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# Factors determining Islamic financial literacy among undergraduates

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## ABSTRACT

This article is written to provide a deliberation reviews on the current context of Islamic financial literacy among students. A research was conducted through case studies carried out among the students of University Malaysia Sabah Campus W.P. Labuan and Institut Pendidikan Guru (IPG), Kampus Batu Lintang, Sarawak, a teacher training institute. The respondents are candidates to become teachers upon completing their studies. Being knowledgeable and having skill in financial literacy, especially with respect to Islamic financial products, would be a great asset to them. Based on current scenario, financial literacy in Islamic financial products should be enhanced, especially to the academicians. The findings from this research is expected to be able to determine the factors influencing Islamic financial literacy among the students. This study employs a quantitative method using questionnaires distribution for analysis puposes. Data are collected through a survey using a closed ended questionnaire. Overall, the objective of this study is to determine the determinant factors towards Islamic financial literacy among students. The implications and recommendations are provided.

# 1. Introduction

Knowledge is dynamic and can be acquired through reading or experience. This includes knowledge in financial products, where the ultimate goal is to educate consumers towards financial literacy and to be knowledgeable in financial products. Financial literacy is critical for promoting access to finance by creating incentives and environments that promote desired financial behaviours, such as saving, budgeting, or using credit wisely (Miller et al., 2009). Financial literacy is also the combination of

\*Corresponding author. Tel.: +6087-460-498; fax: +6087-460-477. *E-mail address*:azmi4386@ums.edu.my/azmi4386@gmail.com consumers' or investors' understanding of financial products and concepts, their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help and to take other effective actions to improve their financial well-being (Miller et al., 2009). In addition, financial literacy is also important, since the financial products and services are complex and multifaceted. There are many types of products with different provider, assessable in the market. The final decision in choosing a suitable financial product is the responsibility of consumers.For example, some consumer may decide to choose investing on a certain financial product for their retirement plan. Finally, there are large numbers of consumers entering financial markets for the first time, due to the growth of income in developing countries, and as a result of the new financial institutions, such as microfinance providers and new technologies. The branchless banking is an example of new technologies, that has resulted in making it easier for consumers to participate in financial markets.

The current financial crisis has also affected the financial needs for education sector. Students are consumers. It is commonly accepted that students have little knowledge and information on financial literacy. Usually the bank and the banking sector is taking the responsibility in cultivating financial literacy among students to support their financial decision-making process. Students must be more cautious in expending their expenses and learn to spend within their means, especially for financial students. If they do not have knowledge in financial literacy, they may not know what danger they gotten themselves into. The skills in making sound financial decision is much important for students, as financial education is very important for the students in order to improve their skill in financial budget.

In Malaysia, the decrease in budget offer by Malaysian government in education system and limitation of Ministry of Education budget by 41.3 bilion in 2016 as compared to 56 bilion in 2015, has made a remarkable attention to the importance of financial literacy to the student's survival. The decrease in budget causes limited loan offer by PTPTN and the university has also started to be affected by reducing budget from Ministry of Education.

Less scholarships are being offered to selective students or lesser amount of sponsorship are being received by the selected students. The crisis, however helps the students to be more independent, increase awareness in financial management and control, as well as increasing their knowledge especially in financial literacy. Students are becoming more aware when it comes to making decision on their financial saving and expenses. Lack of financial supply did accelerate awareness of the need to improve financial literacy among the population. Huston (2010), mentioned that being knowledgeable in financial literacy could help people become more informative on the economic issues. Improper expenses would create negative externalities not only to the individual welfare, but to all economic participants as well. An individual witha good financial literacy will enable a person to function efficiently at work. Theywill be able to evaluate the information needed to make decisions that have financial consequences. In the context of this research, it is anticipated that early exposure on financial literacy to the students will help them in making decisions that have financial consequences upon them after graduating. We can rest assure that financial blunders such as the subprime crisis could be avoided, if more students become knowledgeable in financial products.

