

Beyond the Classroom

Evidence on New Directions in Financial Education

Financial education is widely used by governments, financial service providers, and non-governmental organizations as a tool to help people navigate the financial system and make better financial choices. Financial education programs are built on the assumption that education will lead to knowledge, and that knowledge will lead to better choices and improved financial health. Recent evidence suggests that assumption is flawed, but also shows promise for some new, alternative approaches to financial education.

A robust body of evidence shows that on average conventional approaches to financial education have not been successful in either imparting lasting knowledge or in changing people's financial behavior. While these findings may seem discouraging at first glance, the conventional approach to financial education is not the only approach, and several new methods have been rigorously tested in recent years and yielded positive results. This brief explores the emerging evidence on these new approaches and considers where purveyors of financial education, researchers, and policymakers should go from here.

We encourage providers to use existing evidence to design financial education programs, to assess whether they are in demand, and to rigorously test them. In doing so, providers will avoid wasting resources on ineffective or unpopular programs. Randomized evaluation, the gold standard for impact evaluation, is the methodology that was used to test the impact of all the interventions described in this brief.



Why Financial Education?

Increasing access to and use of quality financial products and services is essential to inclusive economic growth and poverty reduction. Research shows that when people participate in the financial system, they are better able to manage risk, start or invest in a business, and fund large expenditures like education or a home improvement.¹ However, increased access to financial services doesn't necessarily lead to improved financial health. One problem is that people make poor financial decisions, such as over-borrowing or under-saving.

Governments, non-profits, and financial service providers have introduced financial education courses for interested adults as a way to promote stronger financial awareness, knowledge, and skills. These programs are multitudinous and diverse, varying in duration, intensity, and curriculum. They range in frequency from a single hour-long session to weekly sessions over many months. They focus on topics such as saving, budgeting, risk management, debt management, or a combination. Some cater to particular groups, like lending groups, migrants, or farmers, while others are designed for a general audience. They are often delivered by trainers in physical locations like classrooms, but as we discuss in this brief, technology-based delivery channels are becoming more commonplace.

The High Cost of and Low Demand for Financial Education

In addition to having limited impacts on the financial behavior of participants, the costs of conventional financial education tend to be high and demand for it low. A 2012 report estimated that supplemental financial education programs (i.e. those provided by MFIs or banks to their clients), for example, cost \$14-\$20 per learner – sometimes more.³ This cost could make conventional trainings difficult if not impossible to scale, even if they did have an impact on consumer behavior.

Meanwhile, the take-up rates for these programs have been very low on average. In Mexico, for example, even when adults were offered 1,000 pesos (US\$72) to attend a half-day financial education course, only one-third of adults completed it.⁴

That study investigated reasons for low demand for the course—which has served over 300,000 people and has been expanded throughout Latin America—and measured its impacts on knowledge and behavior. Adults were randomly offered one of the following incentives to attend: free transportation to the course, positive testimonials from people who had attended it, 1,000 pesos (US\$72) immediately after completing it, 500 pesos (US\$36) immediately after completing it, 500 pesos one month after completing it, or no incentive.



The study showed that it was difficult to persuade large numbers of people to attend the course, and that the benefits of attending were very limited, suggesting that people are making the optimal choice in deciding not to attend.

How Financial Education Works in Theory

To solve

People make financial decisions that are detrimental to their financial health this problem, governments, non-profits, and FSPs introduce financial education

programs

People attend financial education programs

The financial knowledge of people improves People apply their new knowledge to their financial decisions

The financial health of people improves

Financial education is based on a series of assumptions: 1) that people's poor financial choices stem from a lack of knowledge, 2) that once knowledge improves, people will make better financial decisions, and 3) that better decisions will lead to better financial health. Although this theory is logical enough, evidence suggests that somewhere along this process, something fails. Three recent meta-analyses, each based on data from over one hundred academic papers on financial education, revealed that on average financial education has had only small positive impacts on the financial behavior of the people offered the programs, and effects were particularly small among low-income populations in developing countries.²

However, the research that is emerging now suggests that certain ways of designing and targeting financial education can promote welfare-enhancing financial behavior among low-income individuals in developing countries. These solutions include making financial education simple and actionable, personalized for individuals' needs and situations, timed to coincide with decisions, convenient to access and entertaining to participate in, and targeted to those who are primed to learn, such as youth and young adults.



