Household Financial Capability and Economic Hardship: An Empirical Examination of the Financial Capability Framework

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Presentation Outline

• Background
• Research aims
• Method
• Results
• Conclusions
• Implications
BACKGROUND
• Economic hardships among U.S. households are on the rise.
  
  – **28%** were unable to fully cover their monthly bills or could not do so in the event of a small financial emergency (Board of Governors of the Federal Reserve System, 2020)
  
  – **25%** skipped medical care because they were not able to afford it (Board of Governors of the Federal Reserve System, 2020)

• Sharpe rise during the COVID-19 pandemic
Financial capability

- Ability to act: Financial knowledge and skills (e.g. determine essential payments; weight delinquent payments)
- Opportunity to act: Financial access and inclusion (e.g. access to credit, emergency savings)
- Optimized financial decisions and behaviors (e.g. save for emergencies)
- Complex and multidimensional
Financial capability framework

Social and economic structure

Financial socialization, education and guidance

Availability of financial products

Financial literacy: ability to act

Financial inclusion: opportunity to act

Financial capability: action and behavior

Financial stability and well-being

Financial development

(M.S. Sherraden, 2013)
Research gap

Previous Literature

- Financial capability measurements
- Representativeness
- Determinants and outcomes
Conceptual model
RESEARCH AIMS
1. Investigate the underlying mechanisms and systematic components of financial capability framework using a national representative data
2. Examine how financial education and socialization are associated with financial capability
3. Examine associations between financial capability and economic hardship
4. Pathways from financial education/socialization to economic hardship: which path is relatively more important, financial literacy or financial access?
METHOD
Data and Sample

• 2015 National Financial Capability Study: State by State Survey
• A project of the FINRA Investor Education Foundation (FINRA Foundation)
• 500 individuals per state, plus the D.C.,
• Oversamples of 1,000 in NY, TX, IL & CA: total interviewed 27,564
• Final analytic sample: 24,154
• Weighted to be nationally representative
Financial education

• 1 Binary measure (e.g., Received financial education at school or workplace)

Financial socialization

• 1 Binary measure (e.g., Being taught how to manage finance by parents or guardian)
Financial literacy

• 3 subjective items (e.g., Good at deal with day to day financial matters, Self-rated financial knowledge)

• 6 objective questions (e.g., Buying a single company’s stock usually provides a safer return than a stock mutual funds)

Financial access

• 5 binary measures regarding ownerships of financial products (e.g., Checking, Saving, Investment, Credit cards, & Retirement plans)
**Financial behavior**

- 2 measures describing their financial behavior (e.g., Saving for rainy days; Set long-term financial goals)

**Economic hardship**

- 4 measures covering their economic hardships (e.g., difficulties to cover expenses, Skipped medicine, medical test, and seeing a doctor)
Analytic strategy

• General structural equation model
  ▪ Confirmatory factor analysis-measurement
  ▪ Path analysis-hypothesis
• Mean- and variance-adjusted weighted least squares (WLSMV) estimator
• Effect decomposition: (Sobel, 1986)
RESULTS
## Weighted sample description

| Variable                              | N (weighted %) |
|---------------------------------------|----------------|
| **Gender**                            |                |
| Male                                  | 12,293 (51.4)  |
| Female                                | 15,271 (48.6)  |
| **Age**                               |                |
| 18–24                                 | 3,050 (12.5)   |
| 25–34                                 | 5,013 (18.0)   |
| 35–44                                 | 4,587 (16.3)   |
| 45–54                                 | 5,026 (18.0)   |
| 55–64                                 | 4,802 (17.3)   |
| 65 or older                           | 5,086 (17.9)   |
| **Race**                              |                |
| White                                 | 19,836 (65.0)  |
| Non-white                             | 7,728 (35.0)   |
| **Marital status**                    |                |
| Married                               | 16,895 (58.9)  |
| Not married (single, separated, divorced) | 10,669 (41.1)  |
| **Education**                         |                |
| Less than high school                 | 591 (2.60)     |
| High school or GED                    | 6,145 (26.5)   |
| College                               | 17,081 (60.5)  |
| Post-graduate                         | 3,747 (10.4)   |
| **Household income**                  |                |
| Less than $15,000                     | 3,162 (12.9)   |
| $15,000–$25,000                       | 2,987 (11.7)   |
| $25,000–$35,000                       | 2,989 (11.2)   |
| $35,000–$50,000                       | 4,050 (15.1)   |
| $50,000–$75,000                       | 5,650 (19.9)   |
| $75,000–$100,000                      | 3,745 (12.6)   |
| $100,000–$150,000                     | 3,368 (11.3)   |
| $150,000 or more                      | 1,613 (5.26)   |
| **Working status**                    |                |
| Working (self-employed, work full-time, work part-time) | 15,407 (54.6)  |
| Not at work (homemaker, student, employed, retired) | 12,157 (45.4)  |

