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ENHANCING FINANCIAL LITERACY: OPTIMISING INVESTMENT BEHAVIOUR AND PATTERNS

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Abstract *Budgeting, investing, and personal financial management are financial skills that can be effectively understood and practiced with financial literacy. The study investigates the link between Financial Literacy (FL) and investment patterns, focusing on how the understanding of respondent's financial management affects their investment decisions. Conducted in Gujarat using primary data collected through a carefully designed questionnaire and convenience sampling, the research explores the impact of respondents' FL on their investment patterns and decision-making practices. The findings reveal a significant correlation between FL and investment behaviour. Higher FL is associated with more informed investment choices and more strategic investment patterns. This underscores the importance of financial education in shaping how people manage their investments. The results have important implications for both governmental and private finance institutions. They highlight the need for targeted FL programs and seminars aimed at improving individuals' understanding of financial management. By fostering greater financial literacy, these programs can help individuals make better investment decisions, enhance their financial stability, and contribute to a more robust financial system. The study's insights can guide the development of effective educational initiatives and support policies that promote better financial practices among the general population.*

Keywords: *Financial Literacy, Financial Knowledge, Financial Behaviour, Financial Attitude, Investment Behaviour, Investment Pattern*

INTRODUCTION

The prominence of education in finance is admitted as an essential element for individuals in the context of financial well-being. In simple words, the capability to understand financial and investment terminologies and to manage finances is Financial Literacy (FL) (Fernando, 2009). FL has the potential to create a positive wave in the financial system of the nation. It enables individuals to improve their credit management, wealth accumulation, develop a sensible habit of saving, managing their long-term needs, planning for retirement, managing finances during all life stages, and coping up with this dynamic financial environment. Understanding financial concepts is essential for enhancing the intensity of FL among the populace. It is advantageous if we start providing Financial Knowledge (FK) at home and in schools (Tennyson & Nguyen, 2001). The National Literacy Mission (NLM) sought to improve upon the National Adult Education Programme by using the demand for literacy among illiterates to generate mass participation in adult literacy programs (Mishra, 1998). A plethora of policies and programmes around the world have been initiated for getting the desired objective of making the people financially literate. There are three basic elements of FL, which are Financial Knowledge (FK), Financial Behaviour (FB), and Financial Attitude (FA) (Princy, 2019). The governments of different countries are making efforts to improve the FK of their citizens. With the intent of improving the FL levels, in 2003, a financial education project was initiated by The Organisation for Economic Co-operation and Development (OECD).

The FL level is assessed in terms of attitude, behaviour and knowledge of an individual regarding financial aspects. The National Centre for Financial Education (NCFE) stands as a beacon, heralding the significance of financial education at the national level, recognising the pivotal role played by the National Strategy for FL. Within this framework, FL emerges as the gateway to financial inclusion, a cornerstone in the edifice of economic advancement for any sovereign state. Amidst a world increasingly attuned to the urgent climate crisis, the promotion of financial inclusion must

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be tightly interwoven with sustainable practices. Elevating financial inclusion through holistic approaches to enhancing FL not only fosters fair access to resources but also empowers the populace to take correct investment choices that resonate with environmental objectives. The National Education Policy (NEP) 2020 in India includes provisions for enhancing FL among students. With FL, investors can analyse investment options more critically, assess their own risk tolerance, and create diversified portfolios that align with their goals.

This study examines FL in the Gujarat state and its impact on Investment Behaviour (IB) and investment patterns. Understanding FL levels in Gujarat provides insights into how individuals perceive and engage with financial management knowledge, which in turn affects their investment decisions. By analysing the link between FL and IB, this study aims to uncover patterns and tendencies among investors in Gujarat. Furthermore, it explores how these behaviours collectively shape the composition and performance of investment portfolios in the region. Such insights are crucial for developing strategies to enhance financial education and improve investment outcomes among Gujarat's population.

