Does Financial Perception Mediating the Financial Literacy on Financial Behavior? A Study of Academic Community in Central Java Island, Indonesia

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ABSTRACT

This study aims to investigate the financial knowledge, financial awareness, and financial experiences through financial perception toward financial behavior among academic community in Indonesia. Structural equation modeling (SEM) is used to answer the research purpose. Using probability random sampling this study, take 300 samples as participants among lecturer in Central Java Island, Indonesia. The data are collected by face to face field survey. The samples consist of 59% lecturer in public University and 41% in private University. The proportion of gender is 50% female and 50% male. The majority of the participants were 26-50 years old. This study has proven a significant positive impact of financial knowledge, financial awareness, financial experience and financial perception on financial behavior. Financial behavior was found to be caused by financial perception variables which, in turn, were influenced by knowledge, awareness and experience. People, who has a better understanding in financial concept and have awareness on how they manage financial information and have experience will act in a better way to manage the money financial knowledge possessed by a person can be influenced by financial experience and financial awareness, and ultimately can form a good perception, in turn, actual financial behavior depends on all (knowledge, awareness, experience and perception).

INTRODUCTION

Nowadays the new business models in the financial services has been changes to novel forms be digital finance. The financial services delivered through mobile apps and internet that enable individuals to have access to payments, savings, and credit facilities via online. These changes of
business model of financial service from conventional to moderate, as known “FinTech”. The fastest development of FinTech occurs in developing countries. This is because many people in developing countries do not have access to traditional financial services likely banks. As a country with the largest population in Southeast Asia and the fourth largest in the world, Indonesia is a big market for FinTech. FinTech in Indonesia is reinforced by the increase in the population of middle-class and affluent consumers. The impact of financial product innovation not only a positive effect but also a negative impact on individuals’ well-being and financial behavior. The growth of this industry can be a magnet for fraud and crime because there is less control from regulators. Moreover, the low level of financial literacy in developing countries is a challenge for FinTech to growth. Supervision and monitoring between FinTech and financial literacy from Financial Services Authority or central bank is needed.

The growth of FinTech in developing countries is facing the challenge of low financial literacy, especially the understanding of basic financial concepts that are still limited. Financial literacy has been described in various studies that continue to be studied and developed over time. Financial literacy cannot be measured directly; so, dimensions must be used to measure it. Someone who financially literate can show their competence and ability of financial knowledge obtained through practical experience and active knowledge integration. Financial literacy is not only important for depositors or investors, but also for financial system and economy. Not only does financial literacy have great implications for the welfare of individuals in managing their financial matter, it also influences the behavior of financial institutions and financial stability. The concept of financial literacy has been defined variously. At first, financial literacy was defined as financial knowledge studied by researchers around the world. (Huston, 2010; Hasting et al., 2013; Lusardi and Mitchell, 2011). Financial knowledge was used in making financial decisions about how to manage finance and decide investment. Financial knowledge as human capital is important and needed to make a financial plan and produce good financial behavior.

The conceptualization of financial literacy has been extended along with the development of dynamic financial issues. Furthermore, many researchers have proved, not only knowledge but also other multi-dimension was used to measure financial literacy. Financial awareness, financial experience and financial perception or attitudes are also the antecedent of financial literacy. How can a good perception of finance be formed? Perception can be constructed, not only if individuals have knowledge and awareness of an object, but also experience obtained from personal experience and other people who helped someone has positive or negative financial perception and in the end influences financial behavior.

Based on the literature review, financial knowledge, financial awareness, financial experience and financial behavior have been studied (de Bassa 2013; Robb and Woodyard, 2011; Tokar Assad, 2015). The studies employed various participants including students (Ahsan, 2013; Nidar & Bestari,2012; Robb, 2011), entrepreneurs (Gupta and Kaur, 2014; Oseifuah & Rugimbana, 2010), employees (Agarwalla, 2013; Bhushan & Medury, 2013; Clark et al., 2017), Teachers women (Priyadharshini, 2017; Zaimah et al., 2013). Unfortunately, there is still limited literature discussion the financial literacy and financial behavior of lecturer as academic community. According to a review of previous studies, the purpose of this study is to investigate the effect of financial knowledge, financial awareness and financial experience through financial perception on the financial behavior of lecturers as members of academic community.

