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# THE EVALUATION OF THE STUDENTS IN DUMLUPINAR UNIVERSITY VOCATIONAL SCHOOL OF SOCIAL SCIENCES ABOUT LEVELS OF FINANCIAL LITERACY

**Keywords**: Financial literacy, financial information, financial behavior, financial position.

# J E L Classification: G02, D14, A20, C12.

**Abstract**: As the world economy grows, financial system as well grows and more people participate. A healthy operation of financial system depends on the condition that all of its parts and components work well together. One of these components is individuals and families. Worldwide, it is estimated that approximately 150 million people join the financial system every year. Control mechanisms are needed for the stability of ever growing financial system and financial literacy comes into prominence in this regard.

In this study, we statistically analyzed the factors that affect financial information, behavior and attitudes of students who go to Dumlupinar University Kütahya Vocatio-

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nal School of Social Sciences and then, we determined their level of financial literacy. In order to develop the awareness of financial literacy and to increase the quality of education about this subject, suggestions have been stated in the study.

## INTRODUCTION

The concept of financial literacy has been defined as 'Ensuring participation in economic life and to improve the community's financial well-being by individuals with knowledge and understanding of financial concepts to be able to make effective decisions in a variety of financial position this knowledge and understanding of practical skills, motivation and confidence'. The concept of financial literacy has been becoming more significant correspondingly the changes occurred in the financial markets and financial products and diversification every day. The greatest expectation of the dissemination of financial literacy is to increase awareness of financial issues and to change behaviors of financial decision-making of individuals in the rational manner. Provided that this change in financial behavior can be achieved in an economy, the income – expenditure – saving balance, financial market developments will inherently provide a positive and major step towards economic growth.

In this study, the relationship between financial knowledge, financial behaviors, and the attitudes of students in Dumlupinar University Kütahya Vocational School of Social Sciences has been examined. Also, this study has been conducted to present the inferences on the improvement of the current financial education. In order to make inferences about the subject, it is necessary to determine the financial literacy profile.

## The research methodology and the course of the research process

In this research, general information firstly has been stated about the concept of financial literacy and the results and scientific studies on this subject have been demonstrated in a literature review. Then, in order to determine the financial literacy profiles of students studying in 11 different programs, a survey has been conducted. According to the data obtained from the survey, the cause and effect relationships between regression and frequency analysis and different variables have been demonstrated. The awareness levels of students surveyed about the financial literacy have been tried to be demonstrated.

#### LITERATURE REVIEW

Financial literacy today is an important element of financial stability and development, and a global key success factor. Especially in financial crisis times, people's wrong decisions which are a result of low financial literacy levels cause a negative spillover effect in the whole economy. For this reason, various public, private and non-governmental organizations in many countries carry out studies to measure public's financial literacy level, develop policies to improve the current situation and to monitor the progress. Financial literacy level is measured in national, international, general, or specific subgroups. Demographic features are important for the analysis of differences in financial literacy levels. Women, children, youth, families and retired people are main subgroups that represent the community.

There are many researches that base on different country-region, group and periods about financial literacy. Rather than seeing them as works that repeat each other, these works should be seen as researches that determine the state of financial literacy and observe whether there is a change. Some of these researches and their conclusions are given below briefly:

- Bernheim states in his research in 1995 and 1998 that people cannot make most of even the very basic financial calculations, they do not have the basic financial literacy and they take their saving decisions by rule of thumb (Sarıgül 2014).
- Bernheim, Garrett and Maki (1997) found a positive relationship between financial literacy and saving decisions in a research. Research was conducted in 1995 and researched group was Merrill Lynch's investors aged between 30 and 49. Higher financial literacy resulted in higher savings. The result of the study proves that education is strong tool to promote saving.
- Berrheim, Garrett and Maki (2001) investigated the impact of financial literacy education in high schools on saving behaviors of people in their old lives. The found a positive relationship between education programs and personal savings. The study started with the hypothesis "financial literacy education promotes better financial behaviors" and is one of the first studies about long term impacts of financial education in high school.
- Cude et al. (2006) evaluated financial management applications of university students. They found that student are not good at financial ma-

nagement because they do not listen to advices about financial management and their families are effective in their money management behaviours.

