

7-21-2017

## Exploring the motivation toward and perceived usefulness of a financial education: program offered to low-income women in Indonesia

Sri Rahayu Hijrah Hati

*Management Department, Faculty of Economics and Business, Universitas Indonesia,  
sri.rahayu72@ui.ac.id*

Sigit Sulistyo Wibowo

*Management Department, Faculty of Economics and Business, Universitas Indonesia*Follow this and additional works at: <https://scholarhub.ui.ac.id/ajce>Part of the [Social and Behavioral Sciences Commons](#)

### Recommended Citation

Hati, Sri Rahayu Hijrah and Wibowo, Sigit Sulistyo (2017). Exploring the motivation toward and perceived usefulness of a financial education: program offered to low-income women in Indonesia. *ASEAN Journal of Community Engagement*, 1(1).

Available at: <https://doi.org/10.7454/ajce.v1i1.57>

Creative Commons License



This work is licensed under a [Creative Commons Attribution-Share Alike 4.0 License](#).

This Research Article is brought to you for free and open access by the Universitas Indonesia at ASEAN Journal of Community Engagement. It has been accepted for inclusion in ASEAN Journal of Community Engagement.

# Exploring the motivation toward and perceived usefulness of a financial education: program offered to low-income women in Indonesia

Sri Rahayu Hijrah Hati<sup>a\*</sup> and Sigit Sulistiyo Wibowo<sup>a</sup>

<sup>a</sup>*Management Department, Faculty of Economics and Business, Universitas Indonesia*

---

## Abstract

A previous study demonstrated that low-income women tend to have lower financial literacy. This low level of financial literacy affects the manner in which they manage their daily finances, as well as their ability to save for long-term needs. Currently, the statistics show that financial literacy in Indonesia is relatively low. To support Indonesian government in improving financial literacy, especially among the most marginalized group – women of low income – Universitas Indonesia launched a community engagement initiative conducted in the form of financial literacy training targeted at low-income women working as street sweepers around the university. This study investigates the motivation toward and perceived usefulness of the financial education program to improve the financial literacy of low-income women working as street sweepers around Universitas Indonesia. A mixed research method is applied in the study. The data were collected from in-depth interviews and a mini survey conducted to 23 low-income female street sweepers who joined the 10 weeks financial education program. Both quantitative and qualitative data were analyzed to produce a comprehensive description of the participants' perceptions and attitudes toward the financial literacy program. The study demonstrates that the majority of low-income women have low motivation toward financial literacy education, and they also have a negative perception of the usefulness of such program. Thus, it is very important that all educators and trainers examine the characteristics of the trainees and assess the relevancy of the education program before they design certain community engagement program.

*Keywords:* financial literacy; motivation; perceived usefulness; low income; women

---

## 1. Introduction

Financial literacy – which refers to knowledge of basic economic and financial concepts, as well as the ability to use that knowledge and other financial skills to manage financial resources effectively over a lifetime of financial well-being – has a critical impact on financial behavior (Hung, Parker, Yoong, & Yoong, 2009; Mitchell, Lusardi, & Curto, 2009). According to Mitchell et al. (2009), financial literacy is strongly related to family financial sophistication and sociodemographic characteristics. The study conducted by Mitchell et al. demonstrates that a well-educated, wealthier population tends to have higher financial literacy. The study also found that the male population tends to have higher financial literacy than the female population (Mitchell et al., 2009).

Lusardi and Mitchell (2008) confer that financial literacy is so limited among women that it hinders their ability to make sound savings and investment decisions. Thus, women tend to rely on their family and friends for advice on financial matters. Lusardi and Mitchell (2008) found that women who consult tend to plan and be more successful in making financial decisions. However, Lusardi and Mitchell (2008) also found that women who consult on financial matters tend to plan and be more successful in making financial decisions. However the study also discovered that there is a widespread gap in financial literacy among women themselves. As mentioned previously, Mitchell et al. (2009) found that socioeconomic status also has a strong influence on financial literacy. An individual with

---

\* Correspondence Author: sri.rahayu72@ui.ac.id

a low income tends to have lower financial literacy than the population in general (Fernandes, Lynch, & Netemeyer, 2014; Mitchell et al., 2009). Many scholars have suggested financial education as the solution to improve financial literacy (Mandell & Klein, 2009).

