EFFECTIVENESS OF FINANCIAL EDUCATION WORKSHOPS AMONG UNIVERSITY FACULTY MEMBERS

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ABSTRACT

The objective of this paper is to see whether the financial literacy programme have any impact on the respondents. This is carried out by administering a questionnaire to faculty members of a university prior and post the workshop. Two such workshops were conducted. The questions covered the topics such as savings, compounding, inflation, life insurance, safety, risky asset investments, home loan interest, bond prices, diversification etc. The difference in the scores scored by them between the post-test and pre-test in both the workshops is found to be significantly positive. Thus, one could infer that the financial education programmes conducted by the authors were instrumental in improving the financial knowledge of the faculty members who attended the programmes, which in turn will improve the quality of their future financial investment decisions.

Key words: Financial Literacy Impact, Financial Education, Financial Knowledge, Personal Finance.

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1. INTRODUCTION

One of the important problems faced by the household in India is the lack of working knowledge about the various financial concepts and tools required to take efficient decisions in their financial planning activities. Financial decisions taken by the individuals in any family will have an impact on their current as well as the future wellbeing of the family members.
In olden days one has to go to the financial intermediaries to buy different financial products. With the advent of technology, one could by any financial products with a click of the mouse.

Increased competition in the market has resulted in plethora of financial products for the households to save and invest. On one hand, it gives an opportunity for the households to wade through the various opportunities available in the market. On the other hand, the question arises whether they have the wherewithal to understand all the products that are available in the market to take better financial decisions. Hence, the households need to be well informed and their active engagement will help them in managing their finances effectively.

Hence, financial literacy or financial education is need of the hour. The government is carrying out the financial literacy programmes with the active participation of all stakeholders.

2. REVIEW OF LITERATURE

Financial education programmes were held to improve the financial knowledge of the participants. However, there arises the question, whether it works as expected. The empirical evidences show mixed results. Some studies which examined the effects of literacy on savings and investment choices show financial literacy matters in the savings and investment behaviours of the participants, while some studies didn’t show any positive correlation between financial education and financial outcomes.

The review of the literature encompasses studies showing the positive relationship between financial education and financial outcomes and studies which are contrary to this relationship.

Bernheim, G., Maki (1997) using survey of 30-49 year-olds in 1995, studied the impact of state mandated financial education requirements and found that the mandate increased the number of students taking the financial education course and subsequently higher savings and net worth. In their study, Danes et al. (1999) showed the improvement in the students’ knowledge in understanding the career/income relationship, consumer credit, car insurance and time value of money. About 60 per cent of the students reported increase in their saving behaviour. Duflo, E. and Saez, E. (2002) randomly selected a group of non-faculty employees at a large university and financial incentives were provided to participate in a benefit fair. Participation in pension plans increased but the increase in the contributions of this group was negligible. Hilgert at al. (2003) revealed the link between financial knowledge and financial behavior. Lusardi and Mitchell (2006a, b) discovered the respondents who displayed higher literacy were more likely to plan and invest in complex and tax-favoured assets, such as stocks and Individual Retirement Accounts. Lyons at al. (2007) studied the impact of a financial education program on participants’ financial behaviours, and exhibited that the program benefited all of the participants and observed the greatest improvement in financial behaviour among the respondents who reported lower levels of financial ability prior to the program. Using data from the 1997 National Longitudinal Survey of Youth, Lusardi et al. (2009) examined financial literacy among the young. The study found that financial literacy is low among the young; less than one-third of young adults possess basic knowledge about interest rates, inflation, and risk diversification. Bell et al. (2009), report that financial education does seem to have an effect on specific financial management behaviours. They found that those who have a high school financial education course are more likely to have a savings account for short-term savings goals and to save regularly. Early financial
management experience also matters: those who have a high school savings account are more likely to have an emergency fund, more likely to read money management articles, and less likely to “never” pay off their credit card balances. Shim et al. (2010) examined the associations among financial education, financial knowledge, and risky credit behaviour of first-year college students and showed that taking personal finance courses in high school and college is associated with financial knowledge as well as risky credit behaviour. 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. Rajamohan (2012) found that financial knowledge has a positive influence on the ownership of risky assets in the household portfolio. Rajamohan (2013) found that the post-test financial knowledge scores improved significantly over the pre-test scores after the financial education programme. Tang et al. (2015) found that financial education, financial experience and parents’ financial experience all exert a positive impact on young adults’ financial knowledge. Farinella et al. (2017) examined the relationship between high school student’s financial literacy, social equality and higher income and found that financial literacy is correlated with higher per capita income and social equality. They also found that financial literacy is not improved if the respondents were offered money management courses but increased when these topics are offered in some other courses. Chatterjee et al. (2017) examined the association among risk tolerance, financial literacy, and goal-based savings behaviour of household and found the role of financial literacy in improving household financial capability.

