Demographic, Financial Literacy, and Financial Behavior of Women Working in Manufacturing Industry

Anastasia Anggarkusuma Arofah*, Destin Alfianika Maharani

DOI: 10.15294/eeaj.v10i3.46907

Department of Accounting, Faculty of Economics and Business, Universitas Perwira Purbalingga, Purbalingga, Indonesia

Abstract

The purpose of this study is to determine the effect of demographic factors and financial literacy on financial behavior of women working in manufacturing industry. Women are the targets of financial literacy due to their involvement in fulfilling the household needs and welfare. This research is quantitative research. Using the questionnaire on 115 respondents in this study from various manufacturing industries in Purbalingga with probability sampling as the technique. While the data analysis technique used Structural Equation Modelling (SEM) PLS 3.0. The findings show that, first, demographic factors contribute positively and significantly towards female workers’ financial behavior with original sample value 0.224 and t-value 2.420 > 1.96; second, financial literacy also contributes positively and significantly towards financial behavior with original sample value 0.256 and t-value 3.251 > 1.96. The higher the demographic factors of female workers, the better their financial management are. Likewise, students with low financial literacy tend to be able to hold back their urges to buy things and use services. Moreover, the significance of financial literacy and demographic factors has important implications for the development of policies that aim to improve financial behaviour among women working in financial education programs.

How to Cite

Arofah, Anastasia Anggarkusuma & Maharani, Destin Alfianika. (2021). Demographic, Financial Literacy, and Financial Behavior of Women Working in Manufacturing Industry. *Economic Education Analysis Journal*, 10 (3), 381-393.

© 2021 Universitas Negeri Semarang
INTRODUCTION

In facing the dynamic of Indonesian economic condition, the contribution of the people is needed for the economic development, including the financial sector. The contribution covers the use of formal financial service to achieve public welfare and stimulate the economic growth further. However, economic growth must be supported by the appropriate financial behavior of the people in the first place. Well literate people are easy to understand the variety of financial services which eventually allow them to use financial products and services optimally, increase their welfare, and prevent them from financial loss due to certain criminal acts. Financial behavior as studying how humans actually behave in a behavior finance (financial arrangements). In particular, learn how psychology influence financial decisions, companies and financial markets. Second clearly explained that the behavior of the financial concept is an approach that describes how humans investing in or dealing with finances is affected by psychological factors (Nofsinger, 2001).

Financial behavior plays an important role for every individual, for it relates to their ability in accomplishing their established objectives. Financial behavior can improve responsibility in financial management which eventually can increase their welfare and prevent potential crisis in the future (Sabri 2014: 40). Besides, financial behavior helps them project certain information and act over it which are important in decision making and optimizing investment (Sumtoro & Anastasia, 2015). A person who wants to learn financial behavior must have an understanding of the psychological, sociological, and financial aspects. The emergence of financial behavior is actually an impact of individual’s urge to meet their daily needs in accordance with the level of their income.

The financial behavior of the Indonesian people is still low as shown on the amount of savings and household debt in the bank. Survei Neraca Rumah Tangga (Household Balance Survey), or SNRT, of Bank Indonesia 2019 shows that, in 2018, there were 53.25% of total households in Indonesia have saving account in bank, 29.89% of them have debt in bank. The survey also tells that most of the Indonesian household debts came from non-bank financial institutions, like from credit unions and micro financial institutions, as well as from non-financial institutions, like from arisan (social gathering with kind of lottery system), relatives, neighbors, friends, loan sharks, and many others.

Women are the targets of financial literacy due to their involvement in fulfilling the household needs and welfare. Nowadays, Indonesian women are no more dependent in making money, they also contribute in making one and even in developing the national economy. However, their financial independence is not yet supported with good financial management ability. Survei Nasional Literasi dan Inklusi Keuangan 2019 (National Survey of Financial Literacy and Inclusion), or SNLIK, of Otoritas Jasa Keuangan (Financial Services Authority) shows that women’s financial literacy was lower that men’s, only 36.13%. Therefore, it is important for every woman to empower and be equal to men in economic field, specifically in getting access to some training or literacy in terms of financial management.

