

The Effect of Undergraduate Programs on Financial Literacy Level: The Case Of Kosovo

Soner YILDIRIM¹, Munevver MUYO YILDIRIM^{2*}, Luan VARDARI³

¹⁻²University "UKSHIN HOTI" Prizren, Faculty of Education, Kosovo

³University "UKSHIN HOTI" Prizren, Faculty of Economy, Kosovo

ABSTRACT

This study aimed to determine the financial literacy levels of students studying in different programs at the university. For this purpose, the content of undergraduate education programs and the effect on the individual's financial literacy were investigated. The study assumes that financial literacy, which is necessary for life, will be gained by students, their families' awareness of the subject, and educational programs. The research was conducted with 335 students in four programs at the University of Prizren "Ukshin Hoti". The descriptive study conducted with a random sample group collected the data with the Financial Literacy scale. The scale applied consisted of four parts in total, such as the demographic characteristics of the students in the first part, Financial Product Knowing (13 questions), which measures financial literacy knowledge in the other sub-dimensions, Relation with Money (7 questions), and Information Source about Financial Products (15 questions). In addition, cluster analysis, comparative analysis, Chi-Square, and T-test analyses of the collected data were performed with the SPSS 28 program. As a result of the study, it was determined that the student's financial literacy and general success levels were at MEDIUM LEVEL. Although the students participating in the survey studied in different departments, there was no significant difference. According to the study results, it is concluded that the Financial Literacy knowledge of the students is not sufficient, and they need to have more information about themselves in this field. Similarly, in the light of the data obtained, it has been determined that providing various in-service training for the financial literacy levels of the students or adding Financial Literacy courses to the education programs will strengthen the student's knowledge of this subject and increase their awareness.

Keywords: Curriculum, Financial Literacy, Student

INTRODUCTION

Universities worldwide make progress towards being an environment of innovation and entrepreneurship. This progress can only be achieved by establishing sound and suitable educational environments in universities. Attracting qualified faculty members to the university, renewing the theoretical knowledge of the existing faculty members with up-to-date information, gaining the ability to show themselves quickly in practice, accelerating the teamwork of the technical staff at the university, and doing business for solutions are the leading factors in increasing the quality of the university, which ensures that the university is an entrepreneurial and innovative center environment. Students who will grow up in such an environment create a privilege in putting the knowledge they have learned and the quality education they receive into practice in their daily lives. Undoubtedly, it is possible to raise well-equipped individuals with the quality required by time and give satisfaction. This study's basic assumption is that those university students who represent the future practice what they can gain through their education programs as a skill in their own lives. With this assumption, the content of undergraduate education programs, financial education, and financial literacy gained by university students gain importance. Regardless of the department they are studying, financial education given to

students studying at universities at the primary level is an important step. By applying their theoretical knowledge to real-life, students learn how to manage money best from how they can spend their money correctly and profitably.

The papers collectively suggest that undergraduate programs have an impact on the financial literacy level of students. Böhm (2023) found that factors such as gender, father's education, family's financial background, and part-time work experience influenced the level of financial literacy among undergraduate students. Klapper (2013) found that higher financial literacy was associated with greater

Corresponding Author e-mail: munevver.muyo@uni-prizren.com

tps://or id.org/0000-0003-4720-0045

How to cite this article: YILDIRIM S, YILDIRIM MM, VARDARI L (2024). The Effect of Undergraduate Programs on Financial Literacy Level: The Case Of Kosovo. Pegem Journal of Education and Instruction, Vol. 14, No. 3, 2024, 170-182

Source of support: Nil.

Conflict of interest: None

DOI: 10.47750/pegegog.14.03.16

Received: 09.08.2023

Accepted: 06.11.2023

Published : 01.07.2024

participation in financial markets and a lower reliance on informal borrowing sources. Additionally, individuals with higher financial literacy were better equipped to handle income shocks and had higher spending capacity. Oseifuah (2018) found that students' experience in handling money positively influenced their financial literacy, and saving out-of-pocket incomes was an important consideration in managing personal finances. Batizani (2022) highlighted the lack of financial knowledge and competencies among undergraduate students in Malawi.

Although university years are the first step towards a free life for many students, the same cannot be said for students who study at university with their parents. University students who study independently from their families should be able to adjust their expenses and make financial decisions alone (Muyo & Vardari, 2020). Therefore, it is essential to include the students from the departments who study in different departments at the university, who take financial courses according to their education programs, in terms of how the knowledge levels for literacy differ between departments. For this purpose, the content of undergraduate education programs and the effect on the individual's financial literacy were investigated. The study's basic assumption is that financial literacy, which is necessary for life, will be gained by the families' awareness of the subject and educational programs.

For this purpose, it has been tried to determine the effect on the financial literacy levels of the students studying at the faculties of Education, Economics, Law, and Computer Programming of the Prizren "Ukshin Hoti" University, which is a state university in Prizren, Kosovo and provides education in three different languages. A total of 335 students participated in the study, which were students in semesters 2, 4, 6, and 8. The effects of the students' lessons in their education, their life philosophies, and the practical intelligence they used in their daily life conditions on their financial literacy levels were collected using the Financial Literacy scale. The obtained data were analyzed with the SPSS 28 package program. It aims to reveal university students' knowledge levels of financial literacy.

