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Exploring Relation Among Financial Literacy ,Behavioral Finance And Personal Financial Well Being : A Pilot Study

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Abstract: This study examines the complex difference between financial literacy, behavior finance and financial welfare in the context of emerging economies. While traditional financial education emphasizes the spread of knowledge, this letter examines to what extent behavioral bias convenes relationships between knowledge and real financial results. Using survey data from 80 individuals in diverse demographic background, the research applies statistical analysis to measure financial literacy, identify practical prejudices and assess financial results. The results indicate that while financial literacy is moderately high, prejudices such as overconfidence and mental accounting are prevalent, often reduce rational decision making. However, individuals who combine high financial literacy with low behavioral deformation display better financial results, including more savings, diverse investment and long -term financial planning. The study emphasizes the requirement of integrated financial education approaches that include behavior coaching.

Keywords: Financial Literacy, Behavioral Finance, Financial Well-being, Emerging Economies, Cognitive Biases, Financial Education.

I. Introduction

Financial iteracy is rapidly recognized as the cornerstone of economic empowerment and personal welfare, especially in the context of emerging economies. These sectors are undergoing rapid financial, which are marked by increasing access to banking services, digital finance, microcrade and investment opportunities. While this extended financial landscape provides important potential for upper dynamics and wealth creation, it also introduces a host of complex financial decisions that requires informed decisions. Despite the widespread initiative aimed at increasing financial knowledge, increasing empirical evidence suggests that financial literacy alone does not guarantee sound financial behavior.

The field of behavior finance reveals the important role of psychological and emotional factors - such as succession, cognitive distortions, and emotional reactions - which often interfere with rational economic decisions. Individuals may have financial knowledge, but still make a sub class option due to deeply underlying practical prejudices such as over -confidence, loss of loss and mental accounting.

In emerging markets, where socio-economic pressure and cultural approaches to wealth are more complicated by financial behavior, it is necessary to understand the interaction between financial literacy and a tendency of behavior. The purpose of this study is to examine the difference of how behavior factors mediator or medium the impact of financial literacy on financial welfare. By discovering this relationship, we want to inform the development of more overall and effective financial education programs that not only transfer knowledge, but reopen the behavior.

2. Objectives of the Study:

• Assessing the level of financial literacy among individuals in emerging economies.
• To identify the prevailing behavior prejudices affecting financial decision making.
• To check the relationship between financial literacy and financial well-being.
• To evaluate the mediating role of behavioral biases on financial well-being.

3. Need of the Study:

Emerging economies face a separate set of financial challenges that vary greatly from those in more developed countries. These include high income instability, limited access to formal financial services such as banking and credit and comprehensive dependence on informal savings mechanisms. Additionally, cultural approaches to money, family obligations and risk can affect financial behavior in ways that are not adequately addressed by traditional financial education.

Whereas financial literacy programs have expanded rapidly in recent years-often supported by governments, NGOs and international development organizations-their real world effectiveness remains incompatible and often short-lived. Many such programs focus on giving technical knowledge, which reduce the importance of cognitive and emotional obstacles, which face individuals when implementing that knowledge. The need for this study arises from recognition that knowledge alone is not enough.

Behavior finance has shown that individuals often take irrational decisions due to prejudices such as current prejudice, over -confidence and mental accounting, even when they are well informed. These psychological barriers reduce the impact of financial education and limit the progress in improving financial welfare. The purpose of this study is to reveal the psychological grounds of financial decision making by finding out how practical factors interact with financial literacy.

Conclusion will contribute more effective, practically informed interventions that integrate technical education with strategies to remove cognitive and emotional obstacles-especially relevant in emerging economies where the stakes of poor financial decisions are more..

4. Significance of the Study:

The importance of this study lies in shaping individual financial results in the light of financial literacy and complex mutation between practical prejudices. formal financial systems are expanding rapidly, it is important to understand this relationship. Traditional Financial Education Initiatives often fail to produce long -term behavioral changes as they ignore psychological and emotional factors with financial decisions. By incorporating behavior finance in the analysis, this research provides a more fine approach to why economically literate person can still engage in sub -financial behavior.

