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Economic Literacy Levels of Public Officers in Turkey

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Abstract

Behaviors of consumers and producers become complex and interdependent in accordance with the developments in the world. This development increases the importance of economic knowledge and it becomes more and more important for the individuals and societies to adapt themselves to this development. Economic literacy is of high importance not only for specific social groups but also all the individuals. However; economic knowledge of the public officers who are in a specific level of income, expense and education within Turkish economy as well as their ability of applying this knowledge on their daily lives and their prospective economic planning as being conscious individuals are of high importance. Increase in economic literacy of the individuals not only affects the individuals but also contributes to the society and country. This study aims at determining and evaluating economic literacy levels of the public officers. It includes public officers working in Tokat city center. Research data has been obtained from 397 participants randomly selected as a result of face to face interviews. Factor analysis, independent sample t test and one-way analysis of variance have been applied in the research. It has been determined that averages regarding sub-dimensions of economic literacy of the participants vary depending on gender, age, occupation and income. Economic literacy levels of the public officers have been found high. It is thought the study will be beneficial to politicians, academicians and all decision-makers.

Keywords: economic literacy, behavioral economics, public officer, economic knowledge, factor analysis.

1. Introduction

21st century presents a world without boundaries as well as a globalized life and an information and communication boom. Rapid development of technology and information distribution will lead to extension of the information that will affect the economy, culture and politics of a country. Information, technological developments and information-based economy have changed the application of educational system (Turiman et. al., 2011).

Evolution of market economies has expanded the possibilities of consumers, employees, investors and companies at a large scale. Variety of goods and services which can easily

be reached has achieved a point which even couldn't be dreamt by people one century ago. Number of options has increased as well. It is based on the ability of the actor to utilize available opportunities in the best way and to make logical preferences. Increasing complexity affects almost all market decisions such as the preference of having dinner at home or at a restaurant, preferences of wearing, electronic hardware, transportation and housing, preferences of career paths or preferences of investment and savings etc. (Lerman and Bell 2006). Rapidly changing economic conditions increase the importance of making correct and suitable decisions for the individuals and organizations. So, both individuals and organizations are required to be informed about the economic environment in which they live and economic developments occurring in that environment in order to fulfill their needs. In other words, individuals and organizations are required to have economic literacy in order to be able to make correct and rational decisions.

Economic literacy improves the abilities of people to act as a producer, consumer, saver, investor and a conscious citizen. These abilities are as the following: decision making, economic reasoning, problem solving case analyzing in real life and abilities of comprehension and interpretation of fundamental economic concepts and principles (Akhan, 2013; Winick et al, 2006; Staubs, 2007).

Economic literacy aims at contributing to the experiences of individuals in their daily lives. Today, production and consumption continue increasing rapidly. It seems compulsory for the individuals to be provided with economic education starting from their childhood. So, economic education at home and at school must be conducted in parallel (Akhan, 2013).

In the report of North Central Regional Educational Laboratory (NCREL) (2003), concept of economic literacy is defined as the ability of defining economic problems, alternatives, costs and benefits, analyzing incentives in economic cases at work, analyzing the outcomes of changes occurring in economic circumstances and public policies, understanding and organizing economic findings and measuring benefit against cost.

Increase of economic literacy level of the individuals enables them to act rationally in their financial decision making. An individual who acts rationally can avoid excessive borrowing, use financial instruments more efficiently, make cost-benefit analysis in his/her decisions and understand and define economic concepts (Ünal et al., 2015).

This study aims at determining economic literacy levels of the public officers. It also aims at testing whether or not economic literacy levels of the public officers varies depending on some of their features (age, gender, education and income level).It is composed of four parts. First part presents the importance of economic literacy and aim of the study. Second part presents data and method. Third part includes experimental findings on the research and fourth part includes conclusion and evaluation.

2. Literature Summary

Although economic literacy analysis does not date too back, it has recently been included in the literature when it is realized that it is important for the individuals to act more consciously in the economy. It is also defined as financial literacy in the literature. With the realization of importance of economic literacy in our country, Financial Literacy and Inclusion Association (FODER) was established in 2012 aiming at training the

individuals on financial literacy and raising awareness among them through cooperation with public sector, private sector and non-governmental organizations. There are many studies about economic literacy in local and foreign literature. However; the majority of these studies are generally focused on students. The number of studies which handle civil servants is very limited. Some of these studies are summarized below.

