sub-dimension. TPB has been applied to financial contexts (**Hapsari, 2021**), but financial literacy is typically treated as a control variable rather than as a validated higher-order construct that feeds into all TPB antecedents, and perceived moral obligation is rarely included. This integrated view also remains untested among millennials, whose financial behaviour reflects digital fluency and cohort-specific economic disruption (**Shyamala & Mahesh, 2022**). This study addresses that gap.

1.6 Objectives of the Study

1. To conceptualise and validate Financial Literacy as a construct comprising multiple underlying dimensions, such as Digital Literacy, Financial Knowledge and Self-Efficacy.
2. To study the influence of Financial Literacy on financial attitudes, subjective norms, perceived financial control, and perceived moral obligations.

1.7 Significance of the Study

For theory, the study supports a validated, digitally inclusive conceptualisation of financial literacy and an extended TPB model incorporating moral obligation. For practice, findings can inform financial educators, fintech platforms, and policymakers seeking to design interventions that address not only what millennials know but also how confidently and digitally they can act on that knowledge.

2. Literature Review and Hypotheses Development

2.1 Introduction

This section reviews literature relevant to two broad streams that this study brings together: the conceptualization of financial literacy as a multidimensional construct, and the Theory of Planned Behaviour as applied to financial contexts. The review is organized around the study's objectives, moving from the building blocks of financial literacy to its behavioural consequences, before identifying the specific gap this study addresses.

2.2 Conceptualising Financial Literacy as a Multidimensional Construct

2.2.1 Financial Knowledge

Financial knowledge remains the most extensively studied dimension of financial literacy. **Mireku (2024)** shows that financial knowledge is unevenly distributed across university students and is shaped by demographic and exposure-related factors such as education, work experience, and family background, with more knowledgeable students exhibiting sounder financial behaviour. **Espinoza-Delgado and Silber (2024)** extend this to a cross-country and gender lens, finding significant financial literacy gaps between men and women across Argentina, Chile, and Paraguay, with a large share of the gap attributable to structural and social factors rather than observable characteristics alone. **Akomea-Frimpong, Olaniyan, and Dwomoh-Okudzeto (2023)** show that even policymakers — African legislators — possess only moderate financial knowledge, particularly in budgeting, savings, and retirement planning, and often rely

on external experts as a result. **Blaschke (2022)** adds a psychological dimension, showing that confidence moderates the gender gap in financial knowledge among German high-schoolers, narrowing it for basic concepts but not for more complex ones. Philippas and **Avdoulas (2020)** directly link knowledge to well-being, finding that financially literate Generation Z students in Greece manage financial shocks more effectively and report lower financial fragility. At the more technical end, **Engels, Kumar, and Philip (2020)** show that financial knowledge — more than general financial management behaviour — improves individuals' ability to detect fraud, while **Almenberg and Gerdes (2012)** show that financially literate individuals are less prone to exponential growth bias when evaluating compound returns. **Lusardi and Tufano (2009)** contribute the specific sub-dimension of debt literacy, demonstrating that consumers who poorly understand borrowing costs and interest compounding are more likely to experience financial distress. Collectively, this body of work establishes financial knowledge as a necessary but incomplete determinant of financial behaviour, one that operates alongside confidence, structural circumstance, and — increasingly — digital competence.

2.2.2 Digital Literacy

Digital literacy entered the financial literacy conversation as financial services migrated onto digital platforms. **Gilster (1997)** first defined digital literacy as the ability to understand and use information drawn from multiple digital sources, arguing that it demanded critical thinking and information evaluation rather than mere technical competence. **Eshet-Alkalai (2004)** elaborated this into a multidimensional framework comprising photo-visual, reproduction, information, socio-emotional, and branching literacies, arguing that digital literacy involves the ability to locate, evaluate, organize, and use digital information effectively — competencies increasingly relevant to accessing digital financial services and evaluating online financial information. **Chelli and Himick (2024)**, studying tenant-landlord interactions during the COVID-19 pandemic, introduce the related concept of “housing literacy,” showing that individuals build financial competence through experience and informal, often digitally mediated, knowledge-sharing rather than through formal financial knowledge alone — reinforcing that financial competence in practice extends beyond textbook financial knowledge into digitally situated skill.