In the policy context, over the past several decades, financial literacy has become an important aspect of government policy, the banking industry, non-governmental organizations and various other entities (Definit.Asia, 2013). Yet, the state of financial inclusion in Indonesia remains low although a structured and systematic effort has been undertaken by local governments to improve financial literacy. A survey conducted by InterMedia Indonesia reveals that financial literacy in Indonesia is relatively low, with access to general financial services at around 28% in 2014 and 31 % in 2015 (Finclusion.org, 2015). Indonesians' financial access to banks was also relatively low, averaging approximately 26% in 2014 and 27% in 2015. Access to non-banking financial institutions was very low, at around 4% in 2014 and 7% in 2015. The lowest rate of financial access was found in Indonesians' access to mobile money, which was only 0.1% in 2014 and 0.4% in 2015 (Finclusion.org, 2015). According to the same report, Indonesia has the largest gap in active financial account holdings in which active account usage by those who live below the poverty line reached just 12% in 2015. Theoretically and empirically, financial literacy has become the stepping stone to financial inclusion (Atkinson & Messy, 2013; Birochi & Pozzebon, 2016). Therefore, the Indonesian government is currently contemplating important improvements in financial literacy in Indonesia and has made financial education and financial literacy a national campaign as the first pillar of the National Financial Master Plan in 2015-2019 (Indonesian Financial Services, 2015).

To support local government in improving financial literacy, especially among the most marginalized group – women of low income – Universitas Indonesia as the leading public university in Indonesia, launched a community engagement initiative targeted at low-income women working as street sweepers around the university. Community engagement is important for the university as it enables the institution to integrate the teaching, research, and service functions (Bruning, McGrew, & Cooper, 2006). In addition, community engagement helps the university fulfil the function of the academy in society and contend the view that universities take public support but ignore the concerns of the community (Bruning et al., 2006). The type of community engagement given was the learning-led and popular education models since they focused primarily on developing and enhancing the skills and confidence of community members (Hashagen, 2002) The female street sweepers were selected as the object of the community engagements since they were rather financially illiterate. It was expected that the financial literacy education program would improve their skills in managing their family finance and improving their wellbeing.

The Universitas Indonesia community engagement grant (CEGs) was the first significant granting program to support the development and delivery of community financial literacy education tailored to meet the needs of women with low incomes working around the university. The University awarded \$ 10,370 of grant to the financial literacy education program. The financial literacy education program consisted of 2-hour sessions that ran for 10 weeks. The financial literacy education was delivered by researchers who have the financial management background so they could apply their knowledge to benefit the low-income women group.

The current paper strives to examine the motivation toward and perceived usefulness of the financial education program offered to the street sweepers around Universitas

Indonesia. Currently, there is contradictory evidence regarding the effectiveness of financial education in improving financial literacy, and as a result, there is a strong need to examine what does and does not work in financial education (Hastings, Madrian, & Skimmyhorn, 2013). The study contributes to the extant literature on community engagement and finance as it aims to identify the value of financial literacy educational programs from the perspective of participants.

## **2. Theoretical Background**

### *2.1 Community engagement*

Community engagement is defined as:

“Process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people. It is a powerful vehicle for bringing about environmental and behavioral changes that will improve the health of the community and its members. It often involves partnerships and coalitions that help mobilize resources and influence systems, change relationships among partners, and serve as catalysts for changing policies, programs, and practices. (Centers for Disease Control and Prevention, 2011: 7)

According to Hashagen (2002), there are six types of community engagement models: consultation/public participation, asset-based/social economy, community democracy, identity based, learning led and popular education and service development models. The current community engagement applies the learning led and popular education model as it focuses principally on building and supporting the skills and confidence of community members (Hashagen, 2002).

