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مستوى المعرفة المالية بين جيل الألفية من الطلاب المسلمين

THE LEVEL OF FINANCIAL LITERACY AMONG MUSLIM MILLENNIAL STUDENTS[1]

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الملخص

جيل الألفية ، المعروف أيضًا باسم الجيل Y ، هم مجموعة سكانية وُلدوا بين أوائل الثمانينيات وأواخر التسعينيات ، وهم معروفون بشغفهم لاستخدام بتكنولوجيا المعلومات. في الوقت نفسه، توثق الأبحاث الحديثة تلك المشكلات التي يعاني منها جيل الألفية بسبب عدم كفاية المعرفة المالية، والوضع المالي الحالي غير المرضي، وإساءة استخدام حسابات التقاعد. تكمن أهمية الجزء الأخير بسبب الارتفاع المستمر في متوسط العمر المتوقع اليوم، في حين أن أنظمة المعاشات التقاعدية والرعاية الاجتماعية تتعرض للاستنفاد. في هذه الورقة العلمية، ندرس مستوى المعرفة المالية بين طلاب جيل الألفية الذين هم في الوقت نفسه مستخدمون نشطون للتكنولوجيا المالية. جمع الباحثون البيانات عن طريق توزيع الاستبيان على طلاب الجامعة الإسلامية العالمية بماليزيا (IIUM) في الحرم الجامعي. ومن بين جميع الردود التي تم جمعها، اختير 217 استبانة متطابقة مع معايير البحث، مثل: الطلاب الذين ينتمون إلى جيل الألفية؛ لتحليل البيانات الواردة فيها. ولقياس مستوى المعرفة المالية، استخدمنا طريقة "الثلاثة الكبار" التي صممها لوساردي وميتشل (2011). وحيث كان المستجيبون طلابًا جامعيين في دراستنا، تشير النتائج إلى أن 47٪ من إجمالي 217 مشاركًا لديهم مستوى مُرضٍ من المعرفة المالية. وسجل مستوى المعرفة المالية مستويات أعلى بين طلاب الدراسات العليا وطلاب الهندسة. يشكل مستخدمو الدفع بواسطة الأجهزة المحمولة 64٪ من المجيبين و 24٪ منهم فقط لديهم ثقافة مالية. كما يشار إلى أن 93٪ من المبحوثين ليس لديهم حساب تقاعد. هذه النتائج مهمة للغاية؛ لأن الدراسة أجريت في بيئة جامعية حيث يشارك 100 ٪ من المستجيبين في التعليم العالي. من الأهمية بمكان تدريس المواد المالية في جميع الكليات، وهناك حاجة ماسة لإنشاء مؤسسة تقوم بانتظام بإجراء مسحٍ على مستوى الدولة؛ للوصول إلى مستوى المعرفة المالية والسلوك المالي للشباب؛ لتجنب الانهيار المالي للجيل.

Abstract

Millenials, also known as Generation Y, are a demographic cohort who were born between early 1980's and late 1990's and are reportedly to be active users of FinTech. At the same time, recent research documents the problems Millenials are prone to inadequate financial knowledge, an unsatisfactory current financial situation, and misuse of retirement accounts. The last segment is particularly very important since life expectancy today is rising, while pension and social welfare systems are being strained. In this paper we examine the level of financial literacy among millennial students who at the same time active users of financial technology. The data was collected via questionnaire distribution to International Islamic University Malaysia (IIUM) students in the campus. From all collected responses 217 which matches the research criteria such as students who belong to Millennial generation were selected for analysis. To measure financial literacy level, we use the "Big Three" method designed by Lusardi and Mitchell (2011). In our study where respondents are university students, findings suggest that 47% out of all 217 respondents has a satisfactory level of financial literacy. The level of financial literacy is higher among post-graduate students and engineering students. Mobile payment users comprise 64% of respondents and only 24% among them is financially literate. It is also noteworthy that 93% of respondents do not have a retirement account. These findings are very important since the study is conducted in a university environment where 100% of the respondents are involved in higher education. It is crucial to teach finance subjects in all faculties and there is a dire need to establish an institution which will regularly conduct a nationwide survey to access the level of financial literacy and financial behaviour of youth to avoid the financial collapse of Generation Y.

الكلمات المفتاحية: الثقافة المالية ، الملاءة المالية، تكنولوجيا المعلومات، السلوك المالي، جيل الألفية.

Keywords: Financial literacy, financial capability, FinTech, Financial Behaviour, Millennials.

1.0 Introduction

In today's economy, individuals, sometimes at an early age, are required to make important and complex financial decisions which implies long-lasting consequences. Therefore, individuals today are more responsible for their personal finances than ever before. Simultaneously, financial markets are rapidly changing, with developments in technology and new and more complex financial products.