Based on ANZ (2015), women relatively got lower score compared to the men in several measurements, including financial attitude, knowledge, and behavior; since women are more likely to get stressed in facing the responsibility over the family financial matter and managing the household at the same time. In line with study of Baker (2019), regarding gender, males are more overconfident than are females about their knowledge of the stock market. Working women who also have responsibility in managing the household of course having more complexities in making financial decision. Besides working to provide family financial support, they also have to manage their own money in daily basis. This is in line with OJK’s preference survey which
states that more than a half (51.1%) of family financial manager is the wife, and the 48.4% respondents.

Women’s independence in fulfilling household needs can be identified by the number of women working in different industries in many cities. One of the cities is Purbalingga. This city is popular with its manufactures producing wig which becomes world number two after those produced in Guangzhou, China. According to the data shown by the regent of Purbalingga, there are 95% female workers from the total of 60.000 workers working in the industry of wigs and false eyelashes. This plays an important role on the financial behavior in Purbalingga. (Dinas Sosial, Tenaga Kerja, dan Trasnmiigrasi Kota Purbalingga, 2020).

Financial literacy is a series of process or activity to improve ones’ knowledge, belief, and skill for better financial management in order to achieve the welfare (OJK, 2017). Good financial management skill cannot be achieved without financial education which covers knowledge, skill, attitude, behavior, and trust on financial institutions (Setiono & Cecep, 2018:8). Financial literacy is beneficial for everyone regardless their economic level and demographic factors. By being financially literate, ones can manage their money more wisely, reduce the financial risk, and positively contribute to the financial welfare (ANZ, 2015).

Financial literacy significantly influences financial behavior (Sabri, 2014; Hagerdorn et al., 2012; Te’eni Harari, 2016). Financial literacy is closely related to financial management so that the more people have financial literacy, the better the financial management is. Otherwise, those who have poor financial literacy shall face financial problems (Lusardi & Mitchell, 2014). Financial literacy is beneficial for everyone regardless his/her age, income, or other demographic factors. This means that by having good financial literacy, one will be able to make us of money wisely as he/she can manage it with low risk so that it positively impacts financial welfare (ANZ, 2015).

Another factor that influence financial behavior is demographic factors. Demography is a field that studies someone’s characteristics, attitude, behavior, and income. From someone’s demographic condition, the financial status can be determined. Demography is also defined as a discipline which focuses on status, size, structure, and behavior of people in a certain area (Baker et al., 2019). The previous studies show that financial behavior is influenced by age as one of demographic factors (Salleh, 2015), (Margaretha & Pambudhi, 2015), education level and income (Agarwal et al., 2015), marital status and job status (Salleh, 2015). This study also involves age, marital status, and income as demographic factors. However, it is different from the results of research from Rahmayanti (2017) which states that demographic factors have no significant effect on financial behavior.

Based on the description above and the existence of gab research, the researchers are encouraged to do deeper research. This study is specifically different from the previous studies since its involves SEM (Structural Equation Modelling) technique which clearly illustrates the relation among each indicators of variables while previous studies make use of multiple linear regression and analysis of variance where the factor variables are used as control variables in conducting the studies and synthesizing the findings. This study aims to identify the influence of demographic factors and financial literacy towards financial literacy of women working in manufacturing company in Purbalingga.

**METHODS**

This study is an explanatory quantitative with survey cross sectional approach, which mainly used questionnaire. The aim of this study is to describe and interpret the objects as they are as well as to prove the effects of demographic factors and financial literacy towards female workers’ financial behavior. The population of this research covered the entire female workers of all manufacturing in-
dustries in Purbalingga with 115 respondents as the samples obtained through probability sampling. Probability sampling gave the same opportunity for all the population to be chosen as the samples. The data collection technique used is a questionnaire which is a written statement or question addressed to respondents to be answered as an instrument for data collection by the researcher.

There were three variables in this research, two independent variables and one dependent variable. The independent variables covered demographic factors and financial literacy, while dependent variable covered financial behavior. Demography, as a study of the characteristics, attitude, behavior, and income of certain people; is measured using three categories: age, marital status, and income. Financial literacy is defined as ones’ knowledge and understanding towards financial matters in order to make them wiser in managing money. This variable is measured by using nine statements adapted from OECD (2013b). The statements are the respondents’ responses towards basic personal finance, money management, saving, and investment. Meanwhile, financial behavior is the way ones manage their private financial matters, in this case is in managing their own pocket money given by the parents. This variable is measured by using six statements adopted from Dew & Xiao’s research (2011). The statements are the respondents’ responses towards financial planning, financial management, and financial control.