Lusardi (2008) divides economic literacy into two as fundamental level and advanced level economic literacy. He defines such basic economic concepts as risk, interest rates and inflation in fundamental level economic literacy while he defines the skills of interpreting the relationship between risk and income as well as using and perceiving financial instruments (equities, bonds and investment funds) in advanced level economic literacy.

Jappelli (2010) carries out panel data analysis in 55 countries between 1995- 2008 in his essay by combining economic literacy indicators with macroeconomic and corporate variables. Results suggest that there is a positive relationship among economic and financial competency of the individuals, their knowledge and skills and their economic literacy. Moreover; individuals who are provided with larger social security services have a lower level of economic literacy while there is also a relationship between economic literacy incentives and amount of fund which is available for private savings.

Huston (2010) describes financial literacy as an instrument which is used for defining the need for economic training and explaining diversity of financial results. This study broadly summarizes the financial literacy criteria which are used in the researches having been carried out for the last decade.

Remund (2010) defines economic literacy as the capability of an individual to manage money. He divides economic literacy into such categories as conceptual knowledge for economy, communication skills on economic concepts, individual skills for economic management, skills of making logical economic decisions and financial planning for the future.

Wood and Doyle (2010) have carried out a research on economic literacy with 1001 employees of seven big companies. Findings of the research suggest that it is required to lecture economy at the universities in order to increase economic literacy. It is also suggested that there is a positive relationship between economic literacy, being male and increasing income.

Lusardi and Mitchell (2011) suggest that males have a higher level of financial literacy than females and financial literacy is in parallel with age and education level. It can be said that financial literacy of the individuals increase as they get older and increase their education levels.

Temizel and Bayram (2011) aim at determining financial literacy levels of the students studying at Anadolu University, Faculty of Economics and Administrative Sciences by applying 433 study studies. Results suggest that financial knowledge of the students is sufficient. It has also been determined that students follow the financial developments on TV and Internet.

Gerek and Kurt (2011) have carried out validity and reliability studies in their researches for NCREL scale items which are prepared by considering characteristics of individuals who have economic literacy. They have also applied factor analysis on 34 items and

found a structure with four sub-dimensions: Economic Knowledge, Economic Rationality, Social Economic Reflections and Individual Economy Planning.

Merwe (2012) has analyzed the relationship between economic literacy and allocation efficiency of small-scale producers in South Africa. In the study, it is aimed at determining the impact of efficient use of sources of the producers on economic literacy of the individuals. Findings of the research suggest that individuals who participate in trainings and apply their knowledge are farmers who have economic literacy and producers who can make active investments on their human capitals.

Mercan et al. (2012) applied survey method of NCREL scale items which are prepared by considering characteristics of individuals who have economic literacy on the staff working in a department at the Ministry of Transportation. In the study, it has been determined that individuals in the survey have a high level of economic literacy. It has also been determined by applying variance analysis that economic literacy of the individuals increase as their education levels increase and males have a higher level of economic knowledge than the females.

Oanea and Dornean (2012) put forward that individuals should have an adequate level of economic knowledge as economic literacy not only affects individuals but also the country's economy. They have carried out a research on more than 200 post-graduate students studying at Finance Department of the faculties of economy and business administration in Romania. They have concluded that male students have a higher level of economic literacy than female students.

Atkinson and Messy (2012) have conducted a survey on the individuals in their study in order to determine financial literacy levels of individuals coming from different countries. They have conducted this research in 14 countries by analyzing financial literacy under three sections as financial knowledge, financial behavior and financial attitude. Results suggest that Hungary has the highest level of financial knowledge while Germany, Malaysia and British Virgin Islands are the other leading countries. It has been determined that males have higher levels of financial literacy than females in every country.

Akhan (2013) addresses to the importance of economic literacy training on the individuals. He suggests that economy training is of high importance to create conscious consumers both in the family and at the schools.

