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Unravelling Financial Resilience in India: A Multi-Group Analysis of Socio-Economic Factors

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Abstract

This research investigates the intricate relationship between financial literacy (FL), financial behavior (FB), and financial resilience (FR) across various socio-economic dimensions such as age, gender, income, and education. Building on previous studies, this paper focuses on how these factors may moderate the connection between FL and FR, with FB's role as a mediator. Conducted in Kerala, a region renowned for its high literacy rate, data from 270 participants was collected through an online survey using convenience sampling. The data was then analysed using IBM SPSS AMOS for Structural Equation Modelling, a widely accepted statistical tool. The analysis reveals robust evidence supporting positive relationships between FL-FB, FB-FR, and FL-FR. Additionally, FB partially mediates the FL-FR relationship. Multigroup analysis highlights distinct impacts across subgroups, emphasizing the nuanced interplay between these socioeconomic factors and financial outcomes. The study's conclusions, which highlight the urgent need for focused initiatives to improve financial literacy and promote responsible financial behaviour across a range of demographic groups, provide important new insights into financial dynamics. Such initiatives are essential for bolstering financial resilience and ensuring economic stability amidst varying socio-economic contexts and should be a priority for policymakers and practitioners.

Keywords: Financial Behaviour, Financial Literacy, Financial Resilience, Multigroup Analysis, Socio-Economic Factors.

Introduction

Financial literacy is more than just knowledge; it is a crucial tool for personal financial empowerment and economic well-being, especially in a diverse country like India. With over 40% of its population under 25, the country's youth presents a promising potential for significant economic growth (1). To harness this potential, it is imperative to furnish its populace with fundamental financial knowledge and skills, empowering them to take control of their financial futures (2). Alarmingly, only 24% of Indian adults possess adequate financial literacy, highlighting a critical gap inhibiting inclusive growth and economic resilience (3). The need to strengthen financial literacy has become even more pressing after worldwide catastrophes like the COVID-19 pandemic, which have increased economic uncertainty and highlighted the significance of wise financial decisions (4). Empirical evidence suggests that individuals with restricted proficiency in financial management are predisposed to engaging in suboptimal financial decision-making, bearing a heightened burden of indebtedness, and encountering challenges in obtaining financial assistance during contingencies (5). Moreover, disparities in financial literacy across demographic groups, such as age, gender, and regional location, underscore the need for tailored interventions. These interventions could include targeted financial education programs, the development of user-friendly financial tools, and the promotion of responsible financial behavior through community initiatives. Such interventions can address these gaps and enhance financial literacy. Consequently, improving financial literacy serves not only to foster prudent financial behavior but also as a crucial mechanism for building resilience against unforeseen economic shocks. Better financial literacy makes it easier to increase financial resilience, defined as the capacity to withstand and recover from financial difficulties. Consequently, this promotes stability, security, and pursuing financial goals in the face of hardship, all contributing to increased financial well-being. India can improve its people's

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capabilities to withstand economic downturns, improve their general financial well-being, and promote sustainable economic growth by raising financial literacy and encouraging responsible financial conduct. Financial resilience is a vital component of managing today's financial difficulties, which refers to a person's capacity to tolerate and bounce back from unforeseen financial setbacks. Numerous factors, such as job loss, unexpected medical costs, natural disasters, or economic downturns, can cause these shocks (6). The concept has gained prominence in academic literature and policy discussions as financial resilience is increasingly recognized as a critical component of overall well-being. It influences economic stability, mental health, and social cohesion, vital in promoting sustainable economic development and reducing vulnerability to financial crises (7). "This concept, rooted in effectively leveraging personal and external resources during financial hardship, covers four main aspects: economic resources, access to financial products and services, financial knowledge and behaviors, and social support networks (8). Financial resilience is complex and includes behavioral characteristics, social networks, financial literacy, savings, income stability, adaptation, and resource access. Financial resilience is essential for individuals and communities to thrive amid uncertainties and challenges, ultimately contributing to broader economic stability and growth (9). Research indicates that individuals equipped with financial resilience demonstrate increased financial satisfaction, confidence in managing finances, and a greater likelihood of achieving their financial goals (10-12). Furthermore, financial resilience is crucial in reducing financial stress and anxiety, contributing to improved mental and emotional well-being (13). These findings underscore the significance of fostering financial resilience to promote financial well-being and stability. Financial literacy is a critical factor in determining financial behavior and resilience, with better financial literacy being linked to more sensible financial decision-making and more financial resilience. However, the transforming power of education is equally as important as literacy. The significance of digital and financial literacy in fostering financial resilience, especially for vulnerable groups, is emphasized by studies by (14, 15). According to empirical data, financial literacy has a favorable impact on financial resilience in various circumstances. Studies conducted in Italy (16), Albania (17), Malaysia (18), and Cyprus (19) illustrate how higher financial literacy correlates with increased financial resilience, enabling individuals and households to effectively manage unexpected expenses, liquidity constraints, and debt burdens. Moreover, households with greater financial literacy and investment abilities are less likely to have financial setbacks during emergencies like the COVID-19 pandemic (20). Additionally, studies show that financial behavior is positively impacted by financial literacy, with those with higher levels of financial literacy being more likely to manage their budgets efficiently, make informed financial decisions, and prepare for retirement in advance (21). The relationship between financial knowledge and financial behavior is also mediated by financial literacy, with education emerging as a critical factor in financial behavior by informing and motivating people to take charge of their financial futures (22). Consequently, the hypotheses put out in light of the body of extant literature include:

Financial Literacy and Resilience

People in different socioeconomic groups have better financial resilience when financially literate.

