



# BEHAVIOR ECONOMICS 101

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Center for Financial Security, University of Wisconsin - Madison*

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University of Wisconsin - Madison*

# Welcome & Introductions



***Michael R. Roush, MA***  
**Manager, Financial Empowerment  
& Innovation**  
**National Disability Institute**

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[www.realeconomicimpact.org](http://www.realeconomicimpact.org)

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# Webinar Objectives

- Define Behavior Economics
- Understand key components
- Look at strategies to use as we work to create positive financial habits for clients we serve.



# National Disability Institute

A national research and development organization with the mission to promote income preservation and asset development for persons with disabilities and to build a better economic future for Americans with disabilities.

[www.realeconomicimpact.org](http://www.realeconomicimpact.org)

# Welcome



*Wynne Lum,*  
**Philanthropy Manager**  
**Bank of America**

# Bank of America Partnership

- Bank of America has been a long time supporter of National Disability Institute
- Bank of America's support has:
  - Assisted 1.5 million taxpayers with disabilities receive more than \$1.5 billion in tax refunds
  - Advocated for building inclusive communities of practice in more than 100 tax/asset building coalitions across the country
  - Educated over 1,600 people in 2012 on economic empowerment strategies for persons with disabilities



## Bank of America's Disability Advocacy Networks Collaboration with NDI

- In 2013, NDI and Bank of America's DAN members will join together to increase awareness on financial wellness for persons with disabilities through two opportunities.
  - Financial Education Training
  - Disability Awareness Training for VITA volunteers, tax and asset building coalitions, debt management partners, IDA and financial education providers.

# Volunteer Opportunities

- Financial Education Training
  - Purpose: Financial education is key to advancing up the economic ladder. Often times, financial education is not offered or delivered to persons with significant disabilities.
  - Communities where DAN has a chapter presence – NDI will connect the DAN chapter leads to the coalition/VITA leads in each market.
  - DAN members and partners will determine training schedule and logistics.
  - DAN members will use FDICs Money Smart Curriculum

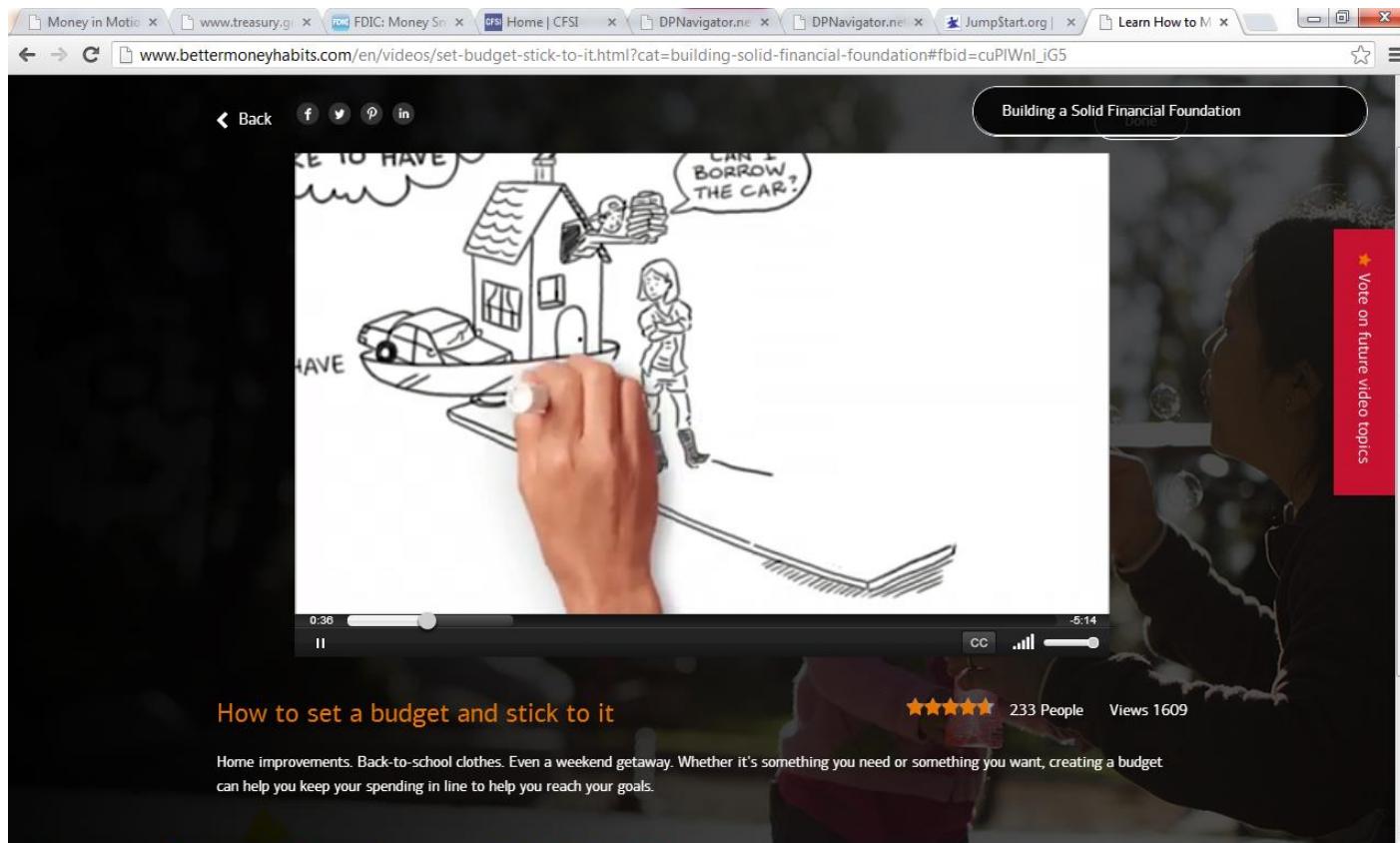
# Volunteer Opportunities

- Disability Awareness Training
  - Purpose: Increase awareness for VITA volunteers, tax and asset building coalitions, debt management partners, IDA and financial education providers.
  - Communities where DAN has a chapter presence – NDI will connect the DAN chapter leads to the coalition/VITA leads in each market.
  - DAN members will use NDIs Disability Awareness Training materials.