Bayram (2014) has tried to determine financial literacy of the students in fundamental level who study at Faculty of Economics and Administrative Sciences and Porsuk Vocational School. Results suggest that students have a lower level of financial literacy although they have the idea that they have an adequate level of financial literacy. In conclusion, it has been understood that students at Faculty of Economics and Administrative Sciences have a higher level of economic literacy than students at vocational school in parallel with their education level.

Şantaş and Demirgil (2015) have tried to determine economic literacy levels of 1st and 4th grade students in the Faculty of Economics and Administrative Sciences of a state university. Findings of the research suggest that students participating in the survey have a medium and likely high level of economic literacy. It has also been concluded that age, gender, class of education, major of education, frequency of following economic and

financial developments and number of economy courses taken are regarded as statistically significant variables.

Gutnu and Cihangir (2015) have applied a survey study on the university staff in order to determine their financial literacy. Survey results suggest that majority of the participants are interested in economic developments in Turkey and in the world, use internet as an instrument while following these developments and have a high level of use of internet banking as well as understanding average interest rates of credit cards.

Kılıç et al. (2015) have applied a survey study on the university students in order to determine their financial literacy. Survey results suggest that students participating in the survey have a medium level of economic literacy and males have a higher level of financial literacy than the females.

Kahya and İmamoğlu (2015) have applied a survey study on 3rd and 4th grade students in the Faculty of Economics and Administrative Sciences of Bayburt University by analyzing relationship between economic literacy and intention of entrepreneurship. As a result of the survey study, it has been concluded that there is a parallel relationship between the increase in economic literacy and increase in intention of entrepreneurship. Economic literacy of the university students has also been determined as middle level.

Öztürk and Demir (2015) have applied a survey study on the academic staff of Süleyman Demirel University in order to determine their financial literacy levels and monetary management capabilities. They have analyzed financial knowledge, behavior and attitudes of the academic staff participating in the survey and concluded that 59 % of them have financial literacy which falls below the average in Turkey (59, 8 %). Results also suggest that 59,3 % of females and 58,8 % of males have financial literacy. It has also been concluded that their financial literacy does not increase as their income level increases. It can be said that university's academic staff need financial training.

Dilek et al. (2016) have tried in their study to determine economic literacy of the students studying at Kastamonu University and concluded that they do not have adequate level of economic literacy.

Barış (2016) has applied a survey study on students studying at Gaziosmanpaşa University and concluded that female students have a higher level of financial literacy than male students. It has also been concluded that financial literacy of the students is not in fundamental level while their advanced level financial literacy is at a low level.

Baysa and Karaca (2016) have tried to determine financial literacy levels of commercial, agricultural and individual bank customers in Central District of Tokat Province. Results suggest that bank customers generally have a low level of financial literacy; but commercial bank customers have a higher level of financial literacy while agricultural bank customers have a lower level of financial literacy.

Serin et al. (2016) have analyzed economic literacy levels of industrial managers of forest forestry products in Kahramanmaraş Province. Findings of the research suggest that managers have the capability of making plans regarding their economic status. As the economic literacy levels of forestry product managers increase, they can gain much more income with limited financial sources.

Lerman and Bell (2006) have analyzed the status of financial training in the USA and surroundings by emphasizing the importance of financial literacy in the market economy

which has been getting complicated day by day. Economy training programs should be associated with the other programs which aim at improving living standards of the individuals. Therefore; economic literacy trainings are of high importance for economic life.

Yasmin et al. (2014) have randomly chosen 200 students from different departments at the universities located in the South of Punjab State of Pakistan and analyzed the indicators of their economic literacy. They applied survey studies on the students by using least-square method and logit model. Results suggest that there is a positive relationship among economic literacy levels of the students and their genders, ages, expenditures as well as education levels of their fathers.

3. Data and Method

This research aims at revealing economic literacy levels of the public officers working in Tokat city center and determining whether or not sub-dimensions of economic literacy of the participants vary depending on different features of the individual. Expressions regarding economic literacy in the study have used Gerek and Kurt's (2011) outline scale used for testing validity and reliability of economic literacy scale as a result of factor analysis.