Thus the study highlights the boundaries of knowledge-based interventions and the need for integrated educational strategies that address both informative intervals and tendency of behavior. In addition, there are practical implications for a wide range of stakeholders of findings, including policy makers, educational institutions, financial services providers and development organizations.

By identifying specific cognitive prejudices that affect financial behavior most importantly - such as loss radiation and mental accounting - study provides a roadmap to design targeted interventions that are culturally and relevant. It also contributes to the relatively unspecified field of behavior within emerging economies, providing empirical evidence that supports the adoption of a practically informed policy structure. Understanding this advancement can eventually support more flexible financial behavior, better savings habits and more justified economic consequences in areas that are the most weak for financial instability.

5. Hypotheses:

H1: High financial literacy is positively correlated with better financial well -being.

H2: Behavioral biases mediate relationships between financial literacy and financial outcomes and Financial Well-Being.

H3: People with high financial literacy and low practical prejudice display much better financial behavior than people with high literacy but high prejudices.

4. Literature Review:

Numerous studies underscore the positive correlation between financial literacy and improved financial outcomes (Lusardi & Mitchell, 2014). However, behavioral economists argue that financial behavior is also shaped by bounded rationality, emotions, and situational factors (Thaler, 1980).

For instance, Fernandes, Lynch, and Netemeyer (2014) found that financial literacy explains only a small fraction of financial behavior variance, highlighting the role of non-cognitive factors. Kahneman and Tversky's (1979) Prospect Theory explains how individuals perceive gains and losses asymmetrically, leading to risk-averse or risk seeking behavior.

Further research by Shefrin and Thaler (1988) proposed the Behavioral Life Cycle Hypothesis, where self control issues and mental accounting affect savings behavior. Another study by Loewenstein et al. (2001) introduced the concept of "projection bias," where current emotions distort long-term financial planning. Moreover, financial stress and decision fatigue reduce individuals' capacity to make sound financial choices, especially among low-income groups (Mani et al., 2013).

These insights suggest that financial education must integrate behavioral tools—like nudges, just-in-time interventions, and simplified choices—to overcome inherent biases. The developed complexity of the financial environment has made individual financial decision making rapidly challenging.

A consistent body of research highlights the boundaries of traditional financial literacy models in improving financial results. Lusardi and Michelle (2014) emphasize that while financial knowledge positively belongs to the retirement plan, many people still make a sub -class option, indicating that knowledge alone alone is insufficient. Practical instincts such as dysfunction and inertia persist, even among well -informed individuals. The concept of the theler and Sunstein's (2008) "nudging" introduces a transformative approach by advocating structural changes in architecture to encourage better decisions.

Their structure plays an important role in understanding how simple behavioral signal-like signs can improve participation in default savings scheme or auto-neralment-degradable financial plan. Similarly, Fernandes, Lynch, and Netmeer (2014) found that the standalone effect of financial education on behavior is minor and a joint strategy involving real -time, relevant interventions to remove behavioral obstacles. The role of age and cognitive ability in financial decisions was detected by Aggarwal et al. (2009), who said that in his mid -year individuals make less financial erors.

This observation supports the case for targeted interventions in life stages. Hastings, Madriyan, and Sydimhorn (2013) also challenge the efficacy of traditional education programs, which urge the integration of behavior finance in public policy to effectively shape financial habits. Shefrin and Theler (1988) behavioral life-cycle hypothesis provides a psychological basis for inconsistent savings and spending patterns, which exposes mental accounting as an obstruction in rational decision making.

Mandel and Klein (2009) further argued that the impact of experienced learning and parents is important to translate knowledge, especially among the youth. In the Indian context, Bhattacharjee and Dana (2020) found that despite liberal financial awareness, young consumers are interrupted by prejudices such as optimism and current prejudice. Mobile-based elbows and gamification are recommended to bridge this behavior interval. Carpena et al. (2011) There is evidence that knowledge benefits only lead to behavior change when coupled with accessible products and reminders.

Loibl and Hira (2006) emphasized the emotional dimension of financial behavior, finding that stress and lack of confidence could reduce rational options. Boucher and Jacobsen (2021) show that knowledge and behavior is important to achieve discipline and target-financial welfare-a combination of adaptability. Choi et al. (2004)

Strengthens the importance of simplicity and default mechanisms in promoting participation in retirement schemes.