Financial Literacy and Behavior

A person in different socioeconomic groups' financial behaviour is influenced by their level of financial literacy. The crucial roles that financial behaviour and financial literacy play in affecting individual financial well-being and overall economic stability have increased their focus in scholarly studies. Much empirical research has proven an enduring favourable relationship between responsible financial behaviour and financial literacy (23, 24) demonstrated that those more financially literate are more likely to follow wise financial habits, like diversifying investments, avoiding excessive debt, and saving for retirement. According to their research, financial literacy is linked to improved long-term planning, asset creation, and daily financial management. In the literature (25), gender disparities in financial behaviour and literacy are extensively established. Women generally score lower in financial literacy tests than men,

corresponding to less engagement in investment activities and long-term financial planning. Similarly, it was discovered that financial literacy had a favourable correlation with habits related to investing, saving, credit management, and cash flow management (26). However, several studies have also pointed out the limitations of financial literacy in explaining financial behavior. Author argued that knowledge alone cannot change behavior, as emotional and psychological factors often override rational decision-making. Financial education programs have been widely advocated to improve financial literacy and behavior (27). Financial behaviour encompasses various activities related to managing daily financial affairs including budgeting, planning, and money management (28). In contrast, the capability to cope with and reverberate back from unusual financial shocks by utilizing resources like savings and flexible financial tactics is known as financial resilience. Research has highlighted the interconnectedness between these dimensions, showing how positive financial behaviors contribute to building financial resilience for entrepreneurs (29). The beneficial effect of financial behavior on financial resilience has been highlighted in Micro, Small, and Medium Enterprises (30) and about household financial behavior (31). Financial technology has also improved students' financial resilience by giving them greater access to and flexibility in managing their finances. It is important to remember that borrowing can positively and negatively affect financial resilience because it can offer short-term resilience. Still, it may lead to financial hardships if debts cannot be managed (32). Therefore, understanding and improving financial behavior is essential for maintaining financial resilience. Using these insights, the study proposes the following hypotheses to examine the connection between financial behavior and resilience.

Financial Behavior and Resilience

Financial behavior helps people in different socioeconomic levels become more financially resilient.

The Financial Behavior Mediating Role

Financial literacy affects financial resilience by mediating people's economic behavior across different socioeconomic categories. Global studies on financial resilience highlight the complex interplay of socioeconomic factors, cultural attitudes, and institutional frameworks that influence individuals' and households' ability to withstand financial shocks (33). Financial resilience is closely associated with income stability, access to formal credit, and social safety nets in developed regions like the United States and Western Europe. The Federal Reserve's surveys show that many Americans do not have enough savings to cover unforeseen expenses, indicating vulnerabilities even in relatively wealthy contexts (33, 34). In contrast, studies from Sub-Saharan Africa show that financial resilience often relies on informal financial systems and community support networks, which play a crucial role in helping individuals manage economic hardships (35). The World Bank's research highlights the value of community connections and social capital in boosting low-income communities' financial resilience (36). However, the region faces substantial challenges, including high unemployment rates and limited access to banking services, which significantly impede individuals' abilities to save and invest. Similarly, cultural attitudes towards money and savings markedly influence financial resilience in the Asia-Pacific region, with countries like Japan and South Korea exhibiting high financial literacy and savings rates (37). However, these nations are grappling with challenges such as aging populations and economic pressures that raise concerns about the sustainability of their financial resilience mechanisms. Collectively, these global insights underscore the need for context-specific strategies to bolster financial resilience across diverse socio-economic environments. The unique socio-economic landscape in India presents challenges and opportunities for enhancing financial resilience. With a population exceeding 1.4 billion, India's demographic diversity encompasses urban and rural populations with varying income levels, education, and access to financial services (38). While urban residents benefit from formal banking systems and digital finance, many rural inhabitants rely on informal lending practices and traditional savings methods, creating distinct challenges in fostering overall financial resilience (39). Culturally, India emphasizes saving, often in gold or real estate, which can be an advantage in building resilience. However, this traditional mindset may limit individuals' engagement with formal investment