The increasing awareness among consumers to consider an Islamic financial services complying with the *shariah* regulations, has led to the renewed focus on Islamic finance worldwide. It facilitates Muslim consumers to adopt products and services that are consistent with their belief, while simultaneously spreading the option to non-Muslim consumers. Islamic finance has unique advantages and secure features that encourage conventional banks to introduce Islamic window products, to choose from.Therefore, an understanding of the features and differences between these instruments and assets are relevant in order for investors to manage their portfolio, irrespective of whether they are Muslims or Non-Muslims. With respect to making these Islamic financial products acceptable by the wider spectrum of investors and business people alike, several years ago the Governor of Central Bank of Malaysia has mentioned the unique characteristics and features of Islamic finance and its real economic value. It has enhanced financial literacy on Islamic financial products and facilitate transactions with a clear understanding and appreciation of those unique characteristics and features. In addition, Ahmad (2010) justifies the importance of Islamic financial literacy to the consumer,given that islamic finance has become an attractive alternative financial instruments as compared to the conventional financial instrument.

The objective of this study is to determine the determinant factors of Islamic financial literacy among undergraduate students. This study attempts to identify their knowledge on Islamic financial literacy towards their future life and well-being. At present, the financial institutions have played a vital role in promoting a proper financial management to the consumers. However, regretfully to say, not many students are interested to improve their knowledge and understanding on financial literacy or Islamic Financial literacy and management. As a consequence, the overall view of this study attempts to realize more interest among the students and consumers on the importance of Islamic financial literacy among students for their future undertakings. Subsequently, it would indirectly provides better understanding on Islamic finance among Muslim and non-Muslim consumers, alike.

# 2. Literature review

## 2.1 What is financial literacy?

Massive research has been done on financial literacy. The terms commonly used are financial literacy, financial knowledge and financial education. Most of the researchers did define or differentiate these terms according to their own scope of study (M. van Rooij et al., 2011; Remund, 2010; Huston, 2010; Johnson & Sherraden, 2007; Worthington, 2004; Huang et al., 2008). In a simple word, financial literacy can be defined as a competency to know, understand, and evaluate information about the finance.

The literature written on financial literacy has been done greatly (Houston, 2010; Remund, 2010; Walstad et al., 2010; Lusardi et al., 2009; Lusardi, 2008). There are some contradicting views among researchers on the financial literacy studies. Indeed, Remund (2010) and Houston (2010) found out that there is no definite definition for financial literacy according to majority of the researchers. Most of the findings show that the conceptual definitions of financial literacy fall into five categories, as the following:

- (i) knowledge of financial concepts;
- (ii) ability to communicate about financial concepts;
- (iii) aptitude in managing personal finances;
- (iv) skill in making appropriate financial decisions; and
- (v) confidence in planning effectively for future financial needs.

As a result, the financial literacy can be defined as a measurement of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate, short-term decision-making and sound, long-range financial planning, while mindful of life events and changing economic conditions (Remund, 2010).

The following table shows a few definitions of financial literacy among the researchers:

Researcher(s)	Definition			
Huston, S.J. (2010)	Financial literacy is a measurement of how well an individual can understand and use personal finance-related information. It is divided into two dimensions:			
	1. Understanding (personal finance knowledge)			
	2. Use (personal finance application).			
Worthington, A.C. (2004)	Financial literacy is a mathematical ability and the understanding of financial terms.			
Van Rooij, M.C.J., Lusardi, A., & Alessie, R. (2011).	Financial literacy is an ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future, and respond competently to life events that affect every day financial decisions, including events in the general economy.			
Huang, R., Samy, S., Tawfik, H., & Nagar, A.K. (2008)	Financial literacy is an ability of an individual to make informed judgments and to take effective decisions regarding the use and management of money.			
Organisation For Economic Co-Operation and Development (2005)	Financial literacy is a combination of consumers' or investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being.			