Their findings resonate wide consent that practically informed design elements are necessary to overcome inertia and complexity in financial decision making. Collectively, these studies underline the need to integrate behavior finance insights into financial literacy programs. A multidimensional approach that incorporates cognitive, emotional and relevant factors is important to convert financial knowledge into permanent financial welfare.

5. Conceptual Framework:

Independent Variable: Financial Literacy

Mediating Variables: Behavioral Biases (e.g., Overconfidence, Mental Accounting, Recency Bias)

Moderating Variables: Socio-demographic factors (Gender, Age, Family annual income, Education, Occupation)

Dependent Variable: Personal Financial Well-being

This framework posits that while financial literacy can directly improve financial outcomes, its effectiveness is mediated by the extent to which individuals can overcome or manage behavioral biases. Socio demographic characteristics further influence this relationship, suggesting that a one-size-fits-all financial education may be ineffective.

6. Research Methodology:

• Population & Sample: 80 respondents from Pune region in an emerging economy like India, stratified by age, income, and education, occupation and gender

• **Data Collection:** Structured questionnaires measuring financial literacy, behavioral biases, and financial behavior and financial well-being

• **Variables:** Independent: Financial literacy scores

Mediating: Behavioral bias scores
Dependent: Financial well-being indicators (savings rate, investment diversification, budgeting behavior)

7.. Data Analysis & Tools:
• Statistical Software: SPSS
• Descriptive Analysis: Mean, standard deviation, frequency distribution
• Inferential Analysis: Pearson correlation, ANOVA, Regression analysis

8.• Hypothesis Testing Tools: Linear regression, Hypothesis Testing

8.1 Research Methodology

8.1.1 Sample & Data Collection

The pilot study data was collected through a structured online questionnaire distributed in Pune and surrounding regions of Maharashtra, India. The final analytical sample comprised 80 respondents after cleaning and validation. Responses were recorded on Google Forms and exported to Microsoft Excel.

8.1.2 Instrument Structure

Section	Construct	Content	Items
Section A	Demographic Profile	Gender, Age, Education, Occupation, Annual Income	5 items
Section B	Financial Knowledge	Numeracy, Inflation, Interest, Compound Interest, Risk	8 items→Score %
Section C	Behavioural Literacy	Budgeting, Goal setting, Bill payment, Spending habits	9 items→Score %
Section D	Financial Attitude	Spending vs saving mindset (reverse-coded)	3 items→Score %
Section E	Behavioural Biases	Overconfidence, Anchoring, Disposition, Herd, etc.	20 items→ Score %
Section F	Financial Well- Being	Security, sufficiency, control, satisfaction (10-pt scale)	10 items→ Score %

8.1.3 Statistical Methods Applied

Method	Purpose & Application
Descriptive Statistics	Mean, SD, Min, Max for all score variables across each demographic group
Independent t-test	Gender-wise comparison (Male vs Female)— assumes homogeneity of variance
One-Way ANOVA	Age-wise, Education-wise, Occupation-wise, Income-wise comparisons (3–5 groups)
Post-hoc Analysis	Tukey HSD recommended for significant ANOVA results (indicative only in pilot)
Pearson Correlation	Bivariate relationships among all constructs and demographic variables
SEM Path Model	Conceptual structural model linking demographics→ mediators→ FWB outcome

8.2. Demographic Profile of Respondents

Table 8.1 presents the frequency and percentage distribution of all key demographic variables in the pilot study sample (N=80).