- Lusardi and Mitchell, in their study in 2007 about retirement planning which is one of important elements of financial literacy, found that less educated people, low income people, Afro-Americans and Latin Americans are the groups that prepare the least for retirement. In their study in 2008, they found that financial literacy is very low among women. And success rate in retirement planning is also low among women who have low financial literacy. In their study in 2009, they observed that people who have more financial information are more prone to making retirement planning (Ergün et al., 2014).
- Lusardi and Tufano (2009) reported that only one third of people respond to the questions about compound interest and how credit cards work and this rate fell further in more complex calculations. They reached the conclusion that this situation is worrying in an economy where routine debt and similar instruments are used and people with low debt literacy bear higher costs in their financial transactions.
- Temizel (2010) aimed to find out financial literacy levels of blue collar workers. They found that workers are conscious about information and applications that will be make their daily lives easier and increase their quality of lives. However, they are not knowledgeable about investments and their behaviors about money management are based on observations. Blue collar workers, who chose their families as the source of acquiring financial information, apply what they see from their parents about spending and saving.
- Akyol (2010) researched about the level of financial awareness of the personnel of private banks. These types of banks offer premium services to qualified depositors, therefore personnel is expected to have high financial awareness however results do not meet the expectations.
- Bayram (2015) in his research in 2009 of the students of Anadolu University Faculty of Economics and Administrative Sciences and Porsuk Vocational School, found that students think that financial literacy is a narrower concept. Therefore, limited perception of students is that financial literacy is the habit of saving up regularly, paying bills on time and keeping financial papers. Although financial literacy is in general low, students are not aware of this situation.

There are also institutional researches about financial literacy as well as aforementioned research. OECD, one of the leading institutions in financial education, started the initiative International Network on Financial Education, INFE. This initiative developed a survey that can be used in the identification of financial literacy levels of people from various countries with different backgrounds. This survey form includes financial literacy related questions such as financial information, behavior and attitudes, budgeting and money management, short and long term financial plans, and financial product selection. There are also questions about socio-demographic information such as age, gender and income. INFE used this survey in 4 continents and 14 countries and analyzed the results. Turkey was not included in the survey.

With the cooperation of World Bank and Capital Markets Board, the research has been carried out in Turkey in 2012. Under the classification of Statistical Regional Units by Turkish Statistics Agency, 3009 people from 12 regions (40 cities and 142 municipalities) were interviewed and thus Turkish data became comparable with the countries that are included OECD research (www.spk.gov.tr). While 84% of people gave the right answer for basic division calculation, this rate fell to 36% about simple interest calculation and only 26,1% about compound interest calculation. When it comes to borrowing, family member and other close people come first. 51% of people said that they pay their debts with borrowing more debt. 58,4% of people answered "No" to the question "Do you need financial information?" (www.milliyet.com.tr). In 2014, survey is conducted again and they got a similar score to the previous survey (www.teb.com.tr).

### THE CONCEPT OF FINANCIAL LITERACY

The concept of financial literacy, which can be simply defined as "the one who knows how to read and write", has changed with the effect of globalization. With the advent of new criterion, its definition took a shape that responds to the needs of modernity. Thus the modern definition is "the one who have the ability to read-write and perform calculations to the extent that may contribute to the development of the community that they live in, and acquired necessary knowledge and skills to carry out his duties in the society". Additionally, technological products that started to have more usage in people's life since second half of 20<sup>th</sup> century has led to emergence of new literacy types in different fields (Özbay and Çelik 2013). Information literacy is one of these.

The concept of information literacy, no matter what field, is expressed as "to get the skills in order to find, acquire, evaluate and use the needed information". Under information literacy, there are many literacy types such as computer literacy, media literacy, network literacy, digital literacy and political literacy. Financial literacy, which currently gained importance, is as well one of these types and used to obtain basic information in financial field.

Financial literacy is in the stage of development and a definition on consensus does not exist yet. This concept of financial literacy is used together with financial qualification, financial awareness and financial education. Although these concepts are different from each other, there is no obstacle that they all refer to the same concept (Gökmen 2012).

The concept of financial literacy is basically related to the competence of the person about money management. The concept has emerged as an idea in the beginnings of 1900s with research about consumer trends in the USA. Since then, the concept is studied under five categories: information about financial concepts, the ability of making connections between financial concepts, personal financial management skills, ability to take long term financial decisions and ability of active planning for financial needs (Remund 2010).