2.2.3 Financial Self-Efficacy

Financial self-efficacy — confidence in one's ability to manage financial matters — recurs across the literature as a moderating and constitutive element of financial literacy rather than a mere outcome of it. **Blaschke (2022)** shows confidence narrowing gender gaps in financial literacy for basic concepts, while **Espinoza-Delgado and Silber (2024)** attribute part of the unexplained literacy gap to factors consistent with differences in self-efficacy and empowerment. Philippas and **Avdoulas (2020)** similarly find that financial habits linked to self-assurance, such as expense tracking, influence literacy outcomes and subsequent well-being. These findings support treating self-efficacy as a distinct dimension of financial literacy rather than folding it into knowledge alone, since confidence appears to shape whether knowledge is actually acted upon.

2.3 Financial Literacy and the Theory of Planned Behaviour

Hapsari (2021) offers the clearest existing bridge between financial literacy and TPB, applying the framework to mutual fund investment intention in Indonesia. The study finds attitude to be the strongest predictor of intention, followed by subjective norms and perceived behavioural control, with financial literacy playing a significant supporting role by helping investors understand risk and return, thereby making more informed decisions. This establishes that financial literacy not only serves as a direct

predictor of financial behaviour but also as an antecedent shaping the belief-based constructs — attitude, norms, and control — that TPB identifies as proximate drivers of intention. However, Hapsari's treatment of financial literacy remains unidimensional, and the study neither examines perceived moral obligation as an additional antecedent nor tests behavioural intention as a formal mediating mechanism between financial literacy and behaviour.

2.4 Financial Literacy Among Millennials

Shyamala and Mahesh (2022) provide direct precedent for studying financial literacy specifically among millennials, finding that age, gender, education, occupation, income, savings, and expenditure all significantly shape financial literacy levels among this cohort in Mysore city. The study notes that millennials face distinctive challenges — job insecurity and easy access to credit — that shape financial behaviour in ways not fully captured by studies of older cohorts, and calls for financial education programmes tailored to this generation. This study extends that call by examining not just financial knowledge but the fuller Financial Literacy construct — including digital literacy and self-efficacy — among this generation.

2.5 Research Gap

Three gaps emerge. First, digital literacy has not been validated as a first-order dimension of a higher-order Financial Literacy construct, despite its growing centrality to financial services (**Gilster, 1997; Chelli & Himick, 2024**). Second, no study integrates a validated multidimensional Financial Literacy construct as a simultaneous antecedent of all three TPB constructs, or extends TPB with perceived moral obligation. Third, this integrated model remains untested among millennials, a cohort shaped by digital fluency and economic disruption (**Shyamala & Mahesh, 2022**), particularly in India. This study addresses these gaps using PLS-SEM among millennials in South Gujarat, India.

2.6 Conceptual Framework and Hypotheses

Building on the reviewed literature, the conceptual framework for this study positions Financial Literacy as a higher-order reflective-formative construct comprising Digital Literacy, Financial Knowledge, and Financial Self-Efficacy. This construct is modelled as an antecedent to four TPB-derived constructs — Financial Attitude, Subjective Norms, Perceived Financial Control, and Perceived Moral Obligation.

Based on this framework, the following hypotheses are proposed:

- **H1.** Financial Literacy is positively associated with Financial Attitude.
- **H2.** Financial Literacy is positively associated with Financial Subjective Norms.
- **H3.** Financial Literacy is positively associated with Perceived Financial Control.
- **H4.** Financial Literacy is positively associated with Perceived Moral Obligation.

3. Research Methodology

3.1 Research Problem

The gaps identified translate into a concrete empirical problem: despite the growing use of digital financial services and investment platforms, many millennials continue to exhibit poor financial behaviour, and limited research has empirically tested how a digitally-inclusive, multidimensional Financial Literacy construct influences behavioural intention and actual financial behaviour among millennials in South Gujarat through an extended TPB lens. The methodology below was designed to address this problem.

