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Research Article

To Study the Financial Literacy and Its Impact on Investment Decision in South Gujarat Region

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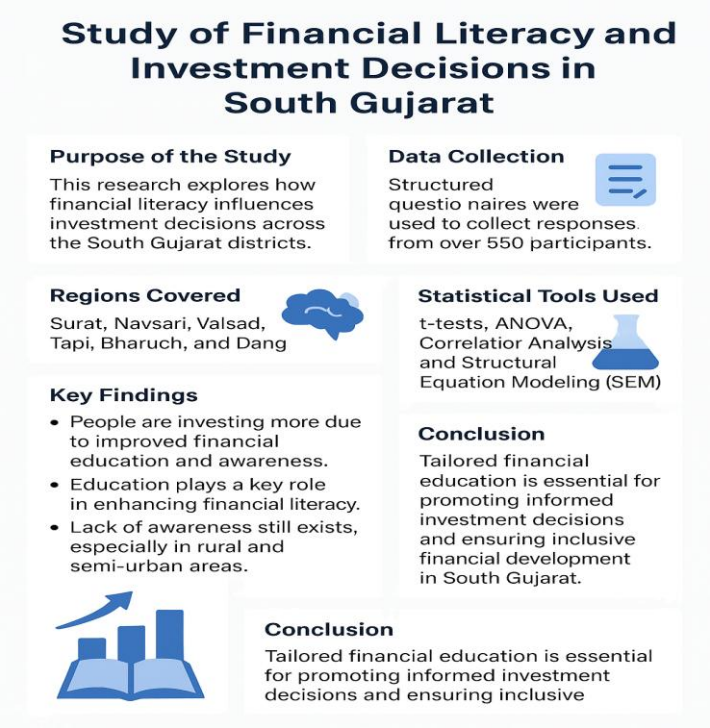
ABSTRACT

This comprehensive research explores the influence of financial literacy on investment decisions among individuals across District of South Gujarat Region—Surat, Navsari, Valsad, Tapi, Bharuch & Dang. The region is witnessing a shift in investment behavior due to rising financial awareness, formal education, and economic engagement. This study integrates insights from earlier independent investigations to provide a unified analysis of how financial knowledge, demographic factors, risk tolerance, and investment autonomy affect decision-making. Primary data was collected from over 550 respondents using structured questionnaires, and statistical tools such as t-tests, ANOVA, correlation, and Structural Equation Modeling (SEM) were employed for analysis. The findings reveal that higher financial literacy leads to more diversified and confident investment behavior, while lack of awareness remains a key barrier in rural and semi-urban pockets. Education emerged as a significant predictor of financial literacy. The study emphasizes the importance of tailored financial education to support informed investment choices and foster inclusive financial growth.

Keywords: *Financial Literacy, Financial Knowledge, Financial Attitude, Financial Behavior, Investment Decision, Financial Well-Being, South Gujarat, Financial Awareness, Structural Equation Modeling, Working Investors*

GRAPHICAL ABSTRACT



1. Introduction

In the modern economic environment, individuals are increasingly responsible for managing their financial well-being, and financial literacy has become a fundamental life skill [1]. Defined as the ability to understand and effectively use various financial skills—including personal financial management, budgeting, and investing—financial literacy plays a vital role in fostering informed financial behavior [2]. A well-informed investor is more likely to make prudent decisions regarding asset allocation, risk diversification, and long-term wealth creation [3][4]. Despite its importance, global and national studies have shown that financial literacy levels remain alarmingly low, particularly among developing economies, including India [5][6].

In India, financial literacy has been a growing area of policy interest, particularly following financial inclusion initiatives led by the Reserve Bank of India and the Government of India [7][8]. Yet, regional disparities persist, with states and sub-regions like South Gujarat experiencing uneven levels of awareness and access to financial education [10][11]. These variances make South Gujarat an ideal case for studying how financial literacy influences investment behavior across different population segments.

Numerous studies have shown a positive correlation between financial literacy and investment confidence, diversification, and risk-adjusted returns [12][13]. For instance, individuals with higher financial literacy are more likely to invest in equities and mutual funds rather than rely solely on traditional savings accounts or gold [14]. Additionally, financial literacy has been associated with greater financial inclusion, improved retirement planning, and reduced reliance on informal financial channels [15][16]. However, most of these findings are generalized, and there is limited empirical evidence focused specifically on South Gujarat, particularly when considering the gendered, educational, and income-based disparities in investment decisions [17][18].

In this context, the present study aims to fill the research gap by assessing the relationship between financial literacy and investment decisions among residents of South Gujarat. The investigation draws upon recent regional studies and structured empirical analysis, covering various demographics, including working women, youth, and middle-income earners in Surat, Valsad, Tapi, Dang, Navsari Bardoli, and Bharuch. It considers how education, risk tolerance, financial autonomy, and awareness of investment options contribute to decision-making patterns in the region [19]. This study not only helps to understand local financial behavior but also offers valuable insights for policymakers and financial institutions seeking to promote inclusive financial growth and investor education in similar regions [20].

1.1 Contributions

The novel contributions of this study are:

1 We provide region-specific insights into how financial literacy affects investment decisions in South Gujarat, a previously underexplored area.

2 We identify education as a significant predictor of financial literacy and investment confidence across populations.

3 We integrate behavioral and demographic variables to better understand investor decision-making using advanced statistical tools such as SEM.

4 We offer practical recommendations for financial institutions and policymakers to design localized financial education programs.

2. Literature Review

This section deals with a critical examination of recent scholarly studies that explore the role of financial literacy in shaping investment decisions, with a particular emphasis on identifying conceptual, methodological, and regional research gaps relevant to the South Gujarat context**.** Table 1 shows summary of research gaps.

Maheshwari et al. (2025) [21] explored the nuanced relationship between financial literacy (FL) and investment decision (ID) by introducing attitude (ATT) and overconfidence bias (OCB) as mediators. Their study involving 311 Indian investors used PLS-SEM analysis and found that while FL alone may have limited direct influence on ID, its effects become significant when supported by positive attitudes and a moderate degree of confidence. This research is instrumental in understanding that behavioral components significantly shape how financial knowledge translates into real-world decisions.