The academic community is a society that has the motivation to build a system of scientific thinking that relies on scientific rules to obtain truth. The academic community is considered to have competence in science, skills and behavior. Research on financial literacy has been done in various countries but still limited investigation in academic community. This research will provide a new insight into financial literacy.
1. LITERATURE REVIEW

1.1 Financial Literacy

The concept of financial literacy has been defined variously in many studies. Hilgert et al. (2003) define financial literacy as financial knowledge. Financial literacy is an empirical and theoretical study has been started since 1966 by Bakken, and then studied continuously by researchers around the world. Financial literacy is defined as a unity of knowledge, skills, and attitudes that proved affect financial behavior (Lusardi & Mitchell, 2013; Xiao et al. 2014; Khan et al. 2017). The Presidents Advisory Council on Financial Literacy (PACFL, 2008) defines financial literacy as the ability to use knowledge and skills to effectively manage financial resources to achieve financial well-being for life. Financial literacy refers to the ability to make judgments and make effective decisions regarding the use and management of money.

Increasing financial literacy supports financial inclusion and improves community welfare. From such various definitions, financial literacy can be defined as a process in perceiving financial knowledge, financial awareness and financial experience to be used in financial decision-making through enhanced skills and positive financial managing capability so as to have positive financial behavior to achieve financial goals and freedom.

1.2 Financial Perception and Financial Knowledge

Perception can be formed well if an individual not only has good knowledge and awareness of an object but also comes from the experiences obtained from personal experience and other people who helped shape these perceptions. Robb and Woodyard (2011), Sivaramakrishnan et al. (2017) and Woodyard (2013) stated that financial perceptions are formed objectively and subjectively where objective financial knowledge can be formed through education or learning processes; this can be measured through questions related to interest rates, inflation, diversification of risk, risk of stocks. Meanwhile, the subjective financial knowledge is reflected in financial attitude towards the knowledge they have. Objective knowledge reflects individual knowledge about financial issues and is measured by assessing the level of understanding of various issues of basic financial issues namely compound interest, inflation, deposits, time value of money, diversification and interest rates, debt, assets (Lusardi and Mitchell, 2014; Khan et al., 2017; Woodyard, 2013). Research on Objective Financial knowledge has been carried out Clark et.al (2017); Knoll and Houts (2012); Sivaramakrishnan et al. (2017); Woodyard (2013); Xiao et al. (2014); and Walstad and Rebeck (2010).

Subjective knowledge is an assessment of a person's own knowledge Van Rooij et al., 2011). Subjective financial knowledge can also be defined as a person's interests, beliefs and abilities related to financial problems or financial decision-making (Sivaramakrishnan et al., 2017). Subjective financial knowledge is understood as an assessment of an individual or individual to the level of financial knowledge (Khan et al., 2017). Subjective knowledge is basically reflected through financial attitude. Financial attitude refers to one's beliefs and values related to various concepts of personal finance (Priyadharsini, 2017). These values and beliefs can shape a person's behavior in making decisions namely behavior to control themselves, patience, long-term thinking, and the ability to solve financial problems faced. Financial behavior can also show how a person tolerates a risk (risk tolerance). Several studies from financial organizations and previous researchers in the world namely the Canada Financial Capability Survey (CFCS), the National Financial Capability Survey (NFCS) in the United States, FINRA Investor Education Foundation, used subjective financial knowledge to measure respondents' literacy. Studies of subjective financial knowledge have been carried out by Robb and Woodyard (2011); Woodyard (2013); Sivaramakrishnan et al. (2017), Xiao et al. (2014), and Riitsalu and Murakas (2019).
Subjective financial knowledge measures a person’s financial attitude related to values and beliefs related to various individual financial concepts. Financial attitude focuses on ability to control himself, believing in something that is considered good in finance, for example, believing that it is important to save money, it is important to make financial planning, be patient in facing financial problems and find ways to overcome them, risk tolerance, perceptions of risk and return.

The formation of financial literacy is not only influenced by individual’s financial knowledge, but also influenced by other factors, which are financial awareness and financial experience. Priyadharshini (2017) proves that the formation of good financial knowledge is influenced by financial awareness. Meanwhile, Knoll and Houts (2012) stated that in addition to financial knowledge, financial experiences make individuals financial literacy more well-literate.