3.2 Research Design

For this study, a **descriptive cross-sectional** research design has been adopted.

3.3 Data Collection

The study relies on both primary and secondary data. Primary data were collected through a structured questionnaire administered via online (Google Forms) and offline (colleges and workplaces) modes, ensuring adequate representation of the millennial population under study. Secondary data were drawn from academic journals and prior research on financial literacy to support the study's theoretical framing. The questionnaire, comprising closed-ended items, included dichotomous, multiple-choice, and Likert-scale statements, designed to systematically capture respondents' financial literacy and financial behaviour.

3.4 Sampling Design

The target population for this study comprised all millennials residing in selected cities of South Gujarat, namely Surat, Navsari, Valsad, and Bharuch. The sampling elements consisted of individual millennials born between 1981 and 1996, while the sampling units included professionals, businessmen, employed individuals, and households. A sample size of 511 respondents was used for the study, selected through a non-probabilistic convenience sampling technique.

3.5 Data Analysis Techniques

Data analysis employed univariate and multivariate techniques. Univariate analysis used frequency distribution, while multivariate analysis included reliability testing and Variance-Based Structural Equation Modelling (PLS-SEM).

4. Results

Here, the analysis was conducted systematically in line with the research objectives formulated earlier. To ensure that each objective was addressed using appropriate and statistically sound techniques, a range of analytical tools was employed. The descriptive characteristics of the respondents and their financial literacy levels were examined using frequencies and percentages. The hypothesised relationships among the constructs were examined using Structural Equation Modelling (SEM).

4.1 Demographic Profile of Respondents

Table 4.1 presents the demographic and socio-economic profile of the 511 respondents surveyed, covering gender, age, education, marital status, professional status, income, financial education exposure, investment experience, and digital financial service usage. The sample was predominantly male (68.1%) and largely young to middle-aged, with 59.3% aged 29–34, 27.4% aged 35–40, and 13.3% aged 41–45. Respondents were well-educated, with 38.9% post-graduates and 30.1% graduates; 75.0% were married, and most were employed in service (51.3%) or business (28.4%). Income was concentrated in the up-to-₹4 lakh bracket (30.1%). While only 30.7% had attended a financial education programme, 67.7% reported using digital financial services, and investment experience ranged from less than two years (30.1%) to more than ten years (8.0%). The detailed distribution is presented in the table below.

Table 4.1 Demographic Profile of Respondent (N=511)

Characteristic	Category	Frequency	%
Gender	Male	348	68.1
	Female	163	31.9
Age	29 to 34 Years	303	59.3
	35 to 40 Years	140	27.4
	41 to 45 Years	68	13.3

Educational Qualification	Secondary/ Higher Secondary	44	8.6
	Graduation	154	30.1
	Post-Graduation	199	38.9
	Professional	114	22.3
Marital Status	Unmarried	121	23.7
	Married	383	75.0
	Widow/Divorced/Separated	7	1.4
Professional Status	Agricultural	5	1.0
	Employed-Service	262	51.3
	Self-Employed-Professional	82	16.0
	Business	145	28.4
	Homemaker	15	2.9
	Unemployed	2	.4
Income level	Up to 4 lacs	154	30.1
	4 to 8 lacs	120	23.5
	8 to 12 lacs	91	17.8
	12 to 16 lacs	55	10.8
	16 to 20 lacs	31	6.1
	20 to 24 lacs	30	5.9
	Above 24 lacs	30	5.9
Financial Education Program	Yes	157	30.7
	No	354	69.3
Investment Experience	Less than 2 Years	154	30.1
	2-4 Years	137	26.8
	4-6 Years	87	17.0
	6-8 Years	53	10.4
	8-10 Years	39	7.6
	More than 10 Years	41	8.0
Digital Financial Service	Yes	346	67.7
	No	165	32.3

(Source- Study Result)

Table 4.2 presents respondents' sources of financial information. Friends and colleagues were the most common source (22.6%), closely followed by the internet (22.2%) and parents (18.4%), with financial experts (17.2%), traditional media (12.7%), and other channels (6.9%) also contributing. Overall, respondents rely on a diverse mix of informal, digital, and professional sources, with informal and online channels most prominent.

