

Does the public know they're being nudged? Assessing the need for disclosure.

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Abstract

Are people aware of the effects of choice architecture interventions (CAIs)?

- Ps read lay summaries of 9 empirical studies of CAIs, incl. defaults, framing & pre-commitment.
- Ps made qualitative & quantitative predictions of own & others' behavior
- Results show Ps have low awareness of CAI effectiveness & exhibit self-enhancement bias: believe CAIs affect them less than others.
- For some CAIs, lay theories about effectiveness of CAIs are inaccurate.

Introduction

CAIs have become increasingly prevalent, but questions have arisen regarding ethics of their use. If people are unable to judge the effectiveness of CAIs, they may incorrectly anticipate their influence even when informed of their existence.

Alternately, if the public is already aware and able to adjust their behavior in response to CAIs, many ethical concerns about disclosure would become moot.

We investigate awareness and perception of CAIs with the following predictions:

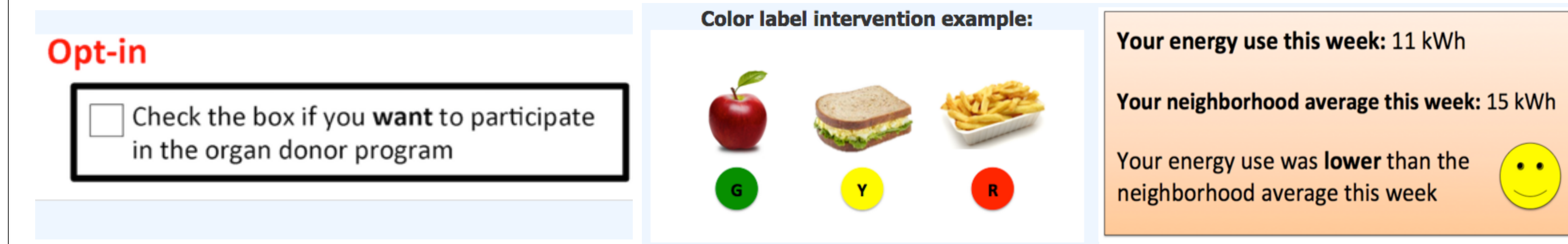
H1. *Decision makers have low awareness of the existence and effects of CAIs.*

H2. *Participants will exhibit a 'self-enhancement bias', believing that the CAIs influence themselves less than others.*

