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**Financial Inclusion and Islamic Finance:  
A Survey of Islamic Financial Literacy Index\***

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ABSTRACT

**Keywords:** *Financial inclusion, Islamic financial literacy, Islamic banks*

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*A20, G21.*

According to the Worldbank, the rate of financial exclusion due to religious reasons, which is 7% in the world, is 9.7% in the group of D-8 countries. Islamic banks or participation banks in Turkey appear to be the most important interface for increasing the tendency of individuals with religious sensitivity for financial inclusion by rendering services like deposit banks in accordance with religious principles for such persons. It's very important that we know the Islamic financial literacy level of individuals with religious sensitivity for the purpose of increasing their financial inclusion. However, a tool for measuring Islamic financial literacy level has not been generated yet.

In this study, an Islamic financial literacy survey was generated and with results of this survey Islamic financial literacy index was studied for revealing the current status with the purpose of increasing the level of Islamic financial literacy. To that end, 3 separate sub-indexes were generated along with the general index of Islamic financial literacy. As a result of the study, general index of Islamic financial literacy was calculated as 58%.

\* In the preparation of this study, the second author's master's thesis on "Islamic Financial Literacy: An Index Study" was used.

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## 1. Introduction

It's inevitable that the mobility of country-wide production factors must be provided homogeneously for achieving income equality, healthy growth, minimized poverty and economic progress (Mundell, 1968). Such that production factors today are considered to be a tool of comparative superiority.

As is known, production factors consist of entrepreneur, labor, capital and land. The capital factor paved the way for emergence of organizations, like a bank whose expertise is capital supply and risk management, as a result of the need for expertise in risk management caused by both amount of fund available throughout the world becoming excessive and increasing population and transactions.

Banks are the organizations allowing for optimum fund pricing by regularly collecting data on existing projects, organizations and persons, making risk assessments of various parts of the society, ensuring that the funds they are to supply are priced per various risk levels when required, along with the process of fund management, which is their conventional function.

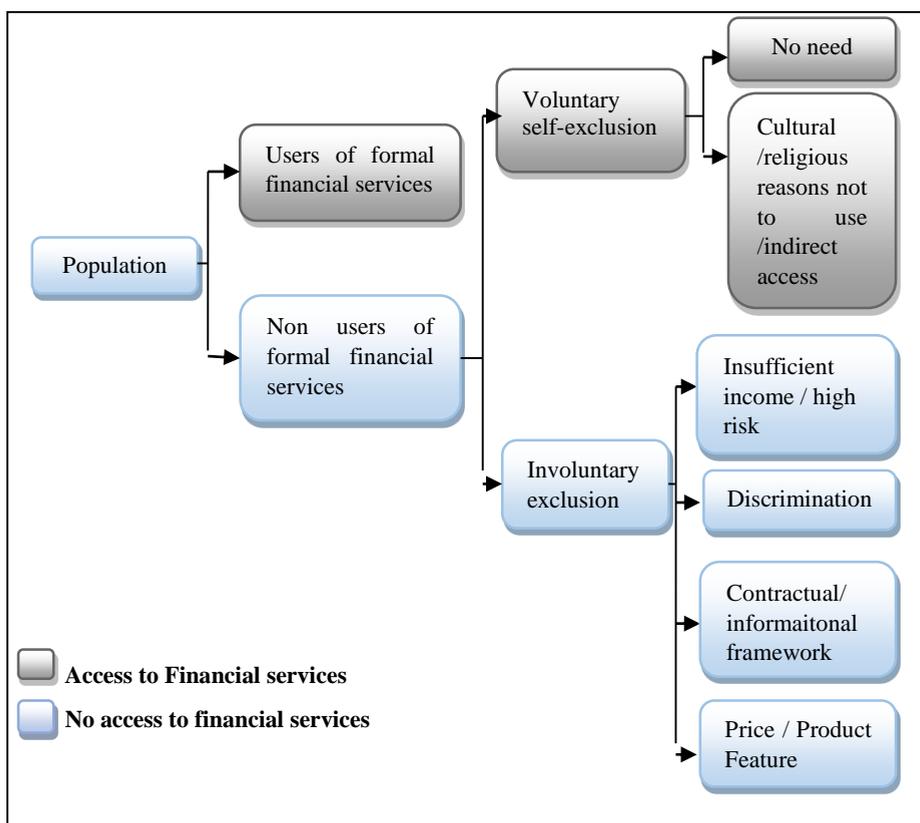
It's certain that all shareholders benefit from this process, including the government, in the countries where account owner, bank, needer cycle functions properly. Account owner gets the share of capital against the fund he/she canalized into the market. Bank gets the fee for services of intermediation and risk analysis and fund needer gets satisfaction of the need by receiving the fund. Successful functioning of this process contributes to the employment by increasing the production/consumption. And that allows for emergence of new jobs and participation of passive savings into production. Ultimately, supply oriented fund cost decreases and the opportunity of bailment or partnering related income growth is provided for the account owners. This process ultimately satisfies the government with the increase of employment and rise of tax revenues. Considering these assumptions as well as the excessively negative effect of the loss, caused by improper functioning of the system, on welfare of the country regarding all shareholders of the system, actions towards increasing the inclusion in the system must inevitably be increased (Worldbank, 2007).

