

The Influences of Demographic Characteristics on the Financial Literacy of Small and Medium Enterprises in Medan

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Abstract

This research was conducted in Medan SMEs totaling 105 respondents in 21 districts. This study examines the comparative level of financial literacy of SMEs Medan seen from the demographic ie gender, age, duration of effort and education. To sexes divided into 2 groups: male and female. For the age of the respondents is divided into 4 groups: <25 years; > 25-40 years; > 40-55 years and > 55 years. For a long effort of respondents divided into 4 groups, namely <3 years; 35 years old; > 5-10 years; and > 10 years. For the study were divided into 3 groups: junior high school, and University. Data was collected by the survey and in-depth interviews with SMEs. This study used a questionnaire financial literacy ordinal scale (True / False and Yes / No) that is standard questionnaire adapted from the OECD Report On Adult Financial Literacy in G20 Countries, 2017. The financial literacy indicator used is the financial knowledge, financial behavior and financial attitude. Data analysis techniques in this study using a non-parametric statistical approach Kruskal Wallis test and the Mann Whitney U test. The results of this study explain that in general the gender, age and education had no impact significant differences in the level of financial literacy SMEs Medan. While long business has an impact significant on differences in the level of financial literacy SMEs Medan. For that is expected for each university is able to improve the financial literacy of students, not only concentrated on the students of the faculty of economics, but on the other majors too.

Keywords: financial literacy, demography, gender, age, duration of business and education

Introduction

Financial literacy is an issue which is more warm and continuously improved in the community. Financial literacy is a matter that should be the basic needs of each individual or society in managing finances. According to A presidential decree number 82, in 2016 on the National Strategy for Inclusive Finance (SNKI) set a target of 75% of the adult population have access to formal financial services in 2019. Increased access to financial services is certainly going in line with the increase of financial literacy community.

Financial literacy, according to *Organization for Economic Co-operation and Development* (OECD) (2016) is a knowledge and understanding of concepts and financial risks, the following skills, motivation and confidence to apply the knowledge and understanding that is owned by the company in order to make financial decisions effectively, improve financial wellbeing (financial wellbeing) the individual and society, and participate in economy field. According to Welly et al. (2016) financial literacy is the ability (skills) a person in making effective decisions related to finances.

Based on National Survey of Literacy and Financial Inclusion Indonesia (SNLIK) in 2016 conducted by the Financial Services Authority (FSA) provides an overview of the state of financial literacy in Indonesia Indonesian community financial literacy rate in 2016 of around 29.7%, which means that for every 100 people population of only about 30 people who are categorized well literate (good financial literacy).

Results of a survey conducted Global F-INDEX (2014) shows that the number of the adult population, especially of childbearing age above 15 years who have an account in a wide range of financial institutions amounted to only 35.90%. This indicates the Indonesian people's access to financial services is still relatively low.

According to Lestari (2015) people who have a low level of financial literacy will be gullible to manage their money. Conversely, those who have a high level of financial literacy will be able to selecting and utilizing financial products and services according to the needs, have the ability to conduct financial planning more well, avoid investing activities in financial instruments that are not clear and gain an understanding of the benefits and risks of products and services finance.

Financial market conditions have now changed with the development of the financial services industry has increased and become more complex. Therefore, it is important for one to understand the basic knowledge of finances related to modern financial security key (Mandell and Klein, 2007).

According to OECD (2016) There are three components of financial literacy, namely: a). Financial knowledge. Knowledge of financial indicators in this study are the basics of finance, financial management, credit and debt, saving and investment, and risk and insurance. b) Financial behavior. The Indicators of financial behavior in this study is the preparation of the budget, save money and control of money, investment and payment obligations on time. c). Financial attitude. Financial indicators of attitude in this research those attitudes toward money, planning for the future.

According to the FSA (2013) in its publication entitled Indonesian National Strategy for Financial Literacy explained that age, occupation, gender, education level, income and geographic distribution are demographic factors to assess the level of financial literacy of the Indonesian population. According to Keown (2011) include immigration status, occupation, gender, age, family status, education level, place of residence.

