

## **Research Article**

# Assessment of Financial Literacy and Its Impact on Investor's Decisions in Saudi Arabia: A Study in the Context of Enabling Financial Planning to Strengthen Economic Development

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The significance of financial literacy is increasing faster in today's world. Financial literacy provides individuals with necessary and adequate financial knowledge and makes them professionally aware of managing their finances. It plays a vital role in the economic development of an economy. The study examines the impact of financial literacy on investors' financial decisions, financial planning, selection of financial products, and financial literacy awareness program and its influence on investors' investment decisions. In order to obtain information from the respondents, we employed a questionnaire that was both structured and self-administered. The investigation analyzes the survey responses from 360 respondents in Saudi Arabia. Various statistical methods such as descriptive statistics, correlation analysis, analysis of reliability, analysis of variance (ANOVA), and regression analysis were utilized to evaluate the data obtained. The results obtained in the study indicated that financial literacy has a significant impact on investors' financial decisions, financial planning, and the selection of financial products that influence investors' investment decisions. The research also found that financial literacy is affected by financial literacy awareness programs, which have a favorable influence on the investment decisions made by investors. The study's findings will help prospective investors understand the importance of raising financial knowledge for their future financial goals.

#### 1. Introduction

The significance of having a solid grasp of personal finances is fast gaining prominence in today's society. It plays a crucial role in developing an economy, which is quite essential. Individuals gain from financial literacy because it equips them with vital and relevant financial information and heightens their professional understanding of managing their resources. One of the essential objectives of financial literacy is to educate individuals in order to educate them towards acquiring critical financial concepts such as budgeting, investing, debt management, taxation, financial planning, retirement planning, and personal financial management. This is one of the critical aims of financial literacy. This instruction encourages individuals to convert their savings into investments that contribute to the overall economic growth of an economy, which in turn boosts economic growth.

The financial market has witnessed tremendous growth, expansion, and innovation in banking and nonbanking organizations' various financial products. Financial literacy is an essential aspect of financial planning. During financial planning, an investor turns his savings into investment; consequently, it is equally crucial to channel the potential savings into a proper investment avenue. Awareness of numerous financial literacy aspects and investment product knowledge is crucial for intelligent financial planning [1].

Financial literacy is raising awareness about analyzing the risk and return of financial products to make prudent investments to achieve future financial objectives. Financial literacy enables individuals to make intelligent and timely financial decisions to increase wealth and savings [2]. In order to lessen the risk of a financial crisis, it is essential to have a solid understanding of financial planning; therefore, financial literacy is essential in this regard. Likewise, financial literacy is a significant obstacle for all growing economies worldwide. Financial literacy links financial institutions, their goods, and the consumers who purchase these products. It creates a foundation for enhanced comprehension of financial products and profitable investing. Multiple financial education initiatives and investor awareness programs are being implemented to promote financial planning awareness. These programs assist investors in comprehending the significance and rewards of investment and maintaining their surplus in productive investment channels.

Numerous financial products are available today that contribute to the growth of the financial market; therefore, it is essential to have a thorough understanding of their advantages and disadvantages to achieve the goals of wealth creation and financial planning [3]. The government and financial institutions' financial literacy initiatives and investors' awareness programs significantly impact raising knowledge about the need for investment planning and understanding future financial objectives for a better and financially secure retirement. Every person recognizes that financial planning is an integral element of their lives, but it is also a fact that they need more information about financial planning.

The present study examines the impact of financial literacy on investors' financial decisions, financial planning, and selection of financial products. Generally, a financially literate individual will have more significant financial planning than an individual with poor knowledge about the financial markets and investment products. Through sound financial planning, individuals park their savings into investments that, in the long run, help overall economic development. It has been viewed that people need to be aware of financial literacy and the importance of doing investments for their personal financial growth and future savings. The economy is constantly in flux, and economic trends substantially impact investment choices. Investors must comprehend how economic trends impact their investments to maximize returns and make informed decisions. The government also instructs banking and nonbanking institutions to create more awareness of the benefits of doing investments, as they aim to mobilize personal and household savings into financial markets. This ultimately turns into the economic development of an economy. We have also raised a few questions in the questionnaire that focus on investment decisions and their relationship with economic development (Appendix A. Supplementary data: questionnaire).

The dissemination of financial knowledge to individuals is the primary focus of the educational concept known as financial education. A person's financial literacy can be improved through the use of the tool that is financial education. In addition, people should educate themselves on safeguarding their particular financial situations and responding appropriately to dynamic economic conditions. In this way, they may make a positive contribution to the expansion of their nation's economy. In addition, investment affects the pace of economic growth. After all, it is a component of demand and, more critically, affects the economy's productive capacity. Both of these factors are related to the fact that investment determines the rate at which the economy grows. An increase in investment should serve as a stimulus to the economy's expansion.

1.1. Rationale of the Study. Lack of financial literacy is one of the main barriers preventing people from investing and budgeting. Managing money has been viewed as a crucial life skill that can enhance people's well-being and quality of life. When people and communities lack financial literacy, they may make poor financial decisions [4]. People can make wise financial judgments in today's complex financial market, provided they have sufficient financial knowledge. The term "financial literacy" describes the capacity to comprehend and apply various money skills, such as budgeting and managing personal resources.