One of the oldest definitions about financial literacy is developed in the research done for England National Westminster Bank by Noctor, Stoney and Stradling in 1900s. Financial literacy in this study is defined as "making informed evaluations and taking effective decisions when people manage their money" (Noctor et al., 1992). Recently, OECD (Organisation for Economic Co-operation and Development), which is one of the institutions that is mentioned often in this regard, in a research that is conducted in 2013 used a definition developed by Atkinson and Messy. According to this, financial literacy is "a combination of awareness, information, skills, attitude and behaviors needed for strong financial decisions and thus personal wealth" (OECD 2013).

FODER (Association for Financial Literacy and Access), which is an accredited NGO for OECD, aims to increase financial literacy in Turkey. They explain the concept of financial literacy as "the ability to conduct educated evaluations and take effective decisions about money management" and "the situation of having the ability to evaluate income, savings and wealth wisely, and manage the budget right" (www.fo-der.org). Financial literacy should not be limited to only finding, understanding, interpreting information and making decisions. Researching information about financial decisions, evaluating this information and using it in solving financial problems are other basic skills (Hayta 2011).

#### **Research about determination of financial literacy**

Findings and analysis about purpose, importance, extent and method of the research will be given in this section.

## **PURPOSE AND IMPORTANCE**

The main purpose of the research is to determine the financial literacy levels of students from Dumlupinar University Kütahya Vocational School of Social Sciences. Sub purposes are to analyze the factors affecting financial information, behavior and attitude levels of students by utilizing statistical technics.

Vocational schools have an important place in the development of the country and in their regions they increase the quality of life, socio-cultural activities and participation to education rate. It is thought that statistical analysis results of the study are important in the identification of financial literacy levels and perception of financial education. It is assumed that the results will reflect the general levels of the students from Dumlupinar University Kütahya Vocational School of Social Sciences.

#### Scope

Dumlupinar University Kütahya Vocational School of Social Sciences, 2014– -2015 academic year, spring semester students are included in the research. In this period, in total 3.103 student in 11 programs are studying. Since reaching everybody is not possible, a sampling method with 95% confidence level in each program is established. In the end of surveying, 1.807 survey forms were evaluable and this result approximately makes 58% of all students. Table 1 shows the programs, number of registered students and number of students who participated in the survey.

THE PROGRAM NAME	Number of Students Registered	Number of Students Participating in the Survey	THE PROGRAM NAME	Number of Students Registered	Number of Students Participating in the Survey
Banking and Insurance	312	200	Accounting and Tax Applications	352	195

Table 1. Programs	That Participants	Took Education
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THE PROGRAM NAME	Number of Students Registered	Number of Students Participating in the Survey	THE PROGRAM NAME	Number of Students Registered	Number of Students Participating in the Survey
Office Management and Executive Assistant	384	196	Bus Captaincy	69	59
Foreign Trade	384	201	Marketing 253		153
Real Estate and Real Estate Management	182	137	Tourism and Hotel Management	276	162
Business Administration	322	177	Tourism and Travel Services	335	180
Logistics	234	147			
			TOTAL	3.103	1.807

Source: own study.

#### Method

Data is gathered through surveying. Survey was first tested by 43 students in order to avoid understanding problems. Then surveys were distributed to 2.101 students who are chosen randomly and a feedback is received by all of the students. However, since some of the survey forms did not qualify, 294 forms were excluded and research continued with the remaining 1.807 forms. Vocational school was accepted as a whole and each program had random selection proportional to their number of students and then the results are combined. Therefore a heterogeneous sample is formed.

PASW Statistics 18 (SPSS Statistics) program is used to analyze the current situation and regression analysis for understanding the relationship between variables. The findings have 95% confidence level and 5% meaningfulness level.

The survey form is composed of 4 sections: (1) demographics: age, sector, entrepreneurship time and education, (2) financial knowledge of the students: place values of numbers, interest, inflation, time value of money (3) financial attitudes: financial perspectives of students about future and (4) financial behaviors: thinking before purchasing, paying bills on time, budgeting, spending and saving in order to reach targets.

The questions and scaled concepts are compiled from the research mentioned in the literature review. The survey used in our research has parallelisms with OECD based research.