Table 2.1. Definition of financial literacy

#### 2.2 Islamic financial literacy

Financial literacy is defined as the ability to understand finance. Therefore, Islamic financial literacy can be defined as the ability to understand finance based on sharia compliance. This should be an issue of concern to Muslim students. Muslims must seek to understand Islamic finance because it is a religious duty. Using the conventional financial system is certainly sinful for Muslims. Most studies on Islamic finance (Abdul Hamid & Mohd. Nordin, 2001) were undertaken on bank selection criteria. Few studies have been undertaken by people with knowledgein Islamic financial products (Bley & Kuehn, 2004; Abdul Hamid & Mohd. Nordin, 2001). A study with regard to knowledge on Islamic banking showed that almost 100 percent of the Muslim population are aware about the existence of Islamic bank. However, out of these, only 27.3 percent completely understood the differences between Islamic bank and conventional banks; and only 38.7 percent patronize the Islamic bank strictly because of religion (Abdul Hamid & Mohd. Nordin, 2001).

## 2.3 Factors affecting financial literacy

Financial literacy is related to financial concept and information. Hence, what is the factor that will be affecting people to understand the financial concepts? How it can help people on making their own decision towards various choices of financial activities, such as saving and investment? According to Lusardi et al. (2009), younger generation has a low input in financial literacy, as indicated by the strong relationship between socio-demographic characters and family financial sophistication. In another situation, female students, unemployed graduates and people from non-English speaking background with low level of education is said to have the lowest financial knowledge (Worthington, 2004). In opposite he found out that financial literacy was at the highest for persons aged between 50 to 60 years old, professionals, business and farm owners, as well as university/college graduates.

Bley and Kuehn (2004) investigate the relationship between the knowledge of university student and other individual variables, on their preferred financial services, including the knowledge in relevant financial concepts and terms in conventional and Islamic banking, the impact of religion and the preferred language. The findings illustrates that Islamic banking terminology was isolated as compared with the

conventional financial. Most of the students are more familiar with the conventional banking terms and concepts rather than Islamic financial product. It also indicates that very little work has been done to link the knowledge on Islamic financial product. Likewise, very limited studies have been undertaken with regard to Islamic banking products, while no such study has been carried out on the financial literacy of these products.

## 2.4 Financial literacy among students

As normally observed, the education in financial programme is generally focusing in teaching students about conventional financial literacy. The term conventional financial literacy isabout financial knowledge but not restricted into the religious prohibition. The effectiveness of the conventional financial literacy has been mixed (Walstad et al., 2010). The studentswill benefit well and expand their financial knowledge if the financial education is well-defined and properly implemented in high school level. Introducing the financial literacy in the early stages can play an important role and able to influence on the wealth planning and management of the individuals. Students are the suitable subject as the respondant and allowing the researcher to observe and study their dependency on financial, the spending behaviour and saving habits. The patterns revealed from the study indicate that most of the students are lacking knowledge on how to manage and control their income. For instance, when they have planty of money, they will spend it lavishly on unnecessary items. Their spending patterns indicate clearly the lack of financial literacy among students and that is why it needs to be changed (Ibrahim et al., 2009), due to the serious absence of such literacy.

The ability of the student to have the financial skills and competencies, based on their financial knowledge and understanding, will actually influenced their attitudes towards the properhandling of money. Indeed, financial skills and competence are know-how that are shown in the practices and habits, formed in everyday and long-term financial management (Pellinen et al., 2011). If the students are not familiar with financial literacy, it will affect their financial decision-making. Consequently, resulting on their ignorance of the basic financial concepts, including lack of retirement planning, lack of participation in stock market and poor borrowing behaviour (Lusardi, 2008). Thus, such lack of literacy may prevent students from their potential to accumulate wealth may also witness the diminishing in their wealth due to wrong financial decisions.

# 2.5 Institut Pendidikan Guru (IPG) Kampus Batu Lintang, Sarawak and UMS

The Teacher Education Institute of Malaysia is an institution of higher learning that provides training for prospective teachers to teach in primary schools. Batu Lintang campus is one of the 27 campuses in the country. The institute commenced its service in late 1947 with the enrollment of 19 trainees, including those from Sabah and Brunei. At the beginning, the training was held at the Madrasah Melayu, Jalan P. Ramlee Kuching, Sarawak. The training centre then changed its name to BatuLintang Teachers Training. In 1967, the college changed its name again to Maktab Perguruan Batu Lintang (MPBL). MPBL upgraded its status to the institute officially on 1 April 2006 and known as Institut Perguruan Batu Lintang (IPBL). With the amendment of the Education Act 1996, on 4 December 2008, the institute was officially renamed again and is now known as the InstitutPendidikan Guru (IPG) KampusBatuLintang, Sarawak.