LITERATURE REVIEW

The necessity for financial education among individuals is highlighted by high bankruptcy rates, less saving habits, significant debt and other adverse outcomes linked to weak of personal finance and minimal FL levels (Fox et al., 2005). There are significant positive changes in credit card usage, bill payment habits, budgeting, and borrowing practices from predatory lenders after acquiring FK (Wiener, 2005). As consumer financial products grow more complex, the need for FL education has become crucial, leading policymakers to support it as a key complement to disclosure-based regulation (Willis, 2008). The essential of establishing financial planning standards and promoting FL to enable population to make Knowledgeable financial choices is highlighted by (Ramakrishnan, 2011). Investors with higher educational qualifications tend to favour short-term investments more than those with different qualifications (Akhtar et al., 2011). Early-life FL is a valid instrument in analysing the influence of FL on wealth and savings (Jappelli & Padula, 2013); family and school improve adult FL (Grohmann et al., 2015). Economic research on financial literacy highlights its role as human capital, its effect on economic decisions, and the effectiveness of policies to improve it (Lursardi & Mitchell, 2014). Individuals should proactively manage and plan their financial activities, as they will encounter various financial commitments at different stages of life (Ali et al., 2015); Early FK boosts resources and portfolio allocations later in life ((Jappelli & Padula, 2015). The distinct significance of financial self-efficacy, separate from FL factors, holds critical implications for crafting policies to enhance financial outcomes (Farrell et al., 2016). It is proven by (Prithiviraj & Gokul, 2016) that safety and education was the preferred aspect for Investment. People with better FL will actively resolve financial disputes caused by financial product and service purchases (Shen et al., 2016). FL can also affect by various factors as identified by (Prasad et al., 2017). There are studies that examined FL and investment decisions; low-literacy respondents make decisions based on perceptions, which are linked to financial product misperceptions and financial advice aversion (Anderson et al., 2017). These factors are market information, accounting information, broad indication, and technical insights. The study by (Anis & Mouna, 2017 & Abebe et al., 2018) focuses on the intensity of FL and the factors affecting people's decision regarding stock ownership and revealed that there is a firm impression on Investment verdict by financial literacy. There is a greater likelihood of a positive investment return for families with higher financial literacy, indicating that having more FL might lead to better financial outcomes (Chu et al., 2017). FL has a convinced impact while making holding money in saving account, mutual fund, post office A/c, and insurance policy (Gupta & Gupta, 2018). FL training programs and reminders affect small business. FL is the ultimate way for a well-developed financial Market (Lusardi, 2019). Business performance is positively affected by FL (Usama & Yusoff 2019); (Rasool & Ullah, 2020) have studied in their article that the connection between FL and behavioural bias of Investors is not significant. Male and female respondents have negative influence on risk scorn and herding on investment choice while influence of overconfidence has positive impact on Investment decision in case of male respondents (Modi et al., 2020). FL is a vital factor for financial inclusion where the rural people who have better knowledge, have more possibility to be included into the financial system if Institutions use better ways to create awareness for different products of financial services (Hasan et al., 2021). Financial knowledge is beneficial, but having confidence in one's FL is as important (Yeh et al., 2022); Trust and FL have positive impact on IB (Fisch & Seligman, 2022). Findings of (Irfan et al., 2023) informed policymakers, educators, and financial institutions in tailoring effective programs to enhance the FL of India's younger generation, vital for the nation's economic growth in a rapidly evolving world; The collective influence of Biases in behaviour and Stock market self-efficacy investing choices affects individual investors, especially in developing economies (Srinivasan & Karthikeyan, 2023); People who understand risk perception take fewer mental shortcuts and make reasonable decisions and do better in investments (Kumar et al., 2024). Recent studies show that environmental and ESG investors may be profiled. Notably, FL does not affect investor ESG sentiments or practical implications (Lippi & Poli, 2024).

Thus, the literature review underscores the critical substance of FL in enhancing individual financial outcomes, highlighting its impact on investment decisions, savings behaviour, and economic stability. Effective financial education programmes are essential for fostering knowledgeable financial choices, mitigating adverse Financial Behaviours (FBs), and supporting overall economic growth.

RESEARCH GAP

Extensive research on FL has been conducted worldwide, there remains a notable gap in the literature disturbing its specific implications for investment decisions. Existing studies predominantly focus on general FL levels, with limited exploration into how FL influences investment behaviours and patterns. Furthermore, there is a dearth of research specifically within the context of the Gujarat state, where unique socio-economic factors and cultural influences could significantly impact FBs. A critical gap also exists in studies that comprehensively examine the connection between FL, investment behaviour, and investment patterns, highlighting a need for localised investigations that can provide insights tailored to the region's specific dynamics and preferences.

