peachlab
The Psychology of Eating And Consumer Health Lab

Search...

Home | About | Our Research | Teaching & Mentoring | Contact

Behavioral Science Insights for Public Health

Christina Roberto, PhD
University of Pennsylvania

Heuristics & Biases

Thinking Fast

Thinking Slow

Nutrition Facts

8 servings per container

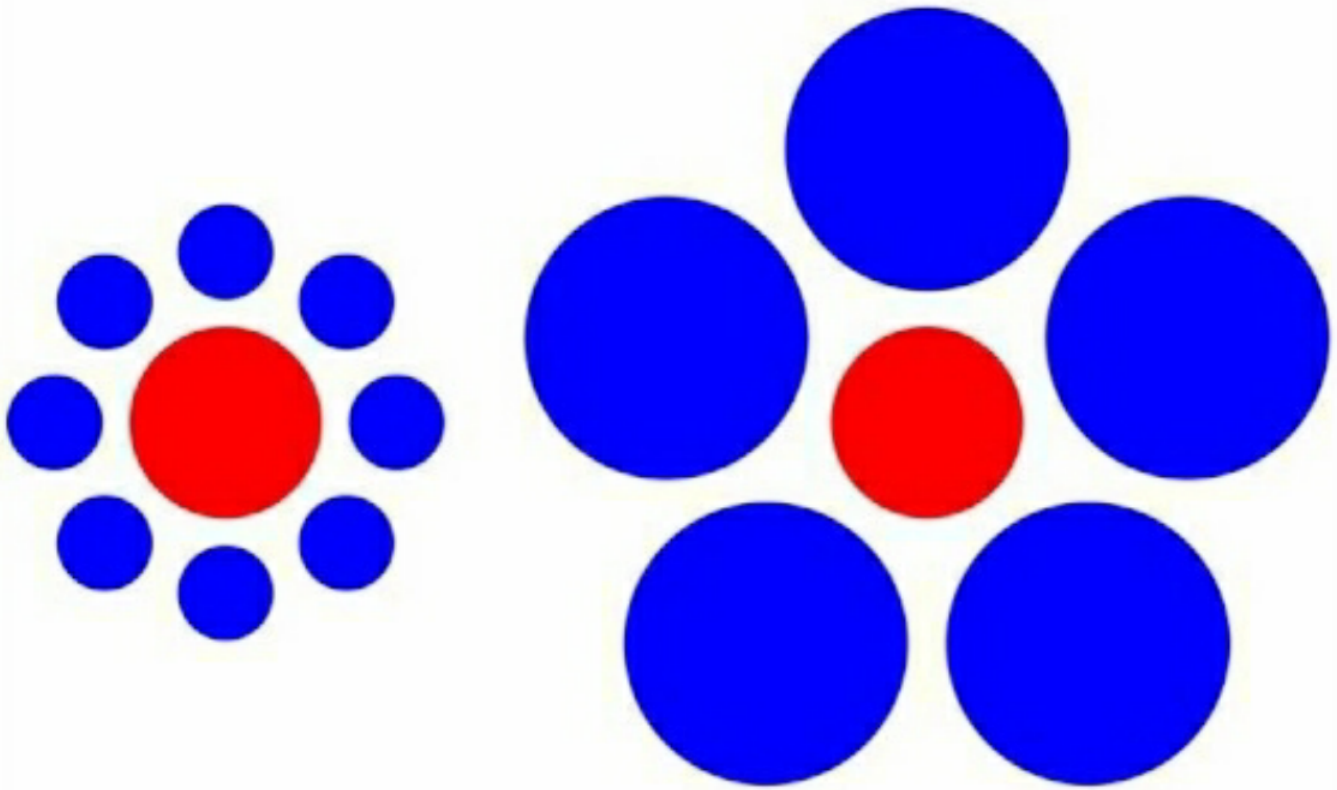
Serving size **2/3 cup (55g)**

Amount per serving

Calories **230**

	% Daily Value*
Total Fat 8g	**10%**
Saturated Fat 1g	**5%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 160mg	**7%**
Total Carbohydrate 37g	**13%**
Dietary Fiber 4g	**14%**
Total Sugars 12g	
Includes 10g Added Sugars	**20%**
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.



Nudge

- Choice context matters
- Does not abridge freedom
- No change in economic incentive

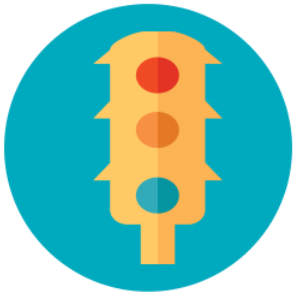
TODAY'S TALK

- [x] Behavioral economics & psychology
- [ ] Choice architecture
- [ ] Simplifying communication
- [ ] Social Norms
- [ ] Defaults

Choice Architecture & Simplifying Communication

Over 6000 employees/visitors

Register data for 9 months



Traffic Lights + Choice Architecture

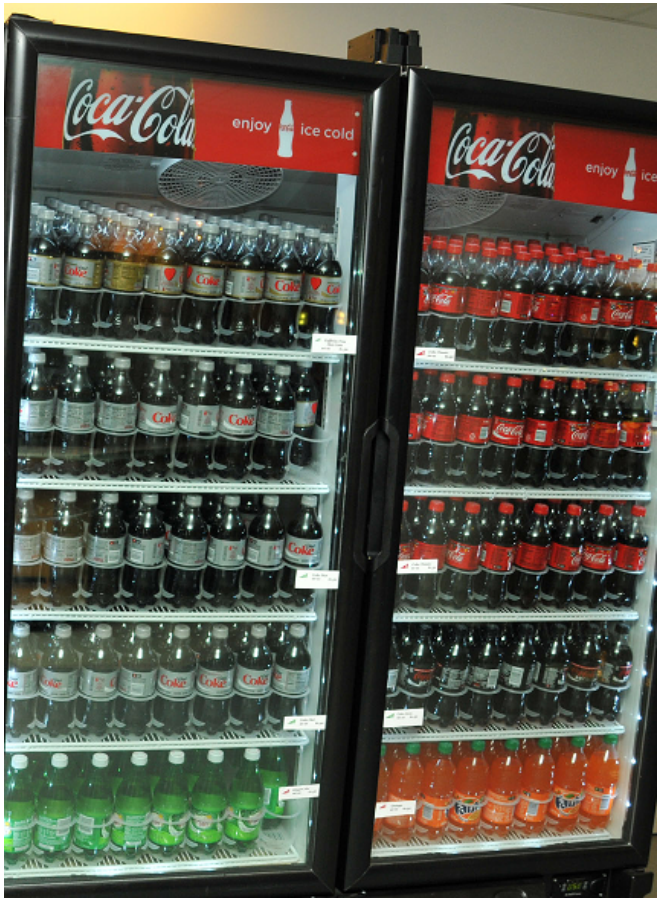
"Consume often"

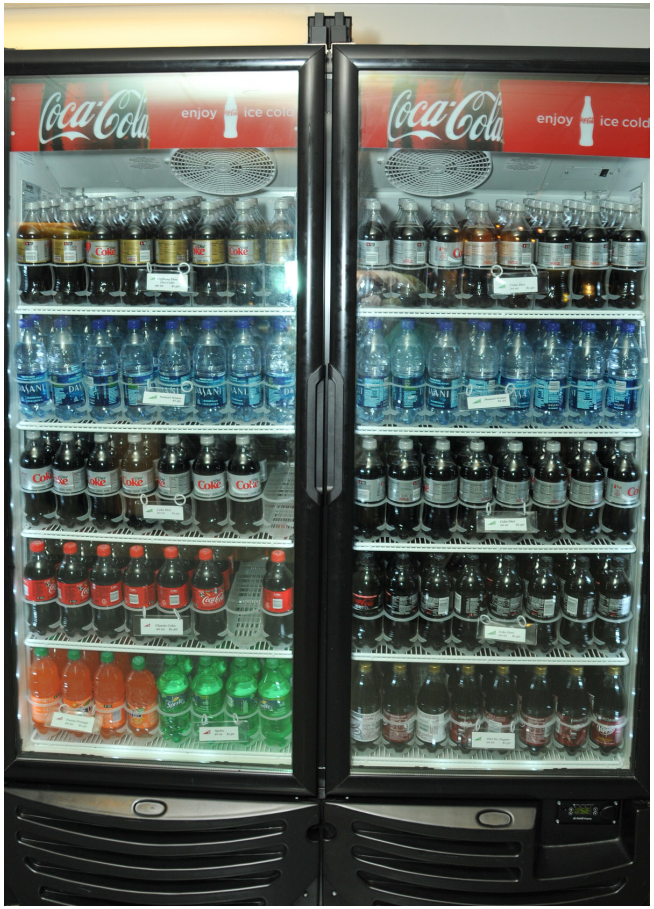
"Consume less often"

"There's a better choice in green or yellow"

