

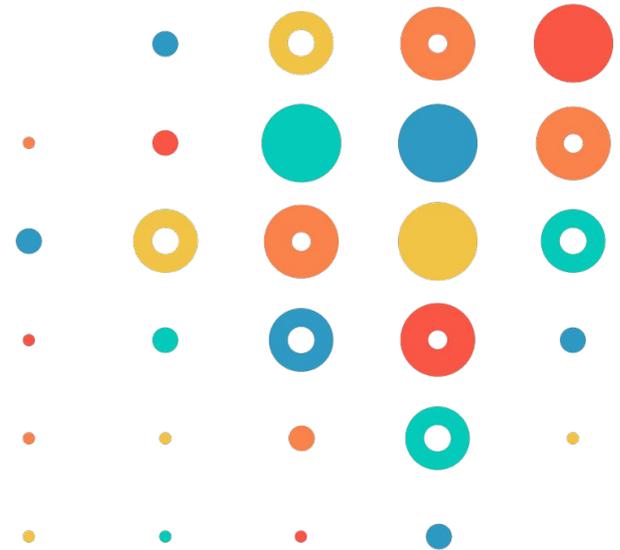
Improving Program Engagement: Insights from Behavioral Economics

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University of Washington

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sbst

SOCIAL AND BEHAVIORAL SCIENCES TEAM

2015 Annual Report

Overview of webinar

- What is behavioral economics
- Commonly applied behavioral principles
- The work of the SBST
- Examples from the field
- Insights on designing effective interventions
- Questions and Discussion

Behavioral Decision Research

- **Blend of multiple fields**
 - (Behavioral) economics
 - Cognitive Psychology
 - Social Psychology
- **Judgment and Decision Making**
- **Behavioral Decision Research**

Contributions of BDR and Behavioral Economics

- **Challenging assumptions of traditional economics**
 - **Rational**
 - **Self-interested**
 - **Consistent**
- **Difference between “normative” and “descriptive” theories of behavior**

Understanding human behavior

- **Rational agent model (normative)**
 - Well-informed
 - Stable preferences
 - Controlled and calculating
- **Behavioral model (descriptive)**
 - Mediocre judgment
 - Malleable preferences
 - Impulsive
 - but behavior is often *predictable!*

A key observation:

Individuals are “irrational” but often
extremely *predictable!*



Behavioral Research: Some Themes

- **Loss aversion**
- **Framing**
 - **Mental accounting, anchoring**
- **Power of defaults**
- **Cognitive priming**
 - **Social identity, self-affirmation**
- **Channel factors matter!**

