



Financial Literacy, Materialism and Financial Behavior

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Abstract

Otoritas Jasa Keuangan (OJK) focus on improving financial behavior is through financial education program. This study discusses the importance of financial literacy and materialism attitudes in affecting individual's financial behaviour. Using survey on 129 undergraduates of Economic Education, financial literacy and materialism being factor in affecting behaviour finance. The result of research shows that financial literacy has positive and significant contribution on financial behaviour. It can be seen from the original sample value is 0.244 and t-value 2.319 > 1.96. In addition materialism has a positive and significant contribution on financial behaviour with the original sample value is -0.583 and t-value 6.666 > 1.96. Undergraduates with high financial literacy has good financial behaviour, and undergraduates with low materialism tends can hold an activity related to the purchase of consumer goods and services. Moreover, the significance of financial literacy and self-efficacy has important implications for the development of policies that aim to improve financial behaviour among college students in financial education programs.

Keywords: Financial Literacy; Materialism; Financial Behaviour; Financial Education

Introduction

Asean Economic Community (AEC) or called *Masyarakat Ekonomi Asean* (MEA) in Indonesian has been enacted since 2016. Asean Economic Community (AEC) is designed to realize the ASEAN 2020 insights with Brunei, the Philippines, Indonesia, Cambodia, Laos, Malaysia, Singapore, Thailand, and Viet Nam. Financial Service Authority (*Otoritas Jasa Keuangan* or OJK in Indonesian) focus on improving related financial community because of the number of communities that understand about finance is still a little bit. The increase of literacy that eventually refers to financial behaviour is important for dealing with the Asean Economic Community (AEC).

Financial behavior has a vital role for every individual since it is closely related to students' ability in achieving the expected goals. Financial behavior can improve individual's financial management responsibility. Consequently, the individual's welfare can be improved and financial crisis can be avoided (Habshick., 2007; Sabri., 2014). But in fact, there are many individuals who have experienced financial problems in the future. Some of them are going on among the undergraduates.

Undergraduates are at a very important time in their lives where they faced financial independence and started doing financial decision-making responsibility.

Based on the observations, there are some undergraduates less wise in taking financial decisions that are reflected in the financial behaviour of undergraduates. The allocation of expenses of the students in a month to see that spending on students in everyday life to the needs of the nature of pleasure just like buying food, buy a voucher for the gadget, buy clothes or shopping, watching movie higher value compared to expenditure for savings and undergraduates educational needs such as purchasing stationery, books, and more. This indicates that the attitude of saving within the undergraduates still belongs to low. Students are still not able to leave a portion of the income earned for submission at the bank in the form of savings or investing. In addition, undergraduates still have not been able to manage his personal finances appropriately and effectively so that financial behaviour shown toward the negative. There are only a few undergraduates who are already making financial records regarding income or financial expenses.

Financial literacy is chosen as one of many factors that may influence financial behavior. Financial literacy affects significantly the financial behavior (Sabri., 2014; Hagerdorn Schug, & Suiter., 2012; Te'eni Harari., 2016). A person's financial literacy is closely related to their financial management so that the higher the financial literacy a person has, the better their financial management and vice versa. There is empirical evidence supporting this practice, as objective financial literacy has been positively linked with responsible financial behavior (Lusardi & Mitchell., 2014). Thus, it is predicted that financial literacy influences financial behavior. The hypothesis is as follows:

H₁: Financial literacy influences undergraduates' financial behavior

In addition to financial literacy, financial behaviour can be affected by an individual materialistic attitude. Materialism is a character considering the ownership of an object (product) as important to show off his/her status or to make him/her happy (Podoshen & Andrzejewski., 2012). The primary priority of an individual having materialistic attitude is a shopping activity to fulfill uncontrolled shopping passion. It results in a mindset to spend all of money without thinking of the long term financial effect. Materialistic attitude encourages an individual to make compulsive purchasing without thinking or considering its consequence first, thereby will impact on negative financial behavior (Gardarsdottir & Dittmar., 2012; Nye & Hillyard., 2013). Thus, it is predicted that materialism influences financial behavior. The hypothesis is as follows:

