A RESEARCH ON FINANCIAL LITERACY OF DUMLUPINAR UNIVERSITY'S ACADEMIC STAFF[1]

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Abstract

Financial literacy is one of the most important issues emerging on the agenda of the economic literature in the aftermath of the 2008 global financial crisis. The lack of financial knowledge of both individuals and institutions play a major role in contributing to the 2008 global financial crisis.

In this study, the level of financial literacy of Dumlupinar University's academic staff was determined with the help of survey questionnaires. Accordingly, a survey form consisting of 40 questions was developed by using the scales of relevant institutions and researchers. 734 out of 1165 academic staff, working at the University completed the survey for the 2016-2017 academic year out of which 505 forms were found to be appropriate to assess. All variables in the survey were in categorical form and the first level was taken as the "reference level". The obtained data were analyzed by "binary logistic regression analysis method". Monitoring economic and financial developments, the level of knowledge on credit card details, budgeting habit, saving and investment ability, the level of general knowledge relating to banking regulations, and the knowledge of calculating the inflation rate and rate of return were among the factors that influence the level of financial literacy. The dependent variable of the study was, "Do you describe yourself as financially literate?" 117 academic staff answered this question as "yes" (23.2%) and 388 "no" (76.8%). 51 of the academic staff, who described themselves as financially literate could be considered as financially literate while 24 of the academic staff who did not describe themselves as financially literate could be considered as financially literate.

Keywords: Financial Literacy, Academic Staff, Binary Logistic Regression Analysis, Dumlupınar University.

DUMLUPINAR ÜNİVERSİTESİ AKADEMİK PERSONELİNİN FİNANSAL OKURYAZARLIK DÜZEYİ ÜZERİNE BİR ARAŞTIRMA

Öz

2008 küresel finans krizinin ortaya çıkış sürecinde, bireylerin ve işletmelerin bilgi eksikliklerinin büyük rol oynadığının görülmesiyle birlikte, finansal okuryazarlık konusu ekonomi dünyasının gündemindeki en önemli konulardan biri olmuştur.

Çalışmada, Dumlupınar Üniversitesi akademik personelinin finansal okuryazarlık düzeyi, anket çalışması yardımıyla belirlenmeye çalışılmıştır. Bu doğrultuda, konu ile ilgili kuruluşların ve araştırmacıların hazırlamış oldukları ölçeklerden de yararlanılarak, 40 sorudan oluşan bir anket formu geliştirilmiştir. Anketlerin uygulanması aşamasında, 2016-2017 akademik yılı itibariyle Dumlupınar Üniversitesinde görev yapmakta olan 1.165 akademik personelden 734'üne ulaşılabilmiş, cevaplanan formların 505'i değerlendirmeye uygun bulunmuştur. Anket formunda yer alan tüm değişkenler kategorik formda olup, ilk düzey "referans düzey" olarak alınmıştır. Elde edilen veriler bilgisayar destekli bir istatistik programı olan SPSS yardımıyla analize uygun hale getirilerek, "ikili lojistik regresyon analizi yöntemi" ile model tahmini yapılmış ve sonuçlar değerlendirilmiştir. Ekonomik ve finansal gelişmelerin izlenmesi, kredi kartı uygulamalarına ilişkin bilgi düzeyi, bütçe yapma alışkanlığı, tasarruf ve yatırım kabiliyeti, bankacılık mevzuatı hakkındaki genel bilgi düzeyi, enflasyon ve getiri hesabı bilgisi gibi değişkenler, finansal okuryazarlık düzeyi üzerinde etkili faktörler arasında dikkati çekmektedir. Bağımlı değişken" olarak alınan "kendinizi finansal okuryazar olarak nitelendiriyor musunuz?" sorusuna 117 akademisyen "evet" (%23,2), 388 akademisyen "hayır" (%76,8) cevabı verirken, kendini finansal okuryazar olarak nitelendiren akademisyenlerin 51'inin aslında finansal okuryazar olarak değerlendirilemeyeceği, kendini finansal okuryazar olarak nitelendirmeyen akademisyenlerin 24'ünün ise aslında finansal okuryazar olarak değerlendirilebileceği görülmüştür.

Anahtar Kelimeler: Finansal Okuryazarlık, Akademik Personel, İkili Lojistik Regresyon Analizi, Dumlupınar Üniversitesi.