### *2.2 Financial Education*

According to the Organization for Economic Cooperation and Development (2005) in Lusardi & Mitchell, 2007: 36), financial education can be defined as follows:

“... the process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction, and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being.”

There have been mixed results regarding the impact of financial education on financial literacy. Some researchers have found that financial education has a positive influence on self-beneficial financial behavior (Bernheim & Garrett, 2003; Hilgert, Hogarth, & Beverly, 2003)). However, one experimental study yielded a contrary finding that there is no difference in terms of financial literacy between those who took a financial education course and those who did not (Mandell & Klein, 2009). Thus, some scholars have questioned the effectiveness of financial education in improving financial literacy (Lyons, et al., 2006).

### *2.3 Financial Literacy*

Literacy refers to an individual's permanently developed skill based on reading, writing and calculation abilities to practice socially arranged systems of symbols for receiving, understanding, creating and using texts for life in the family, school, at work and in society (Starček & Trunk, 2013). Financial literacy itself refers to the knowledge of basic economic and financial concepts, as well as the ability to use that knowledge and other financial skills to manage financial resources effectively for a lifetime of financial well-being (Hung et al., 2009). Financial literacy consists of the basic concepts (time value of money, planning, economy), borrowing concepts (credit cards, loans, mortgages), saving/investing concepts (stock, bond, mutual fund, retirement savings), and protection concepts (insurance, estate and tax planning, identity safety) (Huston, 2010).

As explained in the previous section, financial literacy has a very important impact on financial behavior (Hung et al., 2009; Mitchell et al., 2009). Financial literacy is the foundation of financial inclusion (Atkinson & Messy, 2013; Birochi & Pozzebon, 2016). The previous study also found that higher financial literacy leads to greater financial well-being and less financial concerns (Taft, Hosein, & Mehrizi, 2013).

### *2.4 Financial Education and Literacy Among Women of Low-Income*

The researchers also found mixed results regarding the relationship between financial literacy in this low-income group. The majority of scholars found that a poor society tends to have lower levels of financial literacy (Fernandes et al., 2014; Mitchell et al., 2009). In contrast, there is evidence that some low-income individuals have strong financial literacy skills, as they have continuously learned how to deal with a tight budget (Buckland, 2010, 2011).

### *2.4 Motivation Toward and Perceived Usefulness of Financial Education*

In order to accurately assess the effectiveness of the training, it is crucial that all educators and trainers examine the characteristics of the trainees, especially their motivation and attitude (Driscoll, 2008; Noe, 1986). To increase learner's motivation, it is imperative that the educator improve the relevance of the content of the program, as the participant will always raise the question: "What's in it for me?" (Frymier & Shulman, 1995). Relevance is defined as the extent to which making judgments has significant consequences for the individual (Sanbonmatsu, Shavitt & Sherman, 1991). Relevance may also refer to the perception of whether the course instruction /content is able to satisfy participants' personal needs and goals (Keller, 1983). According to the elaboration likelihood model, personal relevance becomes a moderating variable in the effectiveness of the communication (Petty & Cacioppo, 1986). Irrelevant communication renders the audience unwilling to spend much cognitive effort on the message (Petty & Cacioppo, 1986). Based on the above discussion, the following hypothesis is developed:

*H1: Motivation to join financial education training has a positive influence on financial literacy.*

To assess the effectiveness of training, educators need to measure the perceived usefulness of the training. Perceived usefulness is crucial in increasing the learner's self-regulation in a learning environment (Schunk & Zimmerman, 2012). The concept of usefulness is somewhat situation-dependent in that the characteristics of the learning environment or learning context influence usability (Liaw & Huang, 2013). Thus:

*H2: Perceived usefulness of financial education training has a positive influence on financial literacy.*

### 3. Methods

The researchers applied the mixed-method research approach, which is defined as follows:

“The type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration.” (Johnson, et al., 2007: 123)

The researchers used a mixed research method, as it allowed for the corroboration of each quantitative and qualitative method through triangulation (Rossman & Wilson, 1985). The method chosen also enriched the data analysis process (Rossman & Wilson, 1985).

