



# **Using Behavioral Science Interventions to Increase Program Participation and Outcomes**

**Stephanie Holcomb**

Research Project Coordinator

John J. Heldrich Center for Workforce Development

Edward J. Bloustein School of Planning and Public Policy

Rutgers University

# Agenda

- Behavioral Science Overview
- Overview and Types of Nudges
- Examples of Nudges in Employment Services
- Guided Discussion

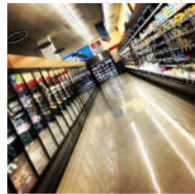
# What is Behavioral Science?

## Definition of Behavioral Science

A branch of science (such as psychology, sociology, or anthropology) that deals primarily with human action and often seeks to generalize about human behavior in society (Merriam-Webster)

Photo Source: [behavioraleconomics.com](http://behavioraleconomics.com)

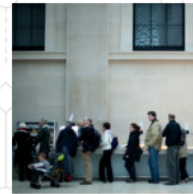
# Principles of Behavioral Science



Choice Overload



Cognitive Depletion & Decision Fatigue



Hassle Factors



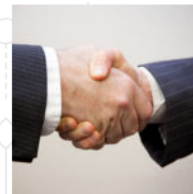
Identity



Limited Attention



Loss Aversion



Primacy Bias



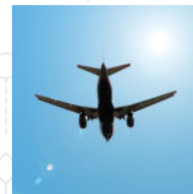
Procrastination



Social Norms



Status Quo Bias



The Availability Heuristic



The Planning Fallacy

Photo Source: Ideas42

## Limited Attention

- **Finite** amount of attention – “cognitive load” or “**bandwidth**”
- When attention is stretched:
  - Forget
  - Miss details
  - Have difficulty weighing options
  - More oriented to present



## Example

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Photo Source: interpretationbydesign.com

## Service Strategies

- **Limit** information
- **Chunk** information
- **Limit** jargon
- **Multiple** reminders
- **Timely** reminders
- **Guided decision-making** to key points
- **Simplify process** to reduce cognitive load
- **Don't assume** that because someone does not choose one option they are not interested



# Choice Overload



- When we have **too many choices**:
  - Don't always choose "best" option
  - Choose not to act at all



# Example



STATE OF NEW JERSEY  
DEPARTMENT OF THE TREASURY

**NJDPB**  
Pensions & Benefits  
Explore Your Benefits

Home / Summary of Benefits and Coverage / Active State

## Summary of Benefits and Coverage - Plan Year 2018

For Members of the State Health Benefits Program (SHBP) or School Employees' Health Benefits Program (SEHBP)

If you are an **Active Member** with a **State Employer**, select a plan from the links below.

Aetna Plans	Horizon Plans	State Active Prescription Plans
<b>PPO Plans</b> <ul style="list-style-type: none"> <li>Aetna Freedom 15</li> <li>Aetna Freedom 1525</li> <li>Aetna Freedom 2030</li> <li>Aetna Freedom 2035</li> </ul>	<b>PPO Plans</b> <ul style="list-style-type: none"> <li>NJ DIRECT 15</li> <li>NJ DIRECT 1525</li> <li>NJ DIRECT 2030</li> <li>NJ DIRECT 2035</li> </ul>	<ul style="list-style-type: none"> <li>State Active Prescription Plan 15</li> <li>State Active Prescription Plan 1525</li> <li>State Active Prescription Plan 2030</li> <li>State Active Prescription Plan 2035</li> </ul>
<b>HMO Plan</b> <ul style="list-style-type: none"> <li>Aetna HMO</li> </ul>	<b>HMO Plan</b> <ul style="list-style-type: none"> <li>Horizon HMO</li> </ul>	
<b>Tiered Plan</b> <ul style="list-style-type: none"> <li>Aetna Liberty</li> </ul>	<b>Tiered Plan</b> <ul style="list-style-type: none"> <li>OMNIA Health</li> </ul>	
<b>High Deductible Health Plans</b> <ul style="list-style-type: none"> <li>Aetna Value HD4000</li> <li>Aetna Value HD 1500</li> </ul>	<b>High Deductible Health Plans</b> <ul style="list-style-type: none"> <li>NJ DIRECT HD4000</li> <li>NJ DIRECT1500</li> </ul>	

Photo Source: New Jersey Department of the Treasury.