Currently, Institut Pendidikan Guru Kampus Batu Lintang offers several programmes for teachers such as Kursus Diploma Perguruan Malaysia (KDPM), Kursus Perguruan Lepasan Ijazah Sekolah Rendah (KPLI-R), Kursus Pra Program Ijazah Sarjana Muda Perguruan (PPISMP), Kursus Program Ijazah Sarjana Muda Perguruan (PISMP), Bachelor of Education – TESL (Link programme with University of Otago) and also various in-house service training programme.

The following hypotheses are developed for this study:

- H1<sub>0</sub>: Attitude on Personal Financial Management (AOPFM) has significant influence toward higher financial literacy level.
- H2<sub>0</sub>: Attitude on Islamic financial product and services (AIFPS) has positive relationship towards higher financial literacy level.
- H3<sub>0</sub>: Education level is positively related to the level of financial literacy.
- H4<sub>0</sub>: Males have higher financial literacy level than females.

#### 3. Methodology

This study adopted a quantitative method. Data were collected through a survey by using a closed ended questionnaire. Questionnaires help gather information on knowledge, attitudes, opinions, behaviours, facts, and other information related to financial literacy. This study has been carried out in order to access the level of Islamic financial literacy among the students of University Malaysia Sabah and Institut Perguruan Guru (IPG), located at Kampus Batu Lintang, Sarawak. Hence, the unit of analysis in this study is at the individual level. Most of the respondents are randomly selected, with no preference on onthe gender of the student, their seniority or type of students programme. The main aim is to identify the determinant factors that influence students learning on Islamic financial products. The intention of the surveyis to identify the knowledge of the students in Islamic finance. The research is specifically trying to examine any factors that influence the general knowledge of personal financial with the Islamic financial literacy. Furthermore, this study is also trying to examine the relationship between students' financial knowledge and attitudes, with their financial literacy level. There are a lot of factors which influence financial for the students, such as gender, age, marital status, level of education, year of entry, faculty, GPA, level of parents' education, average parent income, place of residence, experience, and ownership of investment products (Nidar, et.al. 2012). The total number of studentsare 200 and 150 financial literacy tests and questionnaires were distributed to the students. Out of the 150 questionnaires distributed, a total of 87 were returned and used for the analysis. All the data will be analysed using Statistical Package for Social Science version 21 (SPSS 21.0).

## 4. Results and discussions

## 4.1 Profile analysis

Profile 87 respondents involved in the survey was conducted. Table below summarizes the analysis of respondents' demographic profile data, obtained based on data from survey forms distributed. The number of respondents consisted of 14 men (16.1%) and 73 females (83.9%). This confirms the entry of women into the university student is more than male students. Malay is the majority in this study, namely a total of 70 students (80.5%) compared with other races. The number of Chinese students total respondents is 1 (1.1%), followed by the other races, 16 students (18.4%). The composition of the sample size varies according to the prevailing practices reflecting the entry of students into universities is based on a quota system. The entry of Malay Bumiputera students was much more than other races. 86 students were in the age range 21-25 (100%). This study also disclosed that 86 students (100%) were undergraduate/bachelor students.

Variable	Profile	Respondent (N)	Percentage (%)
Gender	Male	14	16.1
	Female	73	83.9
Age	21-25 years	87	100
Race	Malay	70	80.5
	Chinese	1	1.1
	Other	16	18.4
Education	Bachelor	87	100

#### Table 1. Demographics

## 4.2 Analysis of financial literacy test

The mean and standard deviation of financial literacy test score of the respondents in the sample of the study, is presented in Table 2 below.

Table 2. Mean of financial literacy test score

	Ν	Minimum	Maximum	Mean	Standard	
					Deviation	
Score	87	0	38	47.36	9.009	

The average score is 4.736, or 47.36% with standard deviation of 9.009. The results are much lower than several studies such as Chen and Volpe (2002) - 52.9% and Hilgert et al. (2003) - 68%; and about the same as several other studies, including Markovich and Devaney (1997) - 44.3%, Mohamed and Fatima (2013) - 43.3%, and Mohamad Fazli et al. (2011) - 48%.