Loss aversion

Image: flickr.com user alancleaver_2000

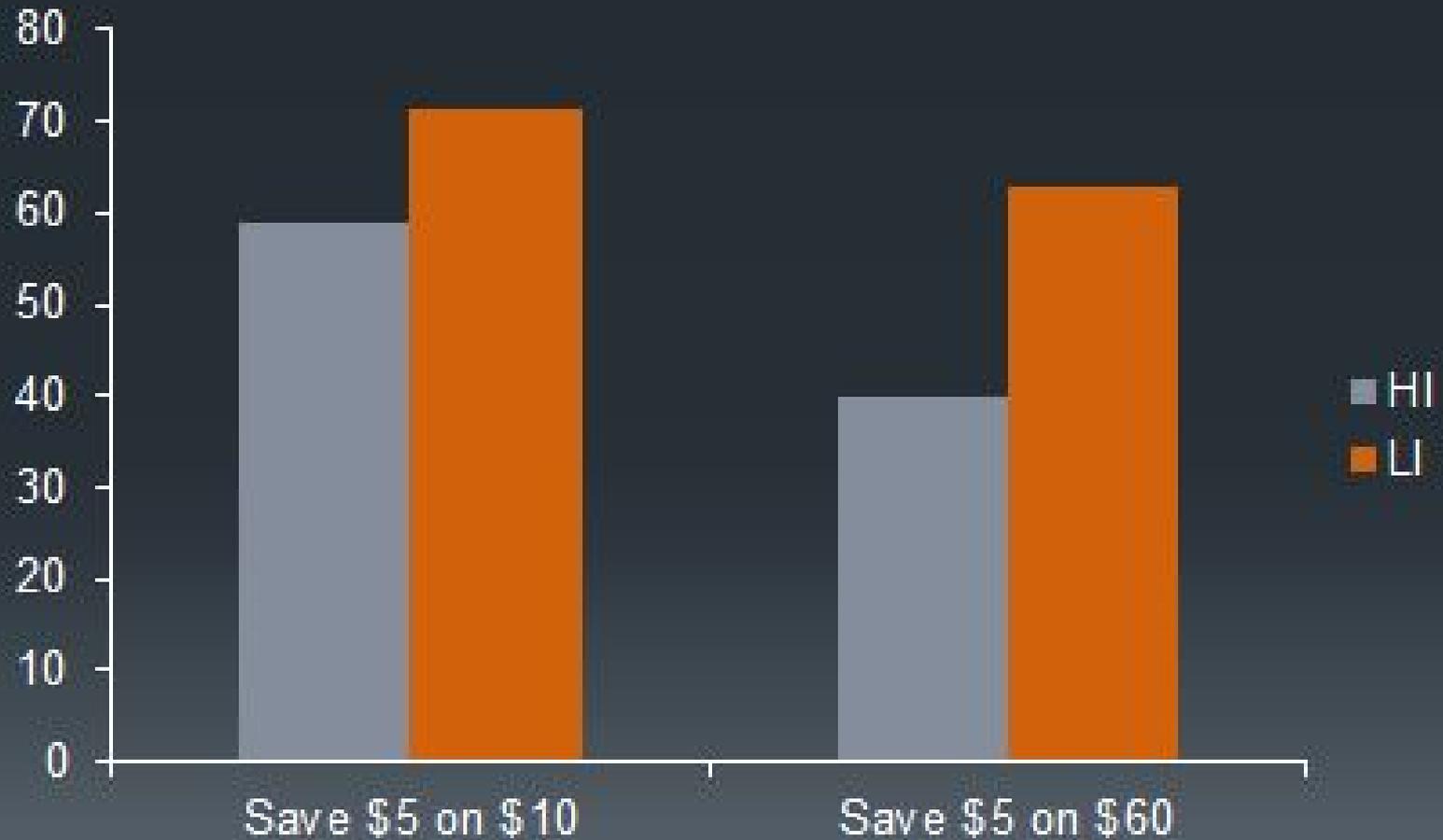


Framing

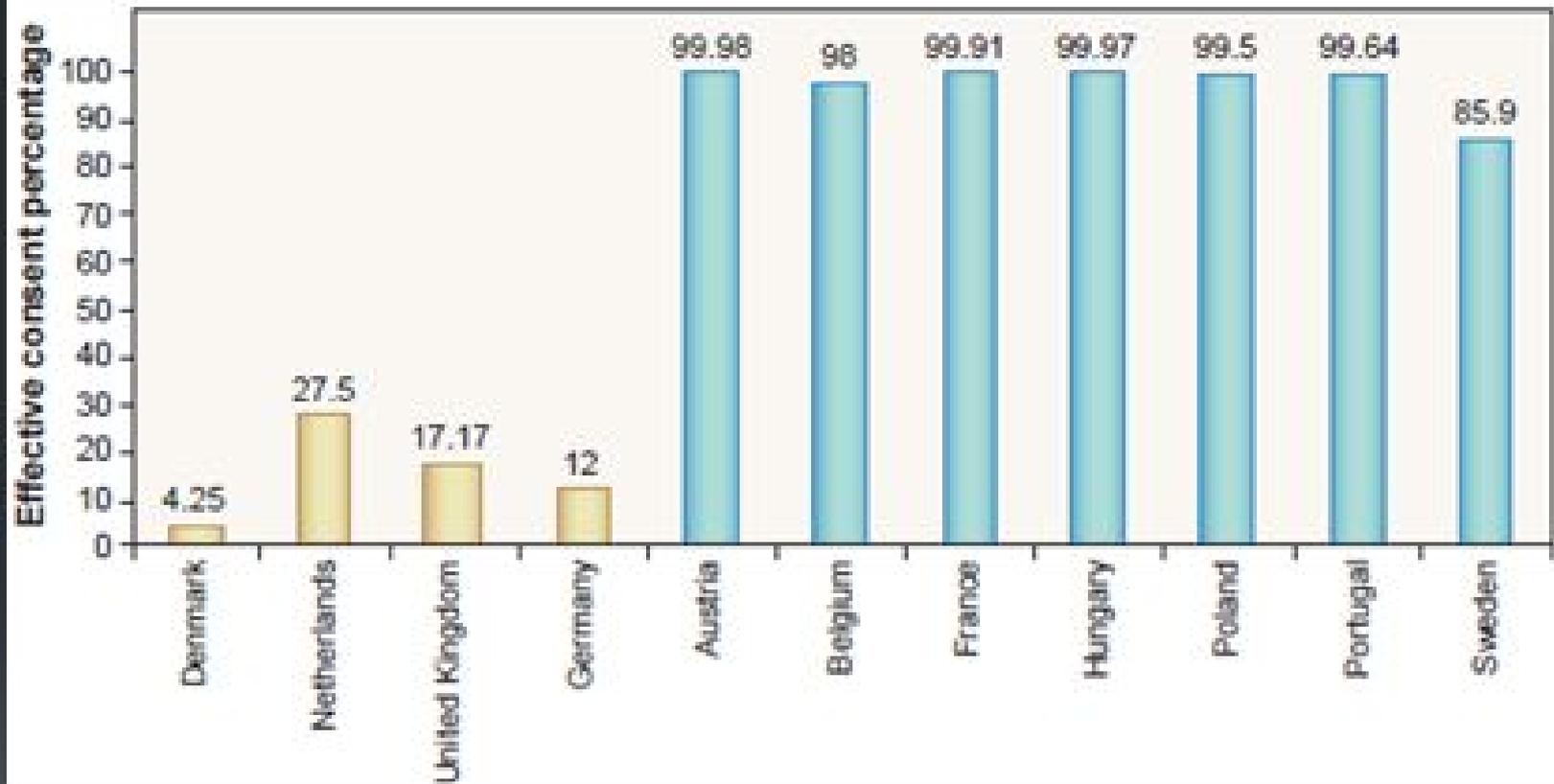
Mental accounting

- Imagine that you go buy a winter jacket that costs \$10 (\$60). The clerk informs you that a store twenty minutes away sells the same jacket for \$5 less. Would you go to the other store to buy the jacket?

Percent 'Yes'



Power of Defaults



Johnson & Goldstein, 2003

Self affirmation

Low income populations and social stigma

- The poor as a stigmatized group
 - Stigma associated with welfare
 - Class-based stereotype threat
- Stereotype content model
- Negative self-concepts
- Unwillingness to utilize public assistance

- Other issues: trust? lack of information?



Money Talks! Have You Heard?

As Much As \$4,716 — or more — Could Be Waiting for You!

You could qualify!

Did you work in 2007? You may be eligible for the Earned Income Credit — even if you don't owe income tax.

If you worked in 2007:

- Did you have one child living with you? Did you earn less than \$33,241*? You can get an EIC up to **\$2,853**.
- Did you have more than one child living with you? Did you earn less than \$37,783*? You can get an EIC up to **\$4,716**.
- If you had no children living with you, did you earn less than \$12,590* in 2007? Were you between the ages 25 and 64? You can get an EIC up to **\$428**.

**Income limits for married workers are \$2,000 higher.*

You could get a CTC refund too!