H₂: Materialism influences undergraduates' financial behavior

Considering the elaboration above, this research is conducted to find out the effect of financial literacy and materialism on the undergraduates financial behavior. This research is different from former researches since it combines two factors that influence financial behavior which are financial literacy and materialism. Moreover, methodologically, this research uses SEM (Structural Equation Modeling) analysis that clearly explains the correlation of each variable. Meanwhile, the former research uses double linear regression analysis and analysis of variance that involve variable factor as a control variable in conducting a study and a synthesis towards research findings.

Literature Review

Financial Literacy

According to Lusardi (2008), stating that financial literacy is knowledge of basic financial concepts, such as the working of interest compounding, the difference between nominal and real values and the basic of the risk diversification. Financial literacy development goals for the long term is to

improve the literacy of someone who previously less literate or not literate became well literate, and increase the number of users of financial products and services. Thus to achieve well-being and prosperity of one must have good financial knowledge. According to Huston (2010) there are several factors that can affect the financial habits such as economic factors, family, friends, cognitive abilities, habits, community and institutional. Some other research has also been conducted to know the influence of the financial literacy of such financial saving (Sabri., 2014; Hagerdorn., Schug & Suiter., 2012; Lusardi., 2014; Te'eni Harari., 2016), a pension plan (Sabri., 2014; Crossan, Feslier & Hurnard., 2011).

Materialism

Materialism a trait that considers the important presence of the ownership of an item in terms of indicating status and make him feel happy (Schiffman & Kanuk., 2008; Podoshen & Andrzejewski., 2012). This is in line with the Nye & Hillyard (2013) stated that materialism can push many consumers in the U.S. to use large amounts of debt. The influence of materialism on financial behaviour is largely moderated by impulsive consumption to make a purchase without thinking beforehand or consider the consequences so it will give financial behaviour impact tends negative (Nye & Hillyard., 2013; Podoshen & Andrzejewski., 2012).

Financial Behaviour

Hubert (2001) states that the financial behavior as the study of the influence of psychology on the behavior of financial practitioners and the subsequent effect on markets. Behavioral finance is concerned with human action in taking financial decisions. Whether or not human right in such financial behaves is influenced by various factors both in him-self as well as the influence from the outside. Financial behavior caused by some of the things that is a factor of in the individual which includes self-esteem, motivation, learning, personality and self-concept. In addition to that caused by factors outside of the covers culture, social class, social groups, reference, and family.

Method

Research Design

This study was an explanatory quantitative research with cross sectional survey using questionnaire as the main objectives of current research are to describe to interpret the objects as the way they are and to prove the effect of financial literacy and materialism variables on undergraduate financial behavior.

In this research, there are three variables consisting of two independent variables and one depended variable. The two independent variables are financial literacy and materialism while the dependent variable is financial behaviour. Financial literacy is defined as individual's knowledge and understanding on finance so that they can manage their finance well. This variable was measured by using nine statements or items adapted from OECD (2013b). The statements or items were the respondents' responses about basic personal finance, financial management, saving, and investment. Materialism is a character considering the ownership of an object (product) as important to show off his/her status. This variable was measured by using nine statements or items adapted from Richins' (2004). The statements or items were the respondents' responses about materialism success, materialism centrality and materialism happiness. Meanwhile, financial behaviour is individual's behaviour in managing their personal finance.

In this research, it deals with individual's behaviour in managing pocket money given from parents wisely. This variable was measured by using six statements or items adapted from Danes & Haberman (2007). The statements or items were the respondents' responses about financial planning, financial management and financial control.

Population and Sample

The population of this research was all undergraduates majoring in Economics Education of Sebelas Maret University. In determining the sample, proportional stratified random sampling was used. There were 129 undergraduates chosen as research sample consisting of 39 Economics Education undergraduates batch 2014, 41 Economics Education undergraduates batch 2015, and 49 Economics Education undergraduates batch 2016.