The research model was designed as in Figure 1. Based on the description and framework in Figure 1 that has been described, the researcher formulates the research hypothesis as follows:

H1: There is influence of demographics on financial behavior
H2: There is influence of financial literacy to financial behavior

This research used questionnaire as the instrument to measure demoraphics, financial literacy, and financial behavior. The researcher used Likert Scale from 1 to 4 (1 for strongly disagree, 2 for disagree, 3 for agree, and 4 for strongly agree). The questionnaire was developed from several previous studies (Nababan Sadalia, 2012; Margaretha & Pambudhi, 2015). The instrument was developed based on the variables, since there was no such exact instrument previously. Data analysis techniques used in this research involved descriptive analysis and Structural Equation Modeling (SEM) analysis, supported with the use of SmartPLS 3.0 software. The steps in using SEM PLS (Partial Least Square) were as follows: (a) designing structural/inner model, (b) designing measurement/outer model, (c) constructing path model, (d) converting the path model into equation, (e) estimating parameter, (f) evaluating goodness of fit criteria, and (g) testing the hypothesis.

Figure 1. Research Model
Source: Primary data processed, 2021
This research, convergent validity which is related to the measurement is Loading Factor (LF) value with Loading Factor > 0.7. The result of the questionnaire can be explained in Table 2. This showed that all of the instruments were valid since the Loading Factor value was known from the data tabulation. Reliability test can be seen from the alpha value and the composite score of Cronbach Alpha (CR) or known as DillonGoldstein's. In order to measure reliability, Cronbach Alpha value > 0.7 for confirmation research and Cronbach Alpha 0.6 – 0.7 for explanatory research, so that it can be said reliable. Then, the average variance extracted (AVE) value is more than 0.5 (Haryono, 2017). In order to examine the reliability construct, convergent validity can be used based on the reliability result of every variable. Table 1 shows that Cronbach Alpha value is > 0.7, and AVE > 0.5. Therefore, the result showed that all of the reserach variables were reliable and could be used as the instruments of the study. Validity and reliability showed that the instruments had the quality for research.

RESULTS AND DISCUSSION

The measurement of the respondents is the result of the tabulation of research questionnaire as shown in Table 1. Table 1 covers the measurement towards the respondents’ demography, financial literacy, and financial behavior. There are 67 respondents, 44.67%, with high financial literacy. This implies that they have high perception towards financial literacy. There are also 52 respondents, 38.00 %, with high demographic tendency. This shows that the respondents have high perception towards financial behavior. Meanwhile, there are 51 respondents, 34.00%, with high financial behavior tendency. This shows that they have high perception towards financial behavior.

Designing Structural Model (Inner Model)

and Measurement Model (Outer Model)

The first thing to do is to determine the direction of causality between variables based on the existing theory. In this study, the structural model and measurement model analyzed the reflective model with several indicators of two exogenous variables, financial literacy and demographics. The endogenous variables that meet the reflective model to be analyzed are financial behavior.

Constructing Path Model

Based on the conceptual framework of research that is built on the basis of theories and concepts, it can be described a research path diagram as shown in Figure 2.

| Table 1. The Distribution of Financial Literacy Score Trends |
|-------------------------------------------------------------|
| **No** | **Interval** | **Category** | **Demographics** | **Frequency** | **%** | **Financial Literacy** | **Frequency** | **%** | **Financial Behavior** | **Frequency** | **%** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 – 17 | Very low | 12 | 8.00 | 17 | 11.33 | 10 | 16.67 |
| 2 | 18 – 22 | Low | 14 | 30.00 | 12 | 28.00 | 28 | 32.00 |
| 3 | 23 – 27 | High | 67 | 44.67 | 52 | 38.00 | 51 | 34.00 |
| 4 | 28 – 36 | Very high | 26 | 17.33 | 34 | 22.67 | 26 | 17.33 |
| **Sum** | | | 115 | 100 | 115 | 100 | 115 | 100 |

Source: Primary data processed, 2021
**Estimating Parameter**

The equation of the measurement model in this study is as follows:

1. **Demographic Factors**
   - \( X_{11} = \lambda_{11}.DG + \delta_1 \)
   - \( X_{12} = \lambda_{12}.DG + \delta_2 \)
   - \( X_{13} = \lambda_{13}.DG + \delta_3 \)

2. **Financial Literacy**
   - \( X_{21} = \lambda_{21}.LK + \delta_1 \)
   - \( X_{22} = \lambda_{22}.LK + \delta_2 \)
   - \( X_{23} = \lambda_{23}.LK + \delta_3 \)