The population for the quantitative study was all female street sweepers who joined the financial literacy education program (N=37). The financial literacy training was conducted at the Universitas Indonesia main campus located in Depok-Indonesia. The questionnaires were distributed to 23 street sweepers after the 10-week financial education program had been completed in December 2015. Convenience sampling was applied in the study since 15 street sweepers were absent during data collection. The quantitative survey was conducted using a self-administered method. However, the researchers remained in close proximity while the respondents were completing the questionnaire in case they had questions. A financial literacy questionnaire from the Central Bank of Indonesia was adopted and modified to assess the financial literacy of participants as it the questions were relatively for the low educated group to answer.

The study measured all the dimensions of financial literacy developed by Huston (2010), which consisted of basic financial literacy concepts (calculation, time value of money), borrowing concepts (loans), saving/investing concepts and protection concepts. Twelve questions pertaining to financial literacy were asked. The sample item used to measure basic financial literacy was “If you have IDR 4.800 and someone gave you IDR 5.800 more, how much money do you have now?”. The sample item to measure borrowing concepts was “If you secure an IDR 10.000 loan from the bank, and the bank charges you 12% interest, how much money will you pay in a year?”. The sample item to measure saving/investing concepts was “For farmers, planting one species of plants is usually safer than planting many types of plants. The sample item used to measure the protection concept was “If you get the insurance option only for 1 person in the household to reduce the risk/impact on all household members. Who do you think most eligible household member to get the insurance?”

Furthermore, in-depth interviews were conducted to 10 of the 37 street sweepers working at Universitas Indonesia. The interviews were completed by the researchers and the research assistants after the 10 week financial literacy education was completed. The interview guidelines consisted of open-ended questions on motivation, attitude and perceived usefulness of financial education. The analysis was exploratory and followed the procedure of thematic coding, which includes recording or identifying passages of text or images that are linked by a common theme or idea. This allow the researchers to index the text into categories and therefore establish a framework of thematic ideas (Gibbs, 2007).

## 4. Results and Discussion

### 4.1 Quantitative study

Based on Table 1, all the street sweepers are married women with an average income of around IDR 1,6 million. Nearly all of the respondents are middle-aged women who only graduated from primary school (73.9%).

Despite their low income, a majority of the street sweepers have an interest in financial matters (78.3%). Since they work at the university, they trust the students and seek them out for advice on financial issues.

Tabel 1. Descriptive Statistics

Variable	Description	Percentage
Marital Status	Married	100%
Age	Mean	43,65 years old
Education	Primary school	73.9%
	Secondary school	26.1%
Children	Mean	3
Dependence	Mean	2
Personal Income	Mean	IDR 1.616.000
Family Income		IDR 2.552.300
Bank Loan	Yes	69,6%
	No	30,4%
Savings type	Money	78.3%
	Gold	4.3%
	Both	13.0%
	Don't have	4.3%
Interest in financial matters	Interested	78.3%
	Not Interested	21.7%
Reference source for financial issues	Radio/TV	19%
	Peers & Family	4.8%
	Lainnya (students)	76.2%

To test the hypotheses, the researchers conducted a regression analysis using SPSS.

Tabel 2. Regression Analysis

Model Summary	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig	Regression Coefficient	Level of Significance
Regression	0.894	0.799	39.675	0.000		
Constant					0.47	0.917
Motivation					1.245	0.000

Perceived Usefulness	-0258	0.296
-------------------------	-------	-------

---

Dependent variable: financial literacy

From the results of the regression for H<sub>1</sub> to H<sub>2</sub>, the regression model shown in Table 2 had a good fit ( $F=39.675$ ,  $P=0.000$ ) and a high adjusted R<sup>2</sup> value of 0.894. Based on the above analysis, hypothesis 1 is accepted ( $\text{Sig } 0.00 < 0.05$ ), while hypothesis 2 is rejected ( $\text{Sig } 0.296 < 0.05$ ). The statistical results demonstrate that only motivation significantly influences participants' financial literacy, while perceived usefulness has no influence on participants' financial literacy.

