RESEARCH ARTICLE



WWW.PEGEGOG.NET

Evaluation of a Developed Financial Literacy Program in High School Students

Burku ÖZDEMİR¹, Gülden KAYA UYANIK^{2,3}

^{1,2}Sakarya University, Sakarya/Turkey

³This study was produced from the master's thesis of the first author, conducted under the supervision of the second author.

ABSTRACT

The purpose of the study was to evaluate an education program at the high school level for financial literacy skills mentioned within the framework of general competencies and test programs' effectiveness. A mixed-method to obtain data diversity was employed in the research. In the quantitative part of the study, an experimental approach was used, while in the qualitative part, the case study method was benefited from. Within the scope of experimental design with the pretest-posttest control, in the quantitative dimension of the study, "Financial Literacy Behavior and Attitude Scale" was used. In the qualitative dimension of the research, the opinions of voluntary students in the experimental group about the training were determined through an interview form. As a result, financial literacy program developed for high school students positively affected their financial attitudes and behaviors. The significant difference between the students in the experimental group and control group indicates that the outcomes aimed by the literacy training program were achieved. In addition, the results obtained from the qualitative part of the research show that the student's perception of money changed, that the program positively contributed to their lives, and that they wanted to receive the training at their early ages. Based on the study results, it is recommended for policymakers to systematically involve financial literacy education in schools.

Keywords: Finance, literacy, financial literacy, high school, program development

Introduction

The importance of integrating the subjects related to economy, which is considered to be an indispensable part of life, into the educational life of the individual is seen as an issue that cannot be ignored now. In this context, providing education to individuals on economic and financial subjects, and getting them to gain skills, attitudes, values and awareness of these issues are highly important. Introducing new rules that are compatible with the purpose for the individuals to be improved through education means helping economic development to gain momentum (Hoşgörür & Gezgin, 2005). Although there are implemented and ongoing projects in our country, it is not possible to mention the presence of a current financial literacy program being implemented in different levels of education. However, it is seen that competences regarding financial literacy that the students need to gain have been determined in some countries worldwide, and that educational activities are systematically carried out in this regard (Collins & Odders-White, 2015; Johnson & Sherraden, 2007; Totenhagen et al., 2015). In many countries, there are compulsory courses on financial literacy(Henning & Lucey, 2017; Lusardi, 2019). In OECD and many affiliated countries, financial literacy is an issue that is attached importance. One of the pioneering organizations regarding financial education and literacy activities, OECD expanded the financial education project it initiated in 2003 and established "International Network on Financial Education" (INFE) in 2008. This network offered innovative methods in order to increase financial literacy in partner countries, and it was established to design and implement national strategies for financial education and personal financial education programs. In order to evaluate the efforts of the countries which approach financial literacy in a systematic way, OECD added the option to the "Program for International Student Assessment" (PISA) in 2012 in order to assess financial literacy levels of young individuals in the age group of 15 years. This step was the first international initiative of PISA aimed at measuring the financial literacy levels of the youth (PISA, 2012). In Estonia, where a steady increase was observed in PISA ranking, financial literacy level was determined to be quite high (OECD, 2016). The main reason for this increase is that they gave importance to financial literacy skill in the country and thus integrated this skill into their education system by cooperating with financial institutions and organizations. Estonia, which included contents regarding financial literacy skills in its

Corresponding Author e-mail: ozdemirburku@gmail.com

https://orcid.org/0000-0001-9799-1864[/]

How to cite this article: Özdemir B, Uyanik GK (2021). Evaluation of a Developed Financial Literacy Program in High School Students. Pegem Journal of Education and Instruction, Vol. 11, No. 3, 2021, 26-33

Source of support: Nil

Conflict of interest: None.

DOI: 10.14527/pegegog.2021.00

Submission : 05.04.2021 **Revision :** 30.05.2021 **Acceptence:** 01.06.2021 **Publication :** 01.07.2021

national education programs for the first time in 1996, placed the revised financial approaches in the course contents at the primary and secondary levels in 2010. Financial institutions and organizations in Estonia, particularly banks, play an important role in the implementation of national strategies (OECD, 2016). Similarly, according to the OECD 2016 report, education programs related to financial literacy were implemented in different forms and processes in the USA, just like in England, Scotland, and North and South Ireland.