Millenials, also known as Generation Y are demographic cohort who was born between early 1980's and late 1990's, reportedly said to be active users of technology. It was reported that about 73 per cent of internet users aged 18 to 24 years purchased products or services online in 2015 alone. Shopping apps and mobile wallets are also growing in popularity within this age group. About 54 per cent of Millennials reported that they use shopping apps because they are user friendly (Statista, 2017). Compared to their predecessors, Millenials are more ethnically diverse, and more economically active. However, Millennials also confront greater difficulties such as economic uncertainty and student debt compared to the preceding generations as well as the rise of life expectancy while pension and social welfare systems are being strained. This implies that Millenials will have to support themselves after retirement for many more years than previous generations did.

PwC conducted a survey which analyses the financial characteristics of more than 5,500 Millennials and examines the factors that threaten their economic aspirations and security. The findings highlight eight financial problems related to Millenials namely, (i) inadequate financial knowledge; (ii) unsatisfactory current financial situation; (iii) concern about student loans; (iv) 81% have at least one long-term debt; (v) almost 30% are financially fragile; (vi) greatly use Alternative Financial Services such as payday loans, pawnshops, auto title loans, tax refund advances, and rent-to-own products; (vii) sacrifice retirement accounts, and (viii) do not seek professional financial help (PwC 2015). These factors are reportedly connected to the lack of financial literacy. The findings suggest that those with greater financial literacy level are more likely to save and plan for retirement, more likely to have non-retirement savings, have a greater propensity to track spending and finally are less likely to be financially fragile.

Organisation for Economic Co-operation and Development (OECD) defines financial literacy as an understanding of financial concepts and risks as well as having skills, motivation and confidence to apply those skills. Therefore, financial literacy refers to both knowledge and financial behaviour (Lusardi, 2019). This requires making calculations, many of which are facilitated by financial literacy. For example, less sophisticated individuals who do not have a good grasp of interest compounding may engage in high-cost credit-card borrowing, or they may be more likely to pay high fees when using financial services. Lusardi and Tufano (2009) found that individuals with low level of financial literacy are more likely to carry high-cost debt and to have problems with debt while financially literate individuals tend to include stocks in their portfolios, as they better understand the principle of risk diversification (Van Rooij et al. 2011). In the context of rapid changes and constant developments in the financial sector and the broader economy, it is important to understand whether Millenials are equipped to effectively navigate the confusion of financial decisions that they face every day. In this study we investigate financial behaviour, and financial literacy level of International Islamic University Malaysia (IIUM) Millenials who also use financial technologies.

2.0 Literature Review

Financial literacy is one of the fields which take attention especially with emergence of financial technology or fintech. Fintech enables consumers to purchase products at the comfort of their homes. At the first it might be seemed like a time saving and convenient procedure however the data on credit card debt tells us that when consumer lacks basic financial knowledge, he is prone to overwhelming loans.

Numerous studies have found that financial literacy rate among youth is low; there are many factors that contributed towards low literacy. For example, study conducted by Lusardi 2018, examined the financial literacy among the young using a longitudinal study on national data from 1977. The results show that financial literacy among young individuals is low; a smaller number of youths acquires basic knowledge of “interest rates, inflation, and risk diversification.” Factors that are strongly related to financial literacy are demographic factors and family financial sophistication. The study found a significant aspect on young adults acquire financial knowledge: Particularly, a young male whose parents had stocks and retirement savings were more likely to know about risk diversification than a female who have less educated parents.

The absence of financial literacy or knowledge is a big concern among well-developed nations as well as developing nations. The Big Three questions were designed by Lusardi and Mitchell (2011) to measure financial literacy on identifying the differences upon financial knowledge and emphasises on the population’s vulnerabilities. Thereby, many programs that provide financial education in every educational sector and community at large have taken existing evidence into account to create rigorous solutions.

Rooij et al (2009) study the relationship between financial knowledge and retirement planning in the Netherlands. Due to the objective of the study the researcher developed a customized module for the DNB (De Nederlandsche Bank) Household Survey. The first set of questions was developed to measure financial literacy and to differentiate levels of financial knowledge. The second set of questions was to explore financial literacy and understanding of basic concepts of "inflation, interest rates, compound interest and the time value of money". The authors found the relationship between financial knowledge and retirement planning which has a very strong positive correlation. Although the descriptive statistics show a strong correlation between financial literacy and thinking about retirement, the authors performed a multivariate analysis of the association between retirement planning and financial literacy. The findings showed that Dutch people are not planning much for retirement these outcomes can contribute to the lack of financial literacy and knowledge.