#### Analysis and Findings

Demographic features of surveyed students are presented in Table 2. 45% of participants are female and 55% are male. There genderwise there is a balanced distribution. %18,6 of participants are 19 years old and below and 81,4 are 20 years old and above. When looked into level of parents' education; 73,8% of mothers have elementary school, 21% high school, 2,8% associate degree, 2,4% graduate degree and above level education. And 51,7% of fathers have elementary school, 37,2% high school, 5,7% associate degree, 5,4% graduate degree and above level education. When looked into working status of parents; 70,2% of mothers and 3% of fathers do not work. Of working mothers; 10,9% are workers, 7,1% civil servants, 6,2% self-employed, 0,6% farmers, 5% retired. Of working fathers; 24% are workers, 18,3% civil servants, 24% self-employed, 5,4% farmers, 25,3% retired. Participants reside 30,8% in Aegean region, 28,5% in Marmara region, 18,1% in Central Anatolia region. When looked into average monthly household income; 63,1% are 1.001-3.000 TL, 23,3% are 0-1.000 TL, 13,6% are 3.001 TL and above. When we look at students' pocket money; 42% are 251-500 TL, 24,8% are 501-750 TL, 18,9% are 0-250 TL, 10,3% are 751-1.000 TL.

Variable	Explanation	Frequency	%	Variable	Explanation	Frequency	%
Age	≤ 19	337	18,6	Gender	Female	813	45
	≥ 20	1.470	81,4		Male	994	55
Mother's Education	Elementary school	1.334	73,8	Father's Education	Elementary sch.	935	51,7
Level	High school	379	21,0	Level	High school	672	37,2
	Associate	51	2,8		Associate	103	5,7
	Graduate	34	1,9		Graduate	81	4,5
	Postgradu- ate	9	0,5		Postgradu- ate	16	0,9

Table 2. Demographic Features of Participants

Variable	Explanation	Frequency	%	Variable	Explanation	Frequency	%
Mother's	Worker	197	10,9	Father's	Worker	433	24,0
Work Status	Civil servant	128	7,1	Work Status	Civil servant	331	18,3
	Self- -employed	112	6,2		Self- -employed	433	24,0
	Farmer	11	0,6		Farmer	97	5,4
	Retired	91	5,0		Retired	458	25,3
	Not working	1.268	70,2		Not working	55	3,0
Residence Status	Mediterra- nean R.	188	10,4	Av. Monthly Household	0–1.000	421	23,3
	Eastern Anatolia R.	72	4,0	Income	1.001-3.000	1.140	63,1
	Aegean Region	557	30,8		≥ 3.001	246	13,6
	Marmara Region	515	28,5				
	Southe- astern An.R.	54	3,0	Pocket Money	0–250	342	18,9
	Central Anatolia R.	327	18,1		251-500	759	42,0
	Black Sea R.	94	5,2		501–750	448	24,8
					751–1.000	186	10,3
					≥ 1.001	72	4,0

Source: own study.

We try to find and answer to the question: "Is there a meaningful difference in financial literacy levels according to variables of gender, program that they are taking education, age, parents' occupation, region they reside, average monthly household income, pocket money and parents' education level?" (Table 2). As a result of these questions, the hypotheses that will be tested are below (Table 3):

H <sub>1</sub> :	There is a statistically significant difference between gender variable and financial literacy level.
H <sub>2</sub> :	There is a statistically significant difference between the program that they take education variable and financial literacy level.
Н <sub>3</sub> :	There is a statistically significant difference between age variable and financial literacy level.
H <sub>4</sub> :	There is a statistically significant difference between occupation of mother variable and financial literacy level.
H₅:	There is a statistically significant difference between occupation of father variable and financial literacy level.
Н <sub>6</sub> :	There is a statistically significant difference between the region they reside variable and financial literacy level.
H <sub>7</sub> :	There is a statistically significant difference between average monthly household income variable and financial literacy level.
H <sub>8</sub> :	There is a statistically significant difference between pocket money variable and financial literacy level.
H <sub>9</sub> :	There is a statistically significant difference between education level of mother variable and financial literacy level.
H <sub>10</sub> :	There is a statistically significant difference between education level of father variable and financial literacy level.
H <sub>11</sub> :	Student's sources of motivation in shopping changes according to their pocket money.
H <sub>12</sub> :	There is a statistically significant difference between investment choice and need for financial informa- tion.

#### Table 3. Hypotheses

Source: own study.

A statistically significant difference between gender variable and financial literacy level has been found and showed in Table 4. Financial literacy in women is detected as (=3.14), and (=3.06) in men.  $H_1$  hypothesis is accepted according to independent t test results in Table 4 (p<0.01).

