

Impact of Sociodemographic, Financial Experience, and Financial Socialization Agents to Financial Literacy among Adults in Jabodetabek

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Abstract. This research aims to determine the impact of socio-demographic factors, financial experience, socialization agents, on financial literacy levels for adults in Jabodetabek. The population in this study was 300 respondents who were Jabodetabek residents aged 18 years and over who were collected via questionnaires from November to December 2022. Data analysis in this study used quantitative analysis with an analytical technique using purposive sampling. The results of this research found that the financial literacy level of Jabodetabek residents was not influenced significantly by gender, age, and family socialization agent, but was influenced significantly by education, income, experience, peers, and media financial socialization agent. Our findings indicate that individuals with higher financial literacy scores are more likely to save and hold stocks and bonds.

Keywords: Financial Attitude; Financial Behavior; Financial Literacy; Financial Knowledge; Financial Socialization Agents

1. INTRODUCTION

There are many reasons why Financial Literacy is essential in life. First, it can help people to make informed financial decisions. When people have a good understanding of personal finance, they can make informed decisions about how to manage money and achieve their financial goals. This can also help people to avoid financial pitfalls and make the most of their financial resources. As in per definition by Lusardi and Mitchell, (2014) that Financial Literacy is “people’s ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and pension.” Budgeting, self-control, and loan knowledge are also components of financial literacy. According to research, financial knowledge affects financial decisions. A thorough understanding of financial concepts like interest rates and inflation is necessary to make smart financial decisions over the short-term, medium-term, and long-term. High financial literacy individuals are better to prioritize their spending on necessities and make better decisions regarding their financial status.

Second, Financial literacy can lead to financial stability and security. By understanding how to manage money effectively, people can build a strong foundation for their financial future. This can help them to achieve financial stability and security, both in the short-term and the long-term. As Bryant, (2013) describe, financial literacy affects the economy on a national level, and it can support stability and growth. People are more willing to support businesses and sectors and participate in the economy when they are able to make educated financial decisions. This may

promote economic expansion and job growth. Financial inclusion must also be inclusive in order to guarantee that people from all socioeconomic backgrounds have access to the financial resources and tools necessary for wise money management. This can support economic opportunities for all people and minimize inequality.

Third, Financial literacy can help people to achieve their financial goals. Whether they want to save for a down payment on a house, pay off student loans, or save for retirement, having financial literacy can help to develop a plan to achieve these financial goals. According to Zhiu R and Pham (2004), having a better understanding of budgeting and saving can help individuals create plans that establish expectations, hold them responsible for their finances, and chart a path towards accomplishing seemingly unattainable goals. Even if someone is unable to afford their current dream, they can still create a plan that enhances their chances of realizing it in the future.

Fourth, Financial literacy can help people navigate complex financial situations. Since the world of personal finance can be complex with variety of financial products and services available, financial literacy can help to understand and navigate these complex financial situations, so they can make the best choices for your financial well-being. Van Roojiet, et al., (2011) highlight the importance of financial literacy and how it will help individuals choose the best saving and investment options as well as knowing the advantages and disadvantages of various financial products. This can ensure that people can manage their money sensibly, avoid expensive financial blunders, and save and invest. By demonstrating how to set up a budget, save money, and pay down debt, it also teaches people how to handle their money more successfully. This can lessen their chance of falling into poverty and help them become more financially stable.

Fifth, Financial literacy can lead to better financial outcomes. In general, people who are financially literate tend to have better financial outcomes than those who are not. They may be more likely to save and invest wisely, have a stronger credit score, and be better able to weather financial setbacks. During unforeseen events, it can be difficult to make life-changing decisions without the necessary information to make the best decision. When individuals have adequate financial knowledge, they can approach significant life decisions with greater assurance, knowing they are less likely to be caught off guard or adversely affected by unforeseeable outcomes. In accordance with Lusardi and Tufano, (2015), a person's response to an unanticipated catastrophe might provide information about their financial literacy and crisis management skills. For instance, a person who does not comprehend interest rates may end up with a high level of debt and pay higher loan interest rates. Lack of basic insurance and emergency funds can also cause financial problems when someone retires or suffers an unforeseen injury. Families that understand how important their

financial situation is understand how important it is to save money and make investments for either themselves or their children.