options that could yield higher returns and better prepare them for financial shocks. Furthermore, a significant portion of the Indian workforce is engaged in informal employment, characterized by a lack of job security and benefits (40). This vulnerability leaves many individuals ill-equipped to handle financial emergencies, highlighting the urgent need for enhanced financial literacy and access to formal financial products. Despite these challenges, the rise of digital finance in India presents a unique opportunity to improve financial resilience (41). To promote saving and investment, government programs like the Pradhan Mantri Jan Dhan Yojana seek to expand financial inclusion by giving millions of formerly unbanked people access to banking. Despite these programs' tremendous progress, obstacles like a lack of digital literacy and mistrust of financial institutions still exist (42). Furthermore, government initiatives like the Mahatma Gandhi National Rural Employment Guarantee Act, which provides social safety nets and increases financial literacy, are essential for boosting resilience (43). However, the effectiveness of these programs varies across regions, underscoring the need for targeted interventions that address structural and educational barriers. It is crucial to comprehend the impact of socioeconomic variables, including Age, Marital status, Gender, Income, Education, and Occupation, to customize policies that promote long-term financial stability and assist people in navigating economic uncertainty. Socioeconomic and demographic factors are commonly used to profile respondents in research studies, offering insights into the connections between various variables (44). These factors, encompassing income, education, occupation, social class, and cultural norms, significantly influence individuals' standard of living, behaviours, and opportunities within society (45). Studies have demonstrated that gender, education level, income level, and family background play pivotal roles in determining financial literacy levels (46), with women typically exhibiting lower financial skills than men, even after accounting for other factors. While financial literacy tends to be higher among affluent, well-educated individuals utilizing financial services, billions still need more preparation to navigate rapid changes in the financial landscape (47). Despite extensive exploration of these financial literacy, behaviour, and well-being factors, a gap exists in understanding their role in financial resilience. This study intends to examine the moderating influence of socioeconomic characteristics in the links between financial literacy, financial behavior, and financial resilience, hypothesizing that age, gender, income, occupation, and education may impact financial resilience.

The Moderating Role of Socioeconomic Factors

Financial behavior, financial resilience, and financial literacy are all influenced by socioeconomic Factors. Financial behavior [FB] and financial literacy [FL] are crucial for enhancing financial resilience [FR], according to the present corpus of research. However, existing studies predominantly centre on specific sectors such as MSMEs, entrepreneurship, and households, leaving a notable gap in understanding resilience at the individual level. Within the Indian context, where socioeconomic disparities are pronounced, there is a shortage of comprehensive investigations into how these factors interact with FL and FB to shape FR outcomes. While previous literature recognizes the substantial impact of socioeconomic characteristics such as sex, age, education, income, and employment status on FL and FB, their precise moderating effects on the FL-FR relationship remain obscure. Furthermore, the potential mediating role of FB in this relationship remains largely unexplored. Thus, there exists a compelling research gap in elucidating the nuanced interplay among socioeconomic factors, FL, FB, and FR within the Indian population. Bridging this gap is essential for informing the design of tailored interventions to foster financial resilience effectively amidst diverse socioeconomic backgrounds and challenges. Human Capital Theory, Behavioral Economics Theory, Resilience Theory, and Social Cognitive Theory are well-established theories that can support the theoretical framework for comprehending the relationship between financial resilience, financial literacy, socioeconomic factors, and financial behaviour. According to Human Capital Theory, people who invest in education and skills, especially financial literacy, are more productive and have more significant economic potential (48). Financial literacy is a type of human capital that increases

financial resilience by empowering people to make wise financial decisions, such as efficient debt management and saving. This theory emphasizes that socio-economic factor, such as income and education, influence access to financial education, thus shaping financial behaviour and resilience. Similarly, Resilience Theory (49) emphasizes how people adjust and prosper in hardship. According to resilience theory, financial literacy improves people's capacity to follow wise financial habits like saving and budgeting, contributing to long-term financial resilience. Additionally, social support networks are essential for promoting resilient financial practices. A different viewpoint is provided by behavioural economics theory (50), which examines how cognitive biases like present bias and loss aversion affect financial judgments. These prejudices can weaken people's resilience by making them put immediate enjoyment ahead of long-term financial security. People can become more resilient and make better financial decisions by addressing these psychological hurdles with financial education programs incorporating behavioural treatments like nudges. Finally, the impact of social networks and self-efficacy on behaviour is highlighted by Social Cognitive Theory (51). Adopting healthy financial practices can result from observing positive financial role models in one's social circle. People who have a high feeling of self-efficacy are also more equipped to manage their financial situation. According to this view, improving financial literacy and resilience requires community-based financial education and support. This research integrates these four ideas to thoroughly explain how financial behaviour, socioeconomic circumstances, and financial literacy influence financial resilience. Figure 1 shows the conceptual framework that was applied to the hypothesis test.