Research population is composed of public officers working in Tokat city center. Sample size of the research is composed of 397 public officers and has been calculated through the formula developed by Özdamar (2003) with a confidence interval of 95% and error margin of 5%. Participants were randomly selected.5-point Likert type questions were addressed to the participants through face to face interview technique. In this technique, 1 stands for the expression "I strongly disagree" and 5 stands for the expression "I strongly agree"

Frequency, reliability, factor and variance analyses have been conducted through SPSS 20.0 package program. As a result of factor analysis, it has been determined that economic literacy is attributed to four sub-dimensions. In the next phase, independent sample t test and one-way analysis of variance (ANOVA) for more than two independent groups have been applied in order to determine whether or not these sub-dimensions vary depending on gender, age, income and occupation groups. Tukey test has been used in order to determine from which group this difference emerges. Level of significance has been taken into consideration as 5% in all statistical tests.

Public officers working in Turkey have standard features. Therefore, findings about public employees in Tokat province may be generalizable.

4. Results and Discussion

In the research, socio-economic and demographic characteristics of public officers within the framework of sampling have been analyzed and briefed as the following: Majority of the participants (60.2%) is composed of males and civil servants (69.5%). Majority of the participants are in 26-35 aged group (40.1%) while it is followed by 36-45 aged group (32.2%) and 46-55 aged group (19.9%). 37.2% of the participants have an income level between 3001-4500 TL while 30.2% of the participants have an income level more than 4500 TL.

It has been determined that majority of the participants (77.8%) are interested in economic news and follow these news generally on the Internet (72.3%) and TV (43.8%).

It can be said that it is resulted from the fact that Internet is cheap, widespread and easily accessible. Ratio of people following economic news a few times in a week is 39 % as the leader and it is followed by people following economy news everyday (28%), a few times in a month (22.2 %) and never (10.8%). A substantial majority of public officers follow economic developments.

It has been researched whether or not the frequency of public officers to follow economic news and their interest in economic news vary depending on their socio-economic and demographic characteristics. Results are indicated in Table 1. While frequency of following economic news varies depending on age, income and gender; it doesn't change depending on their personnel status. While the public officers' interest in economic news varies depending on age and gender, it doesn't change depending on their personnel status.

Factor analysis has been applied in order to determine to which sub-dimensions the variables of economy literacy scale can be attributed. For the application of factor analysis, data and sample size must be appropriate for the analysis. Bartlett's Test of Sphericity has been used for the conformity of data with factor analysis and Kaiser-Meyer-Olkin coefficient (KMO) has been used for the sufficiency of sample size. Items which are specified for factor analysis must be obtained from a normally distributed population. Bartlett's Test of Sphericity has been applied for this. Bartlett's Test of Sphericity provides χ^2(Ki square) value and significance value is considered as in χ^2test. If significance value is lower than 5%, it is determined that data is obtained from normally distributed multi-variable population and items/variables are consistent (Bartlett, 1950; Tatlıdil, 2002). Test calculation value in the study is 8.743 and has been found as significant in 1% level. It means that items/variables are consistent. Kaiser-Meyer-Olkin coefficient (KMO) has been used for the conformity of sample size in factor analysis. If KMO value is lower than 0.50, it is not appropriate to continue factor analysis. In this case, it is recommended to increase the number of observations (Field, 2009). As the coefficient is higher than 0.50, sufficiency of sample size will be better. In this study, KMO value has been found as 0.948 and it can be said accordingly that sample size is sufficient.