Sucuachi (2013) states that the education level has a positive effect on the level of financial literacy in the Small and Medium Enterprises (SMEs). Kharchenko (2011) found that the sex of a significant effect on the level of financial literacy of Ukrainian society. Based on this study found that men had a financial literacy levels are higher than women. According to Krishna, et al, (2010) showed that work experience affect the level of financial literacy.

Based on the background, the demographic examined in this study were gender, age, duration of effort and education in relation to the level of financial literacy.

Methods

The population of this research are all SMEs in the city of Medan. While the sample in this study was 105 respondents SMEs taken by cluster sampling from 21 districts in the city of Medan. The dependent variable used in this research is financial literacy, while the independent variable in this study is the demographic side of the gender, age, duration of effort and education. To sexes divided into 2 groups: male and female. For the age of the respondents is divided into 4 groups: <25 years; > 25-40 years; > 40-55 years and > 55 years. For a long effort of respondents divided into 4 groups, namely <3 years; 35 years old; > 5-10 years; and > 10 years. For the study were divided into 3 groups: junior high school, and University.

Data was collected by the survey and in-depth interviews with SMEs. This study used a questionnaire financial literacy ordinal scale (True / False and Yes / No) is standard and is adopted from the questionnaire G20 / OECD Infe Report On Adult Financial Literacy in G20 Countries Financial Literacy in 2017. It has three indicators, namely financial knowledge, financial behavior, and financial attitude. This study uses a comparative analysis based on the demographic side groups of SMEs business operators. Data analysis was performed using non-parametric statistical approach Kruskal Wallis test for variables of age, duration of business and education and Mann-Whitney U test for gender variable. As for the criteria to test this hypothesis is H_0 accepted if the p-value < 0.05 and H_0 is rejected if the p value > 0.05.

Results and Discussion

The results of descriptive statistics in this study based on gender groups are as follows:

Table 1. Descriptive Statistics Group Sex Performers SMEs Medan

Sex		Financial Knowledge	Financial Behavior	Financial Attitude	Financial Literacy
Male	mean	4.3455	8.7455	.9636	14.0545
	N	55	55	55	55
Woman	mean	4.2400	8.3800	1.0600	13.6800
	N	50	50	50	50
Total	mean	4.2952	8.5714	1.0095	13.8762
	N	105	105	105	105

Source: Research Data (processed)

Based on the above table it is known that there are 55 people or as many as 52.38% of respondents MSME-sex male, while the rest are 50 or as much as 47.61% of respondents SMEs are female. From these data it can be seen that the mean financial literacy male respondents was higher than female respondents. However, for financial attitude, women have the highest mean.

The results of this research descriptive statistics by age group are as follows:

Table 2. Descriptive Statistics Age Group Performers SMEs Medan

Age		Financial Knowledge	Financial Behavior	Financial Attitude	Financial Literacy
<25 years	mean	3.8500	8.5000	1.0500	13.4000
	N	20	20	20	20
> 25-40 years	mean	4.4255	8.8511	1.1064	14.3830
	N	47	47	47	47
> 40-55 years	mean	4.3667	8.2000	.9000	13.4667
	N	30	30	30	30
> 55 years	mean	4.3750	8.5000	.7500	13.6250
	N	8	8	8	8
Total	mean	4.2952	8.5714	1.0095	13.8762
	N	105	105	105	105

Source: Research Data (processed)

Based on the above table it is known that there are 20 people (19.05%) of respondents in the age group <25 years, there were 47 (44.76%) of respondents in the age group > 25-40 years, 30 men (28.57%) of respondents aged > 40-55 years, and lastly there are 8 people (7.62%) of the respondents were aged > 55 years. From these data it is also known that the age group > 25-40 years had mean highest financial literacy. Not only is it the age group > 25-40 year-old also has a mean financial knowledge, financial behaviors and financial attitude of the most high.

The results of descriptive statistics in this study is based on the prior groups of business can be seen in table 3. Based on the table below it is known that there are 28 people (26.67%) of respondents who long effort <3 years, there are 33 people (31.43%) of respondents who long effort > 3-5 years, there are 24 people (22.86%) respondents who long effort > 5-10 years, and lastly there are 20 people (19.05%) of respondents who long efforts > 10 years. From these data it is also known that the old group of business > 3-5 years have a mean highest financial literacy. Not only was the old group of business > 3-5 years also has a mean financial knowledge, financial behaviors and financial attitude of the most high.