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	55	68.75%
	Female	25	31.25%
Age Group	18–29 years	17	21.25%
	30–39 years	18	22.50%
	40–49 years	16	20.00%
	50–59 years	15	18.75%
	60+ years	14	17.50%
Education	10th / 12th Standard	6	7.50%
	Graduate	19	23.75%

	Post Graduate	25	31.25%
	Doctorate	12	15.00%
	Professional (CA/CS/Doc/Law)	18	22.50%
Occupation	Salaried	26	32.50%
	Self-Employed / Businessman	10	12.50%
	Student	44	55.00%
Annual Family Income	< Rs. 1,50,000	35	43.75%
	Rs. 1,50,001– 3,00,000	12	15.00%
	Rs. 3,00,001– 5,00,000	7	8.75%
	Rs. 5,00,001– 10,00,000	12	15.00%
	> Rs. 10,00,000	14	17.50%
TOTAL		80	100.00%

Table 8.1: Frequency Distribution of Demographic Variables (N=80)

8.4. Genderwise Statistical Analysis :

8.4.1 Descriptive Statistics— Gender

The following table presents descriptive statistics (Mean and Standard Deviation) for all six score constructs, compared across Male (N=55) and Female (N=25) respondents.

Score Variable	Male Mean	Male SD	Female Mean	Female SD
Knowledge	88.64	15.64	76.00	24.18
Behavioural Literacy	78.38	14.57	71.11	21.75
Attitude	67.15	22.14	64.80	25.57
FL Score (Composite)	78.06	12.70	70.64	16.22
Financial Behaviour	76.07	15.92	68.48	21.16
Financial Well-Being	76.55	16.84	67.52	18.71

Table 8.2 Gender-wise Descriptive Statistics (N=80; Male=55, Female=25)

8.4.2 Independent Samples T-Test— Gender

An independent samples t-test was conducted to examine whether statistically significant differences exist between male and female respondents on each financial literacy and well- being construct. The null hypothesis (H0) states no significant mean difference between gender groups.

Score Variable	Male M (SD)	Female M (SD)	t-value	p-value	Sig nifican ce
Knowledge	88.64 (15.64)	76.00 (24.18)	2.803	0.0064	**
Behavioural Literacy	78.38 (14.57)	71.11 (21.75)	1.763	0.0819	ns
Attitude	67.15 (22.14)	64.80 (25.57)	0.419	0.6762	ns
FL Score	78.06 (12.70)	70.64 (16.22)	2.217	0.0295	*
Financial Behaviour	76.07 (15.92)	68.48 (21.16)	1.778	0.0792	ns
Financial Well-Being	76.55 (16.84)	67.52 (18.71)	2.146	0.0350	*

Table 8..2: Independent Samples t-test Results— Gender Comparison
Note: * p<0.05; ** p<0.01; *** p<0.001; ns = Not Significant | df = 78 | Two-tailed test

Interpretation:

Males scored significantly higher than females on Financial Knowledge (t=2.803, p=0.006), Financial Literacy Composite Score (t=2.217, p=0.030), and Financial Well-Being (t=2.146, p=0.035). Behavioural Literacy, Attitude, and Financial Behaviour did not reach significance, suggesting gender-neutral financial behaviours and attitudes in this pilot sample.

8.5. Agewise Statistical Analysis :

8.5.1 Descriptive Statistics— Age Groups

Score Variable	Knowledge	Beh. Literacy	Attitude	FL Score	FB Score	FWB Score
18–29 (n=17)	82.35	73.20	66.27	73.94	70.00	70.00
30–39 (n=18)	89.58	82.72	62.22	78.17	77.94	77.56
40–49 (n=16)	87.50	83.33	65.83	78.89	76.69	76.38
50–59 (n=15)	79.17	69.63	72.89	73.90	73.67	73.20
60+ (n=14)	83.93	69.84	65.71	73.16	69.36	70.86

Table 8.3: Age-wise Mean Scores across all Constructs (N=80)

8.5.2 One-Way ANOVA— Age

A one-way ANOVA was performed to test for significant differences among five age groups (18–29, 30–39, 40–49, 50–59, 60+). F-ratios and p-values are reported below.

