

Research Article

Impact of Financial Attitude and Financial Socialisation on Women's Personal Financial Management Behaviour: Exploring the Mediating Role of Digital Financial Literacy

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Abstract

In the evolving landscape of the digital economy, both financial and digital literacy have become essential. This study investigates the mediating role of DFL in the relationship between financial attitude, financial socialisation, and personal financial management behaviour (PFMB) among working and non-working women in Punjab, India. Drawing on the Theory of Planned Behaviour, the research explores how psychological and social factors influence financial behaviour through the lens of digital competence. Using a structured questionnaire, data were collected from a representative sample of women across various districts in Punjab. The study employed Smart PLS 4.0 to examine direct and mediated relationships among the key constructs. The findings reveal that both financial attitude and financial socialisation significantly influence PFMB, and that DFL plays a partial mediating role in these relationships. Notably, working women exhibited higher levels of DFL and more proactive financial behaviours compared to their non-working counterparts. The results emphasise the importance of digital financial literacy as a critical enabler of financial empowerment for women, particularly in semi-urban and rural areas. This study contributes to the growing discourse on digital financial inclusion and offers practical implications for policymakers, educators, and financial institutions seeking to bridge gender and digital divides in financial access and decision-making.

Keywords

Digital Financial Literacy, Financial Attitude, Financial Socialisation, Personal Financial Management Behaviour, Women, Punjab, Financial Inclusion

1. Introduction

In today's increasingly digitised world, managing personal finances effectively has become more challenging and essential than ever before [1]. The proliferation of digital financial services such as online banking, mobile payment platforms, and investment applications demands not only traditional financial literacy but also a strong command of digital financial

tools and platforms. [2] In this context, digital financial literacy (DFL) has emerged as a critical competence for ensuring informed financial decision-making and fostering sound personal financial management behaviour. [3] Personal financial management is influenced by various individual and social factors, financial attitude and financial socialisation are two

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key antecedents widely studied in behavioural finance literature. The theory of Planned Behaviour established the groundwork for personal financial management behaviour and clarified a person's mindset, social conventions, and sense of control over his actions that influence his behaviour and goals. He acts logically based on all the facts at his disposal. This hypothesis holds that people's financial behaviour is based on their attitudes. The relationship between DFL and financial management practices was also examined using this theory. As per this theory Financial attitude refers to an individual's beliefs, values, and psychological tendencies toward money management, which shape their financial choices. [4] Financial socialisation involves the process through which individuals acquire knowledge, skills, and values related to financial behaviour from agents such as parents, peers, and media.

Digital Financial Literacy remains uneven, especially across gender, socio-economic, and occupational lines. For women in India, especially in states like Punjab, digital financial literacy can be a critical enabler of financial independence and security. [5] Women play a central role in household financial decisions, whether employed in the workforce or not. [6] Working and non-working women face different levels of exposure, empowerment, and access to financial information and digital tools. This disparity calls for a deeper understanding of how women's financial behaviours are shaped not only by their financial attitudes and socialisation experiences but also by their ability to engage effectively with digital financial platforms. Existing literature [7-11] has acknowledged the influence of financial attitude and financial socialisation on personal financial management behaviour. However, there is limited empirical research examining the mediating role of digital financial literacy, especially among women in regional Indian contexts like Punjab. Given the state's socio-cultural and economic diversity, it offers a unique setting to explore how digital capabilities impact the translation of attitudes and social learning into concrete financial behaviour. By doing so, it aims to contribute to both theoretical and practical understandings of how digital competence intersects with financial psychology and behaviour in a digitally driven economy. This study aims to investigate the mediating role of digital financial literacy in the relationship between financial attitude, financial socialisation, and personal financial management behaviour among working and non-working women in Punjab. Understanding this dynamic is vital not only for academic inquiry but also for designing effective financial literacy programs and policy interventions that promote inclusive financial empowerment of women.

2. Literature Review

This section reviews the relevant literature on the key constructs of the study. It also discusses the theoretical underpinnings and highlights gaps that justify the current research.