Table 1: Participant Characteristics and Economic News

(N=397)	The Frequency of Following Economic News				Worrying About Economic News	
	Never	Several Times a Month	Several Times a Week	Everyday	No	Yes
Gender						
Female	17.1	32.3	40.5	10.1	13.1	26.7
Male	6.7	15.5	38.1	39.7	9.1	51.1
	χ^2=51.591 ρ=0.000				χ^2=17.564 ρ=0.000	
Age						
18-25	30.4	21.7	43.5	4.3	2.8	3.0
26-35	11.3	25.8	40.9	22.0	9.8	30.2
36-45	8.6	21.9	37.5	32.0	6.0	26.2
46-55	8.9	17.7	34.2	39.2	3.5	16.4
≥ 56			62.5	37.5		2.0
	χ^2=26.512 ρ=0.009				χ^2=13.341 ρ=0.010	
Income						
≤ 1.500	28.6	19.0	38.1	14.3	1.8	3.5
1.501-3.000	10.2	28.7	42.6	18.5	6.0	21.2
3.001-4.500	9.5	23.6	38.5	28.4	9.3	28.0
> 4.500	10.0	15.0	36.7	38.3	5.0	25.2
	χ^2=21.591 ρ=0.010				χ^2=4.311 ρ=0.230	
Occupation						
Official	8.7	21.7	38.8	30.8	14.1	55.4
Employee	6.7	20.0	46.7	26.70	0.3	3.5
Contract	20.5	23.1	35.9	20.5	3.0	6.8
Other	14.9	23.9	40.3	20.9	4.8	12.1
	χ^2=9.100 ρ=0.428				χ^2=5.814 ρ=0.121	

Exploratory factor analysis and confirmatory factor analysis have been applied jointly. Exploratory factor analysis is defined as obtaining few significant and new variables by considering the relationships between the variables through combining several interrelated variables (Altunışık et al., 2005; Büyüköztürk, 2002). Confirmatory factor analysis is defined as testing a hypothesis or theory which has previously been specified regarding the relationship between the variables. In this study, Gerek and Kurt's (2011) economy literacy scale applied on the students has been tried to be validated on the public officers.

Varimax's vertical rotation method has been applied in factor analysis. While determining the number of factors, threshold for eigenvalues of the factor has been considered as 1 and threshold for factor load values of each variable has been considered as 0.40 (Gerek and Kurt 2011; Kline, 1994; Coombs and Schroeder, 1988). Threshold for

differences between load values of each item in the factors has been considered as 0.10 (Büyüköztürk, 2002; Field, 2009; Tabachnick and Fidell, 1996).

Table 2: Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% Of Variance	% Of Cumulative Variance	Total	% Of Variance	% Of Cumulative Variance
1	13,210	47,180	47,180	7,463	26,653	26,653
2	3,043	10,868	58,048	4,629	16,532	43,185
3	1,232	4,400	62,448	3,647	13,026	56,211
4	1,151	4,110	66,558	2,897	10,348	66,558

As it is seen in Table 2, explanatory expressions have been attributed to four factors. eigenvalue of the factor with the highest variance has been determined as 13.210 and its explained variance has been determined as 47.180% while eigenvalue of the second factor has been determined as 3.043 and its explained variance has been determined as 10.868 %. Total explained variance of four factors has been determined as 66.558%. It is known that it is difficult to reach a very high level of explanatory percentage in social sciences. On the other hand, it is put forward in literature that explanatory level of 40% is a good rate (Kline, 1994).

As a result of factor analysis applied to thirty four items, five items have been removed from the scale and 28 items have been included in final version of the scale (Table 3). So, explanatory variance has increased. As a result of factor analysis, it has been determined that scale displays a structure composed of four sub-dimensions. These are called as economic knowledge, economic rationality, social economic reflections and individual economic planning. Average of economy literacy levels of public officers has been determined as 3.47in the study. This average indicates that economy literacy levels of public officers are in a good condition.

Reliability value of the scale used by Gerek and Kurt (2011) has been found as 0.93. The same scale has also been used by Mercan et al. (2012) and its reliability value has been found as 0.95. Reliabilities of 28 items of economic literacy used in the research have been measured through Cronbach Alpha and general reliability of economic literacy scale has been calculated as α=0.958. Since this value is higher than 0.70 as specified in literature, it can be considered as appropriate (Altunışık et. al, 2005). It is seen in Table 4 that internal consistency coefficients of the scale are higher than 0.70 with regarded to sub-dimensions.