Table 4. Independent T Test Results of Financial Literacy About Gender Variable

	Gender	N	x	SS	sd	t	р
Financial Literacy	Female	813	3.14	.467	1805	3.527	.000
	Male	994	3.06	.456			

Source: own study.

(p<0.01)

In Table 5, the significance of the difference between the program that participant takes education and financial literacy level is tested with one-way analysis of variance and it is seen that there is a statistically significant differentiation. According to the results of Post Hoc LSD test, financial literacy rates of students who are respectively in Banking and Insurance (A), Foreign Trade (C) and Accounting and Tax Applications (G) programs are comparatively higher and this difference is statistically significant at p<0.01 level. Therefore, H<sub>2</sub> hypothesis is accepted according to ANOVA results in Table 5 (p<0.01).

	Program	N	x	SS	F	р	Statistically Significant Difference
	A. Banking and Insurance	200	3.26	.435	8.485	.000	A: B-C-D-E-F-G-H-I-J-K
	B. Office Man. and Executive Ass.	196	3.05	.443			<b>B:</b> C-D-E-G-K
	C. Foreign Trade	201	3.17	.462			<b>C:</b> F-I-J-K
_	D. Real Estate and Real Estate Man.	137	3.15	.353			D: F-I-J-K
Financial Literacy	E. Business Administration	177	3.16	.405			E: F-I-J-K
cial Lit	F. Logistics	147	2.99	.477			<b>F:</b> G
inanc	G. Accounting and Tax Applications	195	3.17	.456			G: H-I-J-K
-	H. Bus Captaincy	59	3.04	.457			I: K
	I. Marketing	153	3.02	.519			J: K
	J. Tourism and Hotel Management	162	3.04	.503			
	K. Tourism and Travel Services	180	2.93	.449			

**Table 5**. ANOVA Results of Financial Literacy About Program Variable

(p<0.01)

Source: own study.

The difference between financial literacy level and participants' variables of age, parents' education level, parents' occupation, region they reside, average monthly household income and pocket money is tested with analysis of variance and it is found that there is no statistically significant differentiation. Thus hypotheses of  $H_{22}$ ,  $H_{42}$ ,  $H_{52}$ ,  $H_{42}$ ,  $H_{42}$ ,  $H_{42}$ ,  $H_{42}$ ,  $H_{42}$ ,  $H_{43}$ ,  $H_{42}$ ,  $H_{43}$ ,  $H_$ 

In order to measure the reactions of students to financial issues, there were 7 more questions in the survey. Frequency and percentage distributions to one of these questions, "Where do you think you learned your ability to spend and manage your money?" are given in Table 6. According to this, 77,5% of students refer to family, 9,8% media, 6,5% school, and 6,3% friends.

	Ν	%
Family	1.400	77.5
School	117	6.5
Friends	113	6.3
Media	177	9.8
Total	1.807	100.0

# Table 6. Students' Sources of Learning How to Spend and Manage Money

Source: own study.

Frequency and percentage distributions to the question; "Do you use internet banking applications?" are given in Table 7. 66,9% of students state that they do not use internet banking.

# Table 7. Students' Rate of Using Internet Banking

	N	%
Yes	598	33.1
No	1.209	66.9
Total	1.807	100.0

Source: own study.

Another question was about finding out whether students go to shopping to satisfy their needs or desires. Frequency and percentage distributions to the question; "What is the dominant factor in your shopping?" are given in Table 8. 63,8% of students state that they do shopping in accordance with their needs, while 36,2% state that they cannot resist their desires.

# Table 8. Students' Sources of Motivation for Shopping

	Ν	%
Request	655	36.2
Need	1.152	63.8
Total	1.807	100.0

Source: own study.

Results of cross tab analysis, which is conducted according to students' need/desire choices, is shown in Table 9. According to results, students' pocket money spending changes significantly in relation to their need/desire choices (p<0.01). When we look at proportional data, 26% of students with 0–250 TL pocket money give importance to their desires in shopping, while remaining 74% keep their needs as dominant factor. When looked into this rate while considering all pocket money levels, it is observed that desire motivated shopping behaviors are increasing hierarchically as their pocket money increase. And need motivated shopping behaviors hierarchically decreasing. Thus  $H_{11}$  hypothesis is accepted.

