



FINANCIAL LITERACY'S IMPACT ON DECISION-MAKING PROCESS: AN EXPLORATORY STUDY IN ALGERIA

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Abstract

In the ever-evolving economic landscape of Algeria, where financial stability is intricately linked to individual well-being, the role of financial literacy becomes increasingly significant. Financial literacy, encompassing the comprehension and application of financial concepts, is a vital tool for individuals to navigate complex financial decisions. The main objective of this study is to explore how financial literacy affects the decision-making process among individuals in Algeria. The quantitative data was collected from 295 participants through an online survey using the snowball sampling method. The data was analyzed using simple linear regression to examine the correlation between key variables, including financial knowledge, financial behavior, financial attitude, and decision-making. The results suggest that solely possessing financial knowledge does not significantly affect the decision-making process. However, the study found that financial attitudes and behaviors have a positive influence on decision-making. These findings underscore the importance of considering both financial attitudes and behaviors alongside financial knowledge to enhance individuals' decision-making abilities. By exploring these connections, the study aims to contribute valuable insights that can guide the development of tailored financial literacy programs, thus empowering individuals in Algeria to make informed and effective financial decisions in their unique socio-economic environment.

Keywords: Financial Literacy, Decision-Making, Financial Knowledge, Financial Attitudes, Financial Behaviors.

JEL Codes: M40, M41.



1. INTRODUCTION

Managing personal finances is crucial in today's economic system (OECD, 2020), making financial literacy essential. Financial literacy encompasses knowledge and skills related to wise money handling, including informed decision-making on investments, debt management, and future financial planning. Extensive research consistently demonstrates the broad advantages of financial literacy for individuals, the economy, and the community. For instance, Tennyson and Nguyen (2018) found a positive link between financial literacy and effective debt management, emphasizing the importance of understanding debt obligations and making informed borrowing and repayment decisions. Similarly, studies by Kristanto and Gusaptono (2020) and Baihaqqy et al. (2020) underline the significance of financial literacy in guiding investment decision-making, irrespective of market conditions. Therefore, prioritizing financial literacy empowers individuals to manage debt, improve financial outcomes, and make informed investment choices, contributing to overall financial well-being. Financial literacy serves as a foundation for rational decision-making, enabling investors to evaluate investment options and align them with their requirements, thus enhancing expected outcomes (Sharma, 2020).

In the African context, financial education holds promise in mitigating the negative consequences of limited financial literacy and enhancing welfare initiatives (Engel Brecht, 2011). By imparting essential knowledge and skills, financial literacy can address barriers to financial inclusion, empowering consumers to effectively manage their financial resources. A noteworthy example is observed in Algeria, where an examination of financial inclusion patterns utilized data from the comprehensive and multifaceted Global Findex Database 2017 (Asli Demirgüç Kunt, 2017). This database serves as a valuable tool for assessing the current state and progress toward achieving universal access to financial services.

Based on the Global Findex Database 2017, it is evident that there was a decrease in financial account ownership in Algeria, declining from 50% in 2014 to 43% in 2017. The survey identified the primary reasons for the absence of financial accounts, which included inadequate funds (36% of respondents), the existence of a family member's account (21%), and a lack of confidence in financial institutions (15%). These results highlight the crucial role of financial literacy in addressing the barriers to achieving financial inclusion. By improving financial literacy, individuals acquire the necessary skills to effectively manage their finances, overcome financial limitations, and build trust in financial institutions. This, in turn, facilitates greater access to and utilization of formal financial services.

Furthermore, the survey found that 29% of adults in Algeria engage in borrowing activities. Among the primary sources of borrowing, 19% rely on family or friends, 5% utilize financial institutions, and 3% exclusively borrow from financial institutions. In contrast, at a global level, 47% of adults reported borrowing money, with a significant portion opting for credit cards. These results further highlight the association between financial literacy and borrowing behavior. By promoting financial education, individuals can make informed borrowing decisions, effectively manage debt, and contribute to financial inclusion and economic development. Despite the policy interest of African countries in financial literacy education (Allen & Clarke, 2018), challenges exist in measuring financial literacy due to the absence of standardized measurement tools and varying definitions of financial literacy (Lusardi & Mitchell, 2014). Moreover, obstacles such as low school enrollment rates, the prevalence of informal financial services, and the presence of an informal labor market pose difficulties in effectively promoting financial literacy (Nanziri & Luwangula, 2020). Consequently, policymakers and financial institutions should prioritize financial literacy education tailored to the specific needs of the African population, employing culturally appropriate methods and delivering content in local languages (Kizito & Khasakhala, 2020). Addressing these challenges enhances financial literacy and fosters improved financial inclusion throughout Africa.



To tackle this problem, researchers worldwide, including Zhu and Chou (2020), have devised and validated measurement instruments for assessing financial literacy, bridging the existing research gap. Among these tools is the Financial Fitness for Life (FFFL) Test, specifically tailored for Hong Kong Chinese adolescents. This comprehensive assessment encompasses various domains of financial literacy, such as financial concepts, money management, investment, insurance, and credit. Comprising 48 multiple-choice items, the FFFL Test requires approximately 50 minutes to complete. Its reliability and validity have been demonstrated through administration to a sample of 573 Hong Kong Chinese adolescents, effectively evaluating their financial literacy levels. The development of targeted measurement tools like the FFFL Test has the potential to enhance the efficacy of financial education programs by offering more accurate assessments of financial literacy across diverse demographics. This facilitates the identification of specific areas where individuals may require additional support to enhance their financial knowledge and decision-making abilities.

