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The Roles of Financial Knowledge, Motivation and Self Efficacy on the Influence of Financial Education toward Financial Literacy

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Abstract

This research aims to know the influence of financial education toward financial literacy on Economics Faculty students. In Economics Faculty, Universitas Negeri Semarang, there were 16 of 40 students who had good financial behaviors. It was contradictive because they have taken accounting subject who make them good in financial literacy. The research on financial literacy had the contradiction, especially in the influence of financial education variable on financial literacy. Therefore, this study raised the mediating variables; the consumer knowledge variable and psychological factor variables (motivation, self efficacy). This study was analyzed by two analyses that were descriptive analysis and path inferential analysis. Findings show that students' financial literacy and financial education are in enough categories; whereas, motivation and self-efficacy are in good condition, and students' financial knowledge is in unfavorable category. The results of path analysis show that the variable of financial education does not have any direct influence toward financial literacy, but it has indirect influence through motivation. Then, the variable of financial education also does not have any direct influence toward self-efficacy, and self-efficacy does not influence toward financial literacy and financial knowledge does not have any influence toward financial literacy. Thus; the learning process on Finance should involve three aspects; cognitive, affective, and psychomotor; and it needs the development of learning model on Finance to involve students' activeness in managing their financial activities.

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INTRODUCTION

Individual's ability to efficiently and effectively understand and manage their money as well as to produce something is greatly essential to develop that financial literacy is highly required. According to The Presidents Advisory Council on Financial Literacy (Schwab, 2008), a financial literacy is the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being. Financial literacy is divided into several abilities, such as (a) a specific form of knowledge, (b) abilities or skills to apply the knowledge, (c) perceived knowledge, (d) good financial behavior, and (e) financial experiences. Financial literacy is the basic and essential tool in financial education (OECD, 2012).

A financial literacy survey (DPAU BI: 2014) conducted by Indonesia Bank in cooperation with the Demographic Institution of Indonesia University in 2012 conducted in in five (5) provinces of South Sumatra, West Java, West Kalimantan, West Nusa Tenggara and South Sulawesi shows that 40% of respondents have already made well financial planning and management, while the other 60% of them have not. Some studies show that the level of students' financial literacy is still low. Krishna (2010) show that 63% of UPI students' financial literacy level is still far from optimum limit. Nababan (2011) also shows that 56.61% of true answers on various questions given may conclude that respondents have low level of financial literacy. Meanwhile, Sina (2012) shows that UKSW junior lecturers' financial literacy is still at low level. In addition, a research conducted by Margaretha and Pambudi (2015) also shows that 48.91% of Trisakti University students' financial literacy level is in low category. The preliminary survey of literacy level at Economics Faculty of Semarang State University shows that of 40 students, only 16 of them have good financial literacy level, while the other 24 students still have poor literacy level. After conducting closed interviews to some financial and investment lecturers on planning process, implementation and evaluation of the course learning, it can be concluded that in facts the planning has been well performed. Those conditions become a gap phenomenon in which the financial education process is well performed, yet some students still have low financial literacy level.

Several previous studies show contradictions in revealing the effects of financial education on financial literacy. One of them is based on a research conducted by Nidar and Bestari (2012) that level of education and faculty affect the student's financial literacy level. A research conducted by Bashir et al (2013) shows that academic qualification has no effect, while hopelessness and retirement plan intention affect the financial literacy level. The other study conducted by Agarwalla (2013) finds that family income, decision making, gender, and joint family have effects, while education level and marital status do not affect the financial literacy level. Al-Tamimi and Kalli (2009) also find that education level positively affects the financial literacy. Based on those studies, this research tries to explore the notion that financial knowledge and psychological factors (motivation, self-efficacy) and financial knowledge have significant contributions to the success of financial education which have the mediation effect on financial education to the literacy level when connected to the Edgar Dale's conical experience that learning which involves an action has a higher effectiveness level than the others due to the concept of global education which emphasizes on the inclusive way of thinking in which education is no longer teacher but student-centered that it is expected the quality of human resources may be improved (Oktarina, 2007). Those assumptions are also supported by the research conducted by Huston (2010), Mandell and Klein (2007), showing that motivation, self-efficacy, and financial knowledge has effect on the financial literacy level.