1.3 Financial Awareness

Financial awareness is part of financial literacy (Mason and Wilson, 2000). To be financial literate, a person must be financially aware. Financial awareness is measured through the understanding of existing financial terms likely balance sheets, budgeting. Priyadarsini (2017) states that financial awareness is an important factor in financial literacy that forms or exerts influence on financial perceptions which ultimately influence decision-making related to retirement planning, insurance and utilizes available and optimal financial information. This financial awareness can be identified by knowing when someone has a list of items to be purchased when they want to shop, comparing prices before deciding to buy and awareness of the existence of complaints handling and consumer protection mechanisms, awareness of financial issues, awareness of financial risk. Awareness of consumer protection mechanisms is very important for the financial system, because bad experiences experienced by consumers without the assistance of solutions can result in a loss of public confidence in the financial system. In an increasingly global economic development, financial awareness is one of the elements needed to create financial inclusion. Grohmann et al. (2018) argue that high financial literacy can strengthen financial illusions.

Lack of community capacity to search and filter information can cause asymmetric information problems between depositors as principals and financial institutions as agents. The rapid of financial inclusion with the weak regulation and monitoring has a high risk of behavior moral hazard. The trapping of people in investment with the promise of high returns leading to fraud, due to lack of awareness among people in finding out about the company before investing. It is very important to raise the public’s awareness of investment in official financial institutions such as banking, capital markets and non-bank financial institutions that have received formal permission. In addition, it is also important to be aware of the benefits of saving in these financial institutions, namely security and the flow of funds driving the economy. Some previous study already done by Nga et al. (2010); Palmer et al. (2010).

1.4 Financial experience

Financial experience related to ownership of financial products, experience of having financial records, conducting tax reporting, calculating net worth, saving experience on various investment instruments and experience of having an emergency fund. Someone who has a good financial experience also has good financial knowledge (Frijns et al. 2014). Research on financial experience in financial literacy has also been carried out by Dvorak and Hanley (2010).
Figure 1. Conceptual Development of financial Perception Model

Source: Develop from Lusardi and Mitchell, 2010; Van Rooij et al., 2011; Woodyard, 2013.

Figure 1, shows that financial knowledge possessed by a person can be influenced by financial experience and financial awareness, and ultimately can form a good perception of finance. Financial perception can be a stimulus for someone to explore and sharpen one's financial skills such as the skills to make budgeting. Individuals who have good and skilled financial perceptions will improve one's financial skills. Someone who has good financial skills can influence how a person is able to determine his financial goals, which in turn will shape good financial behavior and appropriate decision-making to achieve financial well-being.

Woodyard (2013) proves that objective financial knowledge and subjective financial knowledge can form financial perceptions. Robb and Woodyard (2011) show that both objective and subjective financial knowledge influence financial behavior, with subjective knowledge having a greater relative impact. In addition to financial knowledge which describes the objective and subjective financial knowledge, financial perceptions are formed because the individual has self-awareness to things that are related to economic issues, both at micro and macro level. A person's financial experience is also a factor that shapes financial perceptions. Better financial experience will shape perceptions of financial knowledge that are getting better (Frijns et al. 2014).

1.4 Financial Behavior

Financial Behavior is an individual’s behavior related to finance that can affect the well-being of the individual. Financial behavior is the integration of behavioral and cognitive psychological theory with economic and financial theory in explaining the motives of someone who behaves irrationally in financial decision-making. Previous research proves that there is a correlation between financial behavior and financial knowledge (de Bassa, 2013; Van Rooij et al., 2012). Another study conducted by Lianto and Elizabeth (2017) proved that financial knowledge and financial attitudes had no effect on financial behavior, while Humaira (2018) prove that financial knowledge and financial attitudes have a positive influence on financial behavior. There are four dimensions to measure financial behavior, namely consumption, cash flow management, savings and investment and debt management (Dew and Xiao, 2011).
1.5 Hypothesis

Based on the theories and previous research findings, the conceptual model and hypothesis are formulated in Figure 2 below:

And the hypotheses are:

- $H_1$: Financial knowledge has a positive effect on financial perception
- $H_2$: Financial awareness has a positive effect on financial perception
- $H_3$: Financial experience has a positive effect on financial perception
- $H_4$: Financial perception has a positive effect on financial behavior.