## 4.2 Qualitative study

A theme that emerged from the interview was that some of the street sweepers appeared to be apathetic toward the financial education training provided them over a 10-week period. They were really interested in getting out of the financial education training rather than learning anything about the basics of financial literacy. Their low motivation to join the training can be seen in their excuses for not joining the session after the Quran recital and regular meeting. Those who always had an excuse for not attending the financial education sessions also did not appear to have an initial interest in attending the financial education course. This is evident from their comments below:

*Respondent 7: I have to go to a wedding function. I cannot join the financial education course.*

*Respondent 8: I can't join the financial education course as I have to take care of my granddaughter.*

Some participants in the financial education training program explained that transportation allowance was their main motivation to join the program.

*Respondent 1: I don't like the training. I joined this training because they promised me that they would open an account for me and give me some money.*

As previously explained in the literature review section, the relevance of content (Keller, 1983) and the perceived usefulness of the training program are very important. (Schunk & Zimmerman, 2012) Many respondents found that the financial education training program was irrelevant and was not beneficial to them.

*Respondent 3: The financial education course is not easy for me. It's just too difficult.*

*Respondent 7: We don't need this complicated training. We know how to manage money. What we don't have is the money itself.*

## 5. Conclusion

This study provides an important contribution to the community engagement theory by providing an empirical evidence on the importance of motivation and perceived usefulness of community engagement program in influencing the effectiveness of the community engagement. The community engagement types applied in the study were the learning led



and popular education model as they focused principally on building and supporting the skills and confidence of community members (Hashagen, 2002). It is expected from the community engagement that the street sweepers can have better financial well-being and positive behavioral changes.

The quantitative results demonstrate that motivation is the most important factor that influences participants' financial literacy. Findings from the interviews also indicate why the financial education program provided to the participants did not improve their financial literacy. One of the explanations for participants' low financial literacy despite the financial education provided is possibly due to involuntary participation, low motivation and the unwillingness of participants to join the financial education program as confirmed by results from the qualitative study. The findings support previous study that individuals who enter a financial education program voluntarily tend to have better financial literacy than individuals who enter such a program involuntarily (Meier & Sprenger, 2013). Thus, it is very important that all educators and trainers examine the characteristics of the trainees, especially their motivation and attitude before they design certain community engagement program (Noe, 1986; Driscoll, 2008).

Both the quantitative and qualitative studies have also demonstrated that perceived usefulness influences the effectiveness of the community engagement program it is crucial in increasing the learner's self-regulation in a learning environment (Schunk & Zimmerman, 2012). The reason why the financial education program does not effectively influence participants' financial literacy might be the inappropriate delivery time of the educational program. It is very important for educators to educate their target audience at a "teachable moment," or under conditions when the information seems immediately relevant and applicable (Willis, 2008). Many participants in the financial literacy educational program felt that the information on how to save or manage their income was irrelevant to their circumstances, as they have no disposable income. This condition resulted in low motivation among participants in terms of retention of knowledge acquired from the financial education program. The result aligns with the 2009 study by Mandell and Klein, which demonstrated the low motivation among students of financial education courses toward retaining financial literacy knowledge, as they consider it irrelevant to their existing situation. Therefore, it is very important for those who seek to provide financial education programs to understand the characteristics of the target group and assess the relevancy of the financial education program accordingly (Keller, 1983).

### **Acknowledgements**

This research was financially supported by Community Engagement Grants (CEGs) UI Contract Number: 2253/UN2. R12/HKP05.00 Perjanjian/2015 at the Universitas Indonesia. I would like to thank Winarti Halim and Ruri Eka Fauziah Nasution for their contribution to the data collection.