Data Collecting

Data collecting used was questionnaire. The questionnaire in this study used Likert scale. Likert scale is the scale used by the author to measure an attitude in a research. In Likert scale, there are two statement forms usually used: positive and negative statements. Positive statement is used to measure positive attitude, and negative statement is used to measure negative attitude. The researcher used Likert Scale from 1 to 4 (1 for strongly disagree, 2 for disagree, 3 for agree, and 4 for strongly agree).

Data Analyze

Data analyze used were descriptive statistic and analysis *Structural Equation Modeling* (SEM) analyses with SmartPLS 2.0 M3 software. The reasons to use SEM analysis techniques based on components or variance (PLS) is PLS may be used to confirm the theory, but it can also be used to describe or no relationship between the latent variables, even with the PLS model structural equation can be used to test a theory or the theory of development to the purpose of prediction. The procedure to be taken in using PLS structural equation model is as follows: a) designing structural model/ inner model; b) designing measurement/outer model; c) constructing path diagram; d) conversion of path diagram into equation; e) parameter prediction; f) goodness of fit criteria evaluation, and g) hypothesis testing.

Results

The data collected from questionnaire that has been filled by the respondents can be seen in Table 1 Frequency Distribution Questionnaire. Table 1, contains the data related to the respondents' responses on financial literacy, materialism, and financial behaviour. It can be found that out of 129 samples of Economic Education Study Program undergraduates, 81 (62.79%) undergraduates have financial literacy tendency belonging to high category. The table shows that respondents' perception on financial literacy is high. In addition, 62 (48.06%) undergraduates have materialism tendency belonging to low category. Table 1 shows respondents' low perception on materialism. About 75 (58.14%) undergraduates have financial behavior tendency belonging to high category. Table 1 indicates the respondents' high perception on financial behavior.

Table 1 Frequency distribution questionnaire

No	Category	Category	Financial Literacy		Materialism		Financial Behaviour	
			Frequency	%	Frequency	%	Frequency	%
1	0 - 17	Strongly disagree	3	2,33	8	6,20	7	5,42
2	18 - 22	Disagree	15	11,63	18	13,95	22	17,05
3	23 - 27	Agree	81	62,79	76	58,91	67	51,93
4	28 - 36	Strongly agree	30	23,25	27	20,93	23	17,82
Total			129	100	129	100	129	100

(Source: Primary data, 2017)

Furthermore, to find out the effect of financial literacy and materialism on financial behavior, data analysis was carried out using SmartPLS software. Table 2 can be explained to see the effect of one variable on another, as indicated with beta coefficient value (original sample), while to find out the significance level can be seen from t-statistic (t-value). Significance value used is 1.96 at significance level of 5%.

Table 2 Total effects

	Original Sample (O)	Simple Mean (M)	Standard Error (STERR)	T-Statistics (O/STERR)	P-value
Literacy->Behaviour	0,244	0,254	0,165	2,319	0,027
Literacy->Materialism	-0,318	0,329	-0,111	2,857	0,004
Materialism->Behaviour	-0,583	0,574	-0,087	6,666	0,000

(Source: Primary data, 2017)

Considering the beta coefficient value (original sample) and t-statistic value (t-value) presented in Table 2, the result of test for individual hypotheses can be explained as follows.

Hypothesis 1

The hypothesis states that there is a significant effect of financial literacy on financial behavior. The result of hypothesis testing shows that the path between financial literacy and financial behavior variables has original sample of 0.244 and t-value of 2.319 > 1.96. This indicates that financial literacy variable affects financial behavior positively and significantly, meaning that the hypothesis **is supported**.

Hypothesis 2

The hypothesis states that there is significant effect of materialistic attitude on financial behavior. The result of hypothesis testing shows that the path between materialistic attitude and financial behavior variables has original sample of -0.583 and *t-value* 6.666 > 1.96. This indicates that materialistic attitude variable affects financial behavior positively and significantly, meaning that the hypothesis **is supported**.