2. RESEARCH METHODOLOGY

The data used in this study are primary data. The data are collected by survey in Central Java, Indonesia. The data from survey will be analyzed using multivariate model (structural equation model) using Lisrel 8.80 package to answer the research objectives.

2.1. The Data

This study comprised 300 participants of lecturer in Central Java, Indonesia. Central Java is one of the province with high level of financial literacy (SNLKI, OJK,2017). Central Java also has some city with large student population and dozens of schools and universities. The sample consist of 59% lecturer in public University and 41% in private University, about 38% respondents as economics and business lecturer and 62 % as non-economics and business lecturer. The proportion of gender is 50% female and 50% male, which categorized in four groups of ages. The majority of the participants were 26-50 years old. Based on the educational background, 76% of the participants hold post graduate master’s degree (S2) and 24% hold Ph.D (S3). Table 1 describes the demographic of respondent.
Table 1. Demographics of respondents

| Demographics                        | Frequency | Percentage |
|-------------------------------------|-----------|------------|
| Category of University:             |           |            |
| - Public                            | 178       | 59%        |
| - Private                           | 122       | 41%        |
| Field of scientific                 |           |            |
| - Economics and Business            | 114       | 38%        |
| - Non-Economics and Business        | 186       | 62%        |
| Gender                              |           |            |
| - Male                              | 150       | 50%        |
| - Female                            | 150       | 50%        |
| Age (years old)                     |           |            |
| - ≤ 25                              | 6         | 2%         |
| - 26 – 35                           | 102       | 34%        |
| - 36 – 50                           | 117       | 39%        |
| - ≥ 51                              | 75        | 25%        |
| Background of Education             |           |            |
| - Master’s                          | 229       | 76%        |
| - Ph.D                              | 71        | 24%        |

Sources: Survey Data

2.2 Questionnaire design

A comprehensive questionnaire was designed to cover the constructs of financial perception, financial knowledge, financial awareness, financial experience and financial behavior. The first construct: financial perceptions' were measured by the participants' responses to four questions of objective financial knowledge (Robb and Woodyard, 2011):

– Time Value of Money: Suppose you get an inheritance of Rp.100 million today, while 3 years later, your brother receives an inheritance of Rp.100 million. Then, you should be richer than your brother.

– Compound Interest: Suppose you have Rp.1 million and save it in savings at an interest rate of 10% per year. If you have not taken the funds for 5 years, then the amount of money you have in the next 5 years is more than IDR 1.5 million

– Diversifications: Saving funds in stocks is more risky than saving in deposits

– Inflation: Suppose you save funds in a financial institution with an interest rate of 9% / year and the inflation rate is 12% / year. So, after 1 year, there are fewer items that can be bought with the fund than today.

The objective financial knowledge was measured by true or false questions. The correct answer will be calculated by mean percentage of correct scores and then be grouped into relatively high level of knowledge to relatively low knowledge (Danes and Hira, 1987; Volpe et al.,1996), where 1 = very low and 5 = very high.

Table 2 shows the construct of subjective of financial knowledge, financial awareness, financial experience, financial perception and financial behavior were measured a five-points likert-scale where 1 is represented strongly disagree, and 5 is represented strongly agree.
Table 2. Instrument of Financial Awareness, Financial Experience, Financial Perception and Financial Behavior

| Indicators of the questions                                      |
|------------------------------------------------------------------|
| **Financial perceptions**                                        |
| 1. Perceived Math ability (FP1)                                  |
| 2. Perceived Risk and return (FP2)                               |
| 3. Perceived of financial matter (FP3)                           |
| **Objective and Subjective Financial Knowledge**                 |
| 1. Level of the objective financial knowledge: Time Value of Money, compound interest, diversification, inflation (FK1) |
| 2. Attitudes towards risk tolerance (FK2)                        |
| 3. Financial records (FK3)                                       |
| **Financial Awareness**                                          |
| 1. Awareness in financial records is like a list before shopping (FA1) |
| 2. Awareness of documenting billing notes (FA2)                  |
| 3. Awareness of financial information is to compare several offers of financial products before deciding (FA3) |
| **Financial Experience**                                         |
| 1. Experience in managing personal assets (FE1)                  |
| 2. Experience investing in the stock market (FE2)                |
| 3. Investment experience in non-bank institutions (FE3)          |
| **Financial Behavior**                                           |
| 1. Pay bills on time (FB1)                                       |
| 2. Investment diversification (FB2)                              |
| 3. Retirement investment (FB3)                                   |

