

Evidence-Based Strategies Supporting Financial Education for Long Term Savings and Investments

Highlights from A Review of the Literature

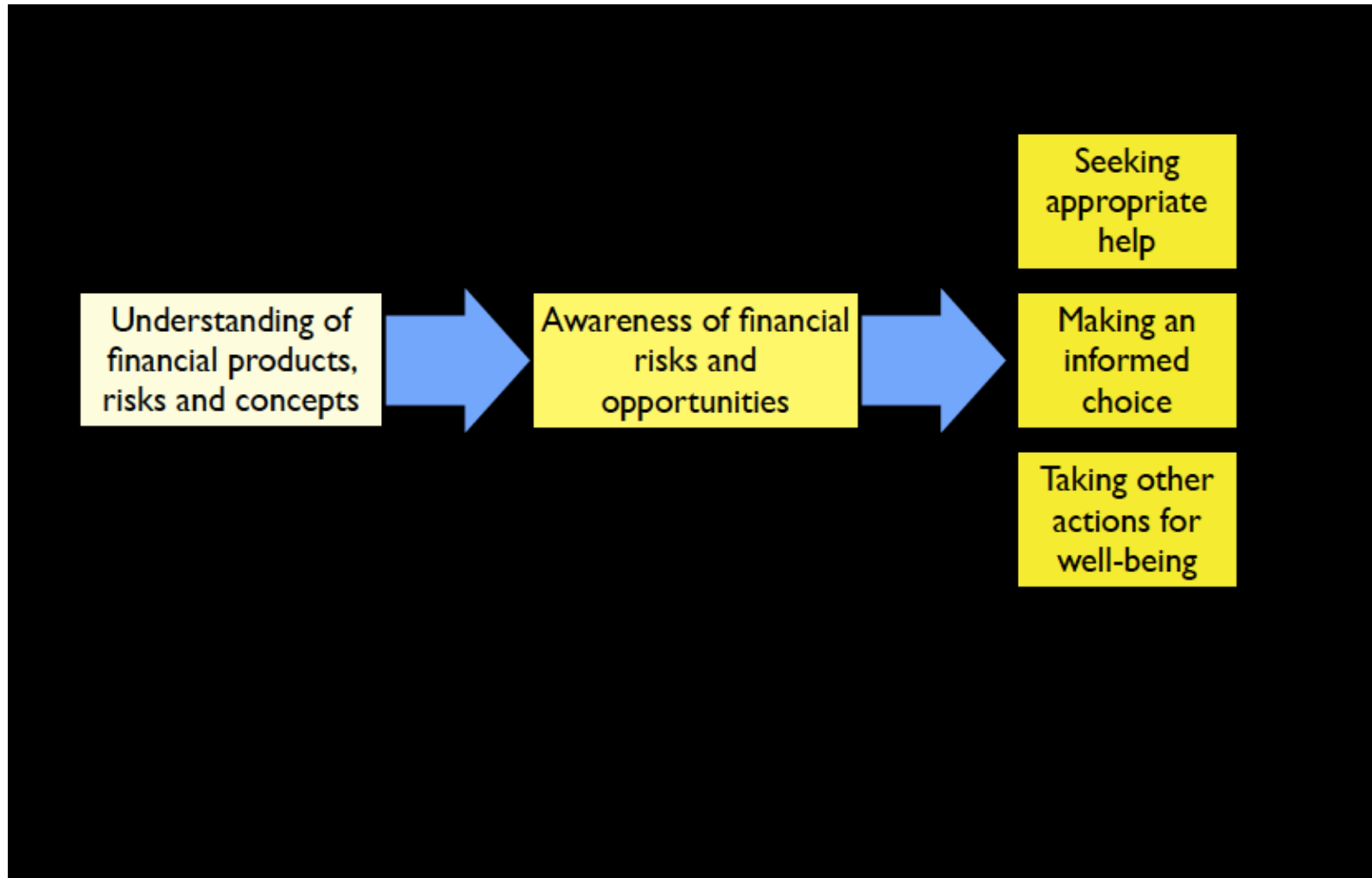
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Based on a study supported by the OECD/INFE