Make it Simple and Actionable 🖆

For financial education to work, people need to be able to apply the knowledge they gain to their own financial situations. However, if the financial concepts are too complicated to understand, or if the material is not clearly linked to real-world situations, it may be difficult for participants to apply.

In the Dominican Republic, Banco ADOPEM tried simplifying their financial education training and making the concepts more actionable. The microfinance institution offered its clients a simple and practical "ruleof-thumb" training. Rather than teaching underlying accounting concepts, ADOPEM taught participants simple rules for financial decision-making, such as storing business and personal cash in different drawers to keep accounts separate. It taught clients about paying oneself a fixed salary, distinguishing between business and personal expenses, and easy-to-implement tools for reconciling accounts.

Clients who were offered the rule-of-thumb training were 8-25 percent more likely to engage in the various

healthy business practices that were taught, a significant difference from those who received no training at all. Meanwhile, the business practices of clients who were offered the standard accounting training did not significantly improve along most dimensions (though the clients were more likely to set aside cash for business expenses). The simple training worked especially well for business owners who had the most limited business and accounting skills before the study began.⁵The success of this program suggests that simplifying financial education into concrete, actionable steps may be more effective at changing consumer business practices than traditional concept-based accounting training.

The program was originally offered in a classroom, but it is now being tested over a digital platform—mobile phones—by Janalakshmi, a non-banking finance company in India (with support from the Citi IPA Financial Capability Research Fund).[†] If effective, the program would be attractive to scale up, due to the reach and affordability of delivering information through digital technology.



Make it Personalized

Many financial education programs cover a broad range of topics with the aim of appealing to a wide swath of people with a range of needs, but some evidence suggests the opposite is more effective. Several studies have shown that personalizing education, by tailoring it to individuals' particular needs or financial situations, makes it more likely to impact their behavior. The theory is that when lessons are made relevant to people's lives, they will be more likely to pay attention, learn, retain the lessons, and apply them at decision time.⁶

At the far end of the personalization spectrum are one-on-one coaching and counseling programs, in which education and guidance is tailored to the needs of each individual. In Peru, Superintendencia de Banca, Seguros y AFP (SBS) implemented an intensive coaching intervention for the employees of a shipping company (with support from the Citi IPA Financial Capability Research Fund).[†] Trained coaches met with employees every week to discuss their financial activities that week, set financial goals, and identify action steps to reach those goals. Even though participants were often not able to attend—on average, participants attended 8.6 sessions out of 20-the coaching positively impacted participants' financial capability, financial satisfaction, likelihood of having a financial goal, and likelihood of having a savings account. It also decreased the amount of debt that participants held.

While it is valuable to learn that these programs have positive impacts, making policy prescriptions from these results is difficult; in-person coaching programs are incredibly expensive and impractical to implement at scale. So, this raises the question: how can such programs be implemented more cheaply? Can technology provide this level of personalization, without the high costs? This is a key area for research and innovation.

Research from Chile provides insight that such technological solutions may hold promise. There, the Superintendencia de Pensiones installed computer kiosks in several social services offices. The kiosks could provide two experiences to users, either a generic experience or a personalized experience. With the former, users received general information about the benefits of making pension contributions and suggestions on how to increase their eventual pension payout. With the latter, users received projections of their payouts based on their personal financial profiles. They could also use a simulator to see how different decisions about formal employment, retirement age and voluntary contributions affected their payout. When the impact of the different user experiences was tested (with support from the Citi IPA Financial Capability Research Fund), researchers found that the personalized experience significantly increased the probability that users would make voluntary contributions and increased the amount they contributed compared to the generic experience.[†]