Table 4.2 Source of Financial Knowledge

Source	Frequency	Percent	Cumulative Percent
Friends/Colleagues	257	22.6	22.6
Internet	253	22.2	44.8

Parents	210	18.4	63.2
Financial Expert	196	17.2	80.4
TV/Newspaper/Magazines	145	12.7	93.1
Other	78	6.9	100
Total	1139	100	-

(Source- Study Result)

Table 4.3 presents the financial instruments used by respondents. Savings accounts were the most widely used (14.4%), followed by mutual funds/SIP (11.3%) and mobile banking/UPI (10.7%), reflecting a strong inclination towards both traditional savings and digital avenues. Life insurance (7.8%), shares/stocks (7.7%), gold/silver (7.5%), credit cards (7.4%), and fixed deposits (7.2%) were also fairly popular, while digital financial instruments (3.8%) and real estate (4.8%) recorded the lowest usage. Overall, respondents maintain a diversified portfolio combining conventional and digital instruments.

Table 4.3 Use of Financial Instruments

Financial Instruments	Frequency	Percent	Cumulative Percent
Saving Accounts	441	14.4	14.4
Credit Card	225	7.4	21.8
Fixed Deposits	221	7.2	29
PPF	164	5.4	34.4
Investment in Gold/Silver	230	7.5	41.9
Investment in Real Estate	148	4.8	46.7
Shares/Stocks	234	7.7	54.4
Mutual Funds/SIP	344	11.3	65.7
Digital Financial Instruments	116	3.8	69.5
Health Insurance	203	6.6	76.1
Life Insurance	239	7.8	83.9
Loan or EMI Product	164	5.4	89.3
Mobile Banking/UPI	326	10.7	100
Total	3055	100	-

(Source- Study Result)

4.2 Reliability of Constructs

Table 4.4 presents the results of the reliability analysis measuring the internal consistency of the constructs used in the study. Reliability was measured using Cronbach's Alpha, with values above 0.70 generally considered acceptable. The overall scale, comprising 73 items across all constructs, confirmed excellent reliability with a Cronbach's Alpha of 0.958

Table 4.4 Reliability of Constructs

Sr. No.	Construct	No. of Items	Cronbach's Alpha
1	All Constructs	73	0.958
2	Financial Attitude	11	0.750

3	Financial Subjective Norms	6	0.702
4	Perceived Financial Control	5	0.804
5	Financial Self-Efficacy	6	0.724
6	Digital Literacy	10	0.907
7	Financial Behaviour	12	0.890
8	Financial Knowledge	9	0.901
9	Financial Behavioural Intention	8	0.879
10	Perceived Moral Obligation	6	0.854

(Source- Study Result)

4.3 Data Analysis

Objective-1 To conceptualize and validate Financial Literacy as a Construct comprising multiple underlying dimensions, such as digital literacy and self-efficacy.