Our study contributes to the literature as a study conducted at university level where all respondents are either undergraduate or postgraduate students. Also, demographically our sample represents Muslims from 19 different countries. Therefore, our results can be considered as a proxy for the financial literacy of a Muslim millennials with higher education.

3.0 Methodology

To provide the tools for better financial decision-making, one must assess not only what people know but also what they need to know, and then evaluate the gap between those things. There are a few fundamental concepts at the basis of most financial decision-making. These concepts, namely, numeracy, understanding of inflation and understanding of risk diversification, which are universal and applying to every context and economic environment. Lusardi and Mitchel (2008, 2011) translated these concepts into easily measured financial literacy metrics by designing a standard set of questions known as the "Big Three". The authors identified three economic concepts that one should have some awareness of when making financial decisions. These concepts are, i) interest compounding; ii) inflation; and iii) risk diversification. The following are the questions which comprise the *Big Three*:

1) *Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?*
   More than $110
   Exactly $110
   Less than $110

2) *Imagine that the interest rate on your savings account was 1% per year and inflation 2% per year. After 1 year, how much would you be able to buy with the money in this account?*
   More than today
   Exactly the same
   Less than today

3) *Please tell whether this statement is true or false. "Buying a single company's stock usually provides a safer return than a stock of mutual fund".*
   True
   False

In this method the first question measures numeracy or the capacity to do a simple calculation related to compounding of interest rates. The second question measures understanding of inflation, in the context of a simple financial decision. The third question tests familiarity with risk diversification; it is a multiparty test of understanding stocks and stock mutual funds, and risk diversification, as the answer to this question rests on understanding what stock is and that a mutual fund is composed of several stocks. Students who answered all three questions correctly considered as financially literate and those who answered less are considered otherwise.

The method was successfully used in several surveys such as in the 2004 HRS module for a sample of over 1200 respondents age 50 plus (Lusardi and Mitchell, 2011), the National Longitudinal Survey of Youth (NLSY) for 2007-08 covering respondents aged 23-28 (Lusardi et al., 2010), the American Life Panel in 2008, an internet based panel data set (Lusardi and Mitchell, 2007) and finally, these questions were used in 2009 Financial Capability Study (FINRA, 2010) which included both phone interviews with a representative sample of the U.S. population, and an internet survey of about 500 respondents in each state (Lusardi, 2010). National Financial Capability Study (NFCS) and the Survey of Consumer Finances (SCF). *Big Three* method also becomes the standard way to measure financial literacy in surveys used by the private sector. For example, the Aegon Center for Longevity and Retirement, ING, Allianz, investment funds, and pension funds have used the *Big Three* to measure financial literacy.

Data on mobile payment users were obtained through an independent survey. We focused on Millennials and restricted the sample to those aged 18-34. The question regarding mobile payment, we adapted from Lusardi et al. 2018. The question is as follows:

How often do you use your mobile phone to pay for a product or service in person at a store, gas station, or restaurant (e.g. by waving/tapping your mobile phone over a sensor at checkout, scanning a barcode or QR code)?

Frequently
Sometimes
Never

Respondents who responded “frequently” or “sometimes” defined as mobile payment users and non-users if they responded “never”. In our survey 64% reported using mobile payments and 36% are categorized as non-users. In the following section, we compare users and non-users, analysing how they differ in terms of demographics, assets, liabilities, and financial management practices.

3.1 Data

The data was collected via questionnaire distribution to International Islamic University Malaysia (IIUM) students in the campus. From all collected responses 217 which matches the research criteria such as students who belong to Millennial generation were analysed. The next session discusses the results and findings of the analyses.

4.0 Results and Discussion

Table 1 illustrates demographic background of respondents. In total the number of students who participated in our survey is 217 where 54 per cent represented by male students and 46 per cent by female students. Most respondents (61%) are aged between 18 to 24 and at the same time undergraduate students. Students from the Faculty of Islamic Revealed Knowledge and Human Sciences comprise 36%, students from the Faculty of Economics and Management Sciences comprise 19%, students from the Institute of Islamic Banking and Finance comprise 14% and students from the Faculty of Engineering, Faculty of Information and Communication Technology and Faculty of Law comprise 11%, 10% and 3% of respondents respectively. The majority of our respondents are single (88%) and full-time (96%) students.

