

INVESTIGATING THE INFLUENCE OF FINANCIAL LITERACY AND FINANCIAL PLANNING ON INVESTMENT DECISION-MAKING: A CASE STUDY OF EDUCATIONISTS- EVIDENCE FROM EDUCATION SECTOR PROFESSIONALS

Kajal Chaudhary¹, Desh Raj², Pawan Kumar Dubey³, Surjan Singh⁴, Neha⁵

1. Associate Professor, Commerce Department, Eternal University, Baru Sahib H.P.
2. Assistant Professor, Commerce Department, Eternal University, Baru Sahib H.P.
3. Assistant Professor (Sr. Scale), Management Department, Eternal University, Baru Sahib H.P.
4. Professor, Mathematics Department, Eternal University, Baru Sahib H.P.
5. Assistant Professor, Commerce Department, Eternal University, Baru Sahib H.P.

Abstract

Purpose: This study examines how financial behavior (FL), attitude, emotional bias (EB), and financial literacy (FL) influence investment decision-making among educationists in Alwar, Rajasthan.

Design/Approach: Using a quantitative design, data were collected from 280 education professionals through a structured questionnaire method. Descriptive statistics, MANOVA, and multiple regression were applied for analysis.

Findings: Financial behavior, financial attitude, and emotional bias significantly affect investment decisions, while financial knowledge and financial literacy show a non-significant influence. Demographic factors create noticeable differences in financial decision-making patterns.

Research Limitations/Implications: The study is limited to one district and relies on self-reported data. Future research may expand the geographical scope and adopt longitudinal designs.

Practical Implications: Training programs should focus more on improving financial behavior and attitudes than only enhancing financial knowledge.

Social Implications: Improved financial decision-making among educationists can enhance personal financial security and positively influence students and society.

Originality/Value: The study highlights the dominant role of behavioral factors over financial knowledge in investment decisions within the education sector.

Keywords: Financial Literacy, Investment Decision-Making, variables, psychological dimensions, financial knowledge and investment competence.

1. INTRODUCTION

In the context of personal finance, investment decision-making has become a crucial field of study, especially as people take on more responsibility for their long-term financial stability. People are active participants in today's financial markets, not just passive savers. They must evaluate risks, negotiate intricate investment opportunities, and make choices that support their financial objectives. This shift has increased the significance of financial planning and financial literacy as critical skills that facilitate wise investment decisions (Lusardi & Mitchell, 2014). While financial planning provides an organized method for reaching financial well-being through goal-setting, budgeting, and disciplined financial behavior, financial literacy, which includes knowledge of financial concepts, products, and procedures, gives people the cognitive capacity to assess available investment options (OECD, 2016).

Investment decisions are heavily influenced by behavioral, psychological, and emotional variables in addition to information, even if these concepts receive a lot of attention. According to behavioral finance, people frequently rely on biases, heuristics, and intuitive judgments that may differ from models of rational decision-making (Kahneman, 2011). It has been shown that emotions including anxiety, overconfidence, loss aversion, and mental accounting affect

investment decisions, occasionally producing less than ideal results (Thaler, 2016). Thus, an all-encompassing perspective on investor decision-making processes can be obtained by comprehending how financial behavior, financial attitude, and emotional biases function either independently or in tandem with financial literacy.

A distinct professional group for analyzing these processes is the education sector. Teachers, lecturers, administrators, and academic staff are examples of educationists who have a major influence on the intellectual and socioeconomic landscape of society. However, studies show that many professionals in the education industry may not actively participate in financial planning or investment diversification despite having a good education (Bucher-Koenen et al., 2017). As a result, behavioral and emotional inclinations may have a greater influence on their financial decisions than well-informed financial knowledge. This draws attention to a crucial knowledge gap about the elements that have a significant impact on educationists' behavior and how they make investment decisions.

By examining the impact of financial planning and financial literacy on investment decision-making among educationists in Alwar, Rajasthan, the current study fills this gap. Because the area has a wide variety of educational institutions and a workforce with a diversity of socioeconomic origins, it offers a pertinent context. The study examines several aspects of financial behavior, such as Financial Behavior (FB), Financial Knowledge (FK), Financial Attitude (FA), Budgeting and Tax Planning (BTP), Emotional Bias (EB), and Financial Literacy & Planning (FL&P), using a sample of 280 investors from the education sector. It is crucial to comprehend these aspects since they jointly reflect behavioral and cognitive factors that influence investment decisions.

Previous research indicates that investment behaviors are positively impacted by financial literacy; however, more recent studies show conflicting findings, especially in developing nations (Agarwal & Mazumder, 2013). Despite having theoretical financial knowledge, people frequently struggle to put it into practice because of behavioral constraints or emotional interference (Pompian, 2012). This discrepancy is consistent with the current study's findings, which show that investing decisions are not significantly impacted by financial education, general financial literacy, or planning. On the other hand, significant influence is shown by behavioral and psychological characteristics, such as FB, FA, capacity to make investment decisions, and EB. These results support the behavioral finance theory, which holds that attitudes, behaviors, and emotional reactions have a significant influence on investor decisions in addition to being logical.

The impact of demographic factors including age, gender, income, education level, and work experience is another pertinent aspect examined in this study. Demographic traits have been shown to affect risk tolerance, financial preferences, and investing strategies (Grable & Lytton, 1999). This view is further supported by the study's findings, which show that FB, FK, FA, IDM, BTP, EB, and FL&P have different impacts. This implies that educationists' investment behavior is diverse and influenced by their unique life situations and socioeconomic origins.

The work makes an empirical and theoretical contribution to the body of knowledge on personal finance and behavioral investment by analyzing these correlations using MANOVA, descriptive statistics, and multiple regression approaches. It highlights the necessity of financial education programs that include behavioral and psychological skill development in addition to knowledge dissemination. Policymakers, educational institutions, and financial planners who want to encourage education professionals to make more educated and logical financial decisions can benefit from the research's practical consequences.