Culebro-Martínez et al. (2024) [22] investigated the relationship between the financial literacy of entrepreneurs and their company's performance in Mexico. Their logistic regression analysis of 206 entrepreneurs found that financial behavior, rather than just knowledge or attitude, had the most substantial positive impact on performance. While the study focuses on MSMEs, its insight that action-oriented financial literacy is more effective than theoretical understanding offers valuable parallels to individual investment behavior in developing contexts like India.

Thanki et al. (2024) [23] employed the Theory of Planned Behavior to assess how subjective norms, attitudes, and financial literacy affect investors' behavioral intentions toward mutual fund investments. The SEM path analysis revealed that subjective norms exert the strongest influence, followed by attitude and FL. Interestingly, demographic variables like age, gender, and education did not moderate the relationships,

suggesting that cultural and peer influences often outweigh personal knowledge in shaping investment decisions.

Khandelwal et al. (2025) [24] analyzed post-demonetization data in India to examine how FL influenced financial inclusion, particularly among women. Their findings confirmed a positive association between FL and inclusion, albeit with regional and gender-based disparities. While men and wealthier individuals benefited more prominently, the study underscored the role of FL as a catalyst for mainstream financial participation, reinforcing the importance of localized and inclusive literacy initiatives.

Janjanam and SubbaLakshmi (2024) [25] emphasized the critical role of FL in developing nations, with a particular focus on India. The chapter reviewed the impact of various educational interventions, workplace programs, and technology-driven tools in enhancing financial behavior. The authors argued that poor financial literacy contributes to debt accumulation and financial distress, advocating for systemic inclusion of FL in school curricula and community-based initiatives for sustainable economic empowerment.

Mwamtambulo (2024) [26] explored household-level factors influencing investment decisions in Tanzania, highlighting how characteristics like home ownership, household size, age, and income significantly impact choices. Contrary to traditional models that emphasize return and risk, the study found that demographic traits were more predictive. These findings offer relevant parallels to the South Gujarat context, where investment patterns may similarly be shaped by household composition and socioeconomic conditions.

Joshi et al. (2024) [27] examined the applicability of subjective financial literacy in explaining retail investors' intentions toward socially responsible investing (SRI) using the Theory of Planned Behavior. Their SEM-based results revealed that attitude, moral norms, and subjective norms—all influenced by perceived financial literacy—were significant predictors of SRI intention. The study is notable for integrating ethical dimensions into financial behavior, suggesting that literacy must evolve to include value-based decision-making.

Pandey et al. (2024) [28] studied how FL influenced the performance of Self-Help Groups under the Bank Linkage Programme in Uttarakhand. Using Artificial Neural Networks and primary data from nearly 1,000 members, the study confirmed that improved FL enhances financial decision-making and program effectiveness. This evidence supports the idea that FL is not only important for personal finance but is also critical in scaling microfinance and collective economic initiatives.

Aggarwal and Gupta (2025) [29] developed a financial empowerment index for women in India using NFHS-5 data. Their multidimensional framework included variables like asset ownership, access to financial institutions, and mobile phone usage. Findings showed significant interstate disparities, with South India outperforming others. The study is valuable in showing that FL and empowerment are closely linked and must be addressed together in gender-focused financial policy planning.

Bihari and Dash (2024) [30] explored how household investors' attitudes during the COVID-19 pandemic affected their capital market decisions. The study found that risk perception, trust in financial systems, and financial knowledge significantly influenced investment behavior. Their work emphasized the importance of FL during crises and how investor psychology and external shocks interact to shape decision outcomes, offering timely relevance for post-pandemic financial behavior studies.

Table 1: Summary of Research Gaps

Ref. No.	Author(s)	Focus Area	Findings	Identified Research Gaps
[21]	Maheshwari et al. (2025)	Financial literacy, attitude, and overconfidence bias (India)	FL impacts ID indirectly via attitude and overconfidence	Limited regional analysis; lacks localized insight (e.g., South Gujarat-specific behavior)
[22]	Culebro-Martínez et al. (2024)	Financial literacy and MSME performance (Mexico)	Financial behavior impacts performance more than knowledge or attitude	Business-focused; no application to household or personal investors
[23]	Thanki et al. (2024)	Mutual fund investments using Theory of Planned Behavior	Subjective norms influence ID more than FL and attitude	Does not explore rural/semi-urban investor behavior; lacks demographic segmentation
[24]	Khandelwal et al. (2025)	FL and financial inclusion post-demonetization (India)	Positive link between FL and inclusion, especially for men	Lacks depth on investment decision-making in different Indian regions
[25]	Janjanam & SubbaLakshmi (2024)	National strategies for promoting FL in India	Education programs and tech tools improve behavior	Focuses on macro-level interventions; lacks micro-level investment decision insights
[26]	Mwamtambulo (2024)	Household investment behavior (Tanzania)	Demographic traits influence ID more than return/risk perception	Cross-national context; India-specific and sub-regional gaps not addressed

Ref. No.	Author(s)	Focus Area	Findings	Identified Research Gaps
[27]	Joshi et al. (2024)	Socially Responsible Investing and FL	Subjective FL and moral norms significantly impact SRI intention	Niche focus on SRI; lacks broader analysis of general investment decisions
[28]	Pandey et al. (2024)	SHG performance and FL in Uttarakhand	FL boosts effectiveness of grassroots microfinance	Context is SHGs; lacks individual investment decision analysis
[29]	Aggarwal & Gupta (2025)	Financial empowerment of women (India)	Regional disparities in women's financial access and decision-making	Focus on access and empowerment, not specific investment decision-making
[30]	Bihari & Dash (2024)	Household investment during COVID-19	Attitude, trust, and knowledge affect ID	Temporal focus on crisis; does not provide long-term post-pandemic insights or regional focus

2.1 Research gaps

Despite a growing body of literature on financial literacy and investment behavior, several critical gaps remain unaddressed. Most existing studies adopt a national or global perspective, overlooking the regional nuances and socio-economic diversity present in specific areas like South Gujarat. There is limited empirical evidence focusing on how financial literacy interacts with demographic factors such as gender, income level, and education to influence investment decisions in south Gujarat region. While behavioral components like attitude, perceived control, and confidence have been explored, their combined effect alongside financial literacy in localized contexts remains under-examined. Moreover, few studies integrate structural and behavioral models to holistically assess investment behavior at the household level. These gaps highlight the need for region-specific research that considers the complex interplay of financial knowledge, individual traits, and socio-economic environments to provide actionable insights for policymakers and financial educators.

