

Still Holding Out Promise: A Review of Financial Literacy Education and Financial Counseling Studies

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Policymakers Turn to Financial Literacy Strategies

- **“I believe you will find that economic education is one of the best investments you can make for your own future and for the future of your family, your community, and our nation.”**
 - Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System (2006)
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- **Common theme**
 - 2008 President's Advisory Council on Financial Literacy (Executive Order no. 13455)–“to increase the level of financial literacy among Americans”
 - Financial education part of bankruptcy, food assistance, foreclosure, unemployment, incarcerated and other programs
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- Despite this durable rhetoric, there is a paucity of research showing the effect of financial education

Theory & Practice

- Widespread use of education programs
 - Theory: Improve knowledge → Improve behavior
 - How to manage budget
 - Understand credit and banking terms
 - Able to access and use information
 - Practice making financial choices
- Low-income populations show relatively lower levels of financial ‘capacity’
 - Mistakes and misinformation not limited by income, however

Overview



- Reviewed 27 studies
 - Financial education and financial counseling broadly
- Positive findings in most studies
 - But smaller in more rigorously controlled designs
- Studies examined knowledge and/or behavior
 - Behavior change effects weaker than knowledge gains
- Still much unknown
 - Content-to-client match, mode of delivery, personalized coaching-style models, life cycle, use of intermediaries

Past Literature Reviews



- Hogarth, 2006 (Fed conference paper)
 - Summarizes 23 studies & discussion of financial education & behavior
 - Highlights wide range of programs
- Martin, 2007 (Fed working paper)
 - Concluded evidence is promising, but points to problems in methods
- Hathaway and Khatiwada, 2008 (Fed working paper)
 - Less optimistic about effects on behavior
 - Notes selection effects are common
- Caskey, 2006 (NFI Policy Brief)
 - Past research flawed due to selection bias
 - Low generalizability and too short time frames
- Willis, 2008 (law review)
 - Nonsignificant results suggest no effects
 - Biased towards positive effects by authors
- Meier and Sprenger, 2007 (Fed working paper)
 - Show selection is serious problem: most likely to attend financial education are also the most future-oriented

Methodology



- Reviewed 27 studies published since 1995
- Focus on remedial programs targeting adults
 - Generally lower-income
 - School-based programs excluded
 - Retirement education/workshops excluded
 - Duflo and Saez (2002) one exception
- Forward and reverse citation tracking
- Review and Categorized each study by methods, content and mode
 - Due to wide range meta-analysis not practical

Typology



- Method of Analysis
 - Descriptive (no control or comparison group)
 - Quasi-Experiment (synthetic control)
 - Experimental (randomized treatment)
- Type of program analyzed
 - Counseling or Education
- Mode of delivery
 - Classroom / group
 - Home study /workbook
 - Telephone
 - In person / individual
 - Online

