Effectiveness of Financial Education Workshops - Results of a Pilot Study

*Dr. R.R. Rajamohan

ABSTRACT

The households in India have an array of investment alternatives in the market place. The financial decision making is a difficult process for households. Perhaps the difficulty has arisen due to the pace at which changes are taking place in the market coupled with the introduction of new and complex products. Financial education programmes are conducted in different parts of the world to improve the financial knowledge of the participants to facilitate their financial decision making process. However, the financial education programs conducted at different part of the world showed mixed results – improving the financial decision making of the participants to no improvement. Hence, the author conducted a financial education workshop to college faculty members. The author gathered the financial literacy levels of the participants' prior and post the workshop and found that the workshop was effective in improving the financial knowledge of the participants.

Introduction

In India, plethora of alternatives is available in the financial market for investors. However, financial decisions are particularly vexing to many of today's families and same is the case with many business people as well. Perhaps the confusion has arisen because of the speed at which financial markets and new financial instruments have emerged or because of the higher levels of sophistication and the longer time horizons required for sound financial decisions. The added complexity is taking place just as households face increased responsibilities for financial decisions and for insuring their own financial well-being. Lengthening life spans are making retirement planning a higher priority; with the shift from defined benefit plans to defined contribution plans, it is a decision that a growing number of retirees will face: specifically, whether they should annuitize their retirement savings. This complicated decision requires that individuals consider not only their future consumption needs and portfolio allocation options, but also their longevity risk.

Availability of credit options is providing individuals with more capacity to invest in education and owner-occupied housing and to separate the timing of consumption from the timing of income. At the same time, bad decisions can mire households in debt and lead to much lower living standards than they could afford had their financial decisions been more sensible. For the new financial freedom to help most people, it is essential that they understand their choices and the likely implications of alternative choices. Unfortunately, many Indians have a weak grasp of basic personal finance principles.

* Professor & Head, Department of Management Studies, Meenakshi College of Engineering, 12, Vembuliamman Koil Street, K.K.Nagar (West), Chennai-600078.

The shift from defined benefit to defined contribution pensions has put the workers an unprecedented degree of control over their pensions and savings, the importance of financial literacy and financial education has increased considerably. Large changes in the structure of financial markets, labour markets, and demographics have led to this change. Consumers have a bewildering array of complex financial products – from reverse mortgages to annuities – to choose from, making saving decisions increasingly complex. Knowledge about the working of compound interest rates, the effects of inflation, and the working of financial markets is essential to make savings and investments decisions. Financial literacy impacts financial decision-making. Failure to plan for retirement, lack of participation in the stock market, and poor borrowing behavior can all be linked to ignorance of basic financial concepts.

Thus, financial literacy plays an important role in many investment decisions and on savings behaviour. Research shows that individuals who are less financially sophisticated avoid the stock market, are less likely to save for retirement, and may be more likely to succumb to the default bias. In addition, individuals with less knowledge tend to make poor debt decisions related to mortgage refinancing and often transact in relatively more costly manners than others.

Review of Literature

Does financial education work as hoped? Empirical evidence has mixed results. Some studies didn't show a positive correlation between financial education and financial knowledge or between financial knowledge and financial outcomes. At the same time several other studies that examine the effects of literacy on savings and investment choice have found that literacy matters.

The review of literature covers studies which found the positive relationship between the financial literacy and financial outcomes and studies which have not found such relationships.

Bernheim, Garrett and Maki (1997) using surveys of 30-49 year-olds in 1995, looked at the impacts of the presence and timing of state mandated financial education requirements. They found the requirements led to more students taking financial education and, subsequently, higher savings and net worth. Self-reported savings rates were approximately 1.5 percent higher for students entering a high school grade five years after the imposition of a financial education mandate than for students not present when this mandate was instituted. Compared to the overall population, the rate of saving out of income for students exposed to the mandate was 4.75 percent higher in the population distribution than for those who were not. Duflo and Saez (2002) selected a random group of non-faculty employees at a large university and gave financial incentives to participate in a benefit fair. Participation in pension plans and pension contributions of this group were then compared to those who were not induced to participate and found that the effects of this program were found to be mixed and overall pretty small. Attending the benefit fair induced more employees to participate in pension plans but the increase in contributions was negligible.

John P. Caskey (2006) argues that the financial literacy initiatives might help lower-income households build savings and improve credit records and concludes that a high research priority should be provided to gather more robust evidence on whether teaching personal financial management skills to lower-income households can be an effective means to improve their financial situations. Calvert, Campbell, and Sodini (2007) showed that households with greater financial sophistication are more likely to participate in risky assets markets and invest more efficiently. Annamaria Lusardi and Olivia S. Mitchell (2007) using the Rand American Life Panel (ALP) data, compared respondents' self-assessed financial knowledge levels with objective measures of financial literacy and found that financial literacy proves to be a key determinant of retirement planning. They also found that respondent literacy is higher when they were exposed to economics in school and to company-based financial education programs.