In order for financial literacy education to be received in early periods, to increase the number of financially literate individuals, and financial resources to be used efficiently by individuals, financial literacy education should be started at early ages and be sustained for life (Temizel & Özgüler, 2015). Hogarth (2002) states that financially competent and well-educated individuals make better financial decisions and have higher welfare through appropriate investment and savings method, and that since financial literacy helps societies to have strong economy, it is a skill that individuals should be made to gain (act. in Johnson & Lewis, 2009). When individuals have sufficient information on financial issues, they will be able to respond quickly to changing and developing conditions over the years and will not experience difficulties while planning their future. In addition, young individuals learning to overcome economic problems is among the basic goals of citizenship education (Adalar, 2019).

The oldest use of the term financial literacy was seen in the report prepared in 1992 related to the researches of National Education Foundation by NatWest Bank, in which the term financial literacy was defined as an individual's skill to make conscious and effective decisions regarding the use and management of money (Lee, 2012). There are various definitions of financial literacy made by different organizations and researchers in the literature (Atkinson & Messy, 2012; Davies, 2015; Malson & Wilson, 2000; Lusardi & Mitchell, 2014).

In the studies conducted by the Program for International Student Assessment (PISA), financial literacy has been defined in detail. According to the definition made in PISA, financial literacy is "the drive and confidence of individuals and society to understand financial knowledge and related concepts, risks and skills in order to increase their financial prosperity, and to use this knowledge and understanding in different financial contexts to make effective decisions" (OECD, 2013).

According to the OECD 2014 report, financial literacy is considered as an essential life skill that needs to be acquired at early ages by the "Program for International Student Assessment" (PISA) (OECD, 2014). In ever-changing global markets, it has become more challenging for young individuals to make choices in the financial field compared to previous periods. In this regard, it is highly important for young individuals to become financially literate. Finance is an issue

that concerns not only the experts but also individuals from all segments of the society, including children. Especially financial knowledge, attitudes and behaviors gained in childhood become important in older ages. For this reason, acquisition of financial literacy skill by young individuals is of interest to policy makers (Gökmen, 2012).

Although there are studies conducted on financial literacy, no study in the form of program proposal in the educational levels before university was found (Özdemir, 2020). In the present study conducted in this direction, a financial literacy education program, no example of which existed at the high school level in our country, was developed, and it was aimed to measure the effectiveness of the program developed. If the efficiency expected from the program was achieved, it was aimed for it to be integrated into a course or offered as a separate course. Within the scope of these targets, the change in financial literacy skill was observed through experimental design model, and then opinions of the students participating in the research were taken and the results obtained were evaluated.

METHOD

Research Design

The purpose of the study was to develop an education program at high school level for financial literacy skills mentioned within the framework of general competences in the Turkish Educational System and to test the effectiveness of the program developed. In line with this purpose, the research was carried out using mixed paradigm. Creswell and Plano-Clark(2006) defined mixed method as "a method in which quantitative and qualitative methods are used together, which makes us understand a problem better compared to using only one method."

The research was carried out with quantitative and qualitative methods in sequence. In the quantitative part of the study, experimental method was used, while in the qualitative part, case study method was benefited from, and answers to the problems were sought. Experimental design, which was used in the quantitative part of the research, is a design that aims to reveal the connection between cause and result and is composed of the data that the researcher wants to observe under his/her control (Karasar, 2008). In the experimental method, quasi-experimental design model with pretest-posttest control groups was used. Case study, which was used in the qualitative part of the study, is a method in which a single issue or situation is focused on and examined in detail and which enables to understand all aspects of the data (Subaşı & Okumuş, 2017).

Ethics committee decision was taken from the affiliated university for the measurement tools to be used in the application of the study.