Impact of Financial Education on Likelihood of Savings Account Ownership 10 Months after Program Conclusion



In India, adding one-on-one counseling to a classroom-based video training was also found to be effective. Counselors visited training participants at their homes, where they provided individualized instruction and advice based on the participants' needs. While the classroombased, more general training had no impact on participant behavior on its own, adding the individual counseling significantly improved behavior: the likelihood that participants made a regular monthly budget increased by 3.8% and the likelihood that they held a formal savings account increased by 13.8%.⁷

Make it Timely 🖾

Financial education can increase knowledge, but this gain tends to be short-lived; participants do not usually experience long-term impacts on knowledge. One meta-analysis revealed that people forget the knowledge they gain from financial education quickly, even when a program is intensive. That study showed that knowledge gained from very intensive programs, with instruction lasting a total of 24 hours, still nearly disappeared after 18 months. These findings suggest that timing education to coincide with financial decisions, or soon before them, may be a promising direction, giving participants less of a chance to forget what they learned.⁸

Although evidence on this approach to financial education is still scant, some programs that try to offer training at a time that coincides with a financial decision have been successful. One program offered a short financial education training on compound interest (which appeared to be driving underinvestment in pensions) to households in China. Participants were asked to make a decision about how much they wished to contribute to pension savings immediately at the conclusion of the training. Pension contributions increased by 15-40 percent among participants who received the training (depending on the content of the training that was provided, it increased more or less).⁹ More research is required to understand whether it was, in part, the proximity of the training to the financial decision that helped to create the positive impact, but this does seem like a promising area for exploration.¹⁰

Make it Convenient to Access and Entertaining to Experience

The study in Mexico mentioned above on the demand for financial education, which illustrated that demand is low even when large monetary incentives are offered, underscored the fact that the opportunity cost of financial education is very high. Asking people to take valuable time out of their day to attend a course that they may not find useful is unlikely to draw high attendance rates. For this reason, bringing financial education programs into people's homes, by integrating them into daily activities or letting people access them whenever it's convenient, may be one solution to improving take-up. Making programs entertaining may also help keep participants engaged. Entertainment media is therefore one option for reaching and engaging a broad captive audience.

In Colombia, for example, Fundación Capital aimed to make financial education programs more convenient to access and more entertaining by designing a tabletbased application called LISTA that used video modules, simulations, and games to teach financial skills and concepts. It was aimed at beneficiaries of Colombia's conditional cash transfers program, Más Familias en Acción. Tablet computers with the LISTA app were distributed to beneficiaries, who rotated them amongst themselves. Each beneficiary had about one day to use the tablet in their own home and could navigate to the content they found most interesting and relevant, or repeat any content as many times as they wished.

An evaluation of the impact of LISTA (supported by the Citi IPA Financial Capability Research Fund) showed that beneficiaries who were given access to the LISTA app had more informal savings, were more likely to have a savings goal, and had greater trust in banks.[†]

Another successful example of using entertainment to deliver financial education comes from South Africa,

where the production company Ochre Media, the National Debt Mediation Association (NDMA), and a team of financial capability and social marketing experts decided to use a widely-watched soap opera called Scandal! as a vehicle for financial education. They created a two-month storyline within the series in which a character on the show faced financial troubles: she borrowed excessively, gambled, and took on rent-to-own contracts. Eventually, she got help by calling the NDMA hotline and took control of her financial situation. During episodes in which the NDMA was mentioned, the actual phone number for the NDMA was shown on the screen so that viewers dealing with indebtedness could call and get help.

