Islamic Financial Literacy and its Determinants among University Students: An Exploratory Factor Analysis

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ABSTRACT

This study aims to develop the constructs in order to test the validity and reliability of Islamic financial literacy (IFL) and its determinants such as hopelessness, religiosity and financial satisfaction. The development of validated constructs for IFL is crucial since most contemporary research focus on conventional financial literacy which contains some elements that are not compatible with the principles of Islamic finance. The data for the study was collected via structured questionnaires distributed to 200 students of Universiti Utara Malaysia. An exploratory factor analysis using SPSS programme were used to analyze the data. The results show that only seven items load reliably in IFL construct. Specifically, religiosity was found to exhibit the highest variance followed by hopelessness and financial satisfaction. This paper enables future researchers to expand the knowledge in the area of IFL by providing validated constructs to assess IFL among university students.

Keywords: Islamic Financial Literacy, Exploratory Factor Analysis, Validity
JEL Classifications: I2, I3

1. INTRODUCTION

Islam places a great importance on knowledge. Indeed, pursuit of knowledge is highly encouraged. As stated in a hadith narrated by Imam Tirmidhi, the Prophet Muhammad (p.b.u.h) was reported to have said "seeking knowledge is an obligatory upon every Muslim." Thus, Muslims are required to be knowledgeable in matters pertaining to acts of worship as well as those relating to mundane affairs of life including trade, economic as well as financial dealings. It should be emphasized that Islamic financial literacy (IFL) is a religious duty for every Muslim because it carries further implications on the realization of *Al-falah* (true success) in this world and the hereafter. In particular, a Muslim must be conversant with the various rules and regulations governing his economic and financial dealings.

The increasing attention to the significant role of financial literacy is attributed to the rising level of indebtedness among the young people. According to Idris et al. (2013), preferences for lavish lifestyle have led them to spending beyond limits to the point that they are willing to be in debt. This is contrary to the teachings of Islam which promotes moderation in spending as well as limiting the use of debt only for genuine needs. A hadith narrated by Imam Ahmad, where the Prophet Muhammad (p.b.u.h) was reported to have said: "Be wary of debts, indeed it is sadness at night and a disgrace in the day" stresses that being in debt not only leads to increase in financial burden, but it can also cause emotional burden. This explains why the concept of moderation in spending is highly encouraged in the Quran, as stated in chapter Al-Furqan verse 67 which means: "Those who, when they spend are not extravagant and not niggardly, but hold a just (balance) between those (extremes)."

Previous studies conducted in Malaysia found that low level of financial literacy among university students are attributed to weak money management skills (Ibrahim et al., 2009). Particularly, most of them tend to spent aggressively for non-academic purposes and are not likely to save upon receiving their scholarship or

student loan (Sabri et al., 2008). In view of these concerns, this study was undertaken to focus on assessing IFL among university students. Specifically, IFL is considered a new area with very limited literature. More importantly, despite calls for such attempt in the literature, the constructs for IFL have not been adequately examined (Abdullah and Anderson, 2015). Thus, this paper aims to develop the constructs for IFL and its determinants, namely, hopelessness, religiosity and financial satisfaction.

2. LITERATURE REVIEW

2.1. IFL

The study on IFL can be considered as a new concept being brought into the area of financial literacy. Due to its novelty, there is currently no commonly accepted meaning of IFL (Abdullah, 2014). Likewise, due to the limited literature in the area, the review of literature in this study is mainly based on contemporary research on financial literacy. Therefore, maintaining its close link with the general definition of financial literacy, this study proposes the conceptual definition of IFL as "the ability of a person to use financial knowledge, skill and attitude (OECD, 2012) in managing financial resources according to the Islamic teachings."

However, the existence of certain unlawful elements such as interest in the existing financial literacy constructs which are not in line with the underlying philosophy of Islamic finance highlights the crucial need to develop the constructs for assessing IFL. Thus, this study attempt to fill this void by developing the appropriate constructs for IFL.

