Sociodemographic factors on Financial Literacy of University Students in Pekanbaru, Indonesia

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Abstract:

This study aimed to investigate the effect of socio-demographic factors, including gender, work experience, age, and GPA (Grade Point Average) on the students’ level of financial literacy within some universities in Pekanbaru. This study conducted in two state universities (Riau University and UIN Sultan Syarif Kasim) as well as in four private universities (Caltex Polytechnic University, Muhamadiyah University of Riau, Lancang Kuning University, and STIE Pelita Indonesia). The universities were the object of this study since they had collaborated with the Riau Representative Indonesia Stock Exchange in establishing a financial education in the purpose to develop students’ knowledge on investment products and personal financial management. The population in this research was 78,540 active students and based on Slovin formula this study used 348 students as sample. Sampling technique used was simple random sampling. In addition, this study applied descriptive analysis and Binary Logistic Regression test as the data analysis technique. As the results, this research indicated that two factors, i.e. work experience and GPA significantly affected the students’ level of financial literacy. In contrast, other factors, i.e. gender and age did not affect the level of financial literacy of university students in Pekanbaru City.

Keywords: Sociodemographic Factors and Financial Literacy.

1. Introduction

The uncertainty of the global economy is still worrying, but so far Indonesia’s economy is still able to withstand the recession of the world economy. Despite the slowdown, the Indonesian economy is still growing at 5% (Statistics Center, 2017). This figure is considered better when compared to other countries such as Thailand, Singapore and other ASEAN countries. Thus, the Indonesian economy is considered far from the signs of crisis. A country is called a crisis if there is high inflation to reach the figure of hundreds of percent and the deficit of the State Budget to tens of percent and there is no economic growth.

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The condition of the Indonesian capital market industry is also classified as conducive even though it is overshadowed by global economic and political pressure. The Financial Services Authority (OJK) considers that the Indonesian capital market in 2016 remained positive, which was growing at around 29% to Rp. 7.4 trillion compared to 2015 which amounted to Rp. 5.7 trillion for the average value of daily securities transactions on the IDX. The condition of the capital market in Indonesia based on the source of the Indonesian Financial Services Authority in 2013 is that the level of understanding of the Indonesian people on the capital market and the level of utility of capital market products is very low and it is the smallest compared to 5 other financial service industries in Indonesia such as banking, insurance, finance, pawnshops and pensions. The Indonesian capital market is still lacking in investors compared to the population in Indonesia, so financial literacy is very important to improve Indonesia's economy (Nidar & Bestari, 2012). This is the focus of many parties to further improve financial literacy in Indonesia, especially the IDX as the main control of the capital market. Financial education is a big challenge for Indonesia, as expressed by Muliaman as BI Deputy Governor who said that Bank Indonesia and the banking sector have a moral responsibility to improve financial literacy to support the decision-making process.

Meanwhile, the Indonesia Stock Exchange (BEI) in the Representative of Riau notes Pekanbaru, Riau Province as the central of investor growth due to the high interest in investing in various groups in the province. Based on a survey conducted by Riau representative IDX in 2016, it was found that as many as 4000 to 5000 people were in Pekanbaru, and as many as 2000 people were young investors aged around 18-25 years and the rest were 40 years old. However, the great potential was not proportional to the literacy or the level of public knowledge about the stock market. Riau representative IDX noted that only 28% of young people knew about investments in the capital market.

Investment decisions are individual and depend entirely on the free personality so that investors need to consider information clearly on an economic event in making decisions.
investment decisions. Poor financial decisions are often associated with low levels of financial literacy. According to Calvet et al. (2009), a lack of understanding in managing finances has a negative impact on investment decisions. Besides, developing research has found a strong relationship between financial literacy and investment behavior.

Financial literacy is financial knowledge with the aim of achieving prosperity (Lusardi & Mitchell, 2007). Financial literacy is currently considered very important compared to before because it can be used as a solution of various economic difficulties, especially poverty. To implement an effective financial literacy strategy, a model that allows the determination of the financial literacy level of a person should be set. The Organization for Economic Co-Operation and Development (OECD, 2013), an Organization for Economic Cooperation and Development conceptualizes financial literacy as a combination of awareness, knowledge, skills, attitudes, and behaviors needed to make financial decisions and ultimately achieve individual financial well-being (Potrich, Vieira & Kirch, 2015).

According to Monticone (2010), the factors that can determine financial literacy include: 1) demographic characteristics (gender, ethnicity, education and cognitive abilities), 2) family background, 3) wealth, 4) time preferences. In fact, in Indonesia, personal finance education (personal finance) is still rarely found either in elementary school to college (Nababan & Sadalia, 2012). Education is very important in the formation of financial literacy in both informal education in the family and formal education at the university.