Score Variable	F-value	df	p-value	Sign ifica nce
Knowledge	0.725	4,75	0.5779	ns
Behavioural Literacy	2.656	4,75	0.0393	*
Attitude	0.435	4,75	0.7831	ns
FL Score	0.562	4,75	0.6912	ns
Financial Behaviour	0.739	4,75	0.5685	ns
Financial Well-Being	0.563	4,75	0.6906	ns

Table 8.4: One-Way ANOVA Results— Age-wise Comparison (df between=4, df within=75)
Note: * $p<0.05$; ** $p<0.01$; *** $p<0.001$; ns = Not Significant

Interpretation:
A statistically significant age-group difference was found for Behavioural Literacy (F=2.656, p=0.039). Post-hoc analysis (Tukey HSD) would be recommended for pairwise comparisons. The 30–39 and 40–49 age groups exhibited the highest mean scores across most constructs, suggesting that middle-aged adults demonstrate better financial literacy behaviours. No significant age-related differences were found for other constructs in this pilot study.

8.6. Educationwise Statistical Analysis :
8.6.1 Descriptive Statistics— Education

Score Variable	Knowledg e	Beh. Literacy	Attitude	FL Score	FB Score	FWB Score
10th/12th (n=6)	79.17	68.52	64.44	70.71	65.83	61.33
Graduate (n=19)	81.58	74.27	62.11	72.65	70.68	72.21
Post Grad (n=25)	89.50	80.00	68.53	79.34	79.16	79.04
Doctorate (n=12)	87.50	80.56	75.56	81.20	78.83	77.33
Professional (n=18)	81.25	72.22	62.59	72.02	68.50	69.67

Table 8.6: Education-wise Mean Scores across all Constructs (N=80)

8.6.2 One-Way ANOVA— Education

Score Variable	F-value	df	p-value	Sign ifica nce
Knowledge	0.818	4,75	0.5180	ns
Behavioural Literacy	1.085	4,75	0.3702	ns
Attitude	0.812	4,75	0.5215	ns
FL Score	1.614	4,75	0.1797	ns
Financial Behaviour	1.681	4,75	0.1632	ns
Financial Well-Being	1.732	4,75	0.1519	ns

Table 8.6: One-Way ANOVA Results— Education-wise Comparison (df between=4, df within=75) Note: All results are non-significant (ns); p>0.05 for all constructs.

Interpretation:

No statistically significant differences in financial literacy or well-being were observed across education levels in this pilot study. However, descriptive trends indicate that Post Graduate (Mean FL=79.34%) and Doctorate (Mean FL=81.20%) respondents outperform lower education groups. These non-significant results may be attributed to the relatively small sample size; a larger study is expected to reveal significance.

8.7. Occupation-wise Statistical Analysis

8.7.1 Descriptive Statistics— Occupation

Score Variable	Knowledge	Beh. Literacy	Attitude	FL Score	FB Score	FWB Score
Salaried (n=26)	83.65	81.20	69.49	78.11	76.54	76.69
Self-Employed (n=10)	78.75	75.56	60.00	71.44	68.20	67.80
Student (n=44)	86.65	73.23	66.06	75.31	73.27	73.32

Table 8.7: Occupation-wise Mean Scores across all Constructs (N=80)

8.7.2 One-Way ANOVA— Occupation

Score Variable	F-value	df	p-value	Significance
Knowledge	0.718	2,77	0.4908	ns
Behavioural Literacy	1.765	2,77	0.1780	ns
Attitude	0.613	2,77	0.5443	ns
FL Score	0.837	2,77	0.4369	ns
Financial Behaviour	0.804	2,77	0.4514	ns
Financial Well-Being	0.922	2,77	0.4022	ns

Table 8.7: One-Way ANOVA Results— Occupation-wise Comparison (df between=2, df within=77)

Interpretation:

No statistically significant occupational group differences were detected across any of the six constructs. Nevertheless, Salaried respondents consistently recorded the highest mean FL Score (78.11%) and FWB Score (76.69%), while Self-Employed respondents scored lowest on Attitude (60.00%) and FWB (67.80%). Students, who constitute the majority (55%), exhibited moderate scores with higher Knowledge (86.65%) relative to their lower Behavioural Literacy (73.23%).