Measurement Model Diagram

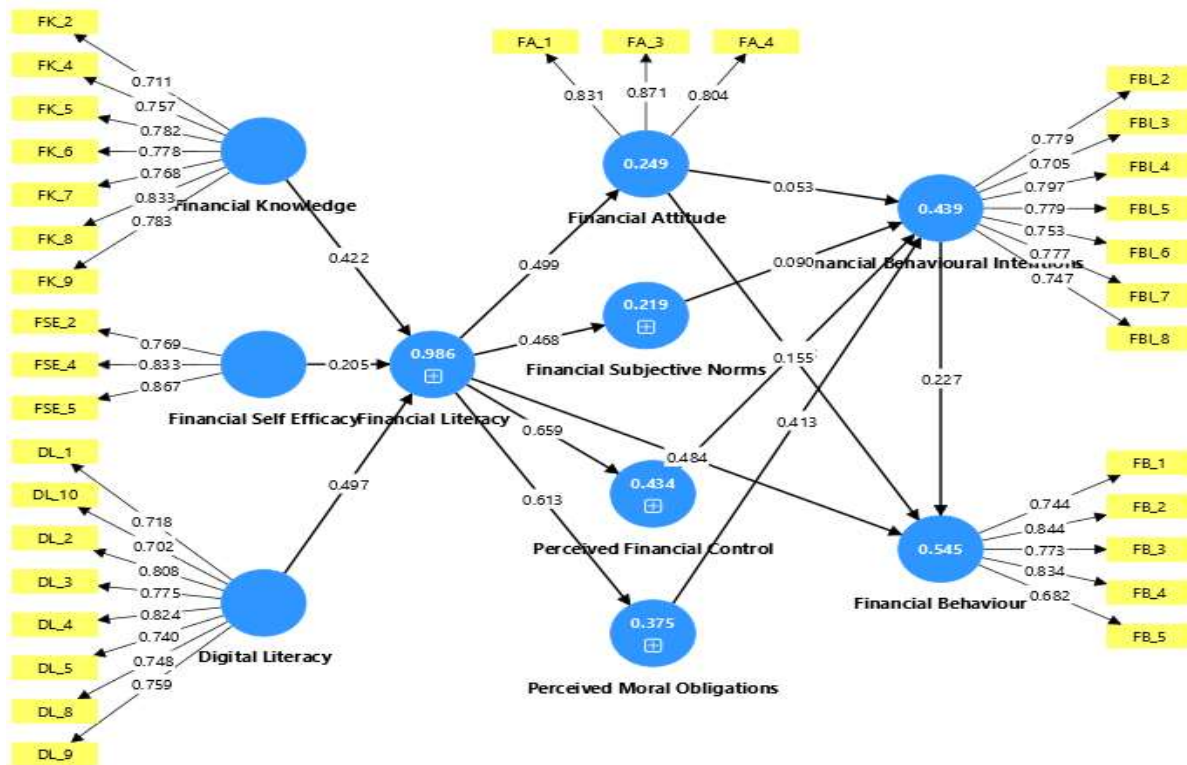


Table 4.5 Outer Loadings

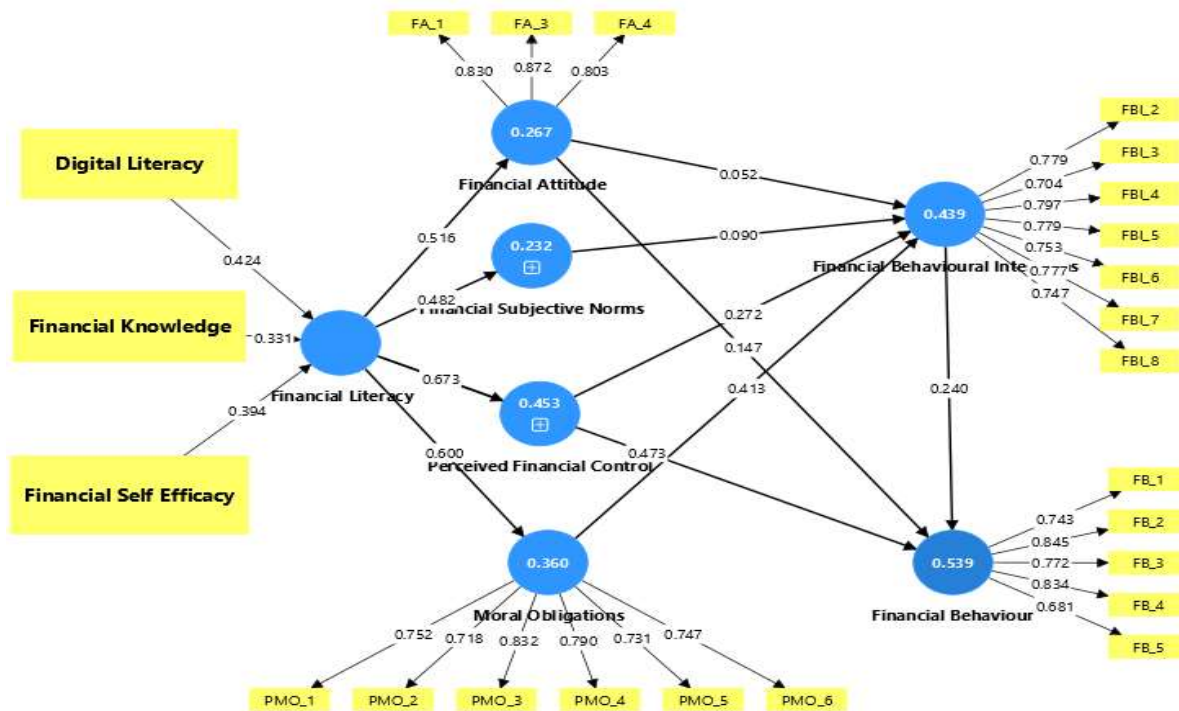
	Original sample (O)	T statistics (O/STDEV)	P values
Digital Literacy <- Financial Literacy	0.891	73.288	0.000
Financial Knowledge <- Financial Literacy	0.873	52.018	0.000
Financial Self-Efficacy <- Financial Literacy	0.845	42.086	0.000