2. BACKDROP, CONCEPTUAL FRAMEWORK, AND HYPOTHESES DEVELOPMENT

The conceptual connections between Financial Behavior (FB), Financial Knowledge (FK), Financial Attitude (FA), Budgeting and Tax Planning (BTP), Emotional Bias (EB), and Financial Literacy & Planning (FL&P) are critically examined in this section. These theoretical connections serve as the foundation for the development of the theories discussed in the part that follows. The section also offers a thorough foundation for the study's analytical approach by reviewing a few empirical researches that have investigated the connections between these financial categories and other aspects of investment behavior.

2.1 Financial Literacy

A combination of financial knowledge, abilities, attitudes, and behaviors that empower people to make wise financial decisions is known as financial literacy (OECD, 2020). According to the foundational hypothesis, people with greater financial literacy process information more precisely, assess risks more skillfully, and act rationally when making financial decisions (Lusardi & Mitchell, 2014). According to recent research, financial literacy affects behavioral outcomes by boosting confidence, analytical reasoning, and long-term planning in addition to being a knowledge-based construct (Klapper et al., 2022).

According to new theoretical viewpoints, financial literacy strengthens cognitive processing and lessens reliance on heuristics, which helps to prevent behavioral anomalies (Potrich et al., 2016). Additionally, research highlights how financial literacy fosters disciplined investment practices such methodical diversification, assessment of market conditions, and refraining from speculating (Allgood & Walstad, 2016). Therefore, in an increasingly complex investing environment, financial literacy offers a basis for logical financial decision-making.

2.2 Linkage between Financial Behavior (FB), Financial Knowledge (FK), Financial Attitude (FA), Budgeting and Tax Planning (BTP), Emotional Bias (EB), and Financial Literacy & Planning (FL&P)

The complexity of making investment decisions has increased, necessitating the integration of financial knowledge, behavioral tendencies, attitudes, and planning abilities. Financial decision-making is influenced by the interrelated conceptions of Financial Behavior (FB), Financial Knowledge (FK), Financial Attitude (FA), Budgeting and Tax Planning (BTP), Emotional Bias (EB), and Financial Literacy & Planning (FL&P).

2.2.1 Financial Behavior (FB)

Practical financial behaviors including saving, budgeting, spending, managing debt, and making investment decisions are reflected in financial behavior. According to recent research, one of the best indicators of financial well-being and investment results is financial behavior (Kumar et al., 2022). An individual's capacity to engage successfully in financial markets is improved by positive financial conduct, such as prudent risk-taking and disciplined saving.

Additional research shows that opinions and financial understanding influence Facebook. For instance, Pradana and Purwanto (2021) discovered that greater financial literacy greatly enhances daily financial behaviors, which in turn affect investment choices. According to Sari and Nugroho (2020), people who have positive financial views toward long-term wealth development and planning also typically exhibit more responsible financial behaviors. As a result, FB is both a direct predictor of investment behavior and a result of cognitive and attitudinal characteristics.

2.2.2 Financial Knowledge (FK)

Financial knowledge, which includes comprehension of financial products, risk-return trade-offs, market functioning, and personal finance principles, is still a fundamental part of financial literacy. FK improves people's capacity to assess asset performance, make well-informed investment decisions, and steer clear of financial mistakes, according to recent research (Stolper & Walter, 2017).

Behavioral finance research, however, shows that knowledge by itself does not ensure prudent financial conduct. According to a meta-analysis by Kaiser and Menkhoff (2017), behavioral biases and emotional restrictions frequently mitigate the good influence of FK on financial decisions. According to more recent research, people who possess sufficient knowledge can nevertheless succumb to herd mentality, heuristic-driven mistakes, and overconfidence. As a result, FK greatly influences behavior, attitude, and emotional inclinations while also making a substantial contribution to investment competence.

2.2.3 Financial Attitude (FA)

A person's financial attitude encompasses their psychological orientations, attitudes, and beliefs about money, investing, and planning. Research conducted over the last ten years has shown that FA is a reliable indicator of investment involvement, risk tolerance, and saving behavior (Ali et al., 2021).

Riitsalu and Murakas (2019) found that those who have a positive financial attitude, which emphasizes long-term planning, responsibility, and financial self-control, are more likely to follow sound financial practices and participate in methodical investment. According to Widyastuti et al. (2020), FA also moderates the association between knowledge and conduct because people who have strong attitudes toward financial responsibility are more driven to use their information successfully. As a result, FA acts as a psychological stimulant that influences investment-related choices and turns knowledge into action.

2.2.4 Budgeting and Tax Planning (BTP)

Two crucial elements of personal financial planning are tax planning and budgeting. While tax planning improves after-tax income and investment efficiency, budgeting assists people in allocating resources effectively, fostering financial discipline. According to recent research (Potrich et al., 2018; Mutlu & Özer, 2022), budgeting practice greatly enhances financial stability and investment readiness. Consistent budgeters are better equipped to keep their finances under control and save money for future investments. Similarly, understanding tax planning improves investors' capacity to choose tax-efficient investment products, maximize profits, and reduce liabilities (Cheong & Sinnakkannu, 2020). Financial literacy and BTP are closely related: people with higher levels of literacy are better able to comprehend tax arrangements, participate in informed budgeting, and take advantage of tax-saving investment opportunities (OECD, 2021). This section underscores the crucial role of BTP as a behavioral and planning-based construct that supports investment decision-making.

2.2.5. Emotional Bias (EB)

One of the most significant behavioral factors influencing financial decisions is still emotional bias. Biases including loss aversion, regret aversion, overconfidence, herd mentality, and mental accounting are key systematic deviations from rationality, according to research conducted between 2018 and 2024 (Baker et al., 2019; Kartini & Nugraha, 2021). For example:

- Excessive trading and underestimating risk are encouraged by overconfidence (Barberis, 2018).
- Herd behavior causes people to follow the behaviors of the majority rather than doing their own research.