Financial literacy is measured using 3 aspects, that includes Financial Knowledge (FK), Financial Behavior (FB), and Financial Attitude (FA). FK refers to a person's understanding of financial concepts and principles, such as budgeting, credit, and financial planning. Financial knowledge is important because it helps a person make informed financial decisions and understand how to effectively manage their money. All three factors are interrelated and can impact a person's financial well-being. FA refers to a person's overall mindset and feelings about money, which can influence their financial behavior. It is important to have a positive FA, as it can motivate a person to make good financial decisions and take control of their financial situation. FB refers to the specific actions that a person takes in regard to managing their money, such as saving, spending, and investing. Financial behavior is important because it determines how a person actually manages their money, and good financial behavior can lead to financial stability and security.

The current problem with macro-economic conditions, individuals in developing countries are still lack of fundamental economic and financial principles, and many people score low in basic economics and finance that may lead them to make poor financial decisions. For example, during the global financial crisis of 2008, consumers' poor financial decisions were brought to light in all their destructiveness. Investors must have financial knowledge and awareness because of the growing responsibility that each individual bears for their financial decisions and the complexity of financial products. Investments in financial literacy can significantly impact an individual's ability to allocate their lifetime resources as efficiently as possible in an uncertain world. Due to a lack of financial literacy, emerging and developing nations may be more vulnerable to poverty than developed ones.

Organization for Economic Cooperation and Development (OECD) (2020) stated that the level of individual financial literacy in 30 countries of OECD is still relatively low with responses being too confident that they already know financial concepts. The financial literacy condition in each country is also different due to variations in the financial environment influenced by Geo-Political and Macroeconomic conditions. Moreover, the level of financial literacy in developing countries is also influenced by cultural factors that impact individual attitudes and behavior in making financial decisions. On a macro-economic scale, countries with citizens with high financial literacy can grow richer faster than those with low financial literacy. Beside OECD, survey by the US Federal Reserve in 2021, 22% of adults in the United States reported not being okay financially and not living comfortably financially. Apart from saving, investing through the capital market with share

ownership is also an important indicator in economic development. Moreover, Agrawal et al., (2015) found the effect of financial literacy on individual participation in the capital market and found that more individuals with high financial literacy tend to be more active in participating in the stock market. According to survey data from more than 22,000 Nigerian respondents, financial literacy has a big impact on how they save money in formal financial institutions. Numerous studies have discovered that financial literacy has a positive effect on everyone's saving behavior by using an extensive measure of financial literacy from the OECD.

Overall, financial literacy is important in various aspects of an individual's life so that a person can make the right decisions from various financial options. Higher levels of personal financial literacy also affect people's attitudes toward evaluating risks prior to making financial decisions, such as paying off debt, investing, and making retirement plans. Those who can count their assets exhibit a higher financial diversification, and they also tend to be more receptive to investment options.

This research attempts to answer the questions below:

Q1: What is the financial literacy level of adults in Jabodetabek?

Q2: Do sociodemographic factors, financial experience, and financial social agents affect financial literacy of adults in Jabodetabek?

Q3: Does financial literacy level affect financial decisions on saving and investments among adults in Jabodetabek?

2. HYPOTHESES DEVELOPMENT

Based on the literature, the independent variables are the impact of age, gender, education, income, financial experience, financial socialization agent and dependent variable is the level of financial literacy among adults in Jabodetabek.