This process can't continue properly for a bunch of wanted and unwanted reasons in every country in the world. When those not using voluntarily are examined, it's observed that two basic factors are effective: religious / cultural reasons and not needing.

In an environment where banks are of such importance for general course of the economy, studies inspecting the communication of the society with the banks and the volume of such communication are performed

frequently in the recent periods. Parameters named as financial inclusion or financial access were developed for formalizing these studies. According to the definition of financial access by the World Bank, financial access is the absence of price and non-price impediments in usage of financial services. The criteria of financial inclusion are interpreted as the rate of individuals with an account in the financial institutions to the total number of individuals in a society.

**Figure 1:** Distinguishing Between Access to and Use of Financial Services



**Source:** Worldbank, 2007

As it can be understood from the fact that financial inclusion is 100% in some of developed economies while a close value in the others, it's of vital importance for the developing economies and those intended to do so. The reasons for this fact are that supply and management of capital, which is one of the basic production factors, are performed by the banks, and that high rate of financial inclusion reduces the poverty and contributes to increase of household income.

In the financial inclusion survey data study performed and announced in 147 countries on behalf of 97% of the world population in 2015 by the World Bank, rate of financial exclusion due to religious/cultural reasons worldwide was calculated to be 7% while this rate was revealed to be<sup>1</sup> 9.7% in D-8 countries (Iran wasn't included into the data pool). In the same research, the rate of financial exclusion in Turkey was calculated as 21.6% (Worldbank, 2014).

The Muslims are the individuals who believe the Quran, which is the holy writ in their lives per their belief, and the hadiths, which are sayings of their prophet, as their guide. Definition of interest as a battle against the creator in the Quran (Bakara, 279) and prohibition of the interest specifically by the prophet in his last speech caused the Muslim to have intentions towards exclusion in interest and interest based financial system.

The biggest effect of financial inclusion is on growth and employment. More comprehensive financial market provides cheaper funds, increases the financial depth by increasing fund mobility, decreases transactional costs and reduces information asymmetry.

As a result of the researches done, it was revealed that there are various supply and demand oriented impediments for increasing the financial inclusion. When supply oriented impediments are examined, that the world's financial market is primarily built and developed by western nationals caused the Muslim, who are sensitive towards interest (riba), to stay away from the banks. This situation caused the relationship between account owner, bank, fund needer to fail in functioning properly, and provided the basis for individuals to be deprived of alternative profit. Thus, the act of financial exclusion affected such individuals and the economies of the countries where they're the proportional majority negatively (Er et al., 2015).

With the purpose of drawing the savings of the account owners who are not involved in the finance due to motive of religious reasons into the financial system, Islamic Banks, supplying funds in accordance with Islamic principles and named as Participation Banks in Turkey, were founded in the World. This system is applied actively for last 60 years in the world and for approximately last 40 years in Turkey. However, the fact that existing conventional system with western origin is known better as it has a much longer history, that individuals have low level of know-how on financial systems and thus have low level of financial literacy resulted in the perception of the individuals that financing transactions can only be performed according

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<sup>1</sup> Bangladesh, Indonesia, Iran, Malaysia, Egypt, Nigeria, Pakistan and Turkey

to the system with western origin. The contributions of the applications of poor Islamic banks into this perception mustn't be ignored.

On the other side, a demand oriented impediment for the financial inclusion is the financial literacy that is in low level. Financial literacy means that an individual has the attitude, behavior and knowledge to rationally manage themselves on cash management and associated subjects to be able to maintain their lives.

The fact that Islamic financial institutions still have a relatively short history than the conventional banks, and that individuals don't have a knowledge of even the current financial arrangement due to low level of financial literacy causes these Institutions to suffer from the issue of recognition.

In this context, the purpose of the study, with regard to the financial literacy mentioned as one of the most important impediments before the financial inclusion, is to create a tool towards improving Islamic finance by developing an Islamic financial literacy scale in Turkey where the rate of financial exclusion is relatively high due to religious reasons.

## **2. Literature Review**

Lack of financial literacy and unawareness of this lack of knowledge are listed among the common problems of developed and developing countries (Kılıç et al., 2015). In the researches done specifically in OECD countries and non-OECD countries, it was observed that individuals have low level of financial knowledge while making financial decisions and that they are not aware of this low level of knowledge (Kılıç et al., 2015). Then, it wouldn't be much of an optimistic approach to expect from the consumers without sufficient knowledge even on the existing system in the world to display conscious behaviors regarding the Islamic Banking, which is a new financial method, or Islamic financial method and tools. On the other hand, there is a limited number of empirical studies on the Islamic financial literacy while a great variety of researches were done on conventional financial literacy.

In studies related to the financial literacy, the relationships between level of financial literacy and various variables such as demographic factors, level of income, financial planning, financial inclusion were investigated. For example, it was revealed that there is a statistically meaningful relationship between; the level of financial literacy and creation of wealth according to Behrman et al. (2012), financial knowledge and financial planning according to Lusardi and Mitchell (2006), financial information and household wealth according to Rooij et al. (2012), level of income and financial inclusion according to Stephen and Tom (2015).

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Jorgensen and Savla (2010) investigated the effect of family on the level of financial literacy while Beckmann (2013) the relationship between the level of financial equipment and the behavior of saving, Grohmann and Menkhoff (2015), the effect of family members on the financial literacy of the children.