Numerous factors make financial literacy crucial. Financial responsibility is growing, which is a significant factor. Many individuals must handle their retirement funds, school loans, mortgage loans, and internet trading accounts, among others, in the present day. This growing need for sound financial literacy motivated us to study the relationship between financial literacy and numerous financial factors influencing an investor's investing selections.

There are six sections in this paper. Following the introduction section, Section 2 reviews the literature on financial literacy. Section 3 then presents the objectives of the study. Section 4 presents the conceptual framework and hypotheses. Section 5 presents the research method used in the study. Section 6 presents the results and discussion. Section 7 presents the implications of the study. Section 8 presents the conclusion, limitations, and direction of future research.

#### 2. Literature Review

Numerous studies have defined financial literacy and its impact on investors' investment decisions in various ways and based on various aspects. The study stressed the primacy of simple rules of thumb in determining the saving behaviours of households needing more fundamental financial understanding [5]. There is a significant need to ensure that young individuals have the basic financial information and abilities to make critical financial decisions [6]. To reach financial and economic well-being, financial literacy is viewed as a vital part [7]. People who know about money can make more responsible decisions. The study stressed how important it is to learn about money in school or on the job so that people can save more money than people with less schooling [8]. The study emphasized how not knowing enough about money affects planning for retirement and, in turn, managing wealth [9]. The authors' research [10] showed that young people must learn more about money to

handle various financial issues. These consumers significantly affect wealth and well-being in the long run because they often make bad financial choices as they do not know much about money [11]. The study focused on the importance of having the knowledge and trust needed for financial literacy since these things significantly affect how a person handles their money [12].

The authors examined whether financial literacy influenced risk-taking and diversification behaviours [13]. They concluded that financial literacy influences the number of risks individuals take, but only to a limited extent, diversification strategies pursued. Through his financial advice, the financial advisor who offers financial products raises and improves the degree of financial literacy among consumers [14]. The study explored the advantages of having high financial literacy, which increases financial inclusion and boosts the real economy [15]. The authors investigated the relationship between financial literacy and financial inclusion and concluded that financial inclusion could be understood as the more inclusive and far-reaching extension of financial development [16]. The study explored the significant impact of knowledge of numerous financial services factors on getting financial access [17].

The study focuses on how technology affects financial literacy and emphasized the significance of employing technology to combat it [18]. This study used quantitative and qualitative methods to analyze its findings, and it concluded that technology could be a valuable tool for raising financial literacy awareness among an economy's investors. The study revealed a substantial correlation between financial literacy and its impact on men's and women's investment decisions [19]. Through a field investigation, the study focused on the importance of human decisions and their impact on financial information [20]. This study also discovered the importance of sound financial judgment in making critical financial decisions. The authors examined several financial decision-related components of financial literacy, such as the various types of hazards connected to investments and the choice of investment product [21]. The study was conducted with an interest in financial planning and investing goals. The outcomes helped to advance the cause of financial literacy education.

The author evaluated the financial capabilities of 123 fish dealers in the Pasil region of the Philippines using a questionnaire and interview method [22]. The study discovered that fish vendors could not make a living according to several characteristics, including financial awareness, the ability to maintain financial records, cash management, and other elements relevant to their financial lives. In order to determine the level of financial literacy among management students, the authors of the study conducted a study in which they concentrated on four essential aspects of financial literacy. These four important facets of financial literacy are its degree and significance, definition and theories, limitations, and measurements. According to the findings of the study, there were no demographic influences that were statistically significant about financial literacy.

A good financial planner is crucial for raising financial literacy among those pursuing long-term financial objectives

[23]. Financial literacy significantly impacts investment decisions [24]. The study was carried out among Gujarat State investors. The working attitudes of women and their priorities regarding family and children were highlighted by the authors, who also noted that their primary motivation is to meet the needs of their families rather than pursuing personal financial objectives [25]. As a result, they give financial planning less importance, and even when they intend to, they choose traditional investment strategies. Due to a lack of financial literacy, the variety of contemporary financial goods is limited.

In addition, several researchers have demonstrated that financial knowledge influences investment risk perceptions. Specifically, the author found substantial differences between financial specialists and nonexperts with less financial understanding than financial experts [26]. Financial literacy can be conceptualized as the degree to which an individual understands and applies key financial ideas to managing his or her affairs [12, 27]. Despite the importance of financial literacy, many nations have needed help to address this issue [28]. A person with little or no financial education, i.e., a person lacking financial sophistication, is likelier to fall victim to high-cost borrowing and pay a great deal of money to acquire various financial services [28]. These challenges pertain to identifying financial literacy-improving critical areas of emphasis [29].

This problem results from the difficulty in identifying an individual's level of financial literacy and the particular factors that influence this literacy [30]. Financial literacy includes many ideas, such as antecedents, consequences, and moderators. Young people have low financial literacy, as evidenced by less than one-third of them having a foundational understanding of interest rates, inflation, and risk diversification [31]. People who lack financial literacy are also ignorant of risk management strategies and portfolio management [32–34].

2.1. Research Gap. Considering the existing literature, the present study focuses on a few critical dimensions of financial literacy in investors' investment decisions. This research looked at the effects of financial literacy on investors' financial decisions, financial planning, and the selection of financial products. The study also explored financial literacy awareness programs' significance in investors' decisions. The quantitative outcome of this study will contribute to filling this gap in the existing literature.