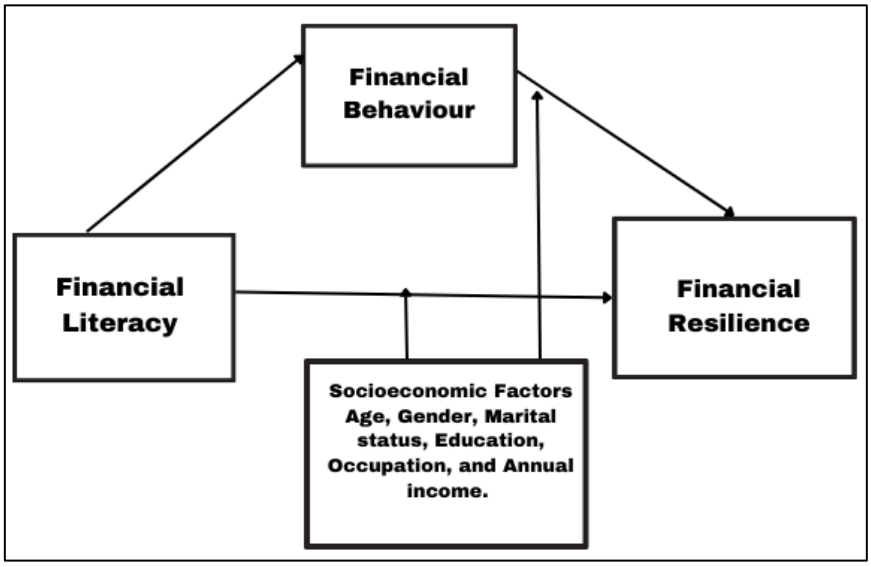

Figure 1: Conceptual Model

Methodology

This study examined the structural connections between financial behavior, financial literacy, and financial resilience across various socioeconomic variables. The focus was on individuals from Kerala, a state in India recognized for its high literacy rate of 94%, as the Ministry of Education reported. The decision to concentrate on Kerala was justified by its notable financial literacy performance, particularly highlighted by a study revealing a top score of 36%, surpassing national and regional averages (52). A sample size of 270 respondents was determined based on the 10-times rule, aligning with the requirement of 27 items across the three constructs being studied (53). The sample consisted of individuals from various demographic backgrounds, including age, gender, Marital Status, Income levels, Education, and occupation, to ensure a representation of Kerala's diverse socio-economic landscape. To effectively reflect India's varied socio-economic landscape, the following demographic categories were included:

- **Age**: Participants ranged from 20 to 80 years, covering young adults, middle-aged individuals, and seniors.
- **Gender**: Male and female participants were included to evaluate potential disparities in financial resilience, behavior, and literacy.
- **Marital Status**: Married, single, and Widow/Widower
- **Income Levels**: Participants were divided into four income groups to investigate the influence of financial resources on resilience and financial literacy: up to 2,50,000, 2,50,000–5,00,000, 5,00,000–10,00,000, and over 10 lakhs.
- **Educational Attainment**: The study included individuals with varying levels of education, from those with primary education to post-graduate degrees, to explore how educational background influences financial constructs.
- **Occupation**: A mix of Employed (full-time), Employed (part-time), Unemployed, and Students were included to capture the spectrum of financial experiences.

Google Forms was used to create a structured questionnaire given to respondents to collect data effectively. Convenience sampling was selected for its practicality in swiftly accessing respondents, particularly considering the geographical spread of the population. To enhance the validity of the findings, comprehensive demographic information was gathered to assess sample diversity and minimize bias. Additionally, demographic factors are being utilized as moderating variables, and multigroup analysis is being conducted to enrich the study's insights further. The survey link was distributed through email, WhatsApp, and various social media platforms to ensure broad outreach to a diverse audience. The questionnaire was divided into two sections: the first was designed to collect demographic data, and the second was intended to record respondents' opinions about each variable being studied. The questionnaire underwent thorough review and validation by three academic experts to ensure clarity, comprehensibility, and impartiality. A pilot study involving 30 individuals was conducted to validate the measurement tool, leading to adjustments for clarity and coherence. Data collection occurred from December 2023 to February 2024, employing a quantitative design with cross-sectional sampling. IBM SPSS AMOS, a potent tool for structural equation modelling [SEM], was used to evaluate the data in this investigation. Complex correlations between observable and latent variables can be examined using SEM. By facilitating the examination of measurement and structural models, AMOS offers a thorough framework for evaluating hypothesized correlations and assessing construct validity and reliability (54). This makes it a valuable tool for studies to understand intricate relationships within a given framework. Questionnaires from earlier studies that are pertinent to the variables being examined are included in this study. Three experts evaluated the questionnaire's face validity and content. The variables are rated on a 5-point Likert scale, with "strongly disagree" [1] to "strongly agree" [5] being the extremes. Financial Literacy [FL] served as the independent variable and was assessed through a questionnaire adapted from earlier studies (55, 56). The factor that mediates the relationship between financial resilience and financial literacy is financial behavior. The scale used to evaluate financial behavior (57), explicitly measuring spending, saving, Insurance, and shopping behaviors. Financial resilience, the outcome variable, was calculated using the developed scale (58). The scale evaluated resilient behavior in several dimensions, such as managing finances, paying bills, retaining a financial cushion, dealing with stress or deficits, and having financial planning.

Potential Biases in Self-Reported Data

Self-reported financial literacy, behavior, and resilience data can be subject to biases like social desirability, recall bias, and self-enhancement, potentially leading respondents to overstate their knowledge and practices. We used procedural techniques to address these problems, such as anonymizing respondents and using a variety of question formats to lessen prejudice. Harman's single-factor test was also used to evaluate common method bias (CMB). The results showed that only 31.25% of the variation can be explained by a single factor, suggesting that CMB is not a substantial concern in this study. Additionally, a multi-group analysis using structural equation modelling (SEM) was conducted to account for latent biases and ensure the findings' reliability across socio-economic groups. Analysis tables [3, 4, 5, 6, and 8] display factor loadings, model fit

indices, and multi-group invariance test results, illustrating the relationships among financial literacy, behavior, and resilience across different socio-economic segments.