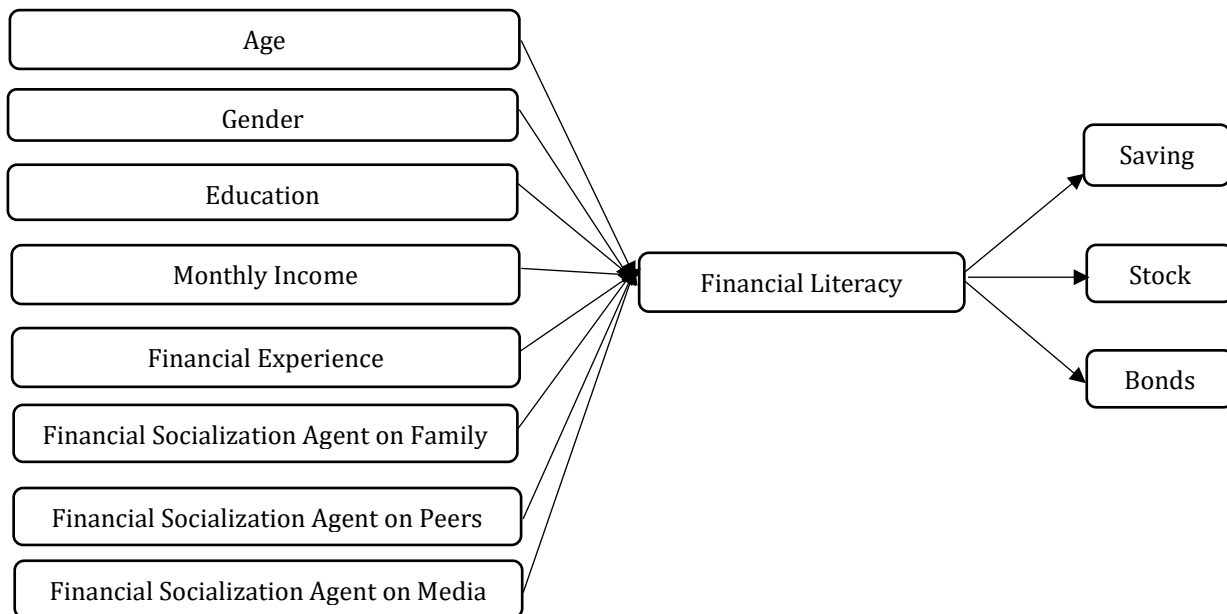


Figure 1. Research Model

Drawing from existing literature, we contended that only a limited number of studies have investigated the correlation between financial literacy and sociodemographic factors, financial experience, and financial socialization agents. We posit the following hypothesis:

- H1a : Age positively affects the financial literacy levels for adults in Jabodetabek
- H1b : Gender positively affects the financial literacy levels for adults in Jabodetabek
- H1c : Education positively affects the financial literacy levels for adults in Jabodetabek
- H1d : Monthly income positively affects the financial literacy levels for adults in Jabodetabek
- H2 : Financial experience positively affects the financial literacy levels for adults in Jabodetabek
- H3a : Family positively affects the financial literacy levels for adults in Jabodetabek
- H3b : Peers positively affects the financial literacy levels for adults in Jabodetabek
- H3c : Media positively affects the financial literacy levels for adults in Jabodetabek
- H4 : Financial literacy level affects financial decisions on saving and investments among adults in Jabodetabek

3. METHOD, DATA, AND ANALYSIS

Method

This type of research is quantitative research that is based on survey conducted among a representative Jakarta, Bogor, Depok, Tangerang, and Bekasi residents between November – December 2022. The sampling technique was convenient sampling using self-administered questionnaire. The number of samples of this study is 300 respondents who is 18 years old and above has Indonesian identity card. The used variables are exogenous variables of financial literacy and endogenous variable consisting of socio-demographic variables of gender, age, education, monthly income, financial experience, and financial socialization agent.

Financial experience was asked about respondents' experience with various financial instruments that are common in Indonesia, including saving and deposits, credit card or personal loans. Experience in financial instrument with "0" scale as no experience and "1" scale as there is experience (Mirzaei M and Bure T 2022). Financial socialization agents were classified by 3 sources family, peers (peers, coworkers, and internet), and media (talkshow, news and newspaper/magazine. Respondents are asked, "Think about how you learn about financial matters on a 7-point scale from 1 (no information) to 7 (great deal of information) which is adopted from the study of Pinto et al. (2005).

We use survey instrument adopted from the Organization for Economic Co-operation and Development Survey Guideline for financial literacy level measurement (OECD 2022). Financial literacy consists of 3 components knowledge, attitude, and behavior. Financial knowledge data was collected with 7 questions on 5-point Likert scale with 5 as strongly agree and 1 as strongly disagree for "overall knowledge about financial matters compared with others" question and the remaining questions on "0" scale as false and "1" scale as true. To measure financial knowledge, the questions are related to time value of money, interest paid on a loan, compound interest rates, risk & return, inflation & diversification.