Table 3. Descriptive statistics based on Prior Group of Enterprises Actors SMEs Medan

old Business		Financial Knowledge	Financial Behavior	Financial Attitude	Financial Literacy
<3 years	mean	3.8214	8.5357	1.1786	13.5357
	N	28	28	28	28
3-5 years old	mean	4.5758	9.0606	1.1212	14.7576
	N	33	33	33	33
> 5-10 years	mean	4.4167	7.9583	1.0833	13.4583
	N	24	24	24	24
> 10 years	mean	4.3500	8.5500	.5000	13.4000
	N	20	20	20	20
Total	mean	4.2952	8.5714	1.0095	13.8762
	N	105	105	105	105

The results of descriptive statistics in this study based education group is as follows:

Table 4. Descriptive statistics Performers Education Group SMEs Medan

Education		Financial Knowledge	Financial Behavior	Financial Attitude	Financial Literacy
SMP	mean	3.4000	8.4000	2.0000	13.8000
	N	5	5	5	5
High School	mean	4.3939	8.6212	.9394	13.9545
	N	66	66	66	66
University	mean	4.2353	8.5000	1.0000	13.7353
	N	34	34	34	34
Total	mean	4.2952	8.5714	1.0095	13.8762
	N	105	105	105	105

Source: Research Data (processed)

According to the table above is known that there are 5 people (4.76%) of the respondents at the level of secondary education, there are 66 people (62.86%) of respondents at the level of high school education; and lastly there are 34 people (32.38%) of respondents at the level of college education. From these data it is also known that a group of high school education have a mean highest financial literacy. Not only is it a group of high school education also has a mean of financial knowledge and financial behavior of the most high.

Furthermore, based on the results of statistical hypothesis test for group sex (male and female) using the Mann-Whitney U test with the following results:

Table 5. Hypothesis Test Mann-Whitney U Test Group Sex Performers SMEs Medan
Test Statistics'

	Financial Knowledge	Financial Behavior	Financial Attitude	Financial Literacy
Mann-Whitney U	1309.000	1189.500	1283.500	1246.000
Wilcoxon W	2584.000	2464.500	2823.500	2521.000
Z	-.465	-.1212	-.757	-.846
Asymp. Sig. (2-tailed)	.642	.225	.449	.397

a. Grouping Variable: Gender

Based on the above table show that in general there is no difference between the financial literacy group sex in SMEs in Medan with the acquisition of the Sig. $0.397 > 0.05$, then H_0 is accepted. This is also confirmed in each of the indicators of financial literacy with a p-value acquisition of financial knowledge for $0.642 > 0.05$, meaning that gender made no difference SMEs degree of financial knowledge of Medan. P-value of 0.225 financial behavior > 0.05 , meaning that gender made no difference SMEs degree of financial behavior of Medan. P-value of 0.449 financial attitude > 0.05 , meaning that gender made no difference SMEs degree of financial attitude of Medan.

The results of this study contradict the results of previous studies, Kharchenko (2011) found that the sex of a significant effect on the level of financial literacy of Ukrainian society. Based on this study found that men had a financial literacy levels are higher than women.

Furthermore, Scheresberg (2013) told that socio demographic characteristics, in particular gender significant effect on the level of financial literacy and financial behavior. The object of research or respondents in these study as many as 4500 samples of adolescents aged 25 to 34 years.

The high participation of women to work, access high internet usage for the community needs and the increasing application of online shop such as shopee, Tokopedia, lazada, and others thought to contribute to improving the financial literacy skills evenly between men and women. This is certainly good for the economy, for access to services of financial products will be more widely used community, such as cash transfers, i-banking, and so forth.

