Applying Behavioral Science to Human Services Programs

The Behavioral Interventions to Advance Self-Sufficiency (BIAS) Project

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What is Behavioral Economics?

• A mix of psychology and economics that challenges the “traditional” view of human behavior

Thaler and Sunstein (2008)

Self-controlled
Rational
Self-interested

Use mental shortcuts
Imperfect self-control
Vulnerable to framing, and hassle factors
Influenced by peers, identity
Why it matters

• Behavioral bottlenecks may interfere with people doing things that are in their self-interest and the interest of society

• 10 pages
• 100 questions + 72 pages of instructions

• 2 questions
• Will save families more than 100 million hours a year!
The BIAS Project

Sponsored by the Federal Office of Planning, Research and Evaluation in the Administration for Children and Families

- Applies behavioral principles to large-scale, human services programs
- Investigates problems using a method of Behavioral Diagnosis and Design
- Develops quick, sustainable, inexpensive changes focused on immediate outcomes
## Overview of BIAS Pilots

<table>
<thead>
<tr>
<th>Site</th>
<th>Problem Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>• Order modification for incarcerated parents</td>
</tr>
<tr>
<td>Ohio (Franklin County)</td>
<td>• Payments on current support</td>
</tr>
<tr>
<td>Ohio (Cuyahoga County)</td>
<td>• Payments on current support</td>
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<tr>
<td>Washington</td>
<td>• Order modification for incarcerated parents</td>
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<tr>
<td>Indiana</td>
<td>• Selection of quality-rated providers</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>• On-time redetermination of CCDF voucher</td>
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<tr>
<td>Los Angeles</td>
<td>• Reengagement</td>
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<tr>
<td>Paycheck Plus*</td>
<td>• Engagement in supplemental meeting</td>
</tr>
</tbody>
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**Child Support**

**Child Care**

**TANF**
Behavioral Diagnosis and Design

- **Define**: Identify problems of interest
- **Diagnose**: Gather data, create a process map and identify bottlenecks
- **Design**: Brainstorm behavioral interventions
- **Test**: Pilot behavioral interventions using random assignment

Source: ideas42 worked with MDRC in the early stages of the project to create the behavioral diagnosis and design framework used in the project.
Using Behavioral Strategies to Increase Reengagement into LA’s Welfare-to-Work Program
In 2009, California temporarily exempted from its welfare-to-work program TANF families with: 1) One young child 12 to 23 months old; or 2) Two or more children under age 6

In 2013, this exemption ended and counties had until December 2014 to “reengage” those formerly exempted

Reengagement process

- 60 days prior to meeting: sent participants a 3-page notice
- 30 days prior: sent 10-page packet with appointment date and time
- 10 days prior: Automated reminder call
- 3 days prior: Case manager attempts call
For early cohort of participants invited in for reengagement appointment:

- Only about half eventually showed up for appointment
- 60% entered noncompliance
- 15% were sanctioned

Questions:

- Can LA County increase the rate who show up?
- Can County reengage participants sooner?
- Can County reduce sanction rate?
## Step 2: Diagnose

<table>
<thead>
<tr>
<th>Bottleneck</th>
<th>Behavioral Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>May not understand complicated, detailed materials</td>
<td>• Cognitive Load</td>
</tr>
<tr>
<td></td>
<td>• Limited Attention</td>
</tr>
<tr>
<td>Is accustomed to receiving TANF with no mandate to participate</td>
<td>• Status Quo Bias</td>
</tr>
<tr>
<td></td>
<td>• Ostrich Effect</td>
</tr>
<tr>
<td>May have planned to attend, but forgot or changed mind</td>
<td>• Prospective Memory Failure</td>
</tr>
<tr>
<td></td>
<td>• Procrastination</td>
</tr>
<tr>
<td>May have wanted to attend, but had problems getting to meeting</td>
<td>• Hassle Factors</td>
</tr>
<tr>
<td></td>
<td>• Limited Information</td>
</tr>
<tr>
<td>Faced more pressing concerns</td>
<td>• Psychology of Scarcity</td>
</tr>
</tbody>
</table>
Step 3: Design

- Created two behavioral [simplified, salient] letters
  - Gain notice: highlighted benefits of attending meeting
  - Loss notice: highlighted losses of not attending

- Created personalized sticky notices (post-its) from case manager [established sense of reciprocity]
  - Gain sticky notes: highlighted benefits
  - Loss sticky notes: highlighted losses
The Los Angeles pilot was evaluated using a three-way random assignment design...