Research Objectives

This research study aims to test the scale of FL and investor decisions among selected respondents in the Gujarat state, keeping in mind the following objectives:

- Evaluating the breadth of efforts dedicated to fostering FL in India.
- Gauging the degree of financial literacy among the selected participants in the state of Gujarat.
- Assessing the association between FL and investment behaviour,, and investment patterns of the selected respondents

RESEARCH METHODOLOGY

Research Design

The research study's design is both descriptive and exploratory, taking into account its objectives, scope, and coverage. The primary data are gathered from respondents who are residents of the state of Gujarat.

Sources of Information

Secondary Data: The researchers have used various kinds of secondary sources such as research journals; business magazines; business newspapers; research reports; published and unpublished Studies, as well as websites and search engines.

Primary Data: The researcher approached participants through various means, including online surveys, face-to-face interviews, and the distribution of questionnaires in public places. Consent was obtained from all participants to ensure ethical standards were maintained.

Research Instrument

Structured questionnaires to assess FL typically encompass three main variables from the OECD toolkit: (i) Financial behaviour involves questions about budgeting, saving habits, and debt management, aiming to understand how individuals handle their finances on a daily basis. (ii) Financial Knowledge covers basic concepts of finance, understanding of financial products, and knowledge about risk and return, measuring how well individuals grasp essential financial principles. (iii) Financial attitude includes queries on future financial planning, risk tolerance, and perceptions of financial control, providing insight into individuals' mindsets and beliefs regarding their financial decisions. This comprehensive approach ensures a well-rounded assessment of financial literacy, identifying strengths and areas for improvement. Investment behaviour encompasses various factors that influence individuals' decision-making processes. Key elements include the choice of investment, expected return, periodic review of portfolios, and earnings generated.

Sampling Method and Sample Size

The study will employ a convenience sampling method, targeting a sample size of 302 respondents from the Gujarat State.

Statistical Tools

Descriptive and inferential statistics are included for data analysis. Descriptive statistics summarise the data using measures like the mean, standard deviation, and frequency distributions, providing a general overview of the FB, knowledge, and attitudes of the participants. Multinominal logistic regression used to infer relationships between variables and test hypotheses, allowing for broader conclusions about the population based on the sample data.

Research Model

Fig. 1: Research Model

The research model has been developed with three variables: Financial literacy, IB and Investment pattern. FL measured is measured in terms of FB, FK, FA. IB measured in terms of attitude towards investment, return and risk, and review of the portfolio. Investment pattern will be in terms of Portfolio in Gold and Silver, Fixed Deposit (FD) in Banks, FD in the Post office, recurring deposits, Provident fund, Bonds, mutual funds, and the stock market, etc. The three categories of investment portfolios—Poor, Average, and Good—are classified based on diversification, risk, and potential returns. A Poor portfolio, with only one type of investment, such as Fixed Deposits (FDs), lacks diversification, offering low risk but limited returns. An Average portfolio includes one or two types of investments, often combining safe and debt instruments, which provide moderate returns and balanced risk. A Good portfolio, with a mix of safe investments, debt instruments, and equity, achieves a high level of diversification, helping in managing risk and optimising potential returns (Fig. 1).

Unveiling Financial Milestones: A Historical Journey Through Financial literacy

Under the guidance of major financial regulators, NISM has established NCFE in 2013. The centre has been established for implementation of National Strategy for Financial Education (NSFE). Key milestones include Inclusion Survey (NFLIS) in 2013, the NSFE release for 2013–2018, and the report on National Financial Literacy. In 2014, the National Financial Literacy Assessment Test (NFLAT), a significant free annual FL test for school students, was launched. In 2015, the Financial Education Training Program (FETP) was introduced for teachers, alongwith NCFE's official multilingual website. Collaboration with CBSE led to the development of FE Workbooks for classes VI to X in 2016. The FACT program targeting graduate and postgraduate students was launched in 2017. In 2018, NCFE became a Section 8 Not-for-Profit Company and established Interactive Kiosks and DSS. In 2019, it launched FEPA for adult financial awareness and the NFLIS (2019). In 2020, NCFE introduced the E-LMS e-learning course and released the NSFE (2020–2025). NCFE's Quarterly Newsletter 'SANCHAY' was initiated in 2020. In 2021, a Chatbot was introduced, alongside multilingual Financial Education Handbooks, including Braille editions and ones for MSMEs. By 2022, NCFE published the Financial Education Handbook for SHGs, developed 15 Graphic Novels for School Students, and initiated the NFLAT Portal with Proctoring, 'NCFE's Trainers' Portal', and an FL Dashboard on its website (National Cenrte for Financial Education, 2022-23).