Furthermore, based on the results of statistical hypothesis test for the age group (<25 years; $> 25-40$ years; $> 40-55$ years and > 55 years) using the Kruskal Wallis test test with the following results:

Table 6. Kruskal Wallis Test Hypothesis Testing Age Group Performers SMEs Medan

	Test Statistics ^a , b			
	Financial Knowledge	Financial Behavior	Financial Attitude	Financial Literacy
Chi-Square	5,623	1,338	5,990	4427
Df	3	3	3	3
Asymp. Sig.	.131	.720	.112	.219

a. Kruskal Wallis Test

b. Grouping Variable: Age

Source: Research Data (processed)

Based on the above table show that in general that there is no difference between the financial literacy in the age group of SMEs in Medan with the acquisition of the Sig. $0.219 > 0.05$, then H_0 is accepted. This is also confirmed in each of the indicators of financial literacy with perulahan p-value of 0.131 financial knowledge > 0.05 ; means that age does not give significant differences in the level of financial knowledge Medan SMEs. P-value of 0.720 financial behavior > 0.05 ; means that age does not give a significant difference in the degree of financial behavior of SMEs Medan. P-value of 0.112 financial attitude > 0.05 ; means that age does not give significant differences in the level of financial knowledge Medan SMEs. Furthermore, based on the results of statistical hypothesis test for a long group effort (<3 years; $3-5$ years; $> 5-10$ years, and > 10 years) using the Kruskal Wallis test test with the following results:

Based on table 7 show that in general there is a difference between groups of long financial literacy efforts on SMEs in Medan with the acquisition of the Sig. $0.013 < 0.05$, then H_0 is rejected. This is also confirmed in each of the indicators of financial literacy namely p-value financial knowledge $0.006 < 0.05$; means long effort provides significant differences in the level of financial knowledge Medan SMEs. P-value of 0.172 financial behavior > 0.05 ; old means businesses no difference SMEs degree of financial behavior of Medan. P-value of 0.000 financial attitude < 0.05 ; means long effort provides significant differences in the level of financial attitude of SMEs Medan.

Table 7. Hypothesis Testing Kruskal Wallis Test Prior Group of Enterprises Actors SMEs Medan

Test Statistics^{a, b}				
	Financial Knowledge	Financial Behavior	Financial Attitude	Financial Literacy
Chi-Square	12 540	4994	22 390	10,735
Df	3	3	3	3
Asymp. Sig.	.006	.172	.000	.013

a. Kruskal Wallis Test

b. Grouping Variable: Old Business

Based on the survey results revealed that the old business of giving a significant difference to the financial literacy SMEs Medan. The results of this study support previous research According to Krishna, et al, (2010) showed that work experience affect the level of financial literacy.

Furthermore, based on the results of statistical hypothesis test for a group of education (junior high schools and universities) using the Kruskal Wallis test test with the following results:

Table 8. Kruskal Wallis Test Hypothesis Testing Actors Education Group SMEs Medan

Test Statistics^{a, b}				
	Financial Knowledge	Financial Behavior	Financial Attitude	Financial Literacy
Chi-Square	6,227	.218	8769	.192
Df	2	2	2	2
Asymp. Sig.	.044	.897	.012	.908

a. Kruskal Wallis Test

b. Grouping Variable: Education

Source: Research Data (processed)

Based on the above table show that in general there is no difference between the groups of financial literacy education in SMEs in Medan with the acquisition of the Sig. $0.908 > 0.05$, then H_0 is accepted. However, if explored further in each of the indicators of financial literacy obtained p-value of 0.044 financial knowledge < 0.05 ; meaning that education provides significant differences in the level of financial knowledge Medan SMEs. P-value of 0.897 financial behavior > 0.05 ; education means no difference SMEs degree of financial behavior of Medan. P-value of 0.012 financial attitude < 0.05 ; meaning that education provides significant differences in the degree of financial attitude of SMEs Medan.

Based on the results of research that turns levels of education no significant impacts on financial literacy in general, but the impacts are significant differences in the financial side of the knowledge and attitude of SMEs financial Medan.

The results of this study contradict previous studies Sucuachi (2013) states that the education level of positive effect on the level of financial literacy in the Small and Medium Enterprises (SMEs). Insignificant financial literacy in SMEs Medan based education because not all college graduates will literacy financial literacy. Graduates who tend literacy financial literacy are a student of the faculty of economics. This is consistent with the results of research conducted by Krishna, A. (2010), the level of financial literacy of students with a background in economics higher than non-economics majors or exact sciences.

