

# Financial Literacy and Mutual Fund Investment Decisions in Urban India

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## Abstract

The current study attempts to explore the effects of financial literacy on the investment decision of investors towards mutual funds in Indian cities. Financial literacy has been defined as a multivariate concept encompassing the dimensions of financial knowledge, financial attitude, and financial behaviour with each dimension having an individual and collective effect on the decision-making process. The growth in the mutual fund industry along with the active participation of investors has been observed due to technological advancements but there exists a wide gap between the supply and use of financial products for personal gains. The current study employs a descriptive-analytical method where the study is based on primary data from 110 respondents selected from Indian cities through questionnaires. The analysis uses Pearson Product Moment Correlation Coefficient, One Way ANOVA, and Chi-Square test of independence. The results indicate a highly significant positive relationship between financial literacy and investment decision quality ( $r = 0.724$ ,  $p < 0.001$ ) where financial literacy explains about 52.4% of the variance in investment decision quality scores. Income acts as a significant distinguishing factor of investment behaviour among individuals ( $F = 4.58$ ,  $p = 0.0047$ ), while educational qualification alone does not significantly predict mutual fund investments ( $\chi^2 = 1.821$ ,  $p = 0.611$ ). Investment decisions show substantial dependence on past returns and social cues from the family and peer group, implying a tendency to chase returns and social herding. This paper finds that improvement in financial literacy is a prerequisite but not enough to improve investment decision quality among urban Indians, and that any program needs to address both dimensions simultaneously.

**Keywords:** Financial Literacy, Mutual Funds, Investment Decision-Making, Urban Investors, Behavioural Finance, India

## INTRODUCTION

There have been numerous developments in the Indian mutual fund industry over the last decade with Assets Under Management (AUM) rising from approximately ₹10 lakh crore in 2014 to over ₹50 lakh crore in recent times (AMFI, 2024). The trend has been fuelled by factors such as democratisation of investment via digital channels, SIPs and policies from the SEBI and AMFI that have encouraged a rise in the number of retail investors who primarily hail from urban areas marked by high income levels and increased access to technology and financial tools.

However, an increase in the number of participants does not necessarily mean an improvement in the

quality of their decisions. As stated by Kahneman and Tversky (1974), human beings often deviate from rationality due to various cognitive distortions like overconfidence, herding, anchoring, and loss aversion. Cognitive distortion becomes even more pronounced when it comes to investment decisions in mutual funds where investors have to make choices based on risk-return tradeoffs, expense ratio, and investment periods. Such decisions need considerable amount of financial skills and SEBI and RBI studies indicate that majority of Indians have limited knowledge of financial concepts such as diversification, compound interest, and inflation.

Although there have been many studies conducted on the relationship between financial literacy and investment

behavior (Lusardi & Mitchell, 2014; van Rooij et al., 2011) worldwide, very little research has been done on this topic in relation to the participation of urban Indians in mutual funds. Most existing literatures fail to address the issue in a specific manner, considering the various investment instruments without taking into account the impact of demographic and socio-economic variables as moderating factors. This research attempts to fill in the gap by testing the influence of the three aspects of financial literacy (knowledge, attitude and behavior) on investment decision making in mutual funds and how income and educational qualifications serve as moderating factors for such a relationship.

There are three main contributions that the paper brings. First, a composite Financial Literacy Score (FLS) composed of the three components discussed above is developed for use as an independent variable. Second, it is proved empirically that while income serves as a significant moderator, education does not influence mutual fund participation. Third, recommendations are made based on the findings of this research for the benefit of SEBI, AMFI, and financial institutions towards financial inclusion in India.

#### **LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

Financial literacy has been conceptualised as a multidimensional construct encompassing financial knowledge, attitudes, and behaviours that jointly shape economic decision-making (Huston, 2010; Potrich et al., 2016). Empirical research consistently demonstrates that higher financial literacy is associated with greater participation in formal investment markets and superior portfolio diversification (van Rooij et al., 2011; Bucher-Koenen & Ziegelmeyer, 2014; Fernandes et al., 2014). Globally,

Klapper et al. (2015) and Lusardi & Mitchell (2014) identify education, income, and access to financial information as key determinants of literacy levels. Behavioural finance literature further establishes that inadequate financial literacy amplifies cognitive biases such as overconfidence and herding, increasing susceptibility to irrational investment choices (Agarwal et al., 2009; Chadha, 2024).