 
 Table 9. The Relationship Between Sources of Motivation in Shopping and Pocket Money (Cross Tab Analysis)

		Pocket Money								
	0-250 TL		251-500 TL		501-750 TL		751–1.000 TL		≥ 1.001 TL	
	N	%	N	%	N	%	N	%	N	%
Request	89	26.0	253	33.3	179	40.0	95	51.1	39	54.2
Need	253	74.0	506	66.7	269	60.0	91	48.9	33	45.8
Total	342	100.0	759	100.0	448	100.0	186	100.0	72	100.0

Source: own study.

Pearson's Chi-Square Value: 48.626 sd : 4 p<0.01

Frequency and percentage distributions to the question; "Do you still have money left after your spending?" are given in Table 10. According to the table, 7,1% never have money left, 46,2% rarely, 34,3% frequently, 12,5% always have money left after their spending.

Table 10. Students' Ability to Save Money After Necessary Spending

	Ν	%
Always	225	12.5
Frequently	619	34.3
Rarely	834	46.2
Never	129	7.1
Total	1.807	100.0

Source: own study.

Frequency and percentage distributions to the question; "If you had saved money, where would you invest your money?" are given in Table 11. According to this, 37,4% of students prefer gold, 16,3% foreign exchange, 7,8% individual pensions, 3,5% stock and 35% states that they would not invest anywhere and keep their money as Turkish Lira.

	N	%
Individual Pensions	141	7.8
Foreign Exchange	295	16.3
Stock	63	3.5
Gold	675	37.4
TL (Turkish Lira)	633	35.0
Total	1.807	100.0

#### Table 11. Students' Options to Invest Money

Source: own study.

Participants are divided into two groups according to their financial preferences (Table 12). In the first group, there are people who prefer investment options which require more advanced financial information (individual pensions and stock), in the second group, there are people who prefer less complicated invest tools such as foreign exchange, gold and Turkish Lira. To the question; "Do you need financial information?", the ones who answer "Yes" are coded (1) and who answered "No" are coded (5). Then, we look if there is a significant difference in the need for financial information. It is found that there is a significant difference between investment preferences variable and need for financial information is (=1.90) in the first group and (=2.53) in the second group. H<sub>12</sub> hypothesis is accepted according to independent t test in Table 12 (p<0.01).

# Table 12. Independent T Test Results About Investment Choices and Need for Financial Information Variable

	Financial Infor- mation Needs	N	x	SS	sd	т	р
Investment Preferences	The First Group	204	1.90	1.676	277.500	4.943	.000
	The Second Group	1603	2.53	1.945			

(p<0.01)

Source: own study.

Frequency and percentage distributions to the question; "What are the sources that you trust to consult your investments?" are given in Table 13. %38,4 of the students consult someone that they trust, 33,3% trust themselves and think that they are qualified enough.

# Table 13. Students' Sources of Consulting Their Investments

	N	%
Trustworthy person	694	38.4
TV	131	7.2
My own knowledge and ideas	601	33.3
Printed publications	94	5.2
Internet	287	15.9
Total	1.807	100.0

Source: own study.

One of the criteria that is used to measure financial literacy level is the answers that are given to financial information questions. Frequency and percentage distributions of the answers that are given to question about basic financial concepts are given in Table 14. The most rightly answered question is about time value of money and most wrongly answered one is about percentage expression.

	N			%		
	Doğru	Yanlış	Toplam	Doğru	Yanlış	Toplam
Defining the percentage of expression	315	1.492	1.807	17,4	82,6	100,0
The time value of money	1.272	535	1.807	70,4	29,6	100,0
Inflation	699	1.108	1.807	38,7	61,3	100,0
Simple interest	406	1.401	1.807	22,5	77,5	100,0
Compound interest	979	828	1.807	54,2	45,8	100,0

Table 14 Evaluation of Answers Given to (	Questions about Basic Financial Information
Table 14. Lyaluation of Answers diven to t	Questions about basic l'inalicial information

Source: own study.

Frequency and percentage distributions of the answers that are given to question: "Do you need financial information?" are given in Table 15. Nearly 64% of the students state that they need financial information. This situation supports Table 14 and shows that students recognize their lack of knowledge.

Table 15. Students' Need for Financial Information

	Ν	%
Yes	1.148	63,5
No	659	36,5
Total	1.807	100,0

Source: own study.

