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# **Executive Summary**

# Fostering Family Financial Literacy Via an Interactive Learning Game

An Evaluation Study of Cha-Ching! Money Adventures

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## **Executive Summary**

Cha-Ching! Money Adventures is an interactive learning game developed in 2022 by the Prudence Foundation to foster greater financial literacy among 7- to 10-year-olds and their families.<sup>1</sup>

Designed for home play on a mobile device or a computer, the game introduces youngsters to the fundamental concepts of earning, saving, spending, and donating within a compelling narrative adventure. In each of four problem-based scenarios, children help a character from the *Cha-Ching!* cartoon series set a financial goal; make decisions and track earning, spending, and saving over time; and assess and revise their financial plan.

A January 2022 evaluation study conducted in the Philippines by the U.S. firm Education Development Center (EDC) found that *Cha-Ching! Money Adventures* is fun and engaging for eight- to nine-year-olds, is effective in improving their financial literacy, and helps catalyze parent-child conversations about money.

## **Key Findings**

#### 1. Cha-Ching! Money Adventures is fun and engaging for eight- and nineyear-old players at home.

Evaluation data show the game succeeds in drawing young players in and motivating them to stay with its financial learning challenges.

- A great majority of children—72%—completed all four levels of the game.
- The average playing time over two weeks was just under two hours, with more than a third of children playing for more than two hours.
- » Roughly 60% of players repeated individual modules in an effort to improve, and a third repeated modules four or more times.

These engagement data are particularly impressive given that children were playing *Cha-Ching!* in their leisure time at home, not for school credit or for homework.

<sup>&</sup>lt;sup>1</sup> Created by Two Moos, a Melbourne, Australia-based educational media design studio, the game's content was overseen by Education Development Center (EDC), a not-for-profit education and health organization based in Waltham, MA, USA.

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# 2. Cha-Ching! Money Adventures measurably improves children's financial literacy.

Cha-Ching! players achieved better results compared to a similar group of children who played science, math and ecology learning games during the same period:

- Cha-Ching! players improved on the Basic Finance Test, a measure of financial literacy, while control students did not. The magnitude of improvement was modest but statistically significant.
- "High" *Cha-Ching!* players—those who completed all four modules, repeated at least one module, and spent more than 90 minutes playing—showed even greater learning gains relative to the control group. Over half of these children (54%) showed improvement from pretest to post-test, whereas only 41% of control children did so.
- Cha-Ching! players' open-ended responses suggest they showed gains in all four areas of financial learning—earning, saving, spending, and donating.

### Playing Cha-Ching! I learned that...

I need to choose work that I am happy with and have skills for.

—Girl, 8 years old

Spending money to buy the things you like doesn't mean that you will be happy forever.

—Boy, 9 years old

It feels good to help others, not only by donating money but also by sharing my time, effort, and talent.

—Girl, 9 years old

#### 3. Cha-Ching! helps foster family conversations about money.

Research shows that family conversations about money are an important contributor to financial literacy among children, and evaluation data indicate that *Cha-Ching!* helps foster these parent-child conversations.

- Cha-Ching! fostered more parent-child talk than the comparison games. Almost twice as many Cha-Ching! players than comparison game players (59% versus 33%) said they talked with their parents about the game "a lot."
- Parents showed greater interest in Cha-Ching! than in comparable nonfinancial learning games. Two-thirds of Cha-Ching! players (66%) said their parents showed "a

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- lot" of interest in their game playing, compared to 43% of children who played nonfinancial games.
- Family conversations provoked by Cha-Ching! covered a wide range of financial ideas, habits, and behaviors. Children described conversations with their parents about the importance of being "money smart"; specific ways to earn, save, and limit spending; and causes to donate to.

## **Broader Implications**

The study suggests two avenues for continued research and program development aimed at improving financial literacy in the developing world and beyond:

- First, delivering learning experiences via mobile devices is a promising way to engage children and families in informal learning activities that can enhance their educational and social capital.
- Second, using media to foster family talk about money and finances is a promising direction for the field of financial education.

Both are discussed in the full report.

## Study Background

The evaluation study was designed and conducted by EDC, a global nonprofit based in the United States that advances lasting solutions to improve education, promote health, and expand economic opportunity worldwide. Since 1958, EDC has been a leader in designing, implementing, and evaluating innovative programs in more than 80 countries around the world.

Study participants included approximately 300 eight- and nine-year-olds and their families in the Philippines, an important market for wider *Cha-Ching!* materials. Participants were in fourth grade during the 2021–2022 school year, had not used the *Cha-Ching!* curriculum, had a stable Internet connection at home via a mobile device or computer, and were fluent in English.

Children were randomly assigned to one of two groups—treatment students played the *Cha-Ching!* financial literacy game at home over two weeks; control students played a selection of science, math and ecology games over the same period.

All children completed a 24-item test of financial literacy before and after game play, about two to three weeks apart. The measure was based on the *Basic Finance Test* developed by the Council for Economic Education (CEE)<sup>2</sup> as a standardized assessment of personal finance knowledge for grade school children.

<sup>&</sup>lt;sup>2</sup> https://www.econedlink.org/wp-content/uploads/2018/09/BFT-manual-final.pdf

For a detailed description of the study and its methods, measures, and limitations, please see the full report:

Tally, W., Brett, J., & Parris, J. (2022). Fostering family financial literacy via an interactive learning game: An evaluation study of Cha-Ching! Money Adventures. Education Development Center. Available at: <u>LINK HERE</u>

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