# Next Steps

- If you are interested in being connected with DAN Volunteers in your community – please send an email to Michael Roush at [mroush@ndi-inc.org](mailto:mroush@ndi-inc.org) with your preference of financial education and/or disability awareness training. In the subject line of the email – please use **Disability Advocacy Network Volunteer Connection**

# BetterMoneyHabits.com



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Building a Solid Financial Foundation

How to set a budget and stick to it

Home improvements. Back-to-school clothes. Even a weekend getaway. Whether it's something you need or something you want, creating a budget can help you keep your spending in line to help you reach your goals.

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# Welcome



***Nicole Truog, MA***  
**Associate Director**  
**Center for Financial Security**  
**University of Wisconsin - Madison**

*Applied* research center at the University of Wisconsin-Madison

Working to build financial capability for families and individuals over the life course

- Measurement of Financial Capability
- Targeting Interventions to Populations at Risk
- Testing Strategies, Products and Services

<http://cfs.wisc.edu>

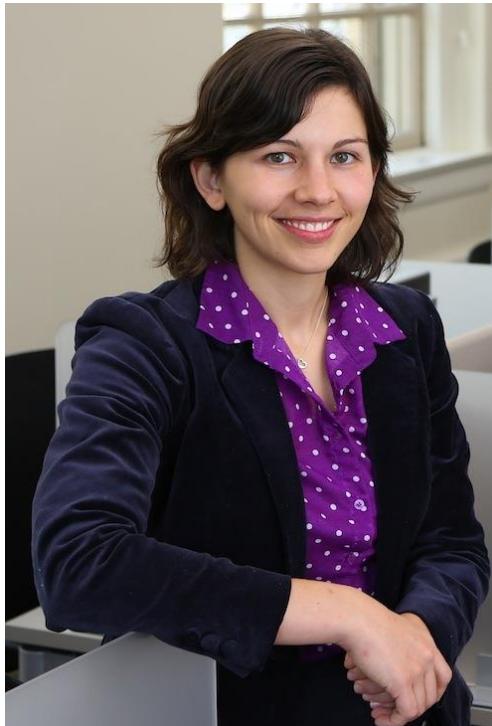
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Nicole Truog, [ntruog@wisc.edu](mailto:ntruog@wisc.edu) - 608-262-6766



# Behavior Economics 101



*Anya C. Samak, PhD*  
Assistant Professor  
University of Wisconsin-Madison

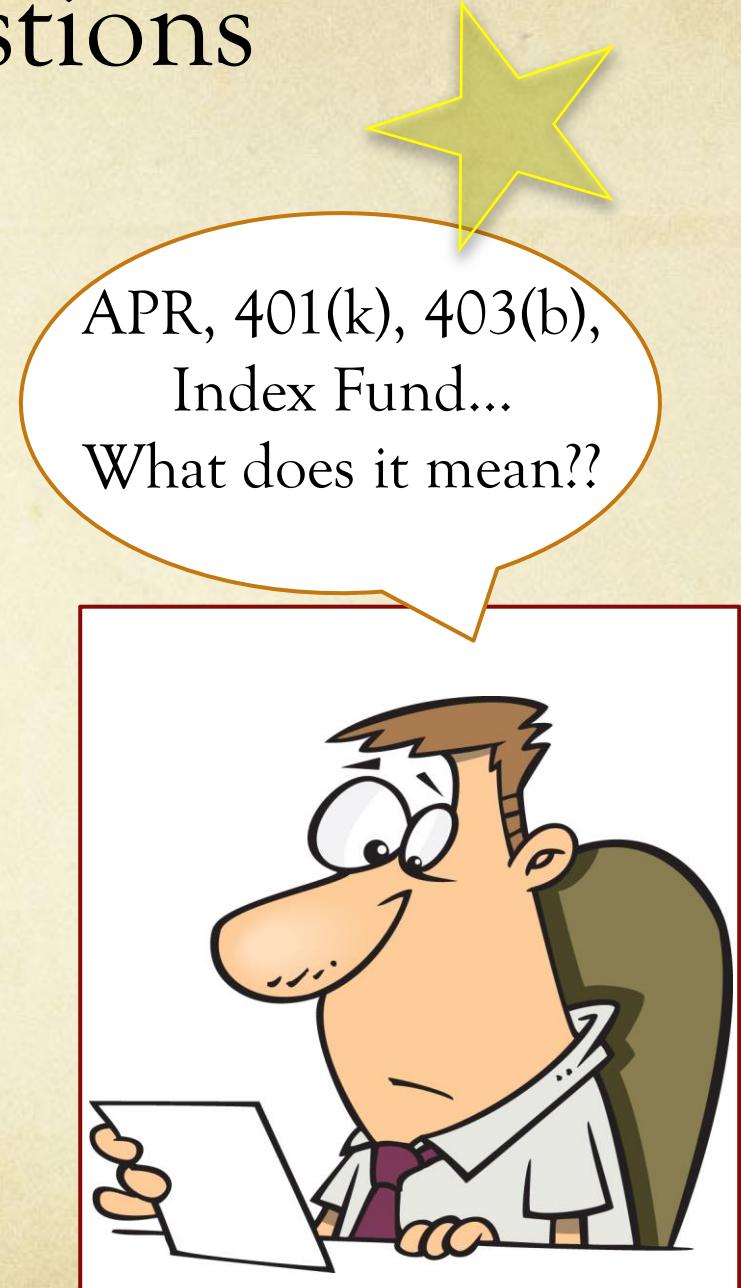
# BEHAVIORAL ECONOMICS: Insights for the Field