Results and Discussion

AMOS 26 software was utilized to conduct the analysis using a two-step method in this study, which employed Structural Equation Modeling [SEM] (59). Confirmatory Factor Analysis [CFA] was conducted in the first phase to determine the measurement model's validity and reliability for additional analysis. Subsequently, the second phase concentrated on assessing the data's reliability. The Goodness of Fit Model [GOF] criterion was then used in the third phase to determine the model fit of the constructs. Last, the structural and path analysis technique tested theories inside the structural model. A thorough assessment of the model's fit, validity, and reliability, as well as the testing of specific hypotheses, were made possible by this systematic approach.

Descriptive Statistics

Table 1 illustrates the socio-economic characteristics of the 270 study participants, indicating a diverse demographic composition. Notably, 37.78% of the participants fall within the 40-60 age bracket, with the majority being married 72.9%. Male participants account for 60% of the sample. In terms of educational attainment, 51.1% hold a Master's degree. A substantial proportion of the population is engaged in full-time employment; 58.14% and 32.6% report an annual income between 5, 00,000 and 10, 00,000. These varied characteristics establish a solid foundation for the comprehensive analysis undertaken in this study. Table 2 displays the constructs' descriptive statistics. With a mean score of 3.9285, participants had a very high level of financial literacy, suggesting that the sample had a firm understanding of financial concepts. Financial behavior, while generally positive with a mean score of 3.8142, showed a slightly lower level than financial literacy, suggesting potential areas for improvement in managing financial practices. However, participants demonstrated commendable financial resilience, with a mean score of 3.8801, reflecting their ability to withstand financial challenges. These results suggest a sample with robust financial knowledge, moderate behavior, and consistent resilience, supported by low standard deviations indicating narrow score distributions.

Table 1: Socio-Economic Profile

Socio-Economic Factors		Frequency	Percent
Age	60 -80	55	20.37
	40-60	102	37.78
	20-40	113	41.85
Gender	Male	161	59.62
	Female	109	40.37
Marital Status	Married	197	72.9
	Single	70	25.92
	Widow/widower	3	1.2
Education	Elementary education	12	4.6
	UG	106	39.25
	PG	138	51.11
	Others	14	5.4
Occupation	Employed (full-time)	157	58.14
	Employed (part-time)	88	33.8
	Unemployed	7	2.7
	Student	18	6.9
	Nil	44	16.9
Annual Income	upto 2,50,000	40	15.4
	2,50,000-5,00,000	47	17.40

5,00,000-10,00,000	88	32.59
Above 10,00,000	51	19.6

Table 2: Descriptive Statistics

	Mean	Minimum	Maximum	Std. Deviation
Financial literacy	3.9285	1.40	4.80	.86616
Financial behaviour	3.8142	1.50	5.00	.78886
Financial resilience	3.8801	1.92	5.00	.66984

Measurement Model

AMOS 26 was used to evaluate the measurement and structural models using the maximum likelihood estimator. Confirmatory factor analysis [CFA] was directly applied, omitting the need for exploratory factor analysis [EFA], supported by adequate empirical and theoretical backing for the chosen scales. Factor loadings for particular items were examined during CFA. Key indices such as CMIN/df [2.67], GFI [0.916], CFI [0.905], TLI [0.935], SRMR [0.04], and RMSEA [0.05] all showed positive results from the model fit analysis. These values meet or exceed recommended thresholds, indicating a robust fit for the three-factor model encompassing Financial Literacy, Financial Behaviour, and Financial Resilience. (Table 3). Composite reliability and Cronbach's Alpha were both used to assess construct reliability. As advised, each construct's Cronbach's Alpha value exceeded the 0.50 requirement (60). Composite Reliability ratings also exceeded the typical criterion of 0.70, ranging from 0.79 to 0.87(61). As shown in Table 4, adequate construct reliability was thus proven for each studied construct. The Average Variance Extracted [AVE] approach evaluated the scale items' convergent validity. The average variance-extracted values obtained were higher than the suggested cut-off of 0.50 (62). Thus, as indicated in Table 4, it can be said that the scales used in this investigation have sufficient convergent validity. The Fornell and Larcker Criterion and the Heterotrait-Monotrait [HTMT] Ratio were used to evaluate the study's discriminant validity. A construct is considered to have discriminant validity when its square root of the Average Variance Extracted [AVE] is more significant than its association with other research constructs. (63). The HTMT ratio is becoming increasingly popular despite the Fornell and Larcker criterion being used traditionally. The Fornell and Larcker criterion only partially validated discriminant validity in this study. Nevertheless, when the HTMT ratio was used, all ratios fell below the suggested cutoff point of 0.85(64), indicating discriminant validity. These results are detailed in Tables 5 and 6. Table 5, based on the Fornell and Larcker criterion, and highlighted some ratios exceeding the 0.85 threshold, indicating potential issues with discriminant validity. Consequently, the study relied on the HTMT ratio analysis presented in Table 6, where all ratios met the discriminant validity criteria. Thus, the study concluded that discriminant validity was established.