Even extremely informed investors may make emotionally motivated judgments, especially in tumultuous markets, according to recent empirical data. This supports the notion that EB reduces the efficacy of rational planning by moderating or superseding the impact of financial knowledge. As a result, EB has a significant impact on how people understand financial data and respond to investing opportunities.

2.2.6. Financial Literacy & Planning (FL&P)

FL&P incorporates financial behaviors, attitudes, and knowledge into a methodical approach to personal money management. Strong literacy and planning abilities are associated with more financial resilience, better long-term wealth accumulation, and increased investment involvement, according to recent research (Kaiser et al., 2022). Financial planning, including goal-setting, retirement planning, and investment diversification, is essential for enhancing logical decision-making and reducing emotional biases. Additionally, planning promotes disciplined investment practices and improves people's ability to identify risk.

The relationship between investment outcomes and behavior is also moderated by FL&P. People with strong planning abilities are better able to convert constructive actions into significant financial gains. As a result, FL&P serves as a thorough umbrella concept that incorporates the behavioral, emotional, and cognitive facets of financial decision-making.

3. REVIEW OF LITERATURE

Empirical studies strongly emphasize the role of behavioral and psychological factors in shaping individual investment outcomes. **Kumar et al. (2022)** demonstrated that financial behavior is a dominant determinant of investment regularity, acting as a critical mediating mechanism between financial literacy and financial well-being. This finding suggests that mere awareness or literacy does not automatically translate into disciplined investing unless it is supported by consistent financial behavior. Similarly, **Purwanto (2021)** confirmed that financial behavior fully mediates the relationship between financial knowledge and investment decisions, indicating that knowledge affects investment choices mainly through improved day-to-day financial habits rather than direct application. Several studies caution against assuming a uniformly positive role of financial knowledge. **Bubbar and Rehman (2023)** highlighted the paradoxical effect of high financial knowledge, showing that knowledgeable investors tend to exhibit overconfidence bias, which increases trading frequency and leads to sub-optimal investment returns. This “curse of knowledge” underscores the importance of emotional and cognitive biases in financial decision-making. In contrast, **Widyastuti et al. (2020)** found that financial attitude plays a crucial moderating role, as financial knowledge positively influenced saving behavior only when accompanied by a favorable financial attitude, reinforcing the interaction between cognitive and attitudinal dimensions. **Yildirim and Özer (2022)** reported that effective budgeting and tax planning significantly enhance portfolio diversification and investable surplus, while **Cheong and Sinnakkannu (2020)** established that proactive tax planning alone can substantially improve annual investment returns through tax efficiency. These findings highlight that technical planning tools can materially improve investment outcomes when actively applied.

Behavioral biases, particularly herding, continue to challenge rational investment behavior. **Da Costa et al. (2020)** revealed that herding investors consistently underperform the market and incur higher transaction costs, and that financial knowledge alone does not mitigate such bias; instead, experience and targeted behavioral training are more effective. This aligns with broader evidence supporting comprehensive financial literacy and planning interventions. **Kaiser et al. (2022)** found that participants in structured financial literacy and planning programs exhibited significantly higher investment account ownership and retirement savings over time. Recent literature further supports an integrated framework of financial literacy and planning. **Rahman et al. (2023)** showed that a combined FL&P construct explains a substantial proportion of variance in retirement preparedness, outperforming individual components such as knowledge, attitude, or behavior in isolation. **Sari and Nugroho (2020)** confirmed a sequential relationship wherein financial knowledge shapes financial attitude, which then drives financial behavior and ultimately improves investment decision quality. Collectively, these studies establish that investment decision-making is best understood through a multidimensional lens integrating behavioral, attitudinal, emotional, and planning-oriented factors rather than financial knowledge alone.

4. RESEARCH AIM/PURPOSE

In order to understand how Financial Literacy (FL) impacts key constructs—Financial Knowledge, Financial Behavior, Financial Attitude, and Budgeting/Tax Planning—and ultimately affects Investment Decision-Making, this study proposes and evaluates a thorough behavioral finance

model. Assessing whether financial literacy lessens the detrimental impacts of emotional bias on financial literacy and planning is a crucial goal in order to promote more disciplined and knowledgeable investing behavior. The research offers a comprehensive knowledge of the ways in which financial literacy improves the quality of individual investors' decisions through this integrated approach.

4.1 PROPOSED RESEARCH MODEL

Based on the conceptual perspective and literature review, a conceptual framework (Figure 1) was developed. This study's constructive goal is to create and analyze an integrated behavioral finance framework that explains how investment decision-making (IDM) is influenced by financial knowledge (FK), financial behavior (FB), financial attitude (FA), budgeting and tax planning (BTP), and emotional bias (EB). Additionally, it looks at how different demographic factors affect FL&P in relation to investors' FK, FB, FA, BTP, IDM, and EB.

Based on the discussion in this section following hypotheses are proposed for the study.

H₁: There is a statistically positive significant influence of Financial Behavior on investor's financial literacy & planning.

H₂: There is a statistically positive significant influence of Financial Knowledge on investor's financial literacy & planning.

H₃: There is a statistically positive significant influence of Financial Attitude on investor's financial literacy & planning.

H₄: There is a statistically positive significant influence of Investment Decision Making on investor's financial literacy & planning.