# Example

## Available Plans:

### Aetna Freedom 15, NJ Direct 15, Aetna HMO, Horizon HMO\*

- \$15 Primary Care copay
- \$15 Specialist Care copay
- \$100 Emergency Care copay

### Aetna Freedom 1525, NJ Direct 1525

- \$15 Primary Care copay
- \$25 Specialist Care copay
- \$100 Emergency Care copay

### Aetna Freedom 2030, NJ Direct 2030

- \$20 Primary Care copay
- \$30 Specialist Care copay (\$20 copay for children up to the 26th birthday)
- \$125 Emergency Care copay

### Aetna Freedom 2035, NJ Direct 2035

- \$20 Primary Care copay
- \$35 Specialist Care copay
- \$300 Emergency Care copay

Photo Source: Rutgers University

# Example

Plan Name and Option	Your Annual Payroll Deduction	Company Deposit into Your Account	Annual Deductible	Plan Payment Percent in Network	Provider Network
Healthy Living Plan	\$1,500	\$0	\$400	85%	Doctors and hospitals in network meet "elite" quality standards. Lower coverage for others
Thrifty Consumer Plan	\$1,200	\$500	\$1,500	85%	Doctors and hospitals in network meet "elite" quality standards.
Legacy PPO	\$1,800	\$0	\$500	80%	No "elite" status designations
No Coverage	\$0	\$500	N/A	N/A	N/A
<p>If you do not make an election, you will be automatically assigned to the <b>Thrifty Consumer Plan</b>.</p> <p>The quality standards behind "Elite Provider" status and the "Healthy Living" standards are explained in your <b>Benefits Guidebook</b>.</p> <p>Review the official plan documents for more details.</p>					
Source: Sibson Consulting					

## Service Strategies

- **Limit** unnecessary information (from the customers perspective)
- Limit to **three best options**
- Present choices in a way that **highlights context** for decision-making
- **Increase meaningful differences** between the choices



# Procrastination



- Most likely to procrastinate when:
  - Actions are **complex**
  - Too many **choices**
  - Too much **information**
  - **Can't finish something in one sitting**
  - Task induces **anxiety**

# Example

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[Career Areas](#)
[Life at Walgreens](#)
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## Start Your Application



### CUSTOMER SERVICE ASSOCIATE

Estimated completion time: **17-20 minutes.**

Thank you for choosing Walgreens! We are excited you have an interest in joining our team! To begin the online application, click "Let's get started" below. Please note once an application has been submitted, responses to job-related questions cannot be edited. You may edit your candidate profile at any time.

[Let's get started](#)

[Save and finish later](#)

## Service Strategies

- Use **implementation prompts** to urge participants to make a plan to help them complete their goals
- Design tasks that allow participants to complete them in **one sitting**
- Send **reminders**

## Key Points

- We **ALL have these errors and biases!**  
(Applies to both customers and staff)
- Errors & biases **interrelated**
- We can use this information to:
  - **Construct environments that create success** by going with **the flow of how people think/act.**
  - Encourage **the right actions** at the **right times**
  - **Combat your own biases** about customers and colleagues

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16



# How to use these biases for program success

Behavioral Bias	Service Strategy
<b>Cognitive Load:</b> Limited bandwidth	Simplify messaging, limit unnecessary information
<b>Psychology of Scarcity:</b> Face more pressing issues and program requirements is low priority	Personalize communication, simplify messaging, highlight benefits, ensure requirement is necessary
<b>Primacy Bias:</b> Favoring information presented first	Randomizing the order of choices so first isn't always selected, listing items that are most critical first, discuss most important matters first
<b>Status Quo Bias:</b> Wanting to do what others are doing, what seems "normal"	Emphasize communication that shows successful outcomes of others who have participated
<b>Procrastination:</b> Forgetting/putting off tasks	Ensure steps can be completed in one sitting, reminders

# What is a Nudge?

## Definition of Nudge

Liberty-preserving approaches that steer people in particular directions, but that also allow them to go their own way  
(Sunstein 2014)

Altering people's behavior in a predictable way without significantly changing their economic incentives  
(Thaler & Sunstein 2008)

Photo Source: [blogspot.com](http://blogspot.com)

## Types of Nudges

- **Default Rules**
- **Simplification**
- **Uses of Social Norms**
- **Increases in Ease and Convenience**
- Disclosure
- Warnings
- Pre-commitment Strategies
- **Reminders**
- Eliciting Implementation Intentions
- Informing People of the Nature and Consequences of Past Actions

Source: Sunstein 2014

# Examples of Nudges

### Smoking cessation support delivered via text messaging (txt2stop): a single-blind, randomised controlled trial

Caroline Free, Rosemary Knight,  
Michael G Kernward, Ian Roberts

**Summary** Smoking cessation programmes delivered via mobile phone reported quitting in the short term. We assessed the effect of an automated mobile phone text messaging on continuous abstinence, which was

[illegible]

**Finding:** We assessed 11914 participants for eligibility; 5800 participants were allocated to the tobacco intervention and 2835 were allocated to the control group. At baseline, 67% (n=8000) of participants had no previous smoking history, 17% (n=2000) were current smokers, and 16% (n=1914) were former smokers. The primary outcome was self-reported continuous smoking cessation at 6 months. The intention-to-treat analysis showed that 11% (n=1265) of participants in the intervention group achieved continuous smoking cessation compared with 5% (n=565) in the control group ( $p < .0001$ ). The absolute risk difference was 6% (95% CI 4.1-7.4;  $p < .0001$ ). No significant heterogeneity was observed across studies ( $I^2 = 0.0\%$ ,  $p = .99$ ).