Table 3: Model Fit

Fit indices	Recommended value	Obtained value
P	Insignificant	0.00
CMIN/df	3 to 5	2.67
GFI	>.90	0.916
CFI	>.90	0.905
TLI	>.90	0.935
SRMR	<.08	0.04
RMSEA	<.08	0.05

Table 4: Loadings, Reliability and Convergent Validity

Items	Cronbach's Alpha (α)	Composite Reliability	AVE
Financial Literacy		.874338709	.582745
fl1	.829		
fl2	.753		
fl3	.74		
fl4	.793		
fl5	.695		
Financial Behavior			
fb1	.633	.916198747	.525707
fb2	.748		
fb3	.607		
fb4	.806		
fb5	.778		
fb6	.809		
fb7	.799		
fb8	.607		
fb9	.628		
fb10	.786		
Financial Resilience			
fr1	.776	.929528961	.531103
fr2	.681		
fr3	.642		
fr4	.748		
fr5	.61		
fr6	.556		
fr7	.921		
fr8	.853		
fr9	.509		
fr10	.648		
fr11	.877		
fr12	.794		

Table 5: Fornell and Larcker's Criterion

	FR	FB	FL
FR	0.78		
FB	0.89	0.871	
FL	0.54	0.734	0.700071

Table 6: HTMT

	FR	FB	FL
FR			
FB	0.632816		
FL	0.761568	0.665315	

Hypothesis Testing

The same indicators used to evaluate the measurement model's fit were also used to gauge the model's fit adequacy before hypothesis testing. The following values showed that the model had sufficient goodness of fit: CMIN/df

[2.67], GFI [.916], CFI [.905], TLI [.935], SRMR [.04], and RMSEA [.05]. Table 7 lists the coefficients of determination [R^2] and standardized path coefficients [β] for the direct, indirect, and multigroup models.

Direct Effect

The research findings support three hypotheses within the structural equation model. First, there is a strong positive association between financial behavior and financial literacy [β =.525, P <0.01], suggesting that people who are more financially literate are more likely to engage in positive financial practices such as financial planning, efficient budgeting, and informed decision-making. Second, there is a strong and positive correlation between financial behavior and financial resilience [β = 0.241, P < 0.01], indicating that people who behave responsibly with their money are more likely to be financially resilient, which means they can handle unforeseen financial difficulties or shocks to the economy. Finally, it is demonstrated that financial literacy has a strong and positive influence on financial resilience [β =.392, p < 0.01], highlighting the critical role that financial literacy plays in fostering overall financial resilience. This suggests that people with greater financial literacy can better learn the information and abilities required to overcome financial challenges, strengthening their ability to withstand economic uncertainty.

Mediation of Financial Behavior: Indirect Effect

The proposed framework reveals a crucial indirect effect and provides insightful information about how financial behavior, financial literacy, and financial resilience interact. The study shows explicitly that financial behavior moderates the favorable impact of financial literacy on financial resilience [β = 0.195, P< 0.01]. According to this, financial literacy's capacity to mold sound financial practices accounts for a portion of its impact on financial resilience. The model accounts for 42% of the variation in financial resilience through direct and indirect relationships between financial behavior and financial literacy. The statistical significance and robustness of the indirect impact offer strong evidence in favor of H4. To promote increased financial resilience, it is essential to consider both the direct effects of financial literacy and the mediating function of financial behavior.

Effect of Moderation through Multi-group Analysis

The multi-group analysis using Amos graphics aimed to discern notable differences across diverse socio-economic groups by employing socio-economic variables as moderators, including age, gender, education, occupation, and annual income. Categorical variables were utilized to categorize age as < and >40 years old, yearly income as < 500,000 and >5,00,000 groups, occupation as Employed and Unemployed, and education as Elementary Education and Higher Education.

Age: Financial literacy and financial behavior were significantly positively correlated in both age groups [<40 and >40]. The more significant direct impact of financial literacy on financial resilience was shown in the older group. Both groups' financial resilience was positively impacted by financial activity, with the younger age group showing a marginally more substantial benefit. For the older age group, the model explained a more significant percentage of the variance in financial resilience [39%] than for the younger age group [15%].

Gender: The positive impact of financial literacy on financial behavior was similarly strong for men and women. The direct relationship between financial conduct and financial resilience, however, was stronger for women [β =.362, P<0.01] than for men [β =.216, P<0.01]. The direct relationship between financial literacy and financial resilience was also somewhat stronger for women [β =.271, P < 0.01] than for men [β =.258, P < 0.01]. Male financial behavior variance was more significantly explained by the model (24%), compared to 21% for females.