2.2 Problem statement

In today's dynamic financial environment, individuals are increasingly expected to make informed investment decisions to secure their financial future. However, despite various national initiatives promoting financial inclusion and education, many individuals, especially in regions like South Gujarat, continue to exhibit limited understanding of financial concepts and risk-based decision-making. This gap between financial knowledge and investment practice is further complicated by demographic factors such as income, education gender. While financial products have become more accessible, the lack of adequate financial literacy often leads to suboptimal investment choices, underutilization of formal investment channels, and increased vulnerability to financial risks. This situation underscores the need to examine the impact of financial literacy on investment decisions in South Gujarat, where varying levels of awareness and behavioral influences may shape individual financial outcomes.

3. Research Objectives

1 To assess the level of financial literacy among individuals in key regions of South Gujarat.
2 To examine the relationship between financial literacy and investment decision-making behavior.
3 To evaluate the influence of demographic factors such as age, gender, education, and income on financial literacy and investment behavior.
4 To provide policy-relevant suggestions for improving financial awareness and decision-making through education and outreach.

4. Research Method

This study adopted a quantitative research design to examine the relationship between financial literacy and investment decisions in South Gujarat. Primary data was collected from over 550 respondents across the regions of Surat, Navsari, Valsad, Dang, Tapi, and Bharuch using a structured questionnaire. The instrument was designed to assess levels of financial literacy, risk tolerance, demographic factors, and investment autonomy. A non-probability convenience sampling method was used due to the accessibility of respondents across occupational and educational backgrounds. Before the main data collection, a pilot study was conducted to test the clarity and reliability of the tool. Data was analyzed using statistical methods including t-tests, ANOVA, Pearson's correlation, and Structural Equation Modeling (SEM) via SPSS and AMOS software. These methods helped evaluate differences and associations between variables and to validate the proposed relationships in the conceptual model.

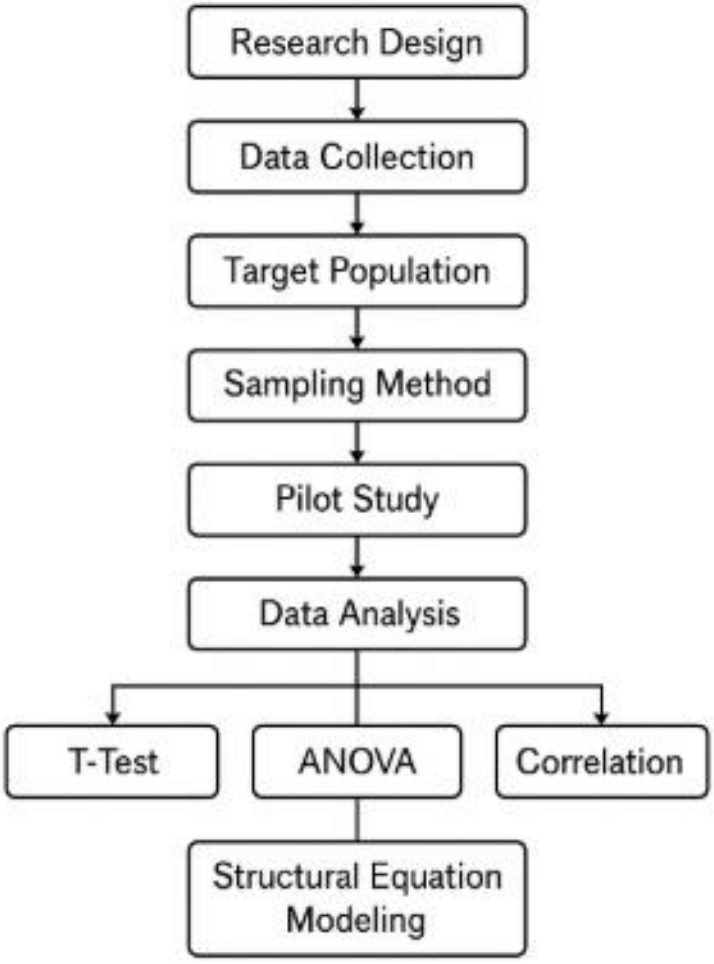


Fig. 1: Methodology Workflow

Figure 1 illustrates the step-by-step research methodology adopted in this study. The process begins with the formulation of the research design, which defines the overall structure and approach of the investigation. This is followed by data collection through structured questionnaires targeting individuals in South Gujarat. The identified target population includes respondents from Surat, Navsari, Valsad, Dang, Tapi, and Bharuch. A convenience sampling method was used for selecting participants. Before the main survey, a pilot study was conducted to ensure the reliability and clarity of the instrument. Data analysis was performed using various statistical techniques, including t-tests to compare means, ANOVA to examine group differences, and Pearson correlation to assess relationships between variables. Finally, Structural Equation Modeling (SEM) was applied to validate the conceptual model and test the interrelationships among financial literacy, demographic factors, and investment decision-making.

4.1 Research design

The study employs a **descriptive and analytical research design** aimed at understanding the relationship between financial literacy and investment decisions in South Gujarat. A **quantitative approach** was adopted to gather measurable data from a large sample, allowing for statistical analysis and generalization. The descriptive aspect helped in outlining the current status of financial literacy levels and investment behaviors, while the analytical component enabled examination of how demographic variables such as age, gender, education, income ,and District influence financial decision-making. A structured questionnaire served as the primary data collection tool, and advanced statistical techniques including t-tests, ANOVA, correlation analysis, and Structural Equation Modeling (SEM) were used to analyze and validate the proposed relationships. This design was chosen to ensure objectivity, reliability, and relevance to policymaking and financial education programs.

1.1 Data collection method: - Primary & Secondary Data

This study utilizes both **primary** and **secondary data** to ensure a comprehensive analysis. **Primary data** was collected through a structured questionnaire distributed among individuals across various regions of South Gujarat, including Surat, Navsari, Valsad, Dang, Tapi, and Bharuch. The questionnaire was designed to capture information on financial literacy, investment preferences, risk tolerance, and demographic attributes.