NASD (National Association of Securities Dealers) Investor Education Foundation (2006) found that financial fraud victims to be more financially knowledgeable than non-victims. Cole and Shastry (2008) showed that adults who are required to take personal financial courses in public schooling were found not to have better financial outcomes than those who have not required taking such a course. Mandell (2009) concludes that there is little evidence showing that full-time high school (or college) courses in personal finance increase financial literacy. However, there is compelling evidence that such courses improve financial behaviour. Willis (2009), Gale and Levine (2011) found that there is no strong empirical evidence validates the theory that financial education leads to household well-being through the pathway of increasing literacy leading to improved behaviour.

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

3. METHODOLOGY
This section covers the data collection method, hypothesis formulation and testing and analysis & interpretation.

3.1. DATA
The authors conducted two financial education workshops for a university faculty member at Vellore in Tamil Nadu. 60 and 54 members were participated in the two workshops respectively. A questionnaire was distributed to all the participants and requested to fill it and return back to the researcher prior to the workshop. Only 47 and 39 faculty members filled and returned back the questionnaire to the authors. Apart from the demographic variables, the first workshop questionnaire included 1 question each about savings, Compounding, Rule 72, Inflation, Life Insurance and Safety. 3 questions were asked about risky 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 Faculty members filled the second questionnaire and returned back to the authors. However, one questionnaire was incomplete and hence not used for the present study. Thus the sample size for the first study is 22 pairs. The second workshop questionnaire included 5 questions encompassing simple interest, inflation, impact of interest on home loans, interest rate and bond price relationship and diversification. Only 23 pairs of responses were filled and submitted both the questionnaires in the second study. Hence, the sample size for the 2\textsuperscript{nd} study is 23 pairs.

The hypothesis the authors are interested to test is given below.

\begin{align*}
\text{H}_0: \text{ Financial Education workshops have no impact on improving participants’ Financial Knowledge.} \\
\text{H}_1: \text{ Financial Education workshops have impact on improving participants’ Financial Knowledge.}
\end{align*}

4. DATA ANALYSIS AND INTERPRETATION

The scores obtained by the participants before the workshop and after the workshop are shown below in the Table 1(a).

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
Parameter & Pre-Test & Post-Test & Difference \\
\hline
Savings & 16 & 22 & 6 \\
Compounding & 8 & 16 & 8 \\
Rule 72 & 3 & 9 & 6 \\
Inflation & 12 & 14 & 2 \\
Life Insurance & 10 & 13 & 3 \\
Safety & 8 & 8 & 0 \\
Risky Investments & 48 & 52 & 4 \\
\hline
\end{tabular}
\caption{Participants Pre and Post Test Financial Knowledge score of first workshop}
\end{table}

From the scores in the Table 1(a) above, one can infer that there is improvement in the financial knowledge level of the participants. The improvement in terms of Savings, compounding and rule 72 is substantial. However, the improvement in case of inflation, life insurance and Risky investments is marginal.

The scores obtained by the participants before the second workshop and after the second workshop are shown below in the Table 1(b).