This research underscores the pressing need for enhanced financial literacy among university students and the broader population. The data analysis reveals that students generally possess only intermediate levels of financial literacy, with significant variations based on gender and academic discipline. Additionally, participants displayed varying degrees of knowledge regarding financial products, mainly showing pronounced awareness of Mobile Payment Accounts and Insurance funds.

This study underscores the urgent necessity for bolstering financial education at the university level and beyond.

The findings emphasize the importance of equipping students with the knowledge and skills to navigate complex financial decisions effectively. As the world grapples with increasingly intricate economic and financial challenges, it becomes imperative to address the existing gap in financial literacy to ensure both individual financial well-being and the stability of societies and nations.

The alignment of our findings with those of previous research, notably Er et al. (2021), reinforces the importance of prioritizing financial literacy programs in educational settings. Academic institutions should consider updating their curricula to incorporate financial literacy as a compulsory course across all departments, equipping students with the essential tools and knowledge to make informed financial decisions.

Considering these results, this study highlights the need for improving financial literacy. It lays the foundation for further research and practical interventions to enhance financial knowledge and awareness among students and the wider community.

LITERATURE REVIEW

According to Atkinson and Messy (2012), financial literacy, making the right financial decision, combines awareness, knowledge, skills, attitudes, and behaviors to reach the person's welfare. The concept of financial literacy is also essential for university students. University students use financial products such as registration-application bill payments, credit cards, pocket money for those studying away from their families, and Internet banking for rent payments. While this young generation, which is just at the beginning of the road, is on their way to their careers, there is a long way to plan, decide, and manage their lives financially. To carry out this journey financially depends on the financial literacy of the student's family, which is the source of financial information, and the compulsory addition of economic subjects to the education programs at the university they are studying. In this context, it is easier for parents to be knowledgeable about financial issues, to be able to think practically in daily life, to be a good model for the children they raise, and to be easy to understand and students to derive similar examples when financial education is given to children in schools. In short, individuals who can make sound financial decisions are raised. Financial literacy is an individual's ability to spend, invest, and manage their savings wisely per their budget. This financial literacy skill is important first for the individual himself and then for the economic interests of the society (Jadon, 2020; Lilia, 2022) .

Temizel and Bayram (2011), trying to determine the basic level of financial literacy of Anadolu University Faculty

of Economics and Administrative Sciences students, applied a questionnaire to 433 students. According to the analysis results, it was observed that the students saw themselves as more successful than they were in managing their financial issues. It has been seen that television and the Internet are the primary sources that students follow economic and financial developments. It has been determined that the family is learning the basics of financial information. They suggested various projects and training to increase results-oriented researchers' financial literacy levels.

Ansong and Gyensare (2012), examining the financial literacy levels of university students, applied a questionnaire to 250 undergraduate and graduate students studying and working in Ghana. According to the findings obtained from the study, a significant positive relationship was found between age, work experience, and the mother's educational status from the family and financial literacy level. However, no relationship was found between the father's education level, place of work education level in the family, and financial literacy.

In the complex financial world, the ability of individuals who make financial decisions to make healthy decisions is undoubtedly related to their financial literacy level. In this context, the scale used to determine the financial literacy levels of Gaziantep University students by Kılıç, Ata, and Seyrek (2015) was examined regarding different demographic characteristics. As a result of the study, the student's general financial literacy success level was 48%. The financial literacy level of male students was higher than that of female students. It has been observed that credit cards and Internet banking effectively affect economic literacy levels. It has been observed that the area where the students have the most financial literacy information is retail banking. In contrast, the field they have the slightest knowledge of is the subject of investment. In addition, it has been determined that students are more sensitive to current financial information.

Temizel and Sönmez (2014) studies were carried out with 824 students studying at five state universities operating in Eskişehir, Bursa, and Istanbul. 40.4% of the students are from verbal education, and 59.6% are from numerical education, and the effect of undergraduate education programs on financial literacy levels in the departments they study was examined. The financial literacy scale prepared for OECD countries was used, and it was determined that 31.7% of the students had HIGH, 30.1% MEDIUM, and 16% LOW financial literacy. Furthermore, a significant relationship was found between different fields (numerical-engineering faculty, verbal-economic, and administrative sciences faculty) and financial literacy levels at the university.

Ünal et al. (2016) used a 14-item scale (Sarıgül, 2015) to determine the financial literacy levels of 743 pre-service

teachers studying in the primary education department of a state university in Ankara. As a result of descriptive statistics, one-way ANOVA, and t-test analyses for unrelated samples, it was determined whether the financial literacy levels of teacher candidates vary according to their demographic characteristics (the department they study in, their classes, the monthly income, and the gender of the families). From the questionnaire, significant relationships were observed between the financial literacy levels of teacher candidates and some demographic characteristics. However, while a meaningful relationship was observed between the level of financial literacy and the department attended, and the class attended, It was concluded that there is no significant relationship between the family's monthly income and gender.

Dilek, Küçük, and Eleren (2016) studied the financial literacy levels of students studying at Kastamonu University. In the study, which supports similar studies in the literature, university students gave medium and high-value answers to the questions. Even if the results obtained show that the FEAS students, who are given economics education, are partially sufficient in financial literacy, it has been determined that there are many points to improve themselves. No statistically significant difference was found between age groups' demographic features, marital status, gender, and financial literacy.