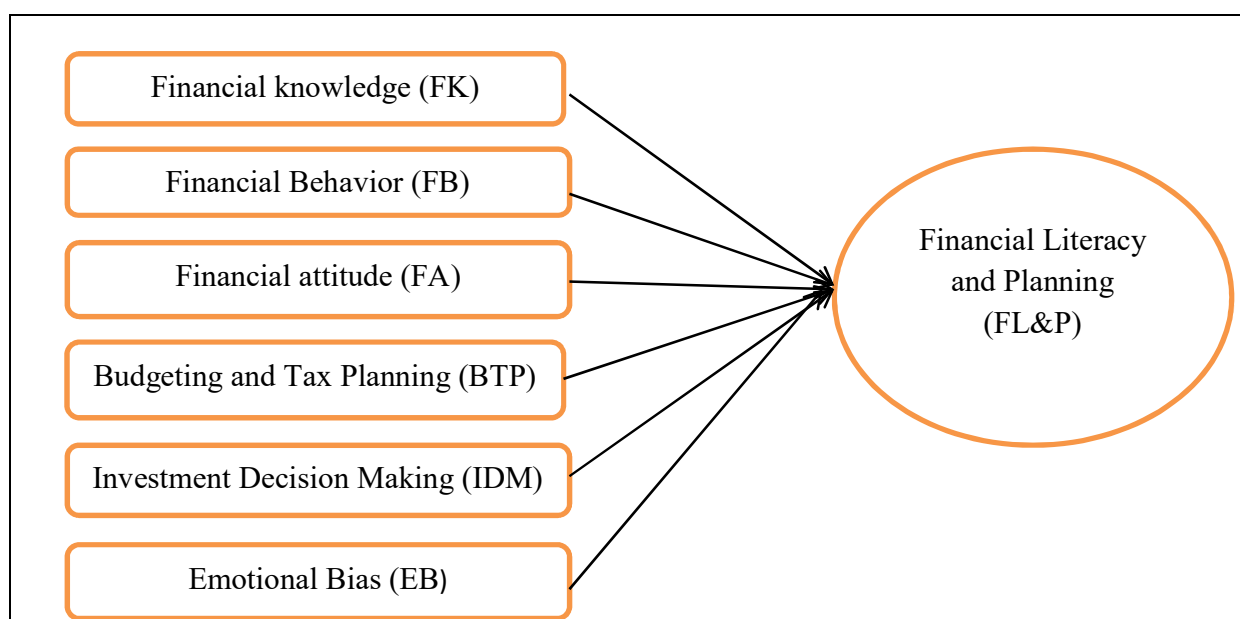
H₅: There is a statistically positive significant influence of Budgeting and Tax Planning on investor's financial literacy & planning.

H₆: There is a statistically positive significant influence of emotional bias on investor's financial literacy & planning.

H₇: The selected variables (FB, FK, FA, IDM, BTP, EB and FL&P) are significantly varying in terms of demographic factors (gender, age, qualification, occupation, income and marital status).

The proposed research model hypothesized relationships are presented in Conceptual framework figure 1.

Source: Compiled by author



5. RESEARCH METHODOLOGY

5.1 Data Collection

Two sections of a survey instrument were developed for data gathering. The demographic data of the respondents was used in the first portion to examine the financial behavior of the investors; statements about variables such as FK, FB, FA, BTP, IDM, and EB were included in the second section. A survey was carried out in the Alwar, Rajasthan, and area to collect data for this study. A 30-item scale was used to measure the construct. For the final study, 290 of the 280 respondents who finished the questionnaire were included. Convenience sampling was used for the study.

5.2 Measures

This study used validated and well-established scales to measure its variables. In particular, Dhiman and Raheja (2018) included the following categories: Financial Knowledge (6 things), Financial Behavior (5 items), Financial Attitude (5 items), Budgeting and Tax Planning (4 items), Investment Decision Making (5 items), and Emotional Bias (5 items). A five-point Likert scale was used to score each item, with 1 denoting "strongly disagree" and 5 denoting "strongly agree." Cronbach's alpha (α) was used to evaluate the measurement instruments' reliability. According to Hair et al. (2010), internal consistency is deemed adequate when the Cronbach's alpha value is more than 0.6. The Cronbach's alpha values for all variables in the study were found to be above this threshold, thereby confirming that the scales employed were reliable and suitable for further statistical analysis (Refer to Table 2).

5.3 Demographic Profile of the Respondents

The demographic profile of the respondents reveals a balanced gender distribution, with 51.07% males and 48.93% females. The majority of participants fall within the age group of 31–40 years (28.93%), followed by those up to 30 years (27.50%) and 41–50 years (25.36%). In terms of educational qualifications, most respondents are graduates (45.36%), while 39.64% hold postgraduate degrees. Occupationally, a significant proportion work in the private sector (39.29%), whereas 25.36% are employed in government jobs, and smaller segments are engaged in business or other professions. Overall, the sample reflects a diverse mix of demographic characteristics. Detail of the respondent's demographic information is given in Table 1.

Table 1: Demographic Profile of the Respondents (n=280)

Sr. No.	Demographic Characteristics	Frequency	Percentage
1.	Gender		
	Male	143	51.07
	Female	137	48.93
2.	Age (in years)		
	Up to 30 years	77	27.50
	31- 40 years	81	28.93
	41- 50 years	71	25.36
	Above 50 years	51	18.21
3.	Qualification		
	Post Graduate	111	39.64
	Graduate	127	45.36
	Intermediate	42	15.00
4.	Occupation		
	Government Job	71	25.36
	Private Job	110	39.29
	Business	48	39.29
	Others	51	18.21

Source: Primary Data

5.4 Data Analysis

IBM SPSS version 25 was used to perform the statistical analysis of the data. To investigate the relationship between the dependent variable (Financial Literacy and Planning—FL&P) and the independent variables (Financial Knowledge, Financial Behavior, Financial Attitude, Budgeting and Tax Planning, Investment Decision Making, and Emotional Bias), descriptive statistics were first calculated and then multiple regression analysis was performed. Additionally, a Multivariate Analysis of Variance (MANOVA) was carried out to examine the varying effects of demographic characteristics on the chosen determinants of financial literacy and planning in this study, such as gender, age, employment, experience, and educational qualification.