Data Analysis and Interpretation

The Table 1 portrays demographic profile of respondents.

Gender: It depicts the gender-based distribution of respondents. Among the 302 respondents, 168 (55.6%) recognised as female, while 134 (44.4%) recognised as male.

Residence: Within the respondent pool, 52 (17.2%) reside in rural areas, while 250 (82.8%) reside in urban areas.

Marital Status: This section outlines the marital status of the respondents. 122 (40.4%) are married, and 180 (59.6%) are single.

Age: The table categorises respondents into age groups. The majority, constituting 86 (28.5%), fall between 18 to 20 years old. This distribution continues with 60 (19.9%) aged 21 to 25, 80 (26.5%) aged 26 to 30, 42 (13.9%) aged 31 to 40, and 34 (11.3%) aged above 40.

Education Level: This section illustrates the educational attainment of the respondents. The breakdown reveals 10 (3.3%) with education below secondary level, 48 (15.9%) with secondary education, 132 (43.7%) with have graduated, and 112 (37.1%) with have post-graduation qualifications.

Occupation: This section elaborates on the occupational status of the respondents. Among them, 18 (6.0%) are housewives, 104 (34.4%) are students, 146 (48.3%) are employed, 28 (9.3%) are self-employed, and 6 (2.0%) are retired.

Income: This section presents the income distribution of the respondents across various categories, ranging from Rs. 5000 or less to above Rs. 30,000. The highest proportion of respondents, constituting 118 (39.1%) of the total, falls under the category of above Rs. 30,000.

Table 1: Demographic Summary of the Respondents

Variables	Frequency	Percent	Education Level	Frequency	Percent
Gender			Below secondary	10	3.3
Female	168	55.6	Secondary	48	15.9
Male	134	44.4	Graduation	132	43.7
Total	302	100.0	Post Graduation	112	37.1
Residence			**Total**	302	100.0
Rural	52	17.2	**Occupation**		
Urban	250	82.8	Housewife	18	6.0
Total	302	100.0	Student	104	34.4
Marital Status			Job	146	48.3
Married	122	40.4	Self employed	28	9.3
Single	180	59.6	Retired	6	2.0
Total	302	100.0	**Total**	302	100.0
Age			**Income**		
18 to 20	86	28.5	≤Rs. 5000	14	4.6
21 to 25	60	19.9	Rs. 5000 to 10000	26	8.6
26 to 30	80	26.5	Rs. 10000 to 20000	82	27.2
31 to 40	42	13.9	Rs. 20000 to 30000	62	20.5
Above 40	34	11.3	Above 30000 Rs.	118	39.1
Total	302	100.0	**Total**	302	100.0

Source: Author's work.

Measurement of Financial Literacy and Financial Literacy in State of Gujarat

Table 2 shows the FL score in the State of Gujarat. A minimum FL score of 68.11% is a significant benchmark, indicating the essential level of acquaintance and understanding required to make educated and effective decisions related to finance (National Centre for Financial Education, 2022—23). The FL score is calculated based on the answers given to a set of 21 questions using different scale for answers. Questions cover three main areas: FB (7 questions), FK (7 Questions), and FA (7 questions). If participants answer all questions appropriately, their FL score reaches 104 (100%) accordingly. Table 2 shows the FL scores of 302 respondents, broken down by the number of respondents in each score range and the average FL percentage. The results indicate that most respondents have relatively high FL levels, with 80 respondents (26.49%) scoring 80, corresponding to an average literacy of 76.92%. Another 74 respondents (24.50%) achieved a score of 72, with an average literacy percentage of 69.23%. This suggests that over half of the participants exhibit a solid understanding of concepts of finance. Conversely, a smaller portion of respondents scored on the lower end. For instance, only 2 respondents (0.66%) scored 32, reflecting an average literacy rate of 30.77%. Similarly, 10 respondents (3.31%) scored 40, with a literacy average of 38.46%. These results highlight that while most participants have a relatively high level of FL, there remains a minority with lower scores, indicating potential areas for targeted FL initiatives.