2.3 Construct Validity

Construct validity test used confirmatory Factor Analysis (CFA). Confirmatory factor analysis (CFA) is one of the most rigorous methodological approaches to testing for the validity of factorial structures within the framework of structural equation modeling (SEM) (Byrne, 2001). Construct validity is made up of the rule of thumb: (Hair et al., 2014, p. 605)

- Convergent Validity, it consists of factor loadings with a good rule of thumb is that standardized loading estimates should be 0.5 or higher, and ideally 0.7 or higher.
- Construct Reliability and Average Variance Extracted (AVE). AVE should be 0.5 or greater to suggest adequate convergent validity, Construct reliability should be 0.7 or higher to indicate adequate convergence or internal consistency.

The average variance extracted (AVE) is: (Hair et al., 2014, p. 619)

\[ AVE = \frac{\sum_{i=1}^{n} L_i^2}{n} \]

The Li represents the standardized factor loading, and i is the number of items. Construct Reliability (CR) is: (Hair et al., 2014, p. 619)

\[ CR = \frac{(\sum_{i=1}^{n} L_i)^2}{(\sum_{i=1}^{n} L_i)^2 + (\sum_{i=1}^{n} e_i)^2} \]

The Li represents the factor loadings (Li) for each construct and ei is the sum of the error variance terms for a construct.
2.4 Confirmatory Factor Analysis, Construct Reliability and Average Variance Extracted

The Convergent Validity, shows that all indicator of latent variable: financial knowledge, financial awareness, financial experience and financial behavior have standardized loading estimates equal to 0.5 or higher. The result shows in table 3, below.

Table 3. CFA-Loading Factor for each latent variable.

| Variable                                      | Indicators                                      | T-Value | Loading Factor | Result |
|-----------------------------------------------|-------------------------------------------------|---------|----------------|--------|
| Financial perceptions                         | Perceived Math ability (FP1)                    | 14.46   | 0.78           | Valid  |
|                                               | Perceived of Risk and return (FP2)              | 15.22   | 0.81           | Valid  |
|                                               | Perceived of financial matter (FP3)             | 14.33   | 0.77           | Valid  |
| Objective and Subjective Financial Knowledge  | Level of the objective financial knowledge:     |         |                |        |
|                                               | Time Value of Money, compound interest, diversification, inflation (FK1) | 10.84   | 0.68           | Valid  |
|                                               | Attitudes towards risk tolerance (FK2)          | 11.17   | 0.71           | Valid  |
|                                               | financial records (FK3)                         | 10.80   | 0.68           | Valid  |
| Financial Awareness                          | Awareness in financial records is like a list before shopping (FA1) | 15.04   | 0.79           | Valid  |
|                                               | Awareness of documenting billing notes (FA2)    | 14.94   | 0.78           | Valid  |
|                                               | Awareness of financial information is to compare several offers of financial products before deciding (FA3) | 16.55   | 0.85           | Valid  |
| Financial Experience                         | Experience in managing personal assets (FE1)    | 16.02   | 0.83           | Valid  |
|                                               | Experience investing in the stock market (FE2)  | 17.10   | 0.87           | Valid  |
|                                               | Investment experience in non-bank institutions (FE3) | 13.58   | 0.72           | Valid  |
| Financial Behavior                           | Pay bills on time (FB1)                        | 12.39   | 0.72           | Valid  |
|                                               | Investment diversification (FB2)                | 15.53   | 0.90           | Valid  |
|                                               | Retirement investment (FB3)                     | 10.95   | 0.63           | Valid  |

Source: Data Processing Result using Lisrel 8.80

Table 3 shows the estimations of loading factor for each latent variable. From the Table 3 it can be seen that all the latent variables is valid and have loading factor more than 0.5 (Hair et al.,2014:623).