1. Introduction

The financial system develops as the world's economy grows and the numbers of its participants increase. However, for a healthy and well-functioning financial system, all of its parts and components must be able to function properly. One of these components is the individual and the household. In recent years, particularly after the 2008 global financial crisis, several control mechanisms were needed for stability of the financial system. "Financial Literacy" has become the most important issue for the world economy within these mechanisms. There is no consensus of the definition of financial literacy yet because it is a concept in the developmental stage (Çelikkol & Çelikkol, 2015; Gökmen, 2012). The concept of financial literacy is mainly concerned with the ability of individuals to manage money. Remund (2010) states that the following five components have been included in the definition of financial literacy since 2000:

- Information about financial concepts,
- Ability to communicate about financial concepts,
- Personal finance management skills,
- Ability to make appropriate financial decisions, and
- Planning behavior for future financial needs.

As it can be seen, financial literacy includes not only financial knowledge of the individuals but also financial skills, attitudes and behaviors (Gökmen, 2012).

In recent years, a growing number of studies have been conducted in collaboration with international organizations (such as the OECD and the World Bank) and researchers on

financial literacy (Atkinson & Messy, 2012; Lusardi & Mitchell, 2008; Lusardi, Mitchell, & Curto, 2009, 2010; OECD, 2005; Van Rooij, Lusardi, & Alessie, 2011). However, the majority of these studies seem to be concentrated in developed countries such as the USA.

In the framework of Istanbul International Finance Center Strategy and Action Plan published in 2009, there are several action plans to increase financial literacy such as the improvement of the curriculum of primary and secondary schools, the modernization of the context of existing programs in universities in cooperation with the financial sector, encouraging university and financial sector cooperation, and training of academicians according to the needs in the field of finance (DPT, 2009). In addition, in the "Financial Access, Financial Education, Financial Consumer Protection Strategy and Action Plans" published as the Prime Minister's Circular in 2014, it is aimed to spread financial products and services to all segments of society, include more individuals to the financial system and increase the quality and the use of existing financial products and services.

The main purpose of this study is to investigate the financial literacy level of academic staff of Dumlupinar University which represents a significant part of the population working in Kütahya, in terms of economic activities such as spending, saving, and investment. In other words, it is to determine the level of understanding the financial system of the academic staff and their financial application skills. It is highly likely that the academic staff may have direct or indirect influence on their family members' and more than 50.000 Dumlupinar University students' financial knowledge, skills, attitudes and behaviors. Therefore, it can be said that the findings add significant value to the study in terms of revealing the financial literacy levels of academic staff and suggesting activities that could increase these levels. Moreover, the financial literacy studies conducted at universities seem to focus more on students. From this point of view, the study provides an important contribution to the finance literature.

This study is composed of six sections. The second section, which follows on from the introduction, reviews the studies which have examined financial literacy within universities. In the third section, the methodology used in the study is explained. In the fourth section, the data used in the study is presented. In the fifth section, empirical results of the financial literacy levels of Dumlupinar University academic staff are interpreted. The final section summarizes the results of the overall study.

2. Literature Review

In the literature, there are many studies related to financial literacy based on different countries-regions, groups of society, and periods. These studies, where the level of financial

literacy is examined on the basis of national, international, general or specific subgroups, should not be considered as repetitive studies but should be considered as studies that enable us to determine the situation of financial literacy level and determine the change in the level of financial literacy over time (Çelikkol & Çelikkol, 2015).

In the literature, the number of studies examining and evaluating financial literacy in terms of academic staff of universities is very limited.

Öztürk and Demir (2015) examine the financial literacy level of Süleyman Demirel University's academic staff indicating that only 59% of them are financially literate. The authors emphasize that this result is worse than Turkey's financial literacy rate of 59.8%. Öztürk and Demir (2015) assert that female academicians have higher financial literacy score (59.3%) than male academicians (58.8%). The authors show that associate professors have the highest financial literacy score (65.5%) while instructors have the lowest (52.6%). The authors also argue that the level of income does not affect the level of financial literacy of academic staff. Gutnu and Cihangir (2015) investigate the financial literacy level of the academic and administrative staff of Osmaniye Korkut Ata University. The authors state that 84.7% of the 144 personnel participated in the survey are interested in economic and financial developments of the world and Turkey and 25% of these staff follow these developments every day, mostly from the internet. The authors further go on to emphasize that participants' internet banking usage rate (86.1%), knowledge of credit card interest rate (60.4%), and the level of understanding credit card statement (75.7%) are quite high.