The theory of self-efficacy has been heavily used in studies related to health and learning behaviors. Social psychology has many important elements to learn about financial literacy. This theory adds the concept of perceived behavioral control coming from the theory of self-efficacy proposed by Bandura (1986) as a cognitive social theory related to expectations and motivation, resulted in frustrations due to the repeated failures determined by the behavioral reactions in the future.

Financial literacy or knowledge has a strong effect on financial literacy level. According to Bowen (2002) "Financial knowledge is defined as understanding of key financial terms and concepts needed to function daily in American society". Huston (2009) has another concept on financial knowledge. Due to the proposed conceptualization, financial literacy and knowledge either from capital or human has a different construct. Financial literacy is the integral dimension of financial literacy, but incomparable with the financial literacy. Financial literacy has additional application of dimension which shows that an individual should have confident ability to use the financial knowledge to make financial decisions.

According to OECD (2005) financial education is a process in which financial users/investors improve their understanding on financial products, risk and information bases, instruction and objective advices in developing skills and empowerment of information trust on financial risks and opportunities, decision making based on good information, recognizing facts in which to find help and take more effective measures to improve their wealth. OECD (2005) divides the concept of financial education into 4 indicators consisting of Understanding (how well is those educated people's understanding), information (how far the information is obtained from education), instruction (how good is the quality of the educational form), advice (educational program recommendation for the success of financial education).

Financial literacy is a competence which is certainly obtained from financial education. Education is a process to transform human beings from cognitive, affective, and psychomotor elements that when financial education is well implemented, it certainly improves the financial literacy. Chung and Park (2014) reveal that financial education positively affects students' financial literacy. At Economics Faculty, some phenomena show that even though the financial education contained in financial-related courses, most students' literacy levels is still low. From those emerging phenomena, there is a variable connecting financial education to financial literacy which is supported by the research conducted by Lusardi (2009) arguing that knowledge and psychological aspects are greatly required, including motivation and self-efficacy which affect the financial literacy. Thus, this research comes with three variables as mediator or intervening variables consisting of motivation, self-efficacy and financial knowledge variable. Financial education without mediated by motivation, self-efficacy and financial knowledge may not improve the literacy level. However, when those three variables are affected, they may also affect the financial literacy, as described in the following framework.

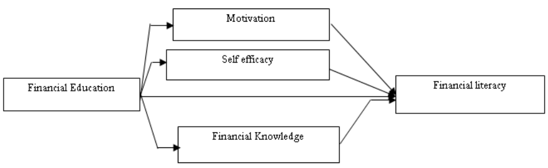

Figure 1. Research Thinking Framework

In connection with the background of this study which focuses on a students' financial literacy study and its path analytical model, the research problems are formulated as follows: (1) How is the brief description of financial literacy level, financial education, motivation, self-efficacy, and financial knowledge of the students' of Economics Faculty of Semarang State University? (2) How is the financial education path model effect on financial literacy through financial knowledge, motivation and self-efficacy?

METHODS

This study focuses to explore the psychological factors (motivation and self-efficacy) and financial knowledge variable as mediator of financial education on financial literacy level of economics students. This quantitative research uses a correlational approach with a path analysis on causality influence between variables. This study is located at Economics Faculty of Semarang State University, with four departments covering economics education, accounting, management, and economic development department.

The research variables are as follows: (1) Financial education variable proxied from financial education evaluation manual (2010) with Understanding, Information, Instruction, and Advise indicator. (2) Financial knowledge variable proxied from Lusardi (2009) with knowledge to understand financial product, and financial product practice indicator. (3) psychological factors consisting of three variables, covering motivation and self efficacy measured with interval data. Motivation variable proxied from Aritonang's theory (2008) consists of learning perseverance in facing difficulties, learning interest and awareness, learning with achievements, and independent learning. Self efficacy variable has three indicators, covering magnitude, strength, and generality. (4) Financial literacy variable proxied from PISA 2012 on financial literacy with indicators of (a) a specific form of knowledge, (b) the ability or skills to apply that knowledge, (c) perceived knowledge, (d) good financial behavior, and even (e) financial experiences.