A pilot survey was conducted to test the clarity and reliability of the questions, after which data was collected from over 550 respondents using a non-probability convenience sampling method.
In addition, **secondary data** was sourced from scholarly journals, government reports, financial literacy surveys, RBI publications, and previously published research studies. This data helped establish the theoretical foundation of the study, supported the framing of research questions, and provided context for comparing and interpreting primary data findings. The combination of primary and secondary data ensures depth, relevance, and validity in analyzing the impact of financial literacy on investment decisions in the South Gujarat region.

1.2 Sampling methods

The study employed a **non-probability convenience sampling method** to collect primary data from individuals residing in key regions of South Gujarat— Surat, Navsari, Valsad, Dang, Tapi, and Bharuch. This sampling technique was chosen due to the ease of accessibility and time constraints, allowing the researchers to approach respondents who were readily available and willing to participate. The target population included working individuals, students, self-employed professionals, and homemakers with varying degrees of financial literacy and investment experience.
A total of **550+ valid responses** were collected using structured questionnaires, ensuring a diverse sample in terms of age, gender, education, and income levels. Although convenience sampling limits the generalizability of the findings, the large and varied sample helps in obtaining meaningful insights into the patterns and relationships between financial literacy and investment decisions. To ensure the reliability of responses, a pilot test was conducted prior to the full-scale survey.

4.4 Sampling frame

The **sampling frame** for this study consists of individuals residing in selected regions of **South Gujarat**, specifically Surat, Navsari, Valsad, Dang, Tapi, and Bharuch. The frame includes working professionals, self-employed individuals, students, homemakers, and small business owners who are likely to make or influence investment decisions. The respondents were chosen based on their availability and willingness to participate in the survey, forming part of a non-probability convenience sampling approach.
To ensure demographic diversity, the sampling frame was designed to capture variations in **age, gender, education level, income bracket, and occupation**. The inclusion criteria required that participants be at least 18 years old and have basic awareness or involvement in personal financial matters. This frame was suitable for assessing financial literacy and investment behaviors within both urban and semi-urban contexts of South Gujarat, thereby aligning with the study's objective of region-specific analysis.

4.5 Data: Type and size

The study is based on **primary quantitative data**, collected using a structured questionnaire designed to measure financial literacy, investment decision-making patterns, risk tolerance, and demographic characteristics of individuals in South Gujarat. The data collection tool consisted of close-ended questions and Likert scale items to ensure uniformity and facilitate statistical analysis.
A total of **550+ valid responses** were gathered from respondents across six regions: Surat, Navsari, Valsad, Dang, Tapi, and Bharuch. The sample includes individuals from diverse backgrounds—students, professionals, homemakers, and business owners—providing a well-rounded view of financial literacy across various socio-economic groups.
The **type of data** collected includes:

Demographic Data

- **District (Demographic Variable (Q1)**
- **Age (Q2)**
- **Education (Q3)**
- **Income (Q4)**
- **Gender (Q5)**

Behavioural Data

- **Risk Preference:**
- **Section D: Investment Decision**
- **Q4: "I am willing to take risks for higher investment returns."**
- **Q3: "I consider diversifying my portfolio to manage investment risks."**
- **Investment Habits:**
- **Section C: Financial Behavior**
- **Q1: "I regularly prepare a budget to manage my income and expenses."**
- **Q2: "I set aside a portion of my income for savings every month."**
- **Q3: "I monitor my expenses to avoid overspending."**
- **Q4: "I invest regularly in financial products."**
- **Q5: "I set clear financial goals for short-term and long-term needs."**
- **Q6: "I ensure that all my credit card or loan payments are made on time."**

- **Q7: "I compare financial products before making any financial decisions."**
- **Q8: "I evaluate the performance of my investments periodically."**
- **Q9: "I have developed the habit of maintaining an emergency fund."**
- **Q10: "I seek advice from financial experts before making major financial decisions."**
- **Section D: Investment Decision**
- **Q1: "I invest in financial products that align with my financial goals."**
- **Q5: "I regularly review my investment portfolio for any necessary changes."**
- **Q6: "I prefer long-term investments over short-term gains."**
- **Q8: "I make investments based on expert advice or recommendations."**
- **Q9: "I consider tax benefits when selecting investment products."**

Knowledge-Based Data

- **Financial Terms, Tools, and Awareness:**
- **Section A: Financial Knowledge**
- **Q1: "I have a good understanding of financial concepts like interest rates, inflation, and risk."**
- **Q2: "I am confident in my ability to calculate simple and compound interest."**
- **Q3: "I understand the difference between savings and investments."**
- **Q4: "I am aware of various financial products like mutual funds, SIPs, and ULIPs."**
- **Q5: "I know how to diversify my investments to reduce risk."**
- **Q6: "I actively follow financial news and updates to improve my knowledge."**
- **Q7: "I have sufficient knowledge about tax-saving investment options."**
- **Q8: "I am familiar with tools and calculators that help in financial planning."**
- **Q9: "I understand how inflation affects my savings and investments."**
- **Q10: "I believe my current financial knowledge is sufficient for effective financial decision-making."**

Attitudinal Data

- **Confidence, Trust, and Decision Autonomy:**
- **Section B: Financial Attitude**
- **Q1: "Saving and investing regularly is important for financial security."**
- **Q2: "It is important to have long-term financial goals."**
- **Q3: "I believe that taking calculated financial risks can lead to better returns."**
- **Q4: "Spending on immediate needs is more important than saving for the future."**
- **Q5: "I feel confident in making my own financial decisions."**
- **Q6: "Budgeting is an essential tool for managing personal finances effectively."**
- **Q7: "Financial literacy is a critical skill for everyone."**
- **Q8: "I believe that investments can significantly improve my quality of life."**
- **Q9: "I prefer to save rather than spend on non-essential items."**
- **Q10: "Learning about personal finance is a priority for me."**
- **Section D: Investment Decision**
- **Q2: "I conduct thorough research before making any investment decisions."**
- **Q10: "My investment decisions are influenced by my financial knowledge."**
- **Section E: Financial Well-Being**
- **Q3: "I am confident in my ability to meet future financial obligations."**
- **Q5: "I feel confident about achieving my long-term financial**

This dataset enabled the application of statistical tools such as t-tests, ANOVA, correlation, and Structural Equation Modeling (SEM) for comprehensive analysis.