**Interpretation** The tx2stop smoking cessation programme significantly reduced the risk of relapse in smoking cessation ( $OR = 0.49$ ; 95% CI 1.74–2.63;  $p < 0.0001$ ). No significant heterogeneity ( $I^2 = 0.0$ ;  $p = 0.99$ ; 95% CI 1.74–2.63;  $p < 0.0001$ ). The tx2stop programme should be considered for inclusion in smoking cessation services.

**Funding** UK Medical Research Council,

### Introduction

Mobile phone technology can support personalised smoking cessation methods used in face-to-face smoking cessation support. Mobile phones can deliver messages and behaviour-change methods used in delivery of smoking cessation support. In this way, support can be delivered wherever the person is located, without them having to attend services, and can be interactive, allowing them to obtain extra help when needed.<sup>65</sup>

Quitters to obtain the widespread ownership of mobile phones is one of the widest smoking cessation support can reach people at low cost.

Because of the widespread ownership of mobile phones, fully automated smoking cessation support can be delivered to large numbers of people at low cost. In 2009, more than two-thirds of the world's population owned a mobile phone and 4.2 trillion text messages were sent.<sup>4</sup> In the UK, there are about 120 mobile phone subscriptions per 100 population, with ownership greater than 80% in all socioeconomic groups.<sup>5</sup>

www.thelancet.com Vol 378 July 2, 2011

11

## The Impact of Enrollments on Savings Plan Investment

John Beshears, James J. C.  
D. L. C. Madrian

Companies have used a variety of approved employer-sponsored savings plans. The vision of an employer matching contribution for a majority of large firms (Profit Sharing) is a match, however, savings plan participation is low (Choi, Laibson, and Madrian 2000). The contributions' effect on plan participation has small effects (Andrews 1992; Papke, Pett, Fleming, and Rodrigues 1998; K. Kumar 2007).

[illegible]

Social Security Administration (number #10-M-98363-1-01). Beshears acknowledges a National Science Foundation Graduate Research Fellowship (NSF 0527516).

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THE POWER OF SUGGESTION: INERTIA IN 401(k)  
PARTICIPATION AND SAVINGS BEHAVIOR\*

BRIGITTE C. MADRIAN AND DENNIS F. SHEA

This paper analyzes the impact of automatic enrollment on 401(k) savings behavior. We have two key findings. First, 401(k) participation is significantly higher under automatic enrollment. Second, a substantial fraction of 401(k) participants hired under automatic enrollment retain both the default contribution rate and fund allocation even though few employees hired before automatic enrollment picked this particular outcome. This "default" behavior appears to result from participant inertia and from employee perceptions of the default as investment advice. These findings have implications for the design of 401(k) savings plans as well as for any type of Social Security reform that includes personal accounts over which individuals have control. They also shed light more generally on the importance of both economic and noneconomic (behavioral) factors in the determination of individual savings behavior.

## I. INTRODUCTION

In this paper we analyze the 401(k) savings behavior of employees in a large U. S. corporation before and after an interesting change in the company 401(k) plan. Before the plan change, employees who enrolled in the 401(k) plan were required to affirmatively elect participation. After the plan change, employees were automatically enrolled in the 401(k) plan immedi-

\* Research support from the National Institute on Aging is gratefully acknowledged. A special thanks to Hewitt Associates for their help in providing the data. Thanks also to Richard Thaler, Anna Lusardi, Amil Petrin, Judith Chevalier, Kara Anderson, and David Docherty for helpful discussions. Comments from seminar participants at the University of North Carolina, Brigham Young University, Western Michigan University, the University of Chicago, the University of Wisconsin, and the University of Massachusetts Institute of Technology, the U. S. Bureau of Labor Statistics, and the National Bureau of Economic Research are also appreciated.