○ Prof. Anya Samak  
Center for Financial Security  
The University of Wisconsin-Madison  
[asamak@wisc.edu](mailto:asamak@wisc.edu) | [anyasamak.com](http://anyasamak.com)

May, 2013

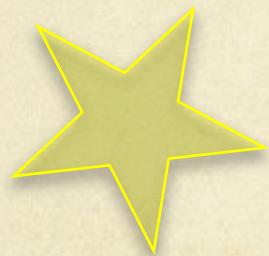
# 3 Big Questions

- 1. What is Behavioral Economics?
- 2. How do Economists study behavior?
- 3. How can insights from Behavioral Economics be applied?



# [ Economics ]

- Microeconomics is the study of how individuals and firms make decisions to “allocate limited resources.”
- Any decision is an “**economic**” one in this sense.
  - Choosing whether to buy a TV or invest in a retirement account
  - Choosing whether to spend time watching TV or exercising
- Two main components of a decision
  - Constraints – tells what the individual **can** do
  - Preferences – tells what the individual **wants** to do – which activities increase his/her satisfaction
- The individual’s objective: **Maximize his/her satisfaction**



# What is Behavioral Economics?

# The Standard Approach: George Invests in a 401(k)

- George carefully considers all information that is given to him
- Using this information, George maximizes his satisfaction over his lifetime
- George does all this, ignoring what his friends and others are doing



# What Really Happens?

- George ~~carefully considers~~ glances at ~~all~~ some information that is given to him
- ~~Using this information~~, George tries to maximizes his satisfaction over his lifetime, but then puts it off for later
- George does all this, after checking ~~ignoring~~ what his friends, colleagues, TV hosts, news...are doing



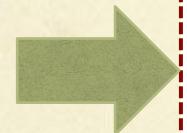
# 3 Principles of Boundedness

✗ George carefully considers all information



**Bounded Rationality:**  
Processing information is costly,  
And there are common biases to how information is perceived

✗ George maximizes satisfaction over lifetime



**Bounded Willpower:**  
People put off doing things they don't like, but believe they'll 'get to it later'

✗ George ignores his friends



**Bounded Selfishness:**  
People care about others; use cues from environment

# “Psychological Underpinnings”

- Bounded rationality

- The brain is limited in its capacity to process information
- “Rules of thumb” often used, strongly dependent on framing
- Leads to: overconfidence, status quo bias, ambiguity aversion, overload of information, loss aversion, subjective measures of probability

- Bounded willpower

- Time preference, Lack self-control
- May not do what is “good” for you

- Bounded selfishness

- People like to help others: warm-glow, altruism.
- People use “cues” from others
- Care about my “in-group” succeeding

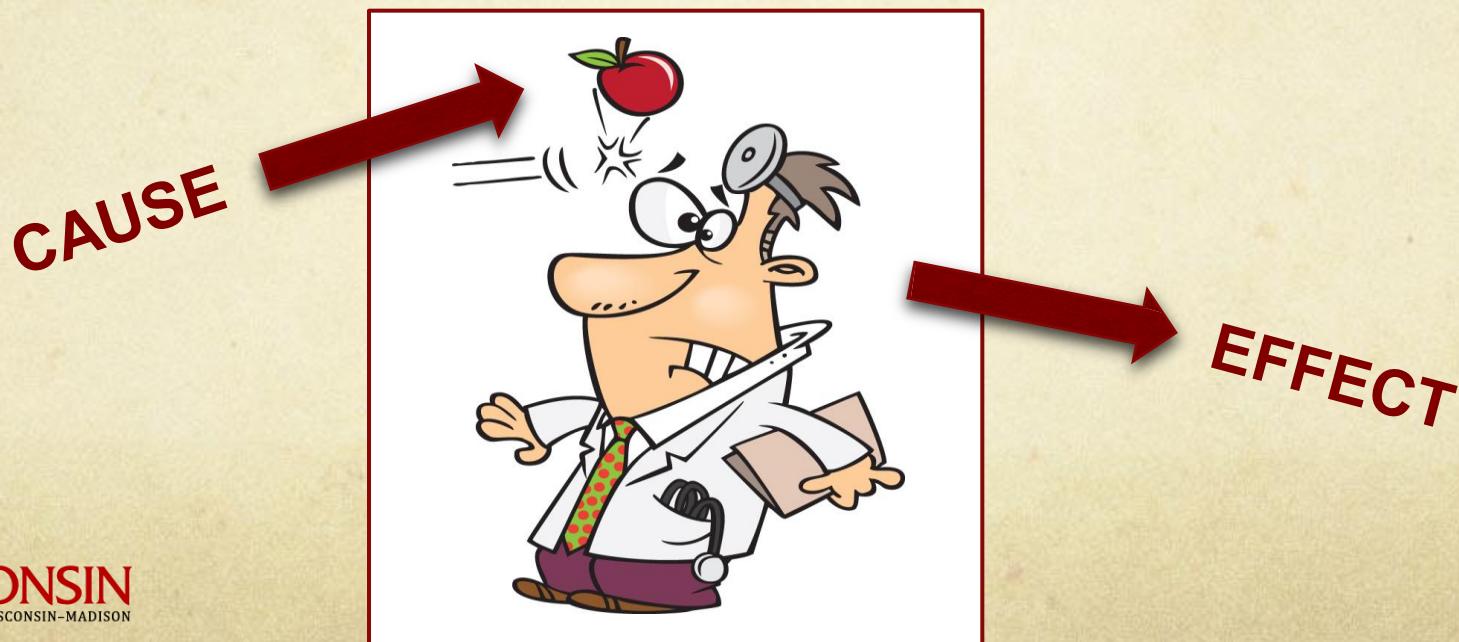


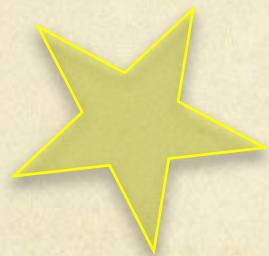
# [ Behavioral Economics ]