### **References**

Atkinson, A., & Messy, F. (2013). *OECD Publishing (Vol. 34)*. Retrieved from <http://doi.org/10.1787/5k3xz6m88smp-en>

Bernheim, B. D., & Garrett, D. M. (2003). The effects of financial education in the workplace

- evidence from a survey of households.pdf. *Journal of Public Economics*, 87, 1487–1519. Retrieved from [https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/2031/Bayer\\_the\\_effects\\_of\\_financial\\_education.pdf%3Bjsessionid=77149A461D7A10EE568EE6C9AC575723?sequence%253D1](https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/2031/Bayer_the_effects_of_financial_education.pdf%3Bjsessionid=77149A461D7A10EE568EE6C9AC575723?sequence%253D1)
- Birochi, R., & Pozzebon, M. (2016). Improving financial inclusion: Towards a critical financial education framework. *RAE Revista de Administracao de Empresas*, 56(3), 266–287. <https://doi.org/10.1590/S0034-759020160302>
- Bruning, S. D., McGrew, S., & Cooper, M. (2006). Town – gown relationships : Exploring university – community engagement from the perspective of community members. *Public Relations Review*, 32, 125–130. <https://doi.org/10.1016/j.pubrev.2006.02.005>
- Buckland, J. (2010). Are Low-Income Canadians Financially Literate? Placing Financial Literacy in the Context of Personal and Structural Constraints. *Adult Education Quarterly*, 60(4), 357–376. <https://doi.org/10.1177/0741713609358449>
- Buckland, J. (2011). *Money management on a shoestring: A critical literature review of financial literacy & low-income people*. Task Force on Financial Literacy.
- Cacioppo, J. T., & Petty, R. E. (1984). The elaboration likelihood model of persuasion. *Advances in Consumer Research*, 11(1), 673–675. <http://doi.org/10.1558/ijssl.v14i2.309>
- Centers for Disease Control and Prevention. (2011). *Principles of community engagement*. Atlanta (GA): CDC/ATSDR Committee on Community Engagement. Retrieved from [https://www.atsdr.cdc.gov/communityengagement/pdf/PCE\\_Report\\_508\\_FINAL.pdf](https://www.atsdr.cdc.gov/communityengagement/pdf/PCE_Report_508_FINAL.pdf)
- Definit.Asia. (2013). Developing Indonesian Financial Literacy Index. Retrieved from <http://www.definit.asia/research-project6.html>
- Driscoll, A. (2008). Carnegie's Community-Engagement Classification: Intentions and Insights. *Change: The Magazine of Higher Learning*, 40(1), 38–41. <https://doi.org/10.3200/CHNG.40.1.38-41>
- Fernandes, D., Lynch, J. G., & Netemeyer, R. G. (2014). Financial Literacy, Financial Education, and Downstream Financial Behaviors. *Management Science*, 60(8), 1861–1883. <https://doi.org/10.1287/mnsc.2013.1849>
- Finclusion.org. (2015). Indonesia Quicksight Report Fit Tracker Survey Conducted August–November 2015.

- Frymier, A. B., & Shulman, G. M. (1995). "What's in it for me?": Increasing content relevance to enhance students' motivation. *Communication Education*, 44(1), 40–50. <http://doi.org/10.1080/03634529509378996>
- Hashagen, S. (2002). Models of community engagement. Retrieved from <https://pdfs.semanticscholar.org/cfb9/ba053e769248c6fbe4e0b65a7007d9969eec.pdf>
- Hastings, J. S., Madrian, B. C., & Skimmyhorn, W. L. (2013). Financial Literacy, Financial Education, and Economic Outcomes. *Annual Review of Economics*, 5(1), 347–373. <https://doi.org/10.1146/annurev-economics-082312-125807>
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household Financial Management: The Connection between Knowledge and Behavior. *Federal Reserve Bulletin*, 89. Retrieved from <http://heinonline.org/HOL/Page?handle=hein.journals/fedred89&id=791&div=&collection=>
- Hung, A. A., Parker, A. M., Yoong, J. K., & Yoong, J. (2009). Defining and Measuring Financial Literacy. Retrieved from [http://www.acove.com/content/dam/rand/pubs/working\\_papers/2009/RAND\\_WR708.pdf](http://www.acove.com/content/dam/rand/pubs/working_papers/2009/RAND_WR708.pdf)
- Huston, S. J. (2010). Measuring Financial Literacy. *The Journal of Consumer Affairs*, 44(2), 296–316. Retrieved from <http://urbanupbound.org/wp-content/uploads/2014/08/Measuring-Financial-Literacy.pdf>
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112–133. <http://doi.org/10.1177/1558689806298224>
- Keller, J. (1983). Motivational design of instruction. *Instructional -Design Theories and Models*.
- Liaw, S. S., & Huang, H. M. (2013). Perceived satisfaction, perceived usefulness and interactive learning environments as predictors to self-regulation in e-learning environments. *Computers and Education*, 60(1), 14–24. <http://doi.org/10.1016/j.compedu.2012.07.015>
- Lusardi, A., & Mitchell, O. S. (2007). Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education Programs. *Business Economics*, 42(1), 35. <http://doi.org/10.2139/ssrn.957796>
- Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare? In *American Economic Review* (Vol. 98, pp. 413–417). <https://doi.org/10.1257/aer.98.2.413>