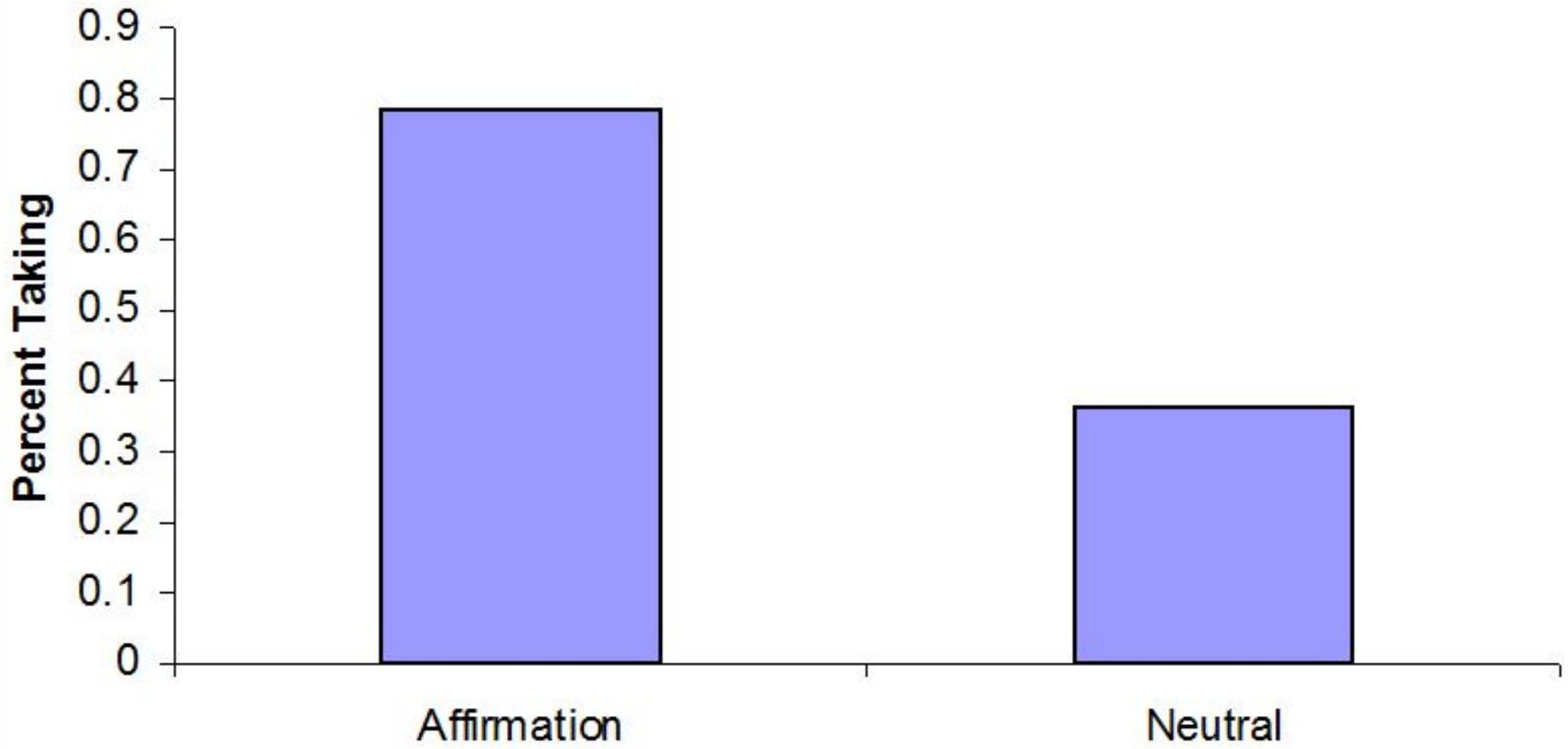
Many families that earned more than \$11,750 may qualify for the Child Tax Credit (CTC) refund — up to \$1,000 for each qualifying child under age 17.

File a Federal Tax Return to get the EIC and CTC: Get Free Help!!!

- VITA — Volunteer Income Tax Assistance — helps people fill out returns for free.
- For a site near you, call 1-800-829-1040.