- Behavioral Economics uses concepts from psychology - and investigates how **social**, **cognitive** and **emotional** factors motivate decision-making
- Simple assumptions, like... “you prefer \$100 to \$50”
- May not always be true. For example,
  - “you prefer \$50 to \$100 if you can get the \$50 now”
  - “you prefer \$50 to \$100 if getting \$100 requires filling out a form”
  - “you prefer \$50 to \$100, unless getting \$50 means your financial advisor is less well-off”

# Why study Behavior?

- Describe what people *actually* do, and why
- Recommend what individuals *ought* to do
- Recommend what society *ought* to do





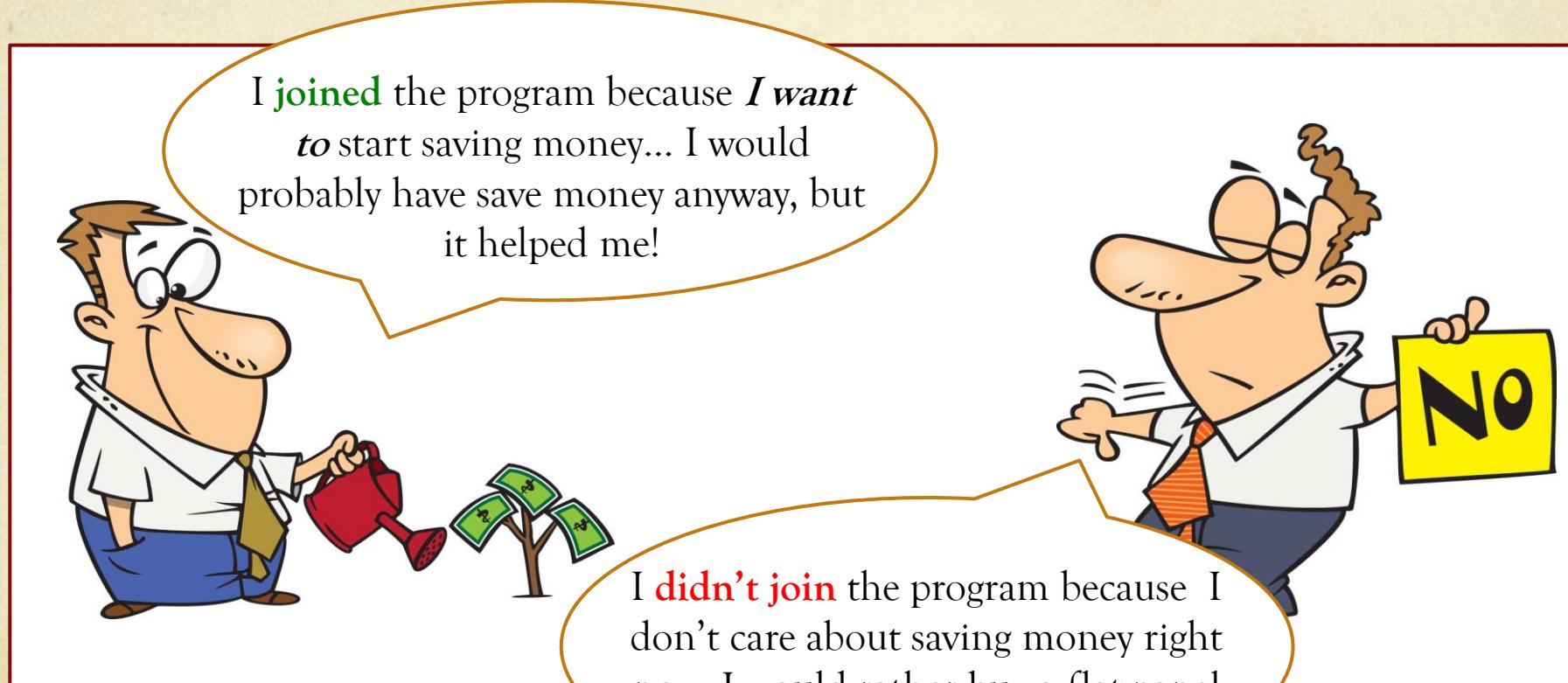
# How do Economists Study Behavior?