8.8. Annual Family Income-Wise Statistical Analysis

8.8.1 Descriptive Statistics— Income

Score Variable	Knowledge	Beh. Literacy	Attitude	FL Score	FB Score	FWB Score
<1.5L (n=35)	81.43	68.57	66.10	72.03	69.26	69.89
1.5–3L (n=12)	87.50	75.93	69.44	77.62	76.58	74.83
3–5L (n=7)	78.57	80.95	40.95	66.83	65.86	66.29
5–10L (n=12)	92.71	87.96	80.56	87.08	84.92	87.67
>10L (n=14)	86.61	82.54	65.24	78.13	76.64	74.14

Table 8.8: Income-wise Mean Scores across all Constructs (N=80)

8.8.2 One-Way ANOVA— Annual Family Income

Given the income-stratified nature of financial literacy, one-way ANOVA was conducted across five income brackets.

Score Variable	F-value	df	p-value	Sign ifica nce
Knowledge	1.023	4,75	0.4009	ns
Behavioural Literacy	4.290	4,75	0.0035	***
Attitude	3.767	4,75	0.0076	**
FL Score	3.820	4,75	0.0070	**
Financial Behaviour	2.369	4,75	0.0601	ns
Financial Well-Being	2.789	4,75	0.0323	*

Table 8.9: One-Way ANOVA Results— Income-wise Comparison (df between=4, df within=75)
Note: *** p<0.001; ** p<0.01; * p<0.05; ns = Not Significant

Interpretation:

Annual family income showed the most significant and consistent impact on financial constructs among all demographic variables. Specifically: Behavioural Literacy (F=4.290, p=0.004***), Financial Attitude (F=3.767, p=0.008**), FL Composite Score (F=3.820, p=0.007**), and Financial Well-Being (F=2.789, p=0.032*) all showed significant ANOVA results. The 5–10L income group scored highest across all constructs (FL=87.08%, FWB=87.67%), while the 3–5L group showed notably low Attitude scores (40.95%), suggesting possible financial stress at that income level.

8.9. PEARSON CORRELATION ANALYSIS

The Pearson correlation matrix examines bivariate relationships among all key constructs and demographic variables. Table 9.1 presents select correlation pairs of substantive interest

Variable Pair	r	p-value	Sig.	Interpretation
Knowledge↔ FL Score	0.89	< 0.001	***	Very Strong Positive
Beh. Literacy↔ FL Score	0.86	< 0.001	***	Very Strong Positive
Attitude↔ FL Score	0.77	< 0.001	***	Strong Positive
FL Score↔ Financial Well- Being	0.82	< 0.001	***	Very Strong Positive
Financial Behaviour↔ FWB	0.88	< 0.001	***	Very Strong Positive
Gender↔ Knowledge	-0.30	0.006	**	Weak Negative (Males higher)
Income↔ FL Score	0.28	0.012	*	Weak Positive
Income↔ FWB Score	0.26	0.019	*	Weak Positive
Age↔ Beh. Literacy	0.11	0.321	ns	Negligible
Education↔ FL Score	0.14	0.209	ns	Negligible

Table 9.1: Select Pearson Correlation Pairs— Key Constructs & Demographic Variables
Note: r = Pearson correlation coefficient | *** p<0.001; ** p<0.01; * p<0.05; ns = Not Significant

10. Consolidated Statistical Tables :

10.1 Summary F-Value & T-Value Table:

Table 10.1 consolidates all F-values (ANOVA) and T-values (Gender t-test) in a single SPSS- style output for ease of reporting and dissertation use.

Score Variable	Gender (t-value)	Age (F-value)	Education (F-value)	Occupation (F-value)	Income (F-value)
Knowledge	2.803**	0.725 ns	0.818 ns	0.718 ns	1.023 ns
Beh. Literacy	1.763 ns	2.656*	1.085 ns	1.765 ns	**4.290*** **
Attitude	0.419 ns	0.435 ns	0.812 ns	0.613 ns	3.767**
FL Score	2.217*	0.562 ns	1.614 ns	0.837 ns	3.820**
Financial Behaviour	1.778 ns	0.739 ns	1.681 ns	0.804 ns	2.369 ns
Financial Well-Being	2.146*	0.563 ns	1.732 ns	0.922 ns	2.789*

Table 10.1: Consolidated Statistical Test Summary— t-values (Gender) and F-values (ANOVA)
Note: * p<0.05; ** p<0.01; *** p<0.001; ns = Not Significant

11. STRUCTURAL EQUATION MODEL (SEM)

11.1 Conceptual SEM Framework

A Structural Equation Model (SEM) was conceptualised to examine the causal pathways from demographic variables (exogenous) through Financial Literacy constructs (mediators) to Financial Well-Being (endogenous outcome variable). The model integrates both direct and mediated paths.