Financial attitude consisted of 3 questions on 5-point Likert scale with 5 as strongly agree and 1 as strongly disagree. To measure financial attitude, the questions related to money and long-term financial planning attitude. Financial behavior consisted of 9 questions on 5-point Likert scale with 5 as strongly agree and 1 as strongly disagree. To measure financial behavior, the questions related to household budgeting, active savings, timely bill payment, long term financial goal setting and borrowing.

To answer research question 1 (Q1), we calculated the survey result using Likert scale questionnaire and showed it in the graphic data. Statistical methods have been employed to analyze

data obtained from 300 respondents by using SPSS software. Ordinary least square method as linear regression analysis is used to determine the impact of sociodemographic, financial experience and financial social agent variables on the financial literacy level. To answer the research question 2 (Q2), we use the basic specification for the analysis is adopted from the study of Mirzaei M and Bure T 2022, is described as follows:

$$Li = Y_0 + Y_1X_i + Y_2EXPi + Y_3FSA_i + \omega_i \quad (1)$$

Where Li is financial literacy score of respondents i , Y is regression coefficient and ω_i is the error term. Vector of X_i is refer to socio-demographic variables (gender, age, level of education and monthly income). $EXPi$ is the financial experience of respondent i and FSA_i is financial socialization agent of respondent i . Besides, to understand the impact of respondents' financial knowledge on their financial products for research question 3 (Q3), we measure the association their savings behavior and financial knowledge by the following formula based on Mirzaei M and Bure T 2022 study:

$$\text{Logit}(P(Y=1)) = \beta_0 + \beta_1X_1 + \dots + \beta_jX_j + \beta_{j+1}K + \eta \quad (2)$$

Where the binary Y variable for savings is 1 if the respondent is holding stock or bonds or savings and 0 otherwise. $\beta_0, \dots, \beta_{j+1}$ is the real-valued constants; X_j, \dots, X_j is the control variables; K is the financial literacy score for the knowledge domain; η is the error term.

Data and Analysis

In terms of age, gender, education, and monthly income questionnaire, we use a single response scale which its result is on Table 1.

Table 1. Demographic Details of the Respondents.

Demographic	N	%
Gender		
Male	164	55%
Female	136	45%
Education		
≤ High school	121	40%
Diploma	55	18%
Bachelor's degree	122	41%
Master's degree and Doctoral degree	2	1%
Age		

18-27	101	34%
28-37	99	33%
38-55	75	25%
>55	25	8%
Monthly income		
< IDR 5.000.000	145	48%
IDR 5.000.001 - 20.000.000	149	50%
IDR 20.000.001 - 35.000.000	2	1%
> IDR 35.000.000	4	1%

Financial literacy observed by collecting the data of three comprehensive dimensions: financial attitude, knowledge and behavior among the residents in Jabodetabek. Figure 2 shows the percentage distribution of the financial knowledge, attitude, and behavior scores for the 300 adult respondents in Jabodetabek have high levels of financial knowledge, attitude, and behavior.