H3. *Lay theories of the effects of CAIs will be relatively inaccurate.*

Methods

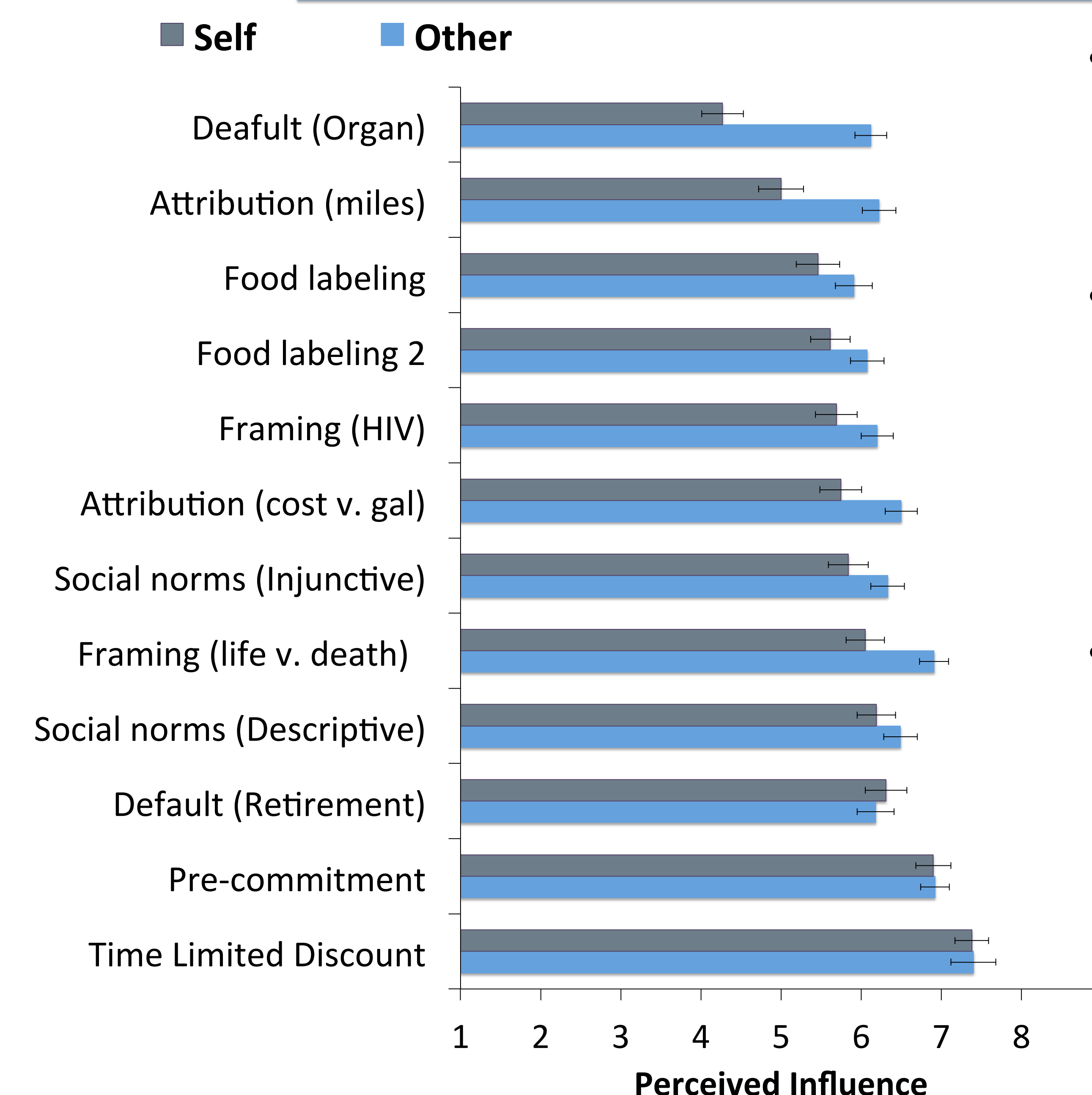
270 US residents read detailed summaries of 9 highly-cited empirical research papers investigating well-documented CAIs. Summaries were pretested for comprehensibility. Following a comprehension test, we measured extent to which Ps believed CAI would influence own and others' behavior. Ps made quantitative predictions about CAI effectiveness & assessed previous familiarity with CAI.



Results

Study	Choice Architecture Intervention	Aware	Comp
Apanovitch, McCarthy & Salovey (2003)	Framing (gain/loss; HIV testing)	0%	99%
Camilleri & Larrick (2014)	Attribute Translation (metric scale - miles)	1%	88%
Camilleri & Larrick (2014)	Attribute Translation (fuel efficiency - \$ vs. gal.)	0%	88%
Duflo, Kremer & Robinson (2011)	Time-limited discounts (fertilizer investments)	0%	86%
Johnson & Goldstein (2003)	Default (organ donation)	4%	79%
Madrian & Shea (2001)	Default (retirement plan)	1%	81%
McNeil, et al. (1982)	Framing (gain/loss; lung cancer treatment type)	4%	96%
Schwartz et al. (2014)	Pre-commitment (healthy food program)	4%	97%
Schultz, et al. (2007)	Normative incentive (descriptive norm – energy)	2%	99%
Schultz, et al. (2007)	Normative incentive (injunctive norm – energy)	2%	99%
Thorndike, et al. (2012) (Study 1)	Ease of access (food labeling)	1%	96%
Thorndike, et al. (2012) (Study 2)	Ease of access (food labeling and placement)	1%	99%

