

Levels of Financial Literacy in Terms of the Ethnicity, Gender, Religion and Locus of Control of College Students

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Abstract: During the pandemic, people must be adept in managing their private finances. Good money management skills are determined by the individual's financial literacy. This research has five purposes. The first is to describe the level of financial literacy of college students. The second is to evaluate and analyze the different levels of financial literacy in terms of ethnicity. The third is to evaluate and analyze the different levels of financial literacy in terms of gender. The fourth is to evaluate and analyze the different levels of financial literacy in terms of religion. The fifth is to evaluate and analyze the different levels of financial literacy in terms of locus of control. This research samples 212 respondents majoring in English teacher training and education in four private universities. Because of this, this research evaluates the T value on the following variables: ethnicity, gender, religion, and locus of control. This research reveals a difference of financial literacy skills in terms of gender and locus of control. No different levels of financial literacy were found in terms of ethnicity and religion. In the future, there needs to be an improvement of financial literacy through formal and informal efforts.

Keywords: *ethnicity, Gender, religion, locus of control, financial literacy*

1. Introduction

Financial literacy is an important topic that needs to be discussed today. According to the Financial Services Authority, in 2016 only 29.7% of the population is financially literate. This shows that most Indonesians do not have sufficient understanding of the various financial products and services that are available. Financial literacy of women is 25.5% lower than men 33.2%. Consequently, the government pushes for nationwide efforts in improving the public's level of financial literacy. These efforts experienced an increase in 2019. A survey conducted by OJK in 2019 shows an increased index of financial literacy to 38.03% from 29.7% in 2016.

Financial literacy is important because it impacts the financial management skills and consumption levels of women and men, especially among college students. Financial literacy influences the consumption level of college students (Pulungan & Febriaty, 2018). Female college students show better money management skills and better financial behavior than men (Falahati, 2011). However, in terms of financial literacy, male college students display a deeper knowledge on credit and credit risks. Female college students are more focused on general financial knowledge. This trend coincides with the findings of a study conducted on

international students in India, where there is a significant relation found between the financial literacy and the financial behavior of college students (Sures Kumar, 2017).

Aside from gender, other factors also play an important part in influencing an individual's financial literacy, which are ethnicity and race (Ariani et al., 2016). Race and ethnicity play an influential role in determining one's financial literacy (Perry & Morris, 2005). Ethnically Malaysian students manage their finances better than ethnically Chinese and Indian students (Falahati, 2011). Ethnic difference becomes an even more pronounced factor among lower income group (Angrisani, et al 2021).

As a Muslim majority country, many of Indonesian's banking sectors adopt the principles of sharia economy. Islamic banks thrive because they are supported by their Muslim customers and Islamic financial literacy (Muslichah & Sanusi, 2019). On the other hand, in European countries like Germany, college students who are Christians, Protestants, and non-religious people shows a significant influence on their financial literacy. This is revealed by student access to opening their own bank accounts (Brown, et al 2018).

According to Rotter (2016), locus of control refers to how individuals view their own ability to handle situations. Ability to handle events that occur both from within and from outside. Thus, there are two types of locus of control, which are internal or external. Individuals with an internal locus of control have a higher confidence in themselves. Whereas individuals with an external locus of control believes that everything is decided by fate and their respective surroundings. According to Karabulut (2016), locus of control refers to one's ability to control their life. Internal locus of control shows one's believe that their lives are under their own decisions whereas external locus of control is one's believe that their lives are influenced by external factors, such as fate, luck, and people that are not related to the decisions that one has (Karabulut, 2016). Locus of control influences economic endeavors through economic literacy (Ariani et al., 2016).

Based on the explanation above, financial literacy is determined by several factors, which are gender, ethnicity, religion, and locus of control. Therefore, this research aims to find if there are any difference levels of financial literacy among college students in terms of gender, ethnicity, religion, and locus of control. The novelty of this study is to include locus of control as a variable in reviewing financial literacy within students from four different campuses. A T-test can determine if there are any differences of financial literacy skills. Thus, the hypotheses are made in accordance with the background research and literature reviews, which includes the following: H1= no difference of financial literacy in terms of gender; H2= no difference of financial literacy in terms of ethnicity; H3= no difference of financial literacy in terms of religion; H4= no difference of financial literacy in terms of locus of control.