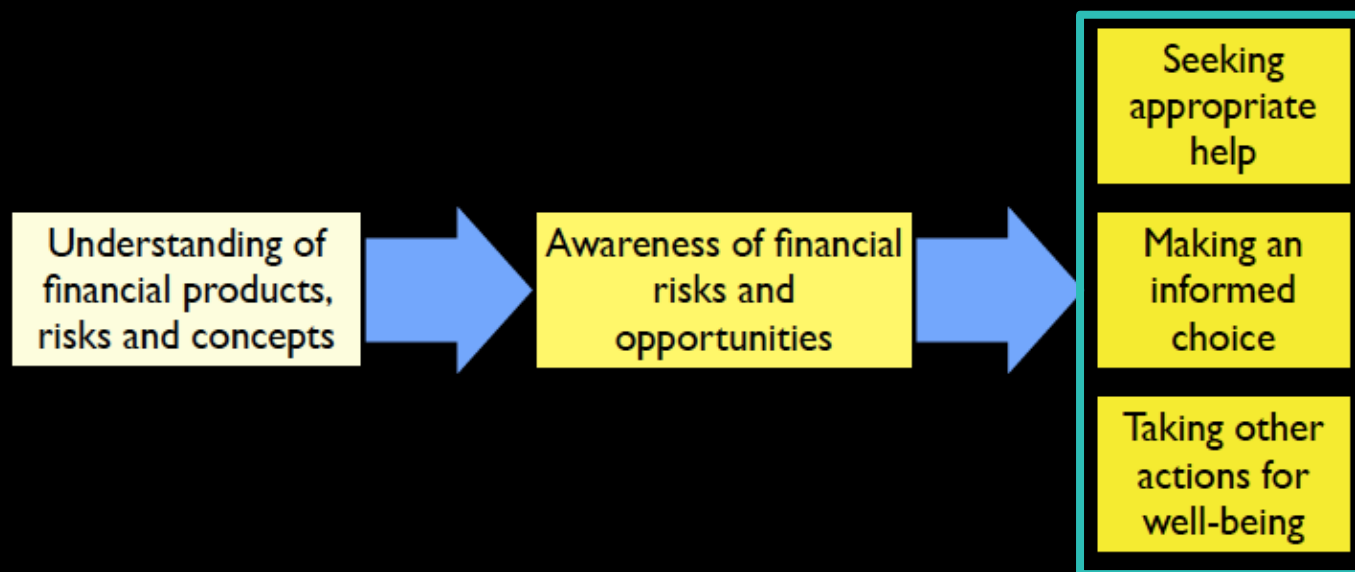
Some Key Questions

- What is known about the *overall effects* of financial education on long-term savings and investments, especially formal retirement planning?
- What do we know about the *relative effectiveness* of different settings, pedagogical principles or incentives?
- What do we know about targeting specific population groups, or low- versus high-income countries?
What does the evidence suggest for Hong Kong?