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
Parameter & Pre-Test & Post-Test & Difference \\
\hline
Simple Interest & 19 & 22 & 3 \\
Inflation & 16 & 23 & 7 \\
Bond Price & 1 & 4 & 3 \\
Home Loan Interest & 5 & 18 & 13 \\
Diversification & 16 & 19 & 3 \\
\hline
\end{tabular}
\caption{Participants Pre and Post Test Financial Knowledge score of second workshop}
\end{table}

From the scores in the table 1(b) above, one can infer that there is improvement in the financial knowledge level of the participants. The improvement in terms of home loan interest and inflation is substantial. However, the improvement in case of simple interest, bond price and diversification is marginal.
The authors conducted paired t tests to see whether the improvement in the scores of the participants is significant. The results of paired t tests for both the workshops are given in Tables 2 (a), 2 (b), and 2 (c) and Tables 3 (a), 3 (b), and 3 (c) below.

**Paired Test results**

**Table 2(a) Paired Samples Statistics of first workshop**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std.Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>6.09</td>
<td>22</td>
<td>1.601</td>
<td>0.341</td>
</tr>
<tr>
<td>Financial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre Test</td>
<td>4.77</td>
<td>22</td>
<td>2.092</td>
<td>0.446</td>
</tr>
<tr>
<td>Financial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Score</td>
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<td></td>
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<td></td>
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</tbody>
</table>

**Table 2 (b) Paired Samples Correlations of first workshop**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>22</td>
<td>0.789</td>
<td>0.000</td>
</tr>
<tr>
<td>Post Test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td></td>
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<tr>
<td>Knowledge Score</td>
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<tr>
<td>and Pre</td>
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<tr>
<td>Test Financial</td>
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<tr>
<td>Knowledge Score</td>
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</tbody>
</table>

**Table 2 (c) Paired Samples Test of first workshop**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Error Mean</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>1.318</td>
<td>0.274</td>
<td>0.748</td>
<td>1.889</td>
<td>4.805</td>
<td>21</td>
<td>0.000</td>
</tr>
<tr>
<td>Financial</td>
<td></td>
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<tr>
<td>Knowledge Score</td>
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<tr>
<td>Pre Test</td>
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<td>Financial</td>
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<tr>
<td>Knowledge Score</td>
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</tbody>
</table>

The study found that the pre-test mean score is 4.77 and post-test mean score is 6.09. It also found that there is a positive and significant correlation between the pre-test score and post-test score by 0.789 percent, i.e. the correlation of those who scored good marks in the pre-test improved their scores in the post-test is significant. 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.

**Paired Test Results**

**Table 3 (a) Paired Samples Statistics of second workshop**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>3.74</td>
<td>23</td>
<td>0.195</td>
<td>0.191</td>
</tr>
<tr>
<td>Financial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre Test</td>
<td>2.48</td>
<td>23</td>
<td>1.039</td>
<td>0.217</td>
</tr>
<tr>
<td>Financial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Score</td>
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</tbody>
</table>
The study found that the pre-test mean score is 2.48 and post-test mean score is 3.74. It also found that there is a positive and significant correlation between the pre-test score and post-test score by 0.806 per cent, i.e. the correlation of those who scored good marks in the pre-test improved their scores in the post-test is significant. 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.

5. LIMITATIONS
The two studies were conducted only in one location. Hence, one should not generalize that this result represents for the whole nation. The study found out the impact immediately after the completion of the workshop. The effects of the workshop on understanding the concept of finance may be very different as soon as the workshop was over compared to three months or 1 year after the termination of the workshop. Ideally one would like to test for both short-term and long-term impacts, but until that is done one should be careful not to assume that the impacts are the same.

6. CONCLUSIONS
Thus the study found that the financial education workshop could improve the financial knowledge of the participants in line with the findings of Boyce and Danes (1999), Jing Jian Xiao et al. (2010) and Rajamohan (2013). Thus by organising such workshops the policy makers could enable the participants to analyse and take informed financial decisions.

REFERENCES


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