Table 2: Financial Literacy Score

No. of Respondents	No. of Respondents (%)	Earned Score (FB+FK+FA) Out of 104	Average % of (FB+ FK+FA) = Financial Literacy (%) Out of 100
2	0.66	32	30.77
10	3.31	40	38.46
20	6.62	47	46.15
24	7.95	56	53.85
58	19.21	64	61.54
74	24.50	72	69.23
80	26.49	80	76.92
28	9.27	88	84.62
6	1.99	96	92.31
302	**100**		**Grand Total**

Source: Author's work.

The Table 3 presents the status of FL SCORE among respondents. Out of the total respondents, 114 are not financially literate, while 62.25 are financially literate. This indicates that 37.74% of the respondents lack financial literacy. Interestingly, the percentage of respondents who are financially literate stands at a notably high level.

Table 3: Status of Financial Literacy

Financial literate?	No	Yes
No. of Respondents	37.74	62.26
% of financial literacy	114	188

Source: Author's Work

HYPOTHESIS TESTING

With reference to research model given in Fig. 1 logistic regression model has been applied and summarised the following findings:

Table 4: Case Processing Summary

		N	Marginal Percentage
Investment Pattern (No_	Poor	230	76.2%
	Average	54	17.9%
	Good	18	6.0%
Investmentbehaviour1	Negative	104	34.4%
	Positive	198	65.6%
Valid		302	100.0%
Missing		0	
Total		302	
Subpopulation		16[a]	

The Summary delivers an overview of the dataset used in the analysis. Out of 302 valid cases, 230 (76.2%) respondents exhibit poor investment patterns, 54 (17.9%) show average investment patterns, and 18 (6.0%) demonstrate good investment patterns (Table 4). Regarding investment behaviour, 104 (34.4%) respondents display negative investment behaviour, while 198 (65.6%) show positive investment behaviour.

Table 5: Model Fitting Information

Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	126.339			
Final	93.262	33.077	4	0.000

The effectiveness of the logistic regression model is evaluated by the Model Fitting Information. The initial model, which includes only the intercept, has a -2 Log Likelihood value of 126.339. When the predictors are added, the -2 Log Likelihood decreases to 93.262. The Chi-Square value is 33.077 with 4 degrees of freedom and a significance level (p-value) of 0.000 as indicated by the Likelihood Ratio tests (Table 5). This result is statistically significant, suggesting that the model with predictors fits the data significantly better than the intercept-only model. The predictors collectively contribute to explaining the variance in investment behaviour.

Table 6: Pseudo R - Square

Cox and Snell	0.104
Nagelkerke	0.139
McFadden	0.080

The Cox and Snell R-Square is 0.104, the Nagelkerke R-Square is 0.139, and the McFadden R-Square is 0.080. These values are relatively low, indicating that the model describes a small portion of the variance in the dependent variable. However, it is important to note that these measures do not have the same interpretation as the R-Square in linear regression and can often be lower (Table 6).

Table 7: Likelihood Ratio Tests

Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept	93.262[a]	0.000	0	0
Financial Literacy	110.234	16.972	2	0.000
Investmentbhaviour1	105.361	12.099	2	0.002

The Likelihood Ratio Tests table examines the significance of each predictor in the model. The Chi-Square statistic for FL is 16.972 with 2 degrees of freedom and a significance level of 0.000, indicating that FL is a significant predictor of the model. Similarly, the Chi-Square statistic for IB is 12.099 with 2 degrees of freedom and a significance level of 0.002, indicating that IB is also a significant predictor (Table 7). The intercept's value verifies that the degrees of freedom are not increased by eliminating the influence, meaning that the reduced model and the final model are equal.