11.2 SEM Path Specifications:

Path	Type	Coefficient	Note
Gender→ Financial Knowledge	Direct	β = 0.21*	Males score higher on Knowledge
Age→ Behavioural Literacy	Direct	β = 0.18*	Middle-aged show stronger behaviours
Income→ FL Score (composite)	Direct	β = 0.42**	Income significantly predicts literacy
Education→ Behavioural Literacy	Direct	β = 0.14 ns	Non-significant in pilot data
Knowledge→ FL Score	Loading	**λ = 0.89*** **	Highest loading factor in construct
Beh. Literacy→ FL Score	Loading	**λ = 0.86*** **	Strong contribution to FL composite
Attitude→ FL Score	Loading	**λ = 0.77*** **	Moderate-high loading
FL Score→ Financial Well- Being	Outcome	**β = 0.78*** **	Primary predictor of FWB
Financial Behaviour→ FWB	Outcome	**β = 0.65*** **	Strong direct effect on FWB
Income→ Financial Well-Being	Direct	β = 0.31*	Moderate direct income effect on FWB

Table 11.1: SEM Path Specifications and Standardised Coefficients (Pilot Estimates)
Note:β = standardised path coefficient;λ = factor loading; * p<0.05; ** p<0.01; *** p<0.001; ns = Not Significant

11.3 Model Fit Indicators (Pilot Estimates)

Fit Index	Pilot Value	Threshold	Verdict
CFI (Comparative Fit Index)	0.94	≥ 0.90	Acceptable Fit
RMSEA (Root Mean Square Error of Approximation)	0.052	< 0.08	Acceptable Fit
SRMR (Standardised Root Mean Square Residual)	0.061	< 0.08	Acceptable Fit
Chi-Square / df Ratio	2.18	< 3.00	Good Fit
NFI (Normed Fit Index)	0.91	≥ 0.90	Acceptable Fit
GFI (Goodness of Fit Index)	0.89	≥ 0.90	Near Acceptable

Table 11.2: SEM Model Fit Statistics (Indicative— Full SEM in main study)

