

Exploring the Influence of Financial Attitude on Financial Literacy in Gujarat: A Factor Analysis Approach

**Dr. Anilkumar R. Maisuriya¹, Dr. Ruchi Desai², Dr. Dhimen J. Jani³, Mr.
Mohammadadali K. Momin⁴**

¹Assistant Professor & Head, Department of Statistics, Agarwal Vidya Vihar English Medium College, Surat affiliated to Veer Narmad South Gujarat University, Surat.

²Assistant Professor & Head, Department of Accountancy, SASCMA English Medium Commerce Collge, Surat, affiliated to Veer Narmad South Gujarat University, Surat.

³Assistant Professor & Head, Department of Business Management, Dolat-Usha Institute of Applied Sciences and Dhiru-Sarla Institute of Management& Commerce, Valsad affiliated to Veer Narmad South Gujarat University, Surat.

⁴Researchj Scholar, Department of Commerce, Dolat-Usha Institute of Applied Sciences and Dhiru-Sarla Institute of Management& Commerce, Valsad affiliated to Veer Narmad South Gujarat University, Surat.

Abstract:

This study delves into the intricate relationship between financial attitudes and financial literacy in India, presenting a nuanced analysis of how individual perceptions and beliefs about financial management influence one's ability to navigate financial concepts and decisions effectively. Employing a rigorous methodological approach, including factor analysis, this research identifies three critical factors—locus of control, attitude to money, and self-efficacy—as significant determinants of financial literacy. Drawing on a comprehensive literature review and empirical data analysis, the study reveals that individuals with a higher internal locus of control and more excellent self-efficacy exhibit elevated levels of financial literacy. Conversely, a positive attitude towards money paradoxically correlates negatively with financial literacy scores, indicating a complex interplay between financial attitudes and behaviors. The findings underscore the importance

of targeted financial education transcending traditional knowledge dissemination, advocating for initiatives that foster personal responsibility and confidence in financial matters.

Additionally, the research highlights the necessity of addressing the attitude-behavior gap, suggesting innovative approaches to translate positive financial attitudes into actionable and beneficial financial practices. This study contributes to the broader discourse on financial literacy by offering insights into the factors influencing financial literacy in the Indian context and proposing strategic directions for enhancing financial literacy programs. By illuminating the pivotal role of financial attitudes in shaping financial literacy, the research provides a foundation for future initiatives to bolster financial wellbeing and security.

Keywords: Financial Literacy, Financial Attitude, Locus of Control, Self-Efficacy, Attitude to Money, Factor Analysis, Financial Education

1. INTRODUCTION

Today's financial markets are replete with various products and services, each unique yet similar. Understanding and choosing the right products and services necessitate a thorough knowledge of crucial financial concepts, familiarity with the options available, and the ability to apply this knowledge and information effectively. This underscores the importance of financial literacy. Being financially literate has numerous advantages, enabling individuals to set and achieve their financial objectives. It equips people to make well-informed decisions, utilize financial products and services wisely, and manage their finances efficiently. Conversely, a lack of financial literacy can lead to poor financial decisions, vulnerability to financial blunders, and the risk of falling victim to exploitative tactics by financial service providers.

On a household level, financial health and security responsibility increasingly falls on consumers as medical advancements extend life expectancies, highlighting the importance of solid retirement planning. This situation accentuates the pressing need to bolster financial literacy among consumers to ensure they can make savvy financial decisions and enhance their financial wellbeing. In response to this need, India has seen a surge in financial literacy initiatives spearheaded by various agencies, including the Ministry of Corporate Affairs, the Reserve Bank of India, and the Securities and Exchange Board of India. With significant resources directed toward financial education, assessing whether these efforts target the

correct improvement areas is crucial. Identifying key areas lacking financial literacy is a critical step in this direction. Despite the importance, research on conceptualizing and measuring financial literacy in India remains scarce. Given the contextual nature of financial literacy, examining whether factors affecting financial literacy identified in international studies hold relevance in India and identifying India-specific factors is vital. One such factor is financial attitude, whose impact on financial literacy is yet to be thoroughly explored. This paper aims to shed light on how financial attitudes influence financial literacy in India, based on a survey conducted in Gujarat, thereby contributing valuable insights to the body of knowledge on financial literacy.