While it is not directly related to financial literacy, Ünal and Düger (2015) investigate the impact of financial behavior on financial well-being of Dumlupinar University's academic staff. The authors indicate that academicians are limitedly satisfied with their current financial well-being, and financial behavior has a positive impact on financial well-being. In addition, Ünal and Düger (2015) emphasized that increasing academician's salary solely is not enough to raise their level of financial well-being. Raising their awareness is equally important.

The majority of the studies that measure the level of financial literacy in universities consider students as the population.

Çelikkol and Çelikkol (2015) state that 77.5% of the students in Dumlupinar University Kütahya Vocational School of Social Science learn money management knowledge from their parents. Temizel and Bayram (2011) also point out that 84% of the students in Anadolu University Faculty of Economics and Administrative Sciences learn financial knowledge from their parents and the financial literacy level of the parents is a factor that directly influence the children's financial knowledge. These findings are similar to the

results of the study by van Rooij et al. (2011) which exhibits that the individuals with low financial literacy tend to invest by relying on their parents' and friends' financial advice. Cude et al. (2006) also emphasize that parents play a significant role on the financial socialization of university students. However, unlike many studies in the literature, this study suggests that female students have a higher level of financial literacy than male students. Another issue that is noteworthy is the student's incorrect answers about basic financial concepts and mathematical expressions.

Bayram (2015) determines that financial literacy is perceived as a narrower concept by students of the Anadolu Universiy Faculty of Economics and Administrative Sciences and Porsuk Vocational School. Accordingly, financial literacy is considered as saving money regularly, paying bills on time, and the habit of keeping financial records. Although financial literacy levels are low in general in students, they are unaware of it. This result is consistent with the findings of Temizel and Bayram (2011) which show that only 8.5% of the students perceive themselves as weak in financial issues. Therefore, the authors emphasize that students perceive themselves more successful than they are in managing financial issues and these findings are compatible with international findings.

The study on the students of Nevşehir Hacı Bektaş University Faculty of Economics and Administrative Sciences reveals that there is a significant relationship between financial attitudes and behavior while there is no significant relationship between financial behavior and knowledge as well as financial attitudes and knowledge (Alkaya & Yağlı, 2015). Alkaya and Yağlı (2015) indicate that although the students have positive financial behavior (78.4%) and attitudes (66.5%) they do not have sufficient financial knowledge. On the other hand, the study which carried the motto that "Financial literacy education should encourage better financial behaviors" by Bernheim, Garrett, and Maki (2001) conclude that there is a positive relationship between financial literacy education programs in high schools and individual savings. In addition, Chen and Volpe (1998) state that insufficient financial knowledge limits students' conscious decision-making capabilities and directs them to making wrong decisions thus the authors assert that the students need to develop their financial knowledge.

Kılıç, Ata, and Seyrek (2015) show that the financial literacy level of the Gaziantep University's undergraduate students is low (48%) and the authors indicate that this result is similar to the results (49.8%) of the study by Sohn, Joo, Grable, Lee, and Kim (2012). In the study, it is suggested that the most successful area of students in financial literacy is "individual banking" and the most unsuccessful area is the "investment". Similar to many studies in the literature, male students have higher level of financial literacy than female students. On the faculty

level, Faculty of Economics and Administrative Sciences has the highest level of financial literacy while the Faculty of Architecture has the lowest (Kılıç et al., 2015).

As it can be seen, the studies on financial literacy in universities are more focused on students and the financial literacy level of academic staff is not sufficiently investigated.

3. Methodology

There are different methods to measure the relationship between two or more variables. One of these methods is regression analysis. The purpose of regression analysis is to determine the contribution of independent variables to the change on the dependent variable and to estimate the dependent variable with reference to the value of the linear combination of the independent variables (Çokluk, 2010: 1359). In regression analysis, when the dependent variable data consist of categorical data with two or more levels, "logistic regression analysis method" is used to examine the causal relationship between dependent variable and independent variable(s) (Agresti, 1996: 103).

