

Reaching the Next Level – On the Effectiveness of a Gamified Online Course Material to Improve Financial Literacy and Reduce the Myopic Bias in Insurance and Investment Decisions

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Abstract

Using a randomized experiment, this paper examines the effectiveness of gamified online course material in improving financial literacy and reducing the bias ‘myopia’ from behavioural economics. Financial illiteracy affects considerably the decision-making of individuals, leading to sub-optimal outcomes and lower financial welfare in the society. One of the most common approaches to improve the financial literacy is financial education. Although financial education has been shown to improve financial knowledge, the gains to financial behaviour are limited with few evidences of long-lasting effects in the society. One of the possible reasons behind this is the existence of behavioural and cognitive biases, which have also been linked to poorer decision. One of the particular biases that has been linked to sub-optimal decisions is myopia, which impacted the financial well-being in decisions across sectors such as investments, insurance and pensions. In a large scale randomized controlled trial among secondary school students in the Flemish region of Belgium, we test the effectiveness of course materials that explicitly mitigate the impact of similar cognitive biases, teaching children about insurance and investment decisions. We measure the effectiveness of the materials using baseline without financial education classes, and three intervention groups: one with a regular class about financial education and two other groups that received a modified version of the class which also teach children about the myopic bias in addition to financial education. The results suggest that the intervention groups had significant better results for both the financial literacy and myopic post-tests in comparison to the baseline condition.

Keywords: Financial literacy, Gamified online learning, Behavioural finance, Debiasing, Myopic bias