Discussion

Financial Literacy Influences Undergraduates' Financial Behavior

Considering the result of test, financial literacy variable influences financial behavior positively and significantly. The predicted attitude is positive (original sample of 0.244), indicating that when the undergraduate's financial literacy, their financial behavior is high as well. The significance parameter value is high, 2.319 (*t-value* 2.319 > 1.96), meaning that the undergraduate's financial literacy influences financial behavior significantly. This condition is indicated with firstly: undergraduate's feel helped in managing their personal finance having acquired financial literacy in the form of basic personal finance pertaining to the knowledge on the consideration of product and service advantages and on the determination of need priority scale. Secondly, undergraduate's feel helped in planning finance and managing their personal finance having acquired financial literacy in the form of money management pertaining to knowledge on cost and income budget planning. Thirdly, the undergraduate's feel helped in managing their personal finance having acquired financial literacy in the form of saving investment pertaining to the knowledge on save and investment, so undergraduates can save their money and plan their future plan, including for unexpected need expense. The result above shows that the undergraduate's financial literacy has influences optimally the financial behavior. The result of research shows financial literacy and financial behavior positively and significantly, in line with some previous studies (Lusardi & Tufano., 2008; Sabri., 2014; Crossan et al. 2011).

Sabri (2014), concludes that financial education in a family and knowledge on finance itself give positive effects on children's attitude in solving problems on their daily lives. Meanwhile, Carlin & Robinson (2012) concludes that financial education improves students' creativity in opting for financial choices. This creativity is very important in affecting their financial behavior since it is helpful for them to make a choice on available options about products and services in the market. Based on the findings, there is a method to improve financial behavior. It is by improving the quality of financial education both in family and school. Improving financial education in family can be done by reobserving the family members, for education on financial management first comes in the family as the smallest social unit. Families can be done by way of looking back at the people closest to you that there are around the neighbourhood, family environment as the nearest environment should provide the pattern of culture, home atmosphere, the view of life and patterns of socialization that will determine your attitude and behaviour. In addition parents can socialize and educate children about finances by giving pocket money can be a means to educate the development competence of financial management. In terms of improving financial education in school, it can be done by evaluating and improving the quality of teaching and learning process itself. It can range from the quality of materials given to socialization of financial education and seminar on personal financial management.

Materialism Influences Undergraduates' Financial Behavior

Considering the result of test, materialistic attitude variable influences financial behavior negatively and significantly. The predicted attitude is negative *original sample* of -0.583) showing that when the undergraduate's materialism is high, the financial behavior will be low. The significance parameter value is high, 0.666 (*t-value* 6.666 > 1.96), meaning that the undergraduate's materialism undergraduate's financial behavior significantly. This condition is indicated firstly with undergraduate's having materialism success in which some students feel admiring others who have expensive products, and to them, material is the measure of a success, and they want to have those products to make others impressed. It makes undergraduate's make unplanned purchasing activity in fulfilling their need, thereby will affect adversely their financial management and financial control. Secondly, undergraduates have materialism centrality in which some undergraduate's feel that buying something can make them happy, love luxury, and buy something not actually needed. It leads undergraduate's to do consumptive activity thereby will affect their financial planning and financial management negatively. Thirdly, undergraduates have materialism happiness in which some of them feel that the products they have currently make them happy, buying many products makes them happy, and they are restless when they cannot afford the product they like. It makes undergraduate's make unplanned purchasing activity as a means of getting material as much as possible thereby will influences financial management and financial control adversely.

The result above shows that materialism undergraduates have affects financial behavior negatively. This result is in line with the result of previous studies stating that an individual having materialism will influences his/her financial behavior (Nye & Hillyard., 2013; Podoshen & Andrzejewsk., 2012). The more materialism the individual, the worse is his/her financial behavior or financial management. It is because materialism is one of individual behaviors indicating unplanned shopping pattern. The primary priority of an individual having materialism is a shopping activity to fulfill uncontrolled shopping passion. It results in a mindset to spend all of money without thinking of the long term financial effect. The high shopping passion and consuming pattern makes an individual forget to manage his/her finance, while the financial management behavior can help him/her avoid the financial problems.