Angela Lyons and Yunhee Chang (2007) investigated the impact that a financial education program has on participants' financial behaviours, showed that the program benefited all of the participants and the greatest improvement in financial behaviour was observed for those who reported lower levels of financial ability prior to the program. Annamaria Lusardi, Olivia S. Mitchell and Vilsa Curto (2009) examined financial literacy among the young using data from the 1997 National Longitudinal Survey of Youth. They found that financial literacy is low among the young; less than one-third of young adults possess basic knowledge of interest rates, inflation, and risk diversification. Financial literacy is strongly related to socio-demographic characteristics and family financial sophistication. Deborah Thorne, Katherine Porter (2010) using data from the 2007 Consumer Bankruptcy Project, examined debtors' attitudes about the value of financial education and found that many debtors express optimism about the future benefits of financial education, only about one in three debtors believes financial education could have prevented their bankruptcy.

Justine Hastings, Olivia S. Mitchell, (2010) using data from a randomized experiment in Chile, indicate that, in choosing pension funds, those with lower levels of education, income, and financial literacy rely more on employers, friends, and co-workers, than on fundamentals. Julie Agnew and Lisa Szykman (2010) investigated how financial literacy and information overload influence the decision to purchase an annuity and how they relate to subsequent confidence and satisfaction and found that as financial literacy increases, information overload decreases. In addition, people who experience higher levels of information overload are less confident in their choice and are less satisfied with their decision. Rajamohan (2010) found that the reading habit of Coimbatore households had a positive and significant relationship with the ownership of risky assets and opined the need of policy intervention for the improvement of financial knowledge of the households through appropriate educational programmes. S. Moulton et al (2011) assigned very low-income families in a subsidized housing program to a mandatory financial education program and tracked for 12 months and measured the changes in self-reported knowledge and behaviour as well as in savings levels and credit scores. Based on difference-in-differences comparisons, financial education led to an increase in self-reported financial knowledge, improvements in self-reported behaviours, an average increase in savings, and small improvements in credit scores. Cole, Paulson & Shastry (2012) found that education improves credit scores, and dramatically reduces the probability of declaring bankruptcy or suffering foreclosure during the financial crisis.

Moore (2003) showed that financial fraud victims to be more financially knowledgeable than non-victims. Cole & Shastry (2008) showed that adults who had attended public schools where they were required to take personal financial courses were found to have no better financial outcomes than adults who were not required to take such a course. Mandell & Klein (2009) found that youth who had taken a personal finance course in high school do not report better financial behavior several years later than youth who did not take the course. Hathaway & Khatiwada (2008), Gale & Levine (2011) found that there is no strong empirical evidence validating the theory that financial education leads to household well-being through the pathway of increasing literacy leading to improved behavior.

Hence, the study makes an attempt to see whether financial education workshop have any impact on improving the financial knowledge of the participants.

***Data* :** The author conducted a financial education workshop to faculty members working in a private university. More than 50 faculty members attended the workshop. A questionnaire was distributed to all the participants and requested to fill it and return back to the researcher. Apart from the demographic variables, 1 question each was asked about compound interest and inflation. 4 questions were asked about savings and investments. Then the workshop was conducted by the author for duration of 2 hours 30 minutes and at the end of the workshop once again another questionnaire was circulated to all the respondents and was requested to fill it and return back it to the author. Only 23 participants out of 50 have completed the questionnaires both before the workshop and after the workshop and hence the sample size for this study is 23 pairs.

The hypothesis the author is interested to test is given below.

Null Hypothesis: Financial Education workshop have no impact on improving participants' Financial Knowledge.

Alternate Hypothesis: Financial Education workshop have impact on improving participants' Financial Knowledge.

Data Analysis: The scores obtained by the participants before the workshop and after the workshop are shown below in the table 1.

Table 1 : Participants Pre and Post Test Financial Knowledge score

Parameter	**Pre-test**	**Post-test**	**Difference**
Compound Interest	12	16	4
Inflation	7	8	1
Savings & Investment	14.75	17.5	2.75

From the scores in the above table, one can infer that there is improvement in the financial knowledge level of the participants, even though marginally. The scores of the participants improved in terms of the awareness about compound interest, savings & investment and inflation.

Results and interpretation: The author conducted paired t test to see whether the improvement in the scores of the participants is significant. The results of paired t test are given below.

Paired Samples Statistics

		Mean	**N**	**Std. Deviation**	**Std. Error Mean**
Pair 1	Posttestscore	4.1304	23	.96786	.20181
	Pretestscore	3.3913	23	1.30520	.27215

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Posttestscore & Pretestscore	23	.713	.000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Posttestscore – Pretestscore	.73913	.91539	.19087	.34328	1.13498	3.872	22	.001

The study found that the pre-test mean score is 3.3913 and post-test mean score is 4.1304. It also found that there is a positive significant correlation of 0.71 between the pre-test score and post-test score, i.e. those who scored good marks in the pre-test improved their scores in the post-test. The test also found that the difference between the post-test and pre-test score is positive and significant.