#### 3. Objectives of the Study

The present study aimed to achieve the following objectives:

- To examine the impact of financial literacy on investors' financial decisions and its effect on investors' investment decisions
- (2) To analyze the impact of financial literacy on investors' financial planning and its effect on investors' investment decisions
- (3) To examine the impact of financial literacy on investors' selection of financial products and its effect on investors' investment decisions

(4) To investigate the investor's perception and satisfaction with financial literacy awareness facilities provided by banking and nonbanking financial institutions

#### 4. The Conceptual Framework and Hypotheses

The study identified four independent factors based on the analysis of the literature review: financial decisions, financial planning, selection of financial products, and financial literacy awareness program. The study analyzed the impact of these variables on one dependent variable, investors' investment decisions, to comprehend their impact. These factors were used to develop the proposed hypothesis and form the basis of the proposed research model to evaluate the study's aims, presented in Figure 1.

This study investigates the statistical relationship between four independent variables and one dependent variable. Examining the following hypotheses in light of the stated aims and proposed model of the study:

H1: financial literacy influences investors' financial and investment decisions

H2: financial literacy influences investors' financial planning and investment decisions

H3: financial literacy influences investors' selection of financial products and investment decisions

H4: investor's perception and satisfaction will be influenced by financial literacy awareness facilities provided by banking and nonbanking financial institutions.

#### 5. Research Method

This study examines the influence of financial literacy on financial decisions, financial planning, selection of financial products, and financial literacy awareness programs and its effect on investors' investment decisions. The present study is descriptive. Descriptive studies are research endeavors that comprehensively depict the current state of affairs without interpreting or evaluating the data [35]. This study used a mixed-methods technique to examine quantitative and qualitative data. A total of 360 people filled out the online questionnaire. Cronbach's alpha was used to figure out how reliable the designs were. Using descriptive statistics, the most essential parts of the information were measured. Through correlation research, it was found that the different factors affected each other. ANOVA and regression analysis were used to test the study's hypotheses.

Numerous studies have examined financial literacy and financial behaviour in an investor's decision-making. The fundamental research showed that a person's financial behaviour is significantly influenced by their level of financial literacy. Studies were undertaken using various techniques and based on various unique elements to define financial literacy and its impact on investors' investment decisions. In order to present the outcomes of the results, the studies used systematic literature review, meta-analysis, bibliometric analysis, descriptive analysis, regression analysis, correlation analysis, and SEM. The model contains five variables, four independent variables and one dependent variable. SPSS was used to derive results via descriptive analysis, correlation analysis, regression analysis, and ANOVA. The method used in the present study is in line with the methods used by the previous researcher and provided valuable insights into the research on financial literacy.

The measurement of an investor's investment decision, as the dependent variable in the proposed research model, is based on the impact of financial literacy on investors' financial decisions, investors' financial planning, investors' selection of financial products, and investor's perception and satisfaction with financial literacy awareness facilities provided by banking and nonbanking financial institutions. Twenty-four questions were designed to measure the responses of individuals from the investment and financial planning point of view. The quantitative outcomes of these selected variables for the study were measured through regression analysis and ANOVA. Based on the *p* values, the measurement results are presented and included in the study. As per the results of regression and ANOVA, the investor's investment decisions significantly impact financial literacy, predominantly affecting their financial decisions, financial planning, and selecting financial products for their investment. The results are based on the 24 statement-based questions, which were carefully designed, which measure various dimensions of investors' investment decisions.

5.1. Data Collection and Sampling. The data used in this study were gathered from a combination of primary and secondary resources. This study's primary data collection tool was a predesigned, self-administered questionnaire. The questionnaire was developed using the existing literature review. There were 24 statement-based questions on the questionnaire, all related to one of the five research variables. A five-point Likert scale was used to quantify the responses: (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree, and (5) strongly agree. Research papers, journal articles, books, and published literature were secondary sources for this investigation. One of the non-probability sampling approaches, convenience sampling, was used to collect the primary data from the respondents.

Before being widely circulated, the questionnaire had a pilot test with forty participants to collect responses, ensure ease of use, readability, and comprehension, and make necessary changes. The pilot test findings revealed that the selected respondents found the questionnaire easy to understand, and the forty respondents approved the questionnaire. The responders were then given the completed questionnaire. A total of 360 participants were included in the study's sample. All research participants provided informed consent.

5.2. Data Analysis. This study investigates the relationship and influence of four independent variables on a dependent variable. SPSS was utilized to analyze the data collected for this study. The data were analyzed with the appropriate statistical methods. The percentages and frequencies of the

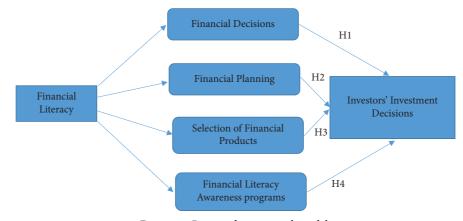


FIGURE 1: Proposed conceptual model.

respondent's demographic variables were presented through descriptive analysis. The correlation was calculated to examine the relationship between variables. For testing hypotheses, regression and ANOVA were utilized. Regression analysis is reliable for determining which variables influence a specific topic of interest. Regression is a statistical method for figuring out how one or more independent (explanatory) variables relate to a dependent variable.