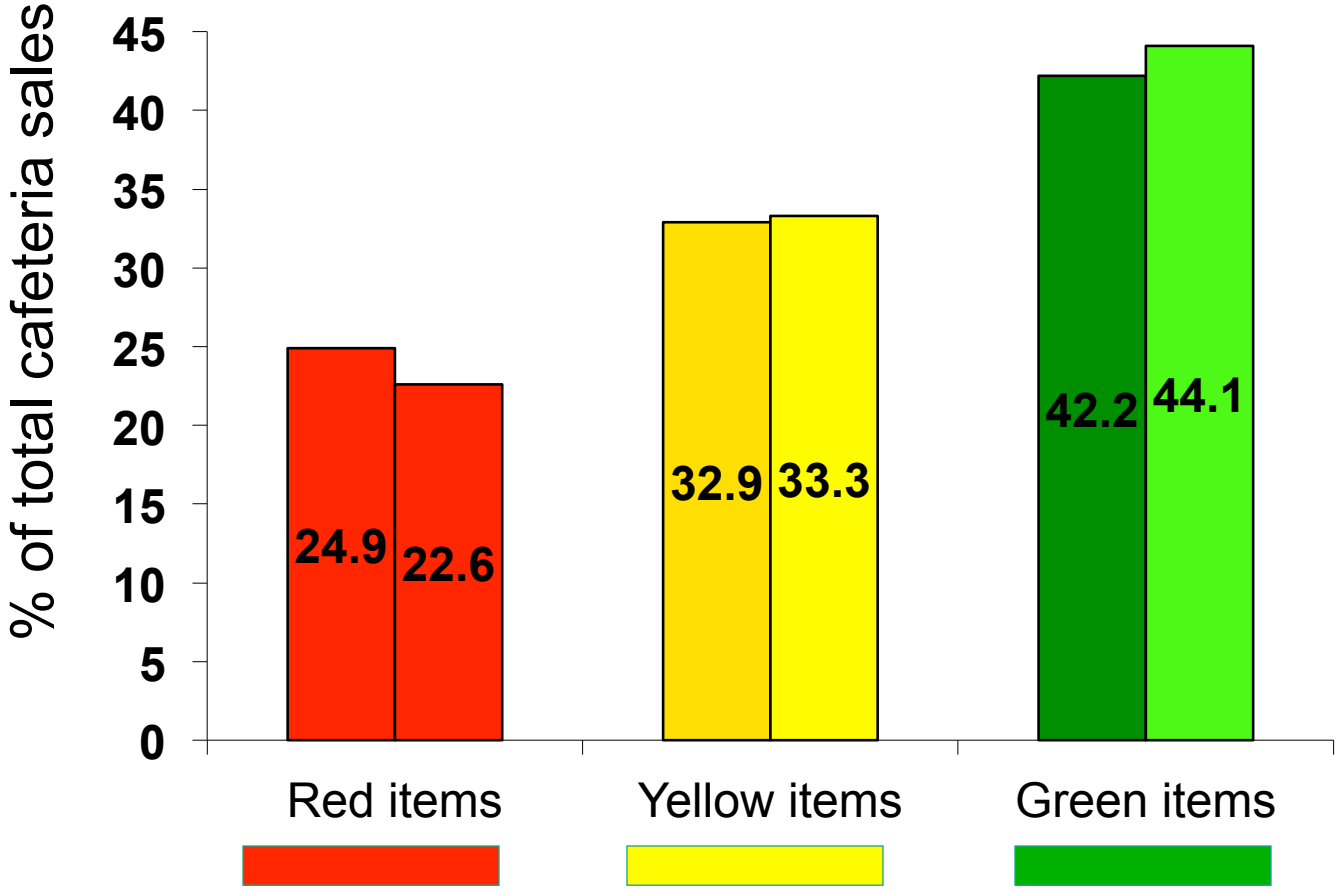
Thorndike et al., AJPH, 2012

Choice Architecture

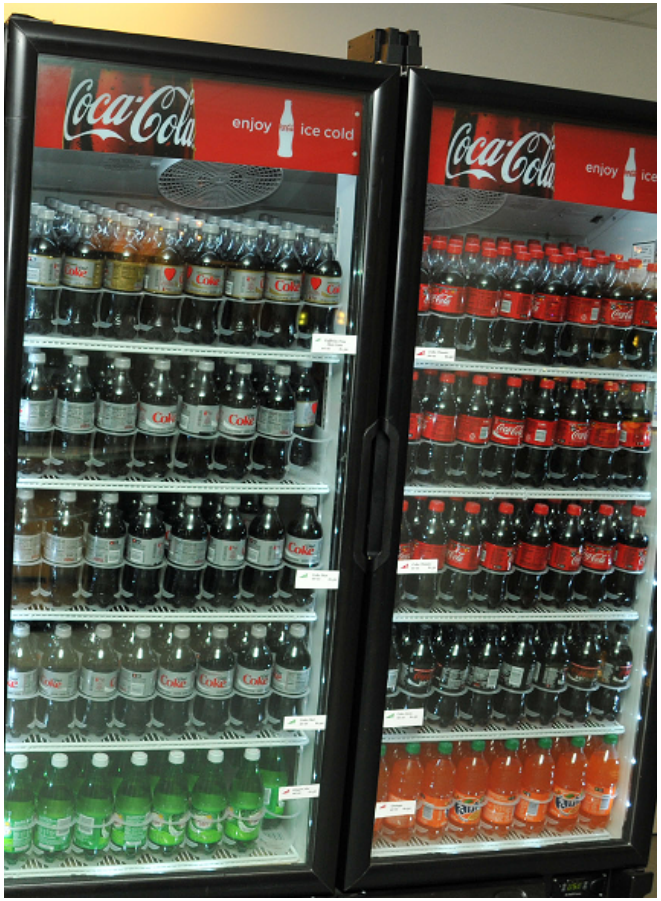




Sales of all cafeteria items during baseline and labeling



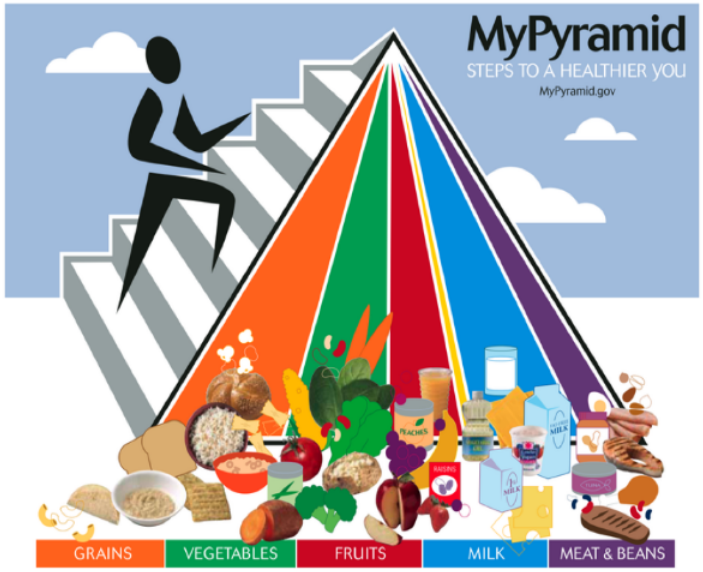
Choice Architecture



Water = 14% of all cold beverage sales

Google moved
M&Ms to opaque
containers
3.1 million fewer
M&Ms eaten
by 2000 employees
over 7 weeks

Memorable & Actionable Guidelines

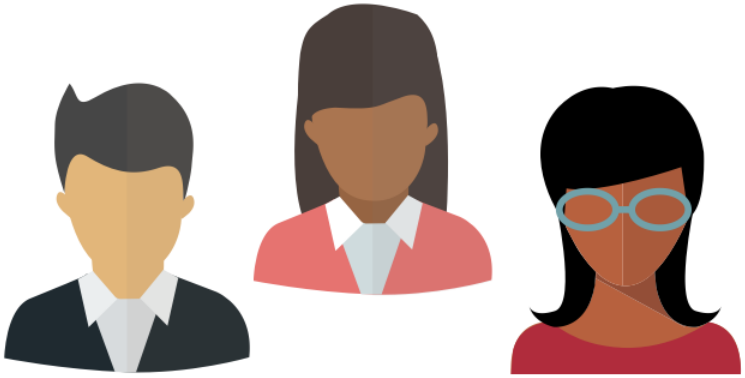


Riis & Ratner, 2015

Simplifying Communication

Social Norms

- How others act in a given situation
- Other people signal what do to & what is appropriate