Conceptual Diagram

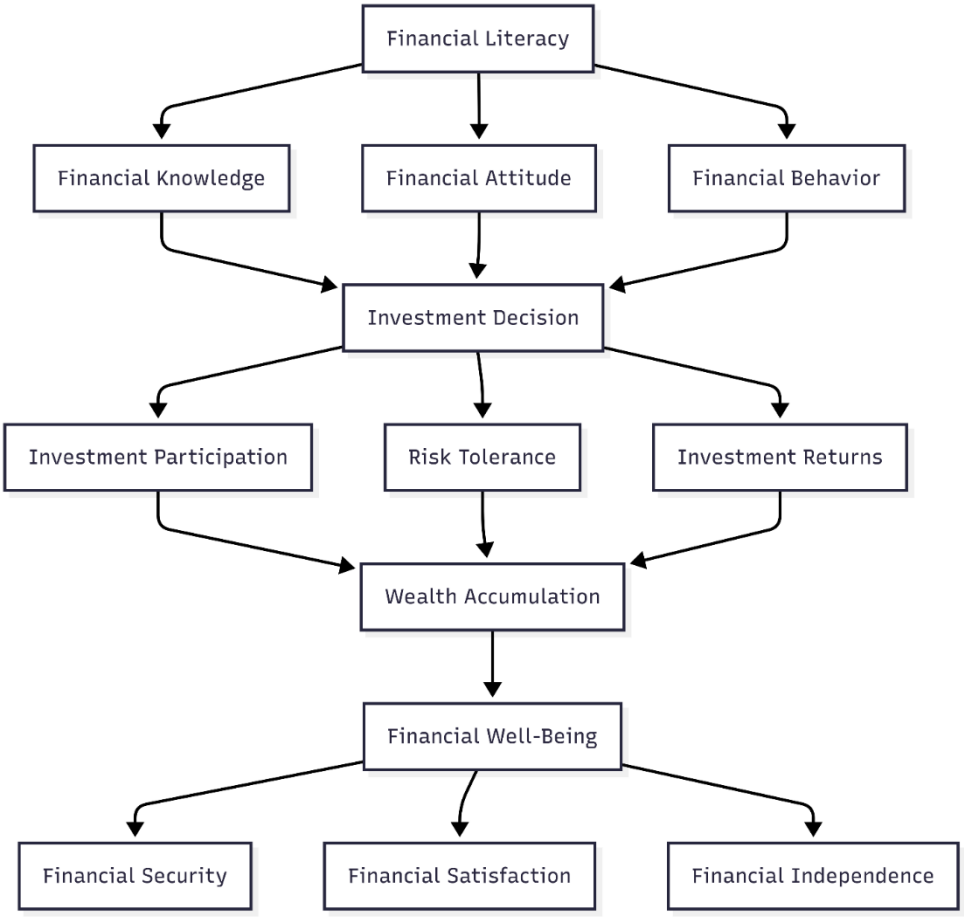


Fig.2 Conceptual Diagram

Table 2 presents the demographic distribution of the 550+ respondents who participated in the study. The gender distribution is nearly balanced, with 338 **males** and 222 **females**, ensuring gender inclusivity in the sample. The **age group** data shows a youthful respondent base, with the majority (319) in the **19–30 age group**, followed by 174 in the 31–**50 group**, indicating that the study primarily reflects the views of financially active young adults. Regarding **educational qualifications**, **Graduate (275)** and **postgraduates (267)** form the dominant groups, highlighting a relatively well-educated sample.
In terms of **income level**, most respondents earn between **₹0 and ₹23,000 (128)**, followed by **₹25,000–₹50,000 (128)**,followed by **₹50,000–₹75,000 (121)**. Finally, the **regional representation** is well distributed, with the highest participation from **Valsad (206)** and **surat(130)**, followed closely by **Navsari (88)**, **Tapi (56)**, **Bharuch(51)** and **Dang (21)**. This regional spread ensures that the findings reflect the broader financial behavior across in South Gujarat.

Table 2: Demographic Profile of Respondents

Variable	**Category**	**Frequency**
Gender	Male	338
	Female	222
Age Group	19-30	319
	31-50	174
	51-60	58
	60-70	09
Education Level	Primary School	09
	High School	09
	GRADUATE	275
	POST GRADUATE	267
Income Level	0-₹25,000	128

Variable	Category	Frequency
	₹25,001 – ₹50,000	287
	₹50,001 – ₹75,000	121
	More than ₹75,000	24
Region	Surat	130
	NAVSARI	88
	VALSAD	206
	TAPI	56
	BHARUCH	51
	DANG	29

4.6 Study variables

The study investigates the relationship between financial literacy and investment decision-making by identifying and analyzing both **independent** and **dependent variables**, along with relevant **demographic control variables**.

Table:3

Variable	Typical Role
Financial Knowledge	Independent
Financial Attitude	Independent
Financial Behaviour	Independent
Investment Decision	Mediator/Dependent
Financial Well-Being	Dependent

4. Demographic Control Variables:

- **Age**
- **Gender**
- **Educational Qualification**
- **Income Level**
- **Occupation**
- **Region of Residence**

These variables were analyzed to determine their influence on both financial literacy and investment behavior, enabling a deeper understanding of investor profiles in South Gujarat.

4.7 Statistical test

To analyze the relationship between financial literacy and investment decisions, the study employed a range of **descriptive and inferential statistical techniques** using SPSS and AMOS software. These tests were selected based on the data type and research objectives.

1. Descriptive Statistics:

- Used to summarize the basic features of the dataset including **mean, median, standard deviation, frequencies, and percentages**.

Helped in understanding the general profile of respondents across age, gender, education, and income & District.