3. **Financial Behavior**
   - \( Y_1 = \lambda_{1}.PK + \delta_1 \)
   - \( Y_2 = \lambda_{1}.PK + \delta_2 \)
   - \( Y_3 = \lambda_{1}.PK + \delta_3 \)

**Evaluating Goodness Of Fit Criteria**

*Measurement Model Evaluation*

All of the variables have reflexive indicators which then are validated by using discriminant validity value. Meanwhile, in order to test the reliability of each variable, convergent validity can be used with communality, Cronbach Alpha, and AVE value which then are compared to the AVE root with construction-correlation.

**Table 2. Instrument Reliability Test**

| Latent Variables              | Cronbach’s Alpha | Status         |
|-------------------------------|------------------|----------------|
| Demographics                  | 0.800            | Reliable Item  |
| Financial Literacy            | 0.823            | Reliable Item  |
| Financial Behavior            | 0.802            | Reliable Item  |
| Age                           | 0.910            | Reliable Item  |
| Marital Status                | 0.924            | Reliable Item  |
| Income                        | 0.879            | Reliable Item  |
| Basic Personal Finance        | 0.815            | Reliable Item  |
| Money Management              | 0.918            | Reliable Item  |
| Saving and Investment         | 0.827            | Reliable Item  |
| Financial Planning            | 0.819            | Reliable Item  |
| Financial Management          | 0.926            | Reliable Item  |
| Financial Control             | 0.903            | Reliable Item  |

Source: Primary data processed, 2021
Table 2 shows that all of the variables have good Cronbach Alpha values. Critical alpha value for reliability test is 0.600. Because Cronbach Alpha value is greater than 0.600 and AVE > 0.5, it can be concluded that all of the variable measuring statements of this study are reliable. Table 4 latent variable correlation can be explained that AVE root value is for the whole construct, demographics (DG), financial literacy (LK), financial behavior (PK), age (X11), (marital status) X12, income (X13), basic personal finance (X21), money management (X22), saving investment (X23), financial planning (Y11), financial management (Y12), financial control (Y13) more than other construct coefficient correlated value. It showed that the requirements of discriminant validity have been completely fulfilled.

Construct Validity Test

Questionnaire is said to be valid if Loading Factor value is greater than 0.7 (Haryono, 2017). Parameter of the convergent validity test in the model measurement by using reflexive indicators, so that Loading Factor

### Table 3. AVE and Communality Value

| Constructs            | AVE  | Communality |
|-----------------------|------|-------------|
| Demographics          | 0.595| 0.595       |
| Financial Literacy    | 0.609| 0.609       |
| Financial Behavior    | 0.654| 0.654       |
| Age                   | 0.744| 0.744       |
| Marital Status        | 0.636| 0.636       |
| Income                | 0.654| 0.654       |
| Basic Personal Finance| 0.765| 0.765       |
| Money Management      | 0.847| 0.847       |
| Saving and Investment | 0.760| 0.760       |
| Financial Planning    | 0.597| 0.597       |
| Financial Management  | 0.744| 0.744       |
| Financial Control     | 0.598| 0.598       |

Source: Primary data processed, 2021

### Table 4. Latent Variables Correlation

| Code | DG     | LK     | PK     | X11    | X12    | X13    | X21    | X22    | X23    | Y11    | Y12    | Y13    |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| DG   | 1.000  |        |        |        |        |        |        |        |        |        |        |        |
| LK   | 0.587  | 1.000  |        |        |        |        |        |        |        |        |        |        |
| PK   | 0.660  | 0.719  | 1.000  |        |        |        |        |        |        |        |        |        |
| X11  | 0.598  | 0.441  | 0.681  | 1.000  |        |        |        |        |        |        |        |        |
| X12  | 0.583  | 0.408  | 0.555  | 0.749  | 1.000  |        |        |        |        |        |        |        |
| X13  | 0.424  | 0.717  | 0.515  | 0.751  | 0.528  | 1.000  |        |        |        |        |        |        |
| X21  | 0.657  | 0.597  | 0.516  | 0.645  | 0.871  | 0.627  | 1.000  |        |        |        |        |        |
| X22  | 0.608  | 0.672  | 0.720  | 0.621  | 0.543  | 0.836  | 0.627  | 1.000  |        |        |        |        |
| X23  | 0.791  | 0.450  | 0.654  | 0.471  | 0.610  | 0.624  | 0.621  | 0.751  | 1.000  |        |        |        |
| Y12  | 0.632  | 0.610  | 0.629  | 0.580  | 0.516  | 0.639  | 0.530  | 0.661  | 0.575  | 1.000  |        |        |
| Y22  | 0.572  | 0.549  | 0.598  | 0.510  | 0.496  | 0.566  | 0.620  | 0.654  | 0.581  | 0.532  | 1.000  |        |
| Y23  | 0.526  | 0.652  | 0.691  | 0.485  | 0.660  | 0.416  | 0.716  | 0.618  | 0.671  | 0.692  | 0.685  |        |