U.K. Organ Donation Study

1,085,000 visitors to vehicle tax/license website June - July 2013

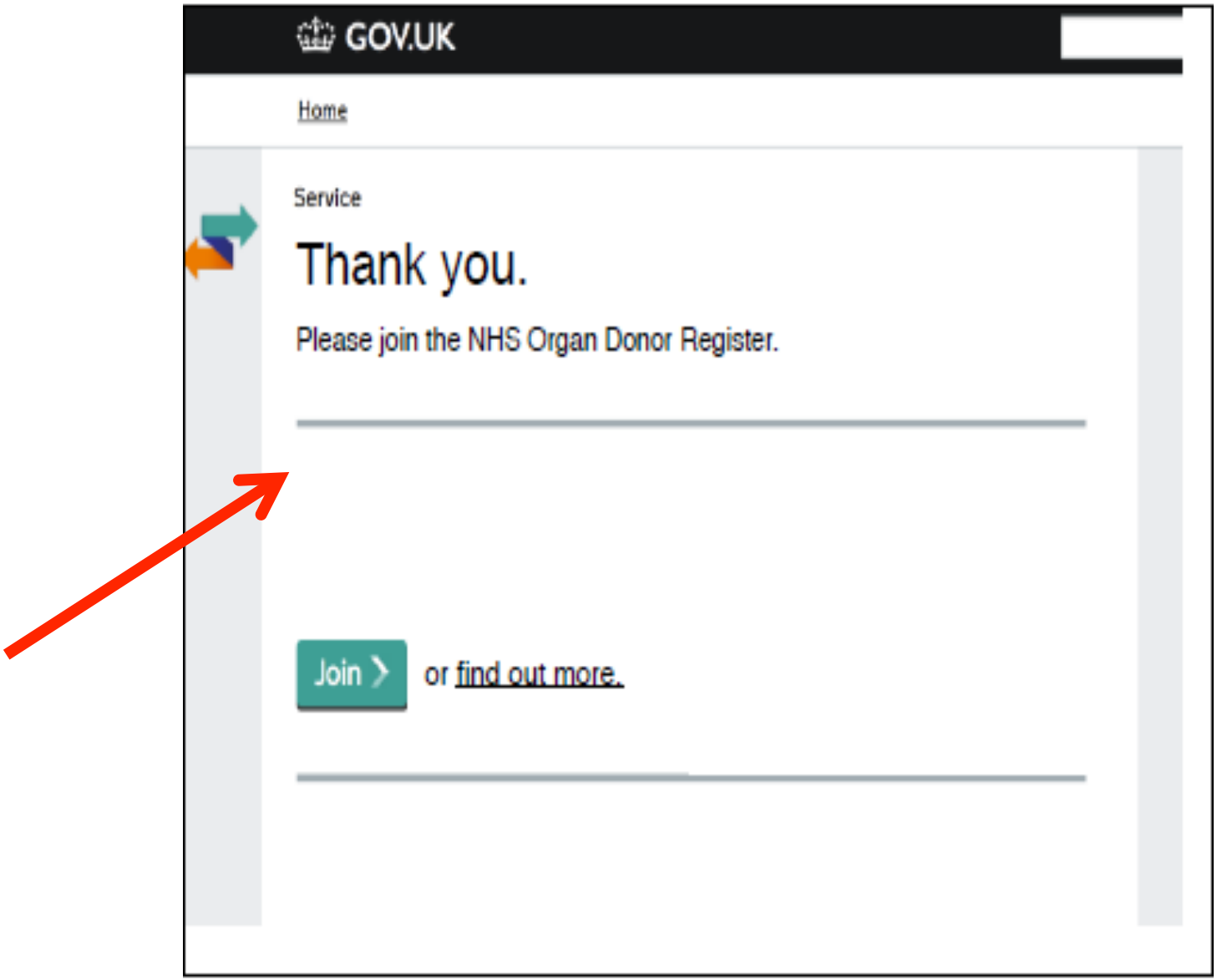
Messages to join organ donor registry

8

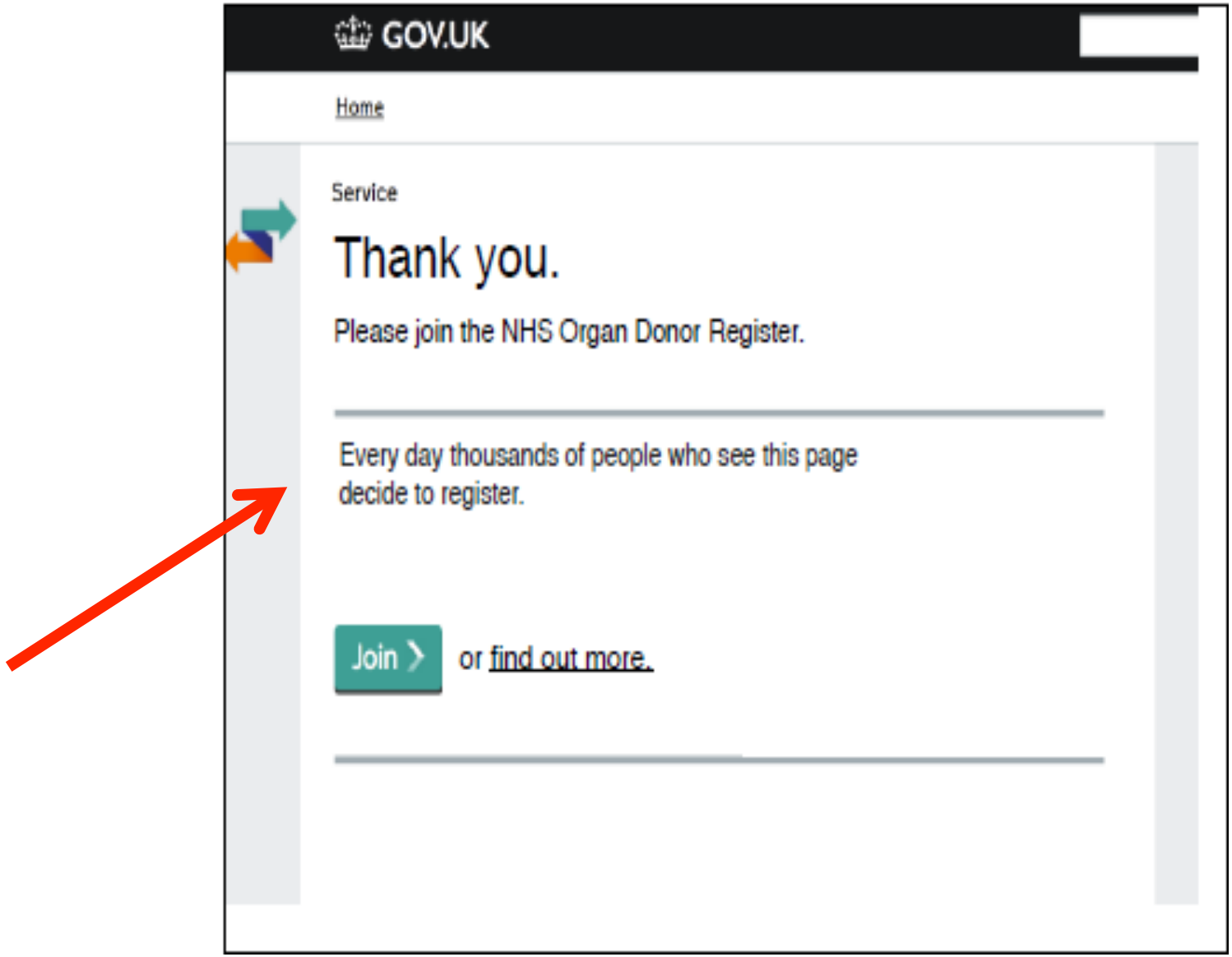
Randomize to webpages

UK Behavioral Insights Team

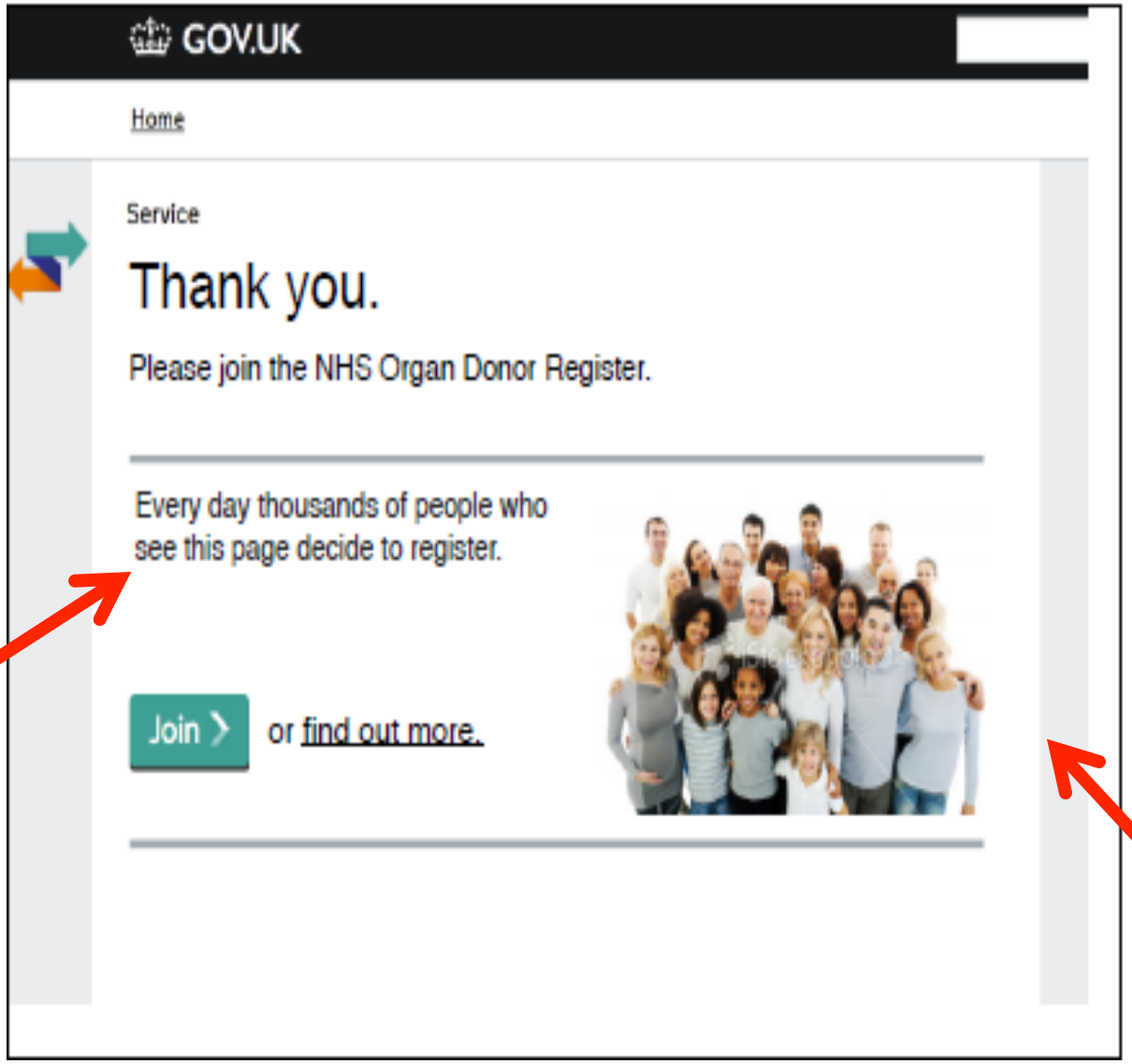
Control


GOV.UK
Home
Service
Thank you.
Please join the NHS Organ Donor Register.
Join
or find out more.