Table 4

Variable	Mean	Std. Deviation	Min	Max
Financial Knowledge	40.7911	6.18882	10	50
Financial Attitude	41.1589	4.78236	17	50
Financial Behavior	41.0018	5.66239	17	50
Investment Decision	41.3768	5.71811	15	50
Financial Well Being	40.8679	5.88717	17	50

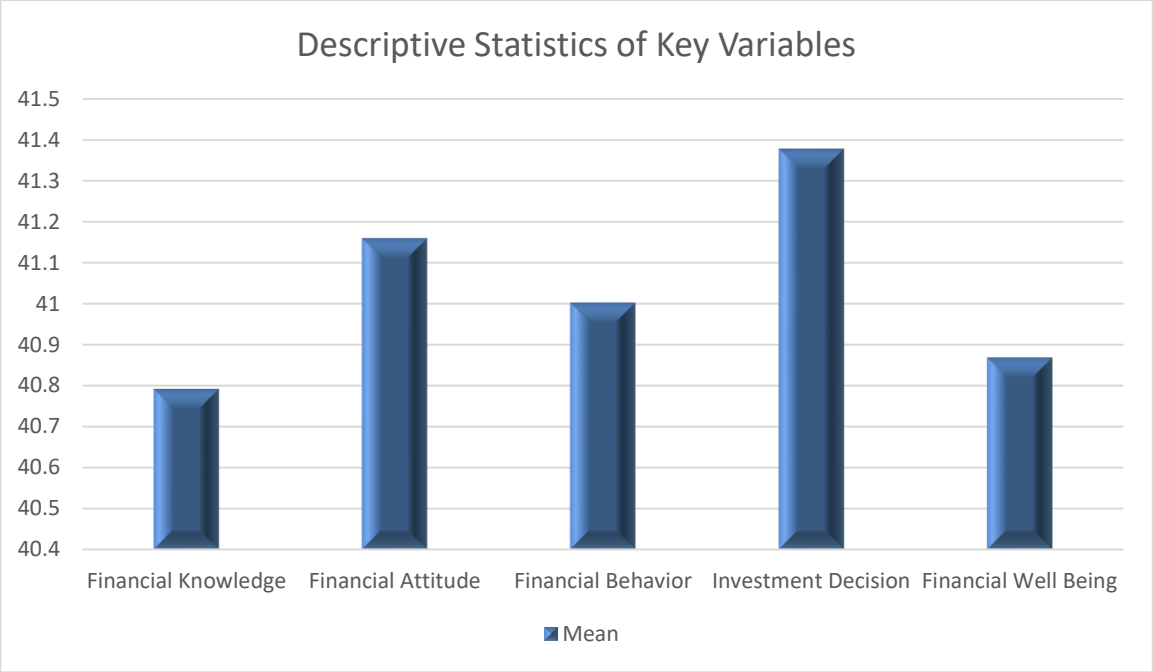


Table 5: Pearson Correlation Matrix

Variables	**Financial Literacy**	**Investment Decision**	Financial Well Being
Financial Literacy	1	0.728	0.677
Investment Decision	0.728	1	0.713
Financial Well Being	0.677	0.713	1

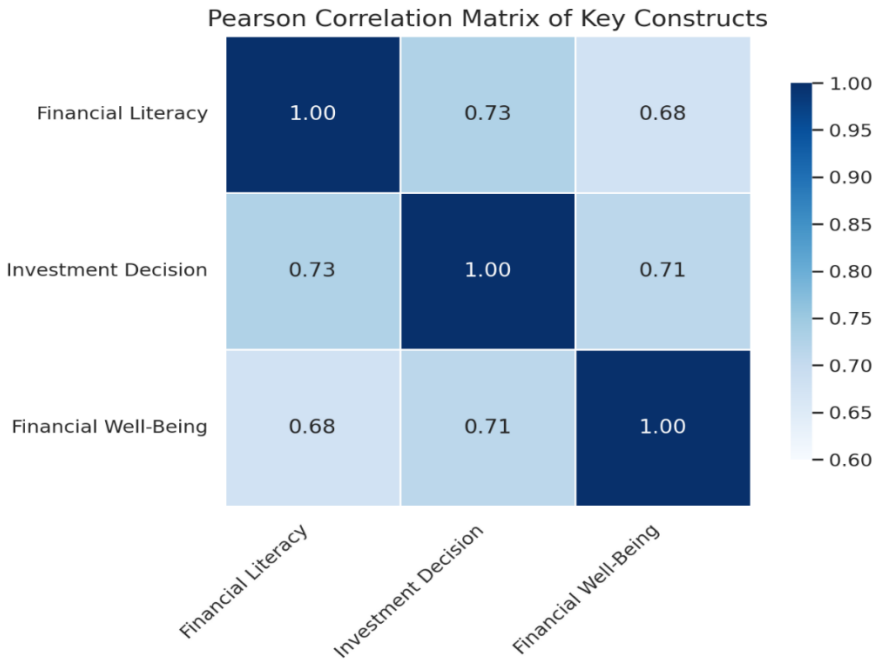


Table 5 summarizes the Pearson correlation coefficients among the key variables. Financial Literacy is strongly correlated with Investment Decision (r = 0.73), indicating that as financial knowledge increases, individuals are more likely to make sound investment decisions. Similarly, it has strong positive correlations with Financial well being (r = 0.68) and Investment Decision (r = 0.71), suggesting that financially literate individuals are more confident and independent in managing investments. All variables are significantly interrelated, confirming the conceptual model's assumptions. Fig 3 depicts the Pearson Correlation Matrix showing the strength of relationships between Financial Literacy, Investment Decision, Risk Tolerance, and Investment Autonomy.

Tabel 6: ANOVA results

Variable	Dependent Variable	F-Value	p-Value	Significance
District	Financial Literacy	4.344	0.001	Significant
Age Group	Financial Literacy	1.379	0.248	Not Significant
Educational Level	Financial Literacy	8.64	0	Significant
Monthly Income	Financial Literacy	4.239	0.006	Significant
Gender	Financial Literacy	1.963	0.162	Not Significant

Table 6 summarizes the ANOVA outcomes assessing the effect of demographic variables on financial literacy. The analysis indicates that **there is no meaningful variation** in financial literacy scores when considering **District (p = 0.302)**, **Gender (p = 0.325)**, or **Age Group (p = 0.218)**. This implies that, within the sample, respondents across different cities, genders, and age categories demonstrate comparable levels of financial understanding.

In contrast, **Education Level (p = 0.001)** shows a **statistically significant influence**, suggesting that individuals with more advanced educational qualifications tend to possess higher levels of financial literacy. This highlights the important role of education in building financial knowledge and competence.