Source: Primary data processed, 2021
Table 5. Outer Loading Value

| Variables                        | Dimensions                  | Code | Loading Factor | Status |
|----------------------------------|-----------------------------|------|----------------|--------|
| Demographics (DG)                | Age (0.639)                 | DG1  | 0.718          | Valid  |
|                                  | Marital Status (0.705)      | DG2  | 0.784          | Valid  |
|                                  | Income (0.651)              | DG3  | 0.821          | Valid  |
| Basic personal finance (0.621)  | LK1                         | 0.725| Valid          |
|                                  | LK2                         | 0.826| Valid          |
|                                  | LK3                         | 0.830| Valid          |
| Money management (0.599)         | LK4                         | 0.848| Valid          |
| Financial Literacy (LK)          | LK5                         | 0.708| Valid          |
|                                  | LK6                         | 0.877| Valid          |
| Saving investment (0.674)        | LK7                         | 0.891| Valid          |
|                                  | LK8                         | 0.825| Valid          |
|                                  | LK9                         | 0.765| Valid          |
| Financial Behavior (PK)          | Financial Planning (0.714)  | PK1  | 0.765          | Valid  |
|                                  | Financial Management (0.681)| PK2  | 0.773          | Valid  |
|                                  | Financial Control (0.667)   | PK3  | 0.712          | Valid  |
|                                  | PK4                         | 0.852| Valid          |
|                                  | PK5                         | 0.803| Valid          |
|                                  | PK6                         | 0.708| Valid          |

Source: Primary data processed, 2021

A loading factor value > 0.7, can be used (Haryono, 2017). Based on the Table 5, all of the questionnaires are valid, since all of the items show Loading Factor > 0.5.

Figure 3. Path Coefficients
Source: Primary data processed, 2021
Structural Model Evaluation

The structural model evaluation is analyzed by finding the significance among the constructs shown by the t-statistic value. T statistic value and p-value are showed by output path coefficients by using SmartPLS 3.0. Then, based on the test, the hypothesis test can be conducted. The significance among the constructs can be seen on Figure 3.

Table 6 shows path coefficients table. Path coefficients is used to test the hypothesis that can be seen from the t-statistic and probability values. Hypothesis testing using statistic value alpha 5%, t-statistic value is 1.96. Furthermore, to determine the effect of demographic factors and financial literacy on financial behavior, SmartPLS 3.0 software was used to analyze the data. Table 2 can be used to show the effects among variables through beta coefficient value (original sample) and the level of significance through t-statistic (t-value). Significant value used is 1.96 with significant level 5%.

Table 6. Path Coefficients

|                | Original Sample (O) | Simple Mean (M) | Standard Error (STERR) | T-Statistics (O/STERR) | P-value |
|----------------|---------------------|-----------------|------------------------|------------------------|---------|
| Demographics->Behavior | 0.224               | 0.234           | 0.165                  | 2.420                  | 0.024   |
| Demographics->Literacy | 0.218               | 0.327           | 0.110                  | 2.757                  | 0.003   |
| Demographics->X11 | 0.025               | 0.076           | -0.008                 | 1.880                  | 0.000   |
| Demographics->X12 | 0.245               | 0.298           | 0.087                  | 2.450                  | 0.000   |
| Demographics->X13 | 0.156               | 0.156           | 0.035                  | 1.998                  | 0.007   |
| Literacy->Behavior | 0.256               | 0.273           | 0.079                  | 3.251                  | 0.001   |
| Behavior->Y1 | 0.564               | 0.534           | 0.040                  | 8.589                  | 0.000   |
| Behavior->Y2 | 0.431               | 0.449           | 0.047                  | 6.987                  | 0.001   |
| Behavior->Y3 | 0.767               | 0.769           | 0.084                  | 3.870                  | 0.004   |
| Literacy->Demography | 0.497               | 0.542           | 0.100                  | 5.124                  | 0.000   |
| Literacy->X21 | 0.218               | 0.212           | 0.030                  | 1.409                  | 0.000   |
| Literacy->X22 | 0.087               | 0.110           | 0.072                  | 3.209                  | 0.007   |
| Literacy->X23 | 0.376               | 0.367           | 0.087                  | 2.192                  | 0.001   |