In essence, the fundamental purpose of this study is to contribute to the literature regarding financial literacy and decision-making by investigating the impact of financial literacy on individuals' decision-making processes in Algeria. In addition, this study aims to explore the influence of financial knowledge, behavior, and attitude on the decision-making process, examine the factors that affect financial literacy, and analyze the mediating and moderating effects of various factors on the relationship between financial literacy and decision-making.

2. CONCEPTUAL FRAMEWORK

Making investment decisions requires careful evaluation of various factors and an understanding of the external environment. Financial literacy plays a vital role in providing investors with the necessary tools to analyze these factors and make informed choices. Challenges such as ambiguity and choice overload need to be managed to mitigate potential losses. Financial literacy encompasses knowledge, awareness, skills, attitudes, and behaviors that enable individuals to make informed financial decisions and achieve financial well-being. However, there is still a gap in the literature regarding a comprehensive definition of financial literacy. Furthermore, Warmath and Zimmerman (2019) identified financial skill, Knowledge, and self-efficacy as important indicators of financial literacy, which are correlated with an individual's ability to make sound financial decisions. This study emphasizes the importance of these factors in the decision-making process and highlights the need for further research to understand the impact of financial literacy on investment outcomes.

FINANCIAL LITERACY: A COMBINATION OF KNOWLEDGE, ATTITUDE, AND BEHAVIOR

Financial literacy encompasses various components that contribute to individuals' ability to make informed financial decisions. Hung and colleagues (2009) conducted a review of early studies on financial literacy and found that they focused primarily on financial knowledge questions covering topics such as inflation, interest rates, savings and borrowing, risk diversification, insurance, and investments. To address this limitation, Hung et al. (2009) developed a financial literacy model that incorporated financial knowledge, financial skills, perceived knowledge, and financial behavior, providing a more comprehensive approach to measuring financial literacy.

Lusardi and Mitchell (2014) emphasize that financial literacy involves knowledge of fundamental mathematical concepts such as simple and compound interest, risk and return, savings, and diversification. Possessing this knowledge helps individuals make informed decisions about financial products and ensures their financial well-being. Fisch et al. (2019) further highlight that investors lacking financial literacy are more prone to unsound investing behaviors such as naive diversification, failure to identify inferior funds, and paying higher fees. The Central Bank of Brazil (2017) suggests



that basic financial knowledge enables consumers to compare and select suitable financial products and services.

Financial attitude, as highlighted by Rai, Dua, and Yadav (2019), refers to an individual's predisposition towards financial matters, including their ability to plan and maintain a savings account. OECD (2016) notes that attitudes influence individuals' decision to act or not, even if they possess sufficient knowledge and ability. Haque and Zulfıqar (2016) consider financial attitude to encompass the ability to manage finances, the desire to increase financial knowledge, spending and saving behaviors, and risk-taking attitudes when investing.

Financial behavior, as defined by Susilowati, Kardiyem, and Latifah (2020) and Dewi et al. (2020), refers to an individual's financial application behavior and the financial-related conduct that can affect their well-being. This includes aspects such as bill payment punctuality, personal budgeting, and savings for the future, as identified by Akben-Selcuk (2015).

2.1. Determinants of Financial Literacy Among Individuals

According to recent studies by various researchers, financial literacy among individuals is influenced by several determinants. Alzahrani and Alhamed (2021) found that age, education, income, and financial knowledge were significant predictors of financial literacy. Similarly, Azizi, Shateri, and Arizi (2021) identified age, education level, gender, and marital status as significant determinants of financial literacy. Additionally, Kumari and Yadav (2021) found that financial literacy was significantly influenced by age, gender, education, income, and occupation. These findings suggest that financial literacy programs and interventions should target specific demographic groups and take into account these determinants in their design and implementation.

AGE

Financial illiteracy is a significant problem that affects individuals of various age groups. Studies conducted by Lusardi and Mitchell (2007, 2011a, 2011b, 2020b, 2020c) reveal that many older adults lack proper retirement planning and knowledge about their potential Social Security and pension payments, leading to lower retirement savings and potential financial difficulties. Additionally, Lusardi and Mitchell (2007b, 2008) highlight that even younger individuals exhibit signs of inadequate financial knowledge. The consequences of financial illiteracy are substantial, as individuals with limited financial knowledge may be more likely to borrow money at higher interest rates (Lusardi and Tufano, 2009). Kharchenko (2011) found that age did not appear to be a significant factor in explaining financial literacy in Ukraine. On the other hand, Ansong and Gyensare (2012) and Altintas (2011) suggested that age is a positive predictor of financial literacy in Ghana and the United States, respectively. The findings are consistent with the study by Oseifuah et al. (2018) on financial literacy in Ghana. Therefore, addressing financial illiteracy and improving financial education across all age groups is crucial for individuals' long-term financial well-being.