© 2001 by the President and Fellows of Harvard College and the Massachusetts Institute of Technology.  
*The Quarterly Journal of Economics*, November 2001

**BUSINESS | SCHOOL**

## Curbing Adult Student Attrition: Evidence from a Field Experiment

Raj Chande  
Michael Sanders  
Oana Borcan  
Elizabeth Linos  
Sean Robinson

Michael Luca  
Xian-Zhi Soon  
Netta Barak-Corren  
Elsbeth Kirkman

## Working Paper

6-065

February 1, 2015

Michael Sanders, Xian-Zhi Soon, Oana Borcan, M. J. Heule, and  
an Robinson

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ICATION ASSISTANCE AND  
GE DECISIONS: RESULTS FROM  
K FAFSA EXPERIMENT\*

BETTINGER  
TERRY LONG  
OREOPOULOS  
NBONMATSU

reness and take-up rates for government aid have spurred calls to simplify the process. We present results from a randomized assistance and receiving tax preparer Student Aid (FAFSA) for themselves were also provided with aid estimates for amounts for nearby colleges. The comparison substantially increased FAFSA submission rates, persistence, and aid for college attendance, persistence, and aid whose parents received the treatment have completed two years of college, three years following the experiment. We suggest many other opportunities for assistance with the FAFSA did not participate in programs that require codes: I2, H4, J24.

## FUNCTION

m for students in the United  
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 Paul Peterson, Bernie Wilson,  
 professionals at H&R Block for  
 experiment.

Press, on behalf of President and  
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# Examples of Nudges for Job Seekers

## Is the Threat of Reemployment Services More Effective Than the Services Themselves? Evidence from Random Assignment in the UI System

By DAN A. BLACK, JEFFREY A. SMITH, MARK C. BERGER, AND BRETT J. NOEL\*

*We examine the effect of the Worker Profiling and Reemployment Services system. This program "profiles" Unemployment Insurance (UI) claimants to determine their probability of benefit exhaustion and then provides mandatory employment and training services to claimants with high predicted probabilities. Using a unique experimental design, we estimate that the program reduces mean weeks of UI benefit receipt by about 2.2 weeks, reduces mean UI benefits received by about \$143, and increases subsequent earnings by over \$1,050. Most of the effect results from a sharp increase in early UI exits in the treatment group relative to the control group. (JEL J650)*

The UI system is widely believed to provide incentives for workers to lengthen their spells of

\* Black: Center for Policy Research, 426 Eggers Hall, Syracuse University, Syracuse, NY 13244 (e-mail: dblack@maxwell.syr.edu); Smith: Department of Economics, 3105 Tydings Hall, University of Maryland, College Park, MD 20742 (e-mail: smith@econ.umd.edu); Berger (Mark Berger passed away on April 30, 2003): Department of Economics, Gannon College of Business and Economics, University of Kentucky, Lexington, KY 40506; Noel: American Express—TBS, 10030 North 25th Avenue, Building 10400, Phoenix, AZ 85021 (e-mail: Brett.J.Noel@aexp.com). We thank the U.S. Department of Labor for financial support through a contract between the Kentucky Department of Employment Services and the Center for Business and Economic Research at the University of Kentucky. Smith also thanks the Social Science and Humanities Research Council of Canada and the CIBC Chair in Human Capital and Productivity at the University of Western Ontario for financial support. We thank Bill Burris, Donna Long, and Ted Pitcher of the Kentucky Department of Employment Services for their assistance, and Steve Allen, Susan Black, Amitabh Chandra, and Roy Szigafus for research assistance. Seminar participants at Australian National University, Boston University, the U.S. Bureau of Labor Statistics, University of Colorado, Cornell University, the Econometric Society meetings, University of Essex, University of Houston, Indiana University, the Institute for Fiscal Studies, the Institute for Research on Poverty Summer Conference, Louisiana State University, University of Maryland, MIT, University of New South Wales, Ohio State University, the Society of Labor Economists meetings, the Stockholm School of Economics, SUNY-Buffalo, Syracuse University, the Tinbergen Institute, University of Toronto, UBC, Univer-

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© See Stephen Wandner (1997), U.S. Department of Labor (1999), or Randall Eberts et al. (2002) for more detailed descriptions of the program and of how it varies across states.

1313

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journal homepage: www.elsevier.com/locate/jpube

## Learning about job search: A field experiment with job seekers in Germany\*

Steffen Altmann<sup>a, b</sup>, Armin Falk<sup>b, c, d, e, f, g, h</sup>, Simon Jäger<sup>b, c, f, i, j</sup>, Florian Zimmermann<sup>b, c, d, f, e</sup>

<sup>a</sup> University of Copenhagen, Denmark  
<sup>b</sup> IZA, Germany  
<sup>c</sup> Institute on Behavior and Inequality (ibig), Germany  
<sup>d</sup> University of Bonn, Germany  
<sup>e</sup> IPR, United States  
<sup>f</sup> CESifo, Germany  
<sup>g</sup> ILM, Germany  
<sup>h</sup> MPI, Germany  
<sup>i</sup> Massachusetts Institute of Technology, United States  
<sup>j</sup> National Bureau of Economic Research, United States