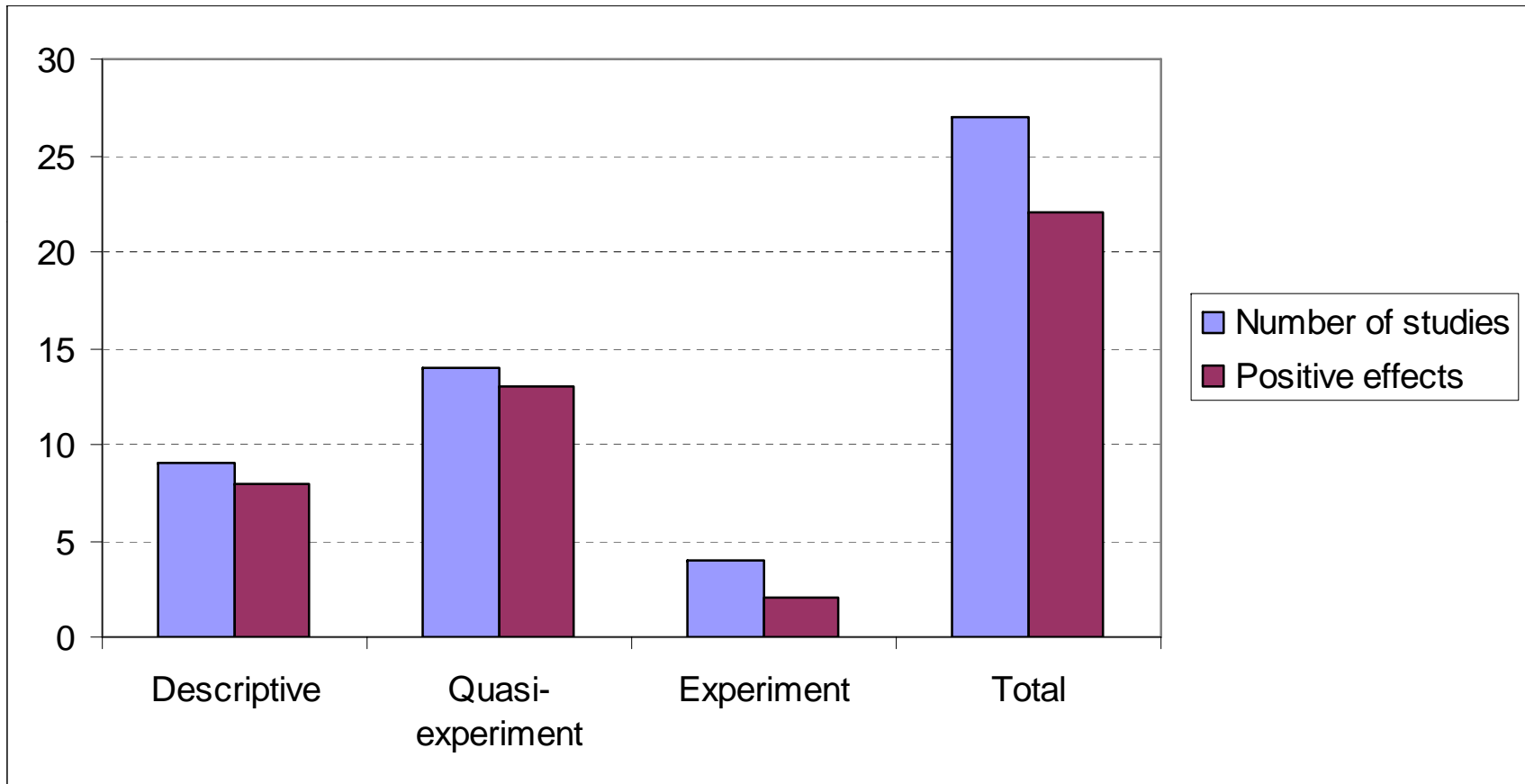
Study Methodology by Type of Program

Table 2: Aggregated Synthesis of Studies Methodology by Mode

Method	Number of studies	Class-room	Home study	Phone	In person	Online
Descriptive	9	7	0	1	1	0
Quasi-experiment	14*	6	2	5	8	0
Experiment	3^	2	0	0	0	1
Total	27	15	2	5	7	1