Aforementioned studies generally analyze the financial literacy levels of the individuals within the conventional financial system. The criteria of individuals for choosing the Islamic banks were examined by the empirical studies (Ahmad ve Haron, 2002; Abdul Hamid ve Mohd Bordin, 2001; Naser ve diğerleri 1999; Metawa ve Almosawi, 1998; Gerard ve Cunningham, 1997; Haron ve diğerleri, 1994) on the Islamic finance while how much knowledge individuals have on the Islamic banking products were examined by certain other studies (Bley ve Kuehn, 2004, Abdul Rahim ve diğerleri, 2016, Sardiana, 2016).

There is a very limited number of studies conducted on Islamic financial literacy in Turkey and the world, and almost all of these studies were performed in and after 2015.

Abdullah and Anderson (2015) completed an Islamic financial literacy study through the levels of knowledge of bankers in Malaysia on Islamic financial products. As a result of the research, regarding the level of know-how of the bankers on the Islamic financial products, they determined 9 different predictive factors as knowledge on banking products, effect of the parents on Islamic financial products and services, determiners of the investment into securities, comments on conventional banking products, personal financial management, the effect of wealth plan on the financial products, wealth planning and management.

Abdullah and Razak (2015) implemented a survey of 4 parts, prepared in line with the definition of financial literacy by OECD, in their heuristic study performed in Sultanate of Brunei and based on Islamic Financial Literacy. Socio-demographic values were measured in the first part while knowledge and understanding of financing methods in Islam (Islamic Finance, Islamic Bank, Transactions, Charity, Alms, Alimony, Donation, Dole, Will) in the second part, understanding and information of conventional banks in the third part, and the ability to implement in the final part. Research was conducted with 133 participants. Abdullah and Razak (2015) mentioned that 87% of the participants made savings, that 65.4% of the participants had an account in Islamic banks only, 9% had an account only in a conventional bank.

In another study, Er et al (2015) performed a comparative study of the level of Islamic financial literacy of the university students in Turkey through a 326-student survey conducted with the students in the Faculty of

Financial and Administrative Sciences and the Faculty of Theology. As a result of the study, they obtained the findings that level of Islamic financial literacy of the students in the Faculty of Theology, male students, the students who have previously attended a course or a seminar based on Islamic economy and the students who have previously had a customer experience with the Islamic Banks is higher than the other students. Er et al (2015) determined through their study that the issue of Islamic finance is considered as a religious matter rather than an economic issue in Turkey.

Antara et al (2016) proposed a measurement consisting of 23 questions for halal literacy and 17 questions for Islamic financial literacy in their study. A similar study was performed by Hidajat and Hamdani (2016). Researchers referred to 22 basic subjects that must be included in the Islamic financial literacy in their studies.

Abdul Rahim et al (2016) investigated the determiners of the Islamic financial literacy of the university students in Malaysia in their study. Researchers reached to the conclusion that the level of piety, despair and financial satisfaction respectively have a significant on the Islamic financial literacy.

### **3. Data and Methodology**

The purpose of the research is to develop a measurement for enabling measurement and comparison of Islamic financial literacy. In this context, a survey study was performed with 388 participants in Trabzon with a confidence level of 95%, and index values were created.

Financial literacy survey created by OECD and financial literacy indexing method prepared by Atkinson and Messy (2012) were taken as a basis while preparing the survey questions. The survey prepared for the research consists of 25 questions and 4 parts: demographic questions, financial literacy information questions, financial literacy attitude questions and financial literacy behavior questions.

While questions are graded at the stage of index preparation, for the questions with Likert scale, only the 4th (agree), 5th (strongly agree) or if a negative form of question is used, 1st (strongly disagree), 2nd (disagree) options, marked in the intended direction, are each 1 point while others are 0 point. Marking only the option of true is considered as 1 point for questions with true-false options, while only the correct answer is considered as 1 point for open ended questions.

While creating index values, the group of questions within the grouping specified in the OECD index guide were assessed for each index value. Assessment was provided as representation of the rate of correct answer

to highest point that can be scored from the group of questions required for index calculation.

Certain changes were made on the application survey prepared for measuring the Islamic financial literacy by necessity since OECD research survey is based on the axis of conventional banks. For example, the question on overnight interest of the debt, which is included in the OECD core survey, is not included in research for the Islamic financial literacy index.

However, certain questions were added to research questions for measuring the knowledge level of participants on basic principles of Islamic finance and functioning of Islamic banks. Certain key issues were included in the contents of these questions, such as the difference between interest and profit share, that the Islamic banking can be used by members of any religions, the principles of whether activity complies with the religious principles or not - which is one of the basic criteria of the Islamic finance considered by the Islamic banks (participation banks) while assessing the project alternatives for supplying funds, and obscurity of the future - which is one of the basic principles of the Islamic finance. In addition, as the main purpose of the Islamic banks is provision of funding in accordance with the religious principles, an attitudinal question measuring if individuals pay attention to Islamic principles or not during the process of funding was also included into survey questions.

#### **4. Results and Discussion**

In this study, an attempt was made to develop a measurement by acting on financial behaviors, attitudes and knowledge levels of the participants as in the conventional financial literacy studies. However, before this, information on demographic features of the participants were provided.