Table 16 shows frequency and percentage distributions of the answers given to questions about whether they see a difference between their pre-university and post-university times about their financial information levels.

Table 16. Difference of Financial Information Level Compared to Pre-University

	Ν	%
Yes	1.422	78,7
No	385	21,3
Total	1.807	100,0

Source: own study.

According to this, 78,7% of students' financial information levels improved compared to their pre-university.

## THE OUTCOME OF THE RESEARCH PROCESS AND CONCLUSIONS

An increase in the level of welfare and people's living standards necessitate not only economic but also social development. Perhaps the most important of the minimum required conditions for economic and social development is education especially when its effect on other areas is taken into consideration. Because, there is no production without education and there is no welfare without production. Therefore, the main condition of the development of society and teaching of proper behaviors is education, and sustainable development is dependent on education.

A lot of research since 1960s shows that there is a positive correlation between economic development and education level. Some economists even went further and prepared charts that show what level of literacy corresponds to how much income per capita (www.egitim.aku.edu.tr). What is important here is that literacy in the modern sense is more than just conventional readingwriting skills and has a new meaning that includes visual and electronic based mental skills. While the difference in the concepts of literacy and literate is growing, mental skills as well as physical skills should be associated with social development and therefore need to be included in the education system. Financial literacy is one of these mental skills that can be associated with economic development and in the simplest way, it can be defined as ability to manage savings and investments effectively.

In this research, factors that affect financial information, behaviors and attitudes of students who go to Dumlupinar University Vocational School Of Social Sciences are analyzed statistically and their level of financial literacy is determined. Results show that:

- Financial literacy level of girls is higher compared to boys. This result is different than many studies in the literature. When we look at family income and pocket money levels, it is seen that girls' pocket money levels are lower than boys thus girls need to spend less compared to boys. Their need for austerity is thought to be effective in this result.
- Financial literacy levels of student who go to programs of Banking and Insurance, Foreign Trade, and Accounting and Tax are higher compared

to other programs' students. It is thought that finance classes of these programs are effective in getting these results.

- 77,5% of students prefer their families as sources of consulting in money management, while %9,8 media, 6,5% school, 6,3% friends. This result is consistent with Rooij et al. (2011) who state that people with low financial literacy level trust advices from kith and kin therefore these people are inclined to invest according to advices of their kith and kin. Cude et al. (2006) show that parents play an important role in financial socializing of university students.
- 64% of students state that they do shopping in accordance with their needs, while 36,2% state that they cannot resist their desires. When their pocket money level is taken into consideration, as their pocket money increases, the likelihood of shopping on desire is increasing hierarchically as well and shopping on need is decreasing hierarchically.
- In the question about their saving attitudes, 7,1% of students say that they never save, 46,2% rare, 34,3% frequently and 12,5% always. To the question about if there were to save, where they would invest this money, 37,4% prefer gold, 16,3% foreign exchange, 7,7% pension, 3,5% stocks, and 35% say that they would keep it as Turkish Lira. Most chosen ones are gold, Turkish Lira and foreign exchange indicates that students do not have adequate information about investment options. That said, when they are asked if they need financial information, the ones who chose pension or stocks stated a higher need for financial information, compared to others.
- 59% of the students gave wrong answers to the questions about basic financial concepts. 83% gave a wrong answer to the question about place values of numbers. This situation might result from their insufficiencies in math.

As is the case with every research, this research has its own limitations too. Survey method is used in this research and it is assumed that students understood and answered questions on the survey form correctly. Even though a measurement tool to make students assess themselves (self-rating) is used and therefore some possibility of evaluation and objectivity problems emerges, the results are parallel with similar research.

Furthermore, researches do not cover all of the students who study the field of social sciences in Dumlupinar University's all vocational schools. Only students of Kütahya Vocational School of Social Sciences are studied and 58% of these students are surveyed. In order to generalize research results to all of the students, sample should be expanded to students of other vocational schools of Dumlupinar University as well.

An increase in welfare is dependent on good financial choices. Thus, financial literacy trainings should not be limited to people working in finance, the whole society should be covered. There should be classes that improve financial literacy in all fields of study and the content of classes should be kept updated.

Repeating studies like these is important to understand the progress in financial literacy education. This paper is expected to contribute to the literature in the context of interpretation of the results of research to be done in the future.

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