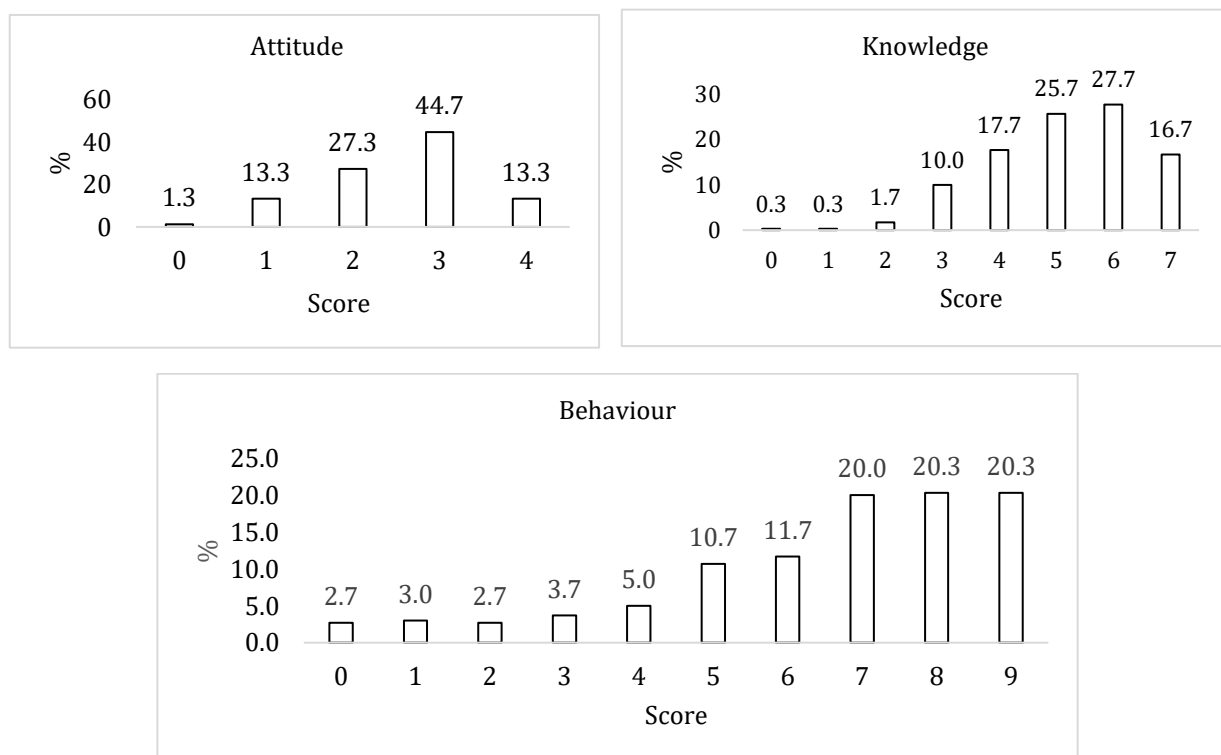


Figure 2. Scores of Financial attitude, behavior and knowledge of 300 Adult in Jabodetabek

4. RESULTS

Table 2 represents the scores' and its components' average values for financial literacy (knowledge, behavior and attitude) in the overall respondent refer to sociodemographic. Different Age and gender doesn't affect financial literacy.

Table 2. Gender and Age

	All	Gender		Age (years old)			
		Male	Female	18-27	28-37	38-55	>55
Financial Literacy	14.2	14.2	14.2	13.9	14.2	14.6	14.2
- Knowledge	5.2	5.2	5.0	5.2	5.1	5.1	5
- Attitude	3	2.5	2.6	2.5	2.5	2.6	2.7
- Behavior	6.5	6.5	6.5	6.2	6.5	6.8	6.6

Table 3. Experience and Education

	Experience		Education			
	No Experience	There is Experience	≤ High school	Diploma	Bachelor's degree	Master & Doctoral degree
Financial Literacy	12.6	14.6	13.4	14.7	14.8	16.5
- Knowledge	4.5	5.3	4.8	5	5.6	7
- Attitude	2.3	2.6	2.4	2.6	2.7	2.5
- Behavior	5.8	6.7	6.2	7.1	6.5	7

From Table 3, Higher education will increase their financial literacy and the financial experience will influence financial literacy.

Table 4. Monthly Income

	Monthly Income (IDR)			
	< 5,000,000	5,000,001 - 20,000,000	20,000,001 – 35,000,000	> 35,000,000
Financial Literacy	13.4	14.9	15.3	16.5
- Knowledge	4.8	5.5	5.6	5.8
- Attitude	2.4	2.6	2.7	3
- Behavior	6.2	6.8	7	7.7

According to Table 4, financial literacy also appears to increase with higher income. Financial literacy is higher among respondents whose monthly income exceeds IDR 5,000,000. Higher income earners are more likely to accurately reply to the financial knowledge questions than lower income respondents.

Financial Socializing Agent

Financial Socializing Agent observed by collecting the data of three comprehensive dimensions: Family, Peers, Media among the residents in Jabodetabek. Table 5 shows the percentage distribution of the 300 adult respondents in Jabodetabek with average levels of financial literacy.