(Source- Study Result)

Table 4.5 above indicates that the outer loading analysis was conducted to examine the strength of the relationship between the higher-order construct, Financial Literacy, and its underlying dimensions. The results indicate that all dimensions exhibit high and statistically significant outer loadings, confirming their strong association with the Financial Literacy construct.

Objective-2 To study the influence of financial literacy on financial attitudes, subjective norms, perceived financial control, and perceived moral obligations.

Structural Model Diagram



(Source- Study Result)

Table 4.6 Path Coefficients

Path	Original sample (O)	T statistics (O/STDEV)	P values
Financial Attitude -> Financial Behaviour	0.148	3.444	0.001
Financial Attitude -> Financial Behavioural Intent	0.052	1.319	0.187
Financial Behavioural Intent -> Financial Behaviour	0.236	4.517	0.000
Financial Literacy -> Financial Attitude	0.513	11.090	0.000
Financial Literacy -> Financial Behaviour	0.477	9.569	0.000
Financial Literacy -> Financial Subjective Norms	0.479	11.105	0.000
Financial Literacy -> Moral Obligations	0.603	14.045	0.000
Financial Literacy -> Perceived Financial Control	0.672	19.161	0.000
Financial Subjective Norms -> Financial Behavioural Intent	0.090	2.293	0.022

Moral Obligations -> Financial Behavioural Intentions	0.413	8.128	0.000
Perceived Financial Control -> Financial Behavioural Intentions	0.272	5.932	0.000

(Source- Study Result)

- Financial Literacy demonstrates significant positive effects on multiple constructs. The relationship between Financial Literacy and Financial Attitude indicates that higher levels of financial literacy are associated with more positive financial attitudes.
- The relationship between Financial Literacy and Financial Subjective Norms is also positive and significant, indicating that greater financial literacy strengthens the perceived influence of important social groups on financial decisions.
- Financial Literacy positively affects Moral Obligations, demonstrating that financially literate individuals possess stronger moral responsibilities regarding financial management.
- Among all the paths originating from Financial Literacy, the strongest effect is observed on Perceived Financial Control. This result indicates that financial literacy substantially enhances individuals' confidence and perceived ability to manage financial matters effectively.

Table 4.7 R – Squared Values

	R-square
Financial Attitude	0.263
Financial Behaviour	0.540
Financial Behavioural Intentions	0.439
Financial Subjective Norms	0.230
Moral Obligations	0.364
Perceived Financial Control	0.452

(Source- Study Result)

The R-square value for Financial Behaviour is 0.540, showing that Financial Literacy, Financial Attitude, and Financial Behavioural Intentions explain 54.0% of the variance in Financial Behaviour. This indicates a substantial explanatory power, demonstrating that the model effectively captures the key determinants of actual financial behaviour.