Table 4. Goodness of Fits Measurement model

| Variable                                      | P-Value (Criteria >0.05) | Goodness of fits | RMSEA (Criteria < 0.05) | Goodness of fits |
|-----------------------------------------------|--------------------------|------------------|-------------------------|------------------|
| Financial perceptions                         | 1.000000                 | Perfect fit      | 0.000                   | Perfect fit      |
| Objective and Subjective Financial Knowledge  | 1.000000                 | Perfect fit      | 0.000                   | Perfect fit      |
| Financial Awareness                          | 1.000000                 | Perfect fit      | 0.000                   | Perfect fit      |
| Financial Experience                         | 1.000000                 | Perfect fit      | 0.000                   | Perfect fit      |
| Financial Behavior                           | 1.000000                 | Perfect fit      | 0.000                   | Perfect fit      |

Source: Data Processing Result using Lisrel 8.80
Table 4 shows the goodness of fit for the measurement model using the criteria of chi-square and RMSEA. Based on the criteria of chi-square, the p-value of the chi-square for each latent variable categorized as a perfect fit. For example the p-values of chi-square for financial perception, objective and subjective financial knowledge, financial awareness, financial experience and financial behavior are 1.000 (perfect fit). Based on the RMSEA criteria, each latent variable is also categorized perfect fit. RMSEA for financial perception, objective and subjective financial knowledge, financial awareness, financial experience and financial behavior are 0.000 (perfect fit).

Table 5. Construct Reliability (CR) and Average Variance Extracted (AVE)

| Latent constructs       | CR  | AVE  |
|-------------------------|-----|------|
| Financial knowledge     | 0.73| 0.50 |
| Financial Awareness     | 0.85| 0.65 |
| Financial Experience    | 0.85| 0.66 |
| Financial Perceptions   | 0.83| 0.62 |
| Financial Behavior      | 0.80| 0.58 |

Sources: Data process

Construct Validity could be conducted by considering the rule of thumb of confirmatory factor analysis. First, Standardized loading estimates for each indicator variable which is reflected latent construct must 0.5 or higher. Table 4 shows that all Standardized loading estimates the indicators variable is higher than 0.5 and its acceptable (Hair et al., 2014). Second, the value of Average Variance Extracted (AVE) should be 0.5 or greater to suggest adequate convergent validity. Table 5 shows the value of AVE is 0.5 and greater, its means that the construct explains more than a half of the variance of its indicators. Third, Construct reliability should be 0.7 or higher to indicate adequate convergence or internal consistency. Table 5 shows that the construct reliability all latent variable are higher than 0.7. Refers to table 5, this study shows that the measurement of each latent variable is reliable. Table 3 also shows that T-value of all indicators variable are more than T-Table= 1.96 (significant level =5%).

3. ANALYSIS

Structural Equation modeling (SEM) using Lisrel 8.80 program was used to analyze the data and answers the research objectives. Lisrel model is composed of two parts: 1) Measurement model is describes how the latent variables or constructs are measured by observed variables; 2).The Structural equation model describes the causal relation among the latent variables. As a statistical methodology that takes a confirmatory approach, the term structural equation modeling conveys two important aspects of the procedure: (a) measurement model, that the causal processes under study are represented by a series of structural equations, and (b) structural model, that these structural relations can be modeled pictorially to enable a clearer conceptualization of the theory under study (Byrne, 2010). There are three types of goodness-of-fit measurement: (1) absolute fit measures (assess the overall model fit, both structural and measurement together, with no adjustment for over-fitting); (2) incremental fit measures (compare the proposed model to a comparison model); and (3) parsimonious fit measures (adjust the measures of fit to compare models with different numbers of coefficients and determine the fit achieved by each coefficient). An acceptable the measurement model fit to the data, be evaluated by several indicators in table 6. The measurement model of this study deals with the impact of financial literacy, financial experience, financially awareness toward financial behavior through financial perception.
3.1 Overall SEM Model Testing

![Figure 3](image1.png)

**Figure 3.** Structural Measurement Model-Standardized Solution  
Source: Data Processing Result using Lisrel 8.80

![Figure 4](image2.png)