Students are one of the society components with a considerable amount in contributing to the economy (Nababan & Sadalia, 2012). Students as the younger generation will not only face the increasing complexity in financial products, services, and markets, but they are also more likely to have to bear more financial risks in the future (Lusardi et al., 2010). Without knowledge and skills in the financial field, the possibility of making mistakes in the management of financial resources will be greater and prosperity will be difficult to achieve (Nababan & Sadalia, 2012). A research by Margaretha & Pambudhi (2015) states that there are several factors that influence student financial literacy, including: gender, age, GPA and parents' income.

Based on the results of the preceding survey (2017), students who received educational seminars from IDX Riau Representatives felt very helpful by the structured presentation delivered, they understood the opportunities and risks that would be faced if they would invest in the capital market. However, this understanding was different between female and male students. Male students tend to feel more challenged and quick to understand. If compared to academic abilities, the result was also very different. Students with good academic abilities only need to understand without the need to get an educational seminar about financial literacy. Many studies on financial literacy were conducted on students and the results show that knowledge of financial literacy in students is still very low. Students as young people from an early age must have knowledge in the field of personal finance
because this knowledge will help students in managing their finances in the future. Margaretha and Pambudhi (2015) conducted a research on financial literacy towards students and found that the level of student financial literacy was in the low category, by categorizing financial literacy into three groups, 1) <60% which meant that individuals had low financial knowledge 2) 60% -79% which meant that individuals have moderate financial knowledge and 3) >80% which meant that individuals had high financial knowledge. This research also explains that men understand financial literacy more than women. The results of similar studies were also put forward by Chen and Volpe (1998). They also suggested that male students had a better influence on financial literacy than women. However, it is different from the research of Nababan and Sadalia (2012) who found that gender did not influence student financial literacy.

Ansong and Gyensare (2012) in their research, found that work experience influence students’ financial literacy, but Ariani and Susanti (2015) found that work experience did not have a positive influence on students’ financial literacy. Furthermore, Shalahuddinta and Susanti (2012) also conducted research on financial literacy for students. In their research, it was stated that the level of student financial literacy was also still in the low category. This study also suggests that a student who has a part-time job and has already worked has the ability to manage financial matters better than students who have never worked. Apart from work experience Ansong and Gyensare (2012); Margaretha and Pambudhi (2015) also found that age influences student financial literacy. After that, Nababan and Sadalia (2012) found that the level of student financial literacy was still in the low category. This study also suggests that students who have a GPA <3 are likely to have a low literacy level compared to students who have a GPA> 3.

2. **Theoretical Background**

2.1 **Definition of Financial Literacy**

Financial literacy is knowledge about finance and the ability to use that knowledge (apply it) to reach the prosperity. Lusardi and Mitchell (2011) state that although we can assess how a person’s financial literacy is, in fact, we find it difficult to explore how someone applies it to life. This happens because financial literacy includes a number of concepts, including awareness and knowledge of finance, financial skills, and financial capabilities. The correct definition including this idea was proposed by the OECD, in which financial literacy is considered as a combination of awareness, knowledge, skills, attitudes, and behaviors needed to make sound financial decisions and ultimately achieve individual financial well-being (OECD, 2013). Thus, OECD discusses financial literacy in three dimensions: financial knowledge, financial behavior and financial attitudes. This study adopted the definition above, in which financial literacy is a combination of financial attitudes, financial knowledge, and financial behavior.
The dimension of financial knowledge is defined as the capital owned by humans and obtained throughout the life cycle, by studying the subject of how to manage income, expenditure, and savings effectively (Delavande et al, 2008). Financial behavior is a key element of financial literacy (OECD, 2013). According to Atkinson and Messy (2012), positive financial literacy is caused by behavior such as the cost of planning and development of financial security. Conversely, the lack of financial literacy has an impact on the use of excessive credit which can reduce financial well-being. Furthermore, the dimensions of the financial attitude is determined through economic and non-economic beliefs held by decision makers on the results of a particular behavior and therefore it is a key factor in the process of personal decision making.

2.2 The Effects of Gender on Financial Literacy

Robb and Sharpe (2009) define gender as a concept that distinguishes a person between men and women. Gender is a biological and physiological concept that distinguishes between men and women that cannot be exchanged because of the natural conditions of humans that have been inherent in humans since birth.