Factor load value explains the relationship between expressions and factors and is required to be high. If there is a cluster which is composed of variables which have a high level relationship with a factor, this finding means that those items jointly measure a concept. A variable with a factor load of 0.3 means that variable which is explained by the factor is 9%.In general, load value of 0.60 and higher can be defined as high while load value between 0.30-0.59 can be defined as medium regardless of the signs and it is taken into consideration in the extraction of the variables (Büyüköztürk, 2002).

Table 3: Rotation Sums of Squared Loadings

Variables	Mean	Std. Deviation	Rotation * Sums of Squared Loadings
Factor 1: Economic Knowledge (EK) (α=0.944)	**μ = 3.16**		
EK1 I can make a comment on the impact of changes in foreign exchange rates on export and import	.3.14	1,27	0.732
EK2 I can discuss the impact of IMF policies on the economy	2.90	1.22	0.826
EK3 I can understand the impact of developments in stock exchange market on the economy	2.87	1.21	0.825
EK4 I can understand the impact of international economic sources on the market	3.10	1.21	0.836
EK5 I can understand the impact of national financial sources on the economy	3.23	1.19	0.792
EK6 I can understand what the changes in inflation rates stand for	3.47	1.20	0.690
EK7 I can make a comment on the reflections of foreign economic developments on the country's economy	3.34	1.14	0.694
EK8 I can understand the impact of interest rates on the market	3.42	1.16	0.692
EK9 I can make assessments on the benefits and costs of economic policies	3.04	1.15	0.728
EK10 I can understand economic roles of SMEs (Small and medium-sized enterprises)	3.07	1.14	0.689
EK11 I can make a comment on the reasons of changes in foreign currency and gold prices	3.22	1.10	0.593
EK12 I can define economic roles of public. private and non-governmental organizations society	3.14	1.09	0.605
Factor 2: Economic Rationality (ER) (α=0.907)	**μ = 3.61**		
ER1 I can compare the benefits and costs of my economic choices	3.52	1.11	0.685
ER2 I can make rational choices by utilizing my monetary sources	3.58	1.10	0.750
ER3 I can evaluate the services which are provided in economic terms	3.62	1.06	0.747
ER4 I can understand the difference between profit and costs	3.63	1.07	0.608
ER5 I can perceive economic elements which affect behaviors of the individuals	3.60	1.07	0.520
ER6 I can make a comment on the impact of scarcities or excesses in the number of some products in the market on market prices	3.68	1.06	0.584
ER7 I can understand how supply-demand disequilibrium are reflected on the prices	3.64	1.05	0.650
Factor 3: Social Economic Reflections (SER) (α=0.873)	**μ = 3.66**		
SER1 I take price-benefit relationship into consideration while deciding which product to consume	3.85	1.01	0.593
SER2 I can understand the impact of competition on consumption preferences	3.63	1.05	0.755

SER3 I can make a comment on the contributions of advertisement expenditures on the economy	3.41	1.10	0.676
SER4 I can understand economic results of competition	3.63	1.06	0.668
SER5 I can understand how distribution process of the products to the consumers is reflected on the prices	3.71	0.98	0.655
SER6 I can make a comment on the impacts of economic crises on unemployment	3.70	1.04	0.657
Factor 4: Individual Economic Planning (IEP) (α=0.900)	**μ = 3.96**		
IEP1 I can stabilize my income-expenditure balance while using loans	3.92	1.05	0.798
IEP2 I take my ability of payment into consideration while using credit card	3.92	1.16	0.862
IEP3 I take my income into consideration in installment payments	4.03	1.10	0.850

* Extraction method: principal components analysis; Rotation method: Varimax

Factor loads of economic knowledge vary between 0.593 and 0.826, factor loads of economic rationality vary between 0.520 and 0.750, factor loads of social economic reflections vary between 0.584 and 0.755 and factor loads of individual economic planning vary between 0.798 and 0.850.

