The impact of a mobile phone-delivered digital financial education program on financial behavior among Hispanics

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Outline

1. Motivation
2. Program details
3. Program evaluation
4. Lessons learned
1. Motivation
A Community-Based Digital Intervention for Improving Financial Capability Among Hispanics
Why is important to focus on Hispanics?

→ From a systematic review on racial, ethnic and gender gaps in financial knowledge, Whites score on average 14 percentage points higher than Hispanics in financial knowledge (Blanco et al., 2022, working paper)

→ Relative to Whites, Hispanics are more likely to engage in financial behaviors that are detrimental to their financial wellbeing (Al-Bahrani et al., 2019, Angrisani et al. 2020; Kim and Xiao, 2020).

→ Hispanics have the highest rate of smartphone dependency - 25 percent of Hispanics are less likely to use broadband at home, but own a smartphone. For Whites and Blacks is 17 and 12 percent, respectively (Deleersnyder et al., 2022)
Where did the idea for Mind Your Money come from?

• Led a community-based randomized controlled trial YoPlaneoMiRetiro (I plan my retirement), to evaluate the impact of an education program to promote opening a myRA (my Retirement Account)

• In person education program conducted during the period of October 2016–September 2017, in collaboration with Isaias Hernandez (Mind Your Money co-PI) from the Mexican American Opportunity Foundation

→ How about designing, implementing and evaluating a digital program that replicates the experience of working with a financial coach in the community?
Reasons I was told why a digital financial capability program won't work...

- “Your target population doesn’t have mobile phones”
- “Your target population might not like using their phone for this purpose”
- “It will be impossible to replicate the personalized experience you get with a financial coach in the community”
- “It will be hard to determine useful and appropriate curricula and material to use for a digital program”

→ Idea developed in 2017-2018, project funded in 2019 (pre-pandemic) and program implementation started in April of 2021
2. Program Details
Access to Information + Motivation = Behavioral Change
Program Main Characteristics

• Designed, implemented, & evaluated in collaboration with Eastmont Community Center (ECC) & the Mexican American Opportunity Foundation (MAOF)

• Used digital solutions from the Understanding America Study (UAS) Internet Panel

• Delivered a six month program of one text message and activity per week to complete in a user friendly platform (Mind Your Money is not an App)

• All material available in English and Spanish and culturally tailored

• Reached 125 Latina/o participants from Los Angeles - We recruited 83 participants through our community organizations and 42 from a convenience sample from Los Angeles from UAS
Our Participants

• 98% were Hispanics/Latinos/as and average age was 39
• 50% had at least a high school education
• 61% were born in the United States
• 73% were renters
• 43% worked full-time
• 42% said Spanish was their native language, but 77% preferred English for program
• 52% had an income below or equal to $33,800
• 80% had a checking or saving account
Our Curricula and Approach

• We used the “Your Money, Your Goals” curricula from the CFPB
• We designed our program through a community-based participatory approach
• We tailored the material to be linguistically and culturally appropriate
• Weekly activities focused on:
  1. **learning** about financial topics by reviewing information (week 1)
  2. **applying** financial knowledge using an online tool (week 2)
  3. **taking an action** and reporting it (week 3)
  4. **Reflecting** about income, expenses, debt, and savings (money diary tool, week 4)

→ Introductory optional meeting in zoom, all program activities in platform
Our Curricula and Approach

Our six-month program covered the following topics:

1) setting financial goals
2) choosing financial products
3) paying bills
4) understanding credit reports and scores
5) dealing with debt
6) saving money

Our program took place during the pandemic (May 2021-June 2022)

Optional material from the CFPB related to managing finances during the pandemic
3. Program Evaluation
Methodology

Randomized controlled trial (RCT) with a wait-list control group
(70 participants in treatment and 55 in control control group)

→ Retention rates

→ Difference-in-Difference (DID) regression analysis using data at 6 months (Model 1) and monthly/3 month data (Model 2) - Primary outcomes:

1. Financial Capability Score
2. Financial Self-Efficacy
3. Financial Stress (previous month)
# Mind Your Money Impact on Retention Rates

## Retention rates at 6 months

<table>
<thead>
<tr>
<th></th>
<th>Treatment</th>
<th>Control</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full sample (N=125)</strong></td>
<td>66%</td>
<td>85%</td>
<td>74%</td>
</tr>
<tr>
<td><strong>Community sample (n=83)</strong></td>
<td>70%</td>
<td>89%</td>
<td>78%</td>
</tr>
<tr>
<td><strong>Internet sample (n=42)</strong></td>
<td>57%</td>
<td>79%</td>
<td>67%</td>
</tr>
</tbody>
</table>
Mind Your Money Impact on Primary Outcomes

\[ Y_{i,t} = \beta_0 + \beta_{treat}Treat + \beta_{post}Post + \beta_{int}(Post \times Treat) + \alpha_i + \varepsilon_{i,t} \]

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Post x Treat (SE)</td>
<td>R-Sqr.</td>
<td>Month x Treat (SE)</td>
<td>R-Sqr.</td>
</tr>
<tr>
<td>Financial Self-Efficacy Scale (FSES)</td>
<td>0.969 (0.653)</td>
<td>0.09</td>
<td>0.201* (0.110)</td>
<td>0.05</td>
</tr>
<tr>
<td>Financial Capability Score (FCS)</td>
<td>0.935** (0.392)</td>
<td>0.10</td>
<td>0.150** (0.064)</td>
<td>0.06</td>
</tr>
<tr>
<td>Financial Stress Indicator (FSI)</td>
<td>-0.174* (0.088)</td>
<td>0.08</td>
<td>-0.026** (0.013)</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Statistical significance denoted as *** at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level.
Mind Your Money Impact on Primary Outcomes

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<tr>
<td></td>
<td>Post x Treat (SE)</td>
<td>R-Sqr.</td>
</tr>
<tr>
<td>Have budget/spending plan</td>
<td>0.283** (0.116)</td>
<td>0.13</td>
</tr>
<tr>
<td>Feel confident to pay for an unexpected expense</td>
<td>0.304*** (0.115)</td>
<td>0.08</td>
</tr>
</tbody>
</table>

Statistical significance denoted as *** at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level.
We found that Mind your Money participants...

• were likely to complete program (66% complete program at 6 months)
• found program material and messages useful
• show higher financial capability scores
  → are more likely to have a budget/spending plan
  → are more likely to pay for an unexpected expenses
• show lower levels of financial stress in the previous month

*Overall, impact of program on primary outcomes is of medium effect size
program has an impact of around 50% of a std. deviation for the FCS and FSI
4. Lessons Learned
Keep it Simple and Specific (KISS) principle should be central to community based digital FinEd programs

- Simplify things when working an interdisciplinary team and community organizations
- Simplify interaction with intervention for your user
- Simplify data collection processes
- Be specific about what specific financial behaviors you want to change
- Be specific about what financial outcomes you want to measure
- Be specific about the role of each involved party in the design, implementation, and evaluation stages
Success of the Community-Based digital FinEd program depends on the degree of involvement of the partner community organizations

- Community organizations should see the need for digital FinEd
- Community organization leaders and staff should take a central role in the idea development, design, and implementation phases
- Community organizations are pulled in many directions, so availability of funding for them to do the work is crucial
- Funding sources that promote an equitable relationship between community organizations and research institutions are necessary
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• April Thames, UCLA

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Interested on learning more about this program?
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