Table 5. Financial Socializing Agent

Financial Socializing Agent	Great deal	Quite great	Above average	Average	Little information	Very little information	No information
Family	4%	12%	7%	37%	22%	12%	5%
Peers							
Friends	3%	13%	12%	35%	19%	13%	6%
Coworkers	6%	13%	9%	34%	21%	10%	7%
Internet	17%	23%	12%	23%	14%	5%	5%
Media							
Talk show	2%	10%	9%	25%	23%	15%	16%
News show	3%	6%	7%	29%	27%	14%	14%
Newspaper	2%	7%	4%	24%	22%	18%	23%

From Table 5, we found that the adult's respondent in Jabodetabek learns financial matters from family 37 % in average, 23% above average and 39% below average. From peers, we found information adult's respondent in Jabodetabek more get information about financial matters from internet better than friends & coworkers. News show is better than talk show and newspaper to give information about financial matters for adult's respondent in Jabodetabek. Respondent gives average for family, peers & media about how to get financial matters. This relates with our literature that FSA like family, peers, school & media are agents that influence financial literacy.

Factors Affecting Financial Literacy in Jabodetabek

In this section, we examine factors affecting financial literacy by regression analysis using ordinary linear regression (OLS) as shown in Table 6. The coefficients using OLS are estimated for overall financial literacy and its components. The dependent variable is the financial literacy scores. The results show that financial experience, financial socializing agent – peers and media have a positive and significant effect on overall financial literacy.

Table 6. Factors affecting financial literacy

	Financial Literacy	Knowledge	Attitude	Behavior
Age	0.196 [0.324]	-0.126 [0.135]	0.072 [0.244]	0.250 [0.107]
Gender	0.025 [0.944]	-0.161 [0.284]	0.139 [0.209]	0.047 [0.864]
Education	0.206 [0.322]	0.275* [0.002]	0.044 [0.493]	-0.113 [0.485]
Monthly income	0.558 [0.087]	0.365* [0.009]	0.079 [0.436]	0.114 [0.654]
Financial experience	1.148* [0.015]	0.348 [0.081]	0.256 [0.080]	0.545 [0.137]
Financial socializing agent				

Family	-0.228 [0.113]	-0.086 [0.157]	0.023 [0.609]	-0.165 [0.141]
Peers				
Friends	0.198 [0.303]	0.066 [0.415]	-0.017 [0.780]	0.148 [0.322]
Coworkers	-0.153 [0.388]	-0.062 [0.410]	-0.077 [0.164]	-0.014 [0.917]
Internet	0.374* [0.007]	0.118* [0.045]	0.035 [0.421]	0.221* [0.041]
Media				
Talkshow	0.335* [0.038]	0.076 [0.265]	0.099* [0.048]	0.160 [0.204]
Newsshow	-0.360 [0.060]	-0.075 [0.357]	-0.025 [0.672]	-0.261 [0.081]
Newspaper	-0.005 [0.972]	-0.039 [0.557]	0.010 [0.841]	0.024 [0.846]
R-squared	0.159	0.170	0.076	0.072
Constant	9.436*	3.771*	1.365*	4.301*
Cronbach's Alpha	0.709			
Note(s): [Significant] in brackets				
*Significant at 5%				

The findings indicate that neither gender nor age significantly affect people's financial literacy. Education has significant impact on financial literacy, it demonstrates a better level of financial knowledge. Financial experience, internet and talkshow has significant effect on financial literacy at 5% α .

Table 7. Reliability statistics

Case Processing Summary			
		N	%
Cases	Valid	300	100.0
	Excluded ^a	0	.0
	Total	300	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.709	17

From Table 7, the reliability of the questionnaire measured from convergent validity with loading factor above 0.70. Reliability measured through the value of composite reliability and Cronbach's alpha above 0.70 (Ghozali, 2014). Testing validity and reliability using SPSS v29.0, the test of reliability shows that there is an indicator of financial literacy that has outer loading more than 0.7.

Impact of Financial Literacy on Savings & Investment Behavior

The relationship between financial literacy, age, gender, education, income, financial experience, financial socialization agent, and the behavior of saving and holding stocks and bonds is examined in this section. The relationship is displayed in Table 8.