**Figure 4.** Structural Measurement Model-T-value  
Source: Data Processing Result using Lisrel 8.80

In assessing the fit of parameters in the model, there are three aspects of concern: (a) the feasibility of the parameter estimates, (b) the appropriateness of the standard errors, and (c) the statistical significance of the parameter estimates (Byrne, 2001). The results show that all indicators variables are good measurements of both constructs.
Table 6. Goodness of Fit Measurement

| No | Statistics | Criteria indicator of Fit | Value | Result |
|----|------------|---------------------------|-------|--------|
| 1  | RMSEA      | RMSEA<0.05 (Joreskog&Sorobom,1996) | 0.046 | Good fit |
| 2  | Chi-Square/df | Chi-Square/df ≤ 5 (Wheaton,1977) | 1.64 | Good fit |
| 3  | ECVI       | ECVI                        | 0.70  | Good fit |
|    | ECVI Saturated |                    | 0.80  |        |
|    | ECVI Independence |                | 27.32 |        |
| 4  | AIC        | AIC                        | 209.83| Good fit |
|    | AIC Saturated |                    | 240.00|        |
|    | AIC Independence |                | 8167.59|       |
| 5  | NFI        | NFI ≥ 0.90                  | 0.98  | Good fit |
| 6  | CFI        | CFI ≥ 0.90                  | 0.99  | Good fit |
| 7  | NNFI       | NNFI ≥ 0.90                 | 0.99  | Good fit |
| 8  | IFI        | IFI ≥ 0.90                  | 0.99  | Good fit |
| 9  | RFI        | RFI ≥ 0.90                  | 0.98  | Good fit |
| 10 | GFI        | GFI ≥ 0.90                  | 0.94  | Good fit |
| 11 | AGFI       | AGFI ≥ 0.90                 | 0.92  | Good fit |
| 12 | PGFI       | PGFI ≥ 0.60                 | 0.65  | Good fit |
| 13 | PNFI       | PNFI ≥ 0.090                | 0.78  | Good fit |

Source: Data Processing Result using Lisrel 8.80

Figure 3, shows that the path coefficient of financial knowledge, financial experience and financial awareness on financial perception is 0.22, 0.47 and 0.31. The path coefficient of financial perception on financial behavior is 0.85. Figure 4 shows result the examination of the correlation between latent variables (financial knowledge, financial awareness, financial experience, financial perception and financial knowledge) and the t-value show that the correlation is very high and the t-value exceeds the critical value of 1.96 (significant level =5%), indicating that the latent constructs are significant correlated with each other. The fit of the structural model is assessed and the results show in table 6 show that the model is appropriate as measurement model for the data set. Table 6 is also represented the output related to the hypothesized model and hypothesized model “fits,” or adequately describes, the sample data.

3.2 Structural Model Testing

Table 7. Summary of Results Estimated parameters of the model

| Parameters                       | Path coefficient | t     | R²   |
|----------------------------------|------------------|-------|------|
| Financial Perception ← Financial knowledge | 0.22             | 2.38  | 0.90 |
| Financial Perception ← Financial awareness | 0.47             | 2.51  |      |
| Financial Perception ← Financial awareness | 0.47             | 2.51  |      |
| Financial Perception ← Financial experience | 0.31             | 2.24  |      |
| Financial Behavior ← Financial perception | 0.85             | 10.45 | 0.71 |

Source: Lisrel 8.80 output

Table 8. Summary The magnitude of direct and indirect Effect

| Parameters                          | Direct effect | Indirect Effect through Financial Perception | Total |
|-------------------------------------|---------------|---------------------------------------------|-------|
| Financial Behavior ← Financial knowledge | -             | 0.19                                        | 0.19  |
| Financial Behavior ← Financial Awareness | 0.40         |                                             | 0.40  |
| Financial Behavior ← Financial experience | 0.27         |                                             | 0.27  |
| Financial Behavior ← Financial perception | 0.85         | -                                           | 0.85  |
| Financial Behavior ← Financial knowledge | -             | 0.19                                        | 0.19  |

Source: Lisrel 8.80 output
Table 7 shows that the direct effect of financial perception on financial behavior is 0.85; the indirect effect of financial knowledge on financial behavior is 0.19; and the indirect effect of financial experience on financial behavior is 0.27. The indirect effect of financial awareness on financial behavior is 0.40. In the total effects of financial knowledge on financial behavior and financial awareness on financial behavior is 0.19 and 0.40. The effect of total financial experience on the financial behavior variable is 0.27. Table 7 and table 8 show that financial perception (FP) is influenced by financial knowledge (FK), financial awareness (FA) and financial experience (FE). Financial knowledge (FK) affects 0.22 \((0.22^2 = 4.84\%\)), Financial awareness (FA) affects 0.47 \((0.47^2 = 22.09\%\)) and financial experience (FE) affects 0.31 \((0.31^2 = 9.61\%\)). Simultaneous influence is 90\%. The financial behavior (FB) is indirectly influenced by financial knowledge (FK), financial awareness (FA) and financial experience (FE). Financial knowledge (FK) affects 0.19 \((0.19^2 = 3.61\%\)), financial awareness (FA) affects 0.40 \((0.40^2 = 16\%\)) and financial experience (FE) affects 0.27 \((0.27^2 = 7.29\%\)). Financial behavior (FB) is influenced by Financial Perception (FP) as simultaneous influence of \(R^2 = 71\%\).