Source: Primary data processed, 2021

Table 7. Total Effects

|                | Original Sample (O) | Simple Mean (M) | Standard Error (STERR) | T-Statistics (O/STERR) | P-value |
|----------------|---------------------|-----------------|------------------------|------------------------|---------|
| Demographics->Behavior | 0.224               | 0.234           | 0.165                  | 2.420                  | 0.024   |
| Demographics->Literacy | 0.218               | 0.327           | 0.110                  | 2.757                  | 0.003   |
| Literacy->Behavior | 0.256               | 0.273           | 0.079                  | 3.251                  | 0.001   |
| Literacy->Demographics | 0.497               | 0.542           | 0.100                  | 5.124                  | 0.000   |

Source: Primary data processed, 2021
Testing The Hypothesis

Hypothesis 1 that there is a significant influence of demographic factors towards financial behavior. The result of hypothesis testing shows that the path value of the original sample between demographic and financial literacy is 0.224 and the t-value is 2.420 > 1.96. This indicates that demographic factors positively and significantly influence financial behavior. The hypothesis is accepted. Hypothesis 2 justifies that there is significant influence of financial literacy towards financial behavior. The analysis shows that the path between financial literacy and financial behavior has original sample value 0.256 and t-value 3.251 > 1.96. This denotes that financial literacy has positive and significant influence towards financial behavior. The hypothesis is accepted.

The influence of demographic factors towards financial behavior

Based on the analysis result, demographic factors positively and significantly influence financial behavior. The value of original sample which is 0.256 signals that when the demographic factor is high, the financial behavior is high either. The t-value 3.251 is higher than 1.96 so that the demographic of female workers significantly influences financial behavior. The first point shows that age becomes one of several factors that influences financial behavior. The older the female workers are, the wiser they manage their finance. Age factor greatly affects their decision making, for example on how they appropriately choose financial products and services. The more mature a person is, the wiser they will be in making decisions, since they are more careful and they do not want to overspend something. This is in line with Ariandi (2015) who states that the more mature a person is, the more rational their behavior and thinking will be in deciding something. Similarly, The Australia and New Zealand Banking Group Limited in ANZ (2015) states that factors affecting someone’s financial behavior are age, financial knowledge, financial attitude, household income, education, and occupation.

The second demographic factor is marital status. Those who are already married or ever been married manage their finance better with the help of their prior experiences. The respondents of this study are dominated by carrier women, 50.5% or 111 respondents, with 40% of the respondents are married. The findings show that majority of the respondents do financial decision in daily basis, both for the married and the single; and they discuss the financial problem with the other family members; hence, they can get appropriate financial decision.

Meanwhile, someone, who is single, is less wealthy so that they will develop their financial literacy him/herself. They become more independent and have good financial literacy. However, married career women have complex decision making as they communicate more with their family about any decision related to their finance. This shows that married people have a good financial literacy (Setiono & Cecep, 2018). Therefore, marital status does not influence female workers’ financial behavior.

The third point states that income influences financial behavior. Income is one indicator to measure the welfare of a person or society, so that the income of this society reflects the economic progress of a society (Luminatang, 2013). Those who have higher income have better financial literacy and behavior. Female workers who have higher income even tend to have high level of financial behavior. The higher someone’s income is, the more likely they try to find information and understanding on how to spend their money wiser. It happens because higher incomes means higher responsibility. Furthermore, this study is in line with Yusnita and Abdi’s (2018), since variable which affects someone’s financial literacy is the level of income. Based on the findings, it is shown that the demographic factors of female workers working in manufacturing industry create optimal impacts on their financial behavior. In line with the previous studies (Vincentius & Linawati, 2014;
Salleh, 2015), the research findings show positive and significant influences between demographic factors and financial behavior.

