

# Lessons learned from behavioral decision research and behavior change interventions

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# Interventions

- Risk governance includes
  - Informed public
  - Behavior change (where needed)
- Domains
  - Health
  - Household finance
  - Energy

# Overview

1. 'Nudge' interventions
2. Educational interventions
3. Main lessons and challenges

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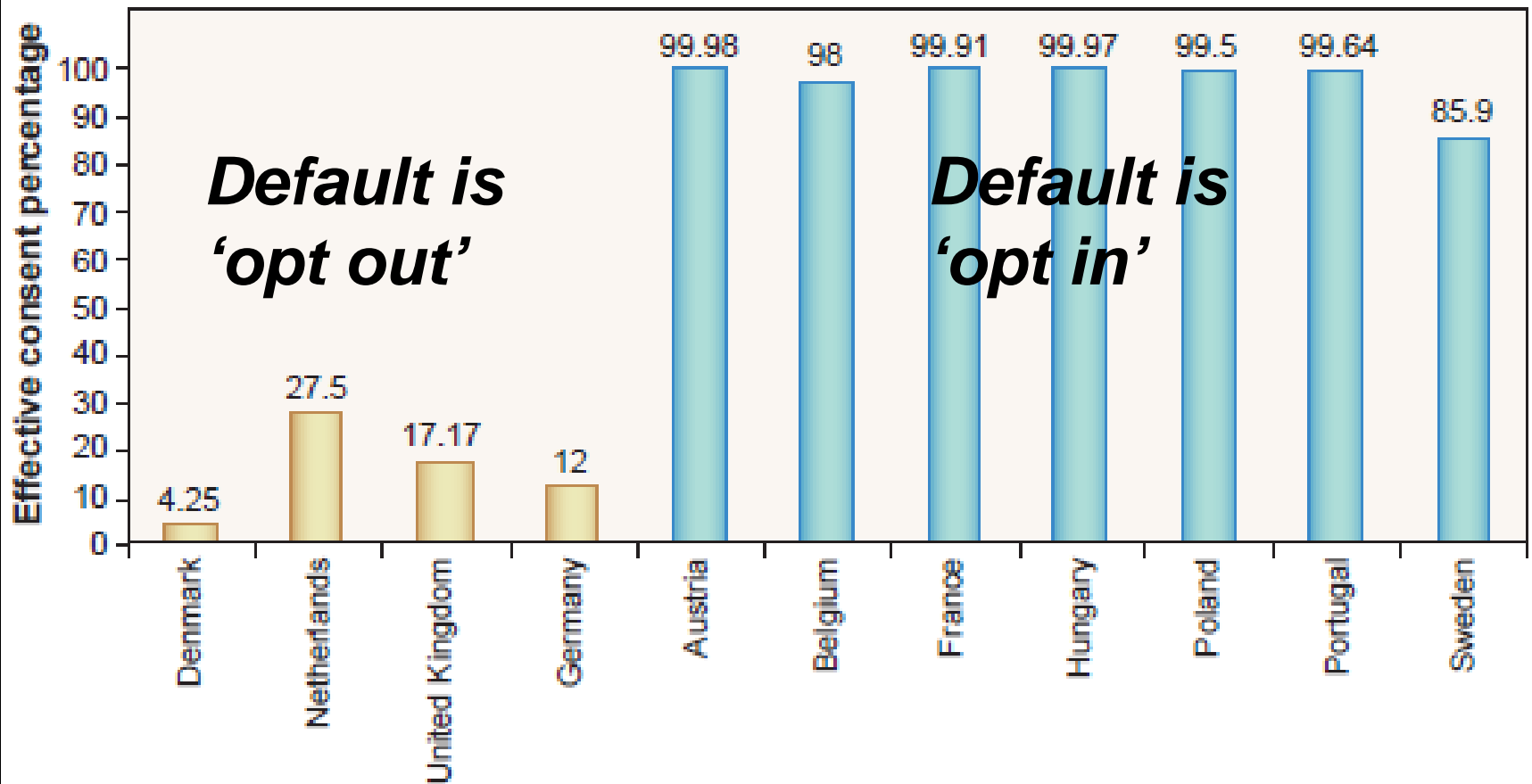
1. ***'Nudge' interventions***
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# 'Nudge' interventions

- Lesson from behavioral research:
  - When making choices, people often stick with the 'default' or 'status quo'
- Intervention principle:
  - Set default to recommended option
- Application:
  - Choices for which there is a recommended option

(Thaler & Susstein "*Nudge*" 2008)

# Organ donation programs



Effective consent rates, by country. Explicit consent (opt-in, gold) and presumed consent (opt-out, blue).

From: Johnson & Goldstein, *Science*, 2003

# Example 'default' settings

- Auto-enrolment into retirement savings plan (vs. requiring signing up) increases participation
- Standard energy-efficient settings on programmable thermostats may increase electricity savings



# Educational interventions

- Application:
  - Decisions *without* recommended option
- Lesson from behavioral research:
  - People are more likely to use information that is *personally relevant* and *easy to understand*
- Intervention principles:
  - Content is based on research with audience so as to cover wants and needs in understandable wording



# Applications

- Patient decision aids
- Electricity bills
- Credit card statements

(Bekker et al., *Patient Education and Counseling*, 2010; Bruine de Bruin et al., *Journal of Risk Research*, in press; Canfield et al., in preparation; McHugh et al., *Journal of Economic Psychology*, 2011)

# Information and skills training

A DVD teaching negotiation skills rather than just basic facts reduced STIs compared to control

(Downs, Murray, Bruine de Bruin, Palmgren, & Fischhoff, *Soc Science & Med*, 2004)



## SEVENTEEN DAYS

There are lots of decisions to make  
It's up to you to make them



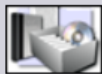
science-based products for researchers & practitioners

EXEMPLARY DATA

EFFECTIVE PROGRAMS

HEALTH EDUCATION

EVALUATION



Teen Pregnancy  
(PASHA)

HIV/AIDS (HAPPA)



> home >> effective programs >>> teen pregnancy  
**WHAT COULD YOU DO? Interactive Video  
Females' STD Risk**

Investigators: Julie Downs, Wändi Bruine de Bruin, Claire Palmgren, Baruch Fischhoff, Pamela Murray, & Joyce Penrose

# Intervention design principles



International Patient Decision Aid Standards (IPDAS)  
Collaboration

<http://ipdas.ohri.ca/>

Fischhoff, B., Brewer, N.T., &  
Downs, J.S. (2011).  
*Communicating risks and  
benefits: An evidence-based  
user's guide*. USFDA.



*Presentations  
on YouTube  
from US NAS*

([www.fda.gov/oc/  
advisory/  
OCRACACpg.html](http://www.fda.gov/oc/advisory/OCRACACpg.html))

**COMMUNICATING  
RISKS AND BENEFITS:**  
*An Evidence-Based User's Guide*

Baruch Fischhoff PhD,  
Noel T. Brewer PhD, & Julie S. Downs PhD, editors



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# Main lessons (*and challenges*) for intervention designers

1. Effective interventions are based on behavioral findings gathered from the intended audience

*Challenges: Overcoming overconfidence in theories  
Committing resources*

2. Interventions should be evaluated for effectiveness

*Challenges: Overcoming institutional resistance  
Committing resources  
Long-term follow-up*

(Davis , Krishnamurti, Fischhoff, & Bruine de Bruin, *Energy Policy*, 2010)