CHOICE ARCHITETURE IN FINANCIAL EDUCATION: A SYSTEMATIC LITERATURE REVIEW OF NUDGE APPLICATIONS IN PERSONAL FINANCE DECISION MAKING

Authors:

- Eduardo Camilo-da-Silva Professor Universidade Federal Fluminense
- Erick Martins Cormack de Oliveira MBA Student Universidade Federal Fluminense

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1. GOAL

The aim of this study was to make a systematic literature review on the use of nudge to influence decisions related to financial education in its 3 dimensions: financial attitude, financial behavior and financial knowledge. The idea is that this review will support the creators of public policies aimed at promoting financial education, who want to use architectural techniques of choice.

2. SEARCH PROBLEM

Thus, the main research question of this study is:

• What are the social effects of Nudge's actions, both public and private, for financial education in individuals?

In addition, we seek to answer the following secondary research questions:

- How can the use of Nudge as a strategy contribute to the different aspects of Financial Education?
- In what aspects of Financial Education is the use of Nudge most effective?
- What methods of Nudge are most effective in meeting the objectives they propose within financial education?
- What scientific methods are used to measure the outcome of the application of a Nudge strategy?
- **3**. METHODOLOGY

To answer this question, a systematic literature review was conducted using the Parsifal application (parsif.al).

The protocol used follows the following PICO model:

- Population: People submitted to Nudge initiatives
- Intervention: Nudge (Incentives, Default-option, Visual Communication, Messages and others)
- Context: Public and Private Organizations
- Outcome: Improvements on Financial Literacy (Education)

Step 1 - Search for studies on indexed bases

To select the articles, the following indexed databases were used: EBSCO, Web of Science and Scopus. Only articles in English and Portuguese were considered. Articles were also accepted only after published in the last 5 years.

The basic search string was as follows: (nudg* OR "libertarian paternalism" OR "choice architecture") AND (financ*)

Step 2 - Selection of articles relevant to the study

After the search and filtering of articles in which different theoretical studies and documents other than academic articles published in peer-reviewed journals and the exclusion of duplicate studies were excluded, we were left with 247 articles for quality evaluation from the reading of the title and abstract.

Step 3 - Evaluation of the quality of articles

The quality assessment was carried out through the analysis of the title and abstract of the articles considering the following criteria:

Are the objectives of the study clearly indicated? Yes: the goal is clear and explicit. Partially: the purpose of the research is unclear. No: You didn't mention any phrases about the purpose of the research.

Are the methods used in the study appropriate to the proposed objective and well executed? Yes: The search method is appropriate and well executed. 0 Partially: The method is adequate or well executed. No: The method is inadequate and poorly executed.

Are the expected conclusions or results relevant and have been achieved? Yes: fulfilled the objective and presented relevant results. Partially: achieved expected or relevant results. No: results that are irrelevant or not achieved.

Are the limitations of work clearly documented? Yes: the text clearly explains the limitation of the study. Partially: the article mentions the limitation, but does not explain why. No: did not mention the limitations of the study.

Each criterion was assigned a Yes, Partially or No evaluation, whose values are, respectively, 1, 0.5 or 0.

Only articles with quality evaluation above or equal to 2 were selected for the next step

Step 4 - Data Extraction

For this stage, 21 articles were selected, which were read in their entirety and, from the reading, the following information was extracted:

- What types of research were applied in the article?
- What methods have been used?
- What dimensions of financial education have been treated?
- What nudge methods were used?
- Where was nudge applied?
- What age groups are covered by the study?

- In what environment (public or private) is the work inserted?
- What decisions were the targets of the nudge?
- What is the result obtained?

After data extraction, the information was mapped and synthesized as follows.

4. Conclusions

Studies on the effectiveness of nudge in decisions involving financial education are predominantly quantitative and based on experiments, both controlled (RCT) and field esperiments, which is excellent because it allows the attribution of causality to nudge actions by changing the level of financial literacy of individuals.

The most exploited dimension of financial education is the financial attitude, specifically the desire to save. A study that was successful in influencing this attitude used the standard option, persuasive information and anchorage in the definition of savings values.

The results of these studies show that the use of nudge is effective in promoting financial literacy, so that the application of choice architecture should be considered by public policy-setters focused on the theme.