The purpose of the logistic regression analysis is to establish a model that can identify the relationship between dependent and independent variables by using fewer variables. There are three basic applications of this method: (1) binary logistic regression, (2) ordinary logistic regression, and (3) nominal logistic regression (Tatlıdil, 1996).

Binary logistic regression analysis method is used when the dependent variable has two categories (e.g., agree/disagree, Yes/No, Right/Wrong). In this study, the answer to the question "Do you describe yourself as financially literate?" is the dependent variable and the dependent variable consist of two categories (Yes/No). Therefore, the binary logistic regression method is used depending on the type of the dependent variable data.

4. Data

As of the academic year 2016-2017, a total of 1.165 academic staff are employed in all academic units of Dumlupinar University. In this study, the financial literacy level of Dumlupinar University's academic staff is determined by using the survey study. Accordingly, a survey consisting of 40 questions is developed by using the scales of the relevant institutions and researchers. During the implementation of the survey, among 1.165 academic staff, the survey was applied to 734 academicians and among 734 survey forms, 505 of them are found to be appropriate to assess. Table 1 shows the number of academic staff surveyed by academic title.

Table 1. Frequency Distribution of Academic Staff by Academic Title

Academic Title	NTAS	NASS	(%)
Professor	66	32	48.48
Associate Professor	93	61	65.59
Assistant Professor	314	135	42.99
Instructor, Research Assistant, Lecturer, Expert, Translator	692	277	40.02
Total	1.165	505	43.35

NTAS : The Number of Total Academic Staff
NASS : The Number of Academic Staff Surveyed

5. Analysis and Findings

The last question of the survey, "Do you describe yourself as financially literate?" is considered as a "dependent variable" while the rest of the 39 questions are independent variables. All variables included in the survey are in categorical form and the first level is accepted as the "reference level". The obtained data are analyzed with SPSS software using "binary logistic regression analysis method".

When the backward selection criteria are applied, it is seen that at the end of step 6, 33 of the 39 variables are excluded and only 6 variables are found to be influential on financial literacy. Table 2 shows the variables that affect the level of financial literacy of academic staff, the changes in -2 Log Likelihood Value, and the significance level of these changes.

Table 2. Backward Likelihood Ratio Changes (Significant Variables)

	Question	Variables	Model Log Likelihood	Change in -2LL Value	s.d.	Significance level of Change
Step 6	7	How often do you follow the economic and financial developments in Turkey and the world?	-191.392	21.873	3	.000
	14	What is your level of knowledge about information on credit card account statements?	-183.376	5.840	1	.016
	21	Do you make weekly, monthly or annual budget and stick to it?	-186.210	11.509	2	.003
	22	Who/where do you think you learned about your saving, investment, spending and money management knowledge?	-189.104	17.296	3	.001
	27	If the inflation rate is 8% and the rate of return is 15%, the real rate of return is 7%.	-185.645	10.378	2	.006
	32	If you have a 200.000 TL individual deposit in a bank, how much TL is covered by "deposit insurance"?	-187.210	13.508	3	.004

It is seen that the variable "How often do you follow the economic and financial developments in Turkey and the world?" is the most effective factor when the significance levels are examined. The distribution of this variable by scientific area is shown in Table 3.

Table 3. The Frequency Distribution of the Most Effective Factor by Scientific Area

SCIENTIFIC AREA / FREQUECNY	Everyday	Few times a week	Few times a month	Few times a year	Never	Total
Educational Sciences and Teacher Training	7	20	10	7	2	**46**
Physical Sciences and Mathematics	11	29	13	1	2	**56**
Philology	3	5	2	1	1	**12**
Fine Arts	6	17	8	2	2	**35**
Law	1	1	0	0	0	**2**
Theology	0	2	3	1	1	**7**
Architecture, Planning and Design	1	1	0	0	0	**2**
Engineering	32	32	27	4	6	**101**
Health Sciences	12	22	5	3	2	**44**
Social, Humanities and Administrative Sciences	100	60	20	3	1	**184**
Sports Sciences	1	9	3	3	0	**16**
Total	**174**	**198**	**91**	**25**	**17**	**505**

