



# "Hypothetically Nudging"

## Hypotheticals provide misleading, noisy measures of real behavior change

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### SUMMARY

**Hypothetical scenarios** (what a participant "would" do) **provide a popular alternative to field experiments for scholars interested in nudging behavior change.** In a recent review, 33% of studies were hypothetical in nature and 21% of papers relied exclusively on hypothetical results (Szasz et al., 2018).

**But how well do hypothetical scenarios approximate real-world behavior change?** Little research explores this outside of willingness-to-pay paradigms (e.g., Camerer & Hogarth, 1999) or moral judgments (e.g., FeldmanHall et al., 2012).

**We investigate this question with 20 pre-registered experiments (N=16,071),** systematically developing 4 styles of hypotheticals following a 2x2 factorial design to approximate the outcomes and effect sizes of 5 real-world "nudging" experiments from distinct domains.

**Hypotheticals ① consistently exaggerated behavioral outcomes and ② provided noisy estimates of nudge effects.** No gold standard hypothetical design emerged across our manipulations of scenario complexity or specificity; none consistently drove more accurate results across our experimental domains. **Our results suggest behavioral researchers should use caution when employing this low-cost but unreliable tool to evaluate nudges.**



### 20 EXPERIMENTS

#### 4 (2x2) designs for hypothetical scenarios...

SETUP		DESCRIPTORS	
SIMPLE	COMPLEX	GENERIC	SPECIFIC
<ul style="list-style-type: none"> <li>One screen</li> <li>-</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>Many screens</li> <li>Images</li> <li>Personalization</li> </ul>	<ul style="list-style-type: none"> <li>Abstracting key situational nouns (e.g., "donuts")</li> </ul>	<ul style="list-style-type: none"> <li>Using names of brands, locations in real test (e.g., "Krispy Kreme donuts")</li> </ul>

#### ... approximating real-world RCTs from 5 domains

DOMAIN	TARGET FIELD STUDY	BEHAVIORAL MEASURE(S)	HYP. SAMPLE
Consumer	Saccardo et al., 2020	(i) Stopping for a donut (ii) Donut WTP	3619
Health	Polman et al., 2022	Choosing the healthier cookie	1750
Finance	Beshears et al., 2021	Choosing the delayed investment	3586
Sustainability	Myers & Souza, 2020	Setting a lower temperature	2438
Transportation	Kristal & Whillans, 2020	Signing up for carpooling	4678

### RESULTS