GENDER

Recent research has shed light on the gender gap in financial literacy, raising concerns about women's increased vulnerability to economic challenges. Studies by Chen and Volpe (2002), and Ansong, and Gyensare (2012) indicate that women generally have lower levels of financial knowledge compared to men, which can potentially harm their financial security. This disparity is consistent across Europe, the United States, and globally, as demonstrated by Bucher-Koenen et al. (2017) and the National Financial Educators Council's (2018) report. The gender gap in financial literacy can disadvantage women, particularly those who are single or widowed, by impeding their ability to make



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informed financial decisions and effectively manage their finances. It is crucial to address this gap and provide women with essential financial information to empower them in making sound financial choices, such as saving for retirement or managing household finances. By improving financial literacy among women, we can promote their economic well-being and ensure they have equal opportunities in financial matters.

EDUCATIONAL BACKGROUND

Research conducted by Chen and Volpe (1998) and subsequent studies has consistently shown that individuals who have taken business-related courses tend to have higher levels of financial literacy. Business majors demonstrate greater financial knowledge compared to non-business majors, as indicated by their ability to correctly answer a higher percentage of financial literacy questions. Research conducted by various scholars, including Ameer and Khan (2020), Karaa and Kuu (2016), Migliavacca (2019), Nikonova et al. (2018), SARIGÜL, support this finding (2014), Yew et al. (2017), Beal and Delpachitra (2003), and Ansong and Gyensare (2012). Moreover, studies highlight that higher financial literacy is associated with increased willingness to invest in stocks, more accurate investment decision-making, and a better understanding of budgeting, savings, debt, and investing. Conversely, a lack of financial literacy can lead to poor decision-making and vulnerability to investment fraud. Thus, educational backgrounds in business, economics, finance, and accounting are recognized as valuable in developing financial literacy skills and empowering individuals to make informed financial choices.

ISLAMIC TEACHING AND FINANCIAL LITERACY

Islamic financial literacy, as defined by Falevy et al. (2022), refers to the skills and knowledge necessary to manage financial resources based on Islamic Sharia principles. Soderlund and Eriksson (2020), suggest that knowledge plays a vital role in encouraging savings, and Lusardi (2008), who notes that a lack of financial knowledge can affect loans and investments, highlights the importance of financial literacy. Lusardi (2014) further emphasizes the importance of financial literacy in decision-making, particularly in consumption decisions. Studies by Munardi et al. (2020), Falevy et al. (2022), Thohari and Hakim (2021), Anindya and Hakim (2021), Fauzi and Murniawaty (2020), and Candera et al. (2020) show that Islamic financial literacy has a positive impact on financial decision-making, including the use of Islamic banking services and interest in saving in Islamic banking.

INCOME

Recent studies conducted by Lee and Hanna (2021) emphasize the positive influence of financial education on financial literacy and shed light on the role of income in determining financial knowledge and decision-making. Higher-income individuals generally have greater access to financial resources, enabling them to engage in investment and retirement savings activities, ultimately contributing to higher levels of financial literacy. This highlights the significance of promoting financial literacy among individuals across all income levels, particularly those with limited financial resources. Income disparities play a substantial role in financial knowledge, as lower-income individuals often exhibit lower levels of financial literacy, leading to adverse financial outcomes. Previous research supports these findings, indicating that individuals with lower incomes are less likely to possess sufficient financial knowledge, which hampers their ability to save and participate in retirement savings plans. Moreover, they may be more susceptible to borrowing from high-cost lenders, resulting in poor borrowing practices and excessive indebtedness. Therefore, enhancing the financial literacy of low-income adults holds the potential to positively affect the overall economy, as acknowledged by scholars such as Neuberger et al. (2006), and Schaffer, and Mohs (2016).



GEOGRAPHIC LOCATION

Geographic location plays a crucial role in determining financial literacy, as evidenced by various studies. For example, Peng et al. (2018) found that southern regions in Italy tend to have lower levels of financial knowledge than their northern counterparts. Similarly, eastern and southern US states have lower levels of financial literacy compared to the northern states. Disparities in financial literacy also exist between rural and urban areas, with rural communities facing challenges in accessing financial education and resources (Klapper & Panos, 2011; Bottazzi & Lusardi, 2021). These areas often have unique financial challenges, such as income fluctuations from seasonal or agricultural work, which require specialized financial knowledge. To address these disparities, it is essential to enhance financial education and resources in rural areas to enable individuals to make informed financial decisions and improve their financial wellness. Cole and Shastry (2019) propose mobile banking as an effective tool for improving financial literacy and inclusion in rural areas. Additionally, Chen and Volpe (2018) found that financial education programs specifically designed for rural populations could improve financial literacy. These programs may involve workshops, online resources, and one-on-one counseling to help individuals better understand financial concepts and make informed financial decisions. By addressing the geographic factors that affect financial literacy, we can promote greater financial well-being and empowerment for individuals across diverse locations.

PARENT'S LEVEL OF EDUCATION

Further research provides support for the significant role of parental education level in determining a child's financial literacy. Von Gaudecker et al. (2021) conducted a study indicating that individuals whose parents had higher levels of education were more likely to possess better financial literacy skills. This relationship was found to be influenced by increased access to financial resources and opportunities facilitated by parental education. Similarly, van Rooij et al. (2020) observed that parents' education level correlated with their children's financial literacy, even after accounting for household income and other factors. The study highlighted that parents with higher education levels were more inclined to engage in financial discussions with their children, leading to improved financial literacy outcomes. Behrman et al. (2020) further affirmed the significance of parental educational attainment, particularly among young adults in low- and middle-income countries. The study found that individuals whose parents had higher education levels demonstrated better financial literacy skills, irrespective of income and other variables. These findings emphasize the importance of promoting financial education and resources for individuals and families from diverse socioeconomic backgrounds. By expanding the accessibility of financial education and resources, individuals and families can enhance their financial knowledge and skills, resulting in improved financial outcomes and increased financial security, regardless of their parent's education level.