Financial Attitude

Financial attitude refers to an individual's psychological

tendencies and value systems related to money management, including saving, spending, investing, and borrowing. [12] Studies have shown that women with proactive financial attitudes are more likely to engage in responsible financial practices, such as budgeting and saving. [13] For women, especially in traditional societies like Punjab, financial attitude may be shaped by cultural norms, family expectations, and personal experiences with money. [14-16] There is a positive association between financial attitude, knowledge of money and personal financial management. [17, 18] Financial attitudes, socialisation and financial knowledge are significantly related to personal financial management behaviour among individuals. [19] The study emphasises on peer group open discussions among women through self-help groups to form financial attitudes and behaviour. [20] Positive financial attitudes may lead individuals to seek more information, including digital payment tools for financial management. This curiosity and confidence often translate into higher digital financial literacy. The research highlights the importance of fostering positive financial attitudes to enhance financial behaviour.

Financial Socialisation

Financial socialisation is the process through which individuals acquire financial knowledge, norms, and behaviours through agents such as parents, peers, educational institutions, and media [21]. Early exposure to money management practices through discussions or observation plays a critical role in shaping lifelong financial habits. [22, 23] Family interaction, peer influence and financial literacy help students in financial management. [24]. The studies found that financial socialization significantly affects financial management behaviour through financial literacy. [25] Family financial socialization has a huge positive relationship with financial education & financial behaviour. [26], The researchers focused on youth financial education as it will provide them more opportunities for social interactions and psychological development, which further enhances financial socialisation of their next generation. [27] There is a significant impact of family financial socialisation on financial self-efficacy, which in turn influences financial behaviours. [28] Self-help groups play an important role in boosting confidence among women through financial empowerment and helping in the financial well-being of women. Therefore, more financial self-help groups need to be created to promote financial socialisation among women. [29] Financially socialised women, especially those exposed to tech-savvy role models or environments, are more likely to use digital financial tools and become digitally empowered.

Digital Financial Literacy

Digital financial literacy (DFL) is the ability to effectively use digital technologies and platforms for personal financial management, including mobile banking, online payments, e-wallets, and digital budgeting tools. [30, 31] DFL builds on traditional financial literacy but includes the skills to navigate digital environments securely and confidently. [32] Women, particularly in developing regions, often face barriers such as limited access to digital tools, lower ICT skills, and societal

constraints. [33] Without adequate DFL, even women with strong financial attitudes or socialisation may be unable to effectively manage finances in the digital economy, regardless of their financial knowledge or intentions. [34] There are different factors which are responsible for high use of digital technology by individuals like the people who are more financially confident and under high financial pressure are heavy users of digital financial technology which ultimately helps to improve personal financial behaviour. [35] DFL is a key factor influencing financial outcomes, and without adequate digital capability, individuals may not translate their financial knowledge or attitude into effective behaviour. [36] Digital financial literacy may act as a bridge between financial attitude/socialisation and financial behaviour. [37] The awareness and understanding of digital financial tools and apps are required for improving financial management behaviour. [38, 39] There is a close association between digital financial knowledge, awareness and financial decision making which further has a significant effect on financial behaviour. [40] The researchers examined the substantial relationship of digital financial awareness, experience and skill with digital payment adoption and concluded that more digital expertise leads to more use of cashless payment by women. [41] Personal and customised digital financial tools help to improve financial behaviour.

Personal Financial Management Behaviour

Personal financial management behaviour encompasses day-to-day decisions related to saving, budgeting, investing, and controlling expenses. Good financial behaviour is linked to improved financial wellbeing, lower financial stress, and greater economic security. [42] For women in Punjab, the behaviours can be influenced by their employment status, household responsibilities, financial autonomy, and access to digital tools. [43] The studies highlight the use of digital channels for saving & spending, personal financial management and insurance and investment to promote digital financial management behaviour. [26] Financial attitude, parental financial socialisation, peer groups, financial self-efficacy and digital media has a positive association with personal financial management behaviour of young professionals. [44] There is a positive relationship between financial attitude, financial literacy, family financial education and personal financial management behaviour. [45] The studies further surveyed that the factors like financial attitude, social factors and digital financial literacy are important to encourage students to use financial technologies for better financial management.