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### ABSTRACT

We conduct a large-scale field experiment in the German labor market to investigate how information provision affects job seekers' employment prospects and labor market outcomes. Individuals assigned to the treatment group of our experiment received a brochure that informed them about job search strategies and the consequences of unemployment, and motivated them to actively look for new employment. We study the causal impact of the brochure by comparing labor market outcomes of treated and untreated job seekers in administrative data containing comprehensive information on individuals' employment status and earnings. The effects of our treatment tend to be positive, but concentrated among job seekers who are at risk of being unemployed for an extended period of time. Specifically, treatment effects in our overall sample are moderately positive on average, but mostly insignificant. At the same time, we do observe pronounced and statistically significant effects for individuals who exhibit an increased risk of long-term unemployment. For this group, the brochure increases employment and earnings in the year after the intervention by roughly 4%. Given the low cost of the intervention, our findings indicate that targeted information provision can be a highly effective policy tool in the labor market.

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### 1. Introduction

Job search is a complex and daunting endeavor. Besides the substantial economic losses that unemployment typically entails, job seekers face a variety of non-trivial informational problems when looking for new employment. They need to think about how much effort to exert, which search channels to use, and what kinds of jobs to target, e.g., in terms of industry, occupations or geographical location. The job search process is further complicated by the fact that there is relatively little information and feedback about important parameters of the search process, such as individual returns to search effort, path dependence, or the degree to which job arrival rates depend on the breadth of one's search. In addition to such informational challenges, the search process also puts a strain on individuals' self-confidence and willpower. Besides the general unhappiness and frustration caused by the loss of a job, a job-seeker needs to overcome discouragement from rejected applications and further personal

\* We thank the co-editor, Monica Singh, several anonymous referees, as well as Alberto Alesina, Björn Bartsch, Stefano DellaGiua, Larry Katz, Eva Kramarz, Alexandra Roulet, Heide Scholder, Frederik Schuettler, and Roberto Weber for their helpful comments and suggestions. The paper also benefited from comments of the seminar and conference participants in Aarhus, Augsburg, Berlin, Bonn, Copenhagen, Edinburgh, Hamburg, London, Mainz, Münster, Nottingham, Olinia, Paris, Velle, Würzburg, and Zürich. We are grateful to Susanne Koch, Stefan Klein, Christopher Ochsner, Georgios Tsionas, and the team of IAB-ITM for support with the data and the setup of the experiment. We also thank Sara Kauer for providing us with information on labor market data. Marie Erdmann, Nicolas Kauling, Patricia Olynec, and Thomas Waischowski provided excellent research assistance.

\* Corresponding author.  
E-mail addresses: steffen.altmann@econ.ku.dk (S. Altmann), armin.falk@ibig-berlin.de (A. Falk), sjager@mit.edu (S. Jäger), florian.zimmermann@ibig-berlin.de (F. Zimmermann).

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## Encouragement Emails Increase Participation in Reemployment Services

DOL Behavioral Interventions Project Brief

by Matthew Darling, Christopher O'Leary, Irma Perez-Johnson, Jaclyn Lefkowitz, Ken Kline, Ben Darnierow, and Randall Eberts

### Study background

The Department of Labor (DOL) Behavioral Interventions project was launched to explore the potential of using behavioral insights to improve the performance and outcomes of DOL programs. It is sponsored by the DOL Chief Evaluation Office and draws on insights from behavioral economics, psychology, and related fields.

In this brief, we present initial findings on the effects of an intervention designed to encourage Unemployment Insurance (UI) claimants to participate in their state's Reemployment and Eligibility Assessment (REA) pilot program and persist in their job search. For the study, selected Michigan Workforce agencies and the W.E. Upjohn Institute partnered with the Department of Labor's Behavioral Interventions (DOL-BI) team to test the effectiveness of a series of seven email messages that supplemented an initial call-in letter to UI claimants from the Michigan Unemployment Insurance Agency (UIA). The messages incorporated insights from behavioral science and were designed to overcome barriers that may keep people from participating in the REA program and using reemployment services.

The study began in March 2015. The new emails were sent to 357 individuals who had valid email addresses and had been called in for mandatory REA services. Another group of 374 claimants received no messages other than the UIA's call-in letter. The effects of the new messages were measured using program and administrative data collected over seven months. In this brief, we report on how the new messages and the overall study were designed, and present initial findings about the messages' effect on REA participation and program completion.

### KEY FINDINGS

- UI claimants who were sent email messages were more likely to start the REA program by scheduling their first session.
- UI claimants who received email messages were also more likely to complete the REA program.
- Once individuals attended their first REA session, they were equally likely to complete the program regardless of whether they had received emails or not.

