

Financial Education, Financial Advisors, and Financial Literacy: Longitudinal and Mediation Analysis

Travis P. Mountain, Virginia Tech¹

Namhoon Kim, Virginia Tech²

Joyce Serido, University of Minnesota³

Soyeon Shim, University of Wisconsin-Madison⁴

Sufficient financial knowledge plays an essential role in appropriate financial (Lusardi & Mitchell, 2007; Hilgert, Hogarth, & Beverly, 2003; Robb & Woodyard, 2011; Robb & Sharpe, 2009). However, Americans are not highly financially knowledgeable and are, therefore, less prepared to make effective financial decisions as compared to those in other countries (Klapper, Lusardi, & Van Oudheusden, 2015; OECD, 2016; OECD, PISA 2015 Results (Volume IV), 2017). A popular strategy for improving financial knowledge is to offer a financial curriculum for high school and college students. Many scholars have evaluated the effects of educational interventions on financial knowledge using test scores from personal finance questionnaires. However, higher test scores do not necessarily guarantee better financial behaviors. Thus, the effect of educational interventions on financial behaviors is still unclear, although financial education has been shown to increase the level of financial knowledge. In this study, we focus on the financial literacy development of young adults over a period of five years and investigate the educational effect on financial behaviors using financial literacy as a dependent variable. To explore interventions that affect financial literacy, we examine the effect that financial advisors have on the financial behaviors and financial knowledge of young adults.

We examine three waves of a dataset, collected in 2008, 2010, and 2013, consisting of financial knowledge and behaviors of young adults collected as part of the Arizona Pathways to Life Success (APLUS) project and estimate the effects of various financial learning and advising activities in which participants engaged. To identify the effect on unobserved financial literacy, we first consider three relationships: (1) the link between educational interventions and the level of financial knowledge; (2) the link between the level of financial knowledge and appropriate financial behaviors, and (3) the link between educational interventions and financial behaviors. Based on these links, we evaluate the direct and indirect effects of educational interventions of young adults.

The results show that direct effects dominated indirect effects. Meeting with a financial advisor or counselor about a future financial plan is positively associated with higher probability of having proper financial behaviors but does not influence improper financial behaviors regardless of direct or indirect way. Reading a book and magazine regarding personal finance is also positively associated with higher probability of having proper financial behaviors but also increases the probability of increasing improper financial behaviors. The formal financial education in college does not affect financial knowledge and behaviors. In addition, the level of objective financial knowledge plays an important role in encouraging respondents to have proper financial behaviors, but not discouraging them to have improper financial behaviors.

To identify individual financial literacy, researchers use the questions proposed by Lusardi and Mitchell (Lusardi & Mitchell, 2011). However, many studies fail to find a significant link between the behaviors of young adults and the knowledge from the questions. APLUS has used different questions from those by Lusardi and Mitchell. They include both general financial knowledge and the questions regarding proper or improper financial behaviors. The behavioral questions would play a significant role in the strong link. Thus, for future research, we need to consider more informed questions to evaluate financial literacy rather than financial knowledge.

¹ Assistant Professor, Department of Agricultural and Applied Economics, 316 Hutcheson Hall, Virginia Tech, Blacksburg, VA, 24061, USA. Phone: 540-231-3545 Email: travis35@vt.edu

² Ph.D., Department of Agricultural and Applied Economics, 317 Hutcheson Hall, Virginia Tech, Blacksburg, VA, 24061, USA. Phone: 540-676-2545 Email: hoonkim@vt.edu

³ Associate Professor, Department of Family Social Science, 299b McNeal Hall, University of Minnesota, Twin Cities, Saint Paul, MN 55108, USA. Phone: 612-301-9693 Email: jserido@umn.edu

⁴ Professor, School of Human Ecology, 2135 Nancy Nicholas Hall, University of Wisconsin-Madison, Madison, WI 53706, USA, Phone: 608-262-4847, Email: soyeon.shim@sohe.wisc.edu

References

- Hilgert, M., Hogarth, J., & Beverly, S. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*, 89, 309-322.
- Klapper, L., Lusardi, A., & Van Oudheusden, P. (2015). Financial Literacy Around the World. *Standard & Poor's Ratings Services Global Financial Literacy Survey*. Retrieved from <http://media.mhfi.com/documents/2015-Finlit\ paper\ 17\ F3\ SINGLES.pdf>
- Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United States. *Journal of Pension Economics & Finance*, 10(4), 509-525.
- Lusardi, A., & Mitchell, O. (2007). Financial literacy and retirement preparedness: Evidence and implications for financial education. *Business Economics*, 42(1), 35-44.
- OECD. (2016). OECD/INFE international Survey of Adult Financial Literacy Competencies. Retrieved June 19, 2017, from <http://www.oecd.org/daf/fin/financial-education/OECD-INFE-International-Survey-of-Adult-Financial-Literacy-Competencies.pdf>.
- OECD. (2016). *PISA 2015 Assessment and Analytical Framework: Science, Reading, Mathematic and Financial Literacy*. OECD publishing.
- OECD. (2017). PISA 2015 Results (Volume IV). Paris: OECD Publishing.
doi:<http://dx.doi.org/10.1787/978926427082-en>
- Robb, C., & Sharpe, D. (2009). Effect of personal financial knowledge on college students' credit card behavior. *Journal of Financial Counseling and Planning*, 20(1), 25-43.
- Robb, C., & Woodyard, A. (2011). Financial knowledge and best practice behavior. *Journal of Financial Counseling and Planning*, 22(1), 60-70.

Acknowledgements

This research is supported the Arizona Pathways to Life Success (APLUS) project.