2. Research Method

This research is a quantitative analysis. The resulting analysis is obtained from processing the primary data. Primary data are data that are obtained directly from the respondents through questionnaires and surveys. Surveys were conducted through Google forms and were distributed to college students who are studying in four different Indonesian universities.

The population for this research is students from the English teacher training and education faculty from four campuses. A sampling process was conducted through purposive sampling and proportional random sampling. The criteria of the sampled population are

students in their first and third semesters. First groups are 38 students from Universitas Kristen Santo Thomas Medan (North Sumatra). Second, 57 students from Universitas Nahdlatul Ulama Sidoarjo (East Java). Third, 47 students from Universitas Sintu Maroso Poso (Sulawesi). And fourth, 71 students from Universitas Nusa Cendana Kupang. There are 212 college students in total. The research was conducted from June – August 2021.

The variables are measured in accordance with the guidance provided by the International Network on Financial Education (OECD, 2011). These literacy measurements contain three indicators that are outlined across 20 statements. The three indicators of financial literacy variables are general knowledge on personal finances, financial knowledge on savings and loans, and advanced financial knowledge on insurance.

Locus of control consists of two parts, which are internal locus of control and external locus of control. This research will use indicators of internal and external locus of control. Indicators of internal locus of control are outlined across two statements, which are success as results of diligence and hard work, feelings of pressure when unsuccessful and disbelief towards the role of luck (Karabulut, 2016). While the external locus of control is outlined across two statements, which are environmental control over personal actions and the influence of those around them.

Validity and reliability tests are conducted on variables of financial literacy and locus of control. According to Priyatno (2014:51) validity is an evaluating technique of item accuracy in measuring something. Items come in the form of statements or questions that are asked to the respondents through research questionnaires. The Pearson correlation method is used to conduct the validity test. The significance level is measured using the two-tailed critical value table with a 5% significance level (0.05). If the positive value and measured $r_{value} \geq r_{table}$ then the item is valid. The item will be rendered invalid if the measured $r_{value} < r_{table}$.

According to Priyatno (2015:64) the reliability test is an evaluating technique to determine the consistency of valid measurements with a questionnaire if the measurements are retaken in another time. The reliability test is conducted with an Alpha Cronbach method. An item is stated as reliable when the value is ≥ 0.6 . A reliability value that is below 0.6 is unacceptable, whereas a value that is over 0.7 is acceptable, and a value that is above 0.8 is good.

A t-test is used to determine the differences of ethnicity, gender, religion, and locus of control in financial literacy. A T-test aims to any differences between two sample groups. Before conducting the t-test, the data must pass two other tests, which are normality and homogeneity test. If the data is normally distributed and is homogenous, thus the hypothesis t-test will be conducted with ANOVA. If the data is not normally distributed, thus the hypothesis test will be conducted with Wallis Test. According to the decision-making criteria, if the Asymp.Sig value (2 – tailed) $<$ alpha 0.05 then H1 is rejected and Ha is accepted. If the Asymp.Sig value (2 – tailed) $>$ alpha 0.05 then H1 is accepted and Ha is rejected.

3. Results and Discussion

3.1. Results

This section will consist of four sections of the results. First, the general descriptions of the respondents according to their gender, religion, and ethnicity. Second, the results of validity and reliability test of financial literacy and locus of control. Third, the results of descriptive

variable of financial literacy and locus of control. Fourth, the results of financial literacy t-test based on the differences between gender, religion, and ethnicity.

First, the general descriptions of the respondents according to their gender, religion, and ethnicity in the four campuses is shown in Table 1 below.