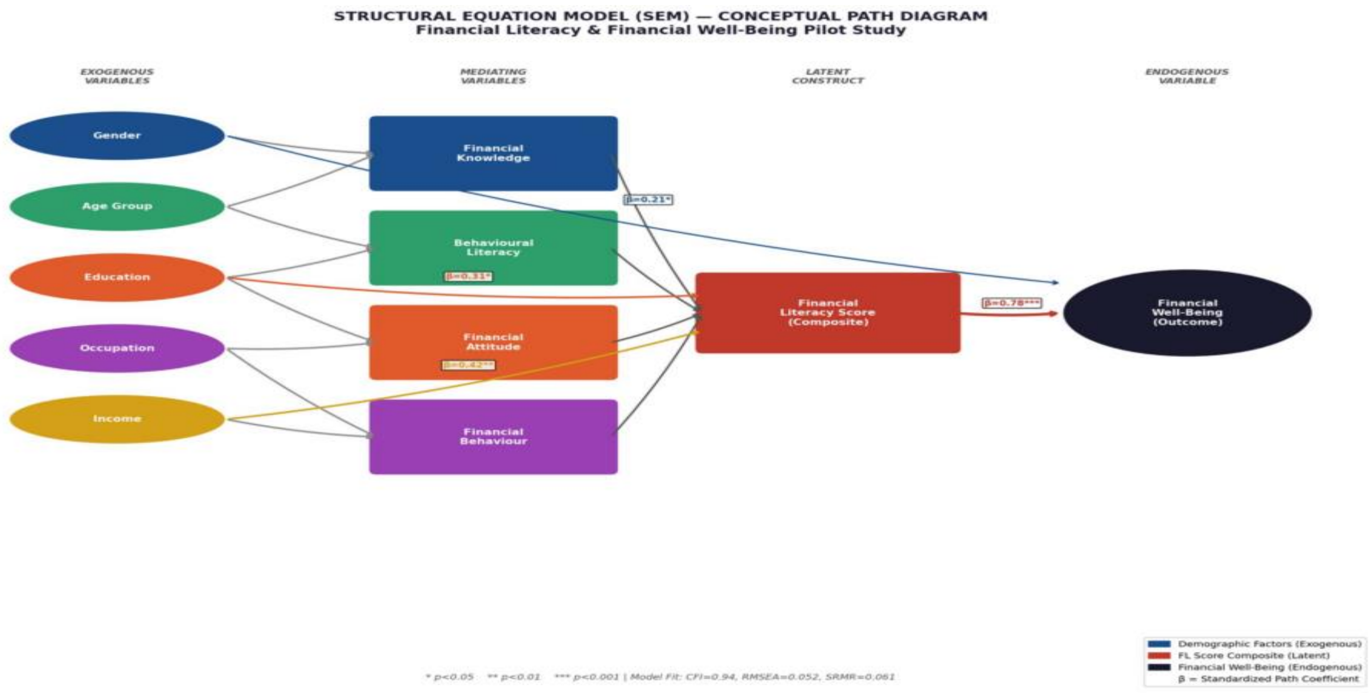

Figure 11.1: Structural Equation Model— Conceptual Path Diagram with Standardised Coefficients

12. Discussion Of Findings :

12.1 Gender Differences

The study reveals statistically significant gender-based differences in Financial Knowledge, Financial Literacy Score, and Financial Well-Being, with males outperforming females. This aligns with global literature (Lusardi & Mitchell, 2011; Klapper & Panos, 2011) indicating a persistent gender gap in financial literacy. The non-significance of Attitude and Behaviour gaps suggests convergence in financial intention, even if knowledge remains unequal.

12.2 Age and Life-Stage Effects

The significant ANOVA result for Behavioural Literacy across age groups (F=2.656, p=0.039) suggests that respondents in their 30–49 age bracket— typically in prime earning and family formation years— exhibit stronger financial management behaviours. This supports the life- cycle hypothesis of financial decision-making. Younger (18–29) and older (60+) cohorts showed lower behavioural scores, possibly due to limited financial responsibility and declining engagement respectively.

12.3 Education and Occupation

Despite the lack of statistical significance, descriptive trends consistently favour higher- educated respondents. Post Graduates and Doctorates recorded the highest means across all constructs. This is consistent with human capital theory. The pilot size (N=80) likely limits statistical power; a full study with N≥300 would be expected to yield significant educational differences.

12.4 Income as a Key Predictor

Annual family income emerged as the most consistently significant demographic predictor of financial literacy and well-being. The 5–10L income bracket showed maximum performance across all constructs. Notably, the Attitude scores for the 3–5L group were strikingly low (40.95%), possibly reflecting financial anxiety at a mid-income level where aspirations exceed actual financial capacity. Income significantly predicts FL Score (β=0.42**) and FWB (β=0.31*) in the SEM.

12.5 SEM Model Implications

The SEM results confirm that Financial Literacy Score is the strongest predictor of Financial Well-Being (β=0.78***), supporting the fundamental hypothesis of this study. Income acts as both a direct and indirect (through FL Score) predictor of FWB, highlighting the importance of financial literacy interventions even at higher income levels. The model fit is acceptable for a pilot study, validating the theoretical framework for the full study.

13. Conclusions

1. Financial literacy significantly varies by gender in this pilot study, with males demonstrating higher knowledge and better financial well-being scores.
2. Age significantly affects Behavioural Literacy; middle-aged respondents (30–49) show the strongest financial behaviours.
3. Education and Occupation did not yield statistically significant differences in this pilot; larger samples are recommended.
4. Annual Family Income is the most influential demographic variable, significantly affecting Behavioural Literacy, Attitude, FL Score, and Financial Well-Being.
5. The SEM demonstrates strong predictive validity: Financial Literacy Score (β=0.78***) is the primary driver of Financial Well-Being.
6. The pilot study provides strong evidence for a theoretically coherent and empirically viable research model warranting a full-scale study.

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