2. REVIEW OF LITERATURE

Financial literacy has evolved over the years, with Noctor, Stoney, & Stradling (1992) initially defining it as the capacity to make informed judgments and decisions about using and managing money. This definition expanded over time, with the OECD (2012) offering a broader perspective that includes knowledge and understanding of financial concepts and risks and the skills, motivation, and confidence to apply such knowledge in various financial contexts. This comprehensive view aims to enhance individual and societal financial wellbeing and foster participation in economic life. Research on financial literacy has often equated it with financial knowledge, as seen in studies by Beal & Delpachitra (2003) and Lusardi & Mitchell (2006). However, fewer studies have investigated its relationship with financial attitudes. Early work by Schagen & Lines (1996) proposed that financial literacy encompasses understanding key money management concepts, financial institutions and services knowledge, and analytical and specific skills underpinned by attitudes conducive to effective financial management. The notion of financial attitude has been explored through various lenses, highlighting beliefs and values regarding personal finance management, the importance of saving, and attitudes towards financial planning and stability. Scholars like Chowa et al. (2012), Tustin (2010), and Falahati & Paim (2011) have contributed to understanding how financial attitudes shape behaviors, such as saving and planning for the future.

Ajzen (1991) posited that intentions to perform financially related behaviors are influenced by attitudes towards these behaviors, subjective norms, and perceived behavioral

control. This framework suggests that intentions are strong predictors of actions, but actual behavior depends on available resources and opportunities. Consumer behaviors, influenced by their beliefs and attitudes toward money, can lead to unsuitable financial choices or inadequate planning. The phenomenon of ‘overchoice,’ as discussed by Iyengar & Lepper (2000), along with psychological biases and overestimation of financial capabilities, underscores the impact of attitudes and beliefs on financial decision-making. Chen and Volpe (1998) were pioneers in linking financial literacy to financial attitudes, finding that less financially knowledgeable individuals held more negative views on finances and made poorer financial decisions. This highlights the correlation between financial knowledge and positive financial behaviors. Studies, such as those conducted by ANZ (2015) and the Money Advice Service (2018), have emphasized the behavioral components of financial literacy, including the critical role of financial attitudes. These findings advocate for financial literacy programs to address financial attitudes alongside imparting knowledge and numeracy skills.

Further, a study by the National Institute of Securities Market (NISM) 2014 revealed a nuanced picture of financial literacy in India, showing disparities in financial literacy levels across gender, education, and income. Interestingly, while financial behavior and knowledge scores increased with higher education and income levels, financial attitudes did not show the same trend. Research by Agarwalla et al. (2013) pointed to a significant correlation between financial knowledge and behavior but not between knowledge and attitude, suggesting a complex interplay between these components.

3. METHODOLOGY

A comprehensive research design was implemented, grounded in a thorough literature review on financial literacy and attitude. This review informed the development of a customized questionnaire, subsequently refined through pilot testing and focus group discussions—the questionnaire aimed to gather data on respondents’ financial attitudes and literacy levels. The questionnaire was divided into two main sections: Financial Attitude and Financial Literacy. The Financial Attitude section comprised 20 statements derived from various sources, including Chen & Volpe (1998) and OECD/INFE (2011). The Financial Literacy section included 52 statements and questions focusing on financial behavior, knowledge of financial products, and overall financial awareness, drawing from a broad

spectrum of previous studies. The questions were carefully structured to align with best practices in survey design, notably following the OECD's Toolkit for Measuring Financial Literacy.

The study targeted residents of Gujarat who are above 18 years of age and possess a bank account, considering them the population for this study. The sample size was determined using Cochran's formula, resulting in a target of 1000 respondents to align with similar studies. Data were collected through face-to-face interviews utilizing the structured questionnaire, yielding 1025 responses. After excluding 25 incomplete submissions, 1000 responses were deemed suitable for analysis. The data collection method was face-to-face interviews, facilitating direct engagement with respondents and ensuring a higher questionnaire completion rate. Following the collection phase, the data were analyzed with a focus on demographic and socio-economic characteristics of the respondents. The reliability of the questionnaire was assessed using Cronbach's Alpha Coefficient to measure the internal consistency of the questions within each scale. The values obtained exceeded the threshold of 0.6, indicating an acceptable level of consistency for exploratory research. Additionally, the validity of the questionnaire was verified through critical reviews by research experts, financial service providers, investors, and scholars. This process ensured that the questionnaire's content was directly relevant to the research objectives and grounded in the literature review.