Occupation: Compared to the unemployed, those employed showed a more significant influence of financial literacy on their financial behavior. Financial behavior had a substantial impact on financial resilience for those who were employed [β = 0.327, p < 0.01], but it was not statistically significant for those who were jobless [β = 0.295]. For the employed, the direct relationship between financial literacy and financial resilience was stronger [β = 0.287, p < 0.01] than for the unemployed [β = 0.167, p < 0.01]. Employed people's financial behavior was more significantly explained by the model (52%), compared to 23% for jobless people.

Education: Financial literacy significantly affected financial behavior among higher education students [β Higher Education = 0.369, p < 0.01; β Elementary Education = 0.195, not statistically significant]. Financial behavior had a beneficial impact on financial resilience in all groups, but the effect was stronger for higher education (β = 0.273, p < 0.01) than for primary education (β = 0.212, p < 0.01). Similarly, compared to elementary education (β = 0.107, not statistically significant), the direct relationship between financial literacy and financial resilience was more substantial for higher education (β = 0.336, p < 0.01). Higher education [49%], as opposed to elementary education [15%], had a higher percentage of the variance in financial resilience explained by the model.

Annual Income: Individuals earning less than 500,000 and those earning more than 5,00,000 annually exhibited a significantly positive correlation between financial literacy and financial behavior. Those earning more than 5,00,000 displayed a stronger connection between financial behavior and financial resilience [β > 5,00,000 = .361, p < .01] compared to those earning less [β < 5,00,000 = .250, p < 0.01]. In contrast, the direct effect of financial literacy on financial resilience was vital for individuals earning less than 500,000 [β < 5,00,000 = .347, p < 0.01] compared to those earning more [β > 5,00,000 = .294, p < 0.01]. There was a stronger correlation between financial conduct and financial literacy among those with incomes under 500,000. Those making over 5,000,000, on the other hand, showed a more significant influence of financial conduct on financial resilience. Here are the summarized outputs from our investigation, provided in Table 7 for the results of hypothesis testing and Table 8 for the specific testing techniques and results for each hypothesis.

Table 7: Findings from Tests of Hypotheses

Hypothesis	**Accepted/ rejected**
H1: Resilience in terms of finances is positively impacted by financial literacy.	Accepted
H2: The influence of financial literacy on financial behavior.	Accepted
H3: Financial behavior has a favorable impact on building resilience.	Accepted
H4: Financial literacy mediates financial behavior, affecting financial resilience.	Accepted
Financial behavior, financial resilience, and financial literacy are all influenced by socioeconomic variables.	Accepted

	Age	**Gender**	**Occupation**	**Education**	**Annual Income**
FL → FB	Accepted	Accepted	Accepted	Rejected	Accepted
FB → FR	Accepted	Accepted	Rejected	Accepted	Accepted
FL → FR	Accepted	Accepted	Accepted	Rejected	Accepted

Table 8: Testing of Hypothesis

	Full sample		**Age**		**Gender**		**Occupation**		**Education**		**Annual Income**	
Path name	Direct effect	Indirect effect	<40	>40	Male	Female	Employed	Unemployed	Elementary	Higher	<5,00,000	>5,00,000
FL-FB	.525**		.258**	.262**	.328**	.359**	.495**	.372**	0.195	.369**	.359**	.345**
FB-FR	.241**		.172*	.154*	.216**	.362**	.327**	0.295	.212**	.273**	0.25	.318**
FL-FR	.392**	.195**	.249*	.371**	.258**	.271**	.287**	.167**	0.107	.336**	.347**	.294**
R²	0.42		0.15	0.39	0.24	0.21	0.52	0.23	0.15	0.499	0.56	0.23