This research uses 4,479 students as the data source with a proportional cluster random sampling method. To determine the required minimum samples for data analysis, Slovin formula in Ferdinand (2012) is used which then is proportionalized with the following results.

To obtain the data required, the researchers use the following methods:

Questionnaires.

In this study, questionnaire is used to ob-

Table 1. Research Samples

Department	Population	Sample Calculation	Total Samples
Accounting Bachelor Degree (S1)	962	(962/4479)x400	86
Economics Development Bachelor Degree (S1)	945	(945/4479)x400	85
Management Bachelor Degree (S1)	586	(586/4479)x400	52
Economic Education Bachelor Degree (S1)	1986	(1986/4479)x 400	177
Total	4479		400

tain information from students of Economics Faculty of Semarang State University in the forms of questions revealing the financial education, motivation, self-efficacy, or financial literacy of students of Economics Faculty of Semarang State University. Questionnaire used is the enclosed one, which means respondents are not given the opportunity to respond with their own words. The questionnaire used in this research is the forms of tabulation using agree-disagree interval scales (Ferdinand, 2012). Each item is provided with a scale range of 1-5 with extreme angle of Strongly Agree (ST) and that of Strongly Disagree (STS).

Test.

This method is conducted using knowledge testing related to financial knowledge, covering financial product and its uses.

Furthermore, the research analysis is conducted as follows:

Reliability and validity analysis.

Based on the instrument (questionnaire) testing results to 30 respondents with 51 question items, the convergent validity testing of 49 question items shows significant results with only 2 items are insignificant that those should improved to be the valid ones. Meanwhile, the testing validity shows that 2 items are invalid that improvement is required. The reliability testing uses alpha cronbach value with a minimum limit of 0.7. Based on instrument (questionnaire) testing results to 30 respondents with 25 items, financial education variable provides alpha cronbach value of 74.3%, motivation variable with that of 73.8%, self-efficacy variable with that of 73.7%, financial knowledge variable with that of 74%, financial literacy variable with that of 85.6%, while according to Nunnally in Ferdinand (2012) stating that it may be considered reliable since the alpha cronbach value is > 70%.

Methods of descriptive statistical analysis, prerequisite testing analysis, path analysis are used to determine the effect paths of each variable.

RESULTS AND DISCUSSION

The descriptions of each variable and its indicators show that the condition of financial education based on respondents' perceptions is considered adequate. It is supported with (1) indicator (understanding) which shows students' understanding after joining the financial classes is adequate, (2) indicator (information) which indicates that the teaching material information deliverd by the lecturers are considered adequate by the respondents, (3) indicator (instruction) which indicate that the lecture instructions are also adequate, (4) indicators (advice) which indicate the recommendations given to understand the financial matters are adequate. The description of students' motivation is in facts good in performing the financial learning processes. It is supported by (1) student persistence indicator in learning financial matters is adequate, (2) awareness indicator in learning financial matters is good, (3) learning achievement the indicator in financial matters is adequate, (4) indendent learning indicator is also considered good.

The description of students' self-efficacy or confidence is that they are able to handle the learning situation, make numerous efforts as best as possible in learning, controlling, and generating good results in the field of financial literacy. Those are supported with (1) students' good magnitude or confidence indicator to overcome learning difficulties (2) students' good strength or belief indicator in achieving specific performance, (3) students' adequate generality or self confidence indicator whether to focus on one or more activities. The financial literacy testing results are not quite good with the average value of 5.85 or when converted with the achievement scale (Point Average/*Indeks Prestasi/IP*) is equal to 1.5 or grade CD. Meanwhile, the students' financial literacy is considered adequate. Those are supported with (1) students' adequate specific form of knowledge indicator on financial products (2) students' good abilities or skills to apply the knowledge indicator (3) students' adequate perceived knowledge indicator in financial management (4) students' good financial behavior indicator (5) Students' adequate financial experience indicator in financial management.