Table 1.
Descriptions of the Respondents According to Gender, Religion and Ethnicity

Demographic		Univ. Santo Thomas Medan	Univ. Nahdlatul Ulama Sidoarjo	Univ. Sintu Maroso Poso	Univ Nusa Cendana Kupang
Gender	Male	18,4%	17,5%	19,%	22,2%
	Female	81,6%	82,5%	80,4%	77,8%
Religion	Muslim	0	100%	45,7%	8,3%
	Christian	44,7%	0	52,1%	52,8%
	Catholic	55,2%	0	0	38,9%
	Hindu	0	0	2,2%	0
	Buddhist	0	0	0	0
Ethnicity	Sumatera	100%	0	2,2%	0
	Java	0	100%	13%	0
	Sulawesi	0	0	84,8%	0
	Nusa Tenggara	0	0	0	100%

From Table 1, it shows that the majority of respondents from all campuses were female. In terms of religion, most respondents from Universitas Nahdlatul Ulama Sidoarjo were Muslims, while Universitas Nusa Cendana in Kupang shows the most diverse religion. In terms of ethnicity, the diversity is most abundant at Universitas Sintu Maroso Poso.

Second, the validity test on financial literacy and locus of control aims to confirm whether the instruments of each variable are valid to be studied further. The results of the testing are shown in Table 2 below.

Table 2
Validity Test on Financial Literacy and Locus of Control

Indicator	Item	r_{value}	r_{table}	Sig	Criteria
1. General knowledge about personal finances	X1.1	0.623	0,22	0,000	Valid
	X1.2	0,678	0,22	0,000	Valid
	X1.3	0,640	0,22	0,000	Valid
	X1.4	0,597	0,22	0,000	Valid
	X2.5	0,642	0,22	0,000	Valid
2. Financial understanding related to savings and loans	X2.1	0.768	0,22	0,000	Valid
	X2.2	0,832	0,22	0,000	Valid

	X2.3	0,842	0,22	0,000	Valid
	X2.4	0,276	0,22	0,001	Valid
	X2.5	0,726	0,22	0,000	Valid
3. Advanced financial understanding related to insurance	X3.1	0,566	0,22	0,000	Valid
	X3.2	0,803	0,22	0,000	Valid
	X3.3	0,455	0,22	0,000	Valid
	X3.4	0,806	0,22	0,000	Valid
	X3.5	0,839	0,22	0,000	Valid
	X3.6	0,829	0,22	0,000	Valid
	X3.7	0,749	0,22	0,000	Valid
	X3.8	0,860	0,22	0,000	Valid
	X3.9	0,796	0,22	0,000	Valid
	X3.10	0,529	0,22	0,000	Valid
4. <i>Locus of control</i>	X4.1	0,715	0,22	0,000	Valid
	X4.2	0,721	0,22	0,000	Valid
	X4.3	0,655	0,22	0,000	Valid
	X4.4	0,64	0,22	0,000	Valid

According to Table 2, it shows that all instruments of the variables are valid to be used in this research as it has passed the significant test. The indicators are stated as valid if the value is positive and the $r_{value} > r_{table}$.

The reliability test of financial literacy and locus of control aims to measure the extent to which the research measurements will produce the same data if same objects are used in another study (Sugiono,2011). The reliability test is shown on Table 3.

Table 3
Reliability Test on Financial Literacy and Locus of Control

Item	Cronbach Alpha	Criteria
X1. General knowledge about personal finances	0,609	Reliable
X2. Financial understanding related to savings and loans	0,745	Reliable
X.3 Advanced financial understanding related to insurance	0,896	Reliable
X4. <i>Locus of control</i>	0,613	Reliable

According to Table 3, it shows that financial literacy and locus of control are reliable to be used in this research as it has passed the reliability test using the Cronbach Alpha method. The variables of financial literacy and locus of control are valued as $\geq 0,6$, meaning that they are accepted.

Third, the financial literacy descriptions of this section will show the level of financial literacy of the college students in the four campuses. According to Chen & Volpe (1998), the level of financial literacy is categorized into three categories, namely low financial literacy (below 60%), moderate financial literacy (60-79%), and high financial literacy (above 79%).

Table 4
Descriptions of Students' Financial Literacy

Indicator	Frequency	Category
General financial knowledge	78,1%	Moderate Literacy
Advanced financial knowledge	67,4%	Moderate Literacy

According to Table 4, the financial literacy of students from English FKIP in the four cities shows a moderate financial literacy. The general financial knowledge shows a higher value compared to the advanced financial knowledge. This shows that both general financial knowledge and advance financial knowledge need to get more attention moving forward. The descriptions of locus of control consist of four statements and the measurement is based on the Likert scale of 1 to 5. The statistic description of locus of control is shown in Table 5 below.