* Hirad and Zorn includes both counseling and education; ^Excludes Duflo et al

Studies by Type and Findings: Most find positive outcomes

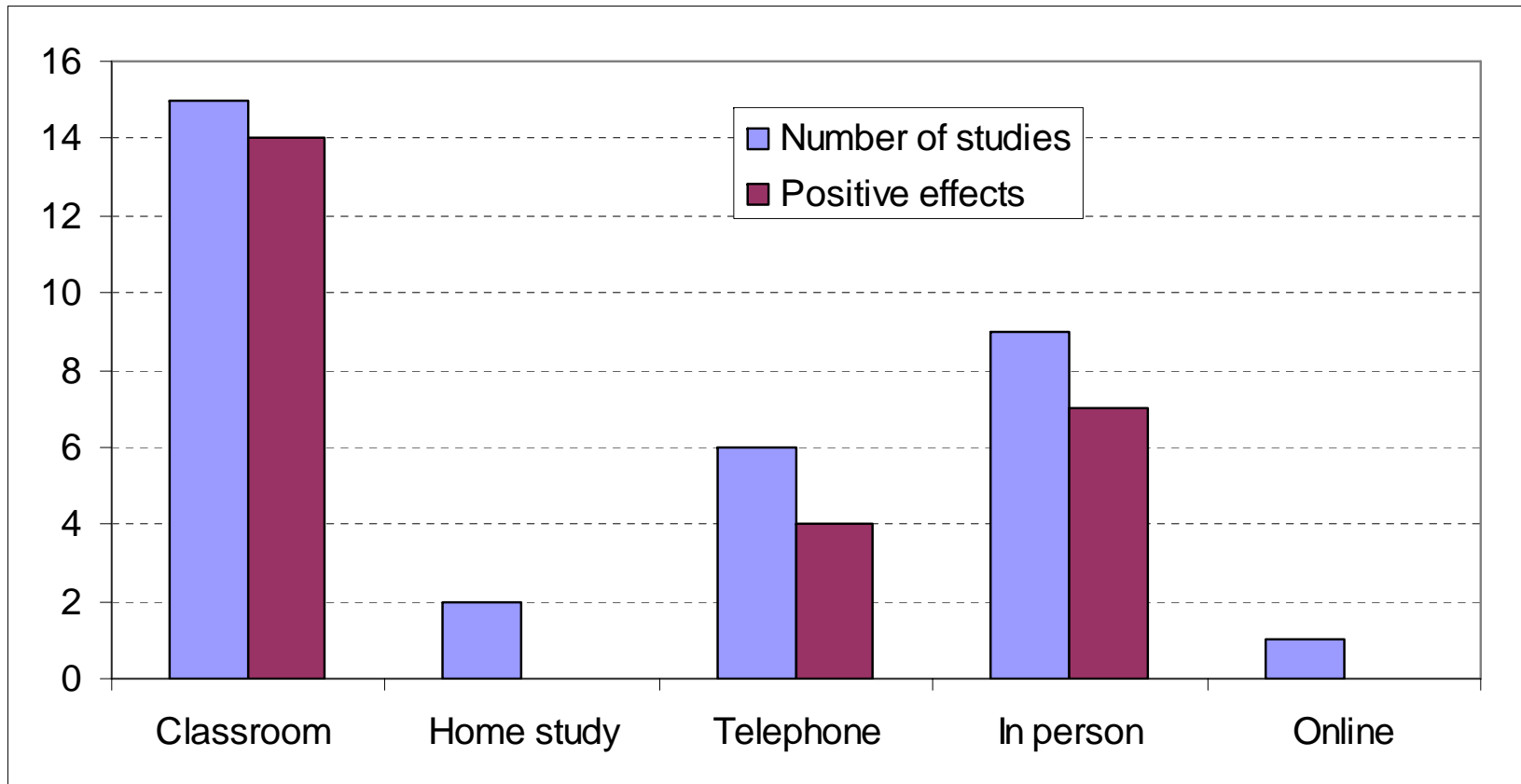


Source: Table 1: Aggregated Synthesis of Studies by Methodology and Format

Studies by Mode and Findings:

Positive Outcomes Across Modes

(few studies examine home or online)



Source: Table 3: Aggregated Synthesis of Studies by Mode

Mode, Method and Type:

Few experiments; Classroom tends toward descriptive

Table 3: Aggregated Synthesis of Studies by Mode

Mode	Number of studies	Financial education	Financial counseling	Positive effects	Descriptive	Quasi-experiments	Experiments
Classroom	15	13	2	14	7	6	2
Home study	2	0	2	0	0	2	0
Telephone	6	1	6	4	1	5	0
In person	9	0	9	7	1	8	0
Online	1	1	0	0	0	0	1

Note: 2 studies (Duflo, et al; Spader et al) excluded because these studies are not relevant to any of these modes. Studies may not be mutually exclusive i.e Hirad and Zorn's study is in multiple rows.

Studies by Content and Findings: Homeownership Counseling Studies Dominate

Table 4: Aggregated Synthesis of Studies by Content

	Number of studies	Financial education	Financial counseling	Positive effects
Basic Financial education	9	9	0	8
Homeownership	10	1	9	9
Banking/ Credit	4	3	1	3
Debtor/Bankruptcy	3	3	0	3
Total	26	16	10	23

Note: not mutually exclusive; Duflo et al is excluded.

Studies by Content and Mode: Individual/Group In Person Dominates

Table 6: Aggregated Synthesis of Studies by Mode of Delivery

	Number of studies	Classroom	Online	Phone	In person	Home study
Basic Financial education	9	9	0	0	0	0
Homeownership	10	3	0	4	8	2
Banking/ Credit	4	2	1	1	1	0
Debtor/Bankruptcy	3	2	0	1	0	0

Note: Not mutually exclusive. Duflo et al excluded.

Studies by Content and Method:

Few Experiments; Most Quasi-experimental on Homeownership

Table 5: Aggregated Synthesis of Studies by Methodology

	Number of studies	Descriptive Method	Quasi-experiments	Experiments
Basic Financial education	9	4	3	2
Homeownership	10	2	8	0
Banking/ Credit	4	2	1	1
Debtor/Bankruptcy	3	2	1	0
Total	26	10	13	3

Note: Not mutually exclusive. Duflo et al excluded.

Mix of Measures Used: Behavior and Knowledge Not Often Linked

Table 7: Aggregated Synthesis of Studies by Format and Measures

Category	Number of Studies in category	Measure <i>Any</i> behaviors	Measure <i>self-reported</i> behavior	Measure financial literacy	Measure Behavior <i>and</i> Literacy
All	27	24	9	8	5
<i>Excluding</i> loan default as the outcome measured	19	16	6	8	5
Financial Education	16	13	9	8	5
Financial Counseling	11	11	1	1	1

Note: Excluding Duflo and Saez. Lyons, White and Howard are counted as financial education and counseling.