Boost your take-home pay! Eligible workers with children can get some of the EIC in their paychecks. To get the Advance EIC, get Form W-5 from your employer, or call 1-800-TAX-FORM.

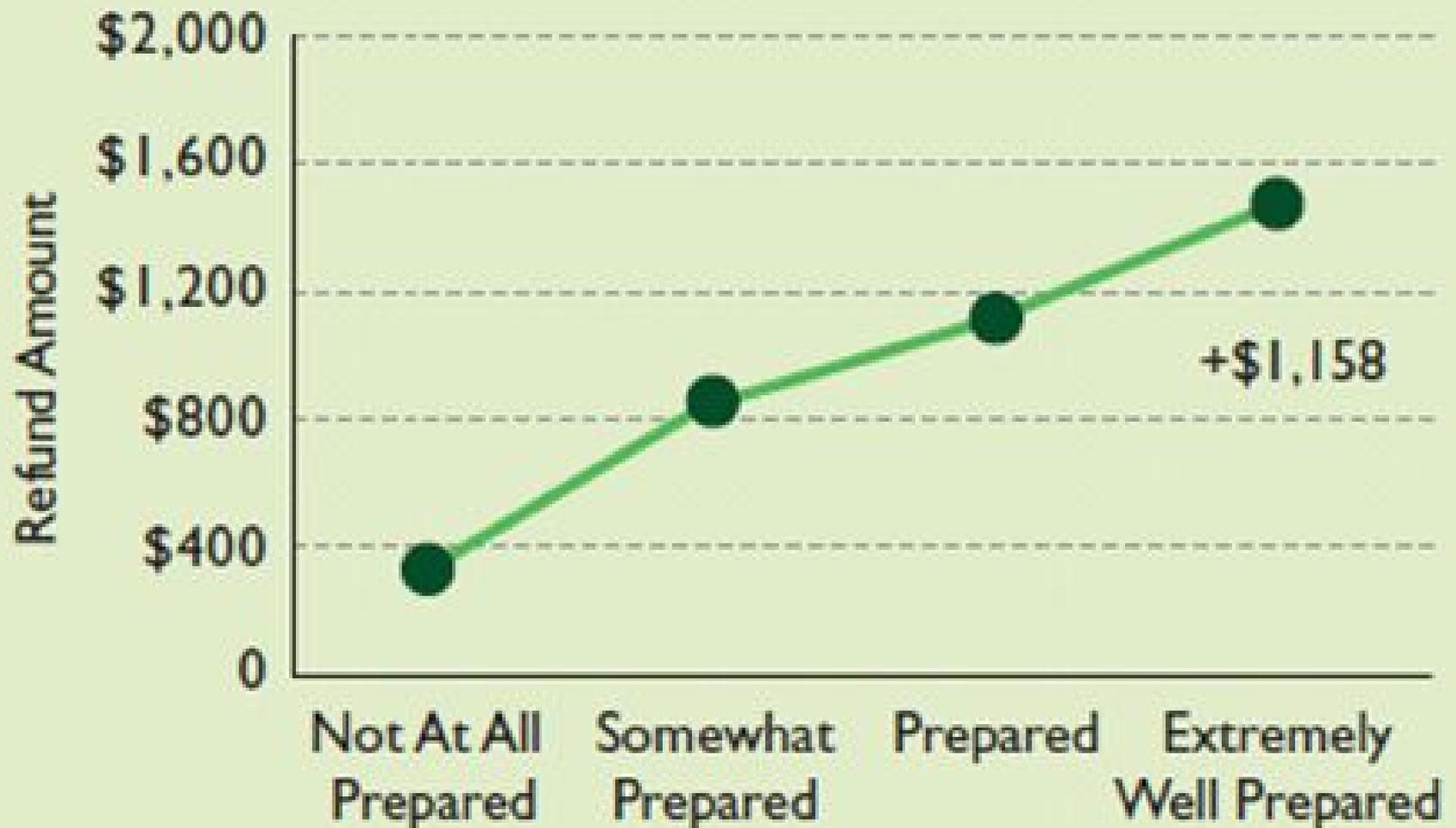
Taking Information



Hall, Zhao & Shafir, 2014

Channel Factors

Average Refund Amount & Preparedness at FC 2010



(Hernandez, 2010)

Plus many more....