**Control group:**
814 received status quo

**Gain group:**
814 received status quo and gain letter/sticky note

**Loss group:**
814 received status quo and loss letter/sticky note

**2,442 participants**

**Primary outcomes of interest**
- Rate positively engaged in welfare-to-work program
- Rate of sanction

**Sample size:** Any behavioral notice = 1,628
Findings

- Positively engaged within 30 days:
  - Control: 25.6%
  - Gain/Loss: 29.2%
  - Gain: 28.4%
  - Loss: 29.9%

- Sanctioned within 60 days:
  - Control: 9.4%
  - Gain/Loss: 8.6%
  - Gain: 8.5%
  - Loss: 8.7%

\*3.6%\* \*4.4%**
The Power of Prompts: Using BE to Encourage Participation
The Paycheck Plus Demonstration

- Paycheck Plus — evaluating an EITC-like earnings supplement in New York City
  - Offers a more generous maximum benefit — $2,000 rather than $496 — to single workers making up to $18,000
  - Extends benefit eligibility from single workers making less than $15,000 up to those almost making $30,000

- Random Assignment evaluation
Step 1: Define Problem

Oct 2013-Feb 2014
Sign up for Paycheck Plus

2014
“On the books” work counts toward amount of EITC enhancement

Mar-Jun 2014
Informational meeting + $50

Focus of BIAS test
Can the program increase attendance at an informational meeting?

Feb 2015
1st year eligible for EITC enhancement

Program group members may not understand the incentive or may forget.
Step 2: Diagnose

Steps to attending an informational meeting

Reads and understands materials?

Decides to attend a meeting?

Attends a meeting and receives $50 incentive?

Inattention

Psychological distance

Hassle factors
Step 3: Design (1)

Eligible to receive EITC supplement in 2015-2017
N=2,978

<table>
<thead>
<tr>
<th>RESEARCH DESIGN</th>
<th>Text message</th>
<th>No text</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Behavioral</strong></td>
<td>Group 1</td>
<td>Group 2</td>
</tr>
<tr>
<td></td>
<td>Two <strong>Behavioral</strong> Postcards and Weekly Text Messages</td>
<td>Two <strong>Behavioral</strong> Postcards Only</td>
</tr>
<tr>
<td></td>
<td>N=737</td>
<td>N=740</td>
</tr>
<tr>
<td><strong>Standard</strong></td>
<td>Group 3</td>
<td>Group 4 (control)</td>
</tr>
<tr>
<td></td>
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<td>Two <strong>Standard</strong> Postcards Only</td>
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<tr>
<td></td>
<td>N=745</td>
<td>N=756</td>
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</table>
COME TO FOOD BANK OFFICES listed here between March 11 and April 9 to receive

- More information about the Paycheck Plus bonus
- And a $50 gift card

COME IN TODAY TO LEARN MORE!

For other locations or questions call 646-981-6111

FOOD BANK FOR NEW YORK CITY LOCATIONS NEAR YOU

Capital One Bank
356 Fulton St., 2nd Fl., Brooklyn, NY 11201
Tue-Wed, 10am-7pm | Thu, 10am-8pm | Sat, 9am-5pm

Bed-Stuy Restoration Plaza
1392 Fulton St., Brooklyn, NY 11216
Tue-Wed, 10am-5pm | Thu, 10am-6pm | Sat, 9am-2pm

St. George Santander Bank
15 Hyatt St., 3rd Fl., Staten Island, NY 10301
Tue-Thu, 12pm-7pm | Sat, 9am-5pm

Northern Manhattan Improvement Corp.
76 Wadsworth Ave., New York, NY 10033
Tue-Thu, 12pm-7pm | Sat, 9am-5pm

Community Kitchen and Pantry of West Harlem
252 W. 116th St., New York, NY 10026
Tue-Thu, 9am-3pm | Sat, 9am-3pm
SIGN UP FOR PAYCHECK PLUS – DONE!

Follow these 3 easy steps to get your $50 gift card and much more...