Yücel and Çiftçi (2018) tried to determine whether the financial literacy levels of university students are affected by independent variables such as class, gender, and income, and to what extent the financial information resources of university students affect their financial decisions. In the research, a ten-question questionnaire was used to determine the financial literacy levels of the students. As a result of the survey, it was concluded that 45% of the students had average knowledge of financial literacy, and 38.6% were successful in financial matters.

Aydın (2018) conducted a study on 300 students in the context of primary finance education given at the university, measuring the financial literacy status of students. It was tried to determine whether there was an improvement in financial literacy by applying a questionnaire before and after the students took the relevant courses. The critical feature of the research will be a critical evaluation of the financial education given at universities. The survey results showed remarkable differences between female and male students. While female students were shyer than male students in terms of using debt, the rate of female students who made an economic plan for more than one year was higher than the early students.

Furthermore, an increase has been recorded in the ratio of male and female students who make an economic plan for more than one year after students take introductory

finance courses. In line with the results obtained, it has been determined that reviewing the curriculum in these two introductory finance courses that students have taken is helpful. Many points need to be developed as content, especially within the scope of financial literacy skills in these two introductory finance courses.

Muyo-Yildirim and Vardari (2020) tried to determine the demographic characteristics of university students, their basic level of financial economics, banking, and advanced mathematics-financial literacy levels. The study was carried out with 276 students studying Turkish and Albanian at the University of Prizren “Ukshin Hoti”. The descriptive research was conducted with a random sample group that collected the data using the applied Financial Mathematics Literacy Scale. As a result of the study, the student’s financial mathematics literacy general success level was 39.7%. The fact that the financial mathematics literacy knowledge levels of the students of the Faculty of Economics are higher than the students of the Faculty of Education and the Faculty of Technology and that the students of the Faculty of Education are at the forefront of the students of the Faculty of Technology are satisfactory. In addition, considering that university students will be more sensitive to their current financial-economic information, the general success in the findings is not expected to be lower than 40%.

METHODOLOGY

A questionnaire was applied to 335 students at the University of Prizren, “UKSHIN HOTI” from 5 faculty in the semester 2,4,6 and 8. In the survey study, firstly, questions about demographic characteristics were included, and in the following part, 3-scale questions were included; these are questions to measure the Financial Literacy Levels of the students, questions to gauge their knowledge about Financial Products, and questions about how they know the Choice of the Financial Product.

To reveal the financial literacy level of the individuals (students) who are the research subject, SPSS 26 and AMOS program and cluster analysis were used. As a result of the analysis, the participants in the study were grouped into three groups in terms of their financial literacy levels. It was tested whether there was a relationship between the clusters formed and gender and financial literacy. In addition, the knowledge of financial products according to the field of education of the anchors, the information sources they used in the selection process of the financial product were examined, and whether their preferences for various expressions related to money differed with the T-test. Finally, whether the sources that are effective in selecting financial products are described to the learning area of the students or not was determined by

calculating the Spearman rank correlation coefficient.

FINDINGS

Cluster analysis was carried out by using 35 questions on financial information on the scale to determine the financial literacy levels of the students. According to their economic literacy levels, university students were separated from each other by cluster analysis. First, the study of gender, financial literacy, and department results is given in Table 1. As a result of analyzing students’ financial literacy levels, they are grouped into high, medium, and low.

Table 1: Demographic Analysis

		<i>Frequency</i>	<i>Percent</i>
Gender	Female	174	51.9
	Male	161	48.1
Financial Literacy Level	High	107	31.9
	Medium	134	40.0
	Low	94	28.1
	Faculty of Education	87	26.0
Department	Faculty of Economics	94	28.1
	Faculty of Computer Science	75	22.4
	Faculty of Law	79	23.6

Table 1 shows the demographic characteristics, financial literacy levels, and averages of the study departments for the students participating in the study. The total number of students is 335, with female students (174) 51.9% and male students (161) 48.1% by gender. Considering the financial literacy levels, 40.0% was determined as MEDIUM, 31.9% as HIGH, and 28.1% as LOW. When the departments of the students participating in the survey are examined, the percentages of the students in the FACULTY of ECONOMY with 28.1%, FACULTY of EDUCATION with 26.0%, FACULTY of LAW with 23.6%, and FACULTY OF COMPUTER SCIENCES with 22.4% were determined according to their educational fields.

In Table 2, it was observed that 36.6% of the male students had a HIGH level of financial literacy and 43.7% of the female students had a MEDIUM level of financial literacy with the cluster analysis in the comparison of the Financial Literacy level of the students according to their Gender and Departments. According to the departments, the highest level of financial literacy was observed to be HIGH, with 38.7% (30) of the students studying at the FACULTY of COMPUTER SCIENCE. The MEDIUM level financial literacy was 44.7% (42), Faculty of Education (37), and 42. Therefore, it has