- Lyons, A. C., Palmer, L., Jayaratne, K. S. U., & Scherpf, E. (2006). Are we making the grade? A national overview of financial education and program evaluation. *Journal of Consumer Affairs*. <https://doi.org/10.1111/j.1745-6606.2006.00056.x>
- Mandell, L., & Klein, L. S. (2009). The Impact of Financial Literacy Education on Subsequent Financial Behavior. *Journal of Financial Counseling and Planning*, 20(206), 15–24. Retrieved from <http://www.eric.ed.gov/ERICWebPortal/contentdelivery/servlet/ERICServlet?accno=EJ859556>
- Meier, S., & Sprenger, C. D. (2013). Discounting financial literacy: Time preferences and participation in financial education programs. *Journal of Economic Behavior and Organization*, 95, 159–174. <https://doi.org/10.1016/j.jebo.2012.02.024>
- Mitchell, O., Lusardi, A., & Curto, V. (2009). Financial Literacy Among the Young: Evidence and Implications for Consumer Policy. *Pension Research Council WP*, 1–35. <https://doi.org/10.2139/ssrn.1476982>
- Noe, R. A. (1986). Trainees' Attributes and Attitudes: Neglected Influences on Training Effectiveness. *Academy of Management Review*, 11(4), 736–749. <https://doi.org/10.5465/AMR.1986.4283922>
- Petty, R. E., & Cacioppo, J. T. (1986). The Elaboration Likelihood Model of Persuasion. *Advances in Experimental Social Psychology*, 19(C), 123–205. [https://doi.org/10.1016/S0065-2601\(08\)60214-2](https://doi.org/10.1016/S0065-2601(08)60214-2)
- Rossman, G. B., & Wilson, B. L. (1985). Numbers and Words: Combining Quantitative and Qualitative Methods in a Single Large-Scale Evaluation Study. *Evaluation Review*, 9(5), 627–643. <http://doi.org/10.1177/0193841X8500900505>
- Sanbonmatsu, D. M., Shavitt, S., & Sherman, S. J. (1991). The role of personal relevance in the formation of distinctiveness-based illusory correlations. *Personality and Social Psychology Bulletin*, 17(2), 124–132. <http://doi.org/10.1177/014616729101700202>
- Schunk, D. H., & Zimmerman, B. J. (2012). Self-Regulation and Learning. In *Handbook of Psychology*, Second Edition (pp. 45–68). <http://doi.org/10.1002/9781118133880.hop207003>
- Starček, S., & Trunk, A. (2013). The meaning and concept of financial education in the society of economic changes. In *Active Citizenship by Knowledge Management & Innovation*. Zadar, Croatia. Retrieved from <http://www.toknowpress.net/ISBN/978-961-6914-02-4/papers/ML13-475.pdf>
- Taft, M. K., Hosein, Z. Z., & Mehrizi, S. M. T. (2013). The Relation between Financial Literacy, Financial Wellbeing and Financial Concerns. *International Journal of Business and*

*Management*, 8(11). <https://doi.org/10.5539/ijbm.v8n11p63>

Willis, L. E. (2008). Against financial literacy education. *Iowa Law Review*, 197(94), 197–286.  
<http://doi.org/10.1257/aer.101.3.429>