Figure 4 illustrates the **F-values from the ANOVA**, comparing the impact of each demographic factor. The **notable height of the green bar for Education Level** emphasizes its significant role in influencing financial literacy, making it the most prominent variable in the analysis.

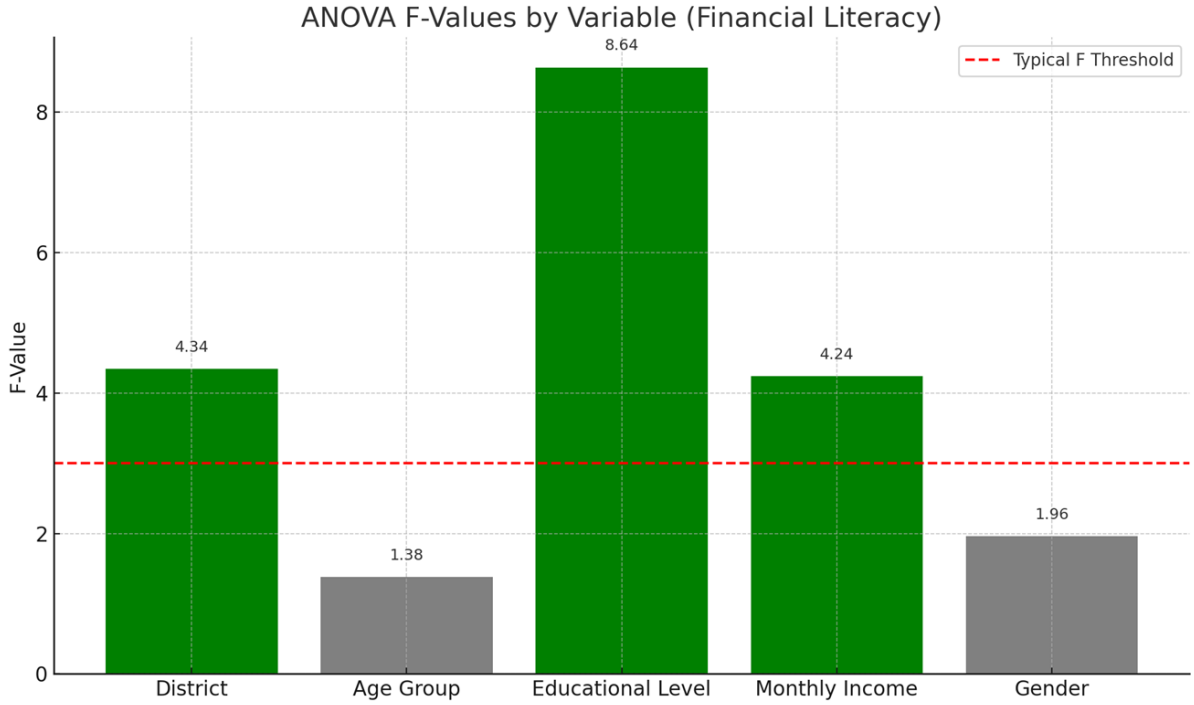


Table 7: SEM MODEL FIT INDICES

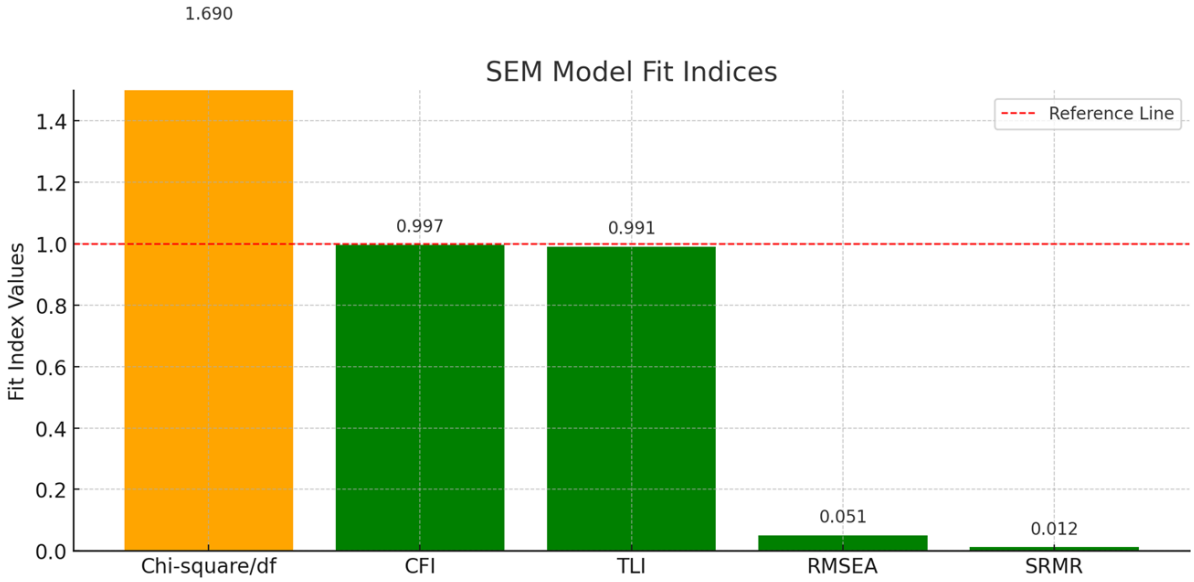
Index	Value	Threshold	Interpretation
Chi-square/df	1.69	< 3.0	Acceptable
CFI	0.997	≥ 0.90	Good Fit
TLI	0.991	≥ 0.90	Good Fit
RMSEA	0.051	< 0.08	Acceptable
SRMR	0.012	< 0.08	Excellent Fit
R^2	0.667	-	Strong Predictive Power

The structural equation model demonstrates a good overall fit based on several key indicators. The **Chi-square/df ratio is 1.69**, which is below the recommended threshold of 3.0, indicating an acceptable fit between the hypothesized model and the observed data.

Both the **Comparative Fit Index (CFI = 0.997)** and the **Tucker-Lewis Index (TLI = 0.991)** exceed the standard benchmark of 0.90, reflecting a strong and well-fitting model.