NOTES **P<.01,*P<.05

Discussion

Based on critical theoretical frameworks like Human Capital Theory, Behavioral Economics Theory, Resilience Theory, and Social Cognitive Theory, the study's findings thoroughly understand the interactions between financial literacy, financial behavior, socioeconomic factors, and financial resilience. The Human Capital Theory contends that financial literacy improves people's capacity to make wise financial decisions, consistent with the positive correlation between financial behavior and financial literacy [$\beta = 0.525$, $p < 0.01$]. The study shows this by showing that participants who are more financially literate are more likely to use strategies like financial planning and budgeting, which produce better results. Additionally, the correlation between resilience and financial behavior [$\beta = 0.241$, $p < 0.01$] validates resilience theory, emphasizing that prudent financial practices enhance people's ability to cope with financial difficulties. The study also emphasizes how vital socioeconomic variables are in determining financial resilience. Financial behavior, resilience, and financial literacy were more strongly correlated with higher earnings and educational attainment. According to Human Capital Theory, people with more significant resources—including financial education—are better positioned to develop resilience and make wise financial decisions. Socioeconomic group disparities in financial resilience highlight the necessity for specialized financial literacy initiatives. For example, more tailored, practical financial education that addresses their particular issues could benefit those with lesser incomes or levels of education, providing equal opportunity to develop financial resilience. The study reveals that different financial literacy components—numeracy, budgeting, credit management, risk assessment, investment knowledge, savings strategies, and understanding financial products—play varied roles in fostering financial resilience across demographic groups. For individuals over 40, numeracy, risk assessment, and retirement planning are critical for financial stability, while younger individuals prioritize budgeting, managing loans, and exploring investment opportunities. Gender differences show that women focus more on budgeting, savings, and risk management for long-term security, whereas men emphasize advanced financial products and investment strategies. Employed individuals prioritize credit management and leveraging employer benefits, while the unemployed focus on budgeting and emergency savings. Educational background further influences financial literacy, with higher-educated individuals engaging in risk assessment and diversified financial products, while those with elementary education depend more on budgeting and credit management. Lower-income individuals benefit from skills in numeracy and emergency savings, while higher-income groups focus on wealth accumulation and complex investment strategies. A multifaceted framework for comprehending the interaction between financial literacy, behavior, and socioeconomic factors in promoting financial resilience is provided by integrating multiple theories, such as Human Capital Theory, Resilience Theory, Behavioral Economics Theory, and Social Cognitive Theory. These frameworks strongly emphasize the value of financial literacy as well as the structural, social, and psychological aspects that affect financial judgment. To address the complexity of factors affecting financial resilience and promote more equitable financial systems, future research might expand on this by investigating methods to improve financial education programs and policies. Furthermore, the direct correlation between financial literacy and financial resilience [$\beta = 0.392$, $p < 0.01$] supports resilience theory by highlighting the critical role that financial literacy plays in assisting people in overcoming financial obstacles. This implies that people are better able to handle uncertainty if they possess more essential financial knowledge. The Behavioral Economics Theory, which describes how psychological elements influence financial decision-making, is supported by the financial behavior mediation between resilience and financial literacy [$\beta = 0.195$, $p < 0.01$]. According to these results, sound financial practices are necessary to fully reap the rewards of financial literacy in fostering resilience. Lastly, the multi-group analysis clearly shows the impact of social networks and self-efficacy as described by Social Cognitive Theory. The links between financial literacy, behavior, and resilience are moderated by socioeconomic characteristics like income and education, indicating that a person's socioeconomic

background influences how financial literacy develops into resilient habits. Age, Income, and educational disparities highlight the necessity of customized financial literacy programs to meet the particular requirements of various demographic groups.

Conclusion

This study profoundly illuminated the relationship between financial literacy, financial behavior, and financial resilience, which involved 270 people. As expected, the positive correlations between these constructs are confirmed by thorough research, focusing on the mediating function of financial behavior in the interaction between financial resilience and financial literacy. Our investigation of various socioeconomic variables as moderators identifies unique trends, highlighting the complex effects of resilience, behavior, and financial literacy on different demographic groups. Notably, we found significant effects within some subgroups, such as those over 40, women, people in the workforce, and people with more education. These results emphasize how crucial it is to design financial literacy initiatives specifically suited to various demographic groups' requirements. Since the COVID-19 pandemic, financial resilience—rooted in psychological resilience—has become more widely discussed. This increasing significance emphasizes the importance of comprehending financial resilience in the current economic environment, mainly as people deal with more complicated financial difficulties. Although research on financial resilience is still in its infancy, there aren't many studies conducted worldwide. Our analysis focuses on the two primary factors of financial literacy and financial behavior. Although our results offer insightful information on these constructs, it is essential to note a few caveats. Despite being a sufficient sample size, it might not accurately reflect the general population's diversity. Furthermore, this study's cross-sectional design restricts our capacity to determine causality between the variables. The temporal dynamics of the links between financial literacy, behavior, and resilience should be better understood through longitudinal studies in future research. Incorporating a more varied population into the sample would significantly improve the findings' generalizability. Future research should also examine the long-term effects of financial behavior and literacy on financial resilience to demonstrate causal linkages. Further exploring other moderating variables, such as social effects, psychological characteristics, cultural aspects, and geographic variations, might deepen our comprehension of these dynamics. An essential contribution to this understanding of financial resilience and its determinants will come from future research that uses secondary data on economic recessions, wars, stock market crashes, inflation, and unemployment, among other financial factors. Due to time limits and the distinctive aspect of India's unity in diversity, the examination was limited to a particular state. Future studies could examine financial resilience from a broader viewpoint by comparing various Indian states and extending it to other nations. These kinds of comparative studies will help us better understand the variables that affect financial resilience and will also guide the creation of customized programs that successfully meet the particular requirements of specific communities. Eventually, this strategy will broadly improve economic stability and financial resilience, improving the welfare of people and communities in various settings.

Abbreviations

FL: Financial Literacy, FB: Financial Behaviour, FR: Financial Resilience, HTMT: Heterotrait-Monotrait.

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Authors Contribution

Annie Issac, was instrumental in identifying the research topic and designing the study, as well as in drafting the manuscript and overseeing data collection. Dr. Seranmadevi R, was crucial in developing the questionnaires and conducting the data analysis. Together, they collaborated closely throughout the research process, ensuring the

study was thorough and effectively communicated their findings. This partnership exemplifies their shared commitment to advancing knowledge in their field.

Conflict of Interest

The authors of this work state that they have no conflicts of interest about its publication.

Ethics Approval

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