5.1. Overall Significance of the Model

The predicted model is generally significant, which means that at least one of the independent variables in the model affect the dependent variable. The null hypothesis states that all slope coefficients are equal to zero ($H_o: \beta_1 = \beta_2 = ... = \beta_k$). In order to test the null hypothesis, p-value of the chi-square statistic (x^2) should be examined. If the p-value is below 0.05, then the null hypothesis is rejected. The chi-square statistics and the p-value in Table 4 confirm the general significance of the logistic regression model's coefficients in the first step (x^2= 185.804; p-value=0.000). Since the p-value is less than 0.05, the null hypothesis that asserts all slope coefficients equal to zero is rejected. Therefore, it can be said that the predicted model is generally significant which means at least one of the independent variables in the generated model affects the dependent variable.

Table 4. General Significance Test of the Model Coefficients

		Chi-Square	s.d.	p-value
Step 6	Step	5.840	1	.016
	Block	185.804	14	.000
	Model	185.804	14	.000

Table 5 presents the model summary. The R^2 values mostly tend to be smaller than 1 and they are big enough for this study which means that the predicted model has significant power in explaining the dependent variable (for more information, see: http://core.ecu.edu).

Table 5. Model Summary

Step	2 Log Likelihood	Cox & Snell R^2	Nagelkerke R^2
6	360.912	.308	.466

Cox&Snell's and Nagelkerke's R^2 values signify the estimation of the variance explained by the model in two different ways and are interpreted in a similar way to the multiple regression's R^2 (Field, 2005). In this context, Cox&Snell R^2 (Nagelkerke R^2) value indicate that the independent variables explain 30.8% (46.6%) of the dependent variable.

5.2. Goodness of fit for the Model

The goodness of fit for the model represents a measure of the effectiveness of the best model to explain the dependent variable. In order to show the goodness of fit for the model "Hosmer-Lemeshow Test" or "Classification Tables" can be used (Oğuzlar, 2005: 25-26).

Hosmer-Lemeshow Test: The purpose of this test is to show whether the data fits the established logistic model or not. The hypothesis established for this purpose is as follows:

H_0: Estimation equation is significant.

H_1: Estimation equation is not significant.

If the p-value of the Hosmer-Lemeshow Test is greater than 0.05, the null hypothesis cannot be rejected and therefore it can be decided that the model is appropriate. In other words, it is not possible to reject the null hypothesis which states there is no difference between the observed values and the predicted values using the model (for more information, see: http://www2.chass.ncsu.edu; http://www.csm.uwe.ac.uk). Table 6 represents the chi-square statistics and the p-value of the Hosmer-Lemeshow Test ($\chi^2 = 4,547$; p-value= 0,805). As the p-value is greater than 0.05, it is concluded that the data fits the established model.

Table 6. Results of Hosmer-Lemeshow Test

Step	Chi-square	s.d.	p-value
27	4.547	8	.805

Classification Tables: Another criterion used for goodness of fit is "Classification Tables". This table is obtained by cross classification of the dependent variable (Oğuzlar, 2005: 26). Table 7 shows that the correct classification rate of observation in the logistic regression model is 85.1%.

Table 7. Classification Table

Observed			Predicted		Percentage Correct
			Do you describe yourself as financially literate?		
			No	Yes	
Step 6	Do you describe yourself as financially literate?	No	364	24	93.8
		Yes	51	66	56.4
	Overall Percentage				**85.1**

5.3. Interpretation of Odds Rates

Table 8 summarizes the result of the logistic regression analysis for the significant variables and their subcategories.

Table 8. Results of Stepwise Logistic Regression Analysis (Backward-LR)