Not only at the level of college graduates, the equivalent of high school graduates although not a significant difference in the level of financial literacy owned. This is consistent with findings Mandell and Klein (2009) which examined the high school students who have gone through the course of financial management, found that students who have followed the course of financial management, financial literacy levels are not higher than those who did not follow the course of financial management.

It certainly needs attention from educational institutions, especially universities. According to Cude (2006) states that financial education is also important for student financial decisions is very important to their financial circumstances during the school term and even affect their lives after college.

Students as young people will not only face a higher complexity in financial products and services, but they are more likely to have to bear the risk in the future than their parents (Lusardi and Mitchell, 2007). Therefore, learning in higher education should play an important role in the formation of financial literacy of students.

Conclusion

Based on these results can be explained that in general the gender, age and education had no impact significant differences in the level of financial literacy SMEs Medan. While long business impact significant differences in the level of financial literacy SMEs Medan. For that is expected for each university is able to improve the financial literacy of students, who are not only concentrated on the students of economic faculties, students of other majors.

Furthermore explored through three indicators of financial literacy can be concluded that in terms of gender, it turns out group sex does not give effect significant differences in financial knowledge, financial behavior, and attitude SMEs financial Medan. Furthermore, in terms of age can be concluded that turns age group do not impact significant differences in financial knowledge, financial behavior, and attitude SMEs financial Medan. Then in terms of education, it can be concluded that there are significant differences in the level of financial literacy and financial knowledge attitude on SMEs Medan. Lastly, in terms of business long known that there are significant differences in the level of financial literacy and financial knowledge attitude on SMEs Medan.

References

- Cude, e. (2006). College Students and Financial Literacy: What They Know and What We Need to Learn. Eastern Family Economics and Resource Management Association, 102-108.
- Global Financial Index (2014); <https://globalfindex.worldbank.org>
- Keown, LA 2011. The financial knowledge of Canadians, (11).
- Kharchenko, Olga. 2011. Financial Literacy In Ukraine: Determinants And Implications For Saving Behavior. Kyiv School of Economics's Thesis.
- Krishna, A. (2010). Analysis of Financial Literacy Among College Students and Factors Affecting. Proceedings of the 4th International Conference on Teacher Education; Join Conference UPI and UPSI. Bandung, Indonesia.
- Lester, S. 2015. Financial Literacy and the use of the products and services of financial institutions. Journal of Business Focus. 14 (02): 14-24. Bank Indonesia. Booklet 2014. Inclusive Finance. Jakarta (ID): Bank Indonesia.
- Lusardi and Mitchell. (2007). Baby Boomer Retirement Security: The Roles of Planning, Financial Literacy, and Housing Wealth. Journal of Monetary Economics (54), 205-224.
- Mandell, L and Klein, LS 2007. Motivation and Financial Literacy. Journal of Financial Services Review, 16 (2), pp: 105-116.
- Mandell, L and Klein, LS 2007. Motivation and Financial Literacy. Journal of Financial Services Review, 16 (2), pp: 105-116.
- Mandell, L and Klein, LS. 2009. The Impact of Financial Literacy Education on Subsequent Financial Behavior. Journal of Financial Counseling and Planning. Volume 20 Issue 1, 2009.
- FSA. 2013. *Indonesian National Strategy For Financial Literacy*. Jakarta
- Organization for Co-operation Development Economics. 2016. Measuring Financial Literacy: Questionnaire and Guidance Notes for Conducting an Internationally Comparable Survey of Financial Literacy. INFE.

- Scheresberg, C. d. (2013). Financial Literacy and Financial Behavior among Young Adults: Evidence and Implications. Washington: Scholar Commons.
- Sucuachi, William T., 2013. Determinants of Financial of Micro Entrepreneurs in Davao City. *International Journal of Accounting Research*, 1 (1), pp: 44-51.
- Welly, Cardinal, Juwita R. (2016). Effect Analysis of Financial Literacy in STIE Investment Decision Against Multi Data Palembang [Internet]. [Downloaded by 2017 Des 22]. [Http://eprints.mdp.ac.id/1825/](http://eprints.mdp.ac.id/1825/) available.