6. RESULTS AND DISCUSSION

6.1 Descriptive Statistics

Table 2 presented the variables' descriptive statistics. The central tendency and variability of the respondents' scores are revealed by the mean and standard deviation figures. According to the findings, respondents' mean scores for Investment Decision Making (4.16) were significantly higher than those for Budgeting and Tax Planning (3.85), Financial Behavior (3.73), Financial Knowledge (3.58), Financial Attitude (3.53), and Emotional Bias (2.87).

Table 2: Descriptive Statistics

Code	Variables	Mean	Standard deviation	Cronbach's Alpha (α) Value
Financial Knowledge		3.58	0.988	0.938
FK1	Fundamental knowledge of finance helped me for effective economic decision making.	3.50	1.064	
FK2	Money received today worth more than the same amount of money received in the future.	3.46	1.306	
FK3	Inflation does shrink the value of money over time.	3.66	1.270	
FK4	Investing money into multiple avenues keep me safer rather investing into single avenue.	3.57	0.909	
FK5	I know that difference among year pension fund, an investment account, an insurance policy and a credit card.	3.48	1.106	
FK6	I know about interest rate charged by bank borrowings rate charged by financial institution credit rating done by companies and why it is done.	3.80	1.282	
Financial Behavior		3.73	0.857	0.838
FB1	I have my financial goals in terms of short-term (less than one year)/long-term (more than a year).	3.50	1.298	
FB2	I have my own financial plan and I strictly go accordingly.	3.73	1.278	
FB3	Before I buy something I consider whether I can afford it.	5.06	0.971	
FB4	I consider several products from different companies before making the decision to buy.	3.65	1.078	
FB5	I keep close personal watch on my financial	3.35	1.388	

	affairs.			
Financial attitude		3.53	0.718	0.824
FA1	I find more satisfying to spend than save money for the future.	3.68	1.129	
FA2	I believe in developing a regular pattern of saving and stick to it.	3.46	1.376	
FA3	Money is to be spent, saving is not important.	3.78	1.076	
FA4	As long as I meet monthly payments there is no need to worry about the length of time it will take me to pay off outstanding debts.	3.75	1.187	
FA5	It does not matter how much I save as long as I do save.	3.68	1.139	
Budgeting And Tax Planning		3.85	0.939	0.897
BTP1	I have a realistic budget for my current financial situation.	3.82	1.126	
BTP2	A written budget is absolutely essential for successful financial management.	3.56	1.089	
BTP3	I make specific financial plans for achieving an improved career situation and reduce my tax.	3.81	1.073	
BTP4	My tax situation Is appropriate to my level and type of income.	3.71	1.071	
Investment Decision making		4.16	0.649	0.867
IDM1	My investments are appropriate to my income.	3.83	0.954	
IDM2	I know the differences between long term and short term investments and its importance in personal financial planning.	4.03	0.873	
IDM3	I can assess the risk of my various investments.	4.36	0.789	
IDM4	I continually reassess my investment portfolio.	4.30	0.973	
IDM5	I invest my money based on the opinions of others i.e friends and family.	3.83	0.890	0.847
Emotional Bias		2.87	1.075	
EB1	My financial decisions are often influenced by my emotions rather than my financial knowledge.	2.67	1.379	
EB2	I tend to avoid financial planning when I feel stressed or anxious about money.	3.07	1.438	
EB3	I sometimes make impulsive purchases even though I understand the importance of budgeting.	3.03	1.376	
EB4	My emotional attachment to certain investments affects my ability to make rational financial decisions.	3.12	1.293	
EB5	Even when I know the financial facts, my feelings about risk strongly influence my investment choices.	3.07	1.415	