		B	S.E.	Wald	df	Sig.	Exp (B)	ODDS$_{adj}$
Step 6	A7			18.514	3	**.000**		
	A7 (1)	-.869	.288	9.087	1	**.003**	.420	2.38
	A7 (2)	-2.239	.646	12.022	1	**.001**	,107	9.35
	A7 (3)	-1.405	.784	3.211	1	**.073**	.245	4.08
	A14 (1)	-.724	.305	5.624	1	**.018**	.485	2.06
	A21			11.072	2	**.004**		
	A21 (1)	.417	.404	1.067	1	.302	1.518	
	A21 (2)	-.606	.432	1.970	1	.160	.545	
	A22			16.502	3	**.001**		
	A22 (1)	-1.066	.350	9.294	1	**.002**	.345	2.89
	A22 (2)	-1.822	.471	14.953	1	**.000**	.162	6.17
	A22 (3)	-.798	.485	2.709	1	.100	.450	
	A27			10.080	2	**.006**		
	A27 (1)	.106	.364	.085	1	.771	1.112	
	A27 (2)	-.866	.395	4.795	1	**.029**	421	2.38
	A32			13.464	3	**.004**		
	A32 (1)	-.516	.463	1.244	1	.265	.597	
	A32 (2)	-.482	.788	.374	1	.541	.618	
	A32 (3)	-1.130	.309	13.366	1	**.000**	.323	3.10
	Constant	1.644	.577	8.125	1	.004	5.175	

Most of the variables or its categories in Table 8 are significant. This result shows that the variables used in the study contribute to the model formation and have an effect on the category level. The variables that have significant coefficients and Odds Ratios which are less than 1, are to be corrected. The correction process is as ODDS$_{adj}$ = 1/ODDS (Özdamar, 2013: 530). Accordingly;

- *A7: How often do you follow the economic and financial developments in Turkey and the world?*

When the other factors are constant, it is seen that the financial literacy levels of those who follow the economic and financial developments in Turkey and the world a few times a week are 2.38 times (1/0.420) lower than those follow every day. It is very interesting that the level of financial literacy of those who follow the economic and financial developments in Turkey and the world a few times a month is 9.35 times (1/0.245) lower while a few times a year is 4.08 times (1/0.245) lower.

- *A14: What is your level of knowledge about information on credit card account statements?*

58.6% of the participants (296 person) state that the level of knowledge about information on credit card account statements as good and very good while 41.4% of the participants (209 person) state it as intermediate and low. The level of financial literacy of participants whose level of knowledge about information on credit card account statements is intermediate or low is 2.06 times (1/0.485) lower than those with good and very good knowledge.

- *A21: Do you make weekly, monthly or annual budget and stick to it?*

Although this variable is statistically significant, none of the subcategories have an effect on the dependent variable (all p-values>0.05).

- *A22: Who/where do you think you learned about your saving, investment, spending and money management knowledge?*

The financial literacy levels of those who indicate that they learned their saving, investing, spending and money management knowledge from their personal experiences is 2.89 times (1/0.345) and those learned from their family and friends are 6.17 times (1/0.162) are lower than those learned from their education.

- *A27: If the inflation rate is 8% and the rate of return is 15%, the real rate of return is 7%.*

168 of the participants (33.2%) answered this question as "right", 68 of the participants (13.5%) as "wrong", and 269 of the participants (53.3%) as "I have no idea". This question is designed to measure the level of financial knowledge of participants and the correct answer is the "wrong". Accordingly, the financial literacy level of those who answered this question as "I have no idea" is 2.38 times (1/0.421) lower than those who answered this question correctly.

When the scientific areas are considered, academic staff of fine arts (17.1%), engineering (16.8%), social sciences (15.8%), physical sciences and mathematics (14.3%), and theology (14.3%) gave the most correct answer for this question respectively.

- *A32: If you have a 200.000 TL individual deposit in a bank, how much TL is covered by "deposit insurance"?*

118 of the participants (23.4%) answered this question as "100.000 TL", 52 of the participants (10.3%) as "the whole amount of money", 10 of the participants (2%) as "not implemented", and 325 of the participants (64.3%) as "I don't know". 23.4% of the participants answered this question correctly. The financial literacy level of those who answered this question as "I don't know" is 3.10 times (1/0.323) lower than those answered correctly. Although this variable is statistically significant, only the "I don't know" category has an effect on the dependent variable since the other categories have p-values bigger than 0.05.

6. Conclusion

Studies in recent years have emphasized that most individuals are unaware of basic economic and financial issues and this leads individuals to make serious and irreversible mistakes. There is a necessity to increase the level of financial literacy of individuals, estimated to be 100 million people that enter into the financial system worldwide each year to work in all segments of the economy. Hence, studies and training activities have begun to be conducted on financial literacy by the national and international organizations, non-governmental organizations, and researchers. Financial literacy comes into prominence in Turkey in the light of the 2023 Vision and the Istanbul International Financial Center Project.