Study Group

The study was carried out with 10th grade high school students determined through purposeful sampling method. The eligibility of the curriculum and the number of students who volunteered were effective in selecting the 10th grade in the program implementation. There were 42 students in the quantitative part of the study. The qualitative part of the study was carried out with 12 participants who were included in the experimental group to whom financial literacy program was applied within the scope of experimental implementation.

Data Collection Tools

In the study, Personal Information Form developed by researchers, Financial Literacy Attitude and Behavior Scale developed by Sarıgül (2015), and Interview Form developed by researchers were used as measurement tools.

Personal Information Form: The form prepared to collect the demographic information of the participants contains questions related gender and family income level.

Financial Literacy Attitude and Behavior Scale (FLABS): FLABS developed by Sarıgül(2015) includes a total of 14 items and 4 factors (spending, saving, perception, interest). In order to calculate the reliability of the 5-point Likert type scale, internal consistency analysis was performed. The Cronbach's alpha reliability coefficients of the total scale and its subdimensions were found to be .72, .78, .76, .78, and .77, respectively. In the present study, the reliability coefficients of the total scale and its subdimensions were determined to be between .76-.82.

Interview Form: The form was prepared by the researchers in order to collect the opinions of some of the students included in the experimental group on the program. First of all, the purposes of the experimental process were listed, and in line with these purposes, items were written. These items were presented to the common opinion of the researchers, and a total of 4 open-ended questions were formed.

Data Collection Process and Data Analysis

In the study conducted through mixed paradigm, quantitative and qualitative data collection processes were carried out separately. The quantitative part of the study was conducted in experimental method. Pretest and posttest applications were performed in the study, and follow-up test applications could not be carried out due to the COVID-19 pandemic, which interrupted the process. For this reason, the study was conducted in quasi-experimental design model with pretest-posttest control group. The content of the financial literacy program developed by the researchers is made up of financial literacy, budget, targets, expenditures, debts, savings, investment and financial decision. In the quantitative part run with experimental design, data collection process

lasted 8 weeks. Activities done in the program by weeks are as follows: Week 1 "Drama Game with Financial Terms", Week 2 "The Budget of My Life", Week 3 "On the Road to My Targets Activity", Week 4 "10 Seconds Game", Week 5 "How to Get Rid of Debts", Week 6 "The Activity of I am Saving, Spending, Sharing", Week 7, "I Invest, I Make Good Use of My Money", and Week 8 "I am Making More Rational Decisions About My Life." Before and after the experimental design, "Financial Literacy Attitude and Behavior Scale" was applied to the students in the experimental and control groups. The students included in the experimental group In the qualitative part of the research were chosen on a voluntary basis, and the data were collected in electronic environment.

In the study in which the quantitative part was conducted through experimental method, the difference between the experimental and control groups was examined by difference tests. According to the results of the Shapiro-Wilk test performed to determine the normal distribution of the data, as the data showed normal distribution (.969 n=42 p>.05 for pretest; .958 n=42 p>.05), parametric tests were used in the analyses. IBM SPSS 21 package program was used for data analysis. Descriptive analysis method was employed in the qualitative part of the study.

FINDINGS

In this section, the findings obtained from the analysis of the data collected in order to find an answer to the main problem of the research are presented. The findings are presented under the headings of findings regarding "the testing of the effectiveness of the financial literacy program" and findings regarding "the opinions of the students participating in the financial literacy program."

Findings Regarding the Testing of the Effectiveness of the Financial Literacy Program

Prior to the financial literacy program, the Financial Literacy Attitude and Behavior Scale was applied to the experimental and control groups, and the scores obtained were recorded as pretest scores. Table 1 shows t-test results regarding the testing of the difference between the pretest scores of the experimental and control groups of the study.