The literature suggests strong theoretical and empirical support for the relationships among financial attitude, socialisation, and financial behaviour. However, there is a compelling need to investigate how digital financial literacy mediates these relationships in a gendered and regional context. In Punjab, where patriarchal norms and cultural traditions often restrict women's financial autonomy, there is an even stronger need to investigate how women's financial attitudes interact with financial literacy and socialisation to shape their overall

PFMB. The convergence of these issues low levels of financial literacy, rapid digitalisation, and gender disparities creates a clear and pressing research gap. While global and national studies have contributed valuable insights, the unique context of Punjab remains understudied. Women in Punjab face distinct socio-cultural challenges, including limited access to financial services, dependence on male family members for financial decisions, and restricted participation in the workforce. Despite these realities, academic research that systematically explores women's PFMB, incorporating both traditional and digital financial literacy alongside socialisation and attitudes, is lacking. The current study seeks to address these gaps by providing a comprehensive examination of PFMB among women in Punjab. It will consider independent variables such as traditional financial literacy, digital financial literacy, financial attitude, and financial socialisation, and their collective influence on PFMB as the dependent variable. By focusing on women in Punjab, the study not only addresses an underexplored demographic but also contributes to the broader discourse on financial inclusion and empowerment in India.

Research Methodology

Research Design

This study follows a quantitative, cross-sectional design using a survey-based approach to collect primary data from working and non-working women in Punjab. The Purposive Sampling technique is combined with Snowball Sampling to enrich the data collection and response rate. Ideally, 385 respondents (determined using Rao soft formula) are acceptable to ensure statistical validity for SEM but final sample for the study is 546 women from 22 districts of Punjab. The data was collected from Jan to June 2024. A structured questionnaire was developed, pre-tested and sent online and offline to collect the data from respondents. The study used adapted scale after some modifications in the statements at 5-point Likert scale. The financial attitude includes 11 statements related to spending, saving, financial planning, investment and anxiety seeking attitude adapted from the structured questionnaire used by *OECD/INFE 2018; Chatterjee et al. 2018; Potrich et al. 2016* [12, 46]. The construct financial socialisation includes 9 questions adapted from the previously used scale by *Shim et al. 2010, Shim et al. 2015, Gudmunson & Danes 2011, and Ashley B. Leborn 2020* [4, 21, 47] covering items family interaction & relationships, financial socialisation agents and self-efficacy. The digital financial literacy used scale from *OECD 2020; Lyons & Kass Hanna 2021* [1, 33] with 11 questions on digital financial awareness, practical knowledge and self-protection. Finally, the dependent variable PFMB includes 15 questions used with some modifications in scale used by *Lai & Tan 2009; Patel & Kumar 2017; OECD/INFE 2018*. [48, 49] related to financial, tax management, insurance, retirement and investment management.

Objectives

- 1) To examine the effect of financial attitudes on personal financial management behaviour.
- 2) To evaluate the influence of financial socialisation on

women's personal financial management behaviour.

- 3) To analyse whether digital financial literacy mediates the relationship between financial attitude, financial socialisation, and personal financial management behaviour.

Hypothesis

H1: Financial attitude has a positive and significant effect on personal financial management behaviour among women in Punjab.

H2: Financial socialisation has a positive and significant effect on personal financial management behaviour among women in Punjab.

H3: Financial attitude has a positive and significant effect on digital financial literacy among women in Punjab.

H4: Financial socialisation has a positive and significant effect on digital financial literacy among women in Punjab.

H5: Financial Socialisation has significant effect on financial attitude of women in Punjab.

H5: Digital financial literacy has a positive and significant effect on personal financial management behaviour among women in Punjab.

H6: Digital financial literacy mediates the relationship between financial attitude and personal financial management behaviour among women in Punjab.

H7: Digital financial literacy mediates the relationship between financial socialisation and personal financial management behaviour among women in Punjab.