N = 27,564
The measurement model had a reasonable fit to the data:

\[
\text{Chi-square} = 3651.456 \ (df = 55), \ p = .000 \\
\text{CFI} = .973, \ TLI = .962, \ RMSEA = .049 \ (0.047, 0.050).
\]

Note. \( \lambda \) = item factor loading (unstandardized) for latent variables, and all factor loadings were significant (in standardized estimates); \( r \) = standardized correlation. Results were estimated using weighted least square to correct the categorical nature of indicators.
Results: Path Analysis

Exogenous Controls:
- Gender
- Age
- Race
- Education
- Marital status
- Employment
- Income

Controls

Financial Literacy
R^2=.286

Financial Education

Financial Socialization

Financial Access
R^2=.540

Controls

Financial Behavior
R^2=.605

Controls

Economic Hardship
R^2=.473

Chi-square = 4346.162 (df = 135), p=.000
CFI=.930, TLI=.900, RMSEA=.036 (.035, .037)

Note. Paths were unstandardized coefficient (β)
***p < .001
Results: Effect decomposition

Financial education → Economic hardship

- Financial Literacy
  - Financial Education: 2.93***
  - Financial Access: 1.22***
  - Financial Education: 0.257***

- Economic Hardship
  - Financial Behavior: -0.312***

- Financial Access
  - Financial Education: 0.897***
  - Financial Literacy: 40%

- Financial Literacy
  - Financial Education: 0.293***
  - Financial Access: 60%
Results: Effect decomposition

Financial socialization → Economic hardship

Financial Socialization → Financial Literacy: 22%

Financial Literacy → Financial Behavior: 0.257***

Financial Socialization → Financial Access: 0.251***

Financial Access → Financial Behavior: 0.897***

Financial Behavior → Economic Hardship: -0.312***

Financial Literacy:

Economic Hardship:

78%
CONCLUSION
Conclusion

• Supporting financial capability framework with a national representative sample
• Financial education and socialization were positively associated with financial capability
• Increased financial capability was associated with lower levels of economic hardship
• Financial access took up larger percentages than financial literacy in the pathways from financial education/socialization to economic hardship
IMPLICATIONS
• Multiple components of financial capability for policy, research, and practice
  – (Financial literacy and financial access) Ability and opportunity
  – Financial behavior and management
  – Subjective and objective; individual and structural
  – Challenges to measure access: eligibility and practicality
Implications

• **Enhancing financial capability by effective financial education and guidance**
  
  – More evaluations on effectiveness of financial education
  
  – Diverse population, representative participant or oversample minority groups
  
  – Financial education decays over time; “Just in time“ ”Rules of thumb” financial education (Fernandes, Lynch, & Netemeyer, 2014, Mandell & Klein, 2009, Drexler & Fischer., 2014).
  
  – Accessible, effective education and guidance through the life course
Implications

- **Increase financial inclusion efforts**
  - Accessible appropriate, affordable, financially attractive, easy to use, & flexible (Sherraden, 2013)
  - Not once and for all, but continued efforts: a) having the legal right, necessary documentation and eligibility, b) ability to open, afford, and c) use continuously (Birkenmaier et al, 2019)
  - Policies and programs (e.g. Emergency savings, banking, small dollar loans, credit building)
  - Multiple products and services at multiple settings
Thank you!

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