Table 1 contains the results of "dependent groups t-test" used in the comparison of pretest scores obtained by experimental and control groups from Financial Literacy scale. As a result of the analysis, it was determined that pretest scores of the experimental and control groups did not show a significant difference in the total financial literacy variable and its subdimensions (spending, saving, perception, interest) ($t_{\rm spending} = 1.25 \, \rm p > .05$; $t_{\rm saving} = -1.69 \, \rm p > .05$; $t_{\rm perception} = 1.18 \, \rm p > .05$; $t_{\rm interest} = 1.39 \, \rm p > .05$; $t_{\rm financial literacy} = .80 \, \rm p > .05$). This situation indicates that there was no significant difference between the two groups.

At the end of the 8-week application of the financial literacy program, the Financial Literacy Attitude and Behavior Scale was applied to the experimental and control groups again, and the scores obtained were recorded as posttest scores. Table 2 shows t-test results regarding the testing of the difference between the posttest scores of the experimental and control groups of the study.

When Table 2 was examined, it was determined that posttest scores of the experimental and control groups showed a significant difference in the total financial literacy variable and its subdimensions (spending, saving, perception, interest) ($t_{\rm spending} = 6.43 \text{ p}<.05$; $t_{\rm saving} = 6.19 \text{ p}<.05$; $t_{\rm perception} = 8.06 \text{ p}<.05$; $t_{\rm interest} = 5.13 \text{ p}<.05$; $t_{\rm financial literacy} = 7.36 \text{ p}<.05$). It was determined that posttest mean scores of the experimental group to which financial literacy program was applied and posttest mean scores of the control group, and posttest mean scores of the total financial literacy variable and its subdimensions (spending, saving, perception,

interest) were higher ($X_{\rm spendingc} = 10.67~X_{\rm spendinge} = 15.81~;~X_{\rm savingc} = 12.81~X_{\rm savinge} = 17.33~;~X_{\rm perceptionc} = 7.81~X_{\rm perceptione} = 13.81~;~X_{\rm interestc} = 8.33~;~X_{\rm intereste} = 11.52~;~X_{\rm financial~literacyc} = 39.62~X_{\rm financial~literacyc} = 58.48).$

The difference between the pretest and posttest scores of the control group was examined in the study. The findings obtained are presented in Table 3.

When Table 4 was examined, it was determined that the pretest and posttest scores of the control group did not show a significant difference in the total financial literacy variable and its subdimensions (spending, saving, perception, interest) ($t_{\rm spending} = -.69 \ p>.05$; $t_{\rm saving} = -.14 \ p>.05$; $t_{\rm perception} = -1.97 \ p>.05$; $t_{\rm interest} = -.52 \ p>.05$; $t_{\rm financial \, literacy} = -1.39 \ p>.05$). This situation shows that variables other than the financial literacy program did not have any effect on financial literacy. The difference between the pretest and posttest scores of the experimental group was also examined. The findings obtained are presented in Table 4.

Table 1: t-test results regarding the testing of the difference between the pretest scores of the experimental and control groups of the study

Pre Test	Groups	N	Mean	SD	df	t	p
Spending	Experiment	21	11.14	1.93	40	1.25	.21
	Control	21	10.38	2.01	40	1.23	.21
Saving	Experiment	21	11.86	1.24	40	1.60	00
	Control	21	12.76	2.12	40	-1.69	.09
Perception	Experiment	21	8.05	1.75	40	1.18	.24
	Control	21	7.24	2.59	40	1.16	.24
Interest	Experiment	21	8.81	1.78	40	1.20	.17
	Control	21	8.14	1.28	40	1.39	.17
Financial Literacy	Experiment	21	39.86	4.27	40	.80	42
	Control	21	38.52	6.33	40	.80	.42

Table 2. t-test results regarding the to	esting of the difference be	tween the posttes	st scores of the ex	operimental and	control groups o	of the study	
Post Test	Groups	N	Mean	SD	df	t	р
Spending	Experiment	21	15.81	2.58	40	C 42	00
	Control	21	10.67	2.59	40	6.43	.00
Saving	Experiment	21	17.33	2.15	40	ć 10	00
	Control	21	12.81	2.56	40	6.19	.00
Perception	Experiment	21	13.81	2.16	40	0.06	00
	Control	21	7.81	2.64	40	8.06	.00
Interest	Experiment	21	11.52	2.06	40	F 12	00
	Control	21	8.33	1.96	40	5.13	.00
Financial Literacy	Experiment	21	58.48	8.05	40		00
	Control	21	39.62	8.52	40	7.36	.00