Conclusion and Suggestion

Considering the result of research, the following conclusions can be drawn. Firstly, financial literacy contributes to financial behavior positively and significantly. It can be seen from original sample value of 0.244 and *t-value* of 2.319 > 1.96. Secondly, materialistic attitude contributes to financial behavior negatively and significantly. It can be seen from original sample value of -0.583 and *t-value* of 6.666 > 1.96. Undergraduates with high financial literacy level can manage their finance better, and those with low materialism will tend to restrain their willing to purchase product or service.

Furthermore, considering the result of research, some suggestions are given related to students' financial behavior. Firstly, the quality of teaching and learning process in financial education at university can be improved more. The vast number of materials in financial education will not give positive effects on undergraduates' financial behavior if the materials are not related to personal financial management. Hence, the use of real-life cases with the touch on personal financial management have to be implemented. Secondly, it is about the improvement of graduates' financial literacy. Undergraduates' financial literacy can be enhanced through an effective financial education and a seminar on financial management. Financial management education can result in some positive things related to spending, saving, and investing money correctly.

Recommendation

The result of research contributes to the organization of further researches to analyze the factors playing more important role in creating financial behavior such as social-economic status, social environment, and etc. Next researches can improve the population of research with some Colleges so that the data obtained will be better and distributed more evenly. In addition, qualitative research approach can be an alternative to further researches to complete the quantitative data produced in this current study.

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References

- Crossan, D., Feslier, D., & Hurnard, R. (2011). Financial Literacy and Retirement Planning in New Zealand. *Journal of Pension Economics and Finance*, 10: 619-635.
- Danes, S. M. & Haberman, H. R. (2007). Teen Financial Knowledge, Self-Efficacy, and Behaviour: A Gendered View. *Financial Counselling and Planning*, 18(2), 48-60.
- Gardarsdottir, R. B & Dittmar, H. (2012). The Relationship of Materialism to Debt and Financial Well-Being: The Case of Iceland's Perceived Prosperity. *Journal of Economic Psychology*, 33: 471-481.
- Habshick. (2007). Survey of Financial Literacy Schemes in the EU27. Hamburg. Financial Services EVERS JUNG Research and Consulting.
- 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.
- Hubert, F. (2001). Behavioral Finance - Theory and Practical Application I, *Business Economics*, 36(3): 812-817.
- Huston, S. (2012). Financial Literacy and the Cost Borrowing. *International Journal of Consumer Studies*, 36(5): 566-572.
- Lusardi, A., Punam, K., & Adam, K. (2008). New Ways to Make People Save: A Social Marketing Approach. In Annamaria Lusardi (Ed.), *Overcoming the Saving Slump: How to Increase the Effectiveness of Financial Education and Saving Programs* (p. 209-236). Chicago: University of Chicago Press.
- Lusardi, A., & Mitchell, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, 52(1): 5-44.
- Nye, P., & Hillyard, C. (2013). Personal Financial Behavior : The Influence of Quantitative Literacy and Material Values Personal Financial Behavior : The Influence of Quantitative Literacy and. *Numeracy*, 6(1): Article 3.

- 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.
- Podoshen, J. S & Andrzejewski, S. (2012). An Examination of the Relationship Between Materialism, Conspicuous Consumption, Impulse Buying, and Brand Royalty. *Journal of Marketing Theory and Practice*, 20(3): 319-334.
- Richins, M. L. (2004). The Material Values Scale : Measurement Properties and Development of a Short Form. *Journal of Consumer Research*, 31(1): 209-219.
- 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.
- Schiffman, L. G, & Kanuk, L.L (2007). *Consumer Behavior* 9th ed. New Jersey: Pearson Prentice Hall.
- Te'eni-Harari, T. (2016). Financial Literacy among Children: The Role of Involvement in Saving Money. *Young Consumers*, 17(2): 197–208.

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