Table 2: Financial Literacy Level in terms of Gender and Faculty

	<i>High Medium</i>		<i>Financial Literacy Level</i>				
			<i>Low</i>	<i>Total</i>			
Gender	Female	Frequency	48	76	50	174	
		Percent	27.6%	43.7%	28.7%	100.0%	
	Male	Frequency	59	58	44	161	
		Percent	36.6%	36.0%	27.3	100.0%	
Total		Frequency	107	134	94	335	
Percent			40.0%	28.1%	100.0%		
Department	Faculty of Education	Frequency	24	37	26	87	
		Percent	27.6%	42.5%	29.9%	100.0%	
	Faculty of Economics	Frequency	30	42	22	94	
		Percent	31.9%	44.7%	23.4%	100.0%	
	Faculty of Computer Science	Frequency	29	25	21	75	
		Percent	38.7%	33.3%	28.0%	100.0%	
	Faculty of Law	Frequency	24	30	25	79	
		Percent	30.4%	38.0%	31.6%	100.0%	
	Total		Frequency	107	134	94	335
	Percent			40.0%	28.1%	100.0%	

been determined that 38.8% (30) of the faculty of law have INTERMEDIATE financial literacy. When looking at the Financial Literacy levels in general terms, it was noted that 40.0% of the participants had MEDIUM Financial Literacy in terms of gender. Similarly, 40.0% (134) of the participants had MEDIUM Financial Literacy compared with the sections they read.

In **Table 3**, according to the Gender variable, it has been seen that the results among the students' Financial Product Awareness know financial issues, the percentages at hand are not high, they are lacking in financial matters, and they need to train themselves more qualified in support education and practice.

The results of the Chi-square analysis of the relationship between the gender, qualifications, and departments of the students and the Status of Knowing the Financial Product are given in **Table 3a**. When the chi-square results and the state of knowing financial products differ according to gender, it is seen that there is a statistically significant difference in the results only in Insurance, Stock, and Treasury Bills. Still,

there is no significant difference in other products. In other words, depending on gender, students' knowledge of financial products does not differ except for three financial products. The fact that there is a significant relationship between gender and financial literacy has shown parallelism with similar results in the literature (Lusardi, 2008).

Group averages were compared to reveal whether there is a difference between gender and students' attitudes towards some money statements, and the results are given in **Table 4**. It is observed that there is no significant difference between the financial literacy clusters and the average of the answers given to these statements. These results show that students think differently in most related words according to gender.

In **Table 5**, participants' questions on sources of information regarding the financial product selection process are included. Considering the averages of the results obtained, the most common sources of information are the best purchase tables of the economic issues of newspapers and magazines, the advice of friends and relatives working in finance, and the questions from my own experience. Judging

The Effect of Undergraduate Programs on Financial Literacy Level: The Case Of Kosovo

Table 3. Student Gender and Financial Product Awareness Crosstab analysis

		Gender				
		Female	Male	Total		
FINANCIAL PRODUCT KNOWLEDGE STATUS	Pension Fund	I have information	18.8%	18.8%	37.6%	
		I have some knowledge	16.1%	15.55	31.6%	
		I have no information	17.0%	13.7%	30.7%	
	Investment Account	I have information	18.5%	18.2%	36.7%	
		I have partial information		17.0%	17.0%	34.0%
		I have no information		16.4	12.8%	29.3%
		I have partial information				
	Mortgage Home Loan	I have information	17.0%	17.0%	34.0%	
		I have partial information		16.1%	16.1%	32.2
I have no information			18.8%	14.9%	33.7%	
Real Estate Mortgage Loan	I have information	15.5%	17.0%	32.5%		
	I have partial information		18.5%	16.4%	34.9%	
	I have no information		17.9%	14.6%	32.5%	
Unsecured Debt	I have information	15.8%	13.7%	29.6%		
	I have partial information		17.0%	13.1%	30.1%	
	I have no information		19.1%	21.2%	40.3%	
Credit Card	I have information		20.3%	17.6%	37.9%	
	I have partial information		16.4%	13.4%	29.9%	
	I have no information		15.2%	17.0%	32.2%	

The Effect of Undergraduate Programs on Financial Literacy Level: The Case Of Kosovo

		<i>Gender</i>		
		<i>Female</i>	<i>Male</i>	<i>Total</i>
Checking Account	I have information	19.7%	17.0%	37.6%
	I have partial information	14.9%	14.6%	31.6%
	I have no information	17.3%	16.4%	30.7%
Deposit Account	I have information	18.8%	17.9%	36.7%
	I have partial information	15.2%	16.4%	31.6%
	I have no information	17.9%	13.7%	31.6%
Insurance	I have information	20.9%	14.6%	34.0%
	I have partial information	16.4%	16.4%	29.3%
	I have no information	14.6%	17.0%	
Insurance	I have information	19.4%	17.9%	
	I have information	20.9%	14.6%	35.5%
	I have partial information	16.4%	16.4%	32.8%
	I have no information	14.6%	17.0%	31.65
	I have partial information	14.3%	16.1%	
	I have no information	20.6%	14.6%	
Stock	I have information	19.4%	17.9%	37.3%
	I have partial information	19.7%	13.1%	32.8%
	I have no information	12.8%	17.0%	29.9%
	I have information	17.0%	17.3%	34.3%
	I have partial information	14.3%	16.1%	30.4%
Bond	I have no information	20.6%	14.6%	35.2%
	I have information	15.5%	19.15	34.6%
Treasury Bond	I have partial information	19.1%	12.8%	31.9%
	I have no information	17.3%	16.1%	33.4%
	I have information	19.4%	19.4%	38.8%
	I have partial information	19.7%	15.2%	34.9%
Mobile Payment Account	I have information	19.4%	19.4%	38.8%
	I have partial information	19.7%	15.2%	34.9%
	I have no information	12.8%	13.4%	26.3%