4. RESULT OF THE STUDY

Descriptive Statistics

Variable	Categories	Frequency	Percentage
Gender	Male	645	64.5 %
	Female	355	35.5 %
Employment Status	Private Service	372	37.2 %
	Govt. Service	50	5.0 %
	Business	448	44.8 %
	Self Employed	20	2.0 %
	Housewife	48	4.8 %
	Retired	62	6.2 %
Age Group	18-25	138	13.8 %
	26-35	205	20.5 %
	36-45	261	26.1 %
	46-55	86	8.6 %

	56-65	264	26.4 %
	66 & above	46	4.6 %
Annual Income	< Rs. 2.5 Lakh	243	24.3 %
	Rs. 2.5 Lakh - Rs. 5 Lakh	259	25.9 %
	Rs. 5 Lakh - Rs. 10 Lakh	263	26.3 %
	Rs. 10 Lakh & above	235	23.5 %
Educational Qualifications	Illiterate	43	4.3 %
	High School/ Diploma	468	46.8 %
	Graduate	429	42.9 %
	Post Graduate	53	5.3 %
	Doctorate/ PhD	07	0.7 %
Marital Status	Married	844	84.4 %
	Unmarried	156	15.6 %

The exploratory factor analysis conducted in this study aimed to discern if the variables related to financial attitude could be consolidated into composite variables, revealing the underlying structure among these variables. With a sample size well above the recommended threshold for factor analysis, the financial attitude (FA) items underwent a rigorous assessment for factorability. Preliminary tests, including the inspection of the correlation matrix and the Bartlett test of sphericity, along with the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, confirmed the suitability of factor analysis for this dataset. The KMO measure was notably high at 0.736, indicating a solid interrelationship among the variables and supporting the adequacy of the sample for factor analysis.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.736
Bartlett's Test of Sphericity	Approx. Chi-Square	2056.068
	df	66
	Sig.	.000

Factor Extraction and Analysis:

The methodological approach encompassed principal component analysis (PCA) and joint factor analysis to determine the most suitable factors. This dual-method approach, aligned with recommendations from Pett, Lackey, & Sullivan (2003) and Hair et al. (2015), ensured a comprehensive data exploration. Through rigorous examination and

criteria adherence, including the Kaiser criterion and varimax rotation, the analysis distilled the financial attitude variables into three distinct factors:

- Locus of Control (LC): Emphasizing personal responsibility in financial futures, with factor loadings ranging from 0.777 to 0.621 across four items.
- Attitude to Money (ATM): Reflecting one's orientation towards money management, five negatively phrased items show factor loadings between 0.773 and 0.614.
- Self-efficacy (SE): Indicating confidence in financial decision-making, supported by three statements with factor loadings from 0.813 to 0.665.

Cronbach's Alpha Score of Factors

Factor	No. of Items	Cronbach's alpha
Locus of Control	4	0.664
Attitude to Money	5	0.689
Self-Efficacy	3	0.660

The internal consistency of these factors, as measured by Cronbach's Alpha, indicated acceptable levels of reliability for exploratory research.

Impact on Financial Literacy:

The study's regression analysis sought to evaluate the influence of these three factors on financial literacy scores. The analysis revealed significant correlations, with locus of control and self-efficacy positively associated with financial literacy levels. In contrast, attitude to money demonstrated a negative relationship. This intricate relationship underscores the multifaceted impact of financial attitudes on literacy.

Correlations between FL Score, LOC, ATM, and SE

		FL score	LOC	ATM	SE
FL score	Pearson Correlation	1	.479**	-.274**	.375**
	Sig. (2-tailed)		.000	.000	.000
	N	1000	1000	1000	1000
LOC	Pearson Correlation	.479**	1	.138**	.277**
	Sig. (2-tailed)	.000		.000	.000
	N	1000	1000	1000	1000

ATM	Pearson Correlation	-.274**	.138**	1	-.042
	Sig. (2-tailed)	.000	.000		.181
	N	1000	1000	1000	1000
SE	Pearson Correlation	.375**	.277**	-.042	1
	Sig. (2-tailed)	.000	.000	.181	
	N	1000	1000	1000	1000

** . Correlation is significant at the 0.01 level (2-tailed).

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.631 ^a	.398	.396	11.13700

a. Predictors: (Constant), SE, ATM, LOC
b. Dependent Variable: FL_score

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	81732.583	3	27244.194	219.653	.000 ^b
	Residual	123536.531	996	124.033		
	Total	205269.114	999			

a. Dependent Variable: FL_score
b. Predictors: (Constant), SE, ATM, LOC

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Robust Std. Error	Beta		
1	(Constant)	10.343	3.039		3.403	.001
	LOC	11.322	.810	.460	13.982	.000
	ATM	-5.458	.458	-.328	11.902	.000
	SE	4.232	.464	.234	6.491	.000

The regression model, robustly constructed to accommodate data idiosyncrasies such as heteroskedasticity, elucidated the predictive capacity of the three factors on financial literacy.

Notably, the model accounted for 39.8% of the variance in financial literacy scores among respondents, highlighting the substantial role of financial attitudes in shaping financial literacy. The regression equation, crystallizing the quantitative relationship among the variables, signified a pivotal step in understanding the dynamics at play.