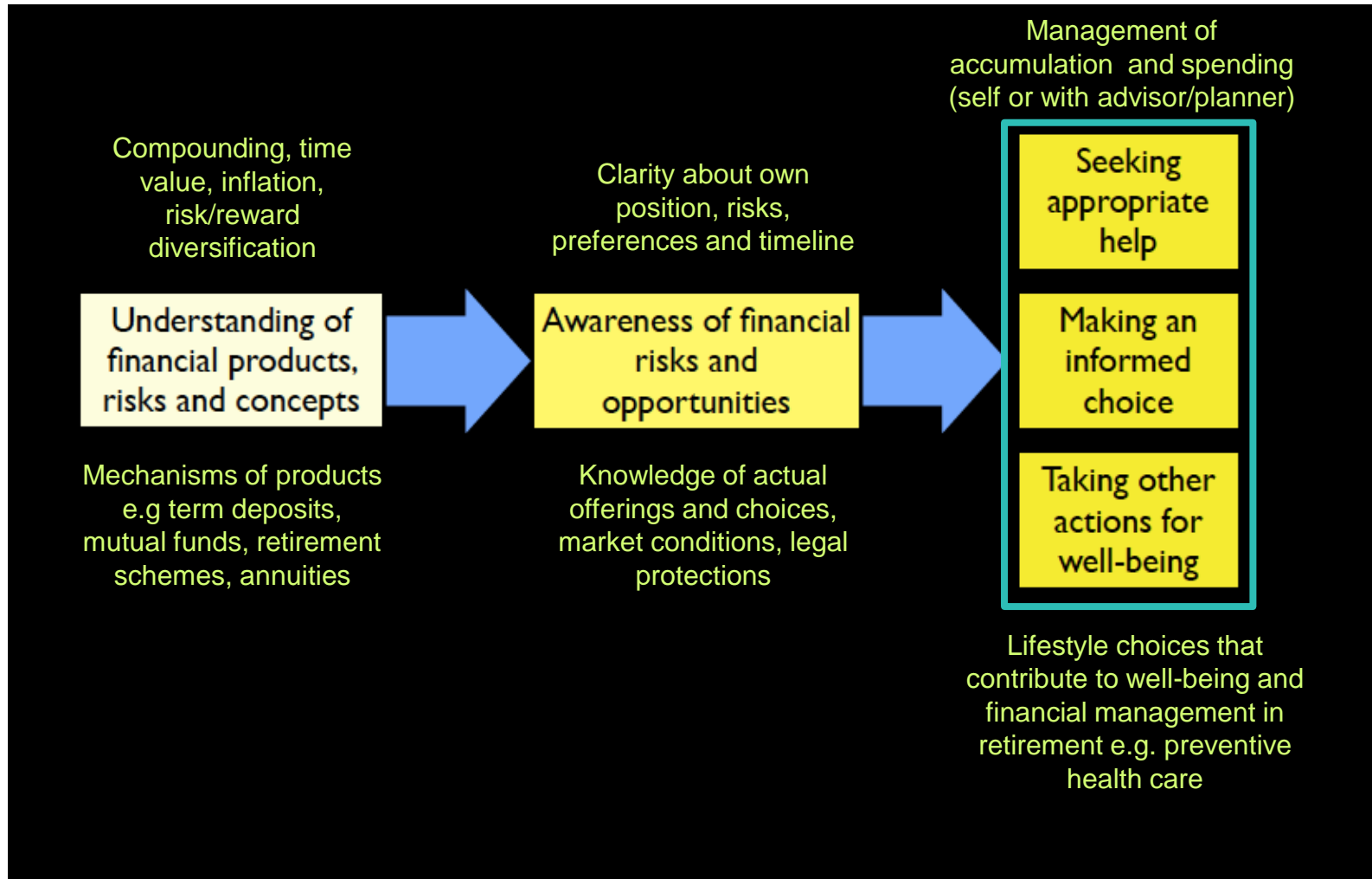
OECD framework for financial literacy



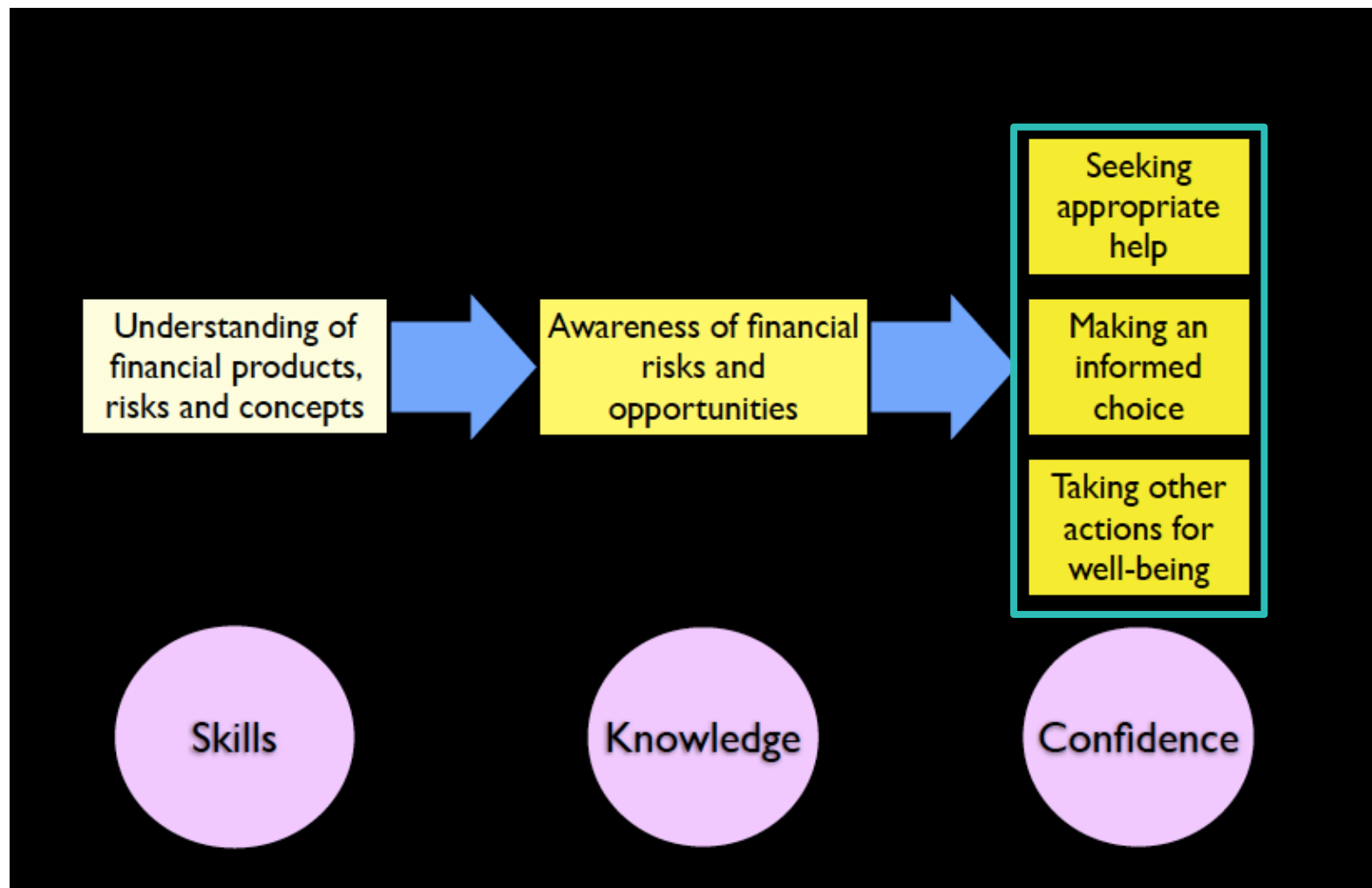
Behavior change as final outcome



Reflecting On Retirement Planning

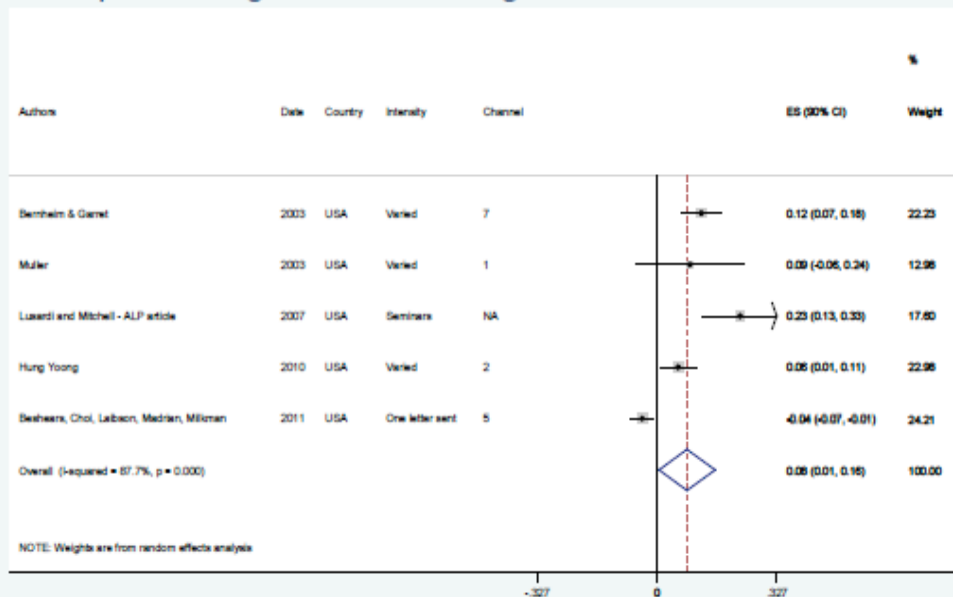


Financial education along the chain



2014 World Bank review (Miller et al 2014)

Papers testing retirement savings behavior after intervention



- Review of 188 papers published for between January 2000 and September 2013 with strict quality and topic criteria

- Although savings was the most popular type of program evaluated, only 5 included papers looked at programs targeting retirement saving

- All 5 studies based in the US, related to employer-based education and/or plans

Concluded that in general, retirement savings education can be effective but there is not enough evidence for any specific strategies

2014 OECD Study in Brief

Methods