According to the findings obtained as a result of the research, 43.3% of the participants of the research is female while 56.7% is male, 48.45% is married and 51.55% is single. According to the data from Turkish Statistical Institute (TÜİK), 50.5% of the population of Trabzon province is female while 49.5% is male. However, the fact that women are rather housewives and not involved in money-related issues caused the aforementioned data to be ignored in this study in which persons are analyzed in terms of cash management. The fact that female participants behave timidly while survey is performed also caused the number of female participant to be less.

Majority of the participants comprise the young persons in the age group below the age of 39. The fact that the rate of young population is high in terms of demographic distribution of the population can be expressed as a reason for this situation. The fact that many participants from the group of

older ages who see the calculation questions doesn't want to participate in survey study can be stated as another reason for participants to be young population weighted.

5 different groups of ages were created while survey study is prepared. However, as there are only 5 participants in the age group of 60 or above, this age group was assessed together with the lower age group of 50-59 in the following analyses.

**Table 1:** Personal Attributes

Variable	Group	Frequency (%)	Variable	Group	Frequency (%)
Gender	Female	168 (43,3)	Education	Primary education	212 (13,9)
	Male	220 (56,7)		High school	108 (25,3)
Business	Private sector	267 (29,6)		Licence	24 (49,2)
	Officer	71 (23,2)		Graduate	2 (11,6)
	Student	21 (15,5)	Income (TRY)	Less than 999	128 (25,2)
	Self-employment	98 (10,6)		1.000 –1.999	30 (30,4)
	Housewife	38 (9,5)		2.000–2.999	35 (25,3)
	Worker	119 (4,9)		3.000–3.999	50 (12,9)
	Retired	97 (3,9)	4.000 and over	53 (5,2)	
	Not working	97 (2,8)	Marital status	Married	150 (48,5)
Age	18 - 29	23 (55,4)		Single	209 (51,5)
	30 - 39	252 (28,6)	Islamic bank experience	Yes	93 (23,9)
	40 - 49	84 (10,8)		No	234 (60,3)
	50 and over	84 (5,2)		I am not aware	61 (15,8)

Same situation as the one for the age group was at stake for the educational groups. 5 educational groups were created with the purpose of determining educational statuses of the participants. However, as there are only 6 participants in the group of literacy, that group was assessed together with the group of primary school which is the next group. When educational statuses are examined after this adjustment, it's been observed that 13.92% of the participants is primary school graduates while 25.26% is high school graduates, 49.23% has bachelor's degree, and 11.60% has master's degree.

When examined in terms of occupational groups, it's observed that a considerable part (29.64%) of the participants is private sector employees. It's also observed that the rate of retired participants is low (2.84%), which

supports the findings that provides the status of the age groups of the participants and shows that the number of participants with high age range is low. The weight of the mass of housewives, for whom financial literacy studies are performed substantially, was realized as 9.54%. It's also observed that workers weigh 4.90% while self-employed persons weigh 10.57%, students weigh 15.46% and civil servants weigh 23.20% among the participants of the research.

Introduction of the consumers to the Islamic finance general takes place through Islamic banks. In this sense, Islamic bank experience of the participants can be assessed as an indicator in terms of Islamic financial literacy. According to the findings obtained, 60.31% of the participants mentioned that they didn't make a transaction in any Islamic Bank before, while 23.97 made a transaction in an Islamic Bank, 15.72% is not aware if they made a transaction in an Islamic Bank or not. The status of unawareness can be considered as resulting from the fact that he/she made a transaction, but couldn't remember that or he/she doesn't know if the bank in which he/she made a transaction is an Islamic Bank or not.

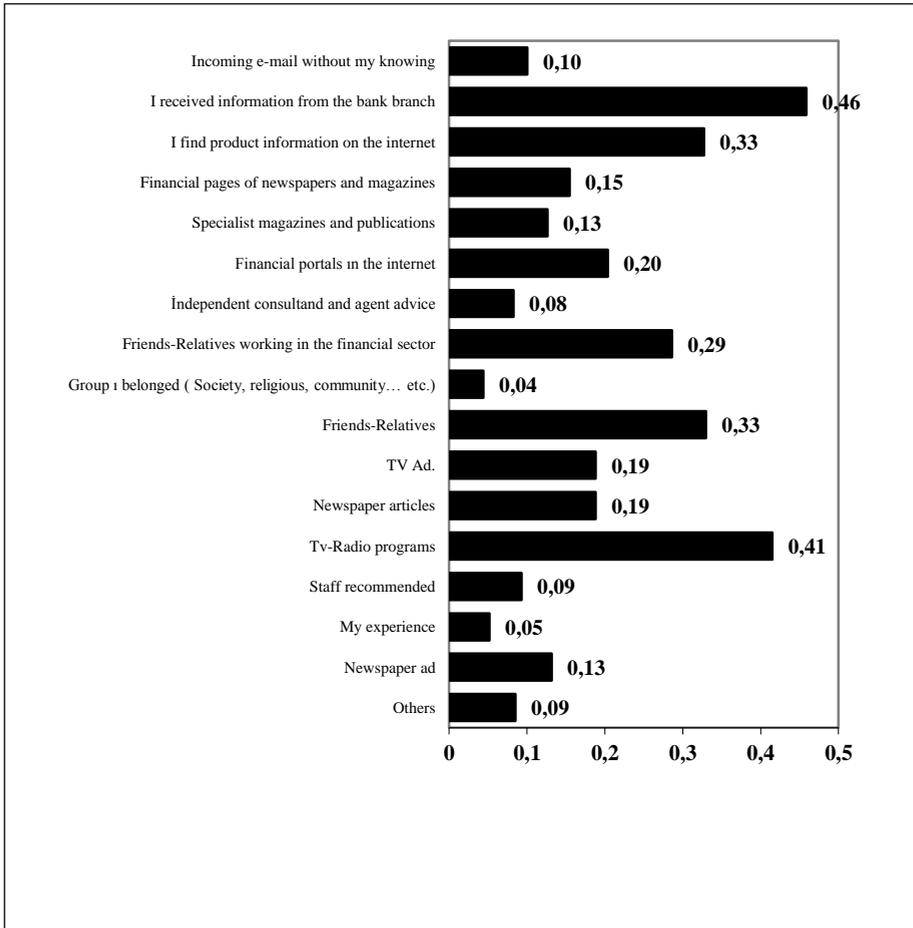
Level of Islamic financial knowledge and as well as attitudes and behaviors of the participants were assessed cumulatively for Islamic financial literacy after analyses were made on the participants demographically. In this sense, firstly, the status of the participants in terms of budget responsibility were analyzed. The budget responsibility question consisted of 5 options, and the participation is provided with a positive score in terms of budget responsibility for calculation of the financial literacy index when options including "I" are chosen. It's observed that participants are included in the process of budgeting at the rate of 73.65% cumulatively. The fact that more than 2/3 of the participants cumulatively aware of the budget responsibility is considered to be a positive data in terms of financial literacy index.