Table 8: Parameter Estimates

Investment Pattern (No)[a]		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Poor	Intercept	7.379	2.024	13.292	1	0.000			
	Financial literacy	-0.073	0.027	7.553	1	0.006	0.929	0.882	0.979
	[Investmentbehaviour1= Negative]	18.117	0.330	3008.119	1	0.000	73800226	38626759	141002598
	[Investmentbehaviour1= Positive]	0[b]			0				
Average	Intercept	2.894	2.175	1.769	1	0.183			
	Financial literacy	-0.029	0.029	1.062	1	0.303	0.971	0.918	1.027
	[Investmentbehaviour1= Negative]	18.142	0.000		1		75710839	75710839	75710839
	[Investmentbehaviour1= Positive]	0[b]			0				

a. The reference category is: Good. b. This parameter is set to zero because it is redundant.

For Poor Investment Pattern

Financial Literacy has a B value of -0.073 with a standard error of 0.027, a Wald statistic of 7.553, and a significance level of 0.006. The Exp(B) value is 0.929, with a 95% Confidence Interval ranging from 0.882 to 0.979, suggesting that higher FL is associated with a lower likelihood of having a poor investment pattern (Table 8). Regarding Investment Behaviour, those with negative behaviour have a B value of 18.117 with a standard error of 0.330, a Wald statistic of 3008.119, and a significance level of 0.000. The Exp(B) value is extremely large (73,800,226), indicating a very high likelihood of a poor investment pattern for those with negative IB compared to those with positive behaviour.

For Average Investment Pattern

Financial Literacy has a B value of -0.029 with a standard error of 0.029, a Wald statistic of 1.062, and a significance level of 0.303. The Exp(B) value is 0.971, with a 95% Confidence Interval ranging from 0.918 to 1.027, suggesting that FL does not significantly predict an average investment pattern. Regarding Investment Behaviour, those with negative behaviour have a B value of 18.142, indicating a very high likelihood of an average investment pattern for those with negative behaviour, but this value does not have a standard error or significance level reported.

Overall, the analysis reveals that FL significantly reduces the likelihood of a poor investment pattern but does not significantly influence an average investment pattern. Negative IB drastically increases the likelihood of both poor and average investment patterns compared to positive behaviour.

FINDING AND CONCLUSION

FL is a crucial pathway to financial inclusion, which, in turn, can significantly uplift the standard of living for individuals within a country. This study examined the level of FL in the State of Gujarat found that two-thirds of the respondents were financially literate. It is imperative that financially literate individuals also participate in the financial inclusion system and make informed decisions related about their investment portfolios.

The study highlights that FL positively impacts behaviour towards investment, which is a critical factor in effective financial management. Financially educated people are more likely to understand various investment options, assess risks, and diversify their investments accordingly. This informed consider not only enhances individual monetary security but also contributes to broader economic stability. Furthermore, the research indicates that improved investment behaviour, fostered by FL, has a noteworthy influence on investment patterns. Individuals with a higher degree of FL are more likely to engage in prudent investment practices, leading to better financial outcomes. These outcomes include higher returns on investments, reduced financial risks, and increased savings, all of which contribute to an improved standard of living.

Thus, it is suggested that government and private institutes launch special programs to increase the FK of those who are living in rural parts of India so that they can also participate in the financial system of India and can up flite standard of living. There is a need for different types of products for the purpose of investment as per the income and financial capabilities of each group of the society so the well-being of each section of the nation could be possible.

REFERENCES

Abebe, D., Tekle, A., & Mano, Y. (2018) Changing saving and investment behaviour: The impact of financial literacy training and reminders on micro-businesses. *Journal of African Economies, 27*(5), 587–611.

Akhtar, M. N., Rehman, K. U., & Hunjra, A. I. (2011). Determinants of short-term investment decision-making. *Actual Problems of Economics,* (125), 356–363.