- *Review of reviews*: synthesis of all significant systematic and narrative reviews of evaluations for financial education programs targeted at long-term savings and investments up to 2014
- *New search with expanded inclusion criteria*
 - Newly published papers or reputable “grey” literature
 - Long-term savings and investment focused education *OR* general programs with LTSI component *OR* general program demonstrating LTSI outcomes
 - Non-US / vulnerable populations : near-retirees, new employees, women, migrants, youth (except via school programs, covered elsewhere by OECD)

Results

6 review articles + expanded search = sample of 14 papers + identification of additional promising case studies / best practices

What (more) can we learn?

The Workplace Works

- Findings hold across diverse settings / delivery models



Making the Case : Early Evidence

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In 2007, Lusardi and Mitchell (2007) showed further that **workplace retirement seminars increase financial literacy**, which in turn increases the propensity to plan for retirement

Making the Case : Long Term Effects

- Work by Duflo and Saez(2002) and Clark and d'Ambrosio (2008) cast doubt on persistence of behavior from single fairs or seminars
- New work by **Skimmyhorn (2012)** shows savings education delivered to newly enlisted US Army personnel in 2007-2008 from an in-person 8 hour mandatory course combined with immediate enrollment, increased retirement savings contributions to the Army Thrift Savings Plan by 2x with results persisting for > 2 years



Making the Case : Blue-Collar Workers



Doi et al (2012) : pre-departure savings and remittance training delivered to migrant workers and their families in Indonesia using comicbooks, brochures, games and take-home workbooks raised awareness and increased savings behavior

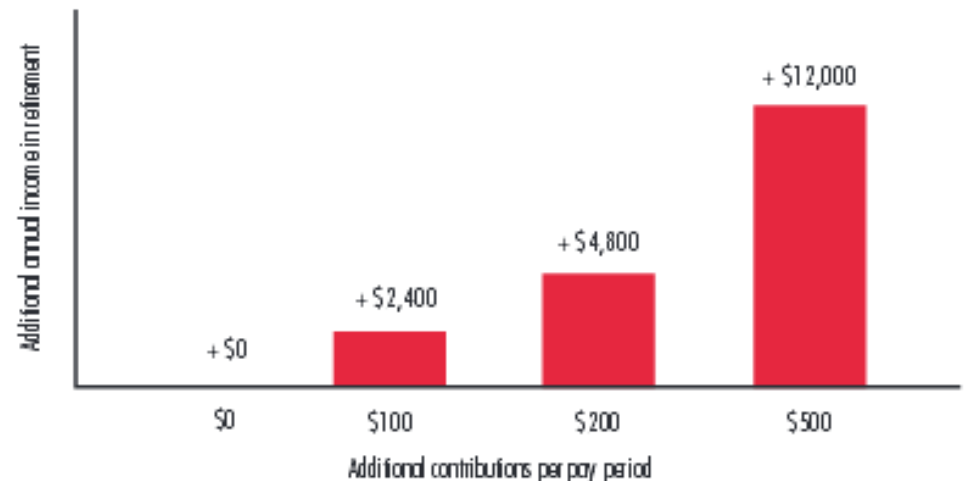


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(b) How additional contributions map to additional annual income at retirement