Table 3a. Chi-square Results of Student Gender, Student Qualifications and Departments, and Financial Products Awareness

	<i>Chi-square</i>	<i>df</i>	<i>P</i>
Pension Fund	0.6333	2	0.701
Investment Account	0.914	2	0.614
Mortgage Home Loan	0.916	2	0.609
Real Estate Mortgage Loan	1.09	2	0.534
Unsecured Debt	2.10	2	0.350
Credit Card	1.54	2	0.463
Checking Account	0.322	2	0.851
Deposit Account	1.54	2	0.456
Insurance	4.11	2	0.028*
Stock	6.06	2	0.048*
Bond	3.15	2	0.197
Treasury Bond	4.72	2	0.042*
Mobile Payment Account	1.39	2	0.480

* Significant at the a=0.05 level. ** Significant at the a=0.01 level.

Table 4: Comparison of some expressions about money by gender

		<i>Female</i>	<i>Male</i>	<i>Total</i>	<i>Mean</i>	<i>Sig.</i>
		<i>Female</i>	<i>Male</i>	<i>Total</i>	<i>Mean</i>	<i>Sig.</i>
	Strongly agree	27.2%	25.1%	52.2%	1.48	0.534
Before I buy something, I consider whether I can afford it or not.	Agree	24.8%	23.0%	47.8%		
	Neither agree nor disagree	0.0%	0.0%	0.0%		
	Disagree	0.0%	0.0%	0.0%		
	Strongly disagree	0.0%	0.0%	0.0%		
I tend to live today; I don't care about tomorrow.	Strongly agree	10.4%	11.3%	21.8%	3.05	0.522
	Agree	9.9%	8.1%	17.9%		
	Neither agree nor disagree	7.5%	9.0%	16.4%		
	Disagree	12.2%	8.7%	20.9%		
I find spending money more satisfying than saving for the long term.	Strongly disagree	11.9%	11.0%	23.0%		
	Strongly agree	11.3%	11.6%	23.0%	2.93	0.422
	Agree	9.3%	7.85%	17.0%		
	Neither agree nor disagree	10.1%	11.0%	21.2%		
I pay my bills on time	Disagree	11.0%	10.4%	21.5%		
	Strongly disagree	10.1%	7.2%	17.3%		
	Strongly agree	16.7%	11.6%	28.4%	2.81	0.251
	Agree	9.0%	9.9%	18.8%		
	Neither agree nor disagree	8.7%	7.8%	16.4%		
	Disagree	7.5%	9.0%	16.4%		
	Strongly disagree	10.1%	9.9%	20.0%		

The Effect of Undergraduate Programs on Financial Literacy Level: The Case Of Kosovo

		<i>Gender</i>				
		<i>Female</i>	<i>Male</i>	<i>Total</i>	<i>Mean</i>	<i>Sig.</i>
I am willing to risk some of my own money to invest or save.	Strongly agree	11.6%	8.7%	20.3%	2.91	0.101
	Agree	13.1%	9.6%	22.7%		
	Neither agree nor disagree	9.9%	11.0%	20.9%		
	Disagree	9.0%	8.7%	17.6%		
	Strongly disagree	8.4%	10.1%	18.5%		
I set long-term financial goals and strive to achieve them.	Strongly agree	15.2%	11.9%	27.2%	2.78	0.067
	Agree	11.9%	6.3%	18.2%		
	Neither agree nor disagree	9.3%	11.6%	20.9%		
	Disagree	7.5%	9.9%	17.3%		
	Strongly disagree	8.1%	8.4%	16.4%		
It's for spending money.	Strongly agree	12.5%	9.0%	21.5%	2.88	0.268
	Agree	12.5%	10.7%	23.3%		
	Neither agree nor disagree	8.4%	9.9%	19.7%		
	Disagree	9.9%	9.9%	19.7%		
	Strongly disagree	8.7%	8.7%	17.3%		

Table 5: Impact of Information Sources in the Selection Process of the Financial Product

	<i>Yes</i>	<i>No</i>	<i>Mean</i>	<i>Std. Dev.</i>
Information from the bank branch	62.4%	37.6%	1.38	0.485
Advice from friends and relatives working in finance	49.0%	51.0%	1.51	0.501
Information obtained from the sales personnel of the company providing the products	51.6%	48.4%	1.48	0.500
Product-specific information found on the Internet	50.4%	49.6%	1.50	0.501
My own experience	48.7%	51.3%	1.51	0.501
The best buying information available on the Internet	53.1%	46.9%	1.47	0.500
Television and radio programs	51.0%	49.0%	1.49	0.501
Expert advice is written in the journal/gazette	56.1%	43.9%	1.44	0.497
Advice from friends and relatives who do not work in finance	52.5%	47.5%	1.47	0.500
TV ads	51.9%	48.1%	1.48	0.500
Best buy tables of financial issues of newspapers and magazines	46.9%	53.1%	1.53	0.500
Newspaper articles	54.0%	46.0%	1.49	0.499
Newspaper ads	57.0%	43.0%	1.43	0.496
Independent financial advisor advice	50.7%	46.0%	1.49	0.501
Employer advice	54.0%	46.0%	1.46	0.499
Other ads	52.2%	47.8%	1.48	0.500

by the answers (50% and above), the information sources that the participants used the most were 62.4% Information from the bank branch, 57.0% Newspaper advertisements, 54.0% Newspaper articles, 54.0% Employer advice, 53.1% Best purchase information found on the Internet, 52.5%

Advice from friends and relatives who do not work in finance is observed as 51.9% TV advertisements, 52.2% Other advertisements and 51.6% information obtained from the sales personnel of the company that provides the products.

