

Aflatoun: Most Evidence-Based Programme for Financial Behaviour Change

Key Message

A recent systematic review and meta-analysis of all rigorous evaluations of financial education for children and youth around the globe found a positive effect on children's financial behaviour. Aflatoun was the only intervention to show positive effects in two different countries. When analysed separately, Aflatoun's effect on children's financial behaviour was twice the average and triple the effect size of the other three interventions combined. As such, Aflatoun is currently the most evidence-based programme for financial education focused on improving children's financial habits and behaviours. Aflatoun will continue to lead the way in evidence-based practice with several evaluations underway to expand our understanding of our programmes' effectiveness with different populations, different curricula, and different teaching methodologies.

Methodology

The study combined two methodologies often used together: a systematic review and meta-analysis. A systematic review utilizes a pre-defined, replicable, and exhaustive search strategy designed to identify all existing literature related to a particular research question. Unlike a literature review, a systematic review must have clear search criteria and rules for which studies are included or excluded. This ensures that the results are transparent, replicable, and unbiased.

Meta-analysis is a statistical methodology to combine the results of different studies and different measurement instruments to determine the average effect across all studies. The aggregation of results across all studies allows meta-analysis to resolve conflicts arising from studies with differing results by finding the average across all studies. Meta-analyses can also allow reviewers to detect small effects that individual studies do not have sufficient statistical power to detect.

The strengths of systematic reviews and meta-analyses place them on the top of hierarchies of evidence, especially when it comes to addressing policy questions of what works. A well executed systematic review and meta-analysis can provide a definitive statement about how much evidence currently exists, what that evidence says about the effectiveness of an intervention, and what might explain variations in outcomes.

The purpose of this systematic review and meta-analysis was four-fold:

1. Explore the efficacy and effectiveness of financial education programmes aimed at children and youth.
2. Explore causal links between financial education, literacy and outcomes.
3. Within different approaches and programmes, identify which types of programmes are showing promise and which are less effective.
4. Provide a definitive statement of the quality and scope of the evidence regarding financial education aimed at children and youth.

The review included any studies of interventions that contained at least one financial education component; in which more than half of the participants were under 25 years old; and that used an experimental design to determine the causal link between the intervention and results. An exhaustive search strategy along with more detailed inclusion criteria were developed in 2013 by the two authors in consultation with academics and practitioners in the field. The protocol including search strategy and inclusion criteria was published online for transparency prior to conducting the search¹. The electronic search included 12 Academic bases containing over 10 million citations; 14 grey literature databases; and a professional outreach to 91 experts in the field of financial education.

Results

The search strategy identified over 1400 records. The records were then screened independently for inclusion criteria by both authors with any disagreements resolved by a third reviewer. Eighty-two full text articles were identified for possible inclusion, the full text of each study was reviewed and authors were contacted where necessary to determine final inclusion. Twenty-one (21) experimental studies of financial education for children and youth were identified indicating a larger than expected evidence base.

Several of the studies were poorly reported and study authors could not be contacted for sufficient statistical data to include several studies in the meta-analysis. Twelve of the studies provided sufficient statistical data on financial knowledge, attitudes, or behaviour outcomes to be included in the meta-analysis of these three domains. One study claimed that the results were not yet finalized (Jamison et al, 2012); one study only measured mathematics outcomes (McNeil, 2008); one study only collected financial outcomes for the intervention group and not the control group because it focused instead on psycho-social outcomes (Ssewamala et al, 2008); and six studies came from one report that did not provide sufficient information and the author was contacted but not able to provide additional details (Gartner et al, 2005).

¹ O'Prey L and Shephard D (2013) Financial Education for Children and Youth: A Systematic Review and Meta-analysis (Protocol), in Academia.edu

Financial Knowledge

Ten studies including more than 35,000 participants provided financial knowledge outcomes. The analysis indicates that financial education has an important positive effect on financial knowledge of a similar size as has been found in other programmed instruction. The combined effect across the 10 studies was a standardized mean difference (SMD) of 0.18 (95% CI = 0.09, 0.28). The strongest effects came from the Stock Market Game which was implemented in the United States in grades 4 through 10 (SMD = 0.42 [0.45, 1.45]) and the secondary school financial education programme that was integrated into five subjects in Brazil (SMD = 0.20 [0.17, 0.23]).

Financial Attitudes

Eight studies including more than 25,000 participants reported financial attitude outcomes. Overall, the results suggest modest improvements in financial attitudes (SMD [95% CI] = 0.10 [0.02, 0.18]). The strongest effects on financial attitudes came from an intervention called the Suubi Project in Uganda. The intervention provided matched savings accounts, mentoring, and financial education workshops for single and double orphans with an average age of 13. Two studies of the programme in Uganda had an aggregate effect size of 0.45 (95% CI = 0.03, 0.87), although one showed a null effect (0.20 [-0.20, 0.60]) and one a very strong effect (0.65 [0.39, 0.88]).

Financial Behaviour

Five studies including over 25,000 participants reported financial behaviour outcomes. Results suggest modest, but robust behaviour change participating in interventions with a financial education component (SMD [95% CI] = 0.08 [0.03, 0.13]). The most robust effects on financial behaviour came from the Aflatoun programme that combines social and financial education with a methodology focused on learning by doing. The Aflatoun programme was evaluated in both Uganda and Ghana and showed a consistent effect size (Aflatoun SMD [95% CI] = 0.16 [0.08, 0.24]) that was twice that of the average effect in the meta-analysis and three times larger than the combined effect of the other three programmes (Other Programme SMD [95% CI] = 0.05 [0.02, 0.09]). It is worth noting that the Suubi Project also had a large effect size (SMD = 0.46) but the robustness of this effect is weakened by its uncertain confidence interval (0.03, 0.89) and the fact that the effect size had to be transformed from an Odds Ratio.

Discussion

There is a large and growing body of rigorous evidence regarding financial education interventions for children and youth around the globe. Future interventions should be built on the knowledge and evidence generated to date rather than attempting to start from theory alone.

Programmes and policies should determine if their key goal is to shift children's financial knowledge, attitudes and/or behaviours. The current meta-analysis shows that different interventions are most effective at each of the three outcome domains. For knowledge change, the Stock Market Game and the Brazil experience of integrated curriculum should be seen as good practice. For financial attitude change, programmes can learn from the Suubi Project in Uganda. Finally, if the focus is on helping children shift their habits and behaviours then Aflatoun should be seen as a model programme.

For more in depth analysis, including various subgroup analyses and descriptions of all the 21 included studies please refer to the working paper on the Aflatoun website² and we will provide you with a link to an upcoming peer-reviewed publication in the coming year that focuses on the educational implications of this research.

² O'Prey L and Shephard D (2014) Financial Education for Children and Youth: A Systematic Review and Meta-analysis. [Aflatoun Working Paper](#).