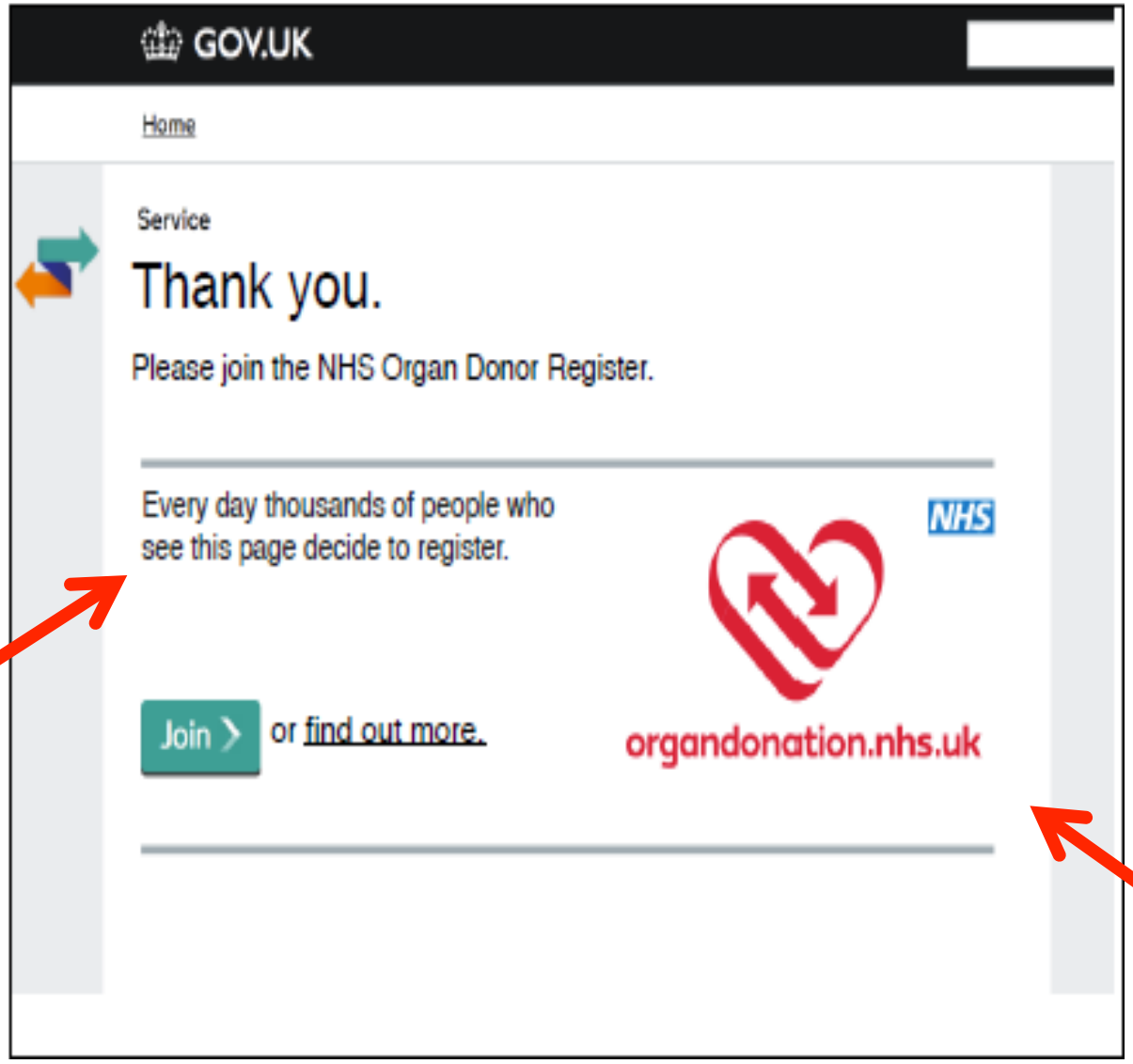
Social Norms



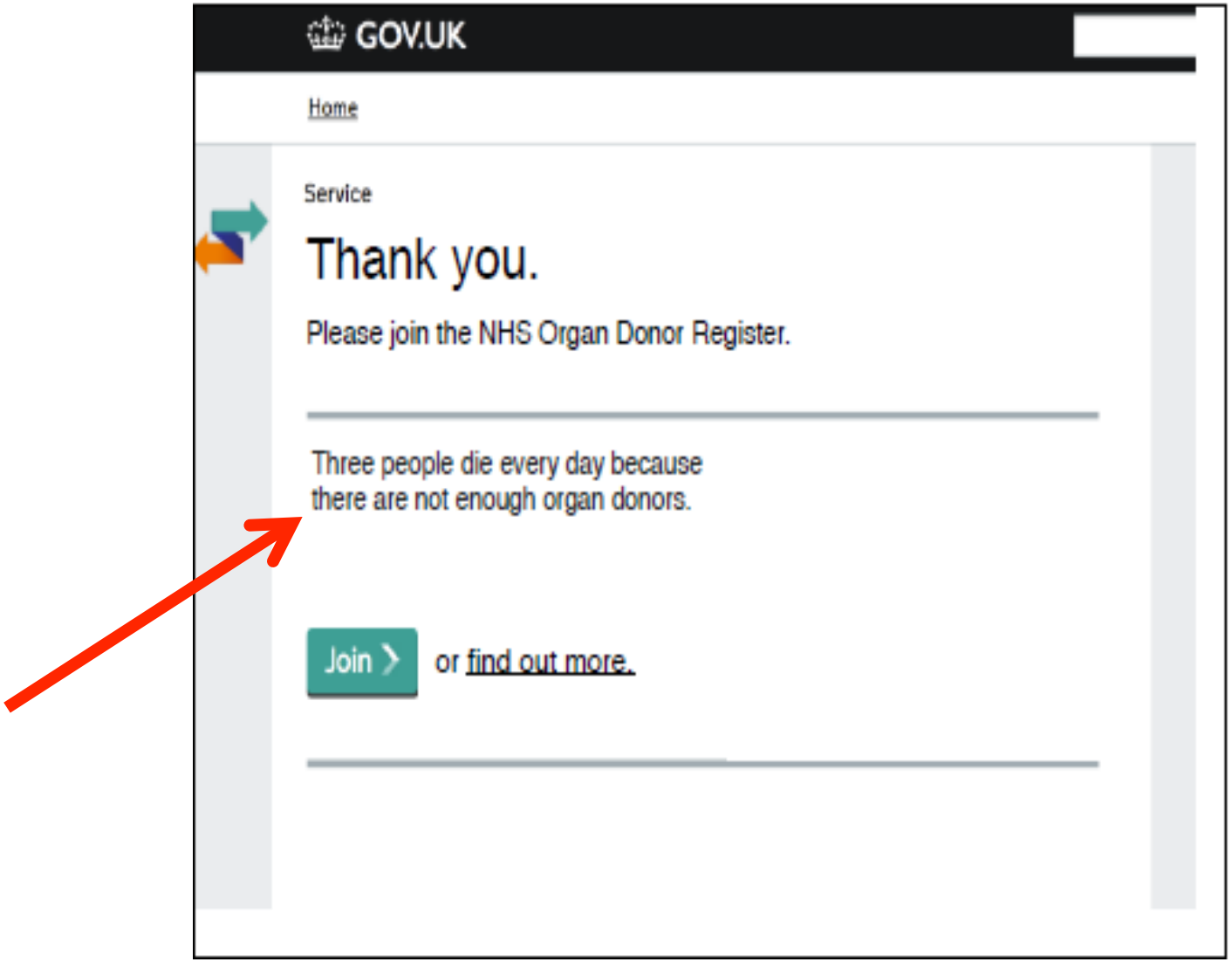
Norm & Picture - Salience



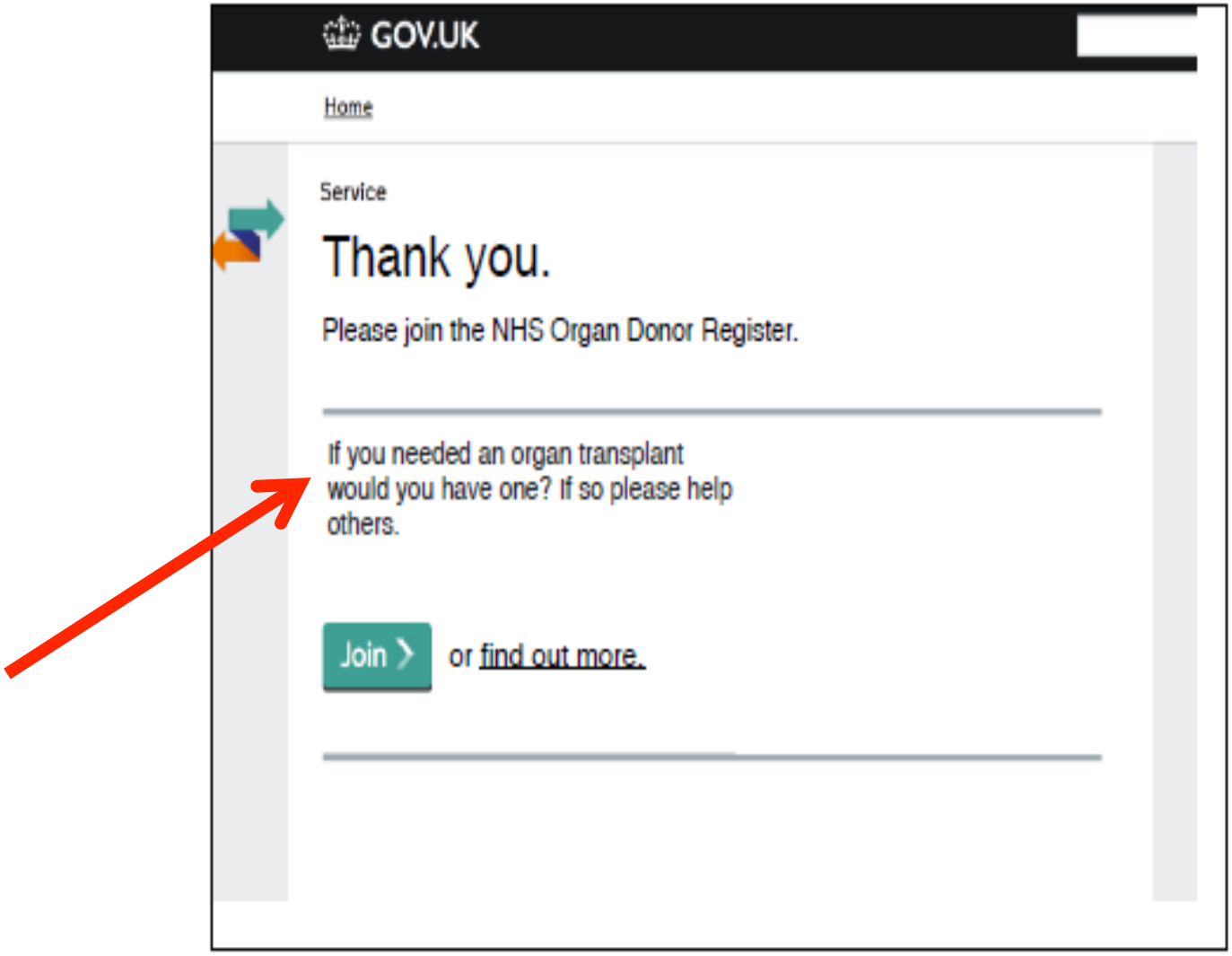