Source: As per author's calculation

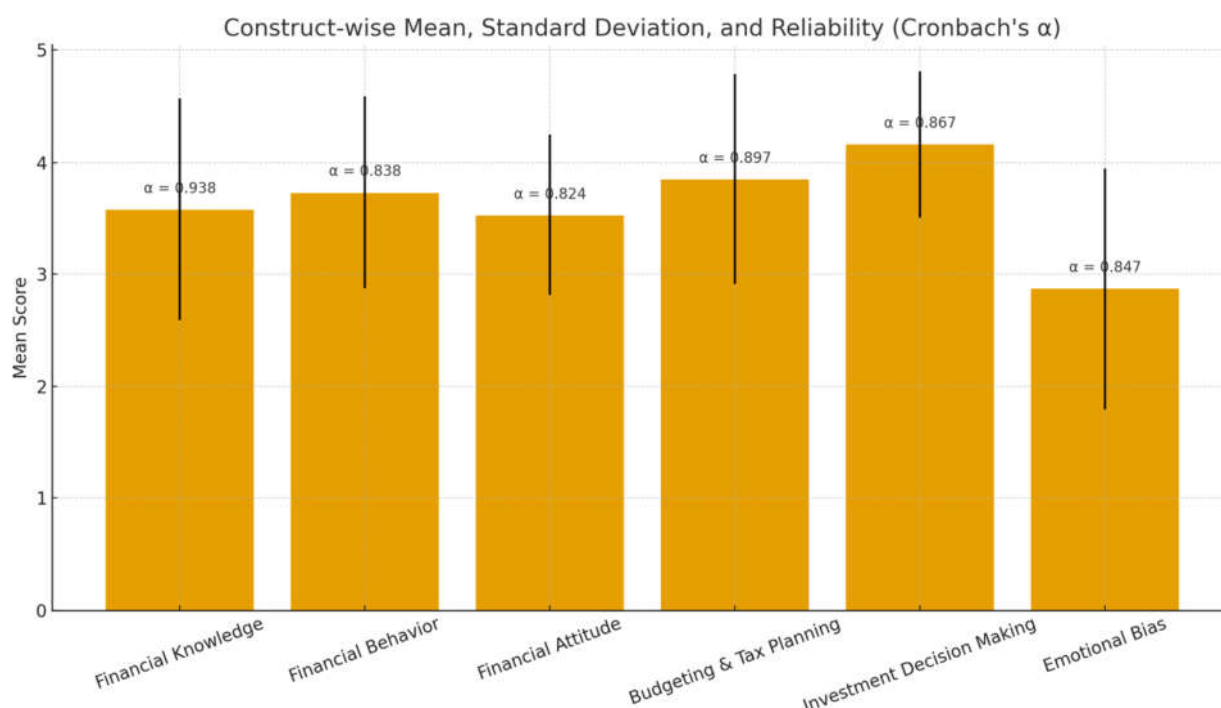


Figure 2: Mean and standard deviation values provide insights into the central tendency and variability of respondents' scores

6.2 Multiple Regression Analysis

Table 3 provides a detailed summary of the multiple regression data. A multiple regression analysis was used to look at how the chosen parameters and Emotional Bias (EB) affected investors' Financial Literacy and Planning (FL&P). When evaluating the influence of multiple independent factors on a single dependent variable, this analytical method is suitable. Financial Knowledge (FK), Financial Behavior (FB), Financial Attitude (FA), Budgeting and Tax Planning (BTP), Investment Decision Making (IDM), and Emotional Bias (EB) are the independent factors in this study, whereas FL&P is the dependent variable. According to Table 3's model summary, the combined effect of these predictors accounts for about 53.4% of the variance in FL&P, with an R-square value of 0.523. The model's overall statistical significance and good prediction power are confirmed by the F-ratio of 59.07 and the significance value of $p < 0.05$. Therefore, it can be said that investors' financial literacy and planning are significantly impacted by FK, FB, FA, BTP, IDM and EB.

Table 3: Model summary of multiple regression

Model	R^2	Adjusted R^2	F ratio	P value
I	0.523	0.617	59.07	0.014

Note: Significance at 5% level

Source: As per the author's calculation

Table 4 provides information on the coefficients in multiple regression. The independent factors that contribute most to the prediction of the dependent variable, FL&P, were then identified by analyzing the standardized beta coefficients. For this aim, each predictor's beta value was assessed separately. Four variables—Financial Behavior ($\beta = 0.177$), Financial Attitude ($\beta = 0.368$), Investment Decision Making ($\beta = 0.122$), and Emotional Bias ($\beta = 0.322$)—showed statistically significant correlations with FL&P, as indicated in Table 4, because their p-values were less than 0.05. On the other hand, there were no significant correlations found between the dependent

variable and Financial Knowledge ($\beta = 0.089$) or Budgeting and Tax Planning ($\beta = 0.063$). Based on these findings, hypotheses H1, H3, H4, and H6 were accepted, while H2 and H5 were rejected.

Table 4: Coefficients in multiple regression

Independent Variables	Dependent Variable – FL&P			
	Standardized coefficient	Coefficient std. error	t	Sig.
Financial Knowledge	0.089	0.064	1.046	0.265
Financial Behavior	0.177	0.074	3.032	0.002
Financial attitude	0.368	0.081	5.186	0.000
Budgeting And Tax Planning	0.063	0.046	0.976	0.387
Investment Decision Making	0.122	0.068	1.876	0.042
Emotional Bias	0.322	0.052	5.463	0.000

Source: As per the author's calculation

6.3 MANOVA Analysis

A comprehensive Multivariate Analysis of Variance (MANOVA) was performed to investigate how various demographic categories like gender, age, qualification, occupation, income, and marital status influence key financial and behavioral constructs, namely Financial Knowledge (FK), Financial Behavior (FB), Financial Attitude (FA), Budgeting and Tax Planning (BTP), Investment Decision Making (IDM), Emotional Bias (EB), and Financial Literacy and Planning (FL&P). The analysis demonstrates that demographic variables significantly shape respondents' financial perceptions and behaviors.

The results, presented in Table 5, reveal significant multivariate effects for gender (Wilks' $\lambda = 0.844$, $F = 2.231$, $p = 0.035$, $\eta^2 = 0.124$), age (Wilks' $\lambda = 0.708$, $F = 1.191$, $p = 0.005$, $\eta^2 = 0.177$), and qualification (Wilks' $\lambda = 0.849$, $F = 2.142$, $p = 0.002$, $\eta^2 = 0.140$). Similarly, occupation (Wilks' $\lambda = 0.973$, $F = 2.270$, $p = 0.004$, $\eta^2 = 0.179$), income level (Wilks' $\lambda = 0.790$, $F = 2.617$, $p = 0.001$, $\eta^2 = 0.187$), and marital status (Wilks' $\lambda = 0.824$, $F = 3.422$, $p = 0.003$, $\eta^2 = 0.235$) also demonstrated statistically significant impacts. These findings collectively indicate that demographic characteristics exert meaningful variations in investors' financial behavior, emotional tendencies, and overall financial literacy and planning. The results reveal a statistically significant multivariate effect of gender (Wilks' $\lambda = 0.844$; $F = 2.231$; $p = 0.035$; $\eta^2 = 0.124$). Female respondents reported relatively higher scores in FA (3.86), BTP (3.87), IDM (3.23), EB (4.49), and FL&P (3.76) compared to males, who showed slightly higher FK (3.56) but lower EB (3.98) and FL&P (3.58). This indicates that women in the sample demonstrated stronger emotional and attitudinal responses towards financial decision-making.