# Case Study on Financial Education

- We study the ability of associates to make better choices about how they manage finances. We advertise a new educational program - *Grow Your Wealth!*. 5,000 qualified associates are invited to join the program, 2,000 **are interested in learning to save money** and decide to participate.
- All 2,000 are invited to join and do very well in the program.
- At the end of the study, we compare the group who has participated (2,000) with the group who hasn't (3,000)
- Our 2,000 have clearly done better!
- **Is the program a success?**

# What Really Happened?

- Selection Bias: Caused our results to be over-stated
- Do not know if the **program** or the **people** cause the effect



# How to Get Cause & Effect

- **This is a Randomized Field Experiment**
- 2,000 chose to participate in the program
- These 2,000 associates are located in 5 different cities
- After associates have expressed their interest, select 2 (A and B) of the 5 cities and offer *Grow Your Wealth!* as a pilot
- Compare all those who wanted to participate in cities A and B with C, D and E
- Now we have removed selection bias – so we know the program caused the effect

# Control is Key

- In a **Field Experiment**, we control who gets offered the intervention
- The “Control group” is the group for comparison
  - They wanted to participate, but were not able to
- The “Treatment group” is the group of interest
  - They wanted to participate, and were able to
- What about non-participants?
  - We may want to learn how the program will affect those who *don't* want to participate
  - But we cannot force people...must use incentives

# Behavioral Interventions

- How to get more participants in the study?

- Now vs. Later – bounded willpower

- Bring “now” incentives to motivate behavior

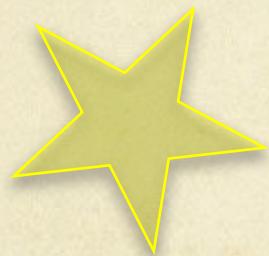
- Include a commitment

- Social feedback

The consequences of not saving money are far in the future.



I **didn't join** the program because I **don't care about saving money** right now. I would rather have a big-screen TV. **I will save later.**



# How can Insights from Behavioral Economics be Applied?

# Overcoming Boundedness



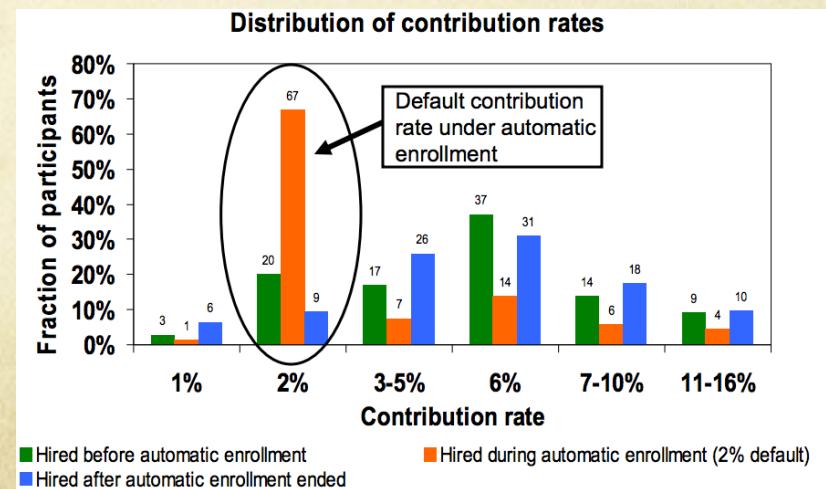
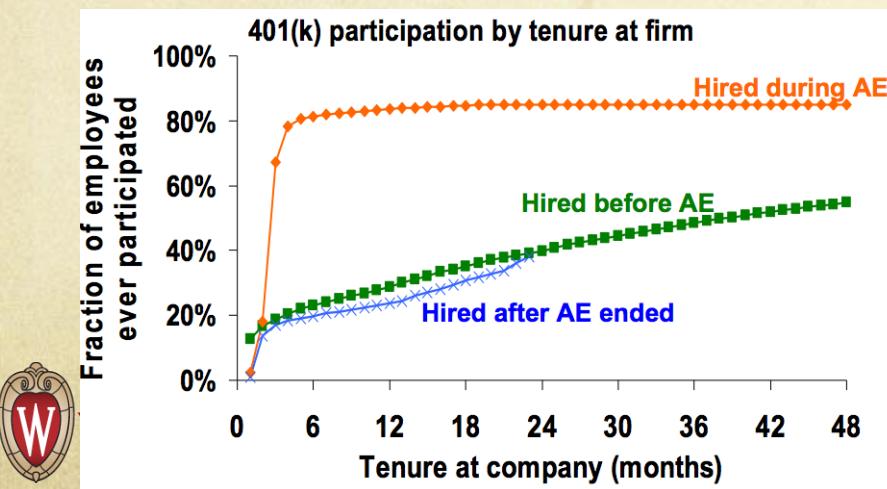
- People do want to make choices that are optimal for them
- But they must overcome many behavioral biases
  - Bounded Rationality
  - Bounded Willpower
  - Bounded Selfishness
- **How can we use what we know to help?**
  - **Lesson 1: Defaults**
  - **Lesson 2: Cost of Information**
  - **Lesson 3: 'Now' Incentives**
  - **Lesson 4: Demand a Commitment**
  - **Lesson 5: Social Strategies**

# Lesson 1: Default is a ‘Nudge’

- In any decision, **inaction triggers a default result**
  - Not signing up for a health insurance plan – no health insurance
  - Not signing up for a 401(k) – no 401(k)
  - Not signing up to be an organ donor – not an organ donor
- If individuals put off difficult decisions to the future, the default is the most likely outcome
- Now suppose we change the default
  - Not signing up for a 401(k) – automatic enrollment in 401(k)
  - If changing the default changes behavior, we **call this a nudge**

# Lesson 1: Evidence

- Choi, Laibson, Madrian and Metric (2004) conduct an experiment with an employer
- Employer puts into place auto-enrollment
  - “Opt in”: the worker must elect to participate in the 401(k) and choose an amount to contribute
  - “Opt out”: with a default rate: 1%, 2%, etc. Worker is defaulted into accepting 401(k) participation and rate, or needs to act to opt out. **Significantly increases enrollments, at default rate!**