2.2. Determinant Factors of IFL

In recent years, numerous studies have been conducted to provide theoretical and empirical evidence on financial literacy. However, most of these studies focused on demographic factors affecting financial literacy. Therefore, this study attempt to examine other factors affecting IFL, namely hopelessness, religiosity and financial satisfaction. Hopelessness refers to the negative effect on several components of financial behavior and well-being (Murphy, 2013). In other words, depression among seriously over-indebted individuals often resulted in rash decisions and actions with horrible consequences. Indeed, hopelessness has been deemed as one of the most important problems faced by many people (Bolland, 2003). Previous study in the USA revealed a negative correlation between hopelessness and financial literacy (Murphy, 2013).

The second determinant factor which is religiosity is defined as the degree to which a person adheres to his or her religious belief, values, and practices which are manifested in their daily life (Shukor and Jamal, 2013). Religion often plays an essential role in influencing how individuals cope with financial decision. In other words, a person is actually fundamentally tied to his religious practices whenever he reacts with his own money (Sabri, 2011). This is substantiated in a study among UAE investors which established a positive relationship between religiosity and financial literacy (Al-Tamimi and Kalli, 2009).

The final determinant factor in this study, namely financial satisfaction refers to the amount of wealth earned and owned by an individual to meet his or her living obligation. Recent studies demonstrated a positive correlation between financial satisfaction and financial literacy (Falahati et al., 2012). A person who is satisfied with his financial position has a tendency to capitalize the surplus money, explore numerous opportunities as well as gather more knowledge about various financial opportunities. Thus, greater financial satisfaction improves the level of financial literacy (Bell, 2009).

3. RESEARCH METHODOLOGY

3.1. Sampling and Data Collection

Based on the disproportionate stratified sampling method, the data was collected via self-administered questionnaires to 200 university students of Universiti Utara Malaysia. All respondents were Muslims with 58.5% of them were female. The data collected were analyzed using Statistical Package of Social Sciences (SPSS 20.0). Valid constructs to measure the proposed concepts were developed in this study. The validity of the developed constructs was further examined using an exploratory factor analysis. Similarly, the reliability of the constructs was also verified.

3.2. Measurement

To measure IFL, the constructs were fully developed by the researchers as unidimensional variable. The determinant factors were identified based on previous studies which established the relationship between financial literacy and the following three factors, namely hopelessness (Murphy, 2013), religiosity (Alam et al., 2011) and financial satisfaction (Ali et al., 2013). It should be noted that some improvement on the items were made and added to the constructs to ensure compatibility with the area of IFL as well as the context of the study. Content validity was verified through consultation with area and constructs experts as well as further discussion with respondents. All constructs were measured based on five-point Likert scale ranging from 1 "strongly disagree" to 5 "strongly agree."

4. FINDINGS

This section provides the results and discussion of the findings in order to meet the objectives of the study. It is necessary to conduct an exploratory factor analysis in this study to fulfill construct validity.

A principal component analysis (PCA) was conducted on all items with orthogonal rotation, the Kaiser–Meyer–Olkin (KMO) verified the sampling adequacy for the analysis, KMO = 0.832, and all KMO values for individual items were >0.5. Additionally, Barletts test of sphericity indicated a significant value (P < 0.001). Therefore, the use of factor analysis is appropriate for this study (Table 1).

Table 1: KMO and Bartlett's test (IFL)

Test	Value
KMO measure of sampling adequency	0.832
Bartlett's test of sphericity approximately Chi-square	293.289
df	21
Significant	0.000

KMO: Kaiser-Meyer-Olkin, IFL: Islamic financial literacy

Table 2: Factor analysis for IFL

Items loading factors	Value	Loading
I know that I might or might not receive any return when the contract is concluded		0.566
I acknowledge uncertainty on sanctity of financial contract is strictly prohibited in Islam		0.677
I always make sure that there is no element of interest in all financial transactions that I made		0.673
I understand that all Islamic financing must be backed by asset		0.620
I can only invest in permissible activities or services		0.751
I am aware on the availability of Islamic instrument in the market		0.701
In Islam, I only transact with people that I trust		0.586
Eigen value	3.014	
Percentage of variance	43.06	