Research on mutual fund decision-making highlights the combined influence of behavioural biases and technological developments. Barber et al. (2005) demonstrate that investors systematically overlook cost-related information such as expense ratios, while Bagchi et al. (2022) and Sharanraj & Chatni (2024) provide evidence that overconfidence, loss aversion, and herding distort fund selection. In the Indian context, Nedumparambil & Bhandari (2022) establish that macroeconomic uncertainty significantly affects fund flows, while Iyer et al. (2024) examine the joint role of demographic factors and behavioural biases among Indian mutual fund investors. The integration of artificial intelligence and machine learning into performance evaluation represents an emerging dimension of the literature (Vadapalli et al., 2025; Wijaya et al., 2025).

The study draws on three theoretical frameworks. The Multidimensional Model of Financial Literacy (Huston, 2010; Potrich et al., 2016) provides the conceptual basis for operationalising financial literacy as a composite of knowledge, attitude, and behaviour. Behavioural Finance Theory (Kahneman & Tversky, 1974) explains systematic deviations from rational investment behaviour and predicts that lower financial literacy will amplify cognitive biases in fund selection. The Theory of Planned Behaviour (Ajzen, 1991) frames income as a proxy for perceived

behavioural control, predicting that economic capacity moderates the translation of financial literacy into actual investment participation. Collectively, these frameworks generate three directional hypotheses.

### RESEARCH HYPOTHESES

Based on the reviewed theoretical frameworks, three hypotheses are formulated:

**H1:** There is a significant positive relationship between financial literacy levels and mutual fund investment decision quality among urban investors in India.

**H2:** There is a significant difference in mutual fund investment behaviour across income groups among urban investors in India.

**H3:** There is a statistically significant association between educational qualification and participation in mutual fund investments.

### DATA AND METHODOLOGY

#### Data

The primary data was collected using an online questionnaire tool, which was distributed through Google Forms during the year 2025-26. There were 110 respondents from urban investors residing all over India, and their selection process was done using convenience sampling. In this study, the population consists of urban people who have knowledge about the mutual fund investment product. The sample includes various age groups ranging from 18 to 25 years, 26 to 35 years, 36 to 45 years, and 46 and above. They also have different educational backgrounds, professions, and monthly incomes ranging from less than ₹25,000 to more than ₹1,00,000. The survey consisted of four sections. The first section sought to collect demographic and socio-economic information. The second section was about

the level of financial literacy among respondents in terms of financial confidence, planning attitude, preference for long-term investments, and investment tracking behavior using a Likert scale (where 1 = Strongly Disagree and 5 = Strongly Agree). The third section collected data regarding investment behavior and involvement in mutual funds. The fourth section addressed the issues that impact investment decisions such as risk aversion, past performance, social pressure, and online tools. The FLS was developed as an aggregation of responses from four Likert-scale questions related to financial confidence, planning attitude, preference for long-term investments, and investment tracking behavior.

#### Estimation Strategy

Three inferential statistical techniques are employed, selected according to the measurement scales of the variables and the nature of each hypothesis. Pearson Product-Moment Correlation Analysis is applied to test H1, examining the linear association between the composite FLS and IDS among the 53 active mutual fund investors in the sample. One-Way Analysis of Variance (ANOVA) is applied to test H2, comparing mean IDS values across four monthly income groups, with post-hoc Tukey's Honest Significant Difference (HSD) tests identifying significant pairwise differences. The Chi-Square Test of Independence is applied to test H3, examining the association between educational qualification (four categories) and mutual fund participation (Yes/No) in a 4×2 contingency table. All tests are conducted at  $\alpha = 0.05$ .

### RESULTS

#### Descriptive Statistics

The demographic profile reveals that 68.2% of respondents are male, 32.7% belong to the 18–25 age group, 55.5% are salaried, and 38.2% are graduates. Among

the 110 respondents, 51.8% (n = 54) are active mutual fund investors. Within this investor cohort, SIP is the predominant investment mode (67.3%) and equity is the most preferred fund type (47.3%), reflecting a growth-oriented investment outlook. Financial attitude is strong, with 88.7% of respondents agreeing that financial planning is important; however, actual investment planning behaviour is more inconsistent, with only 56.6% always planning their investments. Notably, 46.4% of respondents are unaware of formal investor education programmes by SEBI and AMFI, and 60.4% do not consult financial advisors, relying instead on informal channels such as news, social media, and family recommendations.

### Hypothesis Testing

#### H1: Financial Literacy and Investment Decision Quality (Pearson Correlation)

The Pearson correlation analysis yields  $r = 0.724$  ( $t = 7.41$ ,  $p < 0.001$ ), indicating a strong, statistically significant positive relationship between financial literacy and investment decision quality. The coefficient of determination  $r^2 = 0.524$  indicates that approximately 52.4% of the variance in IDS is explained by FLS. The null hypothesis  $H_{01}$  is rejected; H1 is supported. This finding establishes that individuals with higher composite financial literacy demonstrate more structured, risk-aware, and goal-aligned mutual fund investment practices.