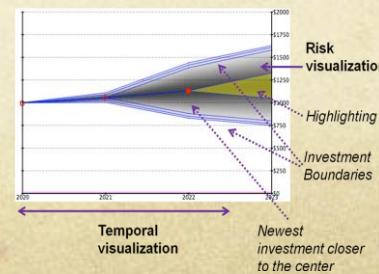
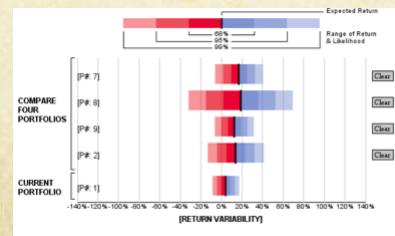
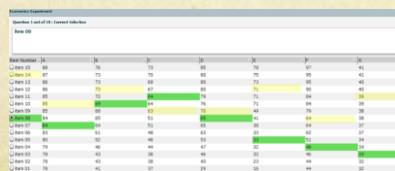
# Lesson 2: Information Has a Cost

- Bounded Rationality makes processing information difficult
- So, we choose to rely on rules of thumb
- Instead, **simplify information**
  - Graphical representation can be more effective than textual
  - More information creates an overload and is not always better
    - Having too many health plan options causes worse outcomes



# Lesson 2: Evidence

- Too many choices cause indecision
- Providing **visual analytics**, a visual and interactive way to represent information, improves economic choice
  - Improves confidence
  - Reduces decision-time
  - Results in higher quality choices
- Examples
  - SimulSort, FinVis (Samak & Co-authors)



# Lesson 3: “Now” Incentives

- **Bounded Willpower** makes it difficult to see the benefits of an action that is ‘good for you’
  - Suppose I know that exercising and eating well will improve my health in the long run
- “Now” Incentives add an immediate benefit to an action
  - This changes my decision problem!
  - Now I consider the cost and benefit of an action with the benefit in the present



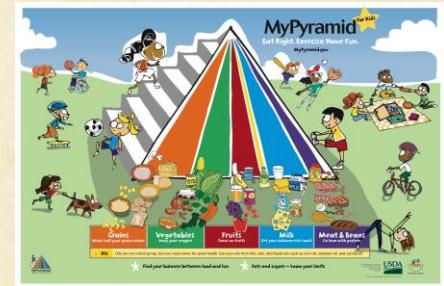
# Lesson 3: Evidence

- Eating healthy in the lunchroom (List and Samak, 2013)
  - Over 40% of school lunch content is thrown away
  - Kids are at highest BMI ever
  - Nutrition education has limited effectiveness/is costly
- Effect of providing incentives on child food choice?