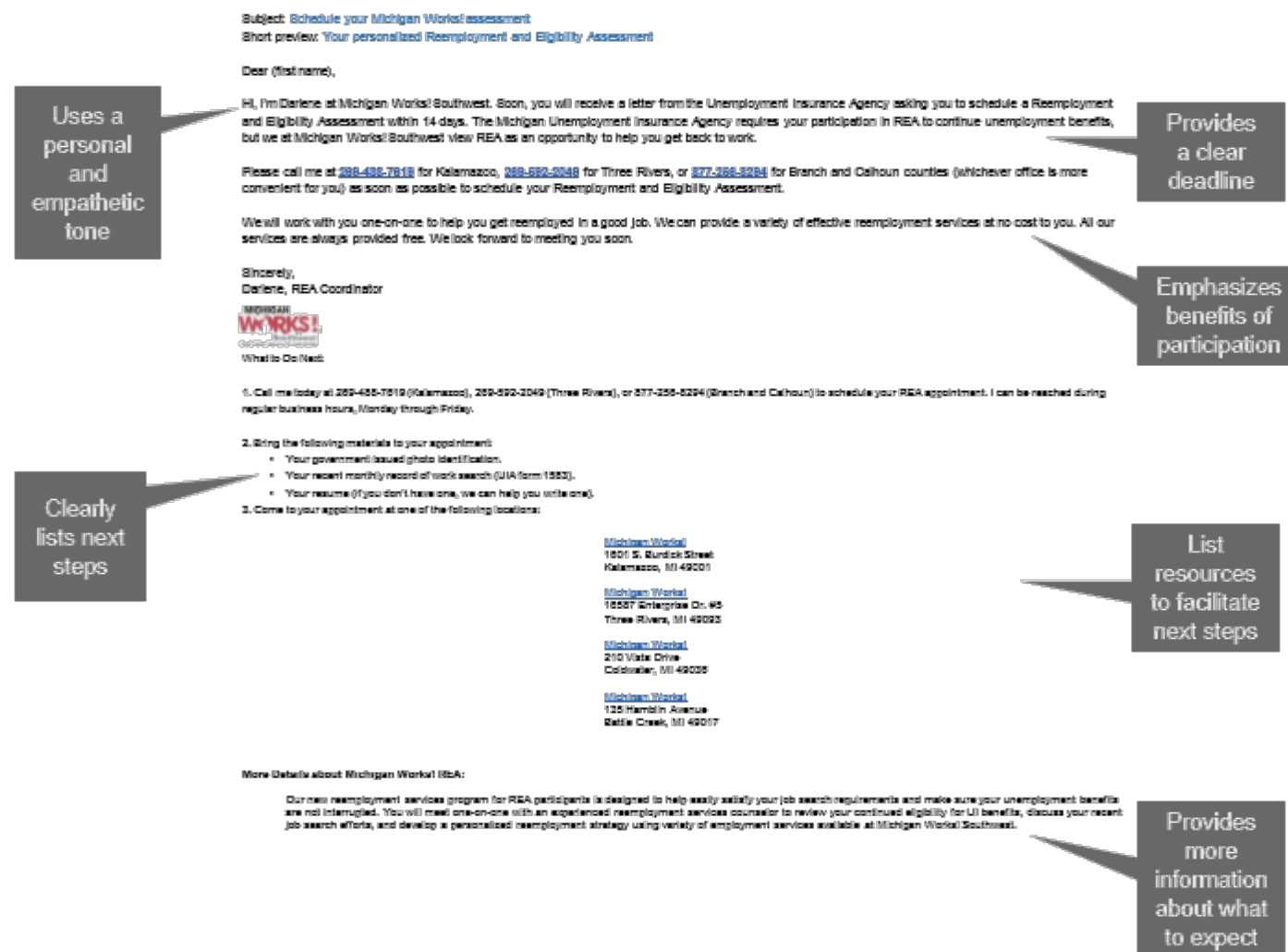
### INTERVENTION DESIGN

**Existing process.** Michigan's REA pilot program, which operated in selected areas of the state from January to September 2015, sought to help UI claimants return to work sooner than the average period of 14 weeks. Claimants who were selected to participate in the program were called in for mandatory, one-on-one REA sessions with a Michigan Workforce representative. During the first REA session, the claimants received an orientation to available reemployment assistance services, a UI eligibility assessment, and labor market information. Staff also reviewed the claimant's recent

April 2016

1

## Exhibit 2. Email sent to randomly selected UI claimants



Uses a personal and empathetic tone

Provides a clear deadline

Emphasizes benefits of participation

Clearly lists next steps

List resources to facilitate next steps

Provides more information about what to expect

## Exhibit A.3. Second email: reminding claimant to schedule REA1

Subject: [Reminder to schedule your Michigan Works! assessment](#):

Short preview: [For your personalized Reemployment and Eligibility Assessment](#)

[first\_name]

Last week I sent you an email about scheduling your Reemployment and Eligibility Assessment (REA) at Michigan Works! Southwest. I haven't heard from you yet. Please call me at [269-488-7619](tel:269-488-7619) for Kalamazoo, [269-592-2049](tel:269-592-2049) for Three Rivers, or [877-256-8294](tel:877-256-8294) for Branch and Calhoun counties (whichever office is more convenient for you) as soon as possible to schedule your REA if you're still looking for work.