The multiple linear regression model may be considered good when meeting the BLUE criteria (Best Linear Unbiased Estimator). BLUE may be achieved when meeting the Classical Assumption. Based on the normality testing results, it shows that data are normal as shown in Asymp. Sig. (2-tailed) above 0.05. The multicollinearity test result shows the VIF results of <10, which means there is no multicollinearity. Similarly, the heteroscedasticity test with gelejser test is all not significant againts the residues that it is declared free from homocedasticity showing a significant value. The following is one-sample Kolmogorov-Smirnov test table resulted from either residual regression or collinearity statistics. Based on the results of path analysis after data processing, the obtained model is as follows Figure 2. Model in Figure 2 may be explained with the following data processing:

Coefficients[a]

Model B		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		Std. Error	Beta			
1	(Constant)	25.096	1.320		19.014	.000
	Financial Education	.446	.036	.525	12.302	.000

a. Dependent Variable: Motivation

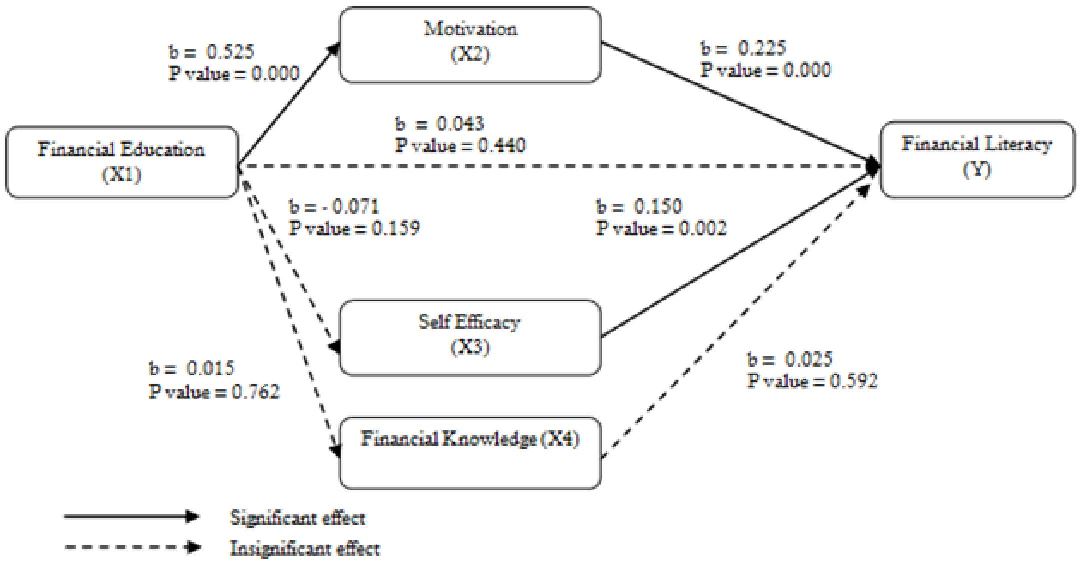

Figure 2. Financial Literacy Determinant Initial Model

Coefficients[a]

Model B		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		Std. Error		Beta		
1	(Constant)	49.348	1.597		30.897	.000
	Financial Education	-.062	.044	-.071	-1.412	.159

Dependent Variable: Self Efficacy

Coefficients[a]

Model B		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		Std. Error	Beta			
1	(Constant)	5.771	.327		17.661	.000
	Financial Education	.003	.009	.015	.303	.762

Dependent Variable: Financial Knowledge

From the constructed initial model has some insignificant variables, including financial education's effect on self-efficacy, financial knowledge, and financial literacy. In addition, financial knowledge has also insignificant effect on financial literacy that the model requires revision, and then revision figure is presented as follows:

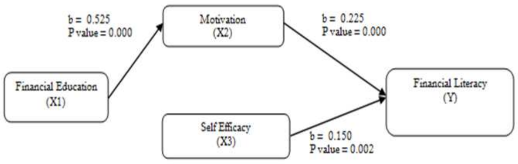

Figure 3. The Revised Financial Literacy Determinant Model

The Figure above is the revised final model of financial literacy determinant path analysis model which can be mathematically illustrated in a significant effect of path analysis that there are 2 structural equations as follows:

$Y = 0.525\ X_1 + e \rightarrow$ Motivation = 0.525 Financial Education + e

It means that each financial education quality increase from the aspect of understanding, information, instruction, or advice may improve students' motivation to participate in the financial learning processes.

$Y = 0.225\ X1 + 0.150\ X2 + e \rightarrow$ Literacy Finance = 0.225 Motivation + 0.150 Self Efficacy + e

It means that each students learning motivation increase (learning perseverance, awareness, achievement, or independence) and self-efficacy (magnitude, streght, or generality) may increase their financial literacy.

Based on the research results, the magnitude of effect as well as direct and indirect interaction effect may be described as follows: (1) There is a direct and significant effect of financial education on motivation by 0.525, (2) There is a direct and significant effect of motivation on financial literacy by 0.225, (3) There is a direct and significant effect of self eficacy on financial literacy by 0.150, (4) There is no direct and significant correlation between financial education and financial literacy through motivation by 0.525 x 0.225 = 0.118.

The research findings show that financial education does not have significant influence on financial literacy. It indicates that during this time, the financial education experienced by the students of Economics Faculty of Semarang State University which may be described that (1) the students' understanding during the learning processes is not at good level which means that most students only have adequate understanding, (2) the obtained information by the students during the learning processes is also not good enough. It can be concluded that all materials delivered by the lecturers are still relatively at theoretical not yet at implementation. The lecturers ways of teaching is less effective that the information obtained by the students is only considered in adequate category, (3) learning or teaching instruction or model made during this time is not effectively implemented. It is supported by respondents perceptions on learning or teaching model which is still at adequate level, (4) suggestions made during the learning or teaching processes which in facts are not effective enough or have not reached the sudents understanding on learning processes with financial materials. It can be concluded that financial education does not affect on the logical financial literacy since financial education processes do not affect the financial literacy.

Financial education which is implemented in financial learning processes actually has a significant and positive effect on motivation. This finding is in line with that revealed by Mandell and Klein (2007: 1) stating that "We find that motivation variable significantly improve our ability to explain differences in financial literacy." Thus, it obviously strengthens the findings of this research. The explanation of each financial education indicator may be understood from (1) comprehension efforts for students are not merely coming from the materials but also how to motivate them to learn, (2) how the information delivered may encourage students to learn, (3) how the learning or teaching instruction methods or models may encourage students to learn, (4) the suggestions given during learning processes may encourage students to learn.

The results of this study show that financial education has no significant effect on self-efficacy (self-efficacy/strong confidence in understanding or making an action). The implications of this research show that how financial education efforts made either by improving understanding, material delivery, information, learning process management, or providing qualified suggestions are less effective in affecting self-efficacy. The development of financial education is certainly required to improve students self-efficacy which has a strong effect to acquire a competence or literacy, including financial literacy.

The next research finding is that financial education has no significant and positive effect on financial knowledge. The results of this research is quite surprising that education performed during this time is unable to improve the students knowledge on financial materials, especially to well manage the financial matters. This finding certainly can be understood when viewed from the students financial knowledge scores which are not good enough with the average of only 5.85 with adequate financial education. However, it does not significantly occur that efforts on financial education are required to be made in terms of understanding, information, instruction, and advices that students financial knowledge may also increase.