Table 3. Reliability statistics of the dimensions in the questionnaire

No	Dimension	No. of Items	Cronbach's Alpha
1.	Attitude on Personal Financial Management (AOPFM)	4	0.779
2.	Attitude on Islamic Financial Product and Services (AIFPS)	4	0.667

Based on the results shown in Table 4, all five dimensions recorded Cronbach's Alpha more than 0.60, showing that the questions or items used for each dimension are highly reliable. This implies that the questionnaire is reliable and the results can be used for further analysis in the study.

#### 4.3 Regression

In this section, the results of the regression analyses between the dependent variable (SCORE) and all the four independent variables (GENDER, AGE, EDUC, AOFM, AIFPS) are presented, whereby the enter method has been used in this study.

	Model	Sum of Squares	df	Mean Square	F	Sig.
-	Regression	1186.376	4	296.594	4.197	.004 <sup>b</sup>
1	Residual	5794.234	82	70.661		
	Total	6980.609	86			

Table 4. Analysis of variance (ANOVA)

a. Dependent Variable: SCORE

b. Predictors: (Constant), AIFPS, GENDER, EDUCATION, AOPFM

The ANOVA results presented in Table 7 above shows that the F-statistics of the model is 4.297, with a probability value of 0.004. This implies that the model is significant and adequate. This also shows that the coefficient results of the variables of the regression can be used and interpreted accordingly.

Table 5: Coefficients of the regression

	Model		ndardized efficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	22.604	11.718		1.929	.057
	AOPFM	3.619	1.942	.205	1.863	.066**
1	GENDER	7.801	2.515	.320	3.102	.003*
	EDUCATION	2.744	1.483	.189	1.850	.068**
	AIFPS	-2.604	1.892	149	-1.376	.173

a. Dependent Variable: SCORE

\*Note: \* Significant at 5% probability level; \*\* Significant at 10% probability level

Table 6 shows the regression of the financial literacy score against the 4 independent variables using the enter method. The results show that only AOFM, GENDER, EDUCATION are statistically significant. The AIFPS independent variables are not significant. The AOPFM variables recorded a coefficient of 3.619, with a significant value of 0.066. This implies that as a person's positive attitude towards personal financial management increases, his or her Islamic financial literacy score get higher. This is consistent with the findings in Bernheim et al. (2001), Lusardi and Mitchell (2006), Clark et al. (2006), Rooij (2009), Lusardi and Mitchell (2011b), Behrman et al. (2010b), Lusardi and Mitchell (2011a) as well as Capuano and Ramsay (2011). These findings support the hypothesis which stated that good saving management or behaviour of the personal financial management person is positively related to the level of financial literacy.

#### 5. Conclusion

The mean financial literacy score for this group is 47.6% and none of the respondents managed to get the full score of 100%. The regression analysis results show that only three variables are significant to determine the level of financial literacy using both of enter method, namely Attitude on Financial Management (AOPFM), Gender (GENDER), and Education Level (EDUCATION). This implies that for the Students in UMS and IPG Sarawak, there are no significant differences between the variables (AIPS). The results of this study are important to assist higher education institutions in creating and planning financial education framework that can be offered to students at the university and college. The emphasis on educational programmes and seminars relating to training in personal finance will cover aspects of Islamic investment, credit, financial planning, takaful. Other programmes can be carried out for future planning by Minister of Education to strengthen the personal Islamic planning knowledge for the students.

Based on the limitations and also the findings of the study, it is recommended that future studies can add a few more students from various universities in Malaysia. This is to make sure the generalizations made from the study can be applicable to the students in Malaysia. In addition to university students, future research may add other related students such as Polytechnic, IKM, and secondary school students. This is to examine whether the students have the same level of personal Islamic financial literacy and also share the same financial problems. Finally, in addition to financial literacy test and questionnaire, it is suggested that future studies may use qualitative research method such as in-depth interview and also observation. This is in order to discover more information from the students that cannot be obtained through the use of questionnaire.

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