5.2.1. Demographic Profile of the Respondents. Table 1 shows the respondent's demographic information. According to the sample survey, most respondents were between the ages of 31 and 50. 70.83% of respondents are male, while 29.17% are female. Most responders have a bachelor's degree, a master's degree, or a PhD; 36.11% of respondents work for the government, while 41.67% work for a private company. Most respondents had heard of financial literacy, financial markets, financial institutions, financial instruments, and financial services. Every respondent puts his or her money into one of the financial products.

The values of the mean and standard deviation are presented in Table 2. According to the values, all four variables significantly contribute to the investor's investment decisions. However, as per the mean values, the role of financial planning, financial decision, and financial literacy awareness program has a high impact compared to selecting financial products.

*5.2.2. Reliability Test.* Cronbach's alpha was utilized in SPSS to determine the validity and reliability of the questionnaire. The internal consistency reliability of the scales should be measured using Cronbach's alpha when the study was based on a Likert-type scale [36]. According to Table 3, the constructions' Cronbach alpha values ranged from 0.815 to 0.89. This exhibits a high level of reliability and internal consistency.

*5.2.3. Correlation Analysis.* Table 4 displays the results of a correlation analysis examining the relationship between the variables that impact the investor's investment decisions. When comparing test results, Pearson's correlation is

typically employed [37]. A correlation coefficient of less than 0.7 is considered acceptable [38].

The investor's investment decisions are strongly correlated with financial decisions (r (360) = 0.87, p < 0.05), financial planning (r (360) = 0.94, p < 0.05), selection of financial products (r (360) = 0.95, p < 0.05), and financial literacy awareness program (r (360) = 0.94, p < 0.05).

5.2.4. Regression Analysis. A regression model is deemed a suitable method for determining the influence of dependent variables and analyzing independent variables. We used bivariate regression analysis in this study. Tables 5–8 summarize the findings of the regression study. At the 0.05 level, all four predictors were significant and affected the investor's investment decisions.

The financial decision variable significantly predicts the investors' investment decisions, according to Table 5 standard deviation-model summary estimation. It creates substantial variance in the value of the investor's investment decisions. The regression model's F, p, and  $R^2$  values are also statistically significant. The regression model's explanatory power is 77%. At the 5% limit for the p value, the influence of financial literacy is significant on financial decisions that impact investors' investment decisions.

The second independent variable, financial planning, is a significant predictor of investors' investment decisions, according to Table 6 standard deviation-model summary estimation. It creates substantial variance in the value of the investor's investment decisions. The regression model's F, p, and  $R^2$  values are also statistically significant. The regression model's explanatory power is 89%. At the 5% limit for the pvalue, the influence of financial literacy is significant in financial planning that impacts investors' investment decisions.

The selection of the financial product variable significantly predicts investors' investment decisions, according to Table 7 standard deviation-model summary estimation. It creates substantial variance in the value of the investor's investment decisions. The regression model's F, p, and  $R^2$ values are also statistically significant. The regression model's explanatory power is 91%. At the 5% limit for the pvalue, the financial literacy effect is significant in selecting

Demographic variables	Frequency ( <i>n</i> )	Percentage (%)
Age		
Less than 20	20	5.56
21-30	48	13.33
31-40	156	43.33
41-50	108	30.00
51-60	16	4.44
Above 60	12	3.33
Gender		
Male	255	70.83
Female	105	29.17
Educational level		
Diploma	35	9.72
Bachelor's degree	142	39.44
Master's degree	119	33.06
PhD	64	17.78
Profession		
Government employee	130	36.11
Private employee	150	41.67
Business	24	6.67
Others	56	15.56
Are you aware of the concept of financial litera	cy?	
Yes	304	84.44
No	56	15.56
Are you aware of financial markets, financial in	nstitutions, financial instruments, and financial service	es?
Yes	304	84.44
No	56	15.56
Do you invest your savings in any of the invest	nent products?	
Yes	272	75.56
No	88	24.44
If yes then how long have you been investing?		
Less than one year	85	23.61
1–5 years	145	40.28
5–10 years	81	22.50
More than 10 years	49	13.61

TABLE 1: Demographic profile of the respondents.

TABLE 2: Descriptive statistics of the variables.

	N	Minimum	Maximum	Mean	Std. deviation
Financial decisions	360	2.33	5	4.100	0.681
Financial planning	360	2.6	5	4.182	0.690
Selection of financial products	360	2.2	5	4.080	0.694
Financial literacy awareness program	360	2.5	5	4.105	0.714

TABLE 3: Reliability analysis of the variables.

Constructs	Ν	Number of items	Cronbach's alpha	Internal consistency
Investors' investment decisions	360	4	0.841	Excellent
Financial decisions	360	6	0.890	Excellent
Financial planning	360	5	0.815	Excellent
Selection of financial products	360	5	0.825	Excellent
Financial literacy awareness program	360	4	0.865	Excellent

financial products that impact investors' investment decisions.

The fourth independent variable, the financial literacy awareness program, is a significant predictor of investors' investment decisions, according to Table 8 standard deviation-model summary estimation. It creates substantial variance in the value of the investor's investment decisions. The regression model's F value, p, and  $R^2$  values are also statistically significant. The regression model's explanatory power is 89%. At the 5% limit for the p value, the influence of the financial literacy awareness program is significant in investors' investment decisions.