TABLE TS.1
EXAMPLES OF BEHAVIORAL INTERVENTIONS

RANK	TYPE	FREQUENCY*	EXAMPLE
1	Reminders	73 papers, appearing in 6 domains	A regular text-message reminder to save money increased savings balances by 6 percent (Karlan, McConnell, Mullainathan, and Zinman, 2010).
2	Social influence	69 papers, appearing in 8 domains	Homeowners received mailers that compared their electricity consumption with that of neighbors and rated their household as great, good, or below average. This led to a reduction in power consumption equivalent to what would have happened if energy prices had been raised 11-20 percent (Allcott, 2011).
3	Feedback	60 papers, appearing in 5 domains	A field experiment provided individualized feedback about participation in a curbside recycling program. Households that were receiving feedback increased their participation by 7 percentage points, while participation among the control group members did not increase at all (Schultz, 1999).
4	Channel and hassle factors	43 papers, appearing in 8 domains	Providing personalized assistance in completing the Free Application for Federal Student Aid (FAFSA) led to a 29 percent increase in two consecutive years of college enrollment among high school seniors in the program group of a randomized controlled trial, relative to the control group (Bettinger, Long, Oreopoulos, and Sanbonmatsu, 2009).
5	Micro-incentives	41 papers, appearing in 5 domains	Small incentives to read books can have a stronger effect on future grades than direct incentives to get high grades (Pryor, Jr., 2010).
6	Identity cues and identity priming	31 papers, appearing in 3 domains	When a picture of a woman appeared on a math test, female students were reminded to recall their gender (Shih, Pittinsky, and Ambady, 1999).
7	Social proof	26 papers, appearing in 5 domains	Phone calls to voters with a "high turnout" message — emphasizing how many people were voting and that that number was likely to increase — were more effective at increasing voter turnout than a "low turnout" message, which emphasized that election turnout was low last time and likely to be lower this time (Gerber and Rogers, 2009).
8	Physical environment cues	25 papers, appearing in 5 domains	Individuals poured and consumed more juice when using short, wide glasses than when using tall, slender glasses. Cafeterias can increase fruit consumption by increasing the visibility of the fruit with more prominent displays, or by making fruit easier to reach than unhealthy alternatives (Wansink and van Ittersum, 2003).
9	Anchoring	24 papers, appearing in 3 domains	In New York City, credit card systems in taxis suggested a 30, 25, or 20 percent tip. This caused passengers to think of 20 percent as the low tip — even though it was double the previous average. Since the installation of the credit card systems, average tips have risen to 22 percent (Grynsbaum, 2009).
10	Default rules and automation	18 papers, appearing in 4 domains	Automatically enrolling people into savings plans dramatically increased participation and retention (Benartzi and Thaler, 2004).
11	Loss aversion	12 papers, appearing in 7 domains	In a randomized controlled experiment, half the sample received a free mug and half did not. The groups were then given the option of selling the mug or buying a mug, respectively, if a determined price was acceptable to them. Those who had received a free mug were willing to sell only at a price that was twice the amount the potential buyers were willing to pay (Kahneman, Knetsch, and Thaler, 1990).
12	Public/private commitments	11 papers, appearing in 4 domains	When people promised to perform a task, they often completed it. People imagine themselves to be consistent and will go to lengths to keep up this appearance in public and private (Bryan, Karlan, and Nelson, 2010).

NOTE: *The eight domains are charitable giving, consumer finance, energy/environment, health, marketing, nutrition, voting, and workplace productivity.