3. Results & Analysis

The different statistical tools have been used to analyse the questionnaire data. Demographic analysis has been used to show the demographic characteristics of respondents. In order to describe the data of questionnaire, descriptive analysis has been applied in the study through Statistical Package for Social Sciences (SPSS 25), Cronbach's Alpha is used to check internal consistency. Construct validity is judged through Exploratory Factor Analysis (EFA). Additionally, the gathered data was assessed for common technique bias. The CMB was tested using Herman's one factor. Specifically, a factor analysis was performed utilizing the constructs, with no rotation approach and a maximum of one factor. If a factor accounts for more than half of the explained variation, the data is impacted by CMB. The study found that data did not pose a serious threat to CMB. Common method variance was also investigated using a single latent component. To determine whether CMB had an effect on the data, CFA was conducted. The results show that none of the apparent factors load on the latent component. Rather, the burden on many manifest components could be ascertained, suggesting that CMB is not an issue in this study.

To test the overall model Confirmatory Factor Analysis (CFA) is done via Smart PLS 4.0. Structural Equation Modelling (SEM) and Mediation Analysis is applied to check the effect of mediation on different constructs with the help of Smart PLS 4.0.

Table 1. Socio-economic Profile of Respondents.

Demographic Characteristics	Classes	Frequency	Percentages
Age (Years)	18 – 25	175	32.1%
	26 – 35	200	36.6%
	36 – 45	125	22.9%
	46 – 55	42	7.7%
	55 & above	4	0.7%
Educational Qualification	Matric	34	6.2%
	Sr. Sec	57	10.5%
	Graduation	201	36.8%
	Post -Graduation	245	45%
Level of Income	Other	9	1.6%
	Less than ₹ 5 lakh	337	61.72%
	₹ 5 lakh - ₹10 lakh	177	32.41%
	₹ 10 lakh - ₹ 15 lakh	27	4.94%
Marital Status	₹ 15 lakh - ₹ 20 lakh	4	0.73%
	Married	195	35.7%

Demographic Characteristics	Classes	Frequency	Percentages
Current Status	Unmarried	297	54.4%
	Divorced	14	2.6%
	Separated	29	5.3%
	Widow	11	2.0%
	Working	306	56%
Type of Family	Non- Working	240	44%
	Joint	290	53.1%
Area	Nuclear	256	46.9%
	Rural	316	57.8%
	Urban	230	42%

Source: Author's compilation

The above Table 1, analysis shows that nearly 32.1% women belong to the age group 18-25 years, 36.6% from 26-35 years of age, 22.9% were of 36-45 years. In the educational qualification most of the women nearly 45% were post graduate, those who are graduates were 36.8%, and around 10.5% were studied up to Sr. Sec level, 6.2% women passed only matric exam and 1.6% women were in other category like diploma or other certificate courses. Most of the women about 61.72% were from income class less than ₹5 lakh, 32.41% women were having income between ₹5lakh - ₹10 lakh, 4.94%

women in ₹10 lakh - ₹15 lakh income category and 0.73% above ₹15 lakh. Out of the sampled women 35.7% were married, 54.4% were unmarried, 2.6% were divorced, 5.3% women live separately and 2% were widow. Nearly 56% women were working in schools, colleges, universities, banks and other corporate sector and around 44% were non-working. The women were sampled from both nuclear and joint families consisting of 53.1% from joint family and 46.9% from nuclear family. Lastly 57.8% women were from rural area and 42% from urban area.

Table 2. Measurement Model Results.

Items	Factor Loadings	VIF	CA	CR	AVE
Financial Attitude (FA)			0.895	0.915	0.547
FA1	0.755	1.287			
FA2	0.774	1.175			
FA3	0.768	1.712			
FA4	0.713	1.854			
FA5	0.763	2.658			
FA6	0.802	1.159			
FA7	0.793	2.876			
FA8	0.762	2.608			
FA9	0.799	1.162			
Financial Socialisation (FS)			0.899	0.917	0.529
FS1	0.713	1.533			
FS2	0.726	1.878			
FS3	0.798	1.513			
FS4	0.801	2.973			
FS5	0.734	1.341			
FS6	0.761	2.252			
FS7	0.775	2.526			
FS8	0.785	1.517			
FS9	0.701	1.319			