Table 6a. Independent Sample T-test Results of Participants' Financial Perceptions Sub-Dimension Perceptions by Gender Groups

<i>Financial Perceptions</i>	<i>Gender</i>	<i>n</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>T</i>	<i>p</i>
Financial product knowledge	Female	174	1.97	0.312	0.270	0.278
	Male	161	1.96	0.292		
Money Relationship	Female	174	2.64	0.638	1.508	0.037
	Male	161	2.74	0.520		
Financial Product Selection Information	Female	174	1.47	0.157	0.125	0.249
	Male	161	1.47	0.139		

In Table 6a, as a result of the t-test performed to decide whether the financial sub-dimension perceptions of the participants differ statistically between groups according to gender, from the sub-dimensions of financial perceptions, The differences in perceptions of knowing financial products according to gender were not significant ($p>0.05$). However, perceptions of money significantly differed according to gender ($t=-1.508$, $p<0.05$). On the other hand, when the perceptions of obtaining information in financial product

selection are analyzed according to gender, the difference is insignificant ($p>0.05$).

In **Table 6b**, because of the t-test performed to decide whether the perceptions of the financial sub-dimensions between the groups differ statistically according to the educational nickels (Numeric and Verbal) of the participants from the sub-dimensions of financial perceptions, The differences in perceptions of financial product knowledge were not found significant according to the quality of the students

Table 6b. Independent Sample T-test Results of Participants' Financial Perceptions Sub-Dimensional Perceptions of Student Quality Groups

<i>Financial Perceptions</i>	<i>Student Qualification</i>	<i>n</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>T</i>	<i>p</i>
Financial product knowledge	Verbal	190	1.96	0.306	0.123	0.902
	Numerical	145	1.96	0.278		
Money Relationship	Verbal	190	2.65	0.593	1.290	0.196
	Numerical	145	2.73	0.574		
Financial Product Selection Information	Verbal	190	1.46	0.152	1.605	0.107
	Numerical	145	1.48	0.143		

($p>0.05$). Perceptions related to money were not found to be significant according to the quality of the students ($p>0.05$). The differences in perceptions of obtaining information in selecting financial products according to the quality of the students were not found to be significant ($p>0.05$). In the T-test analysis made considering the results obtained, it was observed that the student's qualifications were not substantial with their financial literacy information, and the student's capabilities did not affect these sub-dimensions.

In Table 6c, as a result of the t-test performed to decide whether the perceptions of the financial sub-dimensions between the groups differ statistically according to the sections they read, the sub-dimensions of economic perceptions; the

differences in perceptions of financial product knowledge, according to what they read, were not found significant ($p>0.05$). According to the departments, they read ($t=-0.521$, $p<0.05$). Furthermore, when the perceptions of obtaining information in financial product selection are analyzed according to gender, the difference was insignificant ($p>0.05$).

According to the findings, in the T-test analyses made in the financial literacy sub-dimensions, when the results were compared according to gender, student quality, and departments, no clear relationship could be detected between the marks; only the MONEY RELATIONSHIP sub-dimension was significant in the analysis of gender and the section they read.

Table 6c: Independent Sample T-test Results of the Participants' Financial Perceptions Sub-Dimensional Perceptions of the Groups of the departments they studied.

<i>Financial Perceptions</i>	<i>Student Qualification</i>	<i>N</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>T</i>	<i>p</i>
Financial product knowledge	Faculty of Education	87	1.91	0.288	0.391	0.150
	Faculty of Economics	94	1.97	0.324		
	Faculty of Computer Science	75	2.00	0.268		
	Faculty of Law	79	1.98	0.317		
Money Relationship	Faculty of Education	87	2.73	0.653	0.521	0.008
	Faculty of Economics	94	2.69	0.523		
	Faculty of Computer Science	75	2.67	0.609		
	Faculty of Law	79	2.66	0.563		
Financial Product Selection Information	Faculty of Education	87	1.48	0.134	- 0.742	0.771
	Faculty of Economics	94	1.48	0.143		
	Faculty of Computer Science	75	1.45	0.150		
	Faculty of Law	79	1.47	0.167		

CONCLUSIONS

Seeing more severe and complex risks in countries today's economy and financial markets requires individuals to be better equipped with financial literacy and money management. Therefore, individuals must develop their financial literacy levels to make sound financial decisions on creating corporate savings funds, investment and debt management, and even retirement plans.

Financial literacy is one of the competencies that university students should have for every individual in society. Unfortunately, we remain ignorant of these issues as financial courses are not added to every university department's curriculum. As individuals with low financial literacy are raised, the rate of manipulation increases in countries, and the possibility of people being deceived increases. However, university students have responsibilities such as spending correctly per their economic and financial needs. University students have a long life ahead of them, taking their careers to the next level and directing them. In this journey of responsibility, the right financial decisions of the students will not only make them profitable but also shape the future of the state and society in a good way.