#### Discrete Dynamics in Nature and Society

	FD	FP	SFP	FLAP	IID	p value
Financial decisions	1					0.000
Financial planning	0.837955808	1				0.000
Selection of financial products	0.839915568	0.859506142	1			0.000
Financial literacy awareness program	0.81462115	0.815787378	0.8538907	1		0.000
Investor's investment decisions	0.877892331	0.941501704	0.955444352	0.941758924	1	0.000

TABLE 4: Correlation analysis of the variables.

TABLE 5: Estimation of the standard deviation-model summary (independent variable-financial decisions).

	Investment decisions = $a + b$ financial decisions									
	Regression model summary <sup>b</sup> 1									
Model	R	R square	Adjusted <i>R</i> square	Std. error of the estimate	F change	Significance F				
1	0.877 <sup>a</sup>	0.770	0.770	0.317	203.239	0.000				

a. Predictors: (constant), financial decisions. b. Dependent variable: investor's investment decisions.

TABLE 6: Estimation of the standard deviation-model summary (independent variable-financial planning).

		Investors i	nvestment decisions = Regression model su	1	ıg	
Model	R	R square	Adjusted <i>R</i> square	Std. error of the estimate	F change	Significance F
2	0.941 <sup>a</sup>	0.886	0.886	0.223	794.114	0.000

a. Predictors: (constant), financial planning. b. Dependent variable: investor's investment decisions.

#### TABLE 7: Estimation of the standard deviation-model summary (independent variable-selection of financial products).

Investors' investment decisions = $a + b$ selection of financial products Regression model summary <sup>b</sup> 3								
Model	R	R square	Adjusted <i>R</i> square	Std. error of the estimate	F change	Significance F		
3	0.955 <sup>a</sup>	0.912	0.912	0.195	750.987	0.000		

a. Predictors: (constant), selection of financial products. b. Dependent variable: investor's investment decisions.

TABLE 8: Estimation of the standard deviation-model summary (independent variable-financial literacy awareness program).

		Investors' investmen	t decisions = $a + b$ finat	ncial literacy awarene	ss program				
	Regression model summary <sup>b</sup> 4								
Model	R	R square	Adjusted <i>R</i> square	Std. error of the estimate	F change	Significance F			
4	0.941 <sup>a</sup>	0.886	0.886	0.223	807.616	0.000			

a. Predictors: (constant), financial literacy awareness program. b. Dependent variable: investor's investment decisions.

5.2.5. Testing of Hypotheses. According to the regression results, significant collective effects were observed among the financial decisions, financial products, financial planning, and financial literacy awareness program ( $R^2 = 0.726$ , F (4, 359) = 157.520, and p < 0.001). Examining the outcomes of the individual predictors, results showed that "financial

decisions" ( $R^2 = 0.077$ , F (1, 358) = 203.239, and p < 0.001) significantly predict the regression model, so we accepted hypothesis 1. In addition, "financial planning" ( $R^2 = 0.886$ , F (1, 358) = 794.114, and p < 0.001), "selection of financial products" ( $R^2 = 0.912$ , F (1, 358) = 750.987, and p < 0.001), and "financial literacy awareness program" ( $R^2 = 0.886$ , F (1, 358) = 807.616, and *p* < 0.001) also significantly predict the regression model, so we also accepted hypotheses 2, 3, and 4. Table 9 presents the summary of hypothesis testing.

Table 10 shows the ANOVA for the four regression predictor models, and Table 11 shows the regression model coefficients. The connection between the models across all variables was assessed using an ANOVA model. We can discover which independent variable is related to our dependent variable once we know that the means of each independent variable vary.

Table 11 displays the values of the four variables' coefficients of regression. Referring to the values, the third predictor's effects are to be measured as most substantial on the investors' investment decisions ( $\beta = 0.911$ , t = 61.245, and p < 0.05), then second predictor ( $\beta = 0.902$ , t = 52.859, and p < 0.05), first predictor ( $\beta = 0.872$ , t = 34.687, and p < 0.05), and fourth predictor ( $\beta = 0.853$ , t = 52.986, and p < 0.05).

#### 6. Results and Discussion

This study examines how financial literacy impacts investors' investment decisions and is primarily affected by financial decisions, financial planning, selection of financial products, and financial literacy awareness program. According to the results, it has been observed that investors' financial literacy significantly impacts their financial decisions, financial planning, and financial knowledge and that selection of financial products for investment impacts financial planning. Description statistics show that all four independent variables significantly affect investors' investment decisions.

According to descriptive statistics, each variable's mean value is near the fourth point on the Likert scale. It suggests that all the variables are at "agree" levels. The highest standard deviation, which reflects investors' investing choices, is 0.714. As a result, investors' investment choices vary more than those of other factors. On the other hand, the lowest standard deviation is 0.681, which belongs to financial decisions. Therefore, financial decisions are similar. According to the analysis of Cronbach's alpha, the internal consistency and reliability of the data were very high. According to the results of the correlation analysis, there was a significant and positive correlation between financial decisions, financial planning, selection of financial products, and financial literacy awareness program with investors' investment decisions. According to regression results, all four variables significantly influence investors' investment decisions.