Problems in Literature

- Many avenues for bias
 - Selection bias
 - Problem of unobserved factors: E.G. ‘motivation’
 - Meier and Sprenger (2007) show studies biased towards the overestimation of results due to time preferences
 - Self-reported outcomes
 - upward bias: Agnew & Szyman (2005)
 - Short follow-up periods
 - durability unknown
 - Heterogeneous treatment and/or sample
- Only 4 studies used randomized approach (& 2 failed)
 - Effects of descriptive studies appear large
 - Quasi-experiments show modest effects
 - Randomized experiments very small effects

Hard to Make Strong Conclusions based on Current Data



- Variety of contexts of studies
 - Homeownership, bankruptcy, ADD/IDAs, credit repair
 - Mix of mandated and non-mandated programs
- Authors tend to make strong claims
 - Linking program and/or knowledge gains to behavior improvements
 - Yet, low or now statistical significance
 - Small (or implausibly large) predicted results
 - Often findings are suspect due to selection problems and study design
 - Small impacts for experiments with more robust controls
 - Very hard to generalize based on samples used

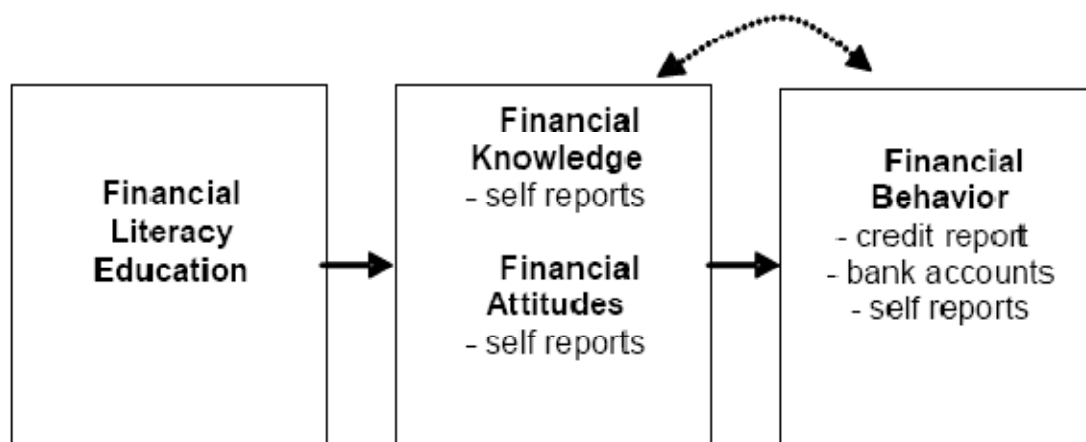
Based on What We Know So Far...

- If a policy goal is to facilitate financial decision making for targeted populations, mandated financial education *may* be useful
 - Could help ‘uninformed’ populations improve financial behavior
 - No evidence it is harmful; little evidence impacts are large in short run
 - Costs of education/counseling are relatively low even if the benefits are modest
 - So perhaps policymakers not misguided
 - But consumers/society would be better off if better strategies could be identified

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- But, much may depend on content and context...
 - The “ideal”: Optimal *information*, in the optimal *form*, at the optimal point in *time*
 - Part of coordinated life cycle approach – ‘just in time’

Linking to Behavior

- Exposure to Information → Changes in Behaviors (formal 'education')
- Experience Event → Gain Information ('hard knocks')



Future Research: A Call for Resource Leadership

- Not just an issue of experimental / randomization
 - Randomization can work
 - Too often dismissed by practitioners
 - But it too has problems – consent and attrition effects; + staff undermine
- Need coordinated set of studies:
 - Longer-term outcomes of financial education – 3 years minimum
 - Application of education ‘just in time’ & ‘in general’
 - Financial “coaching” as longer-term knowledge/behavior strategy - facilitate behaviors & knowledge seeking
 - Adaptations of education/counseling beyond mode/duration models
 - Use technology, mix of modes, customization
 - Include administrative and self-report measures
 - Key measures includes credit status and knowledge interactions

Need for Large Scale Study?

- Randomized large stratified sample
- Linked to public programs & use of admin data
- Robust budget
- Long-term (3-5 years) tracking
- Across content, context, modes, durations
- Use of technology for delivery in some applications
- Examine costs and benefits – social & individual
- Public-private collaborative

Don't repeat the mistake of homebuyer education in the 1990s



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