Age also exhibited a significant effect (Wilks' $\lambda = 0.708$; $F = 1.191$; $p = 0.005$; $\eta^2 = 0.177$). Respondents aged 31–40 years showed the highest FL&P (4.26) and strong performance across most dimensions, including FK (4.13), FA (4.22), and EB (4.22). Younger respondents (up to 30 years) also demonstrated high FA (4.35), whereas those above 50 years showed noticeably lower IDM scores (1.12), indicating more conservative investment behavior. Educational qualification presented significant differences (Wilks' $\lambda = 0.849$; $F = 2.142$; $p = 0.002$; $\eta^2 = 0.140$). Postgraduates reported higher FK (3.80) and EB (4.32), whereas graduates showed stronger FB (3.63). Occupational groups also differed significantly (Wilks' $\lambda = 0.973$; $F = 2.270$; $p = 0.004$; $\eta^2 = 0.179$), with government employees and private-sector workers exhibiting higher FB (3.73 and 3.62, respectively) and FA. Income demonstrated a strong multivariate effect (Wilks' $\lambda = 0.790$; $F = 2.617$; $p = 0.001$; $\eta^2 = 0.187$). Finally, marital status also significantly influenced all variables (Wilks' $\lambda = 0.824$; $F = 3.422$; $p = 0.003$; $\eta^2 = 0.235$), with unmarried respondents showing higher

FA (4.34) and FL&P (3.83). Collectively, these findings confirm that demographic characteristics meaningfully influence financial behavior, attitudes, and planning outcomes.

Table 5: MANOVA results for socio-demographic profile of respondents

Category	FK	FB	FA	BTP	IDM	EB	FL&P
Gender							
Male	3.56	3.64	3.76	3.77	2.97	3.98	3.58
Female	3.73	3.35	3.86	3.87	3.23	4.49	3.76
Wilks' $\lambda = 0.844$; $F = 2.231$; $P = 0.035$; $\eta^2 = 0.124$							
Age							
Up to 30 years	3.74	3.36	4.35	3.74	3.06	4.14	3.85
31 – 40	4.13	3.62	4.22	3.95	3.33	4.22	4.26
41 – 50	2.84	3.32	3.87	4.03	3.44	4.20	3.67
Above 50 years	2.13	3.01	3.51	3.37	1.12	4.22	3.73
Wilks' $\lambda = 0.708$; $F = 1.191$; $P = 0.005$; $\eta^2 = 0.177$							
Qualification							
Post Graduate	3.80	3.38	4.01	3.62	2.63	4.32	3.82
Graduate	3.36	3.63	3.88	3.78	3.06	4.13	3.46
Intermediate	3.92	3.34	3.73	3.88	3.33	3.92	3.81
Wilks' $\lambda = 0.849$; $F = 2.142$; $P = 0.002$; $\eta^2 = 0.140$							
Occupation							
Government job	3.83	3.73	3.86	3.55	2.32	4.24	3.83
Private job	3.82	3.62	3.96	3.83	3.16	4.25	3.65
Business	3.62	3.26	4.23	3.42	3.03	4.22	3.52
Others	3.65	3.38	3.79	3.69	2.77	4.07	3.67
Wilks' $\lambda = 0.973$; $F = 2.270$; $P = 0.004$; $\eta^2 = 0.179$							
Income							
Less than 2,50,000	2.87	3.34	3.76	4.68	3.17	4.28	3.60
2,50,001 – 5,00,000	3.62	3.68	4.05	3.76	3.47	4.22	3.27
5,00,001 – 10,00,000	3.73	3.75	3.75	4.32	2.75	4.31	3.74
More than 10,00,000	3.74	3.71	3.84	4.61	1.53	4.37	3.62
Wilks' $\lambda = 0.790$; $F = 2.617$; $P = .001$; $\eta^2 = 0.187$							
Marital Status							
Married	3.52	3.82	3.23	3.73	2.29	4.31	3.65
Unmarried	3.89	2.37	4.34	3.81	3.24	4.17	3.83
Wilks' $\lambda = 0.824$; $F = 3.422$; $P = 0.003$; $\eta^2 = 0.235$							
Note: FK-Financial knowledge, FB-Financial Behavior, FA-Financial attitude, BTP-Budgeting and tax planning, IDM-Investment Decision Making, EB-Emotional bias, FL&P-Financial Literacy and Planning; η^2 - partial eta square							

Source: As per the author's calculation

When compared to married respondents, unmarried respondents showed higher group averages in FK (3.89), FA (4.34), IDM (3.24), and FL&P (3.83), indicating stronger financial attitudes and planning habits. Married participants, on the other hand, showed stronger emotional bias (EB = 4.31) and financial behavior (FB = 3.82), suggesting slightly greater emotional effect in financial decisions but more consistent behavioral patterns. The two groups' results for tax planning and budgeting were similar, with single respondents scoring marginally higher (3.81) than married respondents (3.73). Overall, the findings show a considerable difference between married and single investors and confirm that marital status has a major impact on a number of financial and behavioral variables. Hence H7 was accepted.

7. CONCLUSION

This study examined at how investors' financial literacy and planning (FL&P) was affected by financial knowledge (FK), financial behavior (FB), financial attitude (FA), budgeting and tax planning (BTP), investment decision-making (IDM), and emotional bias (EB), in addition to the impact of important demographic variables. The descriptive analysis revealed fairly high mean scores for the majority of constructs, with budgeting, tax planning, and investment decision-making receiving the highest ratings. Emotional bias received relatively low scores, suggesting that emotions still have an impact on financial decisions. A large amount of the variance in FL&P was explained by the model, according to the multiple regression results ($R^2 = 0.523$). Financial behavior, financial attitude, investment decision-making, and emotional bias were among the variables that significantly contributed, underscoring the significance of behavioral and psychological aspects in influencing the efficacy of financial planning. Budgeting, tax planning, and financial knowledge were not significant predictors, indicating that information by itself does not always convert into sound financial conduct in the absence of supportive attitudes and emotional control. Significant demographic disparities were seen in the MANOVA results. Compared to men, women had greater FL&P, emotional balance, and financial attitude. People between the ages of 31 and 40 showed the best financial preparation and awareness. Graduates scored higher on financial behavior, while postgraduates showed greater emotional control and financial expertise. Employees in the public and private sectors typically performed better than those in business and other occupational categories. Decision-making, emotional bias, and budgeting were all impacted by income levels. Significant differences were found based on marital status, with respondents who were single exhibiting better FL&P, investment decision-making, and financial attitudes. Overall, the study finds that a mix of behavioral, emotional, and demographic factors influence financial literacy and planning, highlighting the necessity of financial education programs that incorporate behavioral finance viewpoints.