Table 3: t-test results regarding the testing of the difference between the pretest and posttest scores of the control group							
		N	Mean	SD	df	t	Р
Spending	Pretest	21	10.38	2.01	20	60	.49
	Posttest	21	10.67	2.59	20	69	.49
Saving	Pretest	21	12.76	2.12	20	1.4	0.0
	Posttest	21	12.81	2.56	20	14	.88
Perception	Pretest	21	7.24	2.59	20	-1.97	.06
	Posttest	21	7.81	2.64	20	-1.97	.06
Interest	Pretest	21	8.14	1.28	20	50	60
	Posttest	21	8.33	1.96	20	52	.60
Financial Literacy	Pretest	21	38.52	6.33	20	1.20	17
	Posttest	21	39.62	8.52	20	-1.39	.17

Table 4: t-test results regarding the testing of the difference between the pretest and posttest scores of the experiment group								
		N	Mean	SD	df	t	р	
Spending	Pretest	21	11.14	1.93	20	9.77	00	
	Posttest	21	15.81	2.58	20	-8.77	.00	
Saving	Pretest	21	11.86	1.24	20	-11.50	00	
	Posttest	21	17.33	2.15	20		.00	
Perception	Pretest	21	8.05	1.75	20	-12.06	00	
	Posttest	21	13.81	2.16	20		.00	
Interest	Pretest	21	8.81	1.78	20		.00	
	Posttest	21	11.52	2.06	20	-5.66		
Financial Literacy	Pretest	21	39.86	4.27	20	11.42	00	
	Posttest	21	58.48	8.05	20	-11.43	.00	

When Table 4 was examined, it was determined that pretest and posttest scores of the experimental group showed a significant difference in the total financial literacy variable and its subdimensions (spending, saving, perception, interest) $(t_{spending} = -8.77 \text{ p} < .05; t_{saving} = -11.50 \text{ p} < .05; t_{perception} = -12.06)$ p<.05; $t_{interest} = -5.66 p<.05$; $t_{financial literacy} = -11.43 p<.05$). It was determined that posttest mean scores of the experimental group to which financial literacy program was applied were higher than pretest mean scores in the total financial literacy variable and its subdimensions (spending, saving, perception, interest). $(X_{\text{spendingpre}} = 11.44 X_{\text{spendingpost}} = 15.81 ; X_{\text{savingpre}} = 11.86$ X_{savingpost}=17.33; X_{perceptionpre}=8.05 X_{perceptionpost}= 13.81; ; $X_{interestpre}$ =8.81; $X_{interestpost}$ =11.52; $X_{financial\ literacypre}$ =39.86 X_{financial literacypost}=58.48). This difference in favor of the experimental group in all subdimensions and the total score shows that the program is functional.

Findings Regarding the Opinions of the Students Participating in the Financial Literacy Program

After the application, interviews consisting of four open-ended questions were held with a few of the students included in the

experimental group. Findings related to the responses to the question "Can you tell us what you thought of the education before you received financial literacy education?" are presented in Table 5.

Table 5: Opinions of the students on the education before receiving financial literacy education

Thema			Codes	f	%
Your opinion on the education	Positive		\$1,\$2,\$4,\$5,\$6, \$7,\$8	7	63.63
before receiving financial literacy	Negative		S10,S9	2	18.18
education:	N expectation	o n	S3,S11	2	18.18

When the opinions of the students on the education before receiving financial literacy education were examined in Table 5, it was seen that 63.63% of them had a positive opinion of financial literacy education before receiving it, 18.18% had a negative opinion, and 18.18% had no expectations. Below are some opinions of the students in this regard:

S8: I had a positive view of the education before receiving it. I thought it was the education of a topic I needed to learn.