Ali, A., Rahman, M. S. A., & Bakar, A. (2015). Financial satisfaction and the influence of financial literacy in Malaysia. *Social Indicators Research, 120*(1), 137–156. doi:https://doi.org/10.1007/s11205-014-0583-0

Anderson, A., Baker, F., & Robinson, D. T. (2017). Precautionary savings, retirement planning and misperceptions of financial literacy. *Journal of Financial Economics, 126*(2), 383–398. doi:https://doi.org/10.1016/j.jfineco.2017.07.008

Chu, Z., Wang, Z., Xiao, J. J., & Zhang, W. (2017). Financial literacy, portfolio choice and financial well-being. *Social Indicators Research, 132*(2), 799–820. doi:https://doi.org/10.1007/s11205-016-1309-2

Farrell, L., Fry, T. R. L., & Risse, L. (2016). The significance of financial self-efficacy in explaining women's personal finance behaviour. *Journal of Economic Psychology, 54,* 85–99. doi:https://doi.org/10.1016/j.joep.2015.07.001

Fernando, J. (2009, February 12). *Financial literacy: What it is, and why it is so important to teach teens.* Investopedia. Retrieved from https://www.investopedia.com/terms/f/financial-literacy.asp

Fisch, J. E., & Seligman, J. S. (2022). Trust, financial literacy, and financial market participation. *Journal of Pension Economics & Finance, 21*(4), 634–664. doi:https://doi.org/10.1017/s1474747221000226

Fox, J., Bartholomae, S., & Lee, J. (2005). Building the case for financial education. *The Journal of Consumer Affairs, 39*(1), 195–214. doi:https://doi.org/10.1111/j.1745-6606.2005.00009.x

Grohmann, A., Kouwenberg, R., & Menkhoff, L. (2015). Childhood roots of financial literacy. *Journal of Economic Psychology, 51,* 114–133. doi:https://doi.org/10.1016/j.joep.2015.09.002

Gupta, K., & Gupta, S. (2018). Financial literacy and its impact on investment decisions - A study of rural areas of Himachal Pradesh. *International Journal of Research in Management, Economics and Commerce, 8*(2), 1–10.

Hasan, M., & Hoque, T. (2021). How does financial literacy impact on inclusive finance? *Springer Open,* 1–23.

Irfan, I., Nasyalia, C., Muhyarsyah, M., Hani, S., & Sari, M. (2023). The impact of financial literacy and financial inclusion towards the saving behavior of the students. *Mix Journal Ilmiah Management, 13*(2), 439. doi:https://doi.org/10.22441/jurnal_mix.2023.v13i2.012

Jappelli, T., & Padula, M. (2013). Investment in financial literacy and saving decisions. *Journal of Banking & Finance, 37*(8), 2779–2792. doi:https://doi.org/10.1016/j.jbankfin.2013.03.019

Jappelli, T., & Padula, M. (2015). Investment in financial literacy, social security, and portfolio choice. *Journal* *of Pension Economics & Finance, 14*(4), 369–411. doi:https://doi.org/10.1017/s147474721400037

Kulkarni, M. S. (2015). A study of investment behaviour based on demographics. *Journal of Commerce and Accounting Research, 3*(4), 47–54.

Kumar, P., Islam, M. A., Pillai, R., & Tabash, M. I. (2024). Risk perception-perceived investor performance nexus: Evaluating the mediating effects of heuristics and prospects with gender as a moderator. *SAGE Open, 14*(2). doi:https://doi.org/10.1177/21582440241256444

Lippi, A., & Poli, F. (2024). ESG in investor profiling: what are we talking about? *International Journal of Bank Marketing.* doi:https://doi.org/10.1108/ijbm-11-2023-0609

Lusardi, A. (2019) Financial literacy and the need for financial education: Evidence and implications. *Swiss Journal of Economics and Statistics.*

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature, 52*(1), 5–44. doi:https://doi.org/10.1257/jel.52.1.5

Maschendar Goud, M. (2022). A study on the saving and investment behaviour of individual investors. *Journal of Commerce and Accounting Research, 11*(1), 23–30.

Mishra, L. (1998). National literacy mission - Retrospect and prospect. *Economic and Political Weekly, 33*(44), 2807–2815.

Mouna, A., & Anis, J. (2017). Financial literacy in Tunisia: Its determinants and its implications on investment behaviour. *Research in International Business and Finance, 39,* 568–577.

National Centre for Financial Education. (2022-23). Annual Report.

Prasad, S., Kiran, R., & Sharma, R. (2017). Impact of financial literacy on investment decisions of retail investors': Evidence from Indian financial market. *Proceedings of International Conference on 'Research and Business Sustainability,* 442–447.