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General information about planning benefits alone did not change behavior but personalized projections about balances and future income raised contributions by about 4%

Making the Case : Online Tools

- Hung and Yoong(2012) test an online tool that provides simple feedback on portfolio choices in a 401(k) plan
- Results show that a simple checkup tool can be effective in highlighting and correcting potential “mistakes” e.g 100% allocations to single asset classes

Please indicate the percentage of your portfolio that you would like to hold in each of the following funds. Then click the "Evaluate my portfolio allocation" button and we'll then give you some feedback on your choices based on standard financial advice.

My Portfolio Choices	%	Fees	5 Year Return
Money Market Fund	100	0.21%	3.28%
Total Bond Market Index Fund	0	0.20%	-4.50%
S&P 500 Index Fund	0	0.18%	-2.29%
Small Cap Value Index Fund	0	0.23%	-0.76%
REIT Index Fund	0	0.21%	0.77%
Global Equity Index Fund	0	0.72%	-0.29%

[Evaluate my portfolio allocation](#)


Based on your choices, the Portfolio Checkup Tool suggests:

Portfolio Checkup Tool

You have zero equity in your portfolio - my research suggests most people benefit from holding some equity allocation.

If you want to change your choices you can update your allocations before submitting your final answer. Click the "Evaluate my portfolio allocation" button to get new feedback from the Portfolio Checkup Tool. When you are finished, click "Next" to move on.

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However, positive effects were found only when respondents were allowed to freely use the tool. When respondents are forced to use it, there are no effects.

Population Programs: A Cautionary Tale

- Bruhn et al (2014) conducted randomized experiments a large, free, professionally designed 4 hour financial literacy course conducted by a large institution in Mexico City that has served over 300,000 people and has been expanded through Latin America
- Very low initial takeup
 - 40,000 letters sent out with response from 42 clients, Facebook campaign with 16 million views : 116 responses
- Large financial and other incentives were then tested
 - US \$36 - \$72 (increased takeup up by 2x but still low)
 - Transportation provided free and video CV (no effect)
- Impacts on savings balances as well as behaviors related to savings and pensions were zero or vanished after 6 months

On the other hand, a success story...



Song 2012) conducted an experimental intervention with over 1000 rural farmers in Shaanxi province during introduction of national rural pension plan

- Face-to-face education by study staff increased takeup relative to intervention with only flyers describing benefits
- Personalized information about individual benefits alone increased contributions by 20-25 RMB
- Personalized information + education about compound interest increased contributions by 50 RMB (30-40%)

Online Programs : The Jury is Out



- Surprisingly few online programs are rigorously evaluated.
- Heinberg et al (2013) design and test a YouTube-based video program called “Five Steps to Planning Success” and find significant differences compared to text-based narratives (but no change in action)
- Barcellos et al (2014) : online FDIC-based program with additional FAQ immigrant populations increases in knowledge (but no change in action)