Norm & Logo - Salience



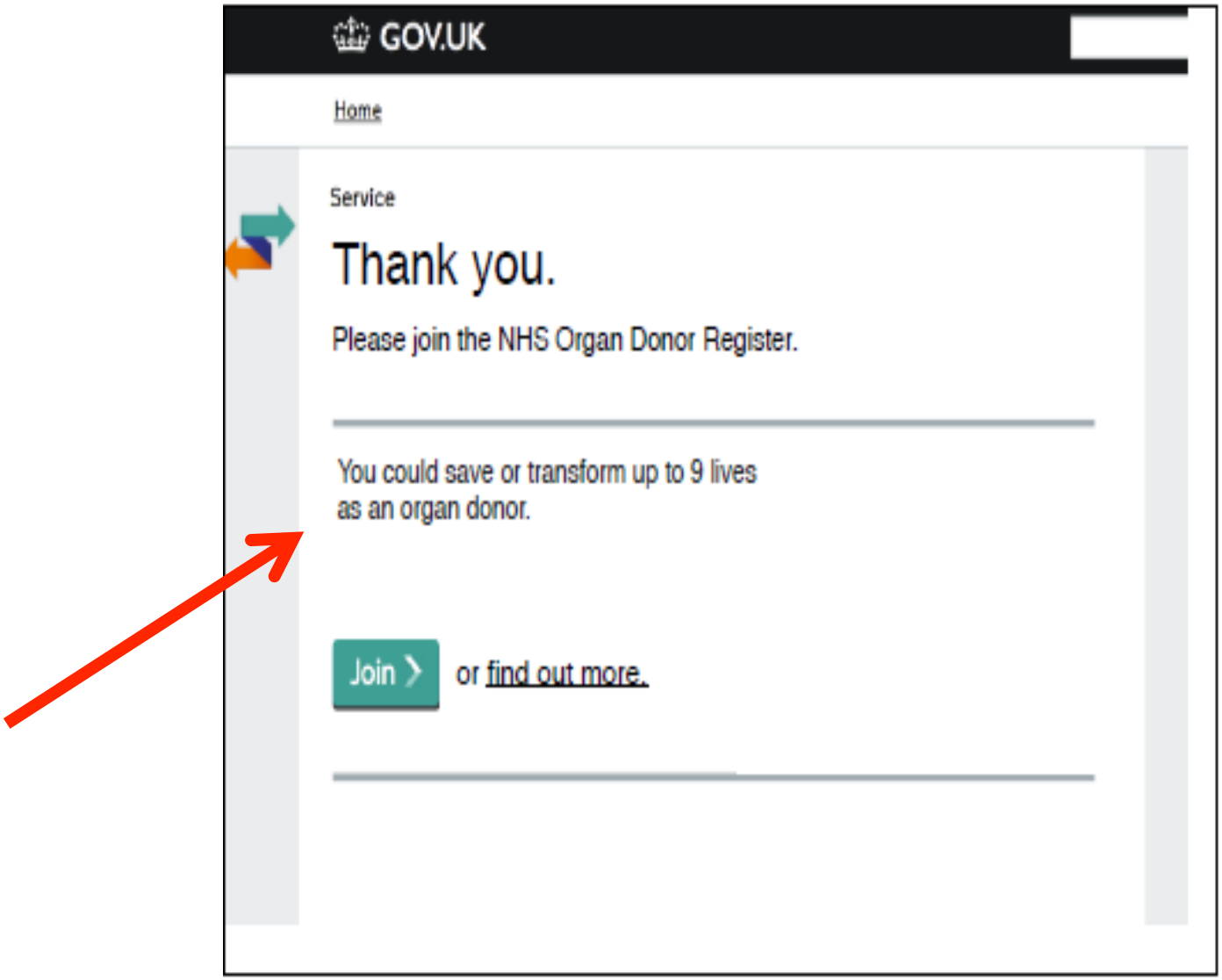
Three Die - Loss Aversion



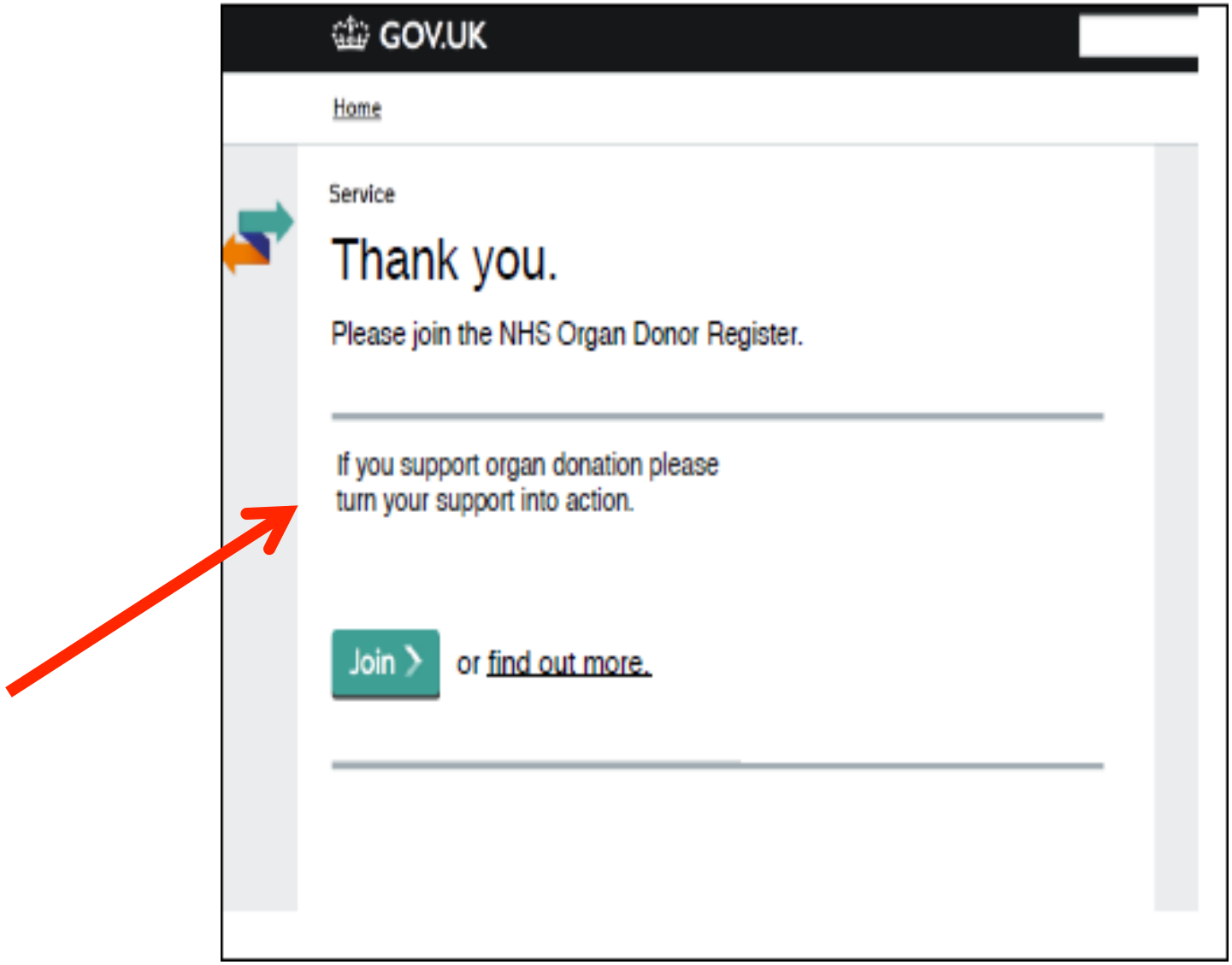
Reciprocity



Nine lives – Self-efficacy