Gender is identified as one of the factors that influence students' financial behavior. Some studies reveal that men are better at managing finances than women (Ansong & Gyensare, 2012; Wegland & Taylor, 2009). This indicates that men have more confidence in making financial decisions than women who are more likely to be risk averse than men. Furthermore, Wagland and Taylor (2009) add that the low level of female self-confidence was also caused by their role as housewives as well as career women, making it very difficult for them to save. Women tend to be less able to control financial problems compared to men. This indicates that men and women have different motivations in financial matters. Thus, it is assumed that gender influences financial literacy. This condition is hypothesized as follows:

H1: Gender influences the financial literacy of college students in Pekanbaru

2.3 The Effects of Experience on Financial Literacy

Work experience is identified as one of the factors that influence a person's financial literacy level. Hogan et al. (2012) say that work experience has a correlation with financial literacy because when a person works, his knowledge and abilities will increase. However, it is inversely proportional to his declining academic performance because most of his time is used for work. Individuals with longer work experience have a higher level of financial literacy, because they are familiar with economic and financial problems, while unskilled or unemployed workers show less desirable attitudes and behaviors (Calamato, 2010). Thus, it is suspected that someone with high work experience will make wiser financial decisions than those who do not have work experience. Based on the concept, it is hypothesized as follows:
H2: Work experience has an effect on the financial literacy of college students in Pekanbaru

2.4 The Effect of Age on Financial Literacy

A person's knowledge of finance is closely related to the factors of age, gender, and the level of education of parents (Ansong & Gyensare, 2012). Age is thought to have a positive correlation with financial literacy because the older the age of a person, the more experience the person is. This indicates that the more mature a person is, the wiser he will be in managing his finances. Furthermore, Ansong and Gyensare (2012) conducted a research on financial literacy at a Ghana university involving 250 students and scholars who worked. The results of his research found that age and work experience had a positive correlation with financial literacy. The average age of 30 to 40 years was associated with a higher level of financial literacy. Then, they found that financial literacy among young and elderly individuals was in the low category (Agarwal et al. 2009; Lusardi & Mitchell, 2011; Atkinson & Messy, 2012; OECD, 2013; Scheresberg, 2013). The age of a person indicates the amount of experience a person has during his life including his experience in financial matters so that the more experienced the person, the better his financial decision making will be. Senior students have more knowledge and experience than junior students; thus, it was hypothesized as follows:

H3: Age affects the financial literacy of college students in the city of Pekanbaru.

2.5 The Effect of Grade Point Average (GPA) on Financial Literacy

Academic ability (academic ability) is also thought to have an influence on students’ financial behavior. Students who have high academic ability (GPA) are more likely to understand financial concepts. Sabri and Gudmunson (2012) say that students’ high academic ability as indicated by the grade point average (GPA) reflects their knowledge and ability to learn and apply the information obtained. The correlation between academic ability and students’ financial behavior is also shown by Hogan at al. (2012) in his research which found that students who have financial problems (debt) will try to find solutions by working part time and increasing working hours. This can lead to low attendance of students to attend lectures and lack of time to study so that their performance will decrease. Thus, it is assumed that students who have high academic abilities as indicated by the GPA will have sufficient knowledge of financial concepts so that it will directly influence the financial literacy of students. This assumption was hypothesized as follows:

H4: Academic ability (GPA) influences the financial literacy of college students in Pekanbaru
The following is the conceptual framework of this research:

![Conceptual Framework Diagram](image)

Sources: Lusardi and Mitchell (2011), Atkinson and Messy (2012), OECD (2013), Potrich, Vieira & Kirch (2015) and Margaretha & Pambudhi (2015).

**Figure 2 Conceptual Framework**

### 3. Methodology

#### 3.1 Population and Samples

The population in this study was students at universities who collaborated with the IDX Riau Representative Office. There were two State Universities, namely Universitas Riau and UIN Sultan Syarif Kasim Riau, and four Private Universities, namely Universitas Muhamadiyah Riau, Caltex Riau Polytechnic, Universitas Lancang Kuning and Pelita Indonesia Institute of Economics as many as 74,855 students. By using the Slovin formula, the samples of 393 students were determined; however, the questionnaires that were returned and could be processed were only 348.

#### 3.2 Operational Definition of Variables

In this study, the dependent variable was a variable that was influenced by other variables, namely financial literacy. Then, the independent variable was a variable that affected other variables, consisting of Gender, Work Experience, Age and Academic Ability (GPA). Financial Literacy Dimensions, Financial Knowledge indicator is the level of respondents knowledge regarding issues such as inflation, interest rates, the value of money from time to time, risk return, diversification, stock markets, stocks, and government securities. Scale with dummy (13 questions) (Van Rooij et al. 2011; OECD, 2013; Klapper et al. 2013). Financial behavior, indicator is organizing behavior, expenditure behavior, saving behavior, wasteful behavior. Scale with dummy (27 questions) (Shockey, 2002; O'Neill dan Xiao, 2012
dan OECD, 2013). Financial Attitude, indicator is Orientation to personal finance, debt philosophy, financial security, valuing finance with 10 question (Shockey, 2002 and OECD, 2013).