IFL: Islamic financial literacy

Table 3: KMO and Bartlett's test (determinant factors of IFL)

Test	Value
KMO measure of sampling adequency	0.896
Bartlett's test of sphericity approximately Chi-square	2528.976
df	210
Significant	0.000

KMO: Kaiser–Meyer–Olkin, IFL: Islamic financial literacy

The items for IFL were initially developed using eleven items. After performing exploratory factor analysis, it was reduced to seven items. This is because 4 out of 11 measures failed to load reliably in IFL construct. Based on Table 2, the Eigen-value for this factor is 3.014 and explains 43.06% of the variance with factor loading between 0.56 and 0.75. The reliability test showed an acceptable level of Cronbach's alpha score at 0.773 level. On the other hand, the determinant factors of IFL were developed with 21 items. A PCA was conducted on the items with orthogonal rotation (varimax).

Based on Table 3, the KMO measure verified the sampling adequacy for the analysis, KMO = 0.896, which is well above the accepted limit of 0.5. Bartlett's test of Sphericity $x^2(210) = 2528.976$, $P < 0.001$, indicate that correlations between items were sufficiently large for PCA. An initial analysis was run to obtain eigenvalue for each component in the data.

Table 4 shows there are three components with Eigen values over Kaiser's criterion of 1 and in combination explained about 60.67% of the variance with factor loading between 0.54 and 0.85. Specifically, religiosity was found to exhibit the highest variance followed by hopelessness and financial satisfaction. With respect to the reliability of constructs, all factors show high reliability ranging from Cronbach's alpha 0.82-0.92.

Table 4: Rotated component matrix of the independent variables

Variables	Component		
	1 Hopelessness	2 Religiosity	3 Financial satisfaction
Hopelessness (Cronbach's alpha: 0.893)			
I feel it is impossible for me to reach the goals that I would like to strive for	0.541		
The future seems hopeless to me and I can't believe that things are changing for the better	0.778		
I don't expect to get what I really want	0.728		
There's no use in really trying to get something I want because I probably won't get it	0.802		
All I see ahead of me are bad things, and not good things	0.776		
I might as well give up because I can't make things better for myself	0.760		
I never get what I want, so it's dumb to want anything	0.721		
Religiosity (Cronbach's alpha: 0.920)			
I believe in a Allah/God who determines pre-destination		0.748	
Doing something contrary to Islam is forbidden by Allah/God		0.854	
I pray mainly to gain relief and protection		0.818	
I find strength and comfort in my religion		0.839	
I try to follow my religious beliefs in all matters of my life		0.825	
I always keep myself away from earning through haram (prohibited) means		0.745	
I always perform my duties as a servant of Allah/God		0.608	
Financial satisfaction (Cronbach's alpha: 0.820)			
I rarely run short of money			0.746
I am satisfied with my current financial situation			0.750
If I'm having financial difficulties I could manage it for a period of time			0.627
Based on my current financial status, I could easily obtain loans if I need one			0.690
I am satisfied with my ability to meet my financial obligations			0.693
I have an effort to improve my current financial situation			0.619
Sometimes I feel the amount of loans received are sufficient to cover my living costs			0.721
Eigen value	3.366	7.737	1.673
Percentage of variance	20.933	23.460	16.277
Cumulative percentage	20.933	44.393	60.67

5. CONCLUSION

This study highlights the significant role of IFL especially among young people. It should be noted that the importance of IFL is difficult to be ignored especially for Muslims. This study represents an initial attempt to explore the concept of IFL through an exploratory factor analysis. In particular, it contributes to the current literature by developing a validated instrument for IFL and its determinants. It is hoped that this study could help other researchers to further expand the knowledge in the area of IFL.

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