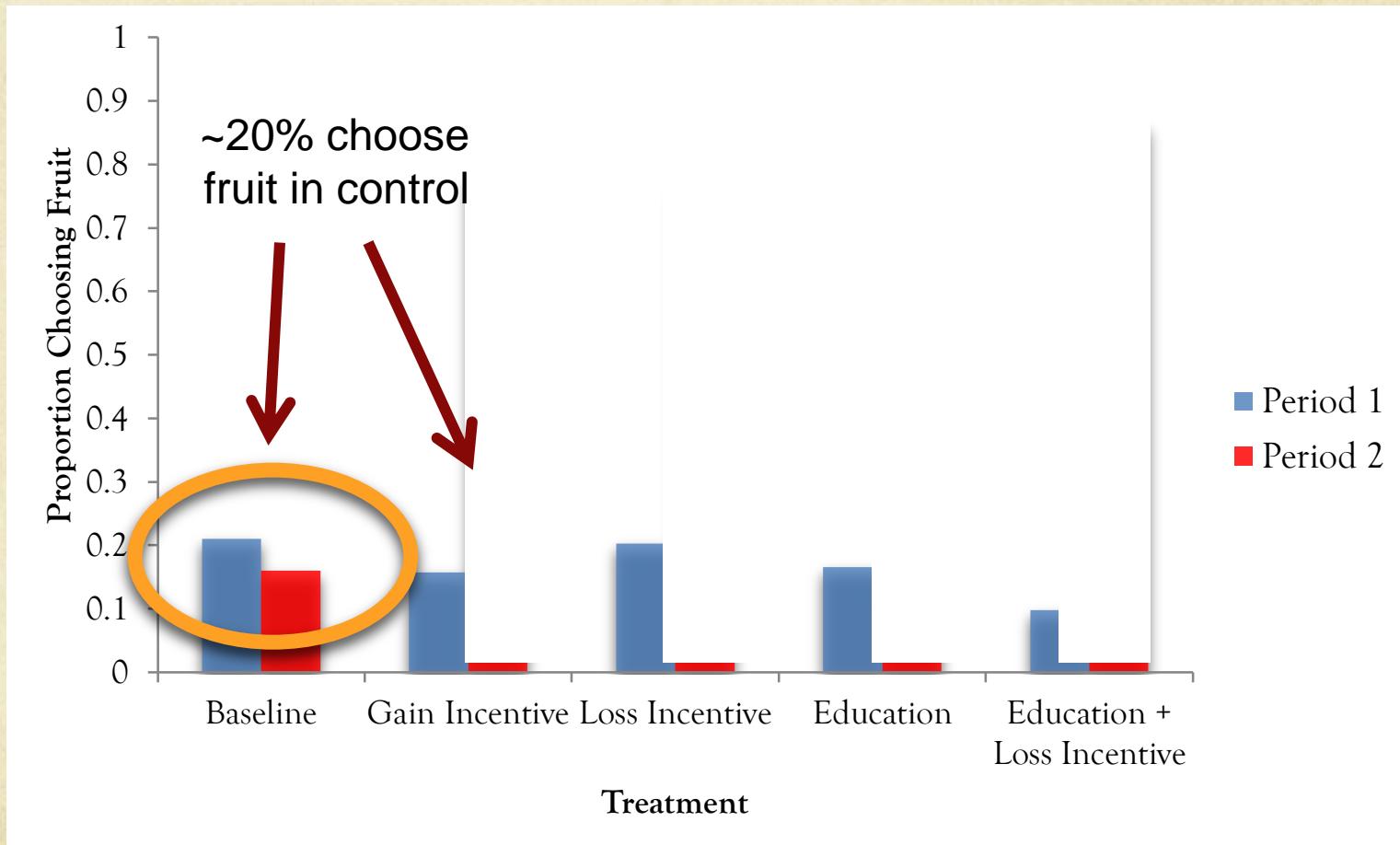
- Choice of cookie or fruit



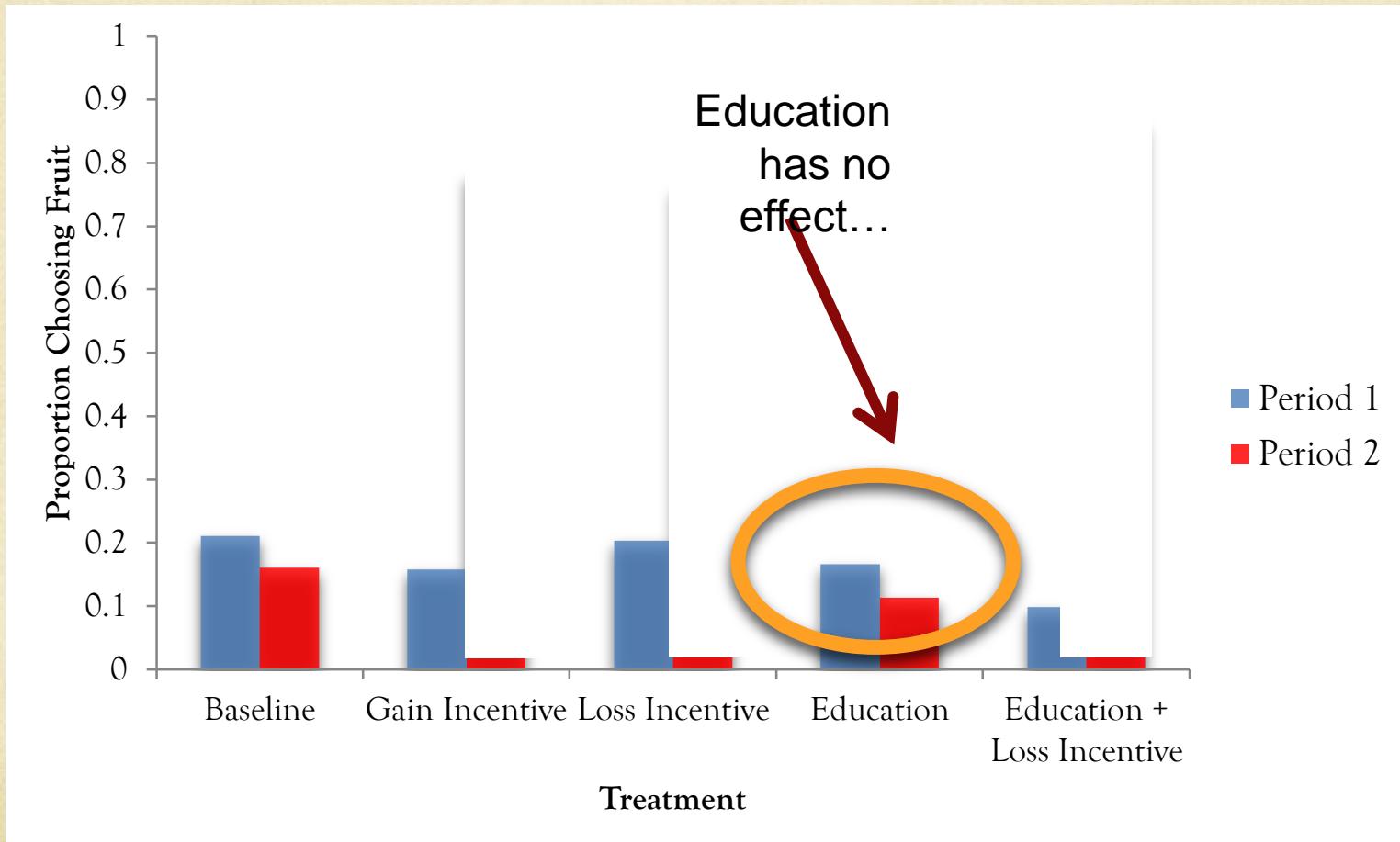
- Can only choose one
  - Control group: choice only
  - Treatment group 1: choice + small toy for fruit
  - Treatment group 2: education + choice