In another question prepared to measure the level of financial knowledge of the participants, a statement "A home budget is made for determining to which extent household income will be saved, spent and how invoices will be financed" was directed to the participants and they were asked to state if this statement is true or not. Participants provided the answer "yes" to this question with a rate close to the rate of cumulative budget responsibility. Considering the importance of the concept of budget for financial literacy, results are considered as positive.

Another important indicator of the level of financial knowledge is the information access channels. With the question asked for the purpose of investigating in which ways participants of the research acquired the information they used while making their individual financial decisions,

participants were provided with 17 sources where they can get financial news and they are which of these sources they use? Accordingly, 43.3% of the participants gets information from a branch of banks while 41.5% makes use of their experience, 33% gets information from friends-relatives and 32.7% makes use of the information on the product in the Internet environment.

**Figure 2:** Sources Affecting Financial Decisions

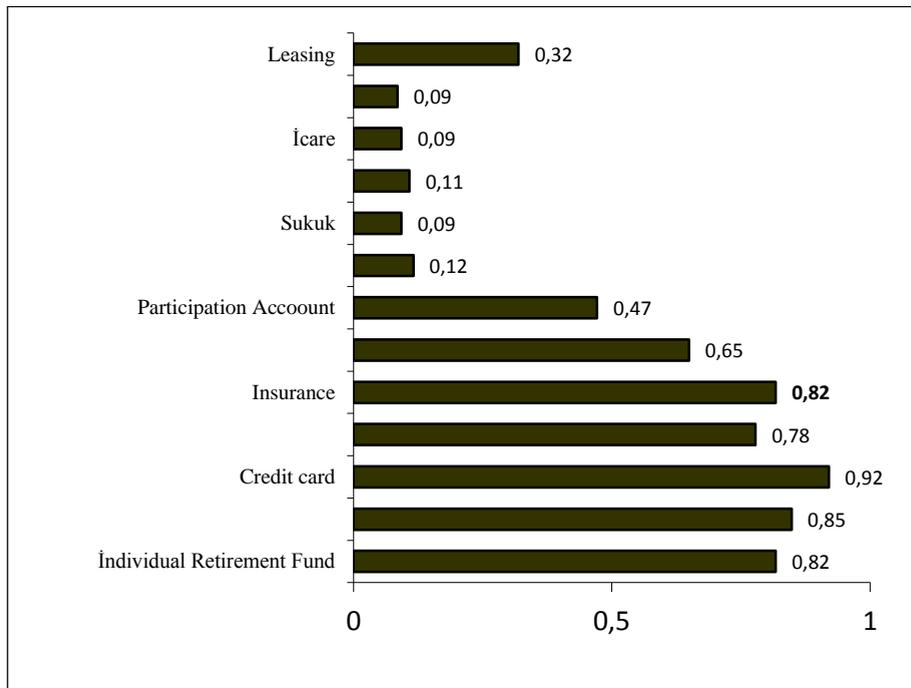


Top three sources of information used as the most frequently used as source of financial information was found out as expected. However, popularization of usage of financial information sources such as "the information on the product I found on the Internet" and "Finance portals on the Internet" must be considered as a finding that information channels must be reviewed again in the age of Internet.

The fact that the option "the group of which I am a member" added as a result of the individual observations except for OECD core survey while measuring the source of financial information and with the purpose of measuring if religious groups, which are a part of the sociological structure of Turkey, are effective on preferability of the Islamic Banks or not was preferred even though it has a rate of 4.4% might be considered as a potential finding to direct future studies to reach the individuals who have decided for financial exclusion due to religious reasons only.

Level of awareness or knowledge of financial products is an important indicator while measuring the level of financial literacy. To this end, participants were provided with certain financial products and asked to state if they previously heard of these financial products or not. While determining the financial products in the related question, financial products of the deposit banks and the financial products of the Islamic banks (participation banks) which render substantially similar services but has different names were provided deliberately.