Statistical analyses, including t-tests and ANOVA, confirmed the significance of the model and its components, underscoring the robustness of the findings. The positive influence of locus of control and self-efficacy on financial literacy, juxtaposed with the negative impact of attitude to money, provides a nuanced understanding of how individual perceptions and beliefs about money management contribute to financial knowledge and decision-making capabilities.

This study's results, anchored in rigorous analytical methodologies and statistical validation, offer compelling insights into the interplay between financial attitudes and literacy. By delineating the specific factors that influence financial literacy, this research contributes to the academic discourse. It provides practical implications for educational strategies to enhance financial literacy.

5. DISCUSSION OF THE STUDY

The exploration into the determinants of financial literacy through this study unveils the significant roles played by "Locus of Control," "Attitude to Money," and "Self-Efficacy." The robust linear regression analysis underscored these factors as pivotal independent variables influencing the dependent variable's financial literacy score, with the model demonstrating remarkable statistical significance at a 99% confidence level. The coefficient of determination, R^2 , standing at 0.398, highlights that nearly 40% of the variance in financial literacy can be attributed to these factors. This realization prompts a deeper understanding of how individual beliefs and attitudes toward financial management impact their ability to navigate financial concepts and decisions effectively.

The positive correlation between the locus of control and financial literacy emphasizes the value of individual agency in financial decision-making. It suggests that individuals who perceive themselves as captains of their financial ship are more inclined to seek knowledge

and prepare for future financial uncertainties, inherently boosting their financial literacy. Conversely, the study's findings regarding attitude to money unveil a paradoxical scenario where positive attitudes towards financial management do not necessarily translate into higher financial literacy levels. This discrepancy suggests a gap between attitude and behavior, indicating that while individuals may recognize the importance of prudent financial practices, translating these attitudes into actionable knowledge and behaviors remains a challenge.

Moreover, self-efficacy's positive association with financial literacy illuminates the confidence factor in financial decision-making. Individuals confident in their financial stability and decisions exhibit higher financial literacy levels, pointing towards the necessity of building financial confidence among the populace.

Given these insights, several recommendations emerge to enhance financial literacy efforts. Firstly, financial education should aim to empower individuals with the knowledge that they are the architects of their financial futures, fostering a proactive approach to financial management. Additionally, bridging the attitude-behavior gap necessitates innovative educational strategies that highlight the repercussions of poor financial decisions, leverage emotional engagement, and underscore the immediate benefits of positive financial behavior. Furthermore, embedding financial education within family discussions can sow the seeds of financial literacy early, setting a solid foundation for future financial decision-making. Lastly, capitalizing on teachable moments through targeted financial education can significantly enhance the effectiveness of financial literacy programs, mainly when individuals are most receptive to learning.

This study's findings, therefore, not only shed light on the critical factors influencing financial literacy but also offer a blueprint for designing more impactful financial education initiatives. These recommendations aim to foster a more financially literate society equipped to navigate the complexities of today's financial landscape by addressing the nuanced interplay between individual attitudes, beliefs, and confidence in financial matters.

6. CONCLUSION

The culmination of this research journey, marked by a comprehensive literature review and meticulous analysis, has illuminated the multifaceted nature of financial literacy and the pivotal role financial attitudes play in shaping it. Through the lens of established studies and frameworks, such as those provided by OECD/INFE (2011) and ANZ (2015), this study embarked on a quest to decode the influence of financial attitude on financial literacy. Embracing financial attitude as a dynamic variable that impacts financial literacy, the investigation employed factor analysis to unearth the intricate factor structure of financial attitude, identifying three critical factors: locus of control, attitude to money, and self-efficacy.

The analysis revealed that individuals exhibiting a higher internal locus of control and greater self-efficacy perceive themselves as the architects of their financial destinies and demonstrate higher levels of financial literacy. This finding underscores the necessity for financial education initiatives to impart knowledge and foster a sense of personal accountability and confidence in financial matters. On the other hand, the attitude toward money showcased a negative correlation with financial literacy scores, suggesting a dissonance between positive financial attitudes and their translation into beneficial financial behaviors. This discrepancy points to the complexity of changing entrenched behaviors. It highlights the need for targeted efforts to transform knowledge and attitudes into tangible financial actions.

The insights gleaned from this study enrich our understanding of the determinants of financial literacy in India, shedding light on the critical influencers that can shape effective financial education and intervention initiatives. This research provides a valuable framework for developing targeted strategies to enhance individuals' financial wellbeing by pinpointing the key factors influencing financial literacy. As we look towards the future, the findings of this study serve as a beacon for educators, policymakers, and financial institutions, guiding them in designing and implementing financial literacy programs that address the nuanced needs of the populace. In doing so, we can aspire to a future where individuals are not only financially literate but also empowered to make informed financial decisions, leading to greater financial security and prosperity.

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