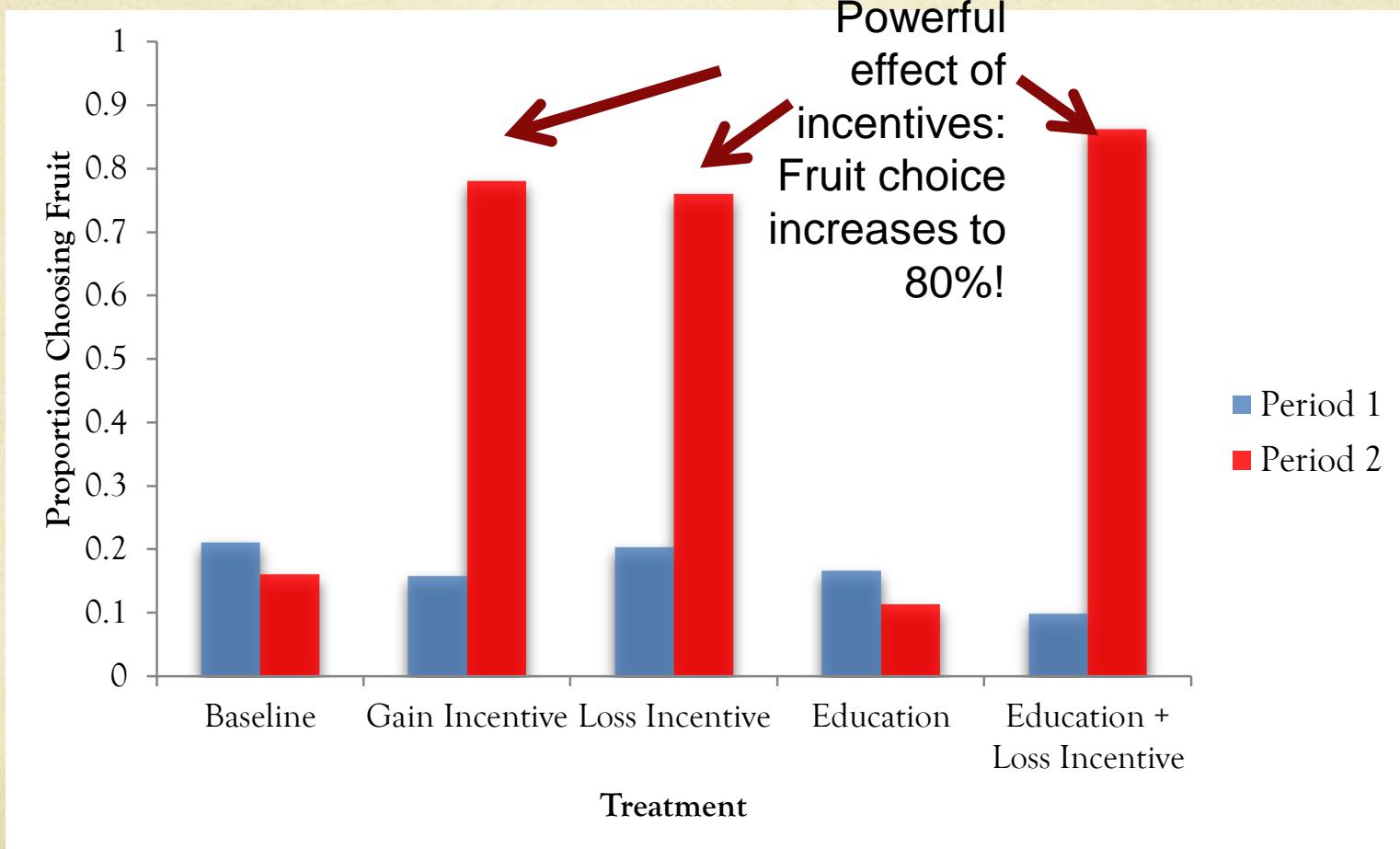
# Lesson 3: Evidence



# Lesson 3: Evidence



# Lesson 3: Evidence



# Lesson 4: Demand a Commitment

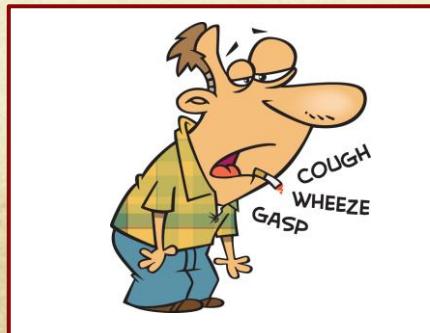
- Individuals want to do better, but **bounded willpower** prevents doing better in the present
- A commitment device is a way to assure that you follow through with a plan
  - Financial Services
    - CDs
    - Restrictions on withdrawals
  - Subscription services
  - Gym memberships
  - ...credit cards in the freezer

# Lesson 4: Evidence

- Gym membership (Dellavigna and Malmendier (2004, 2006))
- Analyze data from 3 gyms, 7,752 members over 3 years
  - Average cost of gym membership: **\$75/mo**
  - Average number of visits by members: **4/month**
  - Average cost per visit: **\$19**
  - Drop-in rate: **\$10**
- The membership is the commitment device
  - Members are foregoing a savings of \$600 annually!
  - **Members willing to pay \$600 for the commitment device**

# Lesson 5: Social Strategies

- Compliance with desirable behaviors can be improved through:
  - Being held accountable to another person
  - Learning one's standing in the social group
  - Learning 'social norms'
  - Receiving 'signal' of benefits based on what role model is doing
  - Tying incentives to group performance
- Evidence:
  - Giving to charity, financial coaching, weight loss programs, AA, new technology adoption



# Thank you!

*If you have any questions,  
e-mail me at:*

[asamak@wisc.edu](mailto:asamak@wisc.edu)

# Q&A



*Michael R. Roush, MA*  
**National Disability Institute**



# Resources

Visit NDIs website:

[www.realeconomicimpact.org](http://www.realeconomicimpact.org)

To sign-up for the NDI's Real Economic Impact Network  
Listserv

send an email to:

[reitour-list-SUBSCRIBE@lists.reitour.org](mailto:reitour-list-SUBSCRIBE@lists.reitour.org)



# **SPECIAL THANK YOU**

# **Bank of America**





**IF YOU HAVE ANY ADDITIONAL  
QUESTIONS AFTER THE WEBINAR  
PLEASE CONTACT:**

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## Next Webinar

*Integrated Service Delivery*

*June 12, 2013*

***3:00 PM EDT – 4:00 PM EDT***