S3: Honestly, I cannot say that issues such as finance, money, etc. attracted my attention much before. Therefore, I did not have big expectations from the education.

S9: Before receiving financial literacy education, I used to believe that financial literacy was an issue that was too difficult to learn and too complicated to overcome. I would try to understand what was being said, but would fail and feel envious of those who understand it and make interpretations about it. That is why, I used to think that I would not be successful.

Findings related to the responses to the question "How would you evaluate the effect of the education you received on your life?" during the interviews are presented in Table 6.

Table 6.: Opinions of the students on the effect of the education they received on their life

Thema		Codes	f	%
The effect of the received education on your life:	Perception of money	S3, S6, S8, S9, S11	5	45.45
	Investing in the future	S1, S2, S3, S4, S7	5	45.45
	Distinction between desire and need	S5, S10	2	18.18

When Table 6 was examined it was determined that in terms of the effect of the education on their lives, 45.45% of the students expressed that their perception of money increased, 45.45% reported that it affected their perception of investing in the future, and 18.18% said that it had an effect on their distinction between desire and need. Below are some opinions of the students in this regard:

S6: The education I received made me more prudent and buy things with more care and self-sacrifice. Mow, I make decisions after giving it a lot of thought, I do not feel upset when I did not or could not buy something; on the contrary, I feel more relieved. My perception of money has changed.

S2: Thanks to the education I received, I invested in my future, and I learned how much I would spend and how much I would spare for investment when I started working; clearly, it had a very positive effect on me.

S10: I learned how I could use my money in a balanced way by determining my desires, needs, and priorities, and I also learned that I could save money without making very big changes in my life.

The question "If you had the opportunity to receive financial literacy education at an earlier age, at what age would you prefer to receive it?" was asked to the students. Table 7 presents the responses of the students to this question.

Table 7. Opinions about the age at which they want to take financial literacy education

Thema		Codes	f	%
The age at	6 +	S2, S3, S10, S11	4	36.36
which they want to take	9-10	S4, S7, S9	3	27.27
financial	10-11	S7, S8	2	18.18
literacy	13+	S1, S5	2	18.18
education	16	S6	1	9.09

When Table 7 was examined, it was determined that regarding the age at which they would prefer to receive financial literacy education, 36.36% of the students said the education should start at age 6 and above, 27.27% at age 9-10, 18.18% at age 10-11, 18.18% at age 13 and above, and 9.09% at age 16. Below are some opinions of the students in this regard:

S10: I wish I could take this education when I was in primary school, because I think it is a good level of education for me to contribute some things from myself and to adapt to life very well.

S4: I think, I would have benefited more if I had received this education at the age of 9-10 when I started secondary school.

S8: I would want it receive it at the age of 10-11, because receiving information about being prudent just when I was starting to realize things would have formed a better foundation for my knowledge of saving.

S1: After the age of 13, because as a result of being informed at an early age, I could have determined my habits related to money better.

S6: I am happy with the age at which I am receiving this education. At the age of 16; no sooner and no later than that. That is the age when we start to make sense of things in our lives.

The question "What are the difficulties you experienced related to the teaching of the subject during the education?" was asked to the students. Table 8 presents the responses of the students to this question.

 Table 8: Opinions in terms of the difficulties experienced during the education process

	Thema	Codes	f	%
The difficulties experienced	putting the knowledge into practice	S2, S4, S5, S7, S9	5	45.45
during the education process	did not live any difficulty	S1, S3, S6, S7	4	36.36
	have difficulty with course material and terminology	S10, S11	2	18.18

Considering the information in Table 8, in terms of the difficulties experienced during the education process, 45.45% of the students expressed difficulty regarding putting the

knowledge into practice, 36.36% said they did not live any difficulty, and 18.18% reported that they had difficulty with course material and terminology. Below are some opinions of the students in this regard:

S7: Actually, I did not have much difficulty in the education process, but it was a bit hard to change some habits; changing my habits such as not leaving the devices plugged, starting to save by bringing my water from home, using the public bus instead of taxi was a little hard for me, but when I changed them and gained new habits, I realized that they were not so difficult to change.