3.3 Techniques of Data Analysis

A descriptive analysis was used to provide an overview about gender, work experience, age, academic ability (GPA) and the financial literacy level of College Students in Pekanbaru. The data observed were the amount of data, minimum score, maximum score, and average score.

Binary Logistic Regression Test

Regression analysis is basically the study of the dependence of dependent variables with one or more independent variables, with the aim of estimating and predicting the population average or the average score of the dependent variables based on the known independent variable scores (Ghozali, 2011). This study applied regression analysis with the stepwise (regression binary logistics) method. Binary logistic regression analysis was utilized to explain the relationship between the dependent variables in the form of dichotomic (binary) data and the independent variable. Dichotomous or binary variables are the variables that have only two categories. The dependent variable and the independent variable in this study were dummy variables. The purposes of the analysis were gender, work experience, age and academic ability (GPA) that were able to influence financial literacy among college students in Pekanbaru.

The analysis technique of this study did not require a normality test because according to Ghozali (2011), logistic regression does not require an assumption of normality in the independent variable. This means that the dependent variable does not require homoscedacity for each of its independent variables. This technique no longer requires normality testing on its independent variables (Ghozali, 2011). The purpose of testing classic assumptions which include normality tests, multicollinearity and heteroscedasticity is that the regression analysis model used in the study produces valid parametric values.

The hypothesis testing which applies logistic regression does not require a classical assumption because before the hypothesis testing is conducted, the first step that must be done is to assess the feasibility of the regression mode and assess the model fit. The function of assessing the feasibility of a regression model and assessing the fit model is a replacement from the classic assumption test. Logistic regression does not have normality for the free variables used in the model. That is, the explanatory variable does not have to have a linear normal distribution, or has a variant that is greeting in each group.
4. Empirical Findings/Result

4.1 Descriptive Analysis

Descriptive analysis is an analytical method where the existing data is collected or grouped then the data are objectively analyzed and interpreted. The variables used in this study consisted of four independent variables: gender (X1), work experience (X2), age (X3) and GPA (X4), and one dependent variable, financial literacy (Y). The results of this descriptive statistical analysis are summarized in the following table:

| Remarks | Frequency | Percent | Valid Percent |
|---------|-----------|---------|---------------|
| G       |           |         |               |
| Male    | 186       | 53,4    | 53,4          |
| Female  | 162       | 46,6    | 46,6          |
| Total   | 348       | 100     | 100           |
| WE      |           |         |               |
| Never   | 113       | 32,5    | 32,5          |
| Ever    | 235       | 67,5    | 67,5          |
| Total   | 348       | 100     | 100           |
| Age     |           |         |               |
| ≤22 Tahun | 262   | 75,3    | 75,3          |
| >22 Tahun | 86     | 24,7    | 24,7          |
| Total   | 348       | 100     | 100           |
| GPA     |           |         |               |
| <3,00   | 112       | 32,3    | 32,3          |
| >3,00   | 236       | 67,8    | 67,8          |
| Total   | 348       | 100     | 100           |
| FL      |           |         |               |
| Low     | 87        | 25,0    | 25,0          |
| High    | 261       | 75,0    | 75,0          |
| Total   | 348       | 100     | 100           |

Source: Research Results

4.2 Binary Logistics Testing

Hypothesis testing was conducted by multivariate analysis using binary logistic regression. Binary logistic regression was applied to test the hypotheses in this study because the variable was a categorical variable that had two categories (dummy variables). So, it cannot be solved by using multiple regressions. Binary logistic regression in this study was used to examine the influence of gender, work experience, age and GPA. The tests were employed at a significance level (α) of 5% (0.05). The level of significance showed the strength of the independent variable in influencing the dependent variable.

Regression Model Feasibility Testing

In this study, the feasibility test of the regression model applied Hosmer and Lemeshow's Goodness of Fit Test. Hosmer and Lemeshow's Goodness of Fit Test
tested the null hypothesis that empirical data matched or were suitable with the model (there was no difference between the model and the data so that the model could be said to be fit). The value of Hosmer and Lemeshow's Statistics Goodness of Fit Test was worth the same as or less than 0.05; as a result, the null hypothesis was rejected. This proved that there were significant differences between the models assessed for observation, so that the Goodness Fit model was not good because the model could not predict the value of its observations. If Hosmer and Lemeshow's assessment of Goodness of Fit Test Statistics was greater than 0.05, the null hypothesis could not be rejected. It means that the model is able to predict the value of its observations or can the model be accepted because it is in accordance with observational data (Ghozali, 2011). Test using Hosmer and Lemeshow's Goodness of Fit Test can be displayed in the following table:

### Table 2 Hosmer and Lemeshow Test

| Step | Chi-Square | df | Sig. |
|------|------------|----|------|
| 7    | 5.586      | 7  | 0.589|

Source: Research Results

The above table shows that the statistical value of the Hosmer and Lemeshow Goodness of Fit is 5.586 with a probability level of 0.589. the value is greater than 0.05; then, H0 was accepted. This states that the model hypothesized matched with the data and worthy of being tested in logistic regression. The study did not find a real difference between the predicted classifications and the observed classifications. The model in this study was able to predict the value of the observations because they matched the observational data.

Testing The Entire Model (overall model fit)

Testing Overall Model Fit was conducted by comparing the value between -2Log Likelihood at the beginning (Block Number = 0) with the value of -2Log Likelihood at the end (Block Number = 1).

### Table 3 Iteration History

| Iteration | -2 Log Likelihood | Coefficients / Constant |
|-----------|-------------------|-------------------------|
| Step 0    | 440.256           | 0.690                   |
| 1         | 440.189           | 0.719                   |
| 2         | 440.189           | 0.719                   |

Source: Research Results

The decrease between the initial -2 Log Likelihood score and the final -2 Log Likelihood score indicated that the mode was hypothesized to be fit with the data (Ghozali, 2011). The comparison between the initial -2 Log Likelihood score and the -2 Log Likelihood score in the following step is shown in the following table:
Table 4 Iteration History$^{a,b,c,d}$

| Iteration | -2 Log Likelihood | Constant | G | WE | Age | GPA |
|-----------|-------------------|----------|---|----|-----|-----|
| Step 1    | 275.020           | -1.456   | -.113 |  .867 | -.074 | 2.471 |
| 1         |                   |          |     |    |     |     |
| 2         | 259.340           | -1.939   | -.216 |  1.454 | -.128 | 3.166 |
| 3         | 258.069           | -2.131   | -.262 |  1.701 | -.147 | 3.423 |
| 4         | 258.052           | -2.159   | -.268 |  1.735 | -.148 | 3.458 |
| 5         | 258.052           | -2.160   | -.268 |  1.736 | -.148 | 3.459 |

Source: Research Results

The output of the statistical values in the above tables shows a decrease in the score of the -2 Log Likelihood. The initial score of -2 Log Likelihood (without just constant variables) is 440.18. After entering three independent variables, the score of -2 Log Likelihood drops to 258.05. The decline occurred was equal to 18.13 (440.18-258.05). Furthermore, by calculating the df value and comparing the drop score of -2 Log Likelihood with the numbers in table c2 (according to df), the conclusion is there was improvement in the fit model by adding four independent variables to the model. Calculation of df values is as follows:

a. \( df1 = n - 1 \)
   = 348-1
   = 347
b. \( df2 = n - k \)
   = 348-4
   = 344
c. \( df = df1 - df2 \)
   = 347-344
   = 3

Where:
- Df = Degree of freedom
- N = Number of samples
- K = Number of variables

Based on table c2 with df = 3, the number was 3.18. The decline value of 18.13, was greater than the value of c2 in the table df = 3 of 3.18. The comparison shows that the number of drop -2 Log Likelihood was significant. Based on the description, it can be concluded that the addition of independent variables, gender, work experience, age and academic ability (GPA) into the model can improve the model fit.

Nagelkerke R Square Score

The Nagelkerke R Square score was used to measure how far the ability of the independent variable model simultaneously in explaining the dependent variable. The Nagelkerke R Square value was a modification of the Cox & Snell R Square...
coefficients and could be interpreted as the value of R Square in multiple regression (Ghozali, 2011). The Nagelkerke R Square value is shown in the following table:

| Step | -2 Log likelihood | Cox & Snell R Square | Nagelkerke R Square |
|------|-------------------|----------------------|--------------------|
| 1    | 258.052           | .407                 | .568               |

Source: Research Results

The table above shows that the Nagelkerke R Square value is 0.568. This value illustrates that there were contributions from the variables of gender, work experience, age and cumulative grade point (GPA) in predicting the level of financial literacy respectively at 56.80%. Meanwhile, the remaining 43.20% was influenced by other factors outside the research model.