For this reason, it is impossible to increase undergraduate students' financial literacy levels only with the instructors who

take their classes. To expand the spectrum of this culture, it will be possible for academicians to update themselves in the field of financial literacy and to include university departments as compulsory courses in every education program.

The data obtained from the analysis results determined that the financial literacy levels of the students participating in the study were INTERMEDIATE. In terms of gender, the level of female participants was determined as INTERMEDIATE with 43%, the level of male participants was determined as HIGH with 36.6%, and MEDIUM with 36.0%. According to these results, it was determined that there was no significant difference in terms of gender. Considering the results in terms of the departments studied by the participants, it was determined that the students studying at the FACULTY of ECONOMY had the highest literacy level at 44.7%, followed by the FACULTY of EDUCATION at 42.5%, the FACULTY of LAW 38.0% and the Faculty of Computer Sciences 33.3%.

According to the financial product knowledge results, it was seen that most of the participants knew financial products. It is seen that the participants have the most information about the effects of Mobile Payment Accounts and Insurance funds. When the Chi-square results in Table 3a and whether the state of knowing financial products differ according to gender, it is seen that there is a statistically

significant difference in the results only in Insurance, Stock, and Treasury Bills. Still, there is no significant difference in other products.

When the answers given to the questions about money are compared, when the participants' statements about cash are compared according to the gender of university students, there is no difference in the averages of participation levels in general. When asked about the sources of information they have learned about financial products, it is seen that the most common source of information for the participants is the best purchasing tables of the economic issues of newspapers and magazines, the advice of friends and relatives working in the field of finance, and my own experience. Judging by the answers (50% and above), the information sources that the participants used the most were 62.4% Information from the bank branch, 57.0% Newspaper advertisements, 54.0% Newspaper articles, 54.0% Employer advice, 53.1% Best purchase information found on the Internet, 52.5% Advice from friends and relatives who do not work in finance is observed as 51.9% TV advertisements, 52.2% Other advertisements and 51.6% information obtained from the sales personnel of the company that provides the products.

In general, according to the study results, it is concluded that the Financial Literacy knowledge of the students is insufficient, and they need more information about themselves in this field. Furthermore, considering the study by Er et al. (2021), it is revealed that the results are similar. Therefore, Er et al. (2021) emphasized that financial literacy programs should be noted. Similarly, in the light of the data obtained, it has been determined that providing various in-service training for the financial literacy levels of the students or adding Financial Literacy courses to the education programs will strengthen the student's knowledge of this subject and increase their awareness.

RECOMMENDATIONS

Effective Pedagogical Approaches: Future research should investigate the most effective pedagogical approaches for enhancing financial literacy among university students. This could include examining the impact of different teaching methods, such as interactive workshops, online courses, or blended learning, to determine which approach is most effective in improving financial knowledge and decision-making skills.

Long-term Impact Assessment: It would be valuable to conduct longitudinal studies to assess the long-term impact of financial literacy education on students' financial behaviors. This research could track the financial decisions and outcomes of students who have received financial education throughout their university years and early careers.

Comparative Analysis Across Universities and Regions: Comparative studies across different universities and regions can help identify variations in financial literacy levels. Such research can shed light on the influence of university policies, regional economic conditions, and cultural factors on students' financial knowledge and behavior.

Gender-Based Financial Literacy Analysis: A deeper investigation into the gender-based differences in financial literacy is warranted. Research can explore the reasons behind the variations in financial literacy levels between male and female students and develop targeted interventions to bridge these gaps.

The Impact of Financial Literacy on Financial Well-being: Future studies should investigate the correlation between financial literacy and financial well-being. This research can assess how students with different levels of financial literacy manage their debts, savings, and investments and how this impacts their overall financial security and quality of life.

Evaluation of Financial Literacy Programs: Evaluating the effectiveness of financial literacy programs within universities and as standalone initiatives is crucial. Researchers can assess the outcomes of these programs in terms of knowledge retention, behavior change, and long-term financial success.

Exploration of Alternative Information Sources: Research should delve into the effectiveness of alternative sources of financial information, such as mobile apps, financial education websites, and social media. This can help identify the most influential sources in shaping students' financial knowledge.

Interdisciplinary Approach: Investigate the benefits of incorporating financial literacy into the curricula of various university departments beyond economics and business faculties. Assess how students from diverse academic backgrounds respond to and benefit from financial literacy education.

Incorporating Behavioral Economics: Incorporating insights from behavioral economics into financial literacy programs can enhance their effectiveness. Research can explore how behavioral economics principles can be integrated into the curriculum to improve decision-making skills and encourage responsible financial behaviors.

Impact of Family and Peer Influence: Research could investigate the influence of family and peer dynamics on financial literacy. This might involve studying the role of parents, siblings, and friends in shaping students' economic attitudes and knowledge.

The findings of this study highlight the importance of increasing financial literacy among university students and

the implications for society and the state. Future research should continue to explore strategies to enhance financial literacy, address disparities, and evaluate the effectiveness of educational programs. By doing so, we can work towards a financially literate and responsible citizenry contributing to economic stability and personal financial well-being.