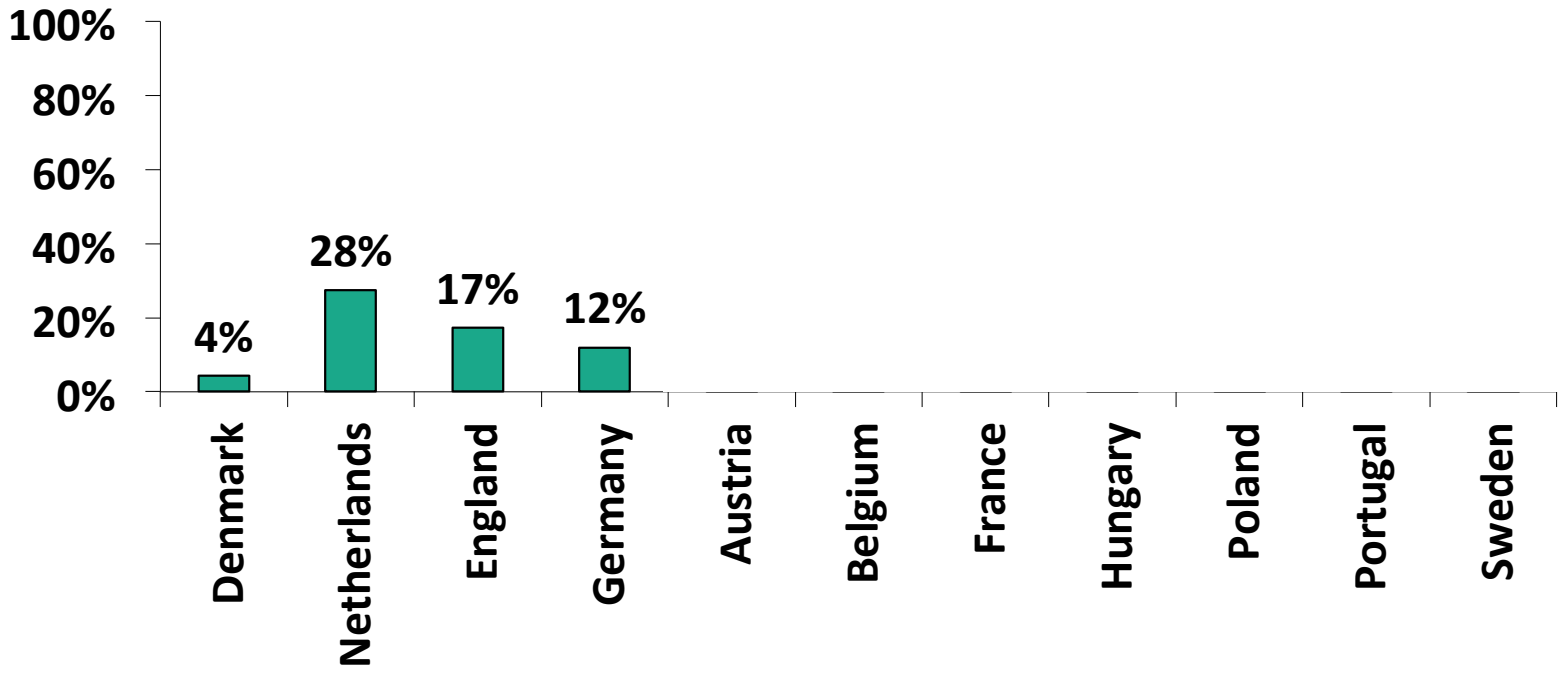
Action – hypocrisy induction



Results

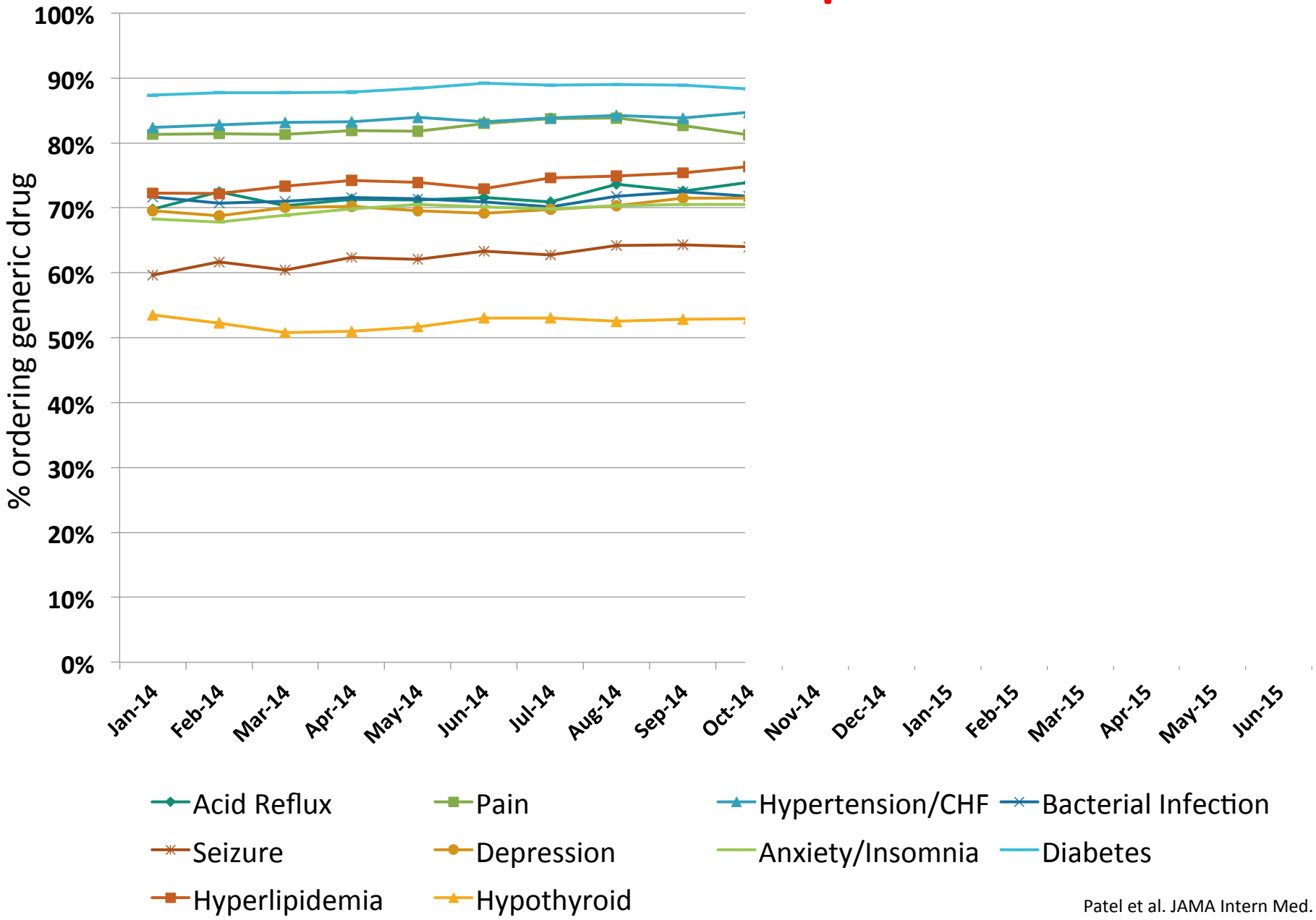
DO NOTHING.
Status Quo Bias:
People prone to sticking with defaults