The study accepted hypothesis 1, indicating that financial literacy affects investors' financial decisions and investment decisions. Investors believe they know the significance of financial planning, investment, and future financial requirements which include purchase of investment products, taking insurance policies, and retirement planning, but financial literacy influences these decisions. The authors stressed the need to empower young people with the information and abilities in finance required to make critical financial decisions [6]. They also recognize the need for financial planning and financial resources necessary to attain their financial goals and objectives. However, due to their lack of financial literacy, these ambitions significantly impact their lives. The authors contend that financial and economic well-being requires financial literacy [7]. Investors believe that financial literacy enables them to make prudent financial decisions and gives investment management knowledge that enables them to make profitable investment decisions on their own. The author emphasizes that people who frequently make poor financial decisions, the reason of this is they lack financial literacy [11], substantially influence their long-term wealth and well-being.

The study accepted hypothesis 2, which indicates that financial literacy affects investors' financial planning and investment decisions. Investors believe a lack of financial awareness leads to misusing savings, which impacts future financial needs. The choice of an investment product and distinct categories of investment risks were two areas of financial decision-making that the authors looked at [21]. To improve their financial literacy, those with long-term financial goals need to work with a qualified financial planner [23]. Investors believe that financial literacy gives valuable financial education, enabling them to invest their retirement resources wisely. They can develop more effective ways to repay their debts with a solid financial education. Investors' financial literacy enables them to monitor and manage their expenditures. In addition, several studies have shown that financial knowledge influences investment risk perceptions. The author found notable differences between nonexperts with less financial expertise than financial specialists and financial specialists [26].

The study determined that financial literacy affects investors' selection of financial goods and influences their investing decisions. Less than one-third of young people understand interest rates, inflation, and risk diversification, highlighting a need for financial literacy [31]. Investors believe a lack of financial education hinders their understanding of all types of financial products and their ascharacteristics. Appropriate sociated financial understanding enables individuals to save and invest more essentially and professionally and avoid financial blunders. Investors also feel that a solid understanding of financial literacy can assist them in choosing the appropriate financial product and establishing emergency funds in preparation for financial emergencies. Significant discrepancies between financial professionals and nonexperts with less financial understanding have been noted by Deacon [26]. Knowledge of the characteristics of various investment products aids in making important investment decisions and informs the selection of the most suitable investment product.

The study supported hypothesis 4, which indicates that the financial literacy awareness program influences financial literacy and influences investors' investing decisions. Financial education encourages individuals to transform their savings into investments that contribute to the economic growth of a country as a whole. Researchers conducting a risk perception survey in Switzerland reported a substantial association between knowledge-related and riskrelated measures in a separate investigation [39]. They also concluded that participants who thought particular investment products were also easier to understand though

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Hypotheses	Regression result	Result	Accept/reject
H1: financial literacy influences investors' financial and investment decisions	Significant	(0.000 < 0.05)	Accepted
H2: financial literacy influences investors' financial planning and investment decisions	Significant	(0.000 < 0.05)	Accepted
H3: financial literacy influences investors' selection of financial products and investment decisions	Significant	(0.000 < 0.05)	Accepted
H4: investor's perception and satisfaction will be influenced by financial literacy awareness facilities provided by banking and nonbanking financial institutions	Significant	(0.000 < 0.05)	Accepted

<b><i>TABLE</i></b>	9:	Results	of	hypot	hesis	testing.
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#### TABLE 10: Variation analysis of the variables of ANOVA.

			ANOVA <sup>a</sup>			
	Model	Sum of squares	Df	Mean square	F	Sig
	Regression	121.400	1	121.400	203.239	$0.000^{b}$
1	Residual	36.120	358	0.100		
	Total	157.520	359			
	Regression	139.630	1	139.630	794.114	0.000 <sup>c</sup>
2	Residual	17.890	358	0.049		
	Total	157.520	359			
	Regression	143.796	1	143.796	750.987	$0.000^{d}$
3	Residual	13.724	358	0.038		
	Total	157.520	359			
	Regression	139.706	1	139.706	807.616	0.000 <sup>e</sup>
4	Residual	17.814	358	0.049		
	Total	157.520	359			

a. Dependent variable: investor's investment decisions. b. Predictors: (constant), financial decisions. c. Predictors: (constant), financial planning. d. Predictors: (constant), selection of financial products. e. Predictors: (constant), financial literacy awareness program.

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TABLE 11:	( netticient	regression	models	1 2	A and 4
INDLL II.	Coefficient	regression	moucio	1, 2,	5, unu 1.

		Coefficients <sup>a</sup>			
Model	Unstandardized coefficients		Standardized coefficients	t	Sig
	В	Std. Error	Beta		c .
(Constant)	-0.105	0.257		-0.514	0.000
Financial decisions	0.193	0.514	0.872	34.687	0.000
Financial planning	0.330	0.598	0.902	52.859	0.000
Selection of financial products	0.448	0.801	0.911	61.245	0.000
Financial literacy awareness program	0.225	0.386	0.853	52.986	0.000

a. Dependent variable: investor's investment decisions.

those same items were less risky. As a result, financial literacy would have a more considerable influence than was previously thought. Lack of knowledge regarding financial services and personal finance results in poor financial decisions impeding economic mobility. An essential component of obtaining economic prosperity is financial literacy [7]. Investors believe banks and nonbanking financial institutions should give them regular financial literacy training to increase awareness.

This study is based on the parameters of an individual's behavioural outcomes that detail the significant measurement of their investment and financial decisions. We applied a detailed questionnaire to explore the importance of financial literacy education to society. Four significant variables, which hold great significance in society to understand the impact of financial literacy, have been analyzed with the help of significant statistical tools, and results have been made available for prospective investors. Investment choices are heavily influenced by economic trends, which in turn are affected by the dynamic nature of the economy. In order to maximize their returns, investors must be aware of how economic trends can affect their assets.