It is considered that economic literacy can vary depending on income level, gender, age, etc. In this regard, a variance analysis has been conducted regarding sub-dimensions of economic literacy and various characteristics of the participants. Results are indicated in Table 4 below:

Table 4: Analysis Results Regarding Sub-Dimensions of Economic Literacy Depending on Various Variables

Variables	Economic Knowledge		Economic Rationality		Social Economic Reflections		Individual Economic Planning	
	Mean	**Std. deviation**	**Mean**	**Std. deviation**	**Mean**	**Std. deviation**	**Mean**	**Std. deviation**
Gender								
Male	2.88.90	0.91403	3.6044	0.76694	3.9494	0.84280	3.5127	0.91789
Female	3.3714	0.86754	3.6933	0.81253	3.8935	0.94371	3.6418	0.89250
	t=-5.252; p=0.000		**t=-1.104; p=0.276**		**t=0.616; p=0.548**		**t=-1.388; p=0.164**	
Age								
18-25	2.4578	0.91165	3.2609	1.03253	3.3983	1.11291	3.0870	1.23410
26-35	3.1269	0.89235	3.6698	0.80353	3.9079	0.86767	3.6390	0.86726
36-45	3.2050	0.94797	3.6766	0.77322	3.9454	0.89465	3.5812	0.90959
46-55	3.4385	0.82930	3.7101	0.74293	3.9961	0.91760	3.6152	0.85980
56- +	3.3300	0.60656	3.7500	0.50709	4.2912	0.57670	3.9750	0.36154
	F=5.602; p=0.000		**F=1.582; p=0.178**		**F=2.457; p=0.045**		**F=2.310; p=0.057**	
Income								
≤ 1.500	2.9119	1.03382	3.4143	1.14118	3.5314	1.18688	3.1333	1.06458
1.501-3.000	3.0490	0.89233	3.4685	0.85310	3.6341	0.98473	3.3556	0.96299
3.001-4.500	3.2247	0.85843	3.7041	0.71170	3.9857	0.81253	3.6919	0.83898
≥ 4.501	3.2878	0.97220	3.8142	0.73041	4.1502	0.79812	3.7567	0.83462
	F=2.021; p=0.110		**F=4.531; p=0.004**		**F=8.162; p=0.000**		**F=6.453; p=0.000**	
Occupation								
Official	3.2539	.87936	3.6938	0.77656	3.9615	0.86257	3.9615	0.86257
Employee	3.3187	.63971	3.7067	0.58975	4.1000	0.93593	4.1000	0.93593
Contract	2.8341	1.03497	3.4282	0.94199	3.6074	1.01144	3.6074	1.01144
Other	3.0424	.99706	3.6328	0.81005	3.8655	0.97753	3.8655	0.97753
	F=3.119; p=0.026		**F=1.318; p=0.268**		**F=2.039; p=0.108**		**F=3.242; p=0.022**	

In independent sample t test analysis, it has been analyzed whether or not such factors as economic knowledge, economic rationality, and social economic reflections vary depending on gender. It has been determined that only economic knowledge factor varies depending on gender (P=0.000 and P <0.05) while other factors do not. It has been statistically found significant that economic knowledge of males working in public sector (3.37) is higher than females (2.89).Variance of economic knowledge depending on gender can be explained through male dominance in investment decisions, consumption expenditures and budget planning in a family. It can be explained through the presence of a male-dominant society. In the study, ratio of males' interest in and frequency of following the economic news has been found higher than the females. It shows that males working in public sector have a higher level of economic literacy than females.

It has been researched whether or not sub-dimensions of economic literacy vary depending on ages of the participants. It has been determined that factors of economic knowledge and social economic reflections significantly vary depending on the age. It has been determined that factor of economic knowledge significantly varies between age groups of 18-25, 26-35, 36-45 and 46-55. It has been determined that factor of social economic reflections significantly varies between 18-25 and 46-55 age groups ($P=0.041$ and $P< 0.05$). Furthermore; this result also indicates that individuals aged between 46 and 55 have a higher level of economic knowledge (3.44) compared to other age groups. It has also been concluded that individuals aged between 46 and 55 think that they can interpret changes and developments in the economy better. This result is also confirmed by the fact that participants' interest in and frequency of following economic news vary depending on the age (Table 1). As the individual gets older, he/she experiences some changes in his/her social life such as getting married or having a child etc. which increases his/her responsibilities. So, individuals feel themselves obliged to follow economic, political and social developments more closely after a certain age. In a study carried out by Mercan et al. (2012) regarding public officers, the variants of gender and age have not been statistically significant to explain economic rationality and economic knowledge.