#### H2: Investment Behaviour Across Income Groups (One-Way ANOVA)

The one-way ANOVA yields  $F(3, 106) = 4.58$ ,  $p = 0.0047$ , which is below the significance threshold of  $\alpha = 0.05$ . The null hypothesis  $H_{02}$  is rejected; H2 is supported. Investment decision scores differ significantly across income groups. Post-hoc Tukey's HSD analysis reveals that the most significant differences exist between

the lowest income group (below ₹25,000, mean IDS = 9.14) and the highest income group (above ₹1,00,000, mean IDS = 12.10), with a mean difference of 2.96. Moderate significant differences are observed between the lowest group and the ₹50,000–₹1,00,000 bracket. These results confirm that economic capacity functions as an important moderator of investment behaviour quality.

#### H3: Education Level and Mutual Fund Participation (Chi-Square)

The chi-square test of independence yields  $\chi^2(3) = 1.821$ ,  $p = 0.611$ , which is substantially below the critical value of 7.815 at  $df = 3$  and  $\alpha = 0.05$ . The null hypothesis  $H_{03}$  is not rejected; H3 is not supported. Educational qualification alone does not significantly predict mutual fund participation. While postgraduate respondents show the highest participation rate (58.3%) compared to undergraduates (36.4%), this variation does not attain statistical significance. The finding challenges the assumption that formal education is a sufficient driver of investment participation and points to the mediating role of income, risk attitude, and behavioural factors.

## DISCUSSION

### Financial Literacy as a Predictor of Investment Quality (H1)

Financial literacy and decision quality of investing are positively correlated ( $r = 0.724$ ,  $p < 0.001$ ). This is the main result obtained in the present study, which is similar to the findings of Lusardi & Mitchell (2014) in various settings that have shown that people with higher financial literacy tend to conduct better and foresighted financial planning. Financial literacy is also found to be associated with stock market participation by van Rooij et al. (2011). This study provides a new finding on mutual funds in urban India.

The high explained variance of 52.4% emphasizes the substantive importance of financial literacy as a predictor but not the only factor influencing decision-making in investing. The unexplained variance will probably be due to income, social factors, and behavioural variables. As noted by Fernandes et al. (2014), financial literacy effects may diminish when exposed to powerful environmental and social cues. Informal sources of information – news, social media, and family advice – are more prevalent in this data set, with 24.5% consulting experts for financial guidance, indicating that the information bias can affect decisions made by financially literate individuals.

### **Income as a Moderator of Investment Behaviour (H2)**

The notable income-based disparities among the investment decision scores ( $F = 4.58$ ,  $p = 0.0047$ ) further validate the Theory of Planned Behaviour's perceived behavioural control component (Ajzen, 1991). Financial ability permits investors not only access to mutual funds but also allows them to undertake diverse and strategic investments. The post-hoc analysis through Tukey HSD test shows that the largest discrepancy among behavioural variables occurs between the investors earning less than ₹25,000 (mean IDS = 9.14) and those earning more than ₹1,00,000 (mean IDS = 12.10) with a mean gap of 2.96. Investors belonging to the lower income level have a tendency to follow non-formal advice channels, undertake shorter term investments, and lack disciplined behaviour.

This discovery is important when designing programs. This means that financial education programs aimed at poorer urban investors need to consider their economic limitations, which will require the introduction of investment

mechanisms that are affordable, including SIP schemes requiring small instalments, simple labelling of risk, and user-friendly software interfaces. Wealthier people can derive more benefits from planning programs focused on goals, optimizing taxation, and investment diversification programs.

### **Education Alone Does Not Predict Participation (H3)**

The non-significant value for chi-square test ( $\chi^2 = 1.821$ ,  $p = 0.611$ ) questions the common notion that higher educational qualifications invariably lead to active involvement in financial markets. Although respondents with postgraduate and professional qualifications show slightly higher rates of participation (58.3% and 52.4%) than those holding undergraduate qualifications (36.4%), these differences are insignificant from a statistical point of view. The findings conform to the predictions made by Behavioural Finance Theory (Kahneman & Tversky, 1974), according to which barriers to cognition such as inertia, risk aversion and herd mentality persist despite being educated.

This result brings into focus the idea of “education-action gap” in the Indian urban investing scenario: while education enhances financial knowledge, it does not ensure investing activity without sufficient income, favourable social climate, and behavioural control. In other words, whereas education can be viewed as a broad term denoting any level of schooling, financial education is the combination of financial knowledge and positive attitude toward behaviour change, the two elements constituting the overall FLS score considered here. SEBI and AMFI investor education initiatives thus need to move away from mere awareness campaigns to financial education promoting behavioural change.