Items	Factor Loadings	VIF	CA	CR	AVE
FS10	0.739	2.546			
Digital Financial Literacy (DFL)			0.912	0.927	0.538
DFL1	0.593	1.427			
DFL2	0.637	1.646			
DFL3	0.719	2.085			
DFL4	0.625	1.791			
DFL5	0.673	1.059			
DFL6	0.694	1.186			
DFL7	0.762	2.451			
DFL8	0.846	1.132			
DFL9	0.788	2.952			
DFL10	0.804	1.212			
DFL11	0.867	1.492			
Personal Financial Management Behaviour (PFMB)			0.932	0.941	0.517
PFMB1	0.763	1.254			
PFMB2	0.709	1.317			
PFMB3	0.798	2.501			
PFMB4	0.761	1.218			
PFMB5	0.694	1.928			
PFMB6	0.848	1.001			
PFMB7	0.786	1.102			
PFMB8	0.841	1.231			
PFMB9	0.812	1.028			
PFMB10	0.721	1.437			
PFMB11	0.778	1.119			
PFMB12	0.753	1.113			
PFMB13	0.714	1.362			
PFMB14	0.606	1.633			
PFMB15	0.734	1.626			

Source: Author Result Compilation in Smart PLS 4.0

The above Table 2 depicts the values of factor loadings, Variance Inflation Factor, Cronbach Alpha, Composite Reliability and Average Variance Extracted. Construct validity is evaluated using two metrics: discriminant validity and convergent validity. Convergent validity is the degree to which two tests measuring the same concept are closely connected to each other or to other tests measuring the same construct. Composite reliability (CR), which should be higher than 0.7, and AVE > 0.5, are used to evaluate it. In general, larger values signify a higher degree of dependability. Values above 0.95

are troublesome because they suggest that the items are redundant, which lowers construct validity. Values between 0.60 and 0.70 are considered as acceptable, while 0.70 and 0.90 are good. The table shows the internal consistency reliability metrics, including Cronbach's Alpha, CR, and (AVE), for each latent construct in the measurement model. All the factor loadings are within the acceptable range of more than 0.708 and above 0.6, indicating a good convergent validity and strong correlation between observed variables and their latent constructs [50]. The VIF values are well below 3 shows no issue

of multicollinearity in the data. The values of Cronbach's Alpha are above 0.8 and 0.9 shows a high degree of reliability of data. Similarly, Composite Reliability is above 0.7, and AVE

values are greater than 0.5, indicating a high internal consistency [51].

