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Analysis of financial literacy level among college students and its determinants: A case of State Islamic University of Sultan Syarif Kasim Riau, Indonesia

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Abstract

Financial literacy which is generally defined as the proficiency to understand finance, should be a matter of concern for all of us. Many factors serve as predictors of financial literacy, such as gender, participant's major, class, and rank, not to mention demographic factors including information on age, family status, geographical location, work and income. Other factor that also play an important role is financial literacy education. This study intends to test the student's level of understanding of the basic concepts of finance consisted of: 1) General Knowledge of Personal Finance, 2) Savings and Loans, 3) Insurance, and 4) Investment, as well as examine the effect of GPA, courses, and gender on the level of financial literacy. This research is conducted in Economic Faculty in State Islamic University of Sultan Syarif Kasim Riau, in Indonesia. In this study, it is found that GPA does not have significant influence on the level of financial literacy. Furthermore, this study also discovers that there is no differences between gender and course on the level of financial literacy.

Keywords: Financial Literacy, college students, Gender, Major, Grade Point Average

1. INTRODUCTION

1.1 Background

Report released by The Central Bank of Indonesia on July 2014 stated that only 32% Indonesian citizen have a good access to informal financial institution. This figure is not sufficient especially when it is comparing to the total of Indonesian Citizen. On the other hand, there is about 49% of Indonesian citizen classified into financial inclusion category, which close to half number of people grouped into financial inclusion. It is meant that only 112 million from 240 million people have good financial literacy (Isnurhadi, 2013).

Financial literacy which is generally defined as the proficiency to understand finance, should be a matter of concern for all of us. *Financial literacy* describes financial understanding comprising general knowledge of financial, investment, savings, and insurance (Chen and Volpe, 1998). Garman and Fogue (2000) defined financial literacy as knowledge in finance that is needed for a basic understanding of personal financial arrangements. While, Remund (2010), states that financial literacy is a person's ability to understand and address the financial problems.

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Many research in the field of financial literacy has been done, including research conducted by (Chen & Volpe, 2002) which found that women generally have less knowledge about personal finance topics, and gender differences remain statistically significant after controlling for other factors such as participant's major, class, rank, and age. Another study conducted by (Atkinson & Messy, nd) identify factors that affect financial literacy, including demographic factors including information on gender, age, family status, geographical location, work and income. Furthermore, financial literacy education could improve the use of financial services and ultimate household welfare (Cole, Sampson, & Zia, 2009).

Financial Literacy Education Program in Indonesia organized by Financial Service Authority known as Otoritas Jasa Keuangan (OJK). To boost financial literacy in Indonesia, financial literacy education began in middle school students. Recently, the Financial Services Authority (OJK) has launched a financial literacy books for junior high school level, entitled "Know the Financial Services Authority and the Financial Services Industry." (Press Release, Financial Service Authority, Jakarta, 23 February 2015). The material presented in the book to the junior high school is about the introduction of the OJK, which includes banking, insurance, finance, capital markets, pension funds, and mortgage. The publication of financial literacy book for junior high school students is considered necessary in order to begin to recognize the financial planning at early stage, and to improve the knowledge and skills of the students regarding financial products and services that can improve the welfare of the community. The preparation of financial literacy materials for secondary schools have been started since 2014, by the OJK in cooperation with the Ministry of Education and Culture as well as the perpetrators of the Financial Services Industry. This program is an implementation of one of the pillars of the National Strategy for Financial Literacy, which is preparing the financial literacy materials covering all sectors of financial services for students from all levels of formal education, including college students.

Research related to financial literacy among students have been carried out, including by (Nidar & Bestari, 2012). This research shows that level of personal financial literacy of students at Padjadjaran University comes within the low category, and therefore needs to be improved, especially for the areas of: investment, credit, and insurance. Level of education, faculty, personal income, knowledge from parents, parents income, and ownership of insurance factors have significant impact on personal financial literacy for Padjadjaran University students. The results of the study that are not much different proposed by Shalahuddinta and Susanti (2014). Based on the results showed that financial education in family, work experience, and learning in higher education has a significant influence on the financial literacy of students.

Research conducted by (Krishna, Sari, & Rofaidah, 2010) found that, demographic factors such as gender, age, origin of courses and work experience affect the level of financial literacy of students, as well as gender. Women have a higher level of financial literacy than men. Students from Economics courses have higher financial literacy level compared to students who come from non Economics courses.