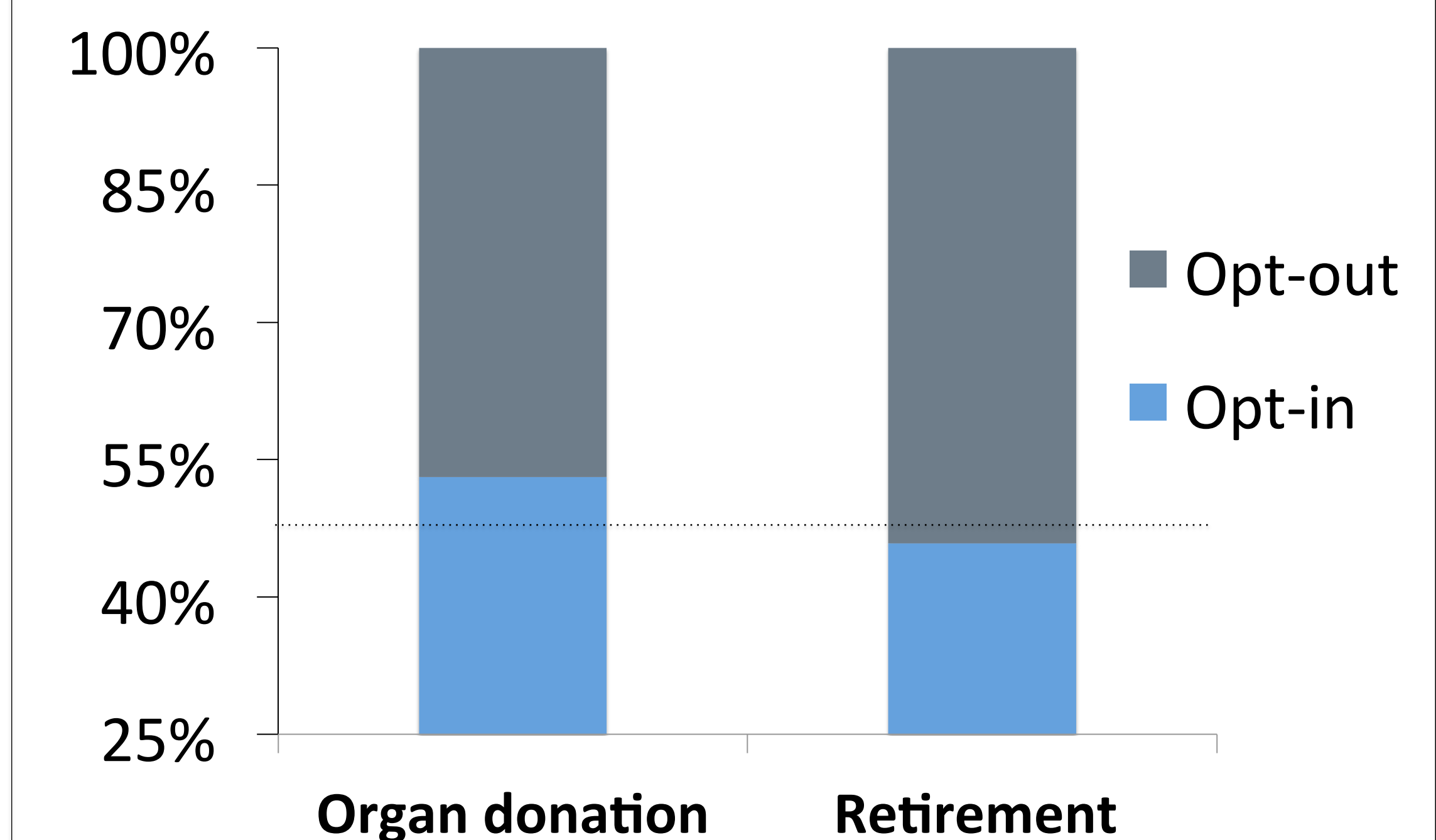
Self-Enhancement Bias



- Across CAIs, Ps generally had self-enhancement bias. But degree of bias differed across CAIs & was absent in some.
- E.g., largest self-enhancement bias for organ donation default ($M_{self} = 4.3$, $M_{other} = 6.2$; $t(100)=7.07$), but retirement default did not display bias ($M_{self} = 6.3$, $M_{other} = 6.2$).
- Defaults rely on multiple underlying psychological mechanisms, such as reference dependence or effort. Awareness may depend upon which mechanism most influences particular default.

Lay Theories

- How well do people's beliefs correspond to CAI effectiveness reported in original studies?
- In partial support of H3, lay theories of effectiveness are inaccurate for some, and accurate for other CAIs.
- E.g., for organ donation default, Ps wrongly estimated that opt-in would lead to *greater* decisions to donate.
- For retirement savings default, participants correctly estimated opt-out would lead to greater participation in retirement savings than opt-in.



Discussion

- Findings might explain why studies of disclosure find no effects: Disclosing CAIs may not influence people's estimates of CAI, making it less likely people adjust their behavior.
- In follow-up work, we will explore why raising awareness of possible effects of a CAI changes participant's predictions for some defaults, but not for others.

References

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