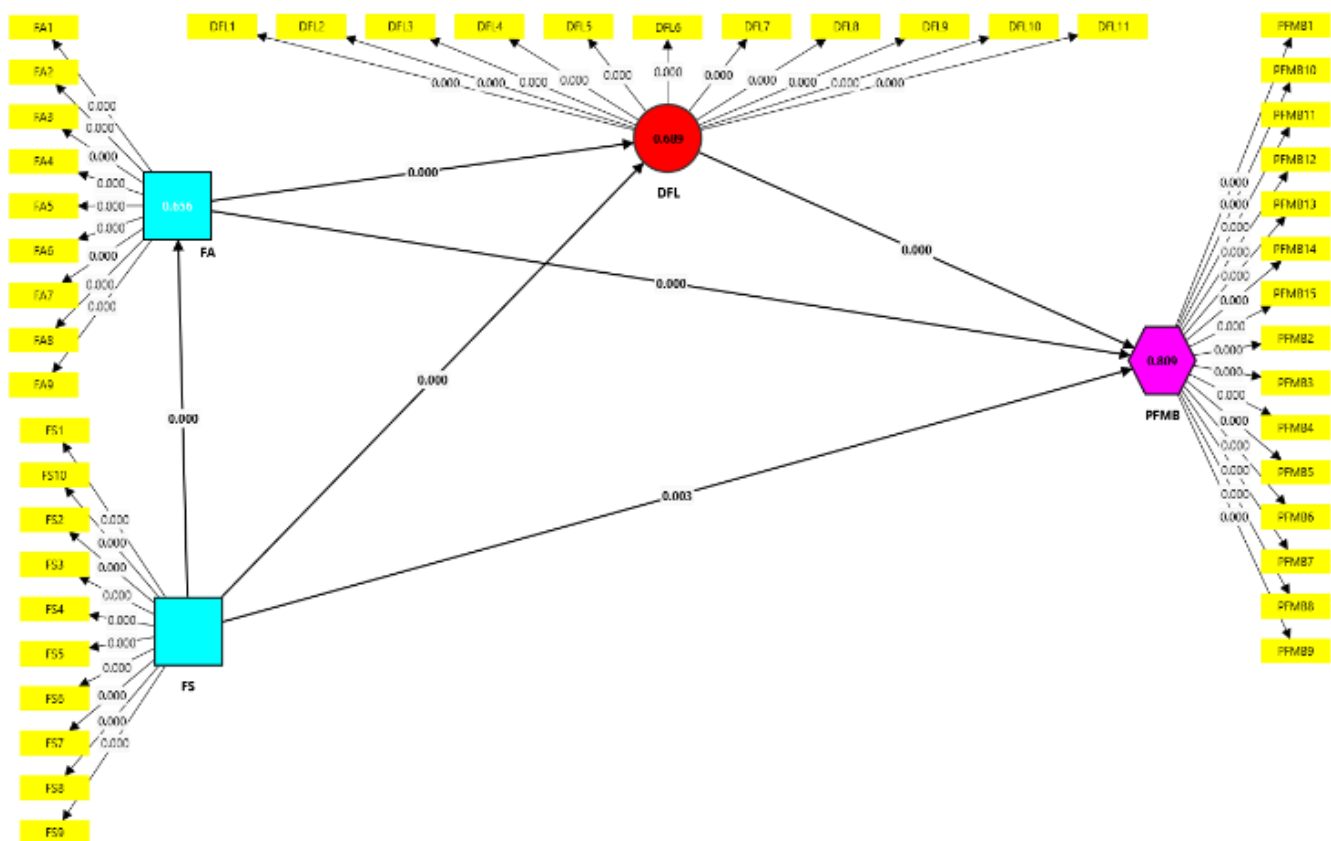
Table 3. Discriminant validity HTMT Ratio Fornell & Larker Criterion.

Constructs	DFL	FA	FS	PFMB	Construct	DFL	FA	FS	PFMB
DFL					DFL	0.733			
FA	0.836				FA	0.716	0.741		
FS	0.814	0.803			FS	0.708	0.711	0.727	
PFMB	0.719	0.779	0.805		PFMB	0.702	0.719	0.714	0.819

Author's Calculation in Smart PLS

The Table 3 indicates the discriminant validity through HTMT and Fornell & Larker criterion. Hetero Trait and Mono Trait Ratio shows that all values are less than 0.85, indicating that all constructs are different from one another. Similarly,

Fornell & Larker's criterion shows that the correlation between diagonal elements are higher than other elements and both these criteria indicate a satisfactory discriminant validity.



Source: Smart PLS 4

Figure 1. Research Model.

Table 4. Hypothesis Testing.

Hypothesis	Beta	Standard deviation	T-Value	P-values Comment
H1: FA -> PFMB	0.308	0.053	5.795	0.000 Supported
H2: FS -> PFMB	0.175	0.059	2.944	0.003 Supported
H3: FA -> DFL	0.323	0.062	5.219	0.000 Supported
H4: FS -> DFL	0.547	0.059	9.316	0.000 Supported
H5: FS -> FA	0.811	0.022	37.14	0.001 Supported
H6: DFL -> PFMB	0.482	0.054	8.975	0.000 Supported

Source: Smart PLS 4.0

The **Table 4** shows the direct effects and evaluation of structural model. The hypothesis H1 depicts "FA positively influences PFMB" with a beta coefficient of 0.308, standard deviation of 0.053. The t-value is 5.795, and the p-value is 0.000, indicating a significant positive influence as supported by different studies [52-54]. The hypothesis H2 is supported as beta value is 0.175, standard deviation is 0.059, t value is 2.944, and p value 0.003 is less than the threshold limit 0.05 which indicates that financial socialisation positively influences personal financial management behaviour. The results are coincided with the previous studies [55-57]. Similarly, the hypothesis H3 and H4 depicts the beta values 0.323 and 0.547 respectively and the p values are 0.000 which is less than the

limit 0.05 which indicates that financial attitude and financial socialisation has significant influence on digital financial literacy as supported by various studies [58-60]. further, H5 shows that financial socialisation and financial attitude influence each other with beta coefficient 0.811 and p value is 0.001 which is less than threshold 0.05 proof the significance of hypothesis as discussed in the previous literature [11, 19, 61, 62]. Finally, H6 is accepted with beta value 0.482, std deviation 0.054, t value 8.975 and p value 0.000 shows the significance effect of digital financial literacy on personal financial management behaviour. These findings are associated with the earlier studies conducted by different researchers [63-67].