The deadline for your REA is rapidly approaching and we want to make sure you don't lose this opportunity to work one-on-one with our team to make your job search as easy as possible. **If you don't call this week, you may lose access to your unemployment benefits.**

We look forward to meeting you soon.

Sincerely,  
Darlene, REA Coordinator



### What to Do Next:

1. Call me today at [269-488-7619](tel:269-488-7619) (Kalamazoo), [269-592-2049](tel:269-592-2049) (Three Rivers), or [877-256-8294](tel:877-256-8294) (Branch and Calhoun) to schedule your REA appointment. I can be reached during regular business hours, Monday through Friday.
2. Bring the following materials to your appointment:
  - Your government issued photo identification.
  - Your recent monthly record of work search (UIA form 1583).
  - Your resume (if you don't have one, we can help you write one).
3. Come to your appointment at one of the following locations (click the link for addresses):

[Michigan Works! Kalamazoo](#)

## Exhibit A.6. Fifth email: encouraging claimant to persist in job search (1)

Subject: [Michigan Works!: Make the most of your job search starting this week](#)

Short preview: [Creating your personal job search plan](#)

[first\_name]

Congratulations on completing the Michigan Works! Reemployment Program. Our team has enjoyed working with you and hopes that our services strengthened your reemployment efforts.

It's the start of a new week and this is a great time to take your job search to the next level by setting goals and making plans to reach them. What do you want to achieve in your job search this week? How will you do it? Will you submit job applications, revise your resume, or attend a job search workshop? These services are always available at your local Michigan Works! office. Please go to our website to see dates for upcoming special reemployment events: [Schedule of Events](#)

As you continue your job search, making a written plan of when, where, and how you will search increases the chances of reemployment success. Use all the tools available to you. For example, you can use the format of your UI 1583 Form (Monthly Record of Work Search) to plan your job search (and then record what you did).

As always, our team remains committed to helping you succeed. Please come visit our office or contact us if you need any additional help with reemployment.

Sincerely,

Your REA team

[CareerServices@michiganworks14.org](mailto:CareerServices@michiganworks14.org)





# Example: Texas Noncustodial Parents



ATTORNEY GENERAL OF TEXAS  
GREG ABBOTT  
CHILD SUPPORT DIVISION

## Can your child support order be lowered?

Name of Incarcerated parent  
TDCJ No.12345678 / OAG No. 0009415412  
Unit/Address  
City/State/Zip Code

Dear Incarcerated Parent,

Your child support obligation (how much you are ordered to pay by the court) does not automatically stop or change when you become incarcerated. While you are in prison, your unpaid child support, along with interest continues to add up.

Due to the change in your circumstances (incarceration), you may be eligible for a modification of your child support payment. This means that the court may lower your monthly child support and/or medical support obligation.

If you are interested in having your child support possibly lowered, please completely fill out the attached application. Upon receipt of your application, our office will contact the other parent (custodial parent) on your child support case to notify them of this process and to ask them for information regarding the case. The court will make a final decision regarding a modification based on all available evidence.

Sincerely,

Oscar Esquivel  
Incarcerated Parents Program Specialist  
bw

Primes prisoner  
identity

High reading level

References the  
custodial parent



# Example: Texas Noncustodial Parents

## Apply For a Lower Child Support Payment in Four Easy Steps

John Doe  
TDCJ No.12345678 / OAG No. 0009415412  
Pam Lychner State Jail  
Humble, TX 77396

Dear Mr. John Doe,

*Did you know that you might be able to lower your monthly child support payment if your income has gone down due to incarceration?*

Even though your child support order didn't change automatically when you became incarcerated, you can request that a court consider lowering your order. Other parents have already gotten their monthly orders reduced to as low as zero! In your case, this could mean reducing the child support you owe by \$3468 over one year.

Lower deliberation costs

Lower reading level

Use social influence

Use loss aversion

Teaser Postcard

Send a reminder

Reminder Postcard

### You Could Lower Your Child Support Payments!

We will send you important information soon on how you could lower your child support payments if your income has gone down due to incarceration.

For example, a parent with a monthly order of \$300 could reduce the amount of child support owed by \$3,600 in just one year.