Social Effects : Handle With Care

Multiplier effects

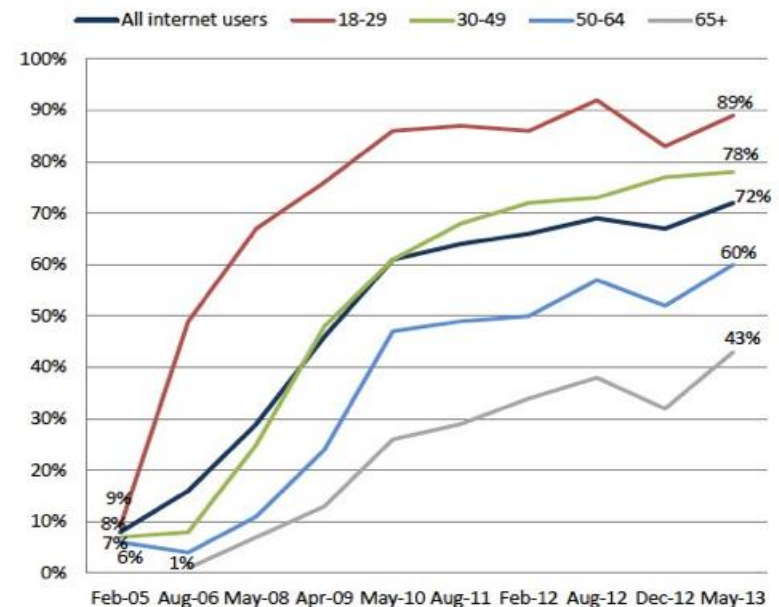
- **Duflo and Saez (2002):**

Participation in a workplace benefit fair, and effects on outcomes increased in workers who attended but also (by transmission or role modeling) among peers who did not actually attend the fair

Social Incentives

- **Doi et al (2012) :** Savings increases when migrant workers and their families are trained together

Social networking site use by age group, 2005-2012
% of internet users in each age group who use social networking sites



Source: Pew Research Center's Internet & American Life Project tracking surveys 2005-2013. Spring Tracking Survey, April 17 – May 19, 2013. N=1,895 adult internet users ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. The margin of error for results based on all internet users is +/- 2.5 percentage points.

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Reactivity and Oppositional Effects

- **Beshears et al (2012):** Workers in a large manufacturing firm shown a form with information on age-matched co-workers savings rates

- *Decreased* likelihood of signing up for 401(k) plan (shifting away from the peer norm), especially for low-income individuals

- Authors find that participants are discouraged by upward social comparisons

New Paradigms ?

Video games and financial literacy

Blood bars and debt bunnies

Clicking your way to sound financial habits

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Timekeeper

Like

ONE way to learn basic financial literacy is to sit in a classroom and listen to someone drone on about retirement accounts and financial charges. An alternative is to run a nightclub for vampires and rake in money by getting your customers the blood-type they want, while socking away enough cash for retirement (a long one—you're undead).

That is the scenario of "Bite Club", a video game created by Doorways to Dreams (D2D) Fund, a Boston-based non-profit organisation that works on improving the finances of low- and middle-income consumers. D2D released its first prototype game in 2009, and its library now totals five games. The other titles include "Farm Blitz", which challenges players to harvest crops from Uncle Felix's farm while staving off ravenous rabbits (the bunnies represent debt); and 'Celebrity Calamity', in which you are a money manager who keeps a Hollywood starlet happy by keeping her out of debt.



Longevity risk



SCANDAL!



Why does evidence lag innovation?

- Complexity of capturing relevant behavioral change especially for certain types of programs
- M & E capacity and competition with program resources
- Publication bias and bias in favor of models that are easiest to evaluate
- Differential standards of evidence and incentives to publish

Summary And Reflections

- We continue to need more evidence to help us show what works, especially with new technology, more comprehensive approaches, more stratified populations
- Comparative effectiveness as well as cost-effectiveness of many different strategies is still open to debate
- However, some pragmatic lessons can be drawn

Summary And Reflections

- **Financial education needs to integrate with the choice environment**
 - Workplace interventions can be a highly effective platform for this reason (among others)
- **Quality of touch can matter more than quantity**
 - In-person seminars remain more effective
 - Repeated/forced exposure can be counterproductive
- **Consumer-centric approaches that build on intrinsic motives succeed**
 - Demonstrable and specific value, combining basic concepts with personalized information
 - Financial incentives important but limited, while social incentives can have both positive and negative effects
- **Best practice interventions acknowledge consumer values and psychology, and connect individual learning with opportunity for action**