Table 5. Mediation Analysis.

Hypothesis	Original Sample	SD	T-value	P-value Comment
H7: FA -> DFL -> PFMB	0.196	0.044	4.46	0.000 Supported
H8: FS -> DFL -> PFMB	0.087	0.03	2.953	0.003 Supported

Source Author's Calculation Smart PLS4

The **Table 5** shows the indirect effect of digital financial literacy in the relationship among financial attitude, financial socialisation and personal financial management behaviour. The hypothesis H7 indicates the beta value of 0.196, std deviation 0.044, t value 4.46 and p value 0.000 which shows a strong mediation effect of digital financial literacy between financial attitude and PFMB. Similarly, H8 shows the original sample of 0.087, std deviation 0.03 shows the variation in the data; the t value 2.953 is sufficiently high and p value 0.003 is less than 0.05, which indicates a positive and significant but weak mediation effect of financial socialisation on PFMB as compared to the earlier effect. DFL has a partial mediation effect in the relationship among FA, FS and PFMB as all the indirect effects between FA & PFMB and FS & PFMB are positive and significant in the presence of the mediator Digital

Financial Literacy. The study's results coincide with the earlier studies conducted by [20, 24, 26, 29, 36, 68-70] who discovered that financial and digital financial literacy has significant and partial mediating effects among financial attitude, socialisation and financial management behaviour.

Table 6. R-Square and Adjusted R-Square.

Construct	R-square	R-square adjusted
PFMB	0.609	0.607

Author's Calculation in Smart PLS

The above table highlights the value of R square which shows the percentage of variance due to one or more independent factors measured by the predictor in the dependent variable. The value 0.609 indicates that 60.9% of the variance in the PFMB is explained, and the adjusted R-squared value of 0.607 further refines the estimates. Both values indicate a strong model fit, showing that the predictors used are highly relevant in explaining the variation in PFMB.

4. Findings and Recommendations

The findings of the study revealed that financial attitude, financial socialisation and digital financial literacy have a significant influence on personal financial management behaviour. Further, the analysis highlights the mediating role of digital financial literacy in the relationship among these constructs and reveals a strong positive and significant effect of financial attitude on personal financial management behaviour through digital financial literacy which intricates that women with positive financial attitude make better use of digital financial tools and can easily convert their financial intentions into action. Similarly, financial socialisation has a positive and significant effect on personal financial management behaviour through digital financial literacy which aligns with the notion that financially socialised people can easily adapt digital financial skills as they are more influenced by their family, friends, peer groups, social media and internet which contribute towards better financial management behaviour. Although this effect is weaker than the earlier effect but positive and substantial, which shows that digital financial literacy has a partially mediating effect on these relationships which is stronger in the case of FA & PFMB and weaker between FS & PFMB. Further, the working women showed higher level of exposure to digital financial tools and proactive financial behaviour as compared to non-working women who rely more on informal financial channels.

Theoretical Implications

This study advances behavioural finance theory by integrating DFL as a cognitive and competency-based construct within established behavioural frameworks of personal financial management behaviour. By conceptualising DFL as a mediating variable the study aligns theoretical models with the realities of the digitalised financial environment. This integration not only enriches the explanatory power of behavioural models but also extends the theoretical understanding of how individuals navigate digital financial ecosystems, especially in the states like Punjab. Further, this research also brings a gender-sensitive approach to financial behaviour theories. This study shows that gender plays an important role in shaping financial attitude, socialisation, DFL, and PFMB. It explains how women's financial decisions are often influenced by social, cultural, and digital factors differently than men's. By highlighting these gendered patterns, the study contributes to feminist and gender economics literature and helps in devel-

oping more realistic and inclusive theories about financial behaviour. This study connects theoretical findings with practical recommendations for improving financial education and inclusion. It shows how behavioural factors can guide policy makers in designing better programs for women's financial empowerment. In this way, the study helps to bridge the gap between research and practice, making theoretical insights useful for real-world decision-making and policy development.