At the time, Scandal! was already a popular soap opera, with about 2.5 million viewers who were mostly low- and middle-income South Africans, so the team was confident that it would command a large audience. They provided a small incentive to ensure that people assigned to watch the show did in fact watch it, and achieved take-up of 96 percent, much higher than the typical financial education program. The impacts on borrowing and gambling behavior four months after the financial education messages concluded were positive: those who were encouraged to watch Scandal! were 69 percent more likely to borrow through formal versus informal channels, 23 percent less likely to enter rentto-own contracts, and 17 percent less likely to gamble. (They also called the NDMA hotline in large numbers immediately following its feature on the show, but this impact was short-lived: there was no detectable change in the number of calls to the hotline four months later.¹¹)

Although few examples like Scandal! exist, its popularity suggests that "edutainment" could play a role in reducing the cost of financial education provision. Despite the initial high production cost, the marginal cost of offering financial education through mass dissemination, like television, is likely low because such a large audience can be reached. Other programs, like "Makatuno Junction" in Kenya and "Nuestro Barrio" in the United States, are also being used as vehicles for financial education (and many other TV series promote social messages related to health or education). However, since some of the impacts from Scandal! were short-lived, more research is needed to understand whether educational messages through edutainment can have a longer-term impact.



A woman uses the LISTA app on a tablet.

Target Youth and Young Adults **1**

Young people are a group that can be easily reached through schools and youth groups, and some researchers theorize that it is easier for them to learn financial concepts and skills because their young minds are ready to soak up information.¹² It could be particularly rewarding to target youth and young adults with financial education if the healthy financial habits they learn stick with them as they get older, benefiting them for the rest of their lives. Some studies show that financial education for youth and young adults can impact their financial behavior.

In Brazil, a large-scale program offered as part of a school curriculum over a period of 17 months was found to positively impact not only students, but also their parents: among other improvements, students who received the financial education were 11 percent more likely to save up for purchases, and their parents' savings rate increased by 5 percent on average.¹³

In a study in Uganda, members of Church of Uganda youth groups (aged 16-28) were provided with financial education, a FINCA group savings account, a combination of the two services, or neither service. The financial education program lasted 15 hours over 10 weeks and covered general financial concepts, including savings, budgeting, and borrowing. In the short term (approximately one year after service provision ended), young people who received any service—financial education, the savings account, or both—were saving more than those who received no services, and also had higher income.¹⁴

At that time, there was no long-term increase in savings except among those who had received both services. This may indicate that financial education alone is not as effective as combining education with access to savings accounts, though more research is needed to know whether this is true.

Regardless, the finding that the participants were still benefitting from increased business incomes several years after receiving financial education makes it clear that financial education can produce lasting benefits under these circumstances.



Looking Ahead: Further Innovation and Testing

Ultimately, the financial education space is in dire need of further innovation. There are some promising hopes and guiding principles, but many challenges to implement at scale. Given that scaling financial education programs can be costly and few of the programs tested so far have succeeded in improving financial behavior on average, it is important to consider new approaches. Making financial education simple and actionable, personalized for individuals' needs and situations, timed to coincide with decisions, convenient to access and entertaining to participate in, and targeted to those who are primed to learn, such as youth and young adults, are all potentially promising directions. However, more research is needed to fully understand the impacts of these new approaches.

If the goal is to promote better decision-making and ultimately improve financial well-being, purveyors of financial education should use existing evidence to inform program design, and ensure programs aim to go beyond improving knowledge to eliciting behavior change. There will never be one financial education curriculum that works for everyone. Such an aspiration fails to recognize the vastly different market settings and individual capabilities, human capital, and behavioral biases.

Technological innovations, such as mobile phone apps and messaging interfaces, hold some promise, but need further work and testing. Mobile devices and the internet can enable financial education to be personalized at the individual level. Mobile or tablet apps can be selfpaced and self-directed, personalized for the particular context, or timed to coincide with a person's decisions, all without a high per-beneficiary price tag. Technological solutions that manage to adapt individual experiences to specific needs will have much better promise for impact at scale than any one-size-fits-all approach.