1.2 Objectives of the Research

This study intends to test the student's level of understanding of the basic concepts of finance consisted of: 1) General Knowledge of Personal Finance, 2) Savings and Loans, 3) Insurance, and 4) Investment, as well as examine the effect of GPA on the level of financial literacy. From the gender and course perspective, this study tries to discover whether there are differences on the level of financial literacy between male and female, and between financial management course and financial accounting course.

2. LITERATURE REVIEW

2.1 Financial Literacy Concept

There are several different definitions of financial literacy and personal finance that has been described in some literature to date. These concepts include:

- a. According Garman and Forgue (2000) is a financial knowledge and understanding of the fundamental knowledge that is needed for the needs of a successful personal financial arrangements.
- b. Jacob et al (2000) states that an individual's understanding of the financial knowledge is needed for personal financial arrangements. This knowledge means good understanding of the conditions, practices, rules and norms needed to perform tasks related to finance. The financial terms include many activities associated with money and includes such control over the use of a credit card, budget preparation, purchasing insurance and investment.
- c. Remund (2010), financial literacy is a person's ability to understand and use financial problems.

- d. Huston, (2010) mentions that includes the introduction of financial literacy and knowledge of financial instruments and their use in business and personal life.
- e. President of the Advisory Board of the Financial Literacy (PACFL, 2008) in (Hung, Parker, & Yoong, 2009), defines financial literacy as the ability to use the knowledge and skills to effectively manage financial resources for a lifetime of financial well-being.

In general, all the above definition shows that financial literacy includes the ability to balance the bank account, prepare a budget, saving for the future and learn strategies to manage debt. A person is considered to have good financial literacy if he is able to organize personal finances.

2.2 The Importance of Financial Literacy

Financial problems in life can affect the community, especially in terms of how they should achieve the required perception, develop their skills in this area and understand the impact on the financial decisions of individuals, others and the environment (Remund, 2010). This then creates the need for the creation of a consumer financial literacy for the money market and the financial industry (Hogarth, n.d.).

In America, where consumers who have good financial understanding is very important, and it is able to encourage the emergence of a warrant signed by the President of the USA in January 2008 which aims to create a state advisory council on financial literacy and awareness of citizens in the United States that aims to create research on issues of financial knowledge, the establishment of standards for public awareness about financial issues and assist schools in providing appropriate training in this area.

Improved financial literacy also has a positive impact on personal and business in people's lives because it can help reduce stress and improve the social and psychological well-being of families in private life. According to Fox and Lee (2005), financial knowledge can reduce stress, illness, financial disputes, financial abuse by children and conflict between families. The adults in the family with the financial knowledge and higher welfare will be a little depressed, shows less aggressive behaviour and anti-social as well as having a higher confidence.

Meanwhile, in working life and career, the level of financial literacy will help create efficiencies and higher productivity, which in turn will help employees to better understand the benefits offered by the organization and increase their job satisfaction (Brennan, 1998). In addition, an understanding of finance is able to reduce absenteeism (Champoin, 2001), lower emotional stress and anxiety in the workplace (Kim, 2007), strengthen the management of human resources, improve the quality of personal and working lives of their employees and to improve their knowledge in the field of finance (Bernheim & Garrett, 2003). Furthermore, Vitt et al. (2000) mentions that the biggest advantage of financial literacy education is to reduce the financial problems of employees and encourage them to take responsibility for their own financing and both will help improve the efficiency of the organization.

3. RESEARCH METHODOLOGY

3.1 Sampling Method

The population in this study were students of financial concentration in the Faculty of Economics of the State Islamic University of Sultan Syarif Kasim Riau (UIN Suska Riau). Sampling was carried out with non-probability convenience sampling method, i.e. sampling is not random. The selection of the sample in this study conducted by purposive sampling is a method of collecting information from certain targets or each of a certain type that can provide the required information.

3.2 Operational Definition of Variables

Financial literacy in this study classifies financial knowledge for four (4) categories, namely: General Knowledge of Personal Finance, Savings and Loans, Insurance, and Investment. For each category, provided five (5) statements that must be answered to answer B (True) or F (False). The level of financial literacy can then be measured by counting how many correct answers of all statements submitted. The more the number of correct answers, the higher the level of financial literacy. As for gender and courses using dummy variables.

3.3 Data Collection Method

The methods used to collect the primary data is through a survey method. Survey method using a questionnaire which is a technique of data collection by giving responsibility to the respondent to read and answer the questions (Indriantoro, 2002).