It has been researched whether or not there is a significant difference between income level of the participants and sub-dimensions of economic literacy. As a result of the analysis, it has been determined that factors of economic rationality, social economic reflections and economic planning significantly vary depending on income level. No significant relationship has been determined between economic knowledge and income level. It has been concluded that economic rationality significantly varies between income levels1501-3000 Turkish Lira (TL) and 4500 TL and higher ($P=0.005$ and $P< 0.05$).

It has also been concluded that factor of social economic reflections significantly varies between income levels 1500 TL and lower and 4500 TL and higher; also there is a significant relationship between income levels 1501-3000 TL, 3001-4500 TL and 4500 TL and higher. Another significant relationship has been determined between the factor of individual economic planning and income levels 1500 TL and lower, 3001-4500 and 4500 TL and higher.

As a result of the analysis, it can be said that public officers whose income level is 4500 TL and higher think that they are better with regard to economic knowledge, economic rationality, social economic reflections and individual economic planning compared to the others. In accordance with the results in Table 1; as the income level increases, the participants start following economic news every day which validates this finding. As the income level increases, individuals' capability and possibility of making investments increase as well. So, they are required to have a higher level of economic literacy in order to be able to act more rational in their decisions.

It has been analyzed whether or not sub-dimensions of economic literacy of the participants vary depending on personnel status. It has been determined that factors of economic knowledge and individual economic planning vary significantly depending on the personnel status. It can be said that people working in civil servant status think that they have a higher level of economic literacy and make a better individual economic planning compared to the others.

5. Conclusion

Data has been obtained from 397 participants through face to face interview method in order to determine economic literacy levels of public officers working in Tokat city center. As a result of factor analysis, it has been determined that the scale is composed of four sub-dimensions *(Economic Knowledge, Economic Rationality, Social Economic Reflections and Individual Economic Planning).*It can be said that research results are in conformity with the literature.

158 females and 239 males have participated in the study. It has been determined that males have a higher level of economic knowledge than females. It has also been determined that individuals aged between 46 and 55 think that they have a higher level of economic knowledge they can and they can interpret economic processes in the society better compared to the other age groups. It has been observed and determined that individuals having an income level of 4500 TL and higher have a higher average of the factors of economic knowledge, economic rationality, social economic reflections and individual economic planning compared to other income groups and they think that civil servants have a higher level of economic knowledge and individual economic planning. It can be put forward that as the individual gets older and his/her income increases, he/she has a higher level of economic literacy.

It has been determined that individuals follow economic news respectively on the Internet and TV. It has been determined that they follow economic news a few times in a week with a ratio of 39.0%. It is followed by people following economy news every day with a ratio of 28%, a few times in a month with a ratio of 22.2 % and never with a ratio of 10.8%. In a study carried out by Mercan et al. (2012) regarding the economic literacy of public officers working at a department affiliated to the Ministry of Transportation, it has been concluded that the majority of these public officers similarly follow economic news a few times in a week. Another similar finding has been obtained in a survey applied by Şantaş and Demirgil (2015) to the students at the Faculty of Economics and Administrative Sciences of a state university indicating that they generally follow economic news a few times in a week, most of whom follow economic news through internet.

It is seen in national and international studies that economic literacy levels of the individuals are low. On the other hand, it is expected to have a high level of economic literacy and it has been determined that public officers have a high level of economic literacy in this study. High levels of economic literacy may lead to correct decisions which are made by the individuals in their economic preferences and thus an efficient use of limited sources. High levels of economic literacy of public officers are of high importance to use public sources efficiently for all societies. Therefore; various courses and programs should be organized in order to increase economic literacy level and it will be appropriate to include more economic literacy courses and programs in school syllabuses. Extension of this kind of studies is of high importance for an efficient use of limited sources. It will also be appropriate to conduct these studies on the officers of public and private sector in a manner that will include all decision makers.

Future work on economic literacy may be better for every public institution. Projecting of such studies may increase social benefits. Different methods can be applied in other studies related to the subject.

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