Table 4.8 Q-Square (Predictive Relevance)

	Q ² predict	RMSE
Financial Attitude	0.305	0.839
Financial Behavioural Intentions	0.216	0.892
Financial Behaviour	0.497	0.713
Financial Subjective Norms	0.218	0.887

Perceived Financial Control	0.445	0.751
Perceived Moral Obligation	0.355	0.809

(Source- Study Result)

The highest predictive relevance is observed for Financial Behaviour, with a Q^2 predict value of 0.497, indicating strong predictive power.

5. Discussion

The results of the measurement model support Financial Literacy loads strongly onto Digital Literacy (0.891), Financial Knowledge (0.873), and Financial Self-Efficacy (0.845), confirming precedent from **Potrich, Vieira, and Mendes-Da-Silva (2016)** and **Potrich and Vieira (2018)** that financial literacy is best modelled as a multidimensional rather than a unidimensional construct, while extending this precedent by validating Digital Literacy as a formal first-order dimension alongside knowledge and self-efficacy — a combination anticipated but not previously tested in the frameworks of **Gilster (1997)** and **Eshet-Alkalai (2004)**.

The structural results support Hypotheses H1 through H4: Financial Literacy significantly and positively predicts Financial Attitude ($\beta = 0.513$, $R^2 = 0.263$), Subjective Norms ($\beta = 0.479$, $R^2 = 0.230$), Perceived Financial Control ($\beta = 0.672$, $R^2 = 0.452$), and Perceived Moral Obligation ($\beta = 0.603$, $R^2 = 0.364$). This extends **Hapsari's (2021)** finding that financial literacy plays a significant supporting role in TPB-based investment intention by showing that a validated, digitally inclusive Financial Literacy construct shapes not only attitude but also all three classical TPB antecedents, as well as the additional Perceived Moral Obligation construct proposed in this study. The particularly strong effect on Perceived Financial Control ($\beta = 0.672$) echoes **Blaschke's (2022)** finding that confidence plays an outsized role in translating financial literacy into usable competence, suggesting that literacy's influence on perceived control may be stronger than its influence on attitudes or norms. Consistent with **Bosnjak, Ajzen, and Schmidt (2020)**, these results affirm that belief-based antecedents remain a productive lens for understanding how financial literacy translates into the psychological foundations of behaviour, and they extend that lens to a millennial, digitally engaged population, consistent with **Shyamala and Mahesh (2022)**.

6. Conclusion, Implications and Limitations

6.1 Conclusion

The Study concluded that Financial Literacy is confirmed as a higher-order construct built on Digital Literacy, Financial Knowledge, and Financial Self-Efficacy, with all three dimensions loading strongly and significantly. Financial Literacy further exerts a significant positive influence on all four TPB antecedents, most strongly on Perceived Financial Control, indicating that financially literate millennials feel more capable of managing their finances, hold more favourable financial attitudes, perceive greater social support for sound financial decisions, and experience a stronger sense of moral responsibility toward financial management.

6.2 Theoretical Implications

The study contributes to theory in two ways. First, it provides empirical validation for a higher-order Financial Literacy construct that formally incorporates Digital Literacy alongside Financial Knowledge and Financial Self-Efficacy, addressing calls in the literature (**Gilster, 1997; Eshet-Alkalai, 2004; Chelli**

& Himick, 2024) to treat digital competence as integral to financial capability rather than a separate skill set. Second, it extends the Theory of Planned Behaviour by incorporating Perceived Moral Obligation as a fourth antecedent and demonstrating that a validated, multidimensional Financial Literacy construct significantly shapes all four antecedents simultaneously — a more integrated test of the literacy-TPB relationship than the unidimensional treatment in Hapsari (2021).

6.3 Practical Implications

For financial educators and fintech platforms, the findings suggest that interventions to improve millennials' financial decision-making should deliberately build digital literacy and self-efficacy alongside factual financial knowledge, rather than focusing solely on knowledge transmission. Because Financial Literacy shows its strongest effect on Perceived Financial Control, programmes that build hands-on, confidence-generating experience with digital financial tools may be more effective than knowledge-only instruction. For policymakers, the results support financial literacy initiatives that are explicitly digitally inclusive, particularly for younger, digitally engaged populations.