**Figure 3:** The Level of Knowledge About Financial Products



The fact that the level of awareness of the participants on the deposit bank products is high while their level of awareness on Islamic bank products is low

according to the findings obtained points out the presence of a problem in terms of Islamic financial literacy.

What type of individual funding method individuals refer to when their amount of expenditure exceeds their income is an important parameter for revealing the attitudes of the consumers in terms of financial literacy. The question prepared to measure the attitudes of the consumers in this sense was created by considering the answers of the individuals who had discrepancy between their income and expenditure within last 12 months. According to the findings obtained, when participants have a deficit in terms of income-expenditure budget, 40.1% reduces spending, 40.1% borrows from family-friends, 26.6% uses credit card, 24.8% pays bills late, 14.9% takes loan, 14.4% withdraws money from time deposit, 6.8% works overtime, 5.9% gets advance, 5.9% sells something, 0.5% pledges something and 7.2% uses other methods.

Whether participants save from their income or not, if they do, what type of behavior they display, is yet another important indicator for revealing attitudes of the consumers. According to the findings obtained from the answers given to the related question, the fact that a significant 17% of the participants provided the answer "I don't save" leads to a negative data for a developing country and thus, the future of national economy. Yet, it's mentioned by the participants that 40.2% keep their savings in their house-pocket, 33.5% in the bank while 8.8% have their cash kept by their families, 4.4% uses savings account and 3.4% purchases financial products. Also, 8.5% of the participants indicated that they make use of their savings by using different methods.

Another issue assessed during the financial literacy studies in terms of financial attitude is to what extent individuals are prepared against income deductions. The answer "I don't know" with a rate of 17.45% received for the multiple-choice question asked to the participants reveals the inadequacies suffered in relation to the budgeting. According to the findings obtained, when the participant with a rate of 12.24% mentioning the period for which they are prepared against income deductions is less than 1 week and the mass with a rate of 17.45% mentioning that they don't know are considered cumulatively, it's observed that participants with an approximate rate of 29.69% are not prepared for income shocks.

Financial information constitutes one of the cornerstones of financial literacy researches. Arithmetic abilities of the consumers and their level of knowledge on basic financial issues such as interest, inflation, risk, value of time are measured with the researches related to financial information. In this study, as also mentioned before, additional questions were prepared and level of Islamic finance information of the participants were measured. The

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questions directed to the participants under this title and findings obtained might be summarized as follows.

Ability of the participants to divide was tested by asking from the participants to share an amount of 1,000 TRY equally among 5 siblings. The fact that 6.54% of the participants who answered failed to provide the correct answer is a challenging results. Such that, certain participants provided with the survey expressed that study is not serious pointing out the easiness of the question. They gave up this attitude when it's mentioned that related question was asked per international reference of the index.

In another question on financial information, participants were asked to make a comparison in terms of value of the money they would receive at the end of year and the money they would receive today if they give the amount of 1,000 TRY to the siblings after one year and if the rate of inflation is assumed to be 8% in this period of one year. Where 50.79% of the participants provided correct answer to this question, the fact that 23.02% directly provides the answer "I don't know" results in the data that they have deficiencies in terms of financial literacy.

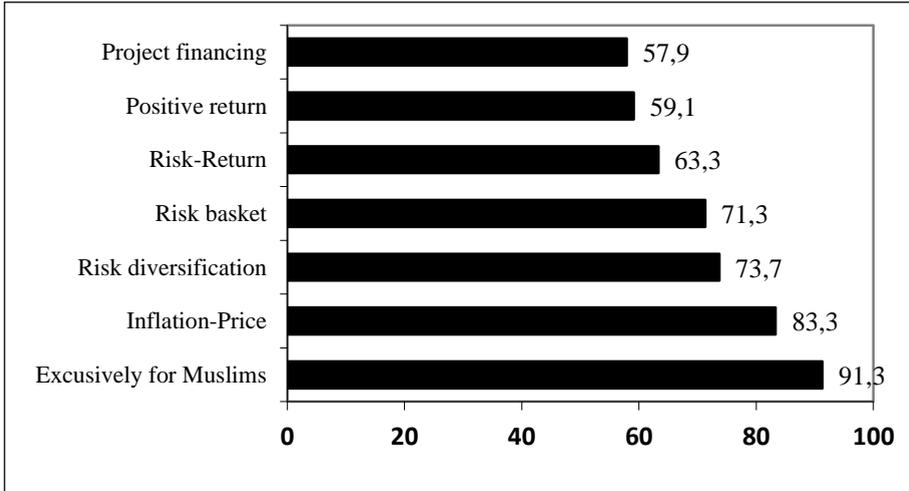
In another question, with the purpose of assessing simple interest calculation abilities of the participants, the participants were asked what would be the total amount they would need to pay after one year if they pay for a cost of 10% for an amount of 100,000 TRY, as an open ended question. Only 39.66% of the participants could answer the question correctly.

In another question, participants were asked to state what would be the amount due at the end of five years when a fund of 100,000 TRY was borrowed to be paid after five years with a cost of 10% per year. Only 5.45% of the participants could answer the question correctly.

A question with 5 options were asked to measure to which extent participants are aware of the features of a fund provided from an Islamic bank. The answer "I have no idea" provided by 40.27% of the participants indicates that there are still persons who don't know substantially. However, the fact that approximately 1 out of every 3 participants, at a rate of 32.60%, provides the correct answer can be considered as a positive situation.