Endnotes

- For all studies supported by the Financial Inclusion Program's Financial Capability Initiative, visit www.poverty-action.org/financial-capability-studies.
- See, for example, the following sources: Ashraf, Nava, Dean 1. Karlan, and Wesley Yin. "Female empowerment: Impact of a commitment savings product in the Philippines." World development 38, no. 3 (2010): 333-344. Bruhn, Miriam, and Inessa Love. "The real impact of improved access to finance: Evidence from Mexico." The Journal of Finance 69, no. 3 (2014): 1347-1376. Burgess, Robin, Rohini Pande, and Grace Wong. "Banking for the poor: Evidence from India." Journal of the European Economic Association 3, no. 2-3 (2005): 268-278. Dupas, Pascaline, and Jonathan Robinson. "Savings constraints and microenterprise development: Evidence from a field experiment in Kenya." American Economic Journal: Applied Economics 5, no. 1 (2013): 163-192. Prina, Silvia. "Do basic savings accounts help the poor to save? Evidence from a field experiment in Nepal." Weatherhead School of Management, Case Western Reserve University, Cleveland, OH (2012). Cull, Robert, Tilman Ehrbeck, and Nina Holle. "Financial inclusion and development: Recent impact evidence." CGAP Focus Note 92 (2014).
- See the following sources: Miller, Margaret, Julia Reichelstein, Christian Salas, and Bilal Zia. "Can you help someone become financially capable? a meta-analysis of the literature." *World Bank Policy Research Working Paper* 6745 (2014). Fernandes, Daniel, John G. Lynch Jr, and Richard G. Netemeyer. "Financial literacy, financial education, and downstream financial behaviors." *Management Science* 60, no. 8 (2014): 1861-1883. Kaiser, Tim, and Lukas Menkhoff. "Does Financial Education Impact Financial Behavior, and if So, When?" (2016).
- 3. Deb, Anamitra, and Mike Kubzansky. "Bridging the gap: The business case for financial capability." *New York: Monitor Group and Citi Foundation* (2012).
- Bruhn, Miriam, Gabriel Lara Ibarra, and David McKenzie. "The minimal impact of a large-scale financial education program in Mexico City." *Journal of Development Economics* 108 (2014): 184-189.

- Drexler, Alejandro, Greg Fischer, and Antoinette Schoar. "Keeping it simple: Financial literacy and rules of thumb." *American Economic Journal: Applied Economics* 6, no. 2 (2014): 1-31.
- 6. World Bank. "Chapter 6: Household finance." *World Development Report 2015: Mind, Society, and Behavior*. World Bank (2015).
- Carpena, Fenella, Shawn Allen Cole, Jeremy Shapiro, and Bilal Zia. "The ABCs of financial education: experimental evidence on attitudes, behavior, and cognitive biases." World Bank Policy Research Working Paper 7413 (2015).
- Fernandes, Daniel, John G. Lynch Jr, and Richard G. Netemeyer. "Financial literacy, financial education, and downstream financial behaviors." *Management Science* 60, no. 8 (2014): 1861-1883.
- 9. Song, Changcheng. "Financial illiteracy and pension contributions: A field experiment on compound interest in China." *Available at SSRN 2580856* (2015).
- 10. World Bank. "Chapter 2: Financial Inclusion for Individuals." *Global Financial Development Report*. World Bank (2014).
- 11. Berg, Gunhild, and Bilal Zia. "Harnessing emotional connections to improve financial decisions: Evaluating the impact of financial education in mainstream media." *World Bank Policy Research Working Paper* 6407 (2013).
- 12. Xu, Lisa, and Bilal Zia. "Financial literacy in the developing world." *Available at SSRN 2248863* (2013).
- Bruhn, Miriam, Luciana de Souza Leao, Arianna Legovini, Rogelio Marchetti, and Bilal Zia. "The impact of high school financial education: experimental evidence from Brazil." *World Bank Policy Research Working Paper* 6723 (2013).
- Jamison, Julian C., Dean Karlan, and Jonathan Zinman. *Financial education and access to savings accounts: Complements or substitutes? Evidence from Ugandan Youth Clubs.* No. w20135. National Bureau of Economic Research (2014).

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