REFERENCES

- Ansong, A., & Gyensare, M. A. (2012). Determinants of university working-students' financial literacy at the University of Cape Coast, Ghana. *International Journal of Business and Management*, 7(9), 126. <http://dx.doi.org/10.5539/ijbm.v7n9p126>
- Atkinson, A., & Messy, F. A. (2012). Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study. <https://doi.org/10.1787/5k9cfsf90fr4-en>
- Aydın, A. D. (2018). "Türkiye'de Finans Eğitimi ve Finansal Okuryazarlık Üzerine Eleştirel Bir Değerlendirme" *Ekonomi Maliye İşletme Dergisi*, 1(1), 12-20. <https://dergipark.org.tr/en/pub/emid/issue/41818/505083>
- Batizani D., & A, Q. (2022). An Empirical Study on Financial Literacy among Undergraduate Higher Education Students: The Case of Malawi Institute of Management. *Austin Journal of Business Administration and Management*. <https://doi.org/10.26420/austinbusadmmanage.2022.1051>
- Böhm, P., Böhmová, G., Gazdíkóvá, J., & Šimková, V. (2023). Determinants of Financial Literacy: Analysis of the Impact of Family and Socioeconomic Variables on Undergraduate Students in the Slovak Republic. *Journal of Risk and Financial Management*. <https://doi.org/10.3390/jrfm16040252>
- Dilek, S., Küçük, O., & Eleren, A. (2016). Kastamonu Üniversitesi Öğrencilerinin Ekonomi Okuryazarlığı. *Itobiad: Journal of the Human & Social Science Researches*, 5(7). <https://dergipark.org.tr/en/download/article-file/225785>
- Er, F., Temizel, F., Özdemir, A. & Sönmez, H. (2014). Lisans Eğitim Programlarının Finansal Okuryazarlık Düzeyine Etkisinin Araştırılması: Türkiye Örneği. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 14 (4), 113-125. <https://doi.org/10.18037/ausbd.00957>
- Fikret, E., Temizel, F., Özdemir, A., & Sönmez, H. (2014). Lisans eğitim programlarının finansal okuryazarlık düzeyine etkisinin araştırılması: Türkiye örneği. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 14(4), 113-125. <https://doi.org/10.18037/ausbd.00957>
- Jadoon, U., Shah, S., Abro, S., & Chuhan, O. (2020). Analysis of Financial Literacy Level Among Undergraduate Students. *Research Journal of Finance and Accounting*. <https://doi.org/10.7176/rjfa/11-14-03>
- Kılıç, Y., Ata, H. A. & Seyrek, İ. H., (2015). "Finansal Okuryazarlık: Üniversite Öğrencilerine Yönelik Bir Araştırma". *Muhasebe ve Finansman Dergisi*, (66), 129-150. <https://doi.org/10.25095/mufad.396535>
- Klapper, L.F., Lusardi, A., & Panos, G.A. (2013). Financial literacy and its consequences: Evidence from Russia during the financial crisis. *Journal of Banking and Finance*, 37, 3904-3923. <https://doi.org/10.1016/J.JBANKFIN.2013.07.014>
- Lilia, S., Yulia, V.R., Arslanovna, G.E., & Evgeniy Yurievich, Y. (2022). Research of the need for training financial literacy under economic uncertainty in the framework of the educational process at schools. 2022 8th International Conference on Energy Efficiency and Agricultural Engineering (EE&AE), 1-7. <https://doi.org/10.1109/eeae53789.2022.9831342>
- Lusardi, A. (2008). Financial literacy: an essential tool for informed consumer choice? (No. w14084). National Bureau of Economic Research. DOI 10.3386/w14084
- Muyo, Yildirim, M. & Vardari, L. (2020). Mathematical and financial literacy: A research with Prizren university students. *Cypriot Journal of Educational Science* 15(6). 1574-1586. <https://doi.org/10.18844/cjes.v15i6.5318>
- Temizel, F. & Bayram, F. (2011). Finansal Okuryazarlık: Anadolu Üniversitesi İktisadi İdari Bilimler Fakültesi (İİBF) Öğrencilerine Yönelik Bir Araştırma, *Cumhuriyet Üniversitesi İktisadi İdari Bilimler Dergisi*, 12(1), 73-86. <http://earsiv.anadolu.edu.tr/xmlui/handle/11421/18940>
- Oseifuah, E.K., Gyekye, A.B., & Formadi, P. (2018). Financial Literacy among Undergraduate Students: Empirical Evidence from Ghana. *Academy of Accounting and Financial Studies Journal*, 22, 1.
- Ünal, O., Torun, S., Yavuz, E. & Ediş, S. (2016). "İlköğretim Bölümü Öğretmen Adaylarının Finansal Okuryazarlık Düzeylerinin Çeşitli Değişkenler Açısından İncelenmesi" *International Periodical for the Languages, Literature and History of Turkish or Turkic*. 11(9), 931-946. <http://dx.doi.org/10.7827/Turkish-Studies.9644>
- Yücel, S. & Çiftçi, N. (2018). "Üniversite Öğrencilerinin Finansal Okuryazarlık Düzeylerinin Bazı Demografik Değişkenler Açısından İncelenmesi". *İnönü University International Journal of Social Sciences-INIJOSS*, 7(1), 143-161. <https://dergipark.org.tr/en/pub/inijoss/issue/38239/411706>