The research finding shows that motivation variable has positive and significant effect on financial literacy level . It is in line with the findings revealed by Mandell and Klein (2007) stating that there is a positive and significant effect of motivation on financial literacy. The motivation variable indicators consist of (1) students adequate persistence in financial study which provides a logical consequence that their enough perseverance may encourage them to understand financial concepts and continue their practices to acquire the implementation of financial concepts. (2) good awareness indicator in financial learning that the materials delivered may be well re-studied or understood in self or in group learning. (3) adequate achievement indicator in financial learning to acquire a competence or, in this research context, financial management concept. Achievement spirit may ease students to holistically acquire financial literacy, (4) good independence indicator in learning may also ease students to understand the financial concepts and its applications.

The following finding is that self-efficacy positively and significantly affects on financial literacy. It means that there is a strong belief that someone may solve any encountering problems he/she is facing in life, especially related to financial matters which may affect someones literacy supported with the findings revealed by Amromin et al. (2010) showing that self-efficacy significantly affects the financial literacy level of United State (US) communities. Jananti (2014) also reveals that in general self-efficacy may affect someones achievement. It is described that self-efficacy indicators consist of (1) good magnitude percentage, which means that students have a strong belief to resolve their problems, especially related to financial management based on the concepts or theories integrated within the practical applications in the field. (2) Good Strength, which means that students of Economics Faculty of Semarang State University have higher self confidence to show their performance, especially on good financial management. Thus, when strength increases, logically the financial literacy may also increase. (3) Generality, which provide adequate self confidence in managing financial matters at any circumstances. When rationally analyzed, the students literacy may increase when their generality increases significantly.

The next finding is that financial knowledge does not have a significant effect on financial literacy. Financial literacy in the concepts of financial products, and financial products practical uses is considered not quite good which may result in inconsistencies that affect on financial literacy. When the students are poor in concepts, it may lead to their poor literacy that financial knowledge insignificantly affects on financial literacy. This research is supported with a research previously conducted by Luxander et al. (2014) stating that "The results demonstrate that the financial-economic knowledge acquired in higher education has a beneficial impact on the financial knowledge of young people; on the other hand, the type of training and studies does not have any significant effect.

In the previous explanations, the research results show three things (1) financial education has no significant effect on financial literacy. (2) financial education has positive and significant effect on motivation, (3) motivation has a positive and significant effect on financial literacy. Based on those three research results, it shows that financial education does not have a direct effect but indirectly affect on financial literacy. Due to the research results, it is understood that financial literacy is a belief to appropriately implement the knowledge. It means that financial education may affect on financial literacy when ones motivation well encourages him to have a good literacy level. From this research, it is understand that good financial education may result in strong motivation which may improve the students financial literacy level.

Financial education is not only a learning activity, but also a learning process which not only emphasizes on cognitive, but also affective and psychomotor aspects. Affective certainly has an important effect. However, the findings in this study show that the roles of affective and psychomotor are poorly noticed. Education focuses more on cognitive aspects which has no significant effect on students self-efficacy. Thus, the financial education processes are only discussing a less applicable theory.

Financial education has no significant effect on financial knowledge or financial literacy. It means that adequate financial education and poor financial knowledge may not improve the financial literacy. Starcek & Trunk (2013) state that there is a close relationship between financial education and individual competence that it is essentially required in financial markets which are dynamic, fast growing, globally complex with general requirements those with the right financial knowledge, good understanding on financial products, services and concepts, developing skills to improve their financial literacy, decision making, protection, and behavioral ethics.

CONCLUSION

The research results may be drawn as follows: (1) financial education has no direct effect on financial literacy, yet affect when financial education may affect motivation that motivation may have indirect effect on financial literacy. (2) Motivation affects on financial literacy, which is mainly supported by indicators of independence and awareness or seriousness in paying attention the learning processes. (3) Self-efficacy affects on financial literacy which is mainly supported by magnitute indicator (individual belief in solving difficulties) and strength (someones self confidence to achieve specific performance. (4) Financial education variable has no effect on self-efficacy, financial knowledge, and financial literacy. Meanwhile, financial knowledge does not affect financial literacy. Thus, financial learning process should involve all three domains of cognitive, affective, and psychomotor, as well as develop the financial learning model which involves students activeness on financial management.