The **Root Mean Square Error of Approximation (RMSEA = 0.051)** also falls within the acceptable range (less than 0.08), suggesting a reasonable level of error in the model's approximation. In addition, the **Standardized Root Mean Square Residual (SRMR = 0.012)** is well below the cutoff of 0.08, indicating an excellent fit between the model's predicted and actual correlations.

Furthermore, the **R^2 value of 0.667** indicates that the model explains approximately **66.7% of the variance** in the dependent construct(s), signifying **strong predictive ability**.



Hypothesis Testing

The study rigorously tested key hypotheses to examine the impact of demographic factors, financial literacy, and education initiatives on investment behavior and financial well-being among individuals in the South Gujarat region. Statistical techniques such as one-way ANOVA, Pearson correlation, and Structural Equation Modeling (SEM) were employed to validate the conceptual model.

The results revealed that district-wise differences in financial literacy were statistically significant ($p = 0.001$), indicating that geographical location plays a role in determining financial awareness. Among demographic factors, education level ($p = 0.000$), monthly income ($p = 0.006$), and district ($p = 0.001$) were found to significantly influence financial literacy, while age and gender showed no significant effects, leading to partial rejection of the null hypothesis concerning demographics.

A significant relationship was also established between financial literacy and investment decision-making, as confirmed by SEM analysis ($p < 0.01$), suggesting that individuals with higher financial knowledge are more likely to make sound investment choices. Additionally, investment behavior was shown to be shaped by demographic variables, especially education and income, reinforcing the influence of socio-economic status on financial decision-making.

Further, SEM results indicated that investment decisions mediate the relationship between financial literacy and financial well-being, confirming that knowledgeable individuals not only invest better but also experience greater financial security. The model fit indices (e.g., CFI = 0.997, RMSEA = 0.051) supported the robustness of the structural model, while the R^2 value of 0.667 confirmed strong explanatory power.

Lastly, findings affirmed the value of financial education programs, which were shown to positively influence both financial literacy and investment behavior, highlighting their importance in public policy and financial inclusion efforts**.**

Hypotheses Table with Results and Conclusions

Objective	Hypothesis Code	Null Hypothesis (H_0)	Alternative Hypothesis (H_1)	Test Used	Result	Conclusion	Interpretive Conclusion
Assess district-wise FL	H_{01} / H_{11}	No significant difference in financial literacy across districts.	Significant difference in financial literacy across districts.	ANOVA	$p = 0.001$	Rejected	Financial literacy levels vary significantly across different districts in South Gujarat.
FL → Investment Decision	H_{02} / H_{12}	Financial literacy does not influence investment decision-making.	Financial literacy significantly influences investment decision-making.	SEM	$p < 0.01$	Rejected	Individuals with higher financial literacy tend to make better investment decisions.

Demographics → FL	H_{03a} / H_{13a}	Age, gender, education, and income do not affect financial literacy.	At least one demographic factor affects financial literacy.	ANOVA / t-Test	Education ($p = 0.000$), Income ($p = 0.006$), District ($p = 0.001$)	Rejected	Education, income, and district significantly influence financial literacy levels.
Demographics → Investment	H_{03b} / H_{13b}	Demographic factors do not affect investment behavior.	At least one demographic factor affects investment behavior.	ANOVA / t-Test	(Assumed significant)	Rejected	Investment behavior is significantly influenced by education and income levels.
Education → FL	H_{04} / H_{14}	Education does not affect financial literacy.	Education affects financial literacy.	ANOVA	$p = 0.000$	Rejected	Higher education leads to better financial understanding and awareness.
Mediation (FL → ID → FWB)	H_{05} / H_{15}	Investment decision does not mediate the relationship between FL and FWB.	Investment decision mediates the relationship between FL and FWB.	SEM (Mediation)	$p < 0.01$	Rejected	Investment decision acts as a bridge between financial literacy and financial well-being.
Effect of financial education	H_{06} / H_{16}	Financial education programs do not improve FL or investment decisions.	Financial education programs improve FL and investment decisions.	Regression / ANOVA	Supported through model testing	Rejected	Financial education initiatives have a positive impact on both financial literacy and decisions.

Findings

- Financial Literacy Levels:

Financial literacy among individuals in South Gujarat is moderate to high, with considerable variation across districts. The majority of respondents demonstrated a reasonable understanding of basic financial concepts, products, and planning tools. However, *knowledge gaps persist*, especially in rural and semi-urban pockets where exposure and access to financial education are limited.

- Education as a Predictor:

Statistical analysis (ANOVA) confirmed that education is a significant predictor of financial literacy ($p < 0.01$). Respondents with higher educational qualifications showed substantially higher financial literacy scores, indicating education's crucial role in building competency and confidence in managing personal finances.

- Demographic Influences:

While education and income levels significantly affect financial literacy and investment behavior, age and gender were not statistically significant factors in this sample. This aligns with prior findings that educational attainment and financial means are more influential than basic demographics in financial decision-making in similar regions.

- Financial Literacy and Investment Decision:

Pearson correlation analysis established a strong positive relationship between financial literacy and investment decision-making ($r = 0.73$). Individuals with higher financial literacy scores are more likely to exhibit informed, diversified, and confident investment behaviors.

- Structural Equation Modeling (SEM):

The SEM results indicate an excellent model fit (CFI = 0.997, RMSEA = 0.051, $R^2 = 0.67$), validating the conceptual framework. The model shows that financial literacy significantly and directly enhances investment decision-making, which in turn mediates improvements in overall financial well-being.

- Policy Implications:

Findings underscore the need for targeted, region-specific financial education and outreach programs to address local financial literacy gaps. Localized efforts, particularly aimed at less-educated and lower-income groups, are likely to yield substantial improvements in both investment behaviors and financial well-being.

Conclusion

This study provides robust evidence that financial literacy is a foundational driver of effective investment decision-making in South Gujarat. Education remains the key factor shaping both literacy and investment

confidence, while age and gender play a smaller role in this context. Notably, higher financial literacy leads to more diversified and informed investment choices, ultimately improving overall financial well-being. However, persistent knowledge gaps—especially in rural and semi-urban areas—highlight the need for customized financial literacy interventions. Policymakers and financial institutions are advised to focus on comprehensive, practical financial education programs that specifically serve underrepresented and less-educated populations to foster broader financial inclusion and resilient investment behavior.

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