FINANCIAL EXPERIENCE

Financial experience is a crucial factor in determining financial literacy, as supported by research conducted by Sohn et al. (2012) and Teeni-Harari (2016). These studies highlight that individuals who engage in financial activities such as having a bank account or receiving an allowance tend to possess higher levels of financial knowledge. By actively participating in real financial experiences, individuals develop cognitive skills and enhance their understanding of financial concepts. Furthermore, childhood experiences and family financial incidents also shape financial literacy and behavior in adulthood, as noted by Grohmann, Kouwenberg, and Menkhoff (2015). Possessing an automatic Teller Machine card and a bank account during school years has been found to improve financial literacy, while owning a credit card as a student may have the opposite effect, as suggested by Cameron et al. (2014). Factors such as numeracy, confidence or self-efficacy, and deliberate decision-making also influence individuals' financial decision-making



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performance, according to Skagerlund et al. (2018). Therefore, gaining financial experience and engaging in financial activities contribute significantly to the development of financial literacy.

2.2. Financial Literacy And Decision-Making Process

Financial literacy plays a vital role in making informed investment decisions, as evidenced by numerous studies. Research has shown that individuals with higher levels of financial knowledge are more likely to make sound financial choices and achieve better investment outcomes (Hikmah et al., 2020). Financial education and access to resources are crucial in helping individuals navigate investment options and improve their overall financial well-being.

Studies have examined the relationship between financial literacy and household financial decision-making, revealing that higher levels of financial literacy are associated with better decision-making in areas such as budgeting, saving, borrowing, and investing. For example, research has shown that financial education courses improve financial behavior, such as credit card payment, debt management, bill payment, and savings (Mandell & Hanson, 2009). Studies conducted in different countries have consistently demonstrated that financial literacy positively influences retirement planning, participation in pension funds, and investment choices (Lusardi & Mitchell, 2011; Fornero & Monticone, 2011; Sekita, 2011; Abreu & Mendes, 2010).

The decision-making process for investments is influenced by cognitive, psychological, social, and behavioral factors, highlighting the importance of financial literacy in guiding investment decisions (Kristanto & Gusaptono, 2020; Baihaqqy et al., 2020). Furthermore, various studies have shown that financial literacy is associated with managing debt effectively, making informed investment decisions, and improving financial outcomes (Klapper & Panos, 2011; Almenberg & Säve-Söderbergh, 2011; Bucher-Koenen & Lusardi, 2011). The evidence suggests that individuals with higher financial literacy levels tend to make better financial decisions, achieve greater success with their investments, and manage their debts more effectively. Promoting financial education and literacy programs is crucial to enhancing individuals' financial well-being and mitigating the negative impact of financial illiteracy (Tennyson & Nguyen, 2018). These programs should be accessible to individuals of all backgrounds and ages to ensure widespread development and improvement of financial literacy skills.

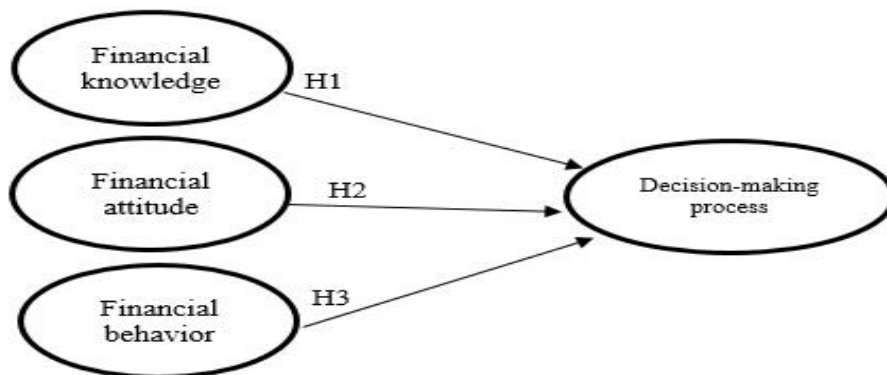


Figure 1: Research model

Source: Self-developed based on (Kumari, D.A.T 2019)



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Thus, from the aforementioned discussion, the following hypothesis can be formulated:

H1: Financial knowledge has a significant positive impact on the decision-making process.

H2: Financial attitude has a significant positive impact on the decision-making process.

H3: Financial behavior has a significant positive impact on the decision-making process.

3. RESEARCH METHOD

3.1. Method of Analysis

To address our research problem and examine our research hypotheses, we conducted a quantitative study to measure the impact of financial literacy on the decision-making process. This study involved administering a questionnaire survey inspired by the OECD (2020) framework, which encompasses financial knowledge, financial behavior, and financial attitudes.

The questionnaire was structured into four sections: survey eligibility, financial knowledge, financial behavior, and financial attitudes. The survey eligibility section aimed to gather demographic information from the respondents, including gender, age, family situation, employment status, educational level, and field of study. This section ensured that only eligible participants meeting the study's criteria were included in the subsequent analysis.

The financial knowledge section (Q13-Q29) consisted of questions designed to assess respondents' comprehension of various financial concepts. These questions covered areas such as budgeting, saving, investing, borrowing, and other aspects of personal finance and economics. The objective was to evaluate the level of financial knowledge possessed by the respondents.