In a few weeks we will send you everything you need to complete and submit an application.

Other parents have had courts lower their child support by \$200 to \$500 per month.

Completing the application is easy. You can do it during a brief meeting with the law librarian.

04/12

### Your child support debt gets bigger every month you don't take action!

**A PARENT WITH AN ORDER OF \$350 PER MONTH COULD REDUCE HIS OR HER CHILD SUPPORT DEBT BY \$4,200 IN ONE YEAR. MANY OTHER PARENTS IN TDCJ HAVE ALREADY HAD THEIR CHILD SUPPORT REDUCED.**

A few weeks ago, we sent you a letter letting you know that you might be eligible to have your child support payments lowered if your income has gone down due to incarceration. We haven't received your application, but you still have time to send it to us.

Make an appointment with the law librarian today, and complete the blue application we sent you. As soon as we receive your completed application, we'll start reviewing your case to see if your support can be lowered.

**Act now! You could lower your child support payments!**

John J. Heldrich Center for Workforce Development

Source: Richburg-Hayes et al. 2017.

# Example: Texas Noncustodial Parents

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**Act now! You could lower your child support payments!**

John J. Heldrich Center for Workforce Development

Source: Richburg-Hayes et al. 2017.

# New York City Paycheck Plus



39 Broadway, 10th floor  
New York, NY 10006

## PAYCHECK PLUS JUST GOT BETTER

Stop by a Food Bank office to get more information about Paycheck Plus and receive a **\$50 GIFT CARD!**

It only takes a few minutes!

Si desea esta información en español, por favor llame al 212-340-4480

Non-Profit  
Org.  
U.S. Postage  
PAID  
Syracuse, NY

Standard Postcard

## 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

John J. Heldrich Center for Workforce Development

Source: Richburg-Hayes et al. 2017.



**FOOD BANK**  
FOR NEW YORK CITY

39 Broadway, 10th floor  
New York, NY 10006

foodbanknyc.org

**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

Non-Profit Org.  
U.S. Postage

☒ **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

MON	TUES	WED	THU	FRI	SAT
closed	9-3	9-3	9-3	closed	9-3

☐ **Northern Manhattan Improvement Corp.**  
76 Wadsworth Ave., New York, 10033

MON	TUES	WED	THU	FRI	SAT
closed	12-7	12-7	12-7	closed	9-5

**2** ☐ **Write down when you will go:** Date  Time  AM/PM

**3** ☐ **Stop by and have a short conversation with Food Bank staff to learn how you can earn a \$2000 bonus next year**

☐ **Get your \$50 gift card!**

For other locations or questions call 646-981-6111

Suggests progress has already been made

Loss aversion

Fewer choices



## Example: One Stop Orientation

### **Current Practice:**

- A lot of information about services
- A lot of jargon
- At times unclear next steps

### **What we could do:**

- Limit jargon and simplify information
- Put services in context
- Clearly present next steps

# Important Reminders for Developing Nudges

- Necessary to get user input and evidence when designing intervention
- Keep interventions simple
- Nudges should not be “one-size-fits-all”
- Consider distributional effects
- Allow for iterative process for light-touch interventions through experiments
- These strategies supplement effective programs

Group Discussion

**WHAT ARE COMMON ISSUES  
IN YOUR ROLE THAT  
BEHAVIORAL SCIENCE COULD  
HELP?**

Group Discussion

# **HOW CAN YOU USE NUDGES TO HELP SOLVE THOSE ISSUES?**

**For more information, please contact:**

**Stephanie Holcomb, MPP**

Research Project Coordinator

John J. Heldrich Center for Workforce Development

Edward J. Bloustein School of Planning and Public Policy

Rutgers University

**Phone: (732) 932-1084**

**Email: [Stephanie.Holcomb@Rutgers.edu](mailto:Stephanie.Holcomb@Rutgers.edu)**



## Sources

- Darling, M., O'Leary, C., Perez-Johnson, I., Lefkowitz, J., Kline, K., Damerow, B., and Eberts, R. (2016). Encouragement Emails Increase Participation in Reemployment Services. DOL Behavioral Interventions Project Brief. Washington, D.C.: U.S. Department of Labor.
- Richburg-Hayes, L., Anzelone, C., & Dechausay, N. (2017). Nudging change in human services: Final report of the Behavioral Interventions to Advance Self-Sufficiency (BIAS) project. Office of Planning, Research and Evaluation, US Department of Health and Human Services.
- Sunstein, C. R. (2014). Nudging: a very short guide. *Journal of Consumer Policy*, 37(4), 583-588.
- Thaler, Richard H., Sunstein, Cass R. (2008) *Nudge: improving decisions about health, wealth, and happiness*. New Haven: Yale University Press.