[Technical supplement](#) to 2014 BIAS report.

http://www.acf.hhs.gov/sites/default/files/opre/bias_2014_report_technical_supplement.pdf

Behavioral Science and Federal Government

2001

Research is published showing that switching from opt-in to an opt-out enrollment in retirement savings plans dramatically increases participation rates

2006

Congress passes, and President Bush signs, the *Pension Protection Act* which codifies the practice of automatically enrolling workers into retirement savings plans

Estimates suggest that ***automatic enrollment and automatic escalation have led to billions of dollars in additional savings*** by Americans

Brigitte C. Madrian and Dennis F. Shea, "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," *Quarterly Journal of Economics* 116 (2001): 1149–1187.

Pension Protection Act of 2006, Public Law 109-280, U.S. Statutes at Large 120 (2006): 780–1172.

Shlomo Benartzi and Richard H. Thaler, "Behavioral Economics and the Retirement Savings Crisis," *Science* 339 (2013): 1152–1153.

Social and Behavioral Sciences Team (SBST)

What is it?

The Social and Behavioral Sciences Team (SBST) is a cross-agency group of experts in applied behavioral science.

Who is it?

SBST is chaired by the Office of Science and Technology Policy (OSTP) and includes representation from a dozen member agencies across the Federal Government, as well as offices within the Executive Office of the President.

What does it do?

SBST translates findings and methods from the social and behavioral sciences into improvements in Federal policies and programs for the benefit of the American people.

Social and Behavioral Sciences Team (SBST)

Subcommittee Members

The following Federal departments and agencies are represented on the SBST and through it, work together to coordinate the application of social and behavioral science research to advance policy and program goals and better serve the Nation:

Department of Agriculture
Department of Defense
Department of Education
Department of Energy
Department of Health and Human Services
Department of Housing and Urban Development
Department of Justice
Department of Labor
Department of the Treasury
Department of Veterans Affairs
General Services Administration (Executive Secretariat)
National Science Foundation
Social Security Administration
United States Agency for International Development

The following offices of the Executive Office of the President are also represented on the SBST:

Council of Economic Advisers
Domestic Policy Council
National Economic Council
Office of Management and Budget
Office of Science and Technology Policy (Chair)

Lessons learned from applied behavioral science

Generate an actionable question

Consider behavioral assumptions

Identify intention/action gaps

Lessons learned from applied behavioral science

Generating a research question/behavior of interest

DEFINE the problem

DIAGNOSE the behavioral issues

DESIGN the intervention

TEST the impact

The diagnosis can be an iterative process that helps to refine the question and leads to a more effective set of behavioral principles to engage.

Focus on specific, measurable behaviors!