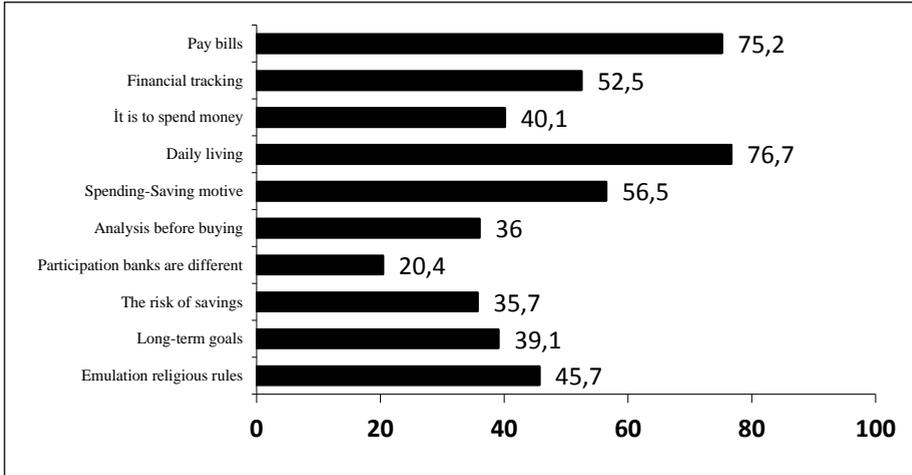
In another question, 7 true-false questions were directed to the participants for testing their knowledge on risk-return, inflation-prices, risk diversification, product package, universality of Islamic banks, project preference criteria of the Islamic banks and that positive return is not guaranteed per the obscurity of the future principle at Islamic banks. The findings obtained from the answers received might be summarized as follows:

- ❖ Regarding the statement that Islamic Banks can finance any type of project/product directed towards the participants in relation to the project funding, 57.9% of the participants indicated that this information is incorrect. Because, Islamic banks cannot provide funds for activities against the religious principles such as alcohol factory, games of chance.
- ❖ The participants were provided with the information that money deposited into Islamic banks would absolutely provide positive return. 59.1% of the participants mentioned that this information is incorrect. Islamic banks might not provide positive return in an absolute manner, even if they mostly provide positive return, as per obscurity of the future principle.
- ❖ Participants were provided with the information that income would be increased when risk is increased. Correct answer provided by 63.3% of the participants is considered as a positive financial knowledge level indicator.
- ❖ With the purpose of measuring knowledge levels of the participants on risk package, they were provided with the information that general risk of the investments would be reduced if they invest in various financial products. Correct answer provided by 71.3% of the participants showed that participants are well equipped in this subject.
- ❖ With the purpose of measuring the knowledge levels of participants on risk diversification, the participants were provided with the information that the risk of losing all the sources would be reduced if investment is made in various sources. When the correct answer provided by the participants with a rate of 73.7% is assessed together with the previous question, it shows that participants are informed of investment risk management.
- ❖ With the purpose of measuring knowledge levels of the participants on inflation-price relationship, they were provided with the information that there is direct relation between the inflation rate and the prices. 83.3% of the participants provided correct answer to the related question.
- ❖ In the final question asked with the purpose of measuring the knowledge levels of the participants, they were provided with an information seeking question with the content that only the Muslim can make transactions at Islamic banks, for the purpose of finding out their opinions if the religious effect created by foundation of the Islamic banks would cause any exclusion of non-Muslims. The fact that 91.3% of the participants provided the correct answer for the related question by mentioning that this information is incorrect forms the basis for reaching to a conclusion that there is no such perception in this regard.

**Figure 4:** Financial Attitudes of Participants

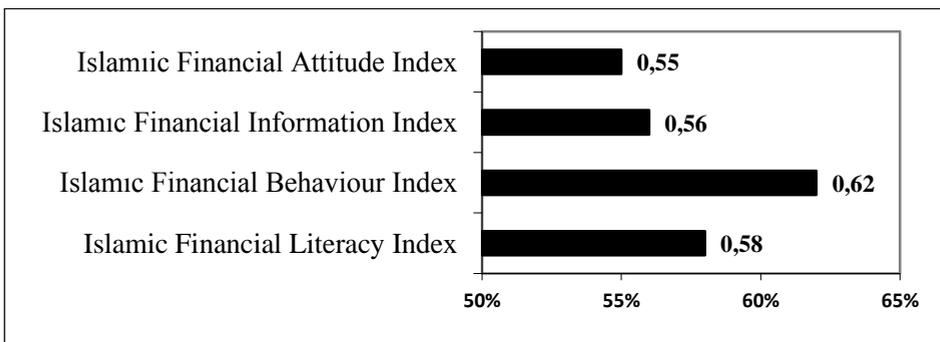
After financial attitudes and levels of financial knowledge of research participants, they were asked 10 question requested to be answered with the help of a 5 point Likert type scale for the purpose of revealing their financial behaviors. According to OECD core survey, in the 5 point Likert scale, if 4th (agree) and 5th (strongly agree) options are chosen in desired direction, it's considered as correct, and 1st (strongly disagree), 2nd (disagree) and 3rd (equally agree and disagree) options are considered as incorrect. According to the findings obtained;

- ❖ 35.7% is ready to risk their savings or investments,
  - ❖ 36% believes that Islamic Banks are different in terms of working principles,
  - ❖ 39.1% sets long term financial targets and makes efforts to realize them,
  - ❖ 40.1% doesn't have the understanding that money needs to be spent,
  - ❖ 45.7% pays attention for implementing religious principles at money related issues,
  - ❖ 52.5% monitors their financial issues closely,
  - ❖ 56.5% becomes happier when they spend money than when they save,
  - ❖ 75.2% pays their bills in time,
  - ❖ 76.7% doesn't have the understanding that let's take care of today, we'll see tomorrow later.
  - ❖ 79.8% analyzes their financial competence before making purchase decisions,
- as mentioned by the participants.

