THE EFFECT OF EDUCATION AND AGE ON FINANCIAL LITERATURE

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ABSTRACT

This research is a quantitative study that aims to determine the effect of education and age on the financial literacy of stock investors in the city of Medan. Financial literacy is knowledge and understanding of financial matters, primarily used about personal financial matters, and to make decisions relating to concepts such as compound interest, financial planning, credit card mechanisms, profitable savings methods, rights consumers, time value of money, advantages, and disadvantages, etc. The sample of this research is stock investors in the city of Medan as many as 50 respondents. Data analysis using the SmartPLS method. The results showed that (1) there was no effect of education on financial literacy, and (2) there was no effect of age on financial literacy.

Keywords: *Education, Age, Financial Literacy*

1. INTRODUCTION

Investors in making stock investment decisions should understand financial literacy. Financial literacy in recent years has received attention from various groups including the government, bankers, entrepreneurs, financial markets and other organizations, especially in developed countries. The importance of increasing financial literacy is due to seeing the development of new financial products, the complexity of financial markets, and changes in political, demographic and economic factors. Financial literacy is how to manage money in terms of insurance, investment, savings and budgeting (Hogart, 2002). Financial literacy refers to a person's ability to understand and utilize financial concepts (Servon and Kaestner, 2008).

According to Al-Tamimi and Kalli (2009), financial literacy influences income, education, and work activity. Significant differences in financial literacy according to gender. Women have a lower level of knowledge/financial literacy than men. Bihari and Shukla (2012), state that the financial literacy of investors has a significant relationship with age and quality of education. Financial literacy is a component of human capital that can be used in financial activities to improve the expected quality of life (i.e. behavior that enhances financial well-being).

This study took a sample of individual investors in the city of Medan because the city of Medan is one of the largest cities in Indonesia, and aims to provide education and socialization for investors in the city of Medan regarding the relationship between education and age on financial literacy. Individual investors' demographics (including education and age) are also focused on in this study because from several studies and phenomena that occur there are differences in the influence of demography on financial literacy.

Some of the formulation of the problem in this study, namely:

a. Is there an influence of age groups on financial literacy?
b. Is there an effect of educational level on financial literacy?

2. THEORETICAL BASIS

Etymologically (linguistically) demography comes from Latin, the word 'demographic' consists of two words, namely demos and graphien, demos means population and graphien means notes, discussion of something. Etymologically, the meaning of demography is a record or discussion of the population of an area at a certain time. Demography is the science that studies the dynamics of the human population. Demographics include the size, structure and distribution of the population, as well as how the population changes over time due to births, deaths, migration and aging.

Demography is the study of the population in an area with its modifying factors (mortality, birth, migration and distribution). In general, Demography is a science that studies problems and conditions of population change or in other words all matters related to the components of these changes such as births, deaths and migration to produce a condition and composition of the population according to a certain age and sex. According to Haupt and Kane (2000), demography is the scientific study of population, especially regarding fertility, mortality and birth rates. Demography includes the scientific study of numbers, geographic distribution, population composition and other demographic characteristics and how these factors change over time.

Demography is the study of the size, territorial distribution and composition of the population, changes in it and its components. Such changes can be identified as births, deaths, territorial movements (migration) and social mobility or status changes (Hauser and Duncan, 1959). According to Xie (2000) that demographic concepts (eg, birth rate, death rate and migration), analysis methods and strategies (eg life table analysis) can soon be extended to other species (insects, animals, plants, etc.) and inanimate objects (companies, cars, etc.). According to Scheidel (2001) that demography is the study of the size, structure and development of the human population, which began to receive more attention among ancient historians. Becker (2008) defines demography as the study of populations that are static and dynamic. The static aspect includes point-in-time characteristics such as the composition of age, sex, race, marital status, and economic characteristics. Its dynamic aspects include fertility, mortality, birth, migration and growth. Meanwhile, demographic analysis is a study of the components of variation and change in demographic variables and the relationship between them. This is also called formal demography or the demographic method.