1. Choose a location and time to visit by March 29
   Check off one location:
   - [ ] Community Kitchen & Pantry of West Harlem
     252 W. 116th St., New York, 10026
   - [ ] Northern Manhattan Improvement Corp.
     76 Wadsworth Ave., New York, 10033

<table>
<thead>
<tr>
<th>MON</th>
<th>TUES</th>
<th>WED</th>
<th>THU</th>
<th>FRI</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
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<td>9-3</td>
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<td>12-7</td>
<td>12-7</td>
<td>closed</td>
<td>9-5</td>
</tr>
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</table>

   Write down when you will go: Date ______ Time ______ AM/PM

2. Stop by and have a short conversation with Food Bank staff to learn how you can earn a $2000 bonus next year.

3. Get your $50 gift card!

For other locations or questions call 646-981-6111

Endowed progress effect
Implementation prompt
Limit choices

Behavioral Postcard

Paycheck Plus Members: With this postcard $50 is yours

All you need to do is come to a Food Bank office by March 29, 2014.

Don’t miss out!

Si desea esta información en español, por favor llame al 212-340-4480
Step 4: Test (1)

- Factorial design used to explore the impact on meeting attendance for messaging type, delivery mode, and the two in combination
  - Does behavioral messaging increase the percentage of participants who completed an informational meeting, relative to the standard messaging?
  - Does “postcards with text messages” perform better than postcards alone?

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Step 4: Test (1)

- Percent of sample attending an informational meeting:
  - Standard Messaging: 18.5%
  - Behavioral Messaging: 25.6%

- 7.1% increase (*** in meeting attendance
Step 4: Test (1)

Percent of sample attending an informational meeting

- **Standard Postcards Only**: 16.5%
- **Standard Postcards and Texts**: 20.5% (4.0%**)
- **Behavioral Postcards Only**: 22.6% (6.1%***
- **Behavioral Postcards and Texts**: 28.5%

12% increase (***) in meeting attendance
• Awarded September 2015
• Led by MDRC in collaboration with MEF Associates and Dr. Larry Katz of Harvard and J-PAL North America
• Build on lessons of BIAS and go beyond BIAS by:
  – Working with additional ACF programs
  – Moving beyond changing communications, greater emphasis on changing the choice architecture of program and policy design
  – Focusing on translating findings into practical lessons for human services practitioners

BIAS Next Generation has launched
For More Information

❖ Contact MDRC’s Center for Applied Behavioral Science with questions or comments
  • be.info@mdrc.org

❖ Read our published reports:
  • Behavioral Economics and Social Policy: Designing Innovative Solutions for Programs Supported by the Administration for Children and Families
  • Taking the First Step: Using Behavioral Economics to Help Incarcerated Parents Apply for Child Support Order Modifications
  • Reminders to Pay: Using Behavioral Economics to Increase Child Support Payments
  • Power of Prompts: Using Behavioral Insights to Encourage People to Participate

❖ Sign up for the Behavioral Buzz at MDRC’s website!
Supplementary Slides
Iterate!
Step 2: Diagnosis (2)

- Re-examine bottlenecks by looking at the process we created with the first intervention, as well as pre-existing factors.

- Main re-design decision: remove hassle factors associated with attending meeting in person.

- Created identical materials and scripts for email, text, letter, and robocall outreach that use behavioral concepts- only difference is whether participant invited to call in for the meeting, or attend in person.
Participants who did not complete a meeting during Round 1 were re-randomized into Round 2 study groups N=2,323

(1) In-Person
Offered meeting at two FBNYC locations N=1,164

(2) By Phone
Offered phone meeting N=1,159
Step 4: Test (2)

- Sent outreach two times per week
  - Example:

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Tuesday: Email</th>
<th>Friday: Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td>Tuesday: Text</td>
<td>Saturday: Robocall</td>
</tr>
</tbody>
</table>

- Randomly assigned remaining program group members- 50% to each condition
Step 4: Test (2)

- Responded (%)
  - Phone Group: 2.9% difference
  - In-person Group

Experimentation period:
- May 8 - Letter #1 sent
- May 13 - Text #1 sent
- May 16 - Robocall #1 sent
- May 22 - Email #2 sent
- May 24 - Text #2 sent
- May 27 - Text #3 sent
- May 31 - Robocall #2 sent
- June 2 - Email #3 sent
- June 4 - Text #4 sent
- June 5 - Text #5 sent, Deadline