3.4 Instrument Development and Data Analysis

Financial literacy instrument used in this study was adapted from the instrument used by (Pesudo, 2013). The instrument classifies financial knowledge within four (4) categories, namely: General Knowledge of Personal Finance, Savings and Loans, Insurance, and Investment. For each category, provided five (5) statements that must be answered to answer B (True) or F (False). The level of financial literacy can then be measured by counting how many correct answers of all statements submitted. The more the number of correct answers, the higher the level of financial literacy. Analysis of the data used is the multiple linear regression analysis

4. ANALYSIS AND DISCUSSION

The level of financial literacy score is between 9 point to 17 point. The lowest rank is 0 while the highest is 20. The average score is 14. Research done by (Krisna, Sari & Rofaidah, 2010) found out that demographic factors such as gender, age, course, GPA, and work experience influenced the level of financial literacy among college students. Female considered to have higher level of financial literacy compared to male. Students from Economics have higher financial literacy that their counterparts from non Economics. On the contrary, this study reveals different result. In this study, it is found that GPA does not have significant influence on the level of financial literacy, as can be seen in Table 1. Contrary to this result, research by Barboza, Smith, and Pesek (2014) found that GPA is significant determinant to the financial literacy. Other research by Cude et al. (2006) found that GPA and several variable influenced their financial fitness scores. Using multiple regression analysis, they indicated that students' grade point average (GPA), having a credit card, year in college, ethnicity, and the marital status of their parents explained only 8% of the variance in their financial fitness scores. Using more specific score, Sabri, et al. (2008) revealed that students who have GPA between 2.5-3.74, was likely to report engaging in more effective financial behaviours.

Table 1. Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	12.796	2.521		5.075	.000
GPA	.294	.769	.046	.383	.703

Dependent variable Financial Literacy

Next, this study also wants to discover the differences between gender and course on the level of financial literacy. Two ways ANOVA is used to test this differences. Based on the Levene's Test of Equality of Error Variances in Table 2, we may conclude that there is no variance difference where the F value is 0.359 and it is not statistically significant at 0.05. So the null hypothesis is accepted. This means there is no deviation in ANOVA assumptions.

Table 2. Levene's Test of Equality of Error Variances^a

Dependent Variable: Financial Literacy			
F	df1	df2	Sig.
.359	3	66	.783

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Course + Gender + Course * Gender

Furthermore, Tests of Between-Subjects Effects in Table 3 describe that F value of students' course is 1.707 and it is not significant at 0.05. This result means there is no difference between financial management and financial accounting course in the level of financial literacy. Gender give F value of 1.842 and is also not significant at 0.05 which means there is no differences between male and female in their level of financial literacy. A study done by Barboza et al. (2014) stated different result with this study. Their exploratory results provide strong evidence indicating that females are significantly much more likely to hold lower overall levels of financial literacy than males.

The result of the interaction between course and gender give F value of 2.337 is not significant at 0.05. it can be said that there is no joint effect between the course and gender on the level of financial literacy. Adjusted R Squared 1% means the variability of financial literacy that can be explained by the course, gender, and the

interaction between gender and the course only 1%.

Table 3. Tests of Between-Subjects Effects

Dependent Variable: Financial Literacy					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11,387 ^a	3	3,796	1,231	.305
Intercept	7608,829	1	7608,829	2467,923	.000
Course	5,262	1	5,262	1,707	.196
Gender	5,678	1	5,678	1,842	.179
Course * Gender	7,207	1	7,207	2,337	.131
Error	203,484	66	3,083		
Total	13463,000	70			
Corrected Total	214,871	69			

a. R Squared = .053 (Adjusted R Squared = .010)

5. CONCLUSION

This study intends to test the student's level of understanding of the basic concepts of finance consisted of: 1) General Knowledge of Personal Finance, 2) Savings and Loans, 3) Insurance, and 4) Investment, as well as examine the effect of GPA, courses, and gender on the level of financial literacy. This research is conducted in Economic Faculty in State Islamic University of Sultan Syarif Kasim Riau, in Indonesia, with total respondent 70 students. Participant in this study come from 2 different courses, financial management, and financial accounting. In this study, it is found that GPA does not have significant influence on the level of financial literacy, which is shown in the sig figures that above 0.05. Furthermore, this study also discovers that there is no differences between gender and course on the level of financial literacy.

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