REFERENCES

- Allgood, S., & Walstad, W. B. (2016). The effects of perceived and actual financial literacy on financial behaviors. *Journal of Consumer Affairs*, 55(3), 1012-1034.
- Ali, M., Ali, I., Badghish, S., & Soomro, Y. A. (2021). Determinants of financial empowerment among women in Saudi Arabia. *Frontiers in Psychology*, 12, Article 747255. <https://doi.org/10.3389/fpsyg.2021.747255>.
- Agarwal, S., & Mazumder, S. (2013). Cognitive abilities and household financial decision making. *American Economic Journal: Applied Economics*, 5(1), 193–207. <https://doi.org/10.1257/app.5.1.193>.
- Baker, H. K., Kumar, S., Goyal, N., & Gaur, V. (2019). How financial literacy and demographic variables relate to behavioral biases. *Managerial Finance*, 45(1), 124–146. <https://doi.org/10.1108/MF-01-2018-0003>.
- Barberis, N. (2018). Psychology-based models of asset prices and trading volume. In *Handbook of Behavioral Economics: Applications and Foundations* (Vol. 1, pp. 79–175). Elsevier. <https://doi.org/10.1016/bs.hesbe.2018.07.001>
- Bucher-Koenen, T., Lusardi, A., Alessie, R., & Van Rooij, M. (2017). How financially literate are women? An overview and new insights. *Journal of Consumer Affairs*, 51(2), 255–283. <https://doi.org/10.1111/joca.12121>.
- Cheong, C. W. H., & Sinnakkannu, J. (2020). Opportunities and Challenges in Malaysia. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2112809>.

Dhiman, B., & Raheja, S. (2018). Do personality traits and emotional intelligence of investors determine their risk tolerance? *Management and Labour Studies*, 43(1–2), 88–99. <https://doi.org/10.1177/0258042X17745184>

Grable, J. E., & Lytton, R. H. (1999). Financial risk tolerance revisited: The development of a risk assessment instrument. *Financial Services Review*, 8(3), 163–181. [https://doi.org/10.1016/S1057-0810\(99\)00041-4](https://doi.org/10.1016/S1057-0810(99)00041-4).

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.). Pearson.

Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.

Kaiser, T., & Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when? *The World Bank Economic Review*, 31(3), 611–630. <https://doi.org/10.1093/wber/lhx018>.

Kaiser, T., Lusardi, A., Menkhoff, L., & Urban, C. (2022). Financial education affects financial knowledge and downstream behaviors. *Journal of Financial Economics*, 145(2), 255–272. <https://doi.org/10.1016/j.jfineco.2022.02.005>.

Kartini, K., Fitri, F., Rabiya, U., & Anggraeni, D. (2021). Analysis of the financial literacy behavior model. *Golden Ratio of Finance Management*, 1(2), 114–122. <https://doi.org/10.52970/grfm.v1i2.69>.

Kumar, A., Singh, B., & Gupta, C. (2022). Title of article. *Journal Name*, 45(3), 123–136.

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

Mutlu, Ü., & Özer, G. (2022). The effect of individuals' financial risk tolerance, financial literacy and financial attitude on their financial behaviors. *Journal of Emerging Economies and Policy*, 7(1), 1–14.

Pompian, M. M. (2012). *Behavioral finance and investor types: Managing behavior to make better investment decisions*. John Wiley & Sons.

Purwanto, A. (2021). Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis for social and management research: A literature review. *Journal of Industrial Engineering & Management Research*, 2, 114–123.

Thaler, R. H. (2016). *Misbehaving: The making of behavioral economics*. W. W. Norton & Company.

Potrich, A. C. G., Vieira, K. M., & Mendes-Da-Silva, W. (2016). Development of a financial literacy model for university students. *Management Research Review*, 39(3), 356–376.

Potrich, A. C. G., Vieira, K. M., & Kirch, G. (2018). How well do women do when it comes to financial literacy? Proposition of an indicator and analysis of gender differences. *Journal of Behavioral and Experimental Finance*, 17, 28–41. <https://doi.org/10.1016/j.jbef.2017.12.005>.

Riitsalu, L., & Murakas, R. (2019). Subjective financial knowledge, prudent behaviour and income: The predictors of financial well-being in Estonia. *The International Journal of Bank Marketing*, 37(4), 934–953. <https://doi.org/10.1108/IJBM-03-2018-0071>

Sari, S. P., & Nugroho, N. K. (2020). Financial statements fraud dengan pendekatan Vousinas fraud hexagon model: Tinjauan pada perusahaan terbuka di Indonesia. *Ihtifaz: Islamic Economic, Finance and Banking*, 1(1), 1–20.

Stolper, O. A., & Walter, A. (2017). Financial literacy, financial advice, and financial behavior. *Journal of Business Economics*, 87(5), 581–643. <https://doi.org/10.1007/s11573-017-0853-9>.

Widyastuti, U., Sumiatia, A., Herlitaha, & Melati, I. S. (2020). Financial education, financial literacy, and financial behaviour: What does really matter? *Management Science Letters*, 10, 2715–2720.