REFERENCES

Amromin, G., Jennifer, H., Clemens, S., & Edward, Z. (2010). Complex Mortgages. Federal Reserve Bank of Chicago Working Paper no. 2010-17, November 2010.

Aritonang, K. T. (2008). Minat dan Motivasi dalam Meningkatkan Hasil Belajar Siswa. *Jurnal Pendidikan Penabur,* 10(7).

Bashir, T., Arshad, A., Nazir, A., & Afzal, N. (2013). Financial literacy and influence of psychosocial factors. *European Scientific Journal*, 9(28).

Bandura, A. (1977). *Social Learning Theory*. New Jersey: Prentice Hall Inc.

Bowen, C. F. (2002). Financial knowledge of teens and their parents. *Journal of Financial Counseling and Planning*, 13(2), 93.

Chung, Y., & Park, Y. (2014). The Effects Of Financial Education And Networks On Business Students' Financial Literacy. *American Journal of Business Education*, 7(3), 229.

DPAU BI. (2014). *Financial Literacy Baseline Survey.* Jakarta: Grup Pengembangan Keuangan Inlusif DPAU BI:

Ferdinand, A. (2012). *Metode Penelitian Manajemen*. Semarang: Undip Press.

Hassan Al-Tamimi, H. A., & Anood Bin Kalli, A. (2009). Financial literacy and investment decisions of UAE investors. *The Journal of Risk Finance*, 10(5), 500-516.

Jananti, N. (2014). Pengaruh Kepercayaan Diri, Budaya Lokal Dan Pendidikan Agama Terhadap Hasil Belajar Mata Pelajaran Ekonomi Siswa Kelas XI IPS SMA Negeri 1 Demak Tahun Ajaran 2013/2014. *Economic Education Analysis Journal*, 3(2).

Krishna, A., Rofaida, R., & Sari, M. (2010, November). Analisis tingkat literasi keuangan di kalangan mahasiswa dan faktor-faktor yang mempengaruhinya (Survey pada Mahasiswa Universitas Pendidikan Indonesia). In *Proceedings of The 4th International Conference on Teacher Education*.

Luksander, A., Béres, D., Huzdik, K., & Németh, E. (2014). Analysis of the Factors that Influence the Financial Literacy of Young People Studying in Higher Education. *Public Finance Quarterly,* 59(2)220-241.

Lusardi, A., Mitchell, O. S., & Curto, V. (2009). *Financial literacy among the young: Evidence and implications for consumer policy* (No. w15352). National Bureau of Economic Research.

Mandell, L., & Klein, L. S. (2007). Motivation and financial literacy. *Financial services review*, 16(2), 105.

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

Nababan, D., & Sadalia, I. (2012). *Analisis personal finan-*

cial literacy dan financial behavior maha-siswa strata I fakultas ekonomi Universitas Sumatera Utara. Downloaded 10 April 2015, from http://repository.usu.ac.id/handle/123456789/34557.

Nidar, S. R., & Bestari, S. (2012). Personal financial literacy among university students (case study at Padjadjaran University students, Bandung, Indonesia). *World Journal of Social Sciences*, 2(4), 162-171.

Oktarina, N. (2011). Peranan Pendidikan Global dalam Meningkatkan Kualitas Sumber Daya Manusia. *Dinamika Pendidikan, 2*(3).

OECD. (2005). *Improving Financial Literacy: Analysis of Issues and Policies*. Paris: OECD Publishing.

OECD. (2012). PISA 2012 Finacial Literacy Assessment Framework. Paris: OECD Publishing.

Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, 44(2), 296-316.

Schwab, C., Iannicola Jr, D., Beck, T., Hira, T., Bryant, J. H., Parker, J., ... & Dawson, C. (2008). *President's Advisory Council on Financial Literacy. Annual Report to the President*. Washington: The department of the treasury.

Sina, P. G. (2012). Analisis Literasi Ekonomi. *Jurnal Economia*, 8(2), 135-143.

Starek, S., & Trunk, A. (2013). The meaning and concept of financial education in the society of economic changes. In *Learn International Conference*.