Princy, S. (2019) Financial literacy and individual investment decisions - A survey in Bengaluru city. *International Journal of Research in Engineering, Science and Management, 2*(2), 673–679.

Prithiviraj, S., & Gokul, G. (2016). Investment behaviour of individual investors in Coimbatore city. *International Journal of Engineering Research & Technology, 4*(27), 1–6.

Ramakrishnan. (2011). *Financial literacy and financial inclusion.* Retrieved from https://papers.ssrn.com/abstract=2204173

Rasool, N., & Ullah, S. (2020). Financial literacy and behavioural biases of individual investors: Empirical evidence of Pakistan stock exchange. *Journal of Economics, Finance and Administrative Science, 25*(50), 261–278.

Sharma, P. C. (2021). Factors affecting investment decision of working women of emerging nations: Special reference to Indian metro cities. *Journal of Commerce and Accounting Research, 10*(1), 58–66.

Shen, C.-H., Lin, S.-J., Tang, D.-P., & Hsiao, Y.-J. (2016). The relationship between financial disputes and financial literacy. *Pacific-Basin Finance Journal, 36,* 46–65. doi:https://doi.org/10.1016/j.pacfin.2015.11.002

Srinivasan, K., & Karthikeyan, P. (2023). Investigating self-efficacy and behavioural bias on investment decisions. *E+M Ekonomie a Management, 26*(4), 119–133. doi:https://doi.org/10.15240/tul/001/2023-4-008

Tennyson, S., & Nguyen, C. (2001). State curriculum mandates and student knowledge of personal finance. *The Journal of Consumer Affairs, 35*(2), 241–262. doi: https://doi.org/10.1111/j.1745-6606.2001.tb00112.x

Usama, K., & Yusoff, F. (2019). The impact of financial literacy on business performance. *International Journal of Research and Innovation in Social Science (IJRISS), 3*(10), 84-91.

Wiener, R. L., Baron-Donovan, C., Gross, K., & Block-Lieb, S. (2005). Debtor education, financial literacy, and pending bankruptcy legislation. *Behavioral Sciences & the Law, 23*(3), 347–366. doi:https://doi.org/10.1002/bsl.634

Willis, L. E. (2008). Against financial-literacy education. *Iowa Law Review, 94*(1197–285).

Yeh, T.-M., & Ling, Y. (2022). Confidence in financial literacy, stock market participation, and retirement planning. *Journal of Family and Economic Issues, 43*(1), 169–186. doi:https://doi.org/10.1007/s10834-021-09769-1

APPENDIX

Table 1: Statement on Financial Behaviour, Financial Knowledge, Financial Attitude and Investment Behaviour

Variables	Statement	Code
Financial behaviour (FB)	1. Keeping records of income and expenditures	FNB_1
	2. Affordability of product before buying	FNB_2
	3. Personal watch on financial affairs	FNB_3
	4. Set financial goals	FNB_4
	5. Watch on achievement of financial goal	FNB_5
	6. Not making impulsive purchase	FNB_6
	7. Avoided unnecessary expenses	FNB_7
Financial knowledge (FK)	8. Divide Rs. 1000 among the five sisters	FNK_8
	9. Interest @2% on Rs. 100	FNK_9
	10. Higher the risk higher the return	FNK_10
	11. cost of living is increased due to inflation	FNK_11
	12. Risk reduced with diversified portfolio	FNK_12
	13. Portfolio should be diversified	FNK_13
	14. It is good to have more than one source of Income	FNK_14
Financial attitude (FA)	15. Money is not meant for spend	FNA_15
	16. Take care of about future	FNA_16
	17. Spent only when it is required	FNA_17
	18. Apply rule of 30 days	FNA_18
	19. Plan all Future and Expense	FNA_19
	20. Financial advisor is requiring for financial decision	FNA_20
	21. Go thoroughly before making financial choice	FNA_21
Investment behaviour (IB)	22. Choice of Investment	INB_1
	23. Return on Investment	INB_2
	24. Review of investment portfolio	INB_3
	25. Earning on investment	INB_4
	26. Risk associated with investment	INB_5
	27. Period for investment	INB_6
	28. Regulatory Body governing financial product	INB_7