Table 5. Descriptions of Locus of Control

Item	N	Minimum	Maximum	Mean	Std. Deviation
Y1.1	212	2	5	4,36	,769
Y1.2	212	1	5	4,24	,844
Y1.3	212	1	5	3,57	,934
Y1.4	212	1	5	3,62	,859
Valid N	212				

According to Table 5, locus of control has the highest mean on the first statement amounting 4.38, meaning that the majority of respondents agree with the statement of “I feel that success requires perseverance in trying”, which also has the lowest standard deviation compared to other statements with 0.769. The lowest mean value is found in the third statement amounting 3.57, meaning that the students are close to agreeing with the statement “I believe the actions I take are not under the control of the environment where I am at.”

Fourth, the t-test result of financial literacy in terms of differences between gender, religion, ethnicity, and locus of control will be outlined by two tests, which are:

1. Prerequisite test conducted by normality and homogeneity test.
2. Hypothesis test

The technique used in the normality test is based on Kolmogorov-Smirnov. If the value of Asymp Sig.(2-tailed) > alpha 0, thus the data is normally distributed. However, if the value of Asymp Sig.(2-tailed) < alpha 0, thus the data is not normally distributed.

Table 6.
Normality Test

One-Sample Smirnov Test	Kolmogorov-	Gender	Religion	Ethnicity	Locus of control	Financial Literacy
N		212	212	212	212	212
Normal	Mean	1.20	1,85	2,66	15,82	66,24

Parameters ^{a,b}	Std. Dev	0,400	0,788	1,148	2,326	9,359
Most Extreme Differences	Absolute	0,492	0,251	0,214	,106	,059
	Positive	0,492	0,251	0,202	,101	
	Negative	-0,310	-1,84	-0,214	-,106	
Test Statistic		0,492	0,251	0,214	,106	,059
Asymp. Sig. (2-tailed)		0,000	0,000	0,000	0,000	0,74

According to Table 6, it shows that financial literacy is normally distributed. However, the variables of gender, religion, ethnicity, and locus of control are not normally distributed. Therefore, to test the differences between the variables that are not normally distributed towards financial literacy, it will be tested based on the analysis of variance (ANOVA). ANOVA test is to examine financial literacy because this variable is normally distributed

After passing the data normality test, the study then tested the four hypotheses. The four hypotheses to be tested are as follow:

- H1 = there are no differences in students' financial literacy in terms of gender.
 - H2 = there are no differences in students' financial literacy in terms of religion.
 - H3 = there are no differences in students' financial literacy in terms of ethnicity.
 - H4 = there are no differences in students' financial literacy in terms of locus of control.
 - Ho = there are no differences in the level of financial literacy in terms of gender.
 - Ha = there are differences in the level of financial literacy in terms of gender
- If P-value > Alpha (α)0,05, thus Ho is accepted. If P-value < Alpha (α)0,05, thus Ha is accepted.

The financial literacy review based on students' gender is based on code 1 = male, 2 = female. In total, there are 170 female respondents, and 42 male respondents.

Tabel 7
The Results of Statistic Test of Gender Variable

	Financial Literacy
Chi-Square	,130
Df	1
Asymp. Sig.	,718

a. Kruskal Wallis Test b. Grouping Variable: Gender

Based on Table 7, the t-test result shows a Asymp.sig value of 0,718 > 0,05. Thus, it is concluded that Ho is accepted. This means that there are no differences in the level of financial literacy between the male and female gender.

The financial literacy review based on the students' religion is Muslims, Christian Protestant, Catholic, Hindu, and Buddhist. A total of 83 students are Muslims, 79 are Christian Protestant, 49 are Catholic 1 is Hindu and Zero is Buddhist.

Table 8
The Results of Statistic Test of Religion Variable

	Financial Literacy
Chi-Square	2,215
Df	3
Asymp. Sig.	,529

a. Kruskal Wallis Test b. Grouping Variable: Religion

Based on Table 8, the t-test result shows that the Asymp.sig value is $0,529 > 0,05$. Thus, it is concluded that H_0 is accepted. This means that there are no differences in the level of financial literacy in terms of religion.