Financial literacy is knowledge and understanding of financial matters, primarily used for personal financial matters, and making financial decisions. It also involves in-depth knowledge of financial concepts such as compound interest, financial planning, credit card mechanics, profitable savings methods, consumer rights, time value of money, and advantages and disadvantages, among others. The absence of financial literacy can make bad financial decisions that have an adverse effect on an individual's financial health. Financial literacy is the ability to read, analyze, manage and communicate about personal financial conditions that affect material well-being. Includes the ability to discern financial choices, discuss money and financial issues, plan for the future and respond to life events that affect day-to-day financial decisions, including economic events in general (Vitt et al., 2000; Cude et al., 2006).

Financial literacy is divided into four categories: (1) knowledge of financial concepts, (2) ability to manage personal finances, (3) skills in making financial decisions and (4) confidence in future financial planning (Remund, 2010). Hilgert and Beverley (2003) define financial literacy as financial knowledge. That financial knowledge is statistically related to financial practice. Someone who has financial literacy is more likely to engage in recommended financial practices. Parker et al. (2008) found that financial literacy is specific knowledge about finance rather than general knowledge and is more influential in predicting investment performance.

Financial literacy includes some relation to the ability to manage personal finances. This reference is analogous to Americans who are "successful but their finances are bad" because of their weak financial knowledge (Lusardi and Mitchel, 2008). Emmons (2005) describes in detail financial literacy, namely the ability to track cash resources and payment obligations, knowledge of how to open a savings account and how to apply for a loan, a basic understanding of health and life insurance, the ability to compare competing offers, and plan needs. future finances. According to Vitt et al. (2000) skills and abilities related to financial literacy, namely the ability to read, analyze, manage and communicate about personal financial conditions that affect well-being.

Financial literacy can be defined as to measure of how well individuals can understand and use information related to personal finance in everyday life, for example in applying this ability to loan applications and installment payments (Huston, 2010). Financial literacy shows a person's ability to perform several tasks related to money, not limited to earning, protecting, and spending that money (Remund, 2010).

Financial literacy is the process of financial consumers/investors increasing their understanding of financial products, developing skills and confidence and opportunities, and taking other effective actions to increase their financial well-being and profits (Bihari and Shukla, 2012).

Previous Research

Bihari and Shukla (2012) found that the financial literacy of investors has a significant relationship with age and quality of education, but has no significant relationship with income. Lusardi and Mitchell (2006), a low level of financial literacy, especially for women, parents, and investors with low education. High financial literacy invests in complex assets such as stocks. Volpe et al. (2002) found that women have lower financial literacy than men. Financial literacy affects the level of income, level of education, and work activities.

In line with the findings of Al – Tamimi and Kalli (2009), financial literacy affects the level of income, education, and work activities. Significant differences in financial literacy according to gender. Women have lower financial literacy than men. There is a significant relationship between financial literacy and investment decisions.

Financial mistakes are common in both young and old due to low financial literacy, according to Agarwal, et al. (2007). According to Rooij et al. (2011) those with low financial literacy significantly dislike investing in stocks. Women have lower financial literacy than men. Financial literacy affects the level of income, level of education, and work activities.

Based on the background, problems, and research objectives, the research hypothesis is as follows:

1.There is a significant influence of education level on financial literacy.

2.There is a significant influence of age group on financial literacy.

3. RESEARCH METHOD

This research was carried out by distributing questionnaires to investors in the city of Medan who is affiliated with securities companies that actively conduct stock transactions online. Questionnaires will be distributed in 2022. Respondents in this study were 50 respondents who returned and answered the questionnaire. This type of research used is quantitative research. The data used are primary. The data collection technique is by distributing questionnaires online to individual investors who invest in shares through securities companies, using an online application.

4. CONCLUSIONS

The results of the research on the characteristics of respondents based on education are shown in Table 1.

Table 1 Characteristics of Respondents Based on Education

No.	Education	Total	Persentase (%)
1	<High School	2	4
2	High School	14	28
3	Diploma	7	14
4	Bachelor	23	46
5	Postgraduate	4	8
	Jumlah	50	100,00

Based on the acquisition of Table 1, it is known that the educational description of the respondents in this study was dominated by investors with an undergraduate education level of 23 people (46%). Then the second most followed by investors with high school education as many as 14 people (28%). This means that education about financial literacy is more in demand by undergraduates and high school students who are now very excited and willing to invest.