6.4 Limitations and Future Research Directions

The study is geographically limited to South Gujarat, so the results may not generalise to millennials elsewhere in Gujarat or across India. Dependence on self-reported data may present response bias, social desirability bias, or overvaluation of financial knowledge and behaviour. The cross-sectional design captures financial literacy and behaviour at a single point in time, without accounting for how financial awareness, income, digital adoption, and behaviour evolve; future research could adopt a longitudinal design to address this. Finally, while the study integrates multiple dimensions of financial literacy, other influential variables — such as financial stress, behavioural biases, risk tolerance, personality traits, and macroeconomic conditions — were not included, offering a promising direction for future research.

Bibliography

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
2. Ajzen, I. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior. *Journal of Applied Social Psychology*, 32: 665–683. <https://doi.org/10.1111/j.1559-1816.2002.tb00236.x>
3. Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychology & Health*, 26(9), 1113–1127.
4. Ajzen, I. (2019). Constructing a theory of planned behavior questionnaire.
5. Akomea-Frimpong, I., Olaniyan, T. O., & Dwomoh-Okudzeto, Y. (2023). Financial literacy of legislators in Africa: An exploratory study. *International Journal of Public Administration*, 46(6), 391–402. <https://doi.org/10.1080/01900692.2021.1998906>
6. Almenberg, J., & Gerdes, C. (2012). Exponential growth bias and financial literacy. *Applied Economics Letters*, 19(17), 1693–1696.
7. Blaschke, J. (2022). Gender differences in financial literacy among teenagers: Can confidence bridge the gap? *Cogent Economics & Finance*, 10(1), 2144328. <https://doi.org/10.1080/23322039.2022.2144328>
8. Bosnjak, M., Ajzen, I., & Schmidt, P. (2020). The theory of planned behavior: Selected recent advances and applications. *Europe's Journal of Psychology*, 16(3), 352–356.

9. Chelli, M., & Himick, D. (2024). Constructing housing literacy through financial literacy. *Critical Perspectives on Accounting*, 100, 102760.
10. Engels, C., Kumar, K., & Philip, D. (2020). Financial literacy and fraud detection. *The European Journal of Finance*, 26(4–5), 420–442. <https://doi.org/10.1080/1351847X.2019.1646666>
11. Eshet-Alkalai, Y. (2004). Digital literacy: A conceptual framework for survival skills in the digital era. *Journal of Educational Multimedia and Hypermedia*, 13(1), 93–106.
12. Espinoza-Delgado, J., & Silber, J. (2024). Gender gaps in financial literacy: Evidence from Argentina, Chile, and Paraguay. *Feminist Economics*, 30(1), 134–171. <https://doi.org/10.1080/13545701.2023.2278798>
13. Gilster, P. (1997). *Digital literacy*. Wiley Computer Publishing.
14. Hapsari, S. A. (2021). The theory of planned behavior and financial literacy to analyze intention in mutual fund product investment. *Advances in Economics, Business and Management Research*.
15. <https://kenpro.org/sample-size-determination-using-krejcie-and-morgan-table/>
16. <https://statcalc.net/yamanes-formula-calculator/>
17. <https://statstudyhub.com/sample-size-calculators/cochrans-sample-size-calculator/>
18. Lusardi, A., & Tufano, P. (2009). Debt Literacy, Financial Experiences, and Overindebtedness.
19. Mireku, K. (2024). Determinants of financial literacy among university students: Insight into background and exposure characteristics. *Journal of Business & Finance Librarianship*, 29(3), 203–235.
20. Philippas, N. D., & Avdoulas, C. (2020). Financial literacy and financial well-being among generation-Z university students: Evidence from Greece. *The European Journal of Finance*, 26(4–5), 360–381. <https://doi.org/10.1080/1351847X.2019.1701512>
21. Potrich, A. C. G., & Vieira, K. M. (2018). Demystifying financial literacy: A behavioral perspective analysis. *Management Research Review*, 41(9), 1047–1068.
22. 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.
23. Shyamala, G., & Mahesh, R. (2022). A study on financial literacy and its determinants among millennials in Mysore city. *International Journal of Scientific and Research Publications*, 12(9), 289–295