**Figure 5: Financial Behavior of Participants**

After revealing the status of the participants in terms of financial knowledge, attitude and behavior in such a way that includes the Islamic sensitivities, Islamic financial literacy index was created as described in the methodology part. In this respect, four different indexes were created as follows: Islamic financial literacy index, Islamic financial behavioral index, Islamic financial attitudinal index, Islamic financial information index.

Accordingly, Islamic financial literacy index was calculated as 58%. Islamic financial behavioral index was calculated as 62%, above the Islamic financial literacy index. On the other side, Islamic financial information index and Islamic financial attitudinal index were found to be below Islamic financial literacy index and respectively 56% and 55%.

**Figure 6: Islamic Financial Literacy Indexes Results**

In the research for 2015 financial literacy and financial access index carried out by OECD, following indexes were found out for Turkey: financial

attitudinal index as 49% (all countries 50%, OECD countries 55%), financial information index as 58% (all countries 56%, OECD countries 62%) and financial behavioral index as 38% (all countries 51%, OECD countries 54%) (www.oecd.org). According to the financial literacy index study prepared together by Turkish Economy Bank and Bosphorus University, financial literacy index of the consumers was calculated as 59.4% from the data in 2014. Aforementioned index value was found out as 59.8 for 2013. When viewed from this aspect, it's considered that Islamic finance must still be developed, considering the socio-cultural tendencies, even though Islamic financial literacy index value found out for Turkey, where Islamic finance is yet at the stage of development, is at such an important level.

## **5. Conclusion**

The main objective of increasing the financial literacy includes that person can manage his/her own money, make medium and long term plans, perceive the risks and benefits related to management of his/her money, know the financial products, be informed on where and how to acquire the information on the financial products and services, use the financial products effectively and efficiently. So, consumers can share the responsibilities and risks with the financial institutions and experts. On the other hand, financial consumers would decrease the informational asymmetry with the financial organizations while managing their individual savings. Therefore, the financial literacy must include the entire society without any division such as socio-economic status, age and gender.

Inclusion of individuals into the financial system is of vital importance for both national economy and their own economy. There are impediments before inclusion into the financial system, changing from culture to culture. Cultural and geographical impediments are beside the point for inclusion into financial system in developed countries, however, individuals with low level of financial literacy due to their religious preferences in specifically the Muslim countries display a behavior towards non-inclusion into the financial system.

As Islam is a religion ordering social solidarity, savings, use of existing sources for the benefit of the public, increasing the Islamic financial literacy of the individuals will contribute to addition of the funds which are idle due to religious concerns into the system in terms of fund supply, and provide a movement towards increasing the demand by enabling that consumers with fund demand find a fund in accordance with the religious principles. In this sense, increasing the level of information of the individuals on Islamic financial literacy is of utmost importance.

While approximately 1,000 companies operate in the area of interest-free funding in the world, it's estimated that global interest free financial

system is at the level of 1.8 trillion US Dollars and will reach to the level of 3 trillion US Dollars with high growth rates in the short term. Nevertheless, the share of the Participation Banks (Islamic Banks) in Turkey within the Turkish banking system at the end of 2015 was realized as 5.1%. It was observed that the size of the assets of Islamic banks in Turkey exceeded 120 billion TRY within the same period. For Islamic Banks, which are expected to have a size of assets of 180 billion US Dollars in the 100th year of the Republic, to achieve this target, it's inevitable that important actions must be taken in relation to the Islamic financial literacy and thus the rate of financial exclusion due to religious reasons is reduced. Therefore, it's aimed in this research that a tool is developed for analyzing the level of Islamic financial literacy of the individuals and the level of Islamic financial literacy of the participants is measured with the help of this tool, and an Islamic financial literacy index is created with reference to the OECD financial literacy index based on the interest bearing system.

4 different indexes - Islamic financial literacy information index, Islamic financial literacy attitudinal index, Islamic financial literacy behavioral index and Islamic financial literacy general index - were calculated with the help of the questions specified while creating the application survey for the index value required in the study. Besides, an Islamic finance index, created by the Islamic finance questions only, was calculated for the purpose of obtaining information.

According to the findings obtained from the study, Islamic financial literacy index value was calculated as below the financial literacy index values prepared for Turkey in various researches. Taking the socio-cultural structure of Turkey into consideration, even though participation banking sector is new compared to the conventional banking sector, this subject appears to be a subject discussed over. Thus, studies with the content of Islamic financial literacy must be carried out for increasing the level of awareness regarding the participation banking. It's considered that studies must be carried out primarily towards young population, housewives, sections of the society with low level of income and education as part of the studies to be carried out according to the findings obtained from the research.

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