An individual's financial literacy is crucial to their capacity to make sound financial decisions. One of the essential advantages of having a solid understanding of personal finance is that it allows individuals to make educated choices regarding their own money. Financially literate people can comprehend how the choices they make in their finances affect their overall financial health, which enables them to make choices that are more in line with their needs and goals.

### 7. Implications of the Study

The present study will significantly help investors understand the significance of financial literacy and increase their awareness of various financial aspects. The study will also significantly contribute to banking and nonbanking financial institutions. Investment from retail investors always plays a significant role in the growth of any banking and nonbanking financial institution. The study's results will help them understand the investors' perception and satisfaction level towards the facilities being offered to help them increase their financial literacy. This will help investors make more savings and investments, directly contributing to economic development.

Financial literacy plays an essential role in the growth and development of the financial market of an economy. Government organizes various financial literacy programs for investors and is also interested to know the effect of these programs on strengthening existing policies. Investment companies can focus on the various determinants affecting financial planning and help investors make informed financial decisions.

#### 8. Conclusions, Limitations, and Future Scope

The study's findings and analysis may lead to several important conclusions. The results indicated that all four factors play a substantial effect on the investment decisions of investors. Investors' investment decisions are affected mainly by financial literacy, which directly impacts their financial decisions, financial planning, and the selection of financial products. The study also concluded that banking and nonbanking financial institutions' financial literacy awareness programs significantly influence investors' investment decisions. These institutions must make regular improvements in such kinds of programs.

According to the study's results, investors believe that financial literacy makes them aware of the financial market and enables them to make prudent financial decisions in response to market changes and volatility. Financial literacy directs people to set aside emergency savings, preparing them to face financial emergencies. Financial knowledge enables individuals to create reasonable budgets and encourages them to develop saving habits. Acquiring financial knowledge enables individuals to become self-sufficient and acquire the financial stability necessary to realize their financial objectives, such as home ownership, international travel, children's education, and retirement planning.

Based on empirical evidence, the present study contributes significantly to understanding the importance of financial literacy and its impact on investors' investment decisions. The study shows that financial literacy affects investors' financial decisions, planning, and selecting financial products directly associated with investors' investment decisions. However, one of the study's main limitations is that it does not consider behavioural, demographic, and income-related factors. Future research could be conceptualized by considering these factors and comparing all alternatives. The factors used in the present study could be considered and compared across variable demographic factors among the respondents.

#### **Data Availability**

The data used to support the findings of this study are included within the article.

#### **Conflicts of Interest**

The authors declare that they have no conflicts of interest.

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#### Supplementary Materials

The questionnaire has been provided as supplementary data. (*Supplementary Materials*)

#### References

- W. A. Bonte and U. Filipiak, "Financial literacy, information flows, and caste affiliation: empirical evidence from India," *Journal of Banking and Finance*, vol. 36, no. 12, pp. 3399–3414, 2012.
- [2] M. Noctor, S. Stoney, and R. Stradling, Financial Literacy: A Discussion of Concepts and Competences of Financial Literacy and Opportunities for its Introduction into Young People's Learning, National Foundation for Educational Research, London, UK, 1992.
- [3] S. Kumar and M. Anees, "Financial literacy and education: present scenario in India," *International Journal of Engineering and Management Research*, vol. 3, no. 6, pp. 83–87, 2013.
- [4] D. H. Tustin, "An impact assessment of a prototype financial literacy flagship programme in a rural South African setting," *African Journal of Business Management*, vol. 4, no. 9, pp. 1894–1902, 2010.
- [5] D. Bernheim, "Do households appreciate their financial vulnerabilities? An analysis of actions, perceptions, and public policy," in *Tax Policy and Economic Growth*, pp. 1–30, American Council for Capital and Formation, Washington, DC, USA, 1995.
- [6] H. Chen and R. P. Volpe, "An analysis of personal financial literacy among college students," *Financial Services Review*, vol. 7, no. 2, pp. 107–128, 1998.
- [7] S. Braunstein and C. Welch, "Financial literacy: an overview of practice, research, and policy," *Federal Reserve Bulletin*, vol. 88, no. 11, pp. 0–457, 2002.
- [8] B. D. Bernheim and D. M. Garrett, "The effects of financial education in the workplace: evidence from a survey of households," *Journal of Public Economics*, vol. 87, no. 7-8, pp. 1487–1519, 2003.
- [9] A. Lusardi and O. S. Mitchelli, "Financial literacy and retirement preparedness: evidence and implications for financial education," *Business Economics*, vol. 42, no. 1, pp. 35–44, 2007.