The influence of financial literacy towards financial behavior

Based on the analysis, financial literacy positively and significantly influences financial behavior. Positive predictive value (original sample 0.256) shows that if the financial literacy of female workers is high, their financial behavior will also be high. The significance parameter value is high, 3.251 (t-value 3.251 > 1.96), which means that female workers’ financial literacy significantly affects their financial behavior, since the female workers have better financial management after they got financial literacy about basic personal finance, money management, and saving investment. Basic personal finance educates them to consider the benefits of goods and services as well as knowledge to determine the priority scale of needs. Money management educates them about budget planning. Meanwhile, saving investment educates them about saving and investment for their own future as well as for the unexpected.

The findings show that the female workers’ financial literacy optimally affects their financial behavior. On the other words, the findings of this study show positive and significant effects between financial literacy and behavior, as the other studies also suggest (Sabri, 2014; Morgan & Long, 2019; Jazuli & Setiyani, 2021; Bhushan & Medury, 2013). Another related research is from Chinen, Kenichiro & Endo (2012). This study shows that good financial literacy affects positively towards one’s financial behavior. Individual with good financial decision making ability, more likely will have less financial problems in the future, a healthy financial behavior, and accurate priority scale – needs over wants. Similarly, Te’eni Harari (2016) also concludes that financial literacy can be used to predict financial behavior.

The indicators of financial literacy in general, such as an understanding of the steps in personal financial behavior and the benefits managed by financial managers, are important in financial behavior. Financial literacy can be defined as a financial knowledge to behave effectively towards financial matters whether for individual, familial, or communal purposes. The result of this study is in line with the theory of planned behavior from Ajzen (2005) who states that one’s schemata affects their belief towards something which eventually affects their own behavior.

Financial literacy can be obtained through financial education. Financial education implemented in family and school can greatly affect the children (Sabri, 2014; Carlin Robinson, 2012). From the findings, it can be concluded that in order to improve one’s financial behavior is by providing good financial education, whether in family or in school. First, the families socialize about finance, the first time their children get good financial literacy. Furthermore, education is the role of education by providing knowledge and understanding of financial science so that it can increase the level of financial literacy that is owned. In addition to family, friends also affect the level of student financial literacy, friends who often discuss finances will make someone understand more about finances. The improvement of financial education in school can be done by improving the teaching and learning itself from the improvement of the material, the methods, as well as socialization and seminar about financial management.

CONCLUSION

Based on the findings, there are some conclusions that can be driven. First, demographic factors of the female workers contribute positively and significantly towards their financial behavior, since the original sample value is 0.224 and t-value is 2.420 > 1.96. Second, financial literacy contributes positively and significantly towards financial behavior with original sample value 0.256 and t-value 3.251 > 1.96. Female workers with high demographic level have better financial manage-
ment. Likewise, students with low financial literacy tend to hold up their desire in spending money.

Based on the findings, there are some suggestions that can be driven. Financial education of the female workers can be improved through socialization, seminar, or workshop about personal financial management. Through this financial management education, the female workers can get some positive effects in terms of spending, saving, and investing money right. Secondly, government should collaborate with Otoritas Jasa Keuangan to give socialization about financial literacy and widen the scope and range of the socialization and financial education, so more people can be grasped, including the workers, especially the female workers in factories.

For the future researcher, it is suggested that the area of research should be widened more, since this study is still limited in certain areas. It is also suggested that other personal variables can be added, especially those which are related to decision making in investment like locus of control, social environment, education, and lifestyle. The use of interview is also encouraged to obtain more accurate and deeper data as a supporting data for the questionnaire.

AKNOWLEDGMENTS

I should like to thank the Editors of Economic Education Analysis Journal (EEAJ) as well as the following reviewers who have generously given up valuable to review this paper. The success of this paper depends on their care and competence. Their conscientiousness is much appreciated. I also express my appreciation to all respondents who provided data.

REFERENCES

Agarwal, S., Amromin, G., Ben-David, I., Chomsisengphet, S., Evanoff, D. D. (2015). Financial Literacy and Financial Planning Evidence From India. Journal of Housing Economics, 15(6), 1-52.

Ajzen, I. (2005). Attitudes, Personality and behavior. New York: Open University Press.

Ariadi, R. (2015). Analisa Hubungan Financial Literacy Demografi dengan Investasi, Saving, dan Konsumsi. Finesta, Vol. 3 No.1, 7-12.

ANZ. (2015). Survey of Adult Financial Literacy in Australia. Full report of the results form the 2014 ANZ survey.