S5: The process of accustoming to the way our teacher recommended us while spending my money was a kind of difficulty I experienced during the education process.

S10: Although I did not experience great difficulties, I found the materials used inadequate (in terms of the knowledge to be permanent), and it was difficult to grasp the meanings of some words.

DISCUSSION AND CONCLUSION

In the study, a financial literacy program for high school students were prepared, and the program was evaluated. The purpose of the study was to ensure that the concept of financial literacy, which is considered as an essential life skill, is integrated into course contents. As a result of the study, when the difference between financial literacy posttest and pretest mean scores of the experimental and control groups were compared, it was determined that the posttest-pretest scores in the total financial literacy variable and all its subdimensions significantly differed. The financial literacy program applied within the scope of the study caused a statistically significant and positive effect on the financial attitudes and behaviors observed in the students. In the present study, in which it was aimed to develop financial literacy accepted as an essential life skill, it was concluded that as a result of the program implemented, there was improvement in the attitudes and behaviors of the students.

There are studies in the literature supporting the results of the current study. Hawthorne, Rodgers and Wheeler (2003) conducted an experimental study in order to increase the knowledge level of primary school students with an economics program they developed. The researchers concluded that the results of the research revealed a significant difference in favor of the experimental groups.

Danes et al. examined the contribution of the content of financial literacy program they designed for high school students to students in terms of financial knowledge, behavior and self-efficacy. They concluded that as a result of 57 sessions of financial education, the planned content positively affected the financial knowledge, behaviors and attitudes of both the students and the teachers (Danes et al., 1999).

Similarly, Varceo et al. examined the financial literacy attitudes of students by the addition of course related to financial literacy to the curriculum for high school students, and they observed that the financial literacy of the high school students improved with the use of financial literacy curriculum, and that it positively affected their financial attitudes and behaviors (Varceo et al., 2005).

When the results of the qualitative results of the study were examined, it was concluded that the students had a positive view of the financial literacy education they received, and that there occurred a change in their perception of money, that they could distinguish between desire and need, and that they wanted to receive this education at earlier ages.

In the study, while teaching the students financial issues, the program was rendered interesting by showing the students the importance of finance in their lives, which facilitated learning. The effectiveness of the financial literacy program we applied is quite clear in terms of ensuring the use of activities in daily lives and making the knowledge gained more permanent.

The efficiency of a sound individual financial management education to be provided at young ages is an important issue for increasing the financial prosperity of societies and countries as well as individuals. Individuals who have basic knowledge of financial concepts and whose financial literacy levels continuously increase play a key role in ensuring financial prosperity in a society. In this context, provided that financial literacy concept, which is not currently included in course contents, is integrated into course contents, this concept, which is learned out of the school, will be provided through the school, and thus a contribution will be made to the provision of equal opportunities in education.

Based on the results of the study, it is recommended for policy makers to involve financial literacy education in schools in a more systematic way. It is recommended that content arrangements regarding financial literacy should be made for teachers who show an effort to increase the quality in education and to create a universally harmonious future and to increase financial literacy levels of students in educational institutions, that there should be an elective financial literacy course in high school curriculum, and that the importance of this issue should be taught to students. Similarly, researcher are recommended to conduct further studies that would apply to a wider universe by including both different grade levels and school types in the sample, thus having access to a greater number of students.

REFERENCES

Adalar, H. (2019). Sosyal Bilgiler Öğretmen Eğitiminde Finansal Okuryazarlık ve Öğretimi: Bir Model Önerisi. (Doktora Tezi),Gazi Üniversitesi, Ankara.

Atkinson, A. & Messy, F. (2012) Measuring Financial Literacy: Results of the OECD/International Network on Financial Education (INFE) Pilot Study. *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 15, OECD Publishing.