Organ Donation Default

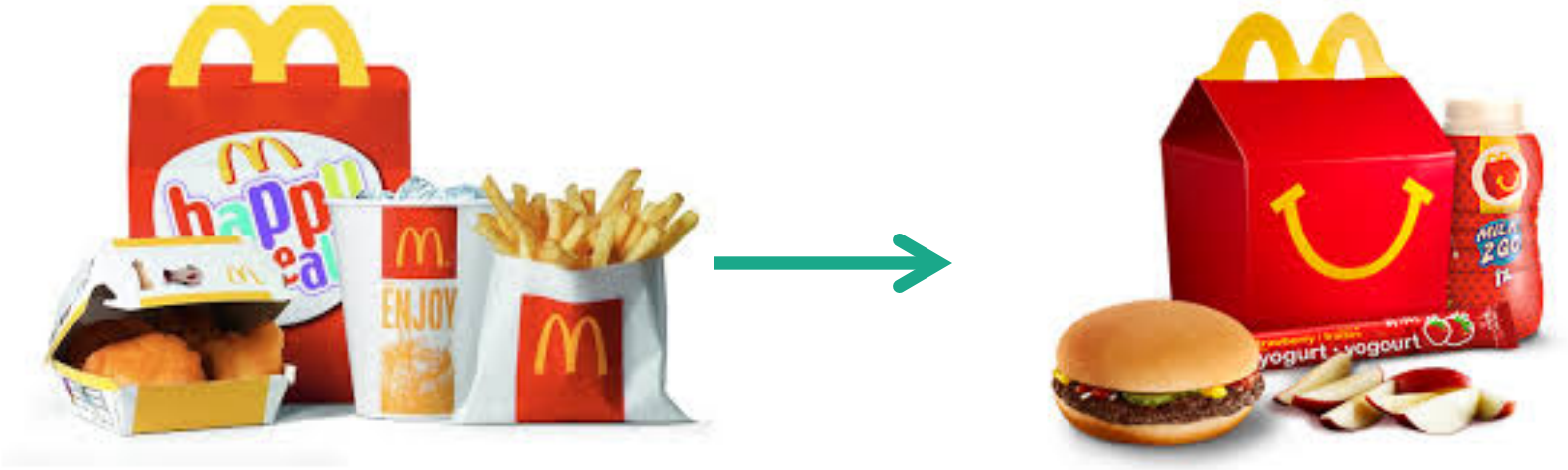


Johnson & Goldstein (2004)

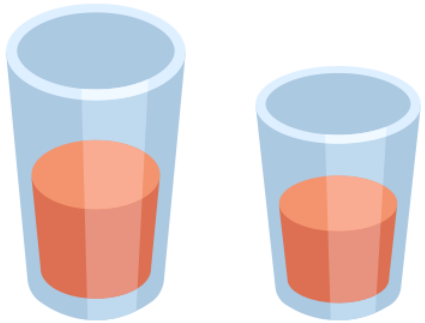
Default Prescriptions



Patel et al. JAMA Intern Med. 2016


ENJOY

Portion limit of 16 ounces on sugary drinks served in restaurants



4 Lab Experiments

90 min session, $25

Order drink at beginning

Given 40 cents for drink

Iced Tea or Lemonade

John, Donnelly, Roberto, in press, Psy Science

Bundling Beverages

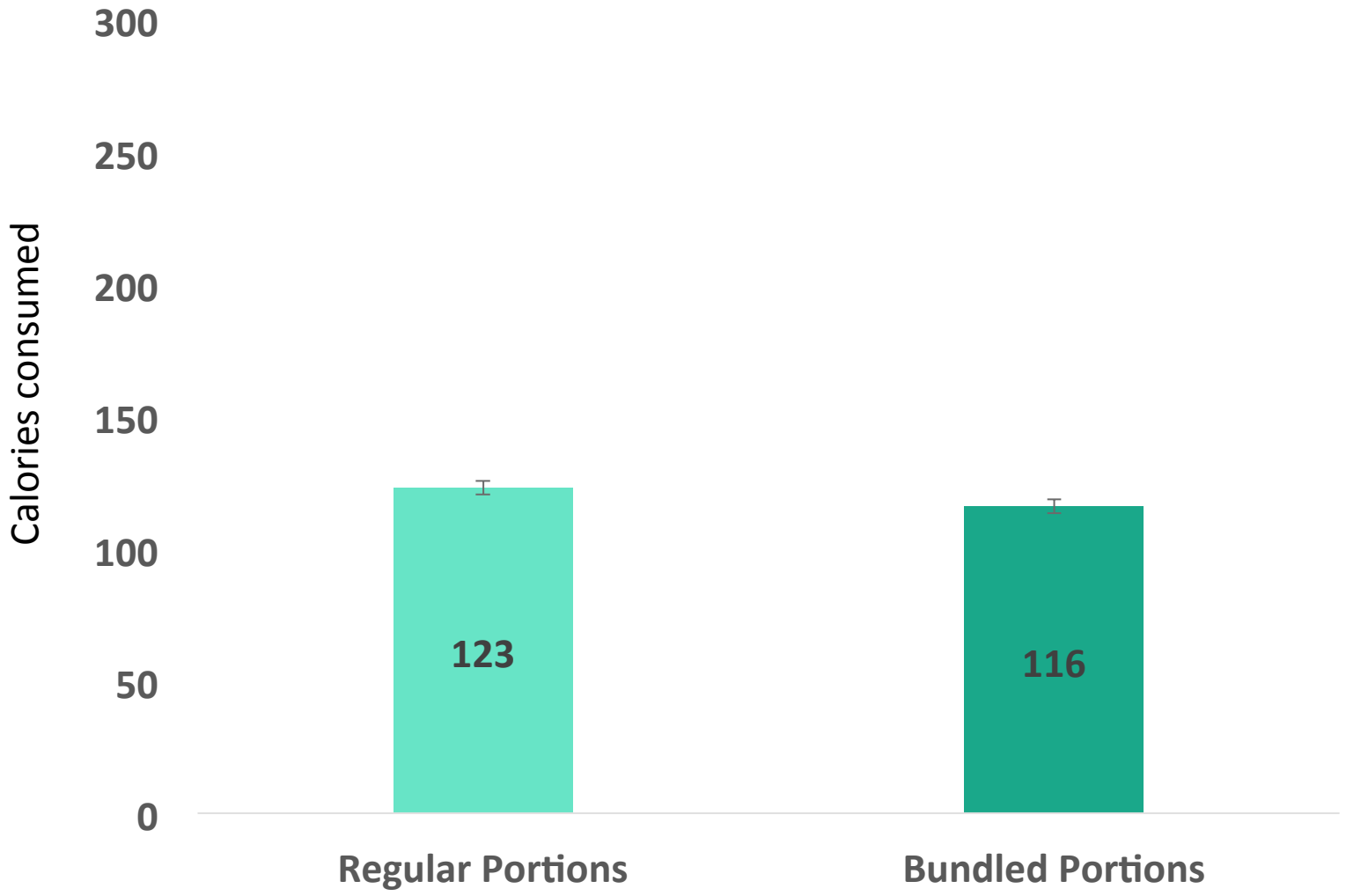
623 participants → 362 order a drink

Medium Size 20 cents	Large Size 30 cents

Regular Portions

Bundled Portions

Calories Consumed (N=362)



F (1,358) = 1.67, p = .20

Summary

- **Bundling did not backfire**

- **Might even help curb consumption**

Free Refills Manipulation

470 participants → 297 order a drink

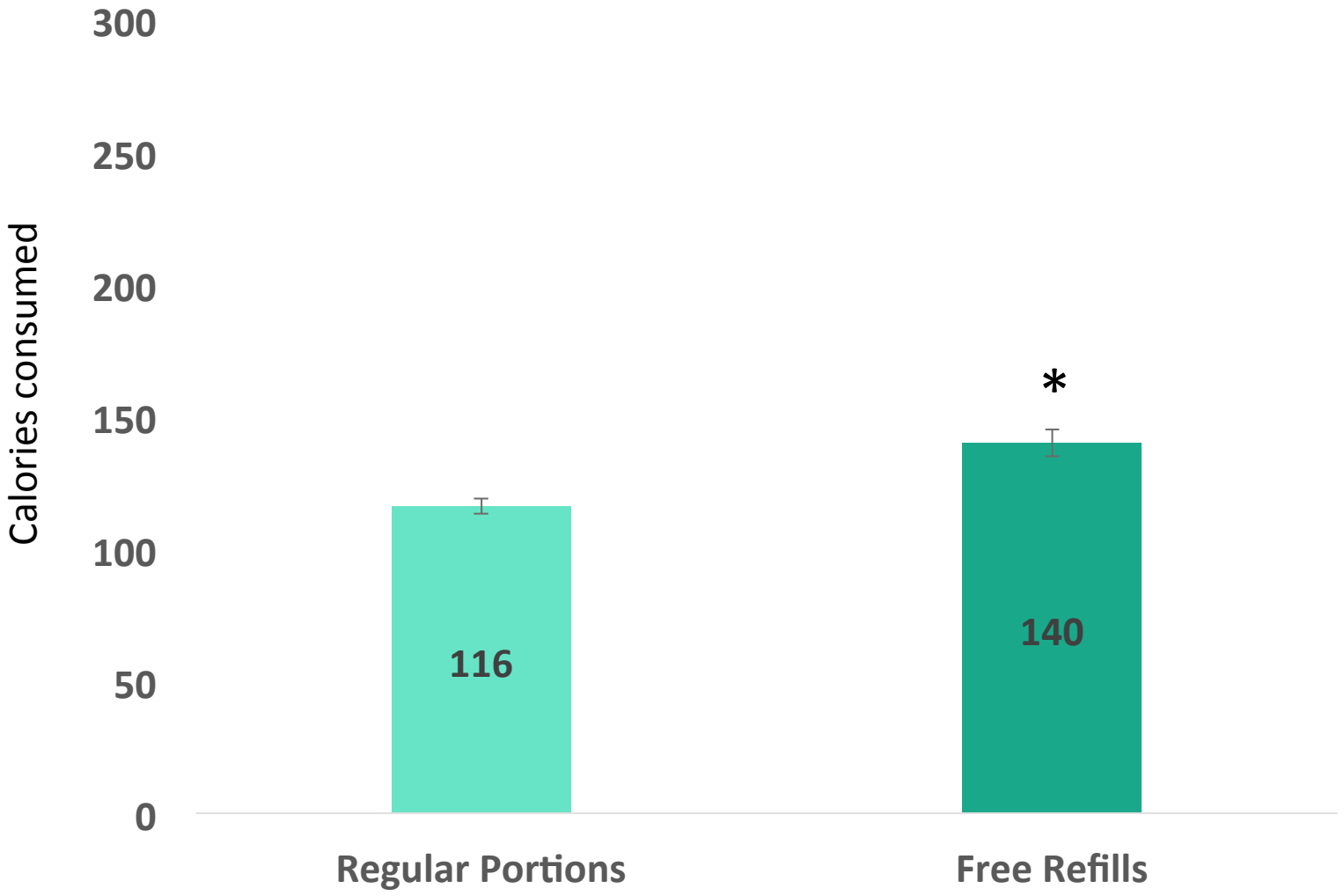
Medium Size	Large Size
20 cents	30 cents

