



Behavioral & social science and environmental policymaking

Office of Policy
November 2016

Why social & behavioral sciences?



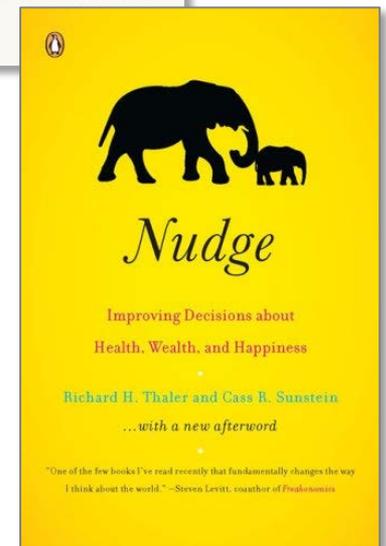
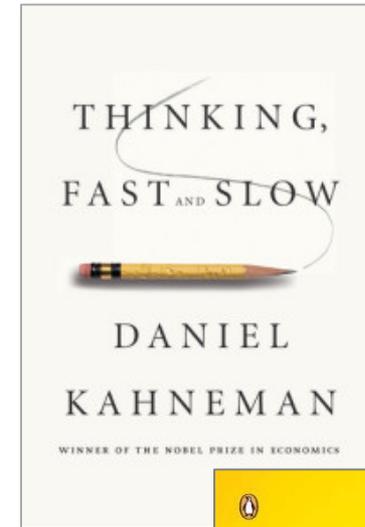
- Environmental challenges stem from human behavior
- Social & behavioral sciences provide key insights about human behavior that can aid in the design of lean, smart, and effective regulatory and non-regulatory programs

Relevance to environmental policy



- Economic analysis already used to support regulatory decision-making (BCA)
- Social and behavioral sciences offer broader insights into how people process information and make decisions
- Leverage insights to support improved design of a wide array of EPA initiatives?
 - Regulations, partnership programs, labeling, information provision, enforcement and compliance approaches, risk communication activities, and more...

Behavioral biases



The White House
Office of the Press Secretary

For Immediate Release

September 15, 2015

Executive Order -- Using Behavioral Science Insights to Better Serve the American People

EXECUTIVE ORDER

USING BEHAVIORAL SCIENCE INSIGHTS TO
BETTER SERVE THE AMERICAN PEOPLE

A growing body of evidence demonstrates that behavioral science insights -- research findings from fields such as behavioral economics and psychology about how people make decisions and act on them -- can be used to design government policies to better serve the American people.

Executive Order 13707



4 areas of focus:

- 1) Access to programs
- 2) Presentation of information to the public
- 3) The structure of choices within programs
- 4) The design of financial and non-financial incentives

Social & Behavioral Science Team (SBST) can partner with agencies to provide guidance.



Training at EPA

- OP-sponsored workshops in 2013, 2014, 2016
- Experts from academia, White House Social & Behavioral Science Team (SBST), USDA Center for Behavioral & Experimental Agri-Environmental Research (CBEAR), Commission on Evidence-Based Policymaking
 - Paul Ferraro • Robert Hahn • Michael Hand • Nathaniel Higgins • Robert Metcalfe • Robert Richardson • Jay Shogren • Laura Taylor



Key messages from workshops

- Bring psychology into economics
- Test how people make decisions in real-world settings
- Focus on touchpoints with the public
 - Mailings, websites, labels
- Foster a culture of testing and adaptation
 - Randomized controlled trials and experimental approaches
 - “Failure” is not always a bad thing

Examples from federal agencies

Structure of choices within programs



II. CHOOSE THE AMOUNT OF YOUR CONTRIBUTIONS

Your choice will cancel all previous elections.

YES, I choose to enroll and save
 NO, I choose not to enroll and save (Put 0's in 7-14)
 I'm already enrolled (Leave 7-14 blank)

To start or change the amount of your contributions, enter in Items 7-10 the percentage of your pay each pay period that you want as traditional (pre-tax) contributions. Enter in Items 11-14 the percentage of your pay each pay period that you want as Roth (after-tax) contributions. **Note:** You **must** elect to contribute at least 1% of basic pay (or its equivalent) to be eligible to contribute from your other types of pay (see instructions). **Remember:** A blank line next to a type of contribution equals 0% contributed.

Traditional (Pre-Tax) Contributions All Services			Roth (After-Tax) Contributions All Services		
Basic Pay	7.	.0%	11.	.0%	
Incentive Pay	8.	.0%	12.	.0%	
Special Pay	9.	.0%	13.	.0%	
Bonus Pay	10.	.0%	14.	.0%	

Figure 1: TSP Active Choice

Notes: As part of an active choice pilot, service members at Fort Bragg were required to submit a modified TSP election form that included the box at the left asking them to indicate their choice among the three options.

Source: SBST 2016 Annual Report

Examples from academia/private sector

Design of incentives



Fuel and carbon efficiency report for Capt. John Smith

Below is your monthly fuel and carbon efficiency report for **Month 2014**

1. ZERO FUEL WEIGHT

Proportion of flights for which the ZFW calculation was completed and fuel load adjusted as necessary

TARGET: XX% of flights

RESULT: XX% of flights

You **ACHIEVED/MISSED** your target and earned/missed out on £10 in donations to Charity Name.

2. EFFICIENT FLIGHT

Proportion of flights for which actual fuel use is less than planned fuel use (e.g. optimised speed, altitude etc)

TARGET: XX% of flights

RESULT: XX% of flights

You **ACHIEVED/MISSED** your target and earned/missed out on £10 in donations to Charity Name.

3. REDUCED ENGINE TAXY IN

Proportion of flights for which at least one engine was shut off during taxi in

TARGET: XX% of flights

RESULT: XX% of flights

You **ACHIEVED/MISSED** your target and earned/missed out on £10 in donations to Charity Name.

Source: Gosnell, List & Metcalfe 2016



Next steps

- Apply best practices...to the extent that they exist
- New research to find out what works in environmental contexts
- Program offices reaching out to NCEE and SBST

Parting words

“The foundation of political economy and, in general, of every social science, is evidently psychology.”

-Vilfredo Pareto