It is seen that the financial literacy levels of different individuals in the society are investigated and the number of studies investigating the level of financial literacy of the educators who have significant effects on these individuals is seen to be very limited in studies conducted about subject. In this study, financial literacy levels of academic staff of Dumlupınar University were determined and findings about financial knowledge and skills were tried to be revealed.

The results of the binary logistic regression analysis show that;

- economic and financial developments,

- the level of knowledge about information on credit card account statements,

- budgeting habits,

- saving and investment ability,

- the level of general knowledge relating to banking regulations,

- the knowledge of calculating the inflation rate and rate of return are among the factors that affect the level of financial literacy.

The question, "Do you describe yourself as financially literate?" is considered as a dependent variable in the study. Table 9 represents that 117 of the academic staff (23.2%) answered this question as "Yes" while 388 of the academic staff (76.8%) as "No". According to this result, 76.8% of the 505 academic staff who participated in the survey did not identify themselves as financially literate.

Table 9. The Frequency Distribution of Dependent Variable

Academic Title	Yes	(%)	No	(%)
Professor	10	31.3	22	68.7
Associate Professor	15	24.6	46	75.4
Assistant Professor	31	23.0	104	77.0
Instructor, Research Assistant, Lecturer, Expert, Translator	61	22.0	216	78.0
Total	**117**	**23.2**	**388**	**76.8**

Table 10 shows the frequency distributions of responses to the question "Do you describe yourself as financially literate?" given by the academic staff participating in the survey based on their scientific area.

Table 10. The Frequency Distribution of Responses to Financial Literacy Status by Scientific Area

Scientific Area	Yes	(%)	No	(%)	Scientific Area	Yes	(%)	No	(%)
Educational Sciences and Teacher Training	2	4.3	44	95.7	Architecture, Planning, and Design	0	0.0	2	100.0
Physical Sciences and Mathematics	7	12.5	49	87.5	Engineering	17	16.8	84	83.2
Philology	1	8.3	11	91.7	Health Sciences	8	18.2	36	81.8
Fine Arts	2	5.7	33	94.3	Social, Humanities and Administrative Sciences	76	41.3	108	58.7
Law	1	50.0	1	50.0	Sports Sciences	3	18.8	13	81.3
Theology	0	0.0	7	100.0	**Total**	**117**	**23.2**	**388**	**76.8**

The analysis demonstrates that 51 of the academic staff who identified themselves as financially literate could not be regarded as financially literate and 24 of the academic staff who did not qualify themselves as financially literate could actually be considered as financially literate (see Table 7).

Table 11 shows the distribution of the academic staff by titles who wish to participate in a short-term training program on financial literacy.

Table 11. Participation in the Training Program

Academic Title		Yes	(%)	No	(%)
Professor		15	46.9	17	53.1
Associate Professor		38	62.3	23	37.7
Assistant Professor		88	65.2	47	34.8
Instructor, Research Assistant, Lecturer, Expert, Translator		205	74.0	72	26.0
	Total	**346**	**68.5**	**159**	**31.5**

When Table 9 and Table 11 are evaluated jointly, the number of academic staff who do not qualify themselves as financially literate (388 and 76.8%) and the number of academic staff who wish to participate in the financial literacy training program (346 and 68.5%) are quite close to each other.

Öztürk and Demir (2015) examine the financial literacy level of Süleyman Demirel University's academic staff indicating that only 59% of them are financially literate. The authors also argue that the level of income does not affect the level of financial literacy of academic staff. Gutnu and Cihangir (2015) investigate the financial literacy level of the academic and administrative staff of Osmaniye Korkut Ata University. The authors state that 84.7% of the 144 personnel participated in the survey are interested in economic and financial developments of the world and Turkey and 25% of these staff follow these developments every day, mostly from the

internet. Unlike the studies of Öztürk and Demir (2015) and Gutnu and Cihangir (2015), in this study, it is seen that only 23.2% of the academicians described themselves as financial literate, 34.4% of them follow everyday and 39.2% of them follow several times a week the economical and financial developments in Turkey and the world.

The studies on financial literacy in universities are more focused on students and the financial literacy level of academic staff is not sufficiently investigated. The lack of study on financial literacy level of Dumlupinar University's academic staff increases the significance of this study and contributes to the finance literature.

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