The financial behavior section (Q30-Q34) comprised five items measured on a 5-point Likert scale, capturing individuals' financial behavior, including attitudes, habits, and decision-making processes related to financial management. The questions explored spending and saving behaviors, as well as debt management, providing insights into respondents' financial behavior and decision-making tendencies.

The financial attitude section (Q35-Q40) included six questions also measured on a 5-point Likert scale. These questions assessed individuals' financial beliefs, emotions, and perceptions, covering topics such as attitudes toward spending and saving, as well as conceptions of wealth and financial stability.

The collected data were subjected to statistical processing using the BIM SPSS program. For hypothesis testing, two steps of statistical analysis were performed. The first step involved a descriptive analysis to identify the profiles of the respondents. This analysis provided a comprehensive overview of the demographic characteristics of the sample, allowing for a better understanding of the context in which the study was conducted.

The second step involved an explanatory analysis using simple linear regression. This analysis aimed to test the research hypotheses. Simple regression analyses were employed due to the characteristics of the variables in the theoretical model. To determine the validity of the model, we followed the recommended threshold from the literature, requiring the ANOVA significance level to be below 0.05 and the adjusted R² to exceed 10%. These statistical analyses allowed us to assess the relationship between financial literacy and the decision-making process.

3.2. DATA

In our study, we focused on a sample of 295 respondents from diverse regions across Algeria. The sample consisted of individuals who had access to the survey, including Facebook friends, LinkedIn professionals, and students. To select the sample, a non-probabilistic judgment-based sampling method was used, aiming to make the sample representative and include individuals likely to provide pertinent information. Additionally, a snowball sampling method was employed to increase the sample size. The study initially contacted 190 individuals and received 295 responses. Data treatment and analysis involved



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descriptive and frequency analyses, as well as a preliminary analysis to identify missing or extreme values. The sample exhibited diverse characteristics, with a majority of respondents being university graduates or currently enrolled students. The age distribution was concentrated in the 18-25 and 26-35 age ranges. The sample also displayed diversity in fields of study and geographic distribution across various provinces in Algeria.

4. FINDINGS AND DISCUSSION

4.1. Results of The Unidimensional Analysis

Table 1 displays the demographic profile of the respondents who participated in the questionnaire survey. The table indicates a gender distribution among the sample, with a predominant presence of both males and females. Most of the respondents fell within the age brackets of 18-25 and 26-35. Regarding marital status, most participants reported being unmarried and without children. Approximately 56.6% of the respondents reported having an income, primarily falling within the lower income brackets. Within this subgroup, a significant majority belonged to the lower income ranges. The educational attainment of the sample was predominantly at the university level, with 93.9% having attended a university. Employment status varied, with slightly over half of the respondents identifying as students, unemployed, or retired. In terms of fields of study, the sample exhibited diversity, with a significant proportion having pursued business and management disciplines. Geographically, respondents resided in various provinces across Algeria, reflecting a diverse representation of residential locations.

Table 1: Respondent Profiles

	Variable	Frequency	Percentage (%)
Gender	Female	149	50,5
	Male	146	49,5
Age	18-25	141	47,8
	26 – 35 years old	104	35,3
	36 -45 years old	32	10,8
	46 - 55 years old	13	4,4
	56 - 65 years old	4	1,4
	Over 66 years old	1	0,3
	Family situation	Single	230
Married		60	20,3
Widow		1	0,3
Divorced		4	1,0
Do you have children?	Yes	48	16,3
	No	247	83,7
Number of children	1	10	3,4
	2	20	6,8
	3	10	3,4
	4	5	1,7
	5	3	1,0
Do you have an income?	Yes	167	56,6
	No	128	43,4
Educational level	Middle school	1	0,3
	Secondary school	4	1,4
	University	277	93,9
	Professional training	9	3,1
	Mosque	1	0,3
	Other	3	1,0



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Place of living (Province)		
01 Adrar	13	4,4
02 Chlef	15	5,1
03 Laghouat	2	0,7
04 Oum El Bouaghi	8	2,70
05 Batna	6	2,0
06 Béjaïa	3	1,0
07 Biskra	2	0,7
08 Béchar	1	0,3
09 Blida	20	6,8
10 Bouira	5	1,7
11 Tamanrasset	1	0,3
12 Tébessa	5	1,7
13 Tlemcen	22	7,5
14 Tiaret	5	1,7
15 Tizi Ouzou	7	2,4
16 Algiers	75	25,4
17 Djelfa	8	2,7
18 Jijel	2	0,7
19 Sétif	7	2,4
20 Saïda	1	0,3
21 Skikda	1	0,3
22 Sidi Bel Abbès	2	0,7
23 Annaba	1	0,3
24 Guelma	1	0,3
25 Constantine	4	1,4
26 Médéa	4	1,4
27 Mostaganem	2	0,7
28 M'Sila	3	1,0
29 Mascara	7	2,4
30 Ouargla	1	0,3
31 Oran	12	4,1
32 El Bayadh	1	0,3
33 Illizi	3	1,0
34 Bordj Bou Arreridj	4	1,4
35 Boumerdès	3	1,0
37 Tindouf	1	0,3
38 Tissemsilt	1	0,3
39 El Oued	2	0,7
41 Souk Ahras	2	0,7
42 Tipaza	13	4,4
43 Mila	3	1,0
44 Aïn Defla	2	0,7
45 Naâma	1	0,3
46 Aïn T'émouchent	3	1,0
47 Ghardaïa	1	0,3
48 Relizane	3	1,0
50 Bordj Badji Mokhtar	2	0,7
55 Touggourt	3	1,0
58 El Meniaa	1	0,3