Table 8. Financial literacy effect on savings and investment

	Saving	Stock	Bonds
Financial Literacy Score	0.057 [0.184]	0.270* [0.000]	0.071 [0.367]
Age	-0.288* [0.045]	-0.298 [0.059]	-0.326 [0.124]
Gender	0.341 [0.213]	-0.437 [0.139]	-0.559 [0.156]
Education	0.038 [0.810]	0.649* [0.000]	0.912* [0.001]
Income	0.200 [0.427]	0.389 [0.132]	0.501 [0.164]
Financial Experience	1.465* [0.000]	0.534 [0.275]	18.716 [0.997]
Financial Socialization Agent	0.020 [0.243]	0.021 [0.284]	0.045 [0.115]
R-Squared	0.168	0.303	0.264
Constant	-3.482*	-7.161*	-43.033*
Note(s): [Significant] in brackets			
*Significant at 5%			

Table 8 shows the correlations between financial literacy, age, gender, education, income, financial experience, financial socialization agent, and saving behavior, stock and bond ownership. The dependent variables are (1) saving (formal and informal), (2) stocks ownership, and (3) bonds ownership. All dependent variables are binary. The value 1 indicates if an individual has savings, holding stocks or bonds and 0 otherwise. We presume that less financial literacy leads to less knowledge of stocks, bonds, and savings options.

5. DISCUSSION

The average financial literacy score in Jabodetabek is 14,2 on a scale of 20 points. This is rather high compared with Indonesia score in the OECD 2020 group (13.30), it might happen because Jabodetabek is urban city that information, data is easily to access with technology. Urban population uses digital applications for daily needs, such as financial services technology to conduct financial transactions (Pratiwi., et al 2022). According to our findings, the average financial knowledge for the entire sample is 5,2 (maximum 7); the average financial behavior is 6,5 (maximum 9); and the average financial attitude is 3 (max 4).

Level of financial literacy score for men is equal to women, 14.2 respectively. However, score of financial knowledge of man is rather high than women. The group of people with the highest financial literacy is those who are between the ages of 38 - 55. Meanwhile, the younger generation,

those between the ages of 18 - 27, has a lowest level of financial literacy. These results are supported by previous research including Lusardi and Mitchell (2014) on financial literacy on age factors.

Financial literacy also increases in parallel with the increase of education where the group of Master and Doctoral Degree has the highest score of financial literacy while group of High School has the lowest. These results are in line with research from Kadoya and Khan (2020); Amari et al. (2020); Mirzaei and Buer, (2021).

The younger and more educated people perform higher on tests of financial knowledge and literacy. These findings are consistent with studies by Dewanty and Isbanah (2018), Mirzaei and Buer (2021) Financial experience will also impact the financial literacy due to higher their financial knowledge, attitude and behavior.

Higher income earners are more likely to accurately reply to the financial knowledge questions than lower income respondents. Based on statistic analysis, younger and more educated people perform higher on tests of financial knowledge and literacy. These findings are consistent with studies by Dewanty and Isbanah (2018), Mirzaei and Buer (2021).

Most of adults in Jabodetabek learn financial matters from family, friends and new shows. Kadoya and Khan (2020) examined the financial literacy can be influenced by social contact that derived from the social learning theory. Social cycle can improve financial literacy due to the consumption of related knowledge and skills in society from family, peers, and media..

Gender and age doesn't significantly affect people's financial literacy. This results didn't in line with findings from Yoshino et al., (2017), Lusardi and Mitchell (2011), Agarwalet., et al. (2015) that stated age has correlation with financial literacy and Klapper and Lusardi (2020), Saavedra's research (2020), Lin, et al. (2019), (Okamoto & Komamura, 2021) that stated women still demonstrated lower financial than males. Nowadays, male and female in any age has same opportunity to absorb education that enrich their financial knowledge.

However education significantly effects financial literacy. Agnew and Harrison, (2015) supported that the increasing level of education will affect the level of financial literacy and behavior in credit taking, hence the overall financial decision. Agarwal et al., (2015); also found the relationship between education level and tendencies of saving preferences. According to Jamalet al. (2015), students are said to have a more favorable financial attitude when they are more educated.

The effect of level of income is significant, there is a positive effect on financial literacy and its components among the higher income group. The results show that higher earners of adults in Jabodetabek are more likely to enjoy a higher level of financial knowledge. This finding is supported by previous studies from Dewanty and Isbanah, (2018); Agarwalla., et al., (2015). Another support

is the level of financial literacy correlates with income levels according to Alwee and Salleh, (2015). This might be because people with higher incomes have easier access to technologically advanced products.