The Results of Hypothesis Testing

This test was conducted with a freedom of 5% or 0.05 in order that the possibility of the occurrence of interference was small and commonly used. The table below shows the results of hypothesis testing of factors that influenced the level of financial literacy among College Students in Pekanbaru.

| Step 1 Step | Chi-Square | Df  | Sig. |
|-------------|------------|-----|------|
| Block       | 182.137    | 4   | .000 |
| Model       | 182.137    | 4   | .000 |

Source: Research Results

Simultaneous tests can be seen in the above table in which the significance value is <0.05; then, the independent variables together influence the dependent variables. Chi-Square value is 18.137 with a significance value of 0.000. This shows that the significance value in the table is <0.05. This means that the variables of gender, work experience, age and cumulative grade point average (GPA) simultaneously influence financial literacy.

| Step 1 G | B   | S.E | Wald  | Df  | Sig. | Exp(B) |
|----------|-----|-----|-------|-----|------|--------|
| PK       | 1.736 | .353 | 24.164 | 1   | .000 | 5.675  |
| Usia     | -.148 | .390 | .145  | 1   | .704 | .862   |
The results of the test reveal a constant number of -2.160 which means that if variables are different (gender, work experience, age and GPA), then the level of financial literacy is equal to the value of the constant. Based on table 4.45 the binary logistic regression equation in this study is as follows:

$$\ln \left( \frac{\rho}{1-\rho} \right) = -2.160 - 0.268Gd + 1.73Expr - 0.148Age + 3.459GPA + e$$

Based on the logistic regression equation, the gender (X1) has a regression coefficient of -0.268 with a significance level of 0.414. This level of significance >0.05 indicates that gender variables do not influence the level of students’ financial literacy.

Then, work experience (X2) has a regression coefficient of 1.736 with a significance level of 0.000. The significance level of <0.05 indicates that work experience influences the level of students’ financial literacy. The positive sign preceding the constants in the regression results states that students who have worked have a higher level of financial literacy than students who have never worked. After that, age (X3) has a regression coefficient of -0.148 with a significance level of 0.862. This level of significance >0.05 indicates that the age does not affect the level of students’ financial literacy.

Finally, Grade Point Average (X4) has a regression coefficient of 3.459 with a significance level of 0.000. This significance level of <0.05 indicates that the grade point average (GPA) influences the level of students’ financial literacy. The positive sign preceding the constants in the regression results states that students with a GPA > 3.00 have a higher level of financial literacy compared to students with a GPA <3.00.

5. Discussion

5.1 The Effects of Gender on Financial Literacy

The results of the test illustrates that gender does not affect financial literacy among College Students in Pekanbaru, so the first hypothesis is rejected. This shows that both male and female students have no difference in understanding financial information. Economics students were indicated to be familiar with financial terms, forms of financial management, financial products and gained enough financial knowledge during college. Consequently, the general knowledge of finance, savings and loans, insurance and investment is equal. Both male and female college students in Pekanbaru always predict what expenses they need to meet their college needs so that they can manage the money they earn independently and from parents.
This finding is supported by the research from Ariani and Susanti (2015) which revealed that gender variables did not have a significant effect on students’ financial literacy. It was indicated by the category of students’ financial literacy which was equally high.

The results of descriptive statistical analysis show that the number of male students is more dominant than female students. Descriptively, male students have an influence on financial literacy. The statistical results also show that women have a partial influence. This is also supported by research conducted by Nababan and Sadalia (2012) stating that the high characteristics of financial literacy are male students; female students have an average level of personal financial literacy below the overall average.

5.2 The Effect of Work Experience on Financial Literacy

The test results show that work experience influences the level of financial literacy among college students in Pekanbaru, so the second hypothesis was accepted. This is due to students who have work experience getting a lot of financial knowledge from their work environment.

Working regularly or part time makes students familiar with financial products so that students are better at managing their finances from the wages or salaries they get, managing expenses every month and having expenditure records. This is supported by research conducted by Shalahuddinta and Susanti (2012) that work experience influences student financial literacy. By working, students will get income in the form of salary/ wages. Financial management when getting a salary/ wage is a form of application that must be applied in everyday life to manage income properly.

These findings agree with the results of previous studies conducted by Shim et al (2009), which in his study he explained that work experience could strengthen the financial knowledge of adolescents who were growing up. Youths, who work, obtain the most effective financial lessons, including a sense of responsibility and better money management skills.

5.3 The Effect of Age on Financial Literacy

The test results show that age did not affect the level of financial literacy among College Students in Pekanbaru, so the third hypothesis was rejected. This was because students under the age of 22 years and over 22 years had the same high level of knowledge regarding financial literacy.

This indicates that age does not guarantee one's financial literacy. Age is not an indicator showing that the older a person's age, the more knowledge and experience
they have. The results of this study rejected the results of research conducted by Margaretha and Pambudhi (2015) that age had an influence on influencing student financial literacy.