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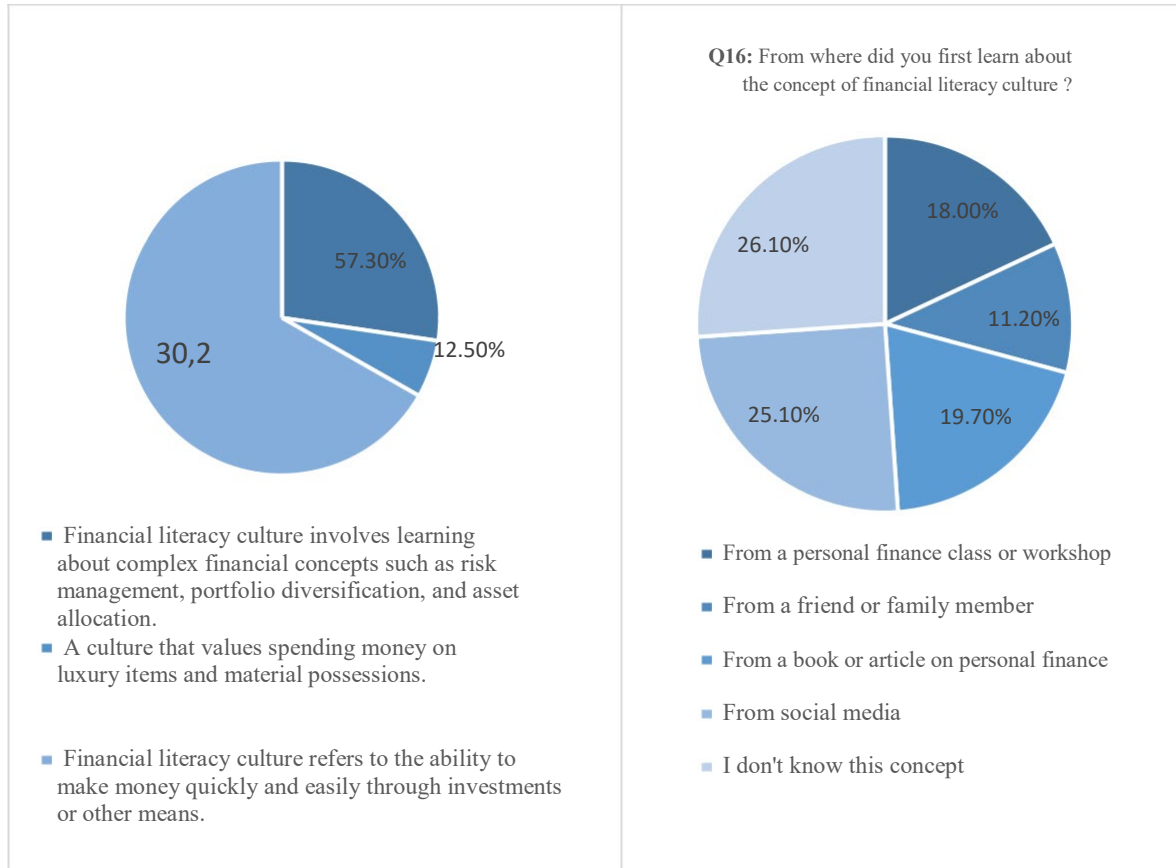


Figure 2: Understanding of financial literacy culture

Figure 3: The key source for engaging with FL

The analysis of Figure 2 suggests that most of the respondents (57.3%) view financial literacy culture as involving the learning of complex financial concepts.

Additionally, Figure 3 indicates that social media was the most commonly reported source (25.10%) for respondents to first encounter financial literacy culture. Other sources of learning included personal finance classes or workshops, books or articles on personal finance, and friends or family members. Notably, most of the respondents (26.10%) reported being unfamiliar with the concept of financial literacy culture., it can be concluded that there is a general understanding among respondents that financial literacy culture involves the acquisition of knowledge on complex financial concepts.

Table 2: Familiarity of respondents to different areas of personal finance

Statements	Frequency					Mean	Level of familiarity
	Not at all familiar	Slightly familiar	Moderately familiar	Very familiar	Extremely familiar		
Q1: Familiarity with retirement planning and the steps needed to ensure a comfortable retirement	61	90	95	37	12	2,49	Slightly familiar



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Q2: Familiarity with financial technology (FinTech) and its applications in personal finance	146	66	38	34	11	1,98	Slightly familiar
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Mean: [1-1,8[Not at all familiar | [1,8-2,60[Slightly familiar | [2,60-3,40[Moderately familiar | [3,40-4,20[Very familiar | [4,20-5] extremely familiar

The analysis of Table 2 and Q1 indicates that most of the sample have some level of familiarity with retirement planning. However, a significant minority 61 (20.7%) claimed to have no familiarity with it.

In addition, Q2 shows that almost half of the sample 146 (49.5%) have no familiarity with FinTech and its applications in personal finance. Most of the remaining respondents are only slightly or moderately familiar with FinTech, while a small proportion claim to be extremely familiar.