The financial literacy review based on the students' ethnicity is coded as Sumatera, Java, Sulawesi, and Nusa Tenggara. Forty-nine students are from Sumatera, 61 students are from Java, 39 students are from Sulawesi, and 70 students are from Nusa Tenggara.

Tabel 9
The Results of Statistic Test of Ethnicity Variable

	Financial Literacy
Chi-Square	9,727
df	3
Asymp. Sig.	,021

a. Kruskal Wallis Test. b. Grouping Variable: Ethnic

Based on Table 9, the t-test result shows that the Asymp.sig value is $0,021 < 0,05$. Thus, it is concluded that H_0 is rejected. This means that there are differences in the level of financial literacy in terms of ethnicity.

The financial literacy review based on locus of control. In this study, locus of control has a minimum respondents' answers of 8 and maximum respondents' answers of 20.

Tabel 10. The Results of Variable Test of Locus of Control

	Financial Literacy
Chi-Square	30,971
df	11
Asymp. Sig.	,001

a. Kruskal Wallis Test. b. Grouping Variable: Locus of control

According to Table 10, the t-test result shows that the value of Asymp.sig is $0,001 < 0,05$. Thus, it can be concluded that H_0 is rejected. This means that there are differences in the level of financial literacy in terms of locus of control.

3.2. Discussion

The level of financial literacy of English FKIP students from the four campuses is at the moderate level, as indicated by the percentage of their general financial knowledge of 78.1% and advance financial knowledge of 67.4%. Similar results was found in students from the economic and literacy education program at Sanata Darma University who had a moderate level of financial literacy (Setiawati, 2018). Therefore, to increase student's financial literacy, it is necessary for the campus to give special attention, such as to carry out a policy of having general course or guest lecturers on financial literacy for the students. Financial literacy will affect on the students' financial behavior (Sures Kumar, 2017).

This study reveals that there are no differences of financial literacy between students of English FKIP in terms of gender. Both male and female students did not show differences on their financial knowledge. Even though the research has more female respondents than males. However, an effort to improve financial literacy must provided to all students regardless of their gender.

This study further stated that there are no differences in financial literacy between students of English FKIP in terms of religion. In this study, there are five religions included, which are Muslim, Christian Protestant, Catholic, Hindu, Buddhist. This finding is different from another research about financial literacy of Muslim students in Malaysia. The study stated that religion affects financial literacy of Muslim students in Malaysia as the majority of the country's population is known as Muslim (Ana & Wan Ahmad, 2020).

This study found that there are differences in financial literacy between students of English FKIP in terms of ethnicity. Similar finding was found in a study of 2500 students from private and public universities that there are differences in financial literacy from the student's ethnicity, where Malaysian ethnicity shows better financial literacy compared to the Chinese and Indian ethnicities (Falahati, 2011). In addition, another study stated that Javanese and Madura ethnicity in Indonesia also shown to have differences in making financial decision (Ariani et al., 2016).

Furthermore, the study found that there are differences in financial literacy between students of English FKIP in terms of locus of control. Internal and external locus of control is a variable that affects financial literacy. The same results found that internal locus of control has more impact on financial investment decisions (Ariani et al., 2016). Therefore, it is necessary to create a situation or condition where the environment supports the students to improve their financial literacy.

4. Conclusion

This study can be concluded as follow:

1. The students at English FKIP on the four campuses has moderate level of financial literacy.
2. There are no differences in financial literacy between the students of English FKIP of the four campuses in terms of gender.
3. There are no differences in financial literacy between the students of English FKIP of the four campuses in terms of religion.
4. There are differences in financial literacy between the students of English FKIP of the four campuses in terms of ethnicity.

5. There are differences in financial literacy between the students of English FKIP of the four campuses in terms of locus of control.

Student's financial literacy at the moderate level requires the universities to have a policy of providing training, workshop, and/or lecturers about general and advance financial literacy. In addition, further studies on ethnicity will need to be conducted; this will help to find out on which level that each ethnicity is categorized at. If we can find an ethnic group that shows a low level of financial literacy, thus it is necessary for them to get additional attention from the financial institutions, local government institutions, and local academics to provide further insights related to financial literacy.

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