→ **often an iterative process**

Lessons learned from applied behavioral science

Consider behavioral assumptions

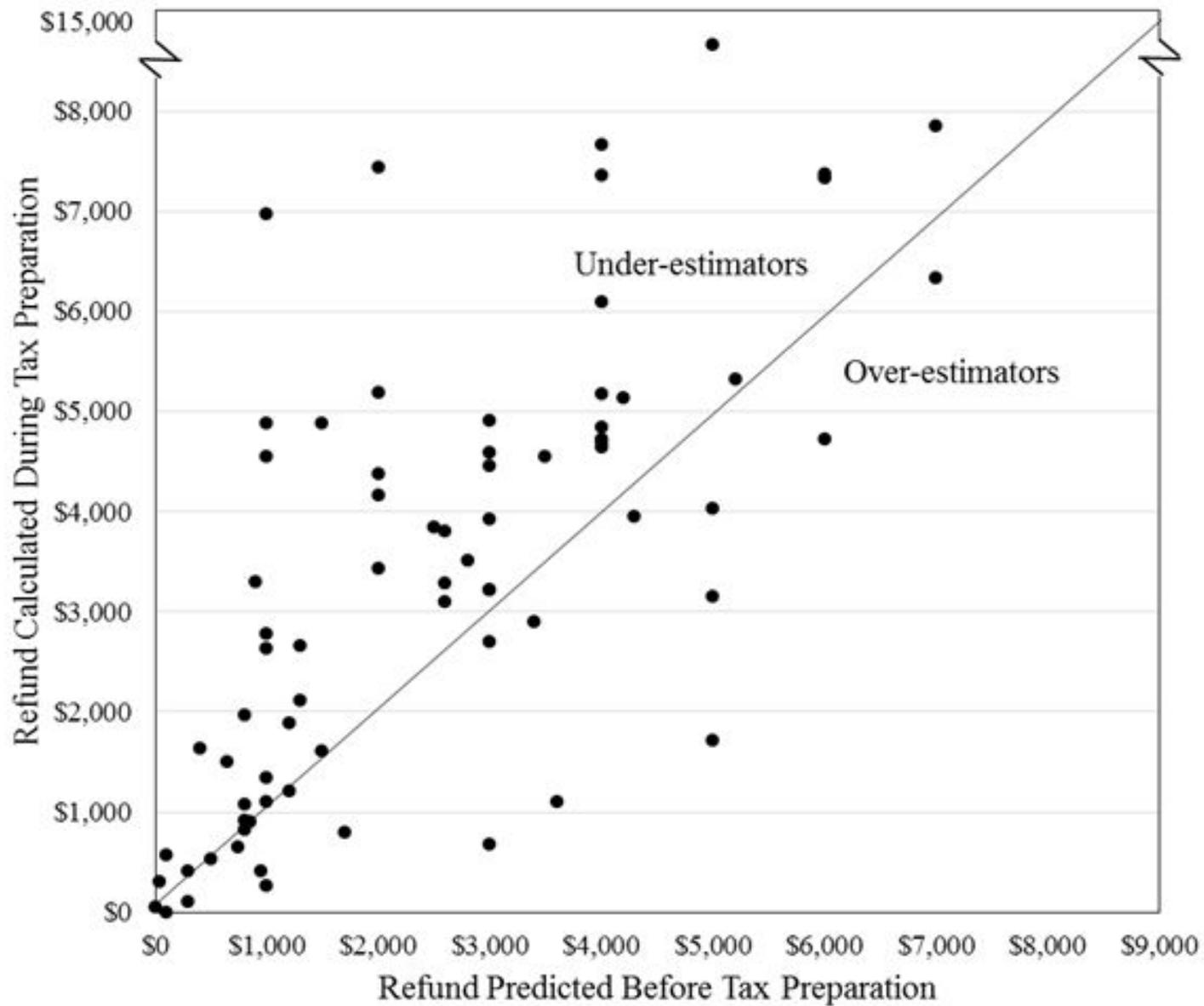
→ especially when considering low-take up of policies and programs

- **Examples:**

- **Anticipation of tax refunds**
- **Housing choice**
- **Food choice**
- **Child care decision making**

also see (Hall, Galvez & Sederbaum, 2014)

Anticipation of tax refunds



Hall & Romich, in press.

Housing choice

Housing choice

- **Half want to stay in familiar neighborhoods (Galvez, 2011; DeLuca & Rosenblatt, 2010)**
- **Not always seeking out “better” neighborhoods (Hall, Galvez & Kleit, in preparation)**
- **Small obstacles have large costs**

Food choice

Food choice

- Targeted subsidy on fresh produce
(Hermann et al., 2008)
- Comparison of subsidy types
- Greater consumption of produce after subsidy ends

Child care decision making

- **Conceptual frameworks** (Chaudry, Henly, Meyers, 2010)
 - Consumer choice (rational) => outcomes
 - Heuristics and biases/social network => processes
- **Accommodation model** combines these
(Meyers & Jordan 2006)
- **Go beyond rational choice**
 - Descriptive models of behavior (not normative)
 - Multiple lenses can research on decision making

Lessons learned from applied behavioral science

Identify intention/action gaps



The inconsistency of humans

- Chronic divergence between intentions and behaviors
 - Influence of social context
 - Current vs. Future self
- Inconsistency \neq Unpredictability!

In summary...

- Understand the context and process
- Identify program goals
- Map the process → Identify roadblocks/bottlenecks
- Design intervention/evaluation

Questions and Comments?