5.4 The Effect of Academic Capability (GPA) on Financial Literacy

The results of the test indicate that the grade point average (GPA) influences the level of financial literacy among College Students in Pekanbaru, so the fourth hypothesis was accepted. Influence here means that students with GPA >3.00 possess higher financial literacy compared to students with a GPA <3.00, in which they have low financial literacy.

Differences in financial literacy between students who have high GPA (> 3.00) and a low GPA (<3.00) occur because students with higher GPA are generally better in understanding each lecture material than students with lower GPA (<3.00). As a result, it makes students’ financial knowledge is different from one another. The difference in the ability to understand financial concepts during lectures makes students with high GPA (> 3.00) tend to have better financial concepts than students with lower GPA (<3.00), such as saving periodically, having a record of expenses each month and provide funds for unexpected expenses. The results of descriptive statistical analysis support the results of partial statistical analysis in which students with GPA >3.00 have a higher level of financial knowledge. This can be seen from the total number of respondents having a high cumulative grade point index.

The results of this study are in accordance with the results of research conducted by Ariani and Susanti (2015). They conclude that students who have high grade point average (GPA) have higher level of financial literacy compared to students who have lower grade point average (Low GPA). Nababan and Sadalia (2012) recognize that the level of students’ intellectual can have a positive impact on financial literacy. This applies to college students in Pekanbaru in which the intellectual level of students can describe high level of financial literacy. At last, the financial literacy level of students with GPA> 3.00 is better than students with GPA <3.00. And the results of this study also support the results of research conducted by Margaretha and Pambudhi (2015) which revealed that the higher the GPA, the better students would be in managing their personal finances (financial literacy).

5.5 The Understanding Level of College Students in Pekanbaru

Measuring the understanding level of college students in Pekanbaru conducted through the dimensions of financial literacy (financial knowledge, financial behavior and financial attitude) was appropriate. Descriptively, the value of financial literacy level of students is high, or 75% (261 people). This shows that the understanding level of students through the financial literacy dimension is high or above average (> 50%). This was due to several factors. First, students were taught how to manage finances well during learning process. Second, the experience of working with a salary/wage was the most effective financial lesson to train students
to manage finance better and have a sense of responsibility towards themselves. Third, a high level of intellectuality makes students get to know financial products and manage finance better, such as periodic savings.

6. Conclusions

Based on the results of this research, the conclusions are that universities collaborating with Pekanbaru Stock Exchange retain students with high financial literacy. And the test results show that gender and age have no effect on financial literacy, while work experience and GPA influence the financial literacy College Students in Pekanbaru. This means that students who have had work experience gain a lot of financial knowledge from their work environment and are familiar with the product financial and students with GPA > 3.00 have higher financial literacy compared to students with GPA <3.00.

Based on the data analysis and the research results, it is expected that further researchers can use more variable variants, such as factors of residence, force, semester, department, parent education (father and mother), parent income, education finance in the family, learning in college and so on. Then, they can conduct other survey methods that are more efficient like the online survey method because the survey used in this study is a manual method that requires considerable time, effort and cost. For the community, it is reminded about the importance of financial literacy in life, because the level of financial literacy of an individual will also affect the economic sustainability of an individual. The level of financial literacy is also one of the important aspects in making financial decisions for an individual. Students are advised to be more proactive in learning financial aspects, especially aspects of investment and savings because investment and savings are the types of allocation of funds that provide the most benefits in the future. Students who have a high GPA should not only learn the concepts of saving and investing, but also learn in practice. This will improve student intellectuality towards financial aspects.

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References:

Agarwal, S., Driscoll, J., Gabaix, X., & Laibson, D. (2009). The age of reason: financial decisions over the lifecycle with implications for regulation. Brookings Papers on Economic Activity 2: 51-117.

Ansong, A., & Gyensare, M.A. (2012). Determinants of University Working-Students’ Financial Literacy at the University of Cape Coast, Ghana. International Journal of Business and Management (7) 9: 126-133.

Ariani, N. A., & Susanti. (2015). Pengaruh Faktor Demografi terhadap Financial Literacy Mahasiswa Fakultas Ekonomi Universitas Negeri Angkatan 2012. Jurnal Pendidikan Akuntansi (JPAK). Vol 3, No 2.

Atkinson, A., & Messy, F. 2012. Measuring financial literacy: results of the OECD / International Network on Financial Education (INFE) Pilot Study [Working Paper n. 15]. OECD Publishing. Retrieved on April 5, 2013, from http://dx.doi. org/10.1787/5k9csfs90fr4 en.

Calamato, M. P. 2010. Learning financial literacy in the family. Unpublished master’s thesis. The Faculty of the Department of Sociology, San José State University.

Calvet, K, Laurent E., John, Y.C & Paolo S. 2009. Measuring the Financial Sophistication Of Households. American Economic Review, 99(2), 393-398.