Investors with diploma education rank third with a total of 7 people (14%), then the number of investors with postgraduate education is 4 people (8%) and the least are investors with education below high school, namely only 2 people (4%)).

The results of the research on the characteristics of respondents based on age are shown in Table 2.

Table 2 Characteristics of Respondents by Age

No.	Age	Total	Persentase (%)
1	< 25 yo	17	34
2	25-40 yo	20	40
3	>40 yo	13	26
	Total	50	100,00

Based on Table 2, it is obtained that the respondents of this study were dominated by investors aged between 25-40 years. There are as many as 20 people or 40% who are investors aged 25-40 years, who are still very interested in seeking information and knowledge about financial literacy, both about managing assets or funds owned, as well as about managing their finances well for future prosperity.

Then the second largest number of respondents are investors aged <25 years, namely there are as many as 17 people or 34%. This condition can be assumed to be almost the same for investors aged 25-40 years. Investors under the age of 25 are also considered to be of an age that still really needs information and want maximum financial literacy so they can manage their finances well for future prosperity.

Next is the number of respondents with age criteria > 40 years as the minority, namely 13 people or 26%. This illustrates that the age over-40n investor who has obtained/has financial literacy, and already understands how to manage his finances, both the assets and funds he owns to guarantee future welfare.

The results of the research on the characteristics of respondents based on their level of financial literacy are shown in Table 3.

Table 3 Characteristics of Respondents Based on Level of Financial Literacy

No.	*Financial Literacy*	Total	Persentase (%)
1	*Financial Literacy* low	4	8
2	*Financial Literacy* mid	11	22
3	*Financial Literacy* high	35	70
Total		50	100,00

The level of financial literacy is based on the results of assessing the answers of the respondents, if the correct answers are below or equal to 40%, then the level of financial literacy of the respondents is classified as low. The correct answer is between 40% and 60%, and the level of financial literacy of the respondents is said to be moderate. The correct respondent's answer is greater than or equal to 60%, it is said that the respondent's level of financial literacy is high. Based on the results of Table 3, it is known that the financial literacy level of the dominant respondent is high, as many as 35 people or 35%, then the second position is at the moderate level of financial literacy, with as many as 11 people or 22%. Finally, the least is the low level of financial literacy of 4 people or 8%.

This study uses the PLS method to analyze differences in age and education on financial literacy. This study interprets the results of the analysis with the SmartPLS program. The test results or data processing results obtained are as follows:

1. There is no significant difference in the level of education on financial literacy with a T-value (1.224) and the value of the difference with a beta value of (0.139).
2. There is no significant difference in the age group for financial literacy with a T-value (1.113) and a large difference with a beta value (0.141).

Table 4 Conclusions from Hypothesis Testing

				Beta	**T-Value**	**Result**	**Hypothesis**
H1	Education	→	*Financial Literacy*	0,139	1,224	Not Significant	Rejected
H2	Age	→	*Financial Literacy*	0,141	1,113	Not Significant	Rejected

There Is No Significant Difference In Education Level On Financial Literacy

There is no significant difference in the level of education on financial literacy, where in this study the respondent's education dominates undergraduate. The research by Tamimi and Kalli (2009) and Bihari and Shukla (2012) is not in line with this research which found that there are differences in the quality of education on investors' financial literacy so that financial literacy has a significant relationship with the quality of education. Volpe and Chen (2002) state that there are differences in the level of financial literacy based on education, investors with a college education have better financial literacy than those with low education. Likewise, research by Lusardi and Mitchell (2006) found a low level of financial literacy among investors with low education. Bhushan and Medury (2013) found that the level of financial literacy is positively and significantly related to the level of education, indicating that the level of financial literacy increases with an increasing level of education. Hung et al. (2009) found that financial literacy was higher for respondents who had a bachelor's degree or more, meaning that there was a significant difference in the level of education on financial literacy.