According to the result, internet (Peers) and talk shows (Media) have significant relationship to the level of financial literacy level for adult's respondent in Jabodetabek compared to family. Past studies conducted and explored financial literacy and its determinants that affect the level of financial literacy (Bharucha, 2019; Bianchi, 2018; Calcagno & Monticone, 2015; Lusardi et al., 2010; Lyons et al., 2019). This study found a positive relationship between financial social agents and financial literacy. Other researchers found that peers have positive and significant impact on making financial decisions (Duflo & Saez, 2003; Isomidinova et al., 2017; Sohn et al., 2012) and social media also one of the elements which greatly influences the financial behavior on financial literacy (Ameliawati & Setiyani, 2018).

Furthermore, the respondents' financial experiences have a significant and positive impact on financial literacy and its components. It is conceivable that people's exposure to sophisticated financial products, like stocks, may offer some training in financial knowledge. It is conceivable that people could improve their financial decisions as a result of learning from their past financial experiences. The findings are consistent with studies by Frijns, et al., (2014) and Grohmann (2018). This study confirms the influence of various demographic and environmental factors on financial literacy. We discovered that, when taking into account various demographic factors, the level of education and income have a significant impact on financial literacy in Jabodetabek. Meanwhile, age and gender do not significantly affect financial literacy.

Financial literacy level has positive correlation with age, education and financial experience and significant effect for ownership of stocks, saving and bond. However gender, income and financial socialization agent are negative significant effect for ownership of stock, saving and bonds. It also shows that financial literacy, education and experience has positive significance effect to own risk asset like stock and portfolio diversification. This is consistent with the literature for savings behavior (e.g. Hilgert et al., 2003; Agrawal et al., 2015; Idris et al., 2016), stock and bond investment (e.g., Van Rooij et al., 2011; Agrawal et al., 2015; Amari et al., 2020; Bianchi, 2018).

6. CONCLUSION, LIMITATIONS, AND SUGGESTIONS

Conclusion

Based on outcome of this research, we investigate the level and factors that influence financial literacy among adults in Jabodetabek, considering three factors: financial knowledge, attitude, and behavior. We have resulted that level of financial literacy among adults in Jabodetabek is rather higher than the average OECD Indonesia's scores. Our finding gives that gender, age, and family socializing agents are not significant to determine financial literacy for adults in Jabodetabek. Meanwhile, income, financial experience, level of education, peers' and media socializing agent are significant to determine financial literacy in Jabodetabek.

With regards to saving and investment behavior, our findings indicate that individuals with higher financial literacy scores are more likely to save and hold stocks and bonds. Education and experience are positive and significant for ownership of stocks, saving and bond while gender, income and financial socialization agent are negative significant for ownership of stock, saving and bonds. In the long term, adults in Jabodetabek will benefit from efforts to increase financial literacy because higher levels of financial literacy are associated with higher levels of education. The government must be aware that Indonesia's demographic conditions will improve when people get a good level of education. Financial literacy can make a positive contribution to Indonesia's GDP, so one way is to increase the level of education. More than 50% of Jabodetabek residents still have a maximum education of high school. Studies from Shusha (2017) highlight the significance of financial education for closing the gender gap and motivating female investors to be informed to avoid financial disputes. Additionally, financial literacy had a positive effect on intentions to manage the individual budget and becoming more knowledgeable about financial matters aids in making wise financial decisions, Amari and others (2020). Hence, the recommendation is financial education immediately enter the formal environment that people are familiar with financial literacy from early age.

From financial socializing agent factors, Peers and Media have significance relationship to level of financial literacy. We recommend that adults be aware of the information that comes from the internet and news programs. Because the decision can be failed if we cannot filter the right and wrong information from the internet, news programs. Preferably, financial education from the family must be improved and instilled early on because a strong foundation for education including financial education comes from the family.

Limitation and suggestions

This study has some limitations, it was conducted through an online survey. Performing the questionnaires face-to-face would be better because respondents can answer more precisely, especially if there is something that needs to be explained regarding the questions in the questionnaire. Then, this study only considered age, educational background, gender, FSA, experience and income as factors affecting the level of financial literacy, and actually, many other factors may also be affected by the level of financial literacy, for example: marital status. Hence, it is hoped that future research can add other factors into the research model.

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