- [10] A. Lusardi, O. S. Mitchell, and V. Curto, "Financial literacy among the young," *Journal of Consumer Affairs*, vol. 44, no. 2, pp. 358–380, 2010.
- [11] J. Yoong, "Financial illiteracy and stock market participation: evidence from the RAND American life panel," *Pension Research Council Working Paper, Pension Research Council, the Wharton School,* University of Pennsylvania, Philadelphia, PA, USA, 2010.
- [12] S. J. Huston, "Measuring financial literacy," Journal of Consumer Affairs, vol. 44, no. 2, pp. 296–316, 2010.
- [13] E. Cavezzali, G. Gardenal, and U. Rigoni, *Risk Taking, Diversification Behavior and Financial Literacy of Individual Investors*, UniversitàCa' Foscari Venezia, Venice, Italy, 2012.
- [14] M. Debbich, Why Financial Advice Cannot Substitute for Financial Literacy?, Banque de France, Paris, France, 2015.
- [15] A. Grohmann, T. Klühs, and L. Menkhoff, "Does financial literacy improve financial inclusion? Cross country evidence," *World Development*, vol. 111, pp. 84–96, 2018.
- [16] A. Grohmann and L. Menkhoff, *The Relationship between Financial Literacy and Financial Inclusion*, DIW Berlin, Berlin, Germany, 2020.
- [17] M. Hasan, T. Le, and A. Hoque, "How does financial literacy impact on inclusive finance?" *Financ Innov.*, vol. 7, no. 1, p. 40, 2021.
- [18] L. J. Servon and R. Kaestner, "Consumer financial literacy and the impact of online banking on the financial behavior of lower–income bank customers," *Journal of Consumer Affairs*, vol. 42, no. 2, pp. 271–305, 2008.
- [19] A. Lusardi and O. Mitchell, "Planning and financial literacy: how do women fare?" *The American Economic Review*, vol. 98, no. 2, pp. 413–417, 2008.
- [20] S. A. Meier, "Discounting financial literacy: time preferences and participation in financial education programs," *Journal of Economic Behavior and Organization*, vol. 95, pp. 159–174, 2012.
- [21] S. Agarwal, "Gene amromin, douglas D evan off, financial literacy and financial planning: evidence from India," SSRN Electronic Journal • December, vol. 27, pp. 4–21, 2010.
- [22] R. Barte, "Financial literacy in MicroEnterprises: the case of cebu fish vendors," *Philippine Management Review*, vol. 19, pp. 91–99, 2012.
- [23] K. N. Narendra, Financial Literacy: a revolution waiting to happen, Proceeding of COFP Convention, Bengaluru, India, 2014.
- [24] H. V. Jariwala, "Analysis of financial literacy level of retail individual investors of Gujarat state and its effect on investment decision," *Journal of Business and Finance Librarianship*, vol. 20, no. 1-2, pp. 133–158, 2015.
- [25] T. S. Shobha and S. Shalini, "A study on the perception of women towards financial planning in the city of Bengaluru," *Asia Pacific Journal of Research*, vol. 1, pp. 14–21, 2015.
- [26] S. Diacon, "Investment risk perceptions: do consumers and advisers agree?" *International Journal of Bank Marketing*, vol. 22, no. 3, pp. 180–199, 2004.
- [27] D. L. Remund, "Financial literacy explicated: the case for a clearer definition in an increasingly complex economy," *Journal of Consumer Affairs*, vol. 44, no. 2, pp. 276–295, 2010.
- [28] A. Lusardi and O. S. Mitchell, "Financial literacy and retirement planning in the United States," *Journal of Pension Economics and Finance*, vol. 10, no. 4, pp. 509–525, 2011.
- [29] A. Atkinson and F. Messy, "Measuring financial literacy: results of the OECD/international network on financial education (INFE) pilot study. OECD working papers on

- [30] D. Fernandes, J. G. Lynch Jr, and R. G. Netemeyer, "Financial literacy, financial education, and downstream financial behaviors," *Management Science*, vol. 60, no. 8, pp. 1861–1883, 2014.
- [31] A. Lusardi, O. S. Mitchell, and V. Curto, Financial Literacy Among the Young: Evidence and Implications for Consumer Policy, National Bureau of Economic Research Working Paper Series, Cambridge, MA USA, 2009.
- [32] D. Christelis, T. Jappelli, and M. Padula, "Cognitive abilities and portfolio choice," *European Economic Review*, vol. 54, no. 1, pp. 18–38, 2010.
- [33] M. Van Rooij, A. Lusardi, and R. Alessie, "Financial literacy and stock market participation," *Journal of Financial Economics*, vol. 101, no. 2, pp. 449–472, 2011.
- [34] M. Van Rooij, A. Lusardi, and R. Alessie, "Financial literacy and retirement planning in The Netherlands," *Journal of Economic Psychology*, vol. 32, no. 4, pp. 593–608, 2011.
- [35] J. W. Cresswell, *Research Design: Qualitative and Quantitative Approaches*, SAGE, Thousand Oaks, CA, USA, 1994.
- [36] J. A. Gliem and R. R. Gliem, "Calculating, interpreting, and reporting cronbach's alpha reliability coefficient for likerttype scales," in *Proceedings of the 2003 Midwest Research to Practice Conference in Adult, Continuing, and Community Education*, pp. 82–88, Columbus, OH, USA, January 2003.
- [37] C. Beanland and Z. Schneider, Nursing Research: Methods, Critical Appraisal and Utilization, Mosby, Sydney, Australia, 1999.
- [38] M. Litwin, How to Measure Survey Reliability and Validity, Sage Publications, Thousand Oaks, CA, USA, 1995.
- [39] M. Wang, C. Keller, and M. Siegrist, "The less you know, the more you are afraid of-A survey on risk perceptions of investment products," *The Journal of Behavioral Finance*, vol. 12, no. 1, pp. 9–19, 2011.