Chen, H. & Volpe, R. (1998). An Analysis of Personal Financial Literacy Among College Students, Financial Services Review, Vol. 7 No.2, pp. 107-128

Delavande, A., Rohlweder, S., & Willis, R. J. 2008. Preparation for retirement, financial literacy and cognitive resources. [Working Paper n. 2008-190]. Michigan Retirement Research Center. Retrieved on April 25, 2013, from http://www.mrcc.isr.umich.edu/ publications/papers/pdf/wp190.pdf.

Ghozali, I. (2011). Aplikasi Analisis Multivariate Dengan Program IBM. SPSS 19 (edisi kelima.) Semarang: Universitas Diponegoro.

Hogan, E. A., Bryant, S.K., & Overmyer-Day, L.E.. (2012). Relationship Between College Students’ Credit Card Debt Undesirable Academic Behaviors and Cognitions, and Academic Performance. College Student Journal 47(1): 102-112.

Klapper, L., Lusardi, A., & Panos, G. A. (2013). Financial literacy and its consequences: Evidence from Russia during the financial crisis. Journal of Banking & Finance, 37(10): 3904-3923.

Lusardi, A., & Mitchell, O. S. (2007). Baby Boomer Retirement Security: The Roles of Planning, Financial Literacy, and Housing Wealth. Journal of Monetary Economics 54: 205-224.

______. (2011). Financial literacy and retirement planning in the United States. Journal of Pension Economics and Finance, 10(4): 509-525.

Lusardi, A., Mitchell, O.S., & Curto, V. (2010). Financial Literacy Among The Young. Journal Of Consumer Affairs Volume 44(2): 3528-380.

Margaretha, F., & Pambudhi, A.R. (2015). Tingkat Literasi Keuangan pada Mahasiswa S-1 Fakultas Ekonomi. JMK, 17(1): 76-85.

Monticone, C. (2010). How much does wealth matter in the acquisition of financial literacy? The Journal of Consumer Affairs 44(2): 403-422.
Nababan, D., & Sadalia, I. (2012). Analisis Personal Financial Literacy dan Financial Behaviour Mahasiswa Strata I Fakultas Ekonomi Universitas Sumatera Utara. Medan:Fakultas Ekonomi dan Bisnis Universitas Sumatera Utara.

Nidar, S. R., & Bestari, S. (2012). Personal Financial Literacy Among University Students (Case Study at Padjadjaran University Students, Bandung, Indonesia). World Journal of Social Sciences Vol. 2. No. 4: 162 – 171.

O’Neill, B., & Xiao, J. (2012). Financial behaviors before and after the financial crisis: evidence from an online survey. Journal of Financial Counseling and Planning, 23(1): 33-46.

Organisation for Economic Co-Operation and Development (OECD). (2013). Financial literacy and inclusion: Results of OECD/INFE survey across countries and by gender. OECD Centre, Paris, France.

Potrich, V., & Kirch. (2015). Determinantes da Alfabetização Financeira: Análise da Influência de Variáveis Socioeconômicas e Demográficas. Revista Contabilidade & Finanças 26(69): 362–377.

Robb, C., & Deanna, L.S. (2009). Effect of Personal Financial Knowledge on College Student’s Credit Card Behavior. Journal of Financial Counseling and Planning, Volume 20, Issue 1: 25-43.

Sabri, M.F., & Gudmunson, C.C. (2012). Financial Well-being of Malaysian College Student. Asian Education and Development Studies (1) 2: 153-170.

Scheresberg, C. B. (2013). Financial literacy and financial behavior among young adults: evidence and implications. Numeracy 6(2): 1-21.

Shalahuddinta, A., & Susanti. (2012). Pengaruh Pendidikan Keuangan di Keluarga, Pengalaman Bekerja dan Pembelajaran di Perguruan Tinggi terhadap Literasi Keuangan. Universitas Negeri Surabaya.

Shim, S., Barber, B.L., Card, N.A., Xiao, J.J., & Serido, J. (2009). Financial Socialization of First-year Collage Studentd: The Role of Parents, Work, and Education. Journal of Youth and Adolescence, 39 (12): 1457-1470.

Shockey, S.S. (2002). Low-wealth adults financial literacy. Money management behavior and associates factors, including critical thinking. Unpublished master’s thesis. University of Utah, United States.

Van Rooij, M., Lusardi, A., Alessie, R. (2011). Financial Literacy and Retirement Planning in the Netherlands. Elsevier 32: 593-608.

Wagland, S. P., & Taylor, S. (2009). When it comes to financial literacy, is gender really an issue?. Australasian Accounting Business and Finance Journal, 3(1): 13-25.