The calculation of mean scores for both Q1 and Q2 indicates that respondents exhibit only a Slight level of familiarity with different aspects of personal finance. This is because the mean scores for both questions fall within the range of 1.8 to 2.6, which is categorized as "slightly familiar" based on the scale provided.

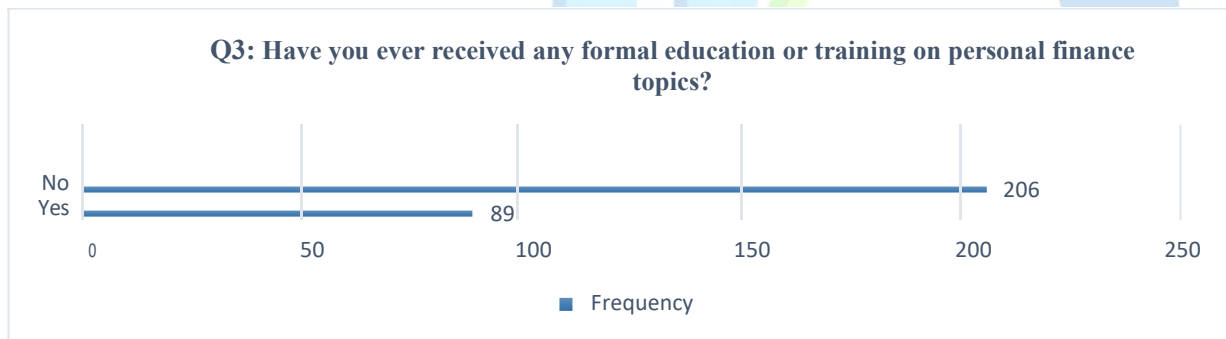


Figure 4: Level of expertise in financial matters

In the analysis of Figure 4 and question Q3, 206 (69.8%) answered "No," while 89 (30.2%) answered "Yes." This suggests that most of the sample has not received formal education or training on personal finance topics, highlighting a potential need for greater financial literacy education.

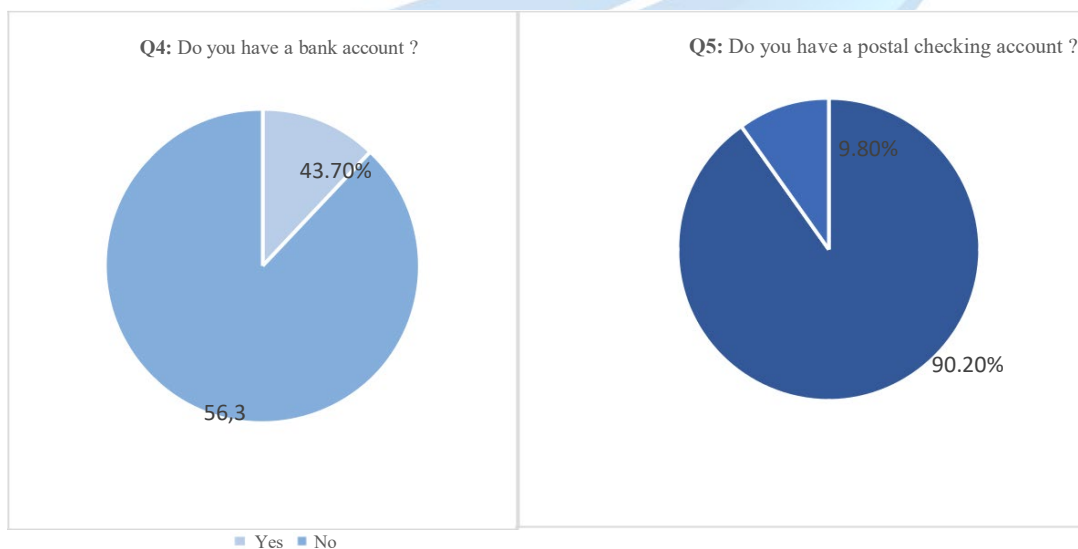


Figure 5: Bank accounts and postal checking ownership



Based on the findings from examining Figure 5 and Q4, it can be concluded that most of the sample, 56.3%, do not possess a bank account, while 43.7% do have a bank account. Furthermore, the analysis of Q5 reveals that a significant majority of respondents, 90.2%, have a postal checking account, whereas only a minority of 9.8% do not have a checking account.

4.2. RESULTS OF THE SIMPLE REGRESSION ANALYSIS

The process of hypothesis testing involved using simple regression analyses to test the research hypotheses. The characteristics of the variables in the theoretical model made this type of analysis possible. To determine the validity of the model, the recommended threshold from the literature was used, which requires that the ANOVA significance level be below 0.05 and the adjusted R² exceed 10%.

4.2.1. THE IMPACT OF FINANCIAL KNOWLEDGE ON THE DECISION-MAKING PROCESS

A basic regression analysis was done to see if there was a connection between financial knowledge and decision-making. However, the findings in Table 03 show that financial knowledge did not have a significant effect on decision-making. The results indicate that the R-squared value was only 0.001, which is lower than the accepted threshold of 0.10. The beta coefficient (β) was -0.031, and the significance level (Sig) was 0.597, which means that financial knowledge had no impact on decision-making. Therefore, the research hypothesis H1 is rejected.