Regular Portions

Portion Cap + Free Refills

Waiter vs. Self-Served

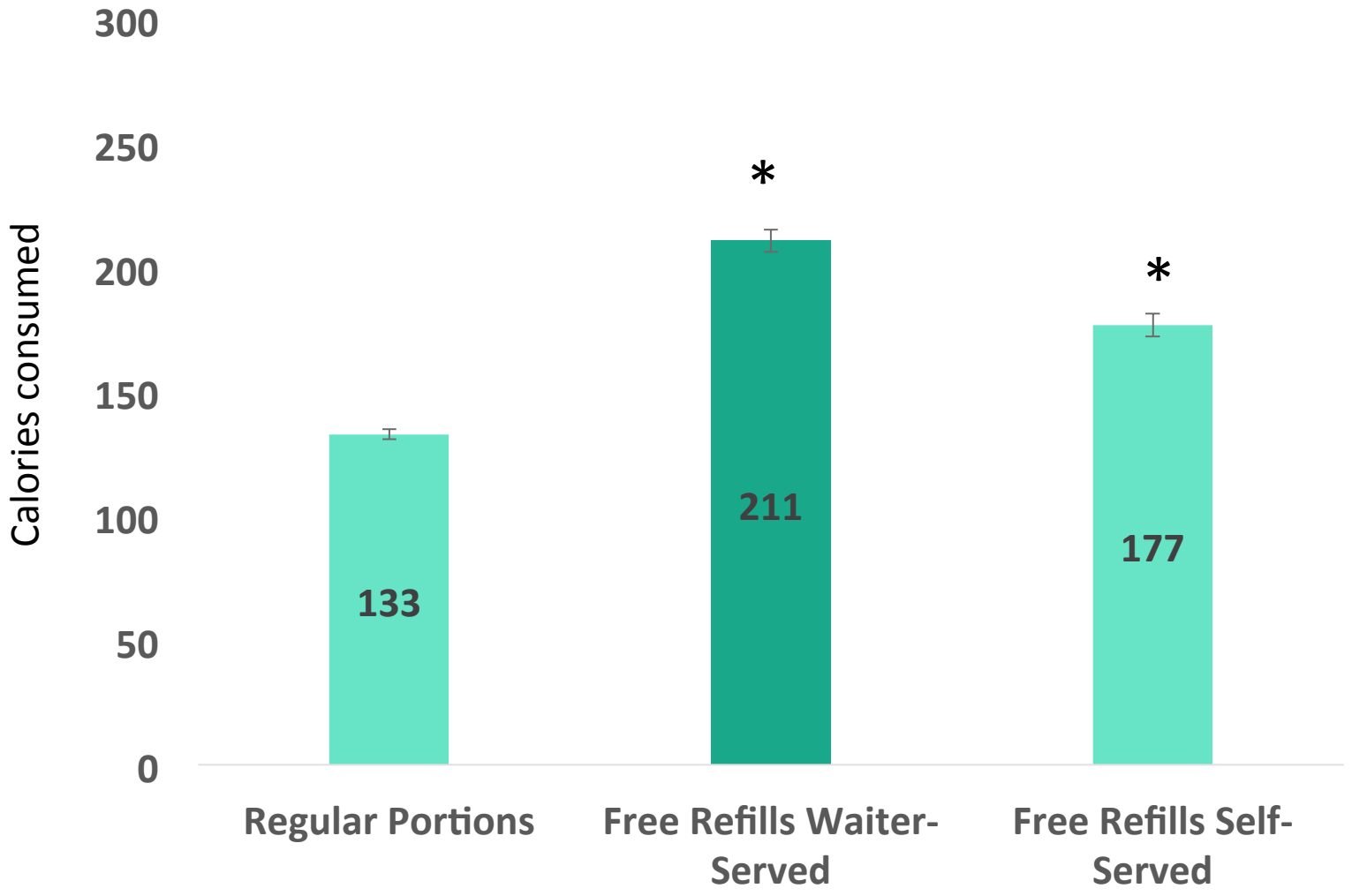
Calories Consumed (N=297)



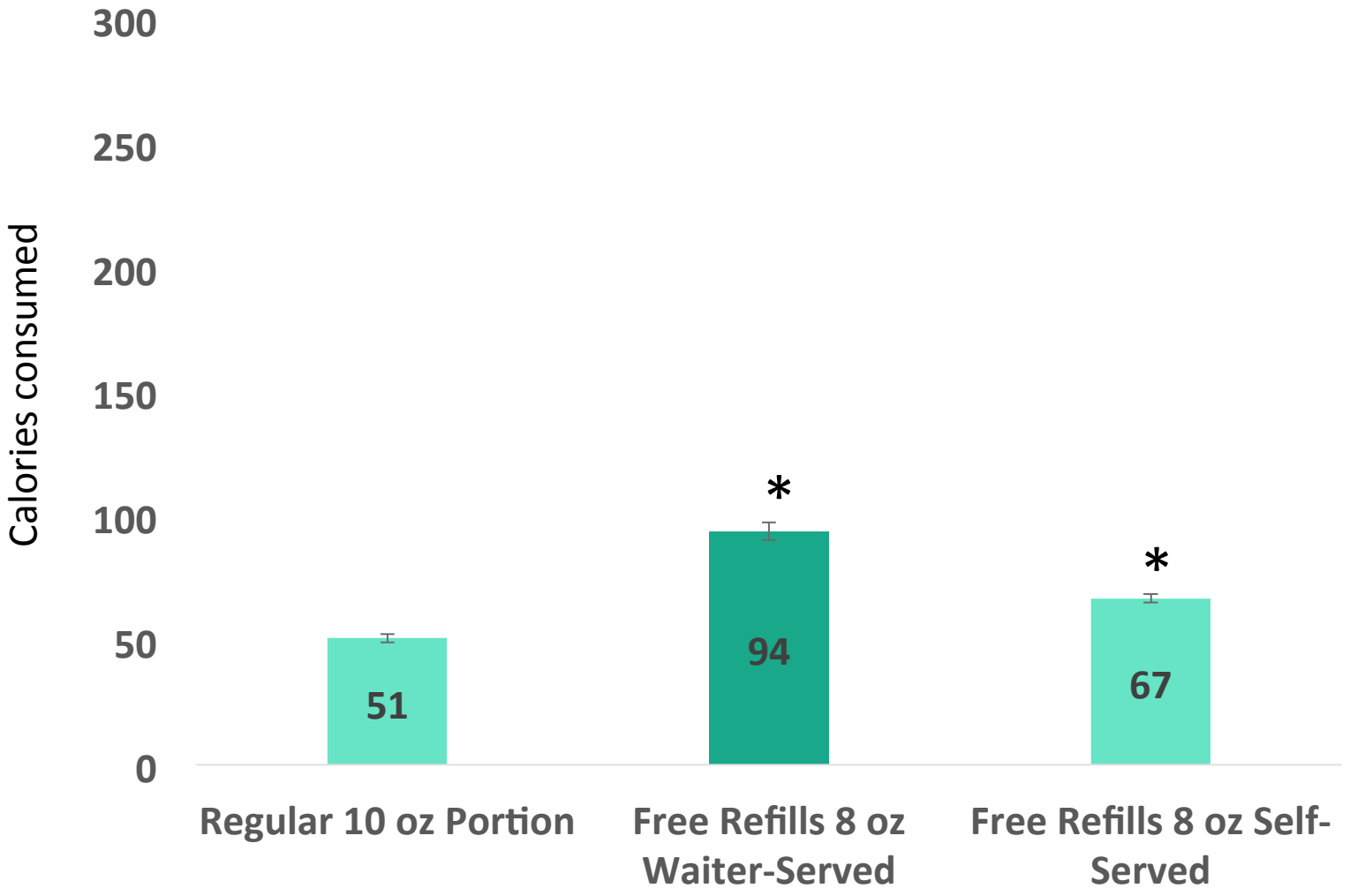
F (1,293) = 22.48 p <.0005

Waiter vs. Self-Served

Calories Consumed (N=557 → 341)



Calories Consumed (N=284 Given Drinks)



Summary

- Bundling did not backfire
- Free refills can backfire, but less so when self-served
- Need to study other portion limit contexts

Do not
become
too seduced

Christina A. Roberto
www.peachlab.org
@RobertoCA

peachlab
The Psychology of Eating And Consumer Health Lab

Search...

Home | About | Our Research | Teaching & Mentoring | Contact