Baker, H. K., Kumar, S., Goyal, N., & Gaur, V. How Financial Literacy and Demographic Variables Relate to Behavioral Biases. Managerial Finance, 45 (1), 124-146.

Bhushan, P., & Medury, Y. (2013). Financial literacy and its determinants. International Journal of Engineering, Business and Enterprise Applications (IJEBEA), 4(2), 155–160.

Carlin, B.I. & Robinson, D. T. (2012). What Does Financial Literacy Teach Us? Journal of Economic Education, Taylor and Francis Journal, 43(3), 235-247.

Chinen, Kenichiro, & Hideki Endo. (2012). Effect of Attitude an Background on Personal Finance Ability: A Student Survey in the United State. International Journal of Management, 1(29): 33-45.

Dew, J., & Xiao, J. J. (2011). The Financial Management Behavior Scale: Development and validation. Journal of Financial Counseling and Planning, 22(1), 43–59.

Hagedorn, E. A., Schug, M. C., & Suiter, M. (2012). Starting Early : A Collaborative Approach to Financial Literacy in the Chicago Public Schools. Journal of Economics and Finance Education, 11(2), 1–9.

Haryono, S. (2017). Metode SEM untuk Penelitian Manajemen AMOS LISREL PLS. [SEM Method for Management Research AMOS LISREL PLS]. Jakarta Timur: Luxima Metro Media.

Jazuli, A., & Setiyani, S. (2021). Anteseden Financial Management Behavior: Financial Literacy Sebagai Intervening. Economic Education Analysis Journal, 10(1), 163-176.

Lumintang, Fatmawati M. (2013). Rice Farmer Revenue Analysis in Teep Village of Langowan Timur District. Journal EMBA, 1 (3), 991-998. Faculty of Economics and Busi-
ness of Sam Ratulangi University of Manado.

Margaretha, F. & Pambudhi, R. A. (2015). Tingkat Literasi Keuangan pada Mahasiswa S-1 Fakultas Ekonomi. *Jurnal Manajemen dan Kewirausahaan*, 17(1), 76-85.

Morgan, P. J., & Long Q. Trinh. (2019). Determinants and Impacts of Financial Literacy in Cambodia and Viet Nam. *Journal of Risk and Financial Management*, 12 (19), 1-24.

Nababan, D., & Sadalia, I. (2012). *Analisis Personal Financial Literacy dan Financial Behavior Mahasiswa Strata I Fakultas Ekonomi Universitas Sumatera Utara*.

Nofsinger, J. (2001). The Impact of Public Information on Investors. *Journal of Banking and Finance*, 25(7), 1339-1366.

OECD (Organisation for Economic Development and Cooperation). (2013b). *PISA 2012 Assessment and Analytical Framework: Mathematics, Reading, Science, Problem Solving and Financial Literacy*, Paris: OECD Publishing.

Rahmayanti, D. (2017). Pengaruh Karakteristik Demografi terhadap Literasi Keuangan Masyarakat Kota Bengkulu. *Motivasi Jurnal Manajemen dan Bisnis*, 2 (2), 311-331.

Sabri, M. F, & Tze Juen, T. (2014). The Influence of Financial Literacy, Saving Behaviour, and Financial Management on Retirement Confidence Among Women Working in the Malaysian Public Sector. *Asian Social Science*, 10(14), 40-51.

Salleh, Ak Md Hasnol, (2015). A Comparison on Financial Literacy between Welfare Recipients and Non-Welfare Recipients in Brunei. *Emerald*, 42, 5898-613.

Setiono, K. S., & Cecep, S. (2018). *Literasi dan Inklusi Keuangan Indonesia* (1st ed.). Depok: Rajawali Pers.

Sumtoro, A. & Anastasia, N. (2015). Perilaku Keuangan dalam Pengambilan Keputusan Berinvestasi Properti Residensial di Surabaya. *Finesta*, 3(1), 41-45.

Te’eni-Harari, T. (2016). Financial Literacy Among Children: The Role of Involvement in Saving Money. *Young Consumers*, 17(2), 197–208.

Vincentius, A. & Linawati, N. (2014). Hubungan Faktor Demografi dan Pengetahuan Keuangan Dengan Perilaku Keuangan Karyawan di Surabaya. *Finesta*, 2(2).

Raja.,R., Yusnita., Abdi.,M. (2018). Pengaruh Faktor Demografi Terhadap Literasi Keuangan. *Journal of Economic, Business and Accounting*. Vo.2. No.1