Table 3: Linear regression results 1

Independent variable	Dependent variable	R ²	R ² adjusted	F	β	t	Sig
Financial Knowledge	Decision-making (ability to budget and forecast for their business)	,001	-,002	,280	-,031	-,529	,597

4.2.2. THE IMPACT OF FINANCIAL ATTITUDE ON DECISION-MAKING PROCESS

To investigate the correlation between the independent variable financial attitude and the dependent variable decision-making, a basic regression analysis was conducted.

Table 4 shows that there is a significant link between financial attitude and decision-making. The analysis reveals that financial attitude has a positive and substantial effect ($\beta = ,393$ Sig = 0.001) on individuals' attitudes towards retirement planning and investment, with an R-squared value of 0.154, which is higher than the accepted threshold of 0.10. This means that an increase in financial attitude can significantly enhance individuals' decision-making. Thus, the hypothesis H2 is accepted by these research findings.

Table 4: Linear regression results 2

Independent variable	Dependent variable	R ²	R ² adjusted	F	β	t	Sig
Financial attitude	Decision-making(saving for retirement)	,154	,151	53,385	,393	7,306	,001



4.2.3. THE IMPACT OF FINANCIAL BEHAVIOR ON DECISION-MAKING PROCESS

A basic regression analysis was conducted to investigate the relationship between the independent variable of financial behavior and the dependent variable of decision-making. Table 05 shows that there is a significant association between financial behavior and decision-making. The analysis indicates that financial behavior has a positive and substantial impact ($\beta = .327$ Sig = 0.001) on individuals' behavior when it comes to financial matters, with an R-squared value of 0.107, which exceeds the accepted threshold of 0.10. This suggests that improving financial behavior can significantly increase individuals' tendency to evaluate options before decision-making. As a result, these research findings support hypothesis H3.

Table 5: Linear regression results 3

Independent variable	Dependent variable	R2	R2 adjusted	F	β	t	Sig
Financial behavior	Decision-making(purchase)	,107	,104	35,172	,327	5,931	,001

4.3. DISCUSSION

The study's results indicate that financial knowledge does not have a significant positive impact on decision-making (H1). This suggests that possessing financial knowledge does not guarantee better financial decision-making. Other factors, such as attitudes and behaviors, may play a more influential role. These findings contradict previous research that highlights the role of financial education in decision-making.

On the other hand, the study confirms that individuals with a favorable attitude toward retirement planning and those who thoroughly evaluate options before making purchases are more likely to make sound financial decisions (H2). This aligns with previous research that emphasizes the impact of attitudes on decision-making. It suggests that even if individuals have the knowledge and ability to act, their attitudes significantly influence their decision to act or not.

Furthermore, the study reveals a positive correlation between financial behavior and decision-making, specifically in terms of assessing options before making purchases. Enhancing financial behavior can significantly increase individuals' inclination to evaluate options before making decisions. This supports the idea that improving financial behavior can have a beneficial impact on decision-making (H3). These findings are consistent with previous research in the field.

To sum up, this study underscores the importance of promoting financial education and fostering a positive attitude towards financial matters, particularly among young individuals. It highlights that financial knowledge alone is not enough to ensure sound decision-making and emphasizes the need to consider attitudes and behaviors. By improving financial behavior, individuals can enhance their decision-making abilities and make more informed choices regarding their finances.

5. CONCLUSIONS AND SUGGESTIONS

5.1. Conclusions

In conclusion, this study employed a quantitative research approach to examine the influence of financial knowledge, attitude, and behavior on the decision-making process. The findings provided valuable insights into the characteristics of the sample, which consisted of individuals from diverse



backgrounds in terms of age, gender, income, education, employment status, field of study, and place of residence.

The results of the study confirmed that financial attitude and financial behavior have a positive and significant impact on the decision-making process. Individuals who exhibited a favorable attitude towards financial matters and engaged in responsible financial behaviors were more likely to make sound decisions regarding their finances. These findings highlight the importance of considering not only financial knowledge but also cultivating positive attitudes and behaviors in promoting financial literacy and improving individuals' long-term financial well-being.

Contrary to initial hypotheses, the study did not find a significant positive impact of financial knowledge on the decision-making process. This suggests that possessing financial knowledge alone does not guarantee better financial decision-making. Instead, the study emphasizes the need to focus on developing positive attitudes and behaviors alongside financial knowledge to facilitate informed decision-making.

In light of these findings, policymakers, educators, and financial institutions must prioritize comprehensive financial education programs that encompass not only the acquisition of knowledge but also the cultivation of positive attitudes and responsible financial behaviors. By promoting a holistic approach to financial literacy, individuals can develop the skills and mindset necessary to make informed and sound financial decisions, ultimately enhancing their long-term financial well-being.

5.2. Suggestions

Several strategic considerations are proposed for enhancing the methodological robustness and generalizability of our study. Firstly, expanding the sample size is crucial for bolstering the robustness of the results and promoting the generalizability of the findings to diverse populations. Secondly, delving into additional variables or factors that might influence the phenomena being investigated, such as demographic or contextual elements, is essential for acquiring a more comprehensive understanding of the topic. Thirdly, employing varied research methods or data collection techniques, including qualitative or mixed-methods approaches, is recommended to attain a more nuanced and multifaceted perspective on the subject, thereby enhancing the credibility of the study's outcomes through triangulation. Lastly, considering the implementation of a longitudinal study would enable researchers to observe and analyze the phenomena over an extended period, providing valuable insights into how the factors under investigation may evolve or change over time.

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