From the model, 1 of the 2 hypotheses had been answered. Four hypotheses have a significant positive effect. Structural Equations (1):

\[
FP = 0.22* FK + 0.47* FA + 0.31* FE, Errorvar.= 0.096 , R^2 = 0.90 \\
(0.094) (0.19) (0.14) (0.029) \\
2.38
d(2.51)
d(2.24)
de(3.26)
\]

From the above structural equation, it is known that the path coefficient of financial knowledge, financial experience and financial awareness on financial perception is 0.22, 0.47 and 0.31. Positive path coefficient values indicate that financial knowledge, financial experience and financial awareness have a positive effect on financial perception. In other words, the better financial knowledge, financial experience and financial awareness, the better the perception of finance will be. Likewise, the path coefficient of financial perception has a positive effect on financial behavior. The statistical value of the t test for the path coefficient of the financial knowledge, financial awareness and financial experience is \(t = 2.38, 2.51\) and \(t = 2.24\). The value of \(t\) table is based on the distribution of table \(t\) with free degrees \(df = n-k = 300-3 = 297\) and the significance level \(\alpha = 5\%\) is \(t_{table} = 1.967\). It can be concluded that the effect that occurs between financial knowledge, financial awareness and financial experience on financial perception is statistically significant. The coefficient of determination \(R^2\) is 0.90, meaning that financial knowledge, financial experience and financial awareness are able to explain financial perception by 90\%. The remaining 10\% is explained by other variables. Structural Equations (2):

\[
FB = 0.85* FP, Errorvar.= 0.29 , R^2 = 0.71 \\
(0.081) (0.059) \\
10.45 4.87
\]

It is known that the path coefficient of financial perception is positive and indicates that the variables have a positive effect on financial behavior. In other words, the better perception the better the behavior will be. The t-test statistic value for the financial perception \((t=10.45)\) is more than \(t_{table} = 1.967\). Then, it can be concluded that the effect that occurred between the perception and the behavior was significant at the 5\% significance level. It is known that the coefficient of determination \(R^2\) for the structural equation above is 0.71. It can be interpreted that 71\% of perception is simultaneously able to explain (ups and downs) behavior by 71\%. The remaining 29\% is explained by other variables.
DISCUSSION AND CONCLUSIONS

How well individuals financial behavior inherent in the day to day of life depends on at least in part, on their financial knowledge, financial awareness, financial experience and financial perceptions. Empirically, this study has proven a significant positive impact of financial knowledge, financial awareness, financial experience and financial perception on financial behavior. These results are empirically proven previous studies (Robb and Woodyard, 2011; Woodyard, 2013) that showed a significant positive impact of financial knowledge, experience and awareness on financial perception and financial behavior. The finding tells us that financial knowledge, financial experience and financial awareness represents a basic form of financial literacy, in turn finally impact on financial perception and had a positive influence on saving behavior. People, who has a better understanding in financial concept and have awareness on how they manage financial information and have experience will act in a better way to manage the money financial knowledge possessed by a person can be influenced by financial experience and financial awareness, and ultimately can form a good perception, in turn, actual financial behavior depends on all (knowledge, awareness, experience and perception).

Based on the results of the research, it can be concluded that:

- Financial knowledge, financial awareness and financial experience have a positive effect on financial perception.
- Financial perception has positive effect on financial behavior.
- Coefficient determination test model 1 obtained a value of 0.90, which means the contribution of knowledge, awareness and experience of the financial perception is 90%; the remaining 10% is given by factors that are not explained in this model.
- Coefficient determination test model 2 obtained a value of 0.71, which means the contribution of financial perception of the financial behavior is 71%; the remaining 29% is given by factors that are not explained in this model.
- Financial perception is defined as a person's process in perceiving financial knowledge, awareness and experience that will be influence their behavior in finance.

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