These findings have important implications for policymakers, academicians, educators, government and financial institutions to develop policies to promote financial education which helps to improve financial attitude as it is an important indicator for financial management and also design more financial socialisation strategies to enhance financial skill and knowledge. It is suggested to promote more open discussions as women are influenced more by their peer groups through community learning. Further it is also recommended to arrange various workshops, seminars to impart knowledge on various digital financial tools, apps especially for non-working women and homemakers like how to fill online forms, knowledge about digital financial frauds, self-protection strategies and procedure for complaints against frauds in order to make them independent and more capable to make informed financial decisions. The government, financial institutions and industry should collaborate with NGOs and local self-help groups to improve outreach and adoption and launch state-sponsored digital financial literacy training programs as per the requirements of women to develop their digital skills and make digital financial education as a part of the curriculum in higher education for their personal growth and financial well-being. The study suggests that policymakers should strengthen the effective implementation of financial literacy as a formal component of higher education under the New Education Policy, ensuring its integration at the university level. Academic institutions are encouraged to establish financial literacy cells to systematically organize awareness initiatives programs. Furthermore, banks and financial institutions should undertake targeted interventions to promote financial inclusion among women, particularly by enhancing access to savings and investment opportunities and encouraging account ownership. Additionally, the creation of women-centric financial platforms or clubs can facilitate knowledge sharing, peer learning, and active participation, thereby fostering greater financial independence and empowerment among women.

Further, the findings also contribute towards the Sustainable Development Goals SDG 4 related to investment in higher education and skill enhancement and in achieving SDG 5 related to gender equality in financial education and financial empowerment of women by highlighting the need of digital financial literacy of women as it will make them empowered to control and manage their own finances independently and give them equal access to all employment opportunities and helps in digital financial inclusion.

5. Conclusion

The present study concluded that financial attitude, financial socialisation, digital financial literacy has a significant and positive influence on personal financial management behaviour of women of Punjab. Further, the study intricated the mediating role of digital financial literacy on the relationship among these constructs. However, the indirect effect of financial attitude on personal financial management behaviour through digital financial literacy is moderately stronger than indirect effect of financial socialisation on personal financial management behaviour in the presence of mediator. Therefore, it is concluded that digital financial literacy acts as a partial mediator among these relationships. The findings underscore the gendered digital divide and emphasise the need for inclusive policies and programs that empower both working and non-working women. Strengthening digital financial literacy is not just a matter of technological competence. It is a pathway to financial independence, resilience, and gender equality in an increasingly digital economy. This study contributes largely towards the literature on personal financial management and highlights the importance of financial education and digital financial literacy to empower women of Punjab towards their personal financial well-being.

6. Limitations and Future Directions

The study is not without limitations. The current study is conducted in Punjab state only which limit the generalisability of findings to other state and regions due to their different socio-economic culture and background, the future studies can explore other states and countries. The focused respondents in the present study were women working and non-working, excluding other categories like students, retired women and entrepreneurs. Future research can examine different demographics. The research used cross-sectional design which limits the ability to establish causal relationships. Further, the constructs used in the study are financial attitude, financial socialisation, digital financial literacy and personal financial management behaviour, in the future other new constructs like digital financial attitude, digital financial socialisation and personal financial management behaviour through advanced AI tools can be explored. In the current study digital financial literacy is used as a mediating variable other mediating and moderating variables can be used in future studies. Further, the sample size can also limit the results of present study it can be extended to get wider coverage and more generalised results. Last but not the least the data collected through a self-reported questionnaire may be subject to social and desirability bias.

Abbreviations

FA	Financial Attitude
FS	Financial Socialisation

DFL	Digital Financial Literacy
PFMB	Personal Financial Management Behaviour

Author Contributions

Kuldip Kaur: Writing – review & editing

Conflicts of Interest

The author declares that there is no conflicts of interest.

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