## CONCLUSION

The current research analysed the impact of financial literacy on mutual fund investments by analysing 110 individuals in urban India using the Financial Literacy Score and statistical approaches to make inferences. One of the major findings is the presence of a high positive correlation ( $r = 0.724$ ,  $p < 0.001$ ) between financial literacy and the quality of investment decisions, thus, proving that financially literate investors possess better mutual fund investments. Financial literacy defined as knowledge, attitude, and behaviour accounts for 52.4% of the variance in investment decision quality.

The analysis further highlights that income plays a significant moderating role in determining investment behavior ( $F = 4.58$ ,  $p = 0.0047$ ), with the maximum difference in investment behavior being seen between the lowest and the highest income groups. The findings emphasize the need for income-specific intervention strategies in literacy programs. On the other hand, educational qualifications do not prove to be a significant determinant of mutual fund investment ( $\chi^2 = 1.821$ ,  $p = 0.611$ ), indicating the presence of an education-action gap, necessitating behaviorally based literacy programs rather than traditional awareness campaigns.

The shortcomings of the study include the use of a convenient sample size of 110 people, the cross-sectional nature of the study making it impossible to infer causality, and dependence on self-reports which can be prone to the influence of social desirability. The future scope of this area could explore the use of probability sampling, longitudinal methods, and the application of structural equation modeling to identify the different channels through which the various dimensions of individual literacy affect investments. Another interesting area of focus would be to

conduct panel data studies among semi-urban and rural populations.

Implications of the research have been provided not only for Asset Management Companies, who should incorporate financial literacy as one of the primary components of client engagement; but also for SEBI and AMFI, who should incorporate financial education material in popular digital payment and investment apps to reach out to a wider audience.

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**Table 1: Variable Definitions**

Variable	Definition	Scale	Role
Financial Literacy Score (FLS)	Composite of financial confidence, planning attitude, long-term preference, and investment tracking	Likert (4–20)	Independent
Investment Decision Score (IDS)	Composite of risk aversion, past returns influence, and online platform influence	Likert (3–15)	Dependent
Monthly Income	Self-reported monthly income in four brackets	Ordinal (4 groups)	Moderating
Educational Qualification	Highest attained qualification in four categories	Nominal (4 categories)	Moderating

*Note: FLS and IDS are constructed from Likert-scale items (1 = Strongly Disagree to 5 = Strongly Agree). Higher scores indicate higher literacy and better decision quality respectively.*

**Table 2: Descriptive Statistics of Composite Scores (n = 53 active investors)**

Statistic	Financial Literacy Score (FLS)	Investment Decision Score (IDS)
Mean	16.57	10.43
Standard Deviation	2.84	3.21
Minimum	9	4
Maximum	20	15
Possible Range	4–20	3–15

**Note:** Scores computed as sum of Likert-scale item responses. Higher FLS denotes greater financial literacy; higher IDS denotes better investment decision quality.

**Table 3: Pearson Correlation Results (H1)**

Parameter	Value	Critical Value (df=51, $\alpha=0.05$ )	Decision
Pearson r	0.724	$\pm 0.273$	Reject $H_{01}$
t-statistic	7.41	2.008 (two-tailed)	Significant
p-value	< 0.001	0.05	Reject $H_{01}$
Coefficient of Determination ( $r^2$ )	0.524	—	52.4% variance explained

**Table 4: ANOVA Summary Table (H2)**

Source of Variation	Sum of Squares	df	Mean Square	F-statistic	p-value
Between Groups	129.82	3	43.27	4.58	0.0047
Within Groups	1,004.98	106	9.48	—	—
Total	1,134.80	109	—	—	—

**Table 5: Chi-Square Test Results (H3)**

Parameter	Value	Critical Value (df=3, $\alpha=0.05$ )	Decision
$\chi^2$ statistic	1.821	7.815	Fail to Reject $H_{03}$
Degrees of Freedom	3	—	$(r-1)(c-1) = 3 \times 1$
p-value	0.611	0.05	Not Significant

#	Test	Null Hypothesis	Statistic	p-value	Decision
H1	Pearson Correlation	No significant correlation: FLS & IDS	$r = 0.724$	< 0.001	Reject $H_{01}$
H2	One-Way ANOVA	No difference in IDS across income groups	$F = 4.58$	0.0047	Reject $H_{02}$
H3	Chi-Square ( $\chi^2$ )	No association: Education & MF participation	$\chi^2 = 1.821$	0.611	Fail to Reject $H_{03}$