Table 1. Demographic Background

Gender		**Faculty**	
Male	54%	IRK*	36%
Female	46%	KENMS**	19%
Marital Status		II*i*BF***	14%
Single	88%	Engineering	11%
Married	11%	KICT****	10%
Divorced	1%	AIKOL*****	3%

Age		Architecture	3%
18 – 24	61%	Education	2%
25 – 29	25%	Others	2%
30 – 34	14%		
Level of Study		**Nationality**	
Undergraduate	61%	Malaysian	26.9%
Postgraduate	39%	Yemeni	8.2%
Student Status		Indian	7.8%
Full Time	96%	Chinese	5.9%
Part-time	4%	Syrian	5%
		Somali	4.6%
		Egyptian	4.1%
		Turkish	3.7%
		Nigerian	3.2%
		Indonesian	3%
		Bangladeshi	2.7%
		Algerian	1.8%
		Jordanian	1.8%
		Singaporean	1.8%
		Sudanese	1.8%
		Afghan	1.8%
		Palestinian	1.4%
		Pakistani	1.4%
		Thai	1.4%
		Others	13.5%

[*] Kulliyyah of Islamic Revealed Knowledge and Human Sciences
[**] Kulliyyah of Economics and Management Sciences
[***] IIUM Institute of Islamic Banking and Finance
[****] Kulliyyah of Information and Communication Technology
[*****] Ahmad Ibrahim Kulliyyah of Laws

Nationalities of the respondents are as follows, Malaysian 26.9 %, followed by Yemeni, Indian, Chinese, Syrian, Somali, Egyptian, Turkish, Nigerian, Indonesian, Bangladeshi, Algerian, Jordanian, Singaporean, Sudanese, Afghan, Palestinian, Pakistani and Thai students with 8.2%, 7.8%, 5.9%, 5%, 4.6%, 4.1%, 3.7%, 3.2%, 3%, 2.7%, 1/8%, 1.8%, 1.8%, 1.8%, 1.4%, 1.4%, 1.4% respectively.

Table 2 shows the level of mobile payments use among the demographic groups. First, we outline which demographic group use mobile payments most often, and second, we identify how mobile payment users compare to non-users in terms of socio-demographic characteristics. The findings from this section provide instrumental insights into Fintech's Millennial customer base.

In our survey 62% of undergraduates and 65% of postgraduate students are fintech users. Single individuals use mobile payment slightly more compared to married individuals 64% and 56% respectively. The gender segment of fintech users is almost the same more than half of both genders are using financial technology. When it comes to the age range the usage of mobile payments among the ranges is almost same which is 64 per cent, 62 per cent and 64 per cent subsequently for the age ranges 18 – 24, 25 – 29 and 30 – 34. We found that usage is higher among those who use financial services (66%). And 93% of the respondents do not have a retirement plan. Which means that only 7% from all respondents are planning for retirement.

Table 2. Rate of Usage of Mobile Payments by Demographics Groups among 18- to 34-year-olds

Gender	
Male	62%
Female	65%
Marital Status	
Married	56%
Single	64%
Age	
18-24	64%
25-29	62%
30-34	64%
Level of Study	
Undergraduate	62%
Postgraduate	65%
Has a checking/saving account	
Yes	66%

Has a retirement account	
No	93%

Table 3 summarizes the findings from Big Three. According to our findings the number of male students answered all three questions correctly is higher by seven per cent. Thirty-five per cent of PG students answered all three questions accurately while this number is only 17 % among UG students. Among the faculties the highest score belongs to engineering students (59%), followed by İslamic finance students (43%) and IT students (31%). The level of financial literacy among students who also active users of mobile technology is only 24%.

Table 3. Survey Findings

	Interest Rate Q	Inflation Q	Risk Div. Q	All 3 Qs	*N*
	Correct (%)	Correct (%)	Correct (%)	Correct (%)	
Female	55	51	66	20	101
Male	52	61	68	27	116
UG Students	53	47	63	17	133
PG Students	54	71	73	35	84
IIiBF	53	77	87	43	30
AIKOL	43	86	71	14	7
KENMS	41	76	76	29	41
ENGINEERING	61	61	74	59	23
KICT	52	48	62	31	21
IRK	59	42	56	20	78
Architecture	29	14	71	0	7
Mobile Payment Users	54	51	65	24	138

5.0 Conclusion

Technological innovations are fundamentally changing how people use financial products and make financial transactions. Due to innovations such as mobile applications, web applications, and cloud-based services, over the last decade there has been a rapid multiplication of tools which promise to provide easier, quicker, and cheaper access to financial services. Millennials are the generation which actively use digital platforms to search and purchase products. However, the level of the financial literacy is not encouraging.

In our study where respondents are university students, findings suggest that 47% out of all 217 respondents has a satisfactory level of financial literacy. The level of financial literacy is higher among PG students and Engineering students. Mobile payment users comprise 64% of respondents and only 24% among them is financially literate. It is important to highlight that this survey was conducted among Muslim millennials who are involved in higher education. Despite this, the level of financial literacy is far below the desired level. This implies that finance subjects which enable youth to make healthy financial decisions should be taught in every faculty.

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