- Collins JM & Odders-White E (2015) A framework for developing and testing financial capability education programs targeted to elementary schools. *The Journal of Economic Education* 46(1): 105–120.
- Creswell, J. W., & Plano Clark, V. L. (2006). Understanding mixed methods research. *Designing and conducting mixed methods* research, 1-19.
- Danes, S. M., Huddleston-Casas, C., & Boyce, L. (1999). Financial planning curriculum for teens: Impact evaluation. *Journal of Financial Counseling and Planning*, 10(1), 26. 10(1), 25-37.
- Davies, P. (2015). Towards a framework for financial literacy in the context of democracy. *Journal of Curriculum Studies*,47(2), 300–316.
- Gökmen, K. (2012). Finansal Okuryazarlık. İstanbul: Hiperlink.
- Hawthorne, S., Rodgers, Y., & Wheeler, R. C. (2003). Economic Literacy Among Primary-Grade Students. Available at SSRN 433980.
- Henning, M. B., & Lucey A.T. (2017) Elementary Preservice Teachers' and Teacher Educators' Perceptions of Financial Literacy Education, *The Social Studies*, 108:4, 163-173,
- Hogarth, J. M. (2002). Financial literary and family & consumer scences. *Journal of Family and Consumer Sciences*, 94(1), 14.
- Hoşgörür, V. & Gezgin. G. (2005). Ekonomik ve Sosyal Kalkınmada Eğitim. Van Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi.2(1).
- Johnson, C.A. & Lewis, A.R. (2009). Consumer economics and family resources: importance of financial literacy. *Journal of Family Consumer Sciences Education*, 27, 1-12.
- Johnson, E. & Sherraden, M. (2007) From financial literacy to financial capability among youth. *Journal of Sociology and Social Welfare* 34(3): 119–145.
- Karasar, N. (2008). *Bilimsel Araştırma Yöntemi*, Ankara: Nobel Yayınları.
- Lee, N. (2012). What is financial literacy, and does financial literacy education achieve its objectives? Evidence from banks, government agencies and financial literacy educators in

- England. In the Proceedings of 2012 Academy of Financial Services Annual Conference at San Antonio, USA E (Vol. 4).
- Lusardi, A. (2019). Financial literacy and the need for financial education: evidence and implications. Swiss Journal of Economics and Statistics 155, 1.
- Lusardi, A. & Mitchell, O.S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature* 52(1): 5–44.
- Mason, C. L. J., & Wilson, R. M. S. (2000). Conceptualising financial literacy. *Occasional paper*, 7.
- OECD. (2013). PISA 2012 Assessment and Analytical Framework
- OECD (2014). PISA 2012 Results. Students And Money: Financial Literacy Skills For The 21st Century (Volume VI), PISA, OECD Publishing.
- OECD. (2016). Financial Education in Europe Trends And Recent Developments Financial. OECD Publishing.
- Özdemir, B., (2020). Developing financial literacy program for high school students and evaluating its effects, Mater thesis, Sakarya University, Sakarya.
- PISA (2012). Assessment and Analytical Framework Mathematics, Reading, Science, Problem Solving and Financial Literacy.
- Sarıgül, H. (2015). Finansal Okuryazarlık Tutum ve Davranış Ölçeği: Geliştirme, Geçerlik ve Güvenirlik. *Yönetim ve Ekonomi Araştırmaları Dergisi*, 13(1), 200-218.
- Subaşı, M. & Okumuş, K. (2017). Bir araştırma yöntemi olarak durum çalışması. Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 21(2), 419-426.
- Temizel, F., & Özgüler, İ. (2015). Finansal Eğitime Bakış. Business Management Studies: An International Journal, 1(3), 1-16.
- Totenhagen CJ, Casper DM, Faber KM, et al. (2015) Youth financial literacy: A review of key considerations and promising delivery methods. *Journal of Family and Economic Issues* 36(2): 167–191
- Varcoe, K., Martin, A., Devitto, Z., & Go, C. (2005). Using a Financial Education Curriculum for Teens. *Journal of Financial Counseling and Plannig*, Vol 47- (1). P.1-10.