Murphy (2013) states that educational level is a relevant determinant and correlates to financial literacy. Research Volpe et al. (2002) examined the financial literacy of 530 online investors and found that the level of financial literacy varied according to education, there were significant differences in the level of education on the financial literacy of online investors. Research by Nidar and Bestari (2012) explains that the factors that have a significant influence on the financial literacy of students at Padjadjaran University are the level of education, where there are significant differences in the level of education on financial literacy. Murphy (2013) shows that education level is a significant predictor of financial literacy. Tóth's research (2015) in Slovakia found that the higher the education achieved, the higher the level of financial literacy so education has a significant effect on financial literacy.

There is no significant difference in the level of education on financial literacy, indicating that Medan City investors are dominated by undergraduate education (46%) but there is no difference in the mastery of financial literacy in making stock investment decisions. Investors with a high school education compared to investors with a bachelor's education do not differ in their understanding of making stock investment decisions, because they may already have experience investing in stocks. According to (Lusardi, 2008) that financial literacy is knowledge and understanding of financial concepts and skills, motivation and self-confidence, including knowledge of basic financial concepts, such as compound interest work, the difference between nominal value and real value, and the basics of risk diversification, to be applied to make effective decisions in a variety of financial contexts. So that financial literacy places more emphasis on financial knowledge in theory, even though it will be applied to improve the financial welfare of individuals and society and enable participation in economic life. While the level of education includes understanding general knowledge, personality formation, maturity in thinking both social intelligence, emotional intelligence or what is often called EQ, namely social intelligence to guide thoughts and actions (according to Shapiro, 1998), emotional spiritual quotient, adversity quotient/power juang (according to Stoltz, 2000), so that education is broader in scope than financial literacy, it can finally be understood that there is no significant difference in the level of education on financial literacy.

There Is No Significant Difference Between Age and Financial Literacy

There is no significant difference in the age group on financial literacy. So the hypothesis is rejected. This research is not in line with Bihari and Shukla (2012) that the financial literacy of investors has a significant relationship with age. Research by Chen and Volpe (1998) also disagrees with this research that the level of financial literacy is low in participants aged 18–22 years, different for each age group the level of financial literacy. Volpe et al. (2002) examined the investment literacy of 530 online investors and older respondents had better financial literacy than younger respondents. Research by Agarwal and Driscoll (2007) states that financial mistakes are common among young and old due to low financial literacy. Volpe and Chen (2002) state that there are differences in the level of financial literacy based on age so that there are differences in the age of financial literacy. Likewise, with the research of Taft et al. (2013) there is a positive relationship between age and financial literacy. Research by Shaari et al. (2013) there is a negative relationship between student financial literacy and age. Lusardi and Mitchell's research (2011) found that age has an effect on financial literacy and middle age has the highest level of financial literacy. Hung et al. (2009) found that the older age group has a higher level of financial literacy than the younger age group. The results of Worthington's (2006) study show that financial literacy is highest for people aged between 50 and 60 years.

This research is also not in line with Bhushan and Medury (2013) that financial literacy is highest in respondents who are over 60 years old, followed by respondents who are in the 51-60 year age group, the level of financial literacy is lowest for young respondents, namely those who are in the age group of 20-30 years.

The results of the hypothesis show that differences in the level of financial literacy of respondents based on age are not statistically significant. The conclusion is that there is no significant effect of age group differences on the level of financial literacy. Thus that the level of financial literacy does not depend on age. Nidar Research, S.R. and Bestari, S. (2012) also found that age had no significant effect on the financial literacy of students at Padjadjaran University, so there was no difference between students and female students on financial literacy.

This study shows that investors in each age group do not affect financial literacy, whether the younger age group or the older age group are equally able to learn and understand well about finance, financial products, stock investment, or types of risk. owned by each share, one of which is the ease of obtaining financial information such as through online and offline media, and information from friends or other investors. In this study it is assumed that young people digest and receive knowledge faster than older people and already have a mature way of thinking so young people's financial knowledge is no different from the financial knowledge of older investors.

5. SUGGESTIONS

The suggestions that the author can give are as follows:

1. This research is still within the scope of Medan city investors, this research should be continued to other big cities in Indonesia.
2. Investment managers need to educate their customers/investors about financial literacy. Especially understanding and knowledge of the types of risks faced by investors when investing in stocks.
3. Financial service institutions to pay more attention to the level of financial literacy of potential investors before setting them as a target market, so that they can easily offer financial institution products and services to potential investors.

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