Thus, the study proved the hypothesis that the financial education workshop had impact on improving the participants' financial knowledge.

Limitations: The study is restricted to a sample of 23 faculty members only. Hence, one should not generalize that this result represents the Indian population. The study found out the impact immediately after the completion of the workshop. The same could not be said whether the impact could last long among the participants'.

Conclusion

Thus the study found that the financial education workshop could improve the financial knowledge of the participants in line with the findings of Bernheim, Garrett and Maki (1997), John P. Caskey (2006), S. Moulton et. al. (2011). Thus this will enable the participants to analyse and take informed financial decisions.

References

- Agnew, Julie and szykman, Lisa, Annuties, Financial Literacy and Information Overload (November 2010). Pension Research Council WP 2010-33. Available at SSRN: http://ssrn.com/abstract=1707659.
- Bernheim, B. D., Garrett, D. M. and Maki, D. M. (1997), "Education and Saving: The Long Term Effects of High School Financial Curriculum Mandates." NBER Working Paper Series No. 6085.
- Calvert, Laurent, John Campbell and Paolo Sodini (2007), "Down or Out: Assessing the Welfare Costs of Household Investment Mistakes.", Journal of Political Economy Vol. 115, no. 5, pp707-747.
- Caskey, John, Can Personal Financial Management Education Promote Asset Accumulation by the Poor? (March 2006). Networks Financial Institute Policy Brief No. 2006-PB-06. Available at SSRN:http://ssrn.com/abstract=923565
- Cole, Shawn & Gauri Kartini Shastry. 2008. "If You Are So Smart, Why Aren't You Rich? The Effects of Education, Financial Literacy and Cognitive Ability on Financial Market Participation." Harward Business School Working Paper 09-071.
- Cole, Shawn, Paulson Anna & Gauri Kartini Shastry (2012). Smart Money: The Effect of Education on Financial Behavoiur. Harvard Business School Working Paper 09-071.
- Duflo, Esther and Emmanuel Saez (2002), "The Role of Information and Social Interactions in Retirement Plan Decisions: Evidence from a Randomized Experiment," NBER Working Paper Series No. 8885.
- Gale, William G. & Ruth Levine. 2011. "Financial Literacy: What Works? How Could It Be More Effective?" Financial Security Project Working Paper 2011-1.
- Hathaway, Ian & Sameer Khatiwada. 2008. "Do Financial Education Programs Work?" Federal Reserve Bank of Cleveland Working Paper 2008-03.

- Justine Hastings and Olivia S. Mitchell (2010), "How Financial Literacy and Impatience Shape Retirement Wealth and Investment Behaviors" October 2010 University of Michigan Michigan Retirement Research Center Working Paper, WP 2010-233.
- Lusardi, Annamaria and Olivia Mitchell (2007), "Financial Literacy and Retirement Planning: New Evidence from the Rand American Life Panel", University of Michigan Michigan Retirement Research Center Working Paper 2007-157.
- Lusardi, Annamaria, Olivia S. Mitchell and Vilsa Curto (2009), "Financial Literacy among the Young", University of Michigan Michigan Retirement Research Center Working Paper, WP 2008-191.
- Lyons, Angela C. and Chang, Yunhee, Are Financial Education Programs Meeting the needs of Financially Disadvantaged Consumers? (January 2007). Available at SSRN; http://ssrn.com/abstract=985652
- Mandell, Lewis & Linda Schmid Klein. 2009. "The Impact of Financial Literacy Education on Subsequent Financial; Behavior." Journal *of Financial Counseling and Planning*, 20(1): 15-24.
- Moore, Danna. 2003. "Survey of Financial Literacy in Washington State: Knowledge, Behavior, Attitudes, and Experiences." Washington State University Social and Economic Sciences Research Center Technical Report No. 03-39.
- Rajamohan, R.R., (2010), "Reading Habit and Household Investment in Risky assets", The IUP Journal of Applied Finance, Vol. 16 No.6, pp. 66-80.
- Stephanie Moulton, Cäzilia Loibl, J. Michael Collins, Anya Savikhin (2011), "Field Experiments on the Impacts of Financial Planning Interventions for Recent Homebuyers" University of Wisconsin, Center for Financial Security Working Paper: October 2011-CFS.5.
- Thorne, Deborah and Porter, Katherine M., Debtors' assessments of Bankruptcy Financial Education (August 2010). University of Iowa Legal Studies Research Paper No. 10-28. Available at SSRN: http: //ssrn.com/abstract=1654417.