Field Experiments

Overview and Applications

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Today's Agenda

Field Experiments

- **Overview**: What field experiments are and why we should care.
- **Application #1**: Turnout.
- **Application #2**: Vote buying.
- **Application #3**: Corruption.

Overview

Field Experiments

Overview

- **Lab experiments**: Highly **controlled but artificial** settings. **They tend to be context-less** (**?**).
- **Field experiments**: Conducted in **real-world settings** to test **context-specific hypotheses** (**?**), thus offering more realism.

  ☑ Field experiments are sometimes referred to as “**naturally occurring experiments**.”

- **Key question: Are natural experiments and field experiments the same?**

Field Experiments

Overview

- **Natural Experiments**:

  ☑ They take place in realistic/ naturalistic settings.

  ☐ **The researcher *does NOT* control assignment to treatment**.

  - **Examples?**

- **Field Experiments**:

  ☑ They take place in realistic/ naturalistic settings.

  ☑ **The researcher *does* control assignment to treatment**.

  - **Examples?**

Turnout

Application #1

Turnout

Overview

- Democracies require citizens to vote. Why?

  ☑ **Voting ensures preferences are aggregated into public policies reflecting most of society.**

- Unfortunately, low-income voters tend to vote less. Why?

  - **The key problem**: **this negatively impacts the representativeness of the redistributive policies they actually need the most.**

- **The key question**: How can we encourage more low-income voters to participate?

Turnout

Overview

- **One way to increase turnout is by increasing income.**
- Increasing income can **boost voter turnout** by:
  - **Enhancing education** (**?**).
  - **Strengthening political efficacy** (**?**).
  - **Improving politically engaged social networks** (**?**).
  - **Reducing political alienation** (**?**).

Turnout

Setup

- In Finland (Jan. 2017—Dec. 2018) there was the "**basic income**" **experiment** (**?**):
  - Their design: among the **unemployed** people, a BI of **€560** was assigned, such that:
    - Control (n=173,222): **transfer was conditional**; once the "employment condition" was met, the BI stopped.
      Employed folks received their salary.
    - Treatment (n=2,000): **transfer was unconditional**; if the "employment condition" was met, the transfer ***continued*** until December 2018.
      Employed folks received their salary + BI.
    - **The key question**: **What's causing higher turnout? *Conditionality* or *higher income*? Confoundedness.**

      ☑ It's all about the "**conditionality.**"

Turnout

Results

- What do they find? What's the **ATE** (?)
- The **ATE** (?) was 8%. Can you tell?

$$\text{ATE} = \hat{Y}_c - \hat{Y}_t$$

Are you familiar with the **"relative increase"**?

$$\text{Relative ATE change} = \frac{\text{Treatment group change}}{\text{Control group change}}$$

$$\text{Relative ATE change} = \frac{.029}{.359} = 0.08$$

TABLE 3 Average treatment effect.

	(1)	(2)	(3)	(4)
Basic income (BI) treatment	.029†	.027†	.028†	.027†
	(.016)	(.016)	(.015)	(.015)
Controls	No	Female Age Ln income	Female Age Ln income SES Education	Female Age Ln income SES Education
Municipality FE	No	No	No	Yes
Untreated $\bar{Y}$	.359	.359	.359	.359
Observations	54,522	54,516	54,516	54,516

Note: The outcome is voting in 2017. Municipality-level clustered standard errors in parentheses. Controls comprise gender, age, ln of pretax income, education groups, and socioeconomic status (SES) (profession) groups.
† $p < .10$, * $p < .05$, ** $p < .01$.

Turnout

Results

- The ATE is .08. **But what *exactly* is causing folks to vote more?**
  - Is it the **extra income** associated with the program? And if so, ***how exactly*?**
  - Is it instead that **income is causing something else**, e.g., "*trust in Parliament,*" that makes folks vote more**?** And if so, ***how exactly*?**
- This piece is nice because it offers additional evidence addressing possible ***causal* "*mechanisms.*"** That is, ***causal* "*channels*"** by which the BE ****causes**** higher turnout.
- What's that causal mechanism**?** And how is it calculated**?**

“turnout *does not* increase among treated participants who find a *new job*, and thus *receive additional income*. Instead, our *results seem to be driven by those who remain unemployed*[, that is, by those who have lower incomes].”

So, it's *not* income by itself

“While various mediators (?) such as political trust and efficacy also increase among [low-turnout] propensity voters, the actual turnout effect is concentrated among the marginals[, e.g., ‘voters who are on the fence about voting’].”

Vote Buying

Application #2

Vote Buying

Overview

- **Definition**: "**cash for votes**."
- Vote buying then is very **coercive** (**?**) and harms democracy. **Why?**
- One way to **decrease** vote buying is by implementing **educational programs**. They could,

  ☑ Increase **self-awareness** and **political efficacy**.

  ☑ Reaffirm the democratic principle of "**secret ballot**."

  ☑ **Highlight the illegal nature** of vote buying—**this paper's strategy**.

- **This piece is exactly about that**: **what happens when such a program is implemented in real life? Does it decrease vote buying? And why do we care?**

Vote buying

Results

- **This paper shows evidence of an educational program aimed at decreasing vote buying**.
- The **evidence** suggests that the program,

  ☑ Did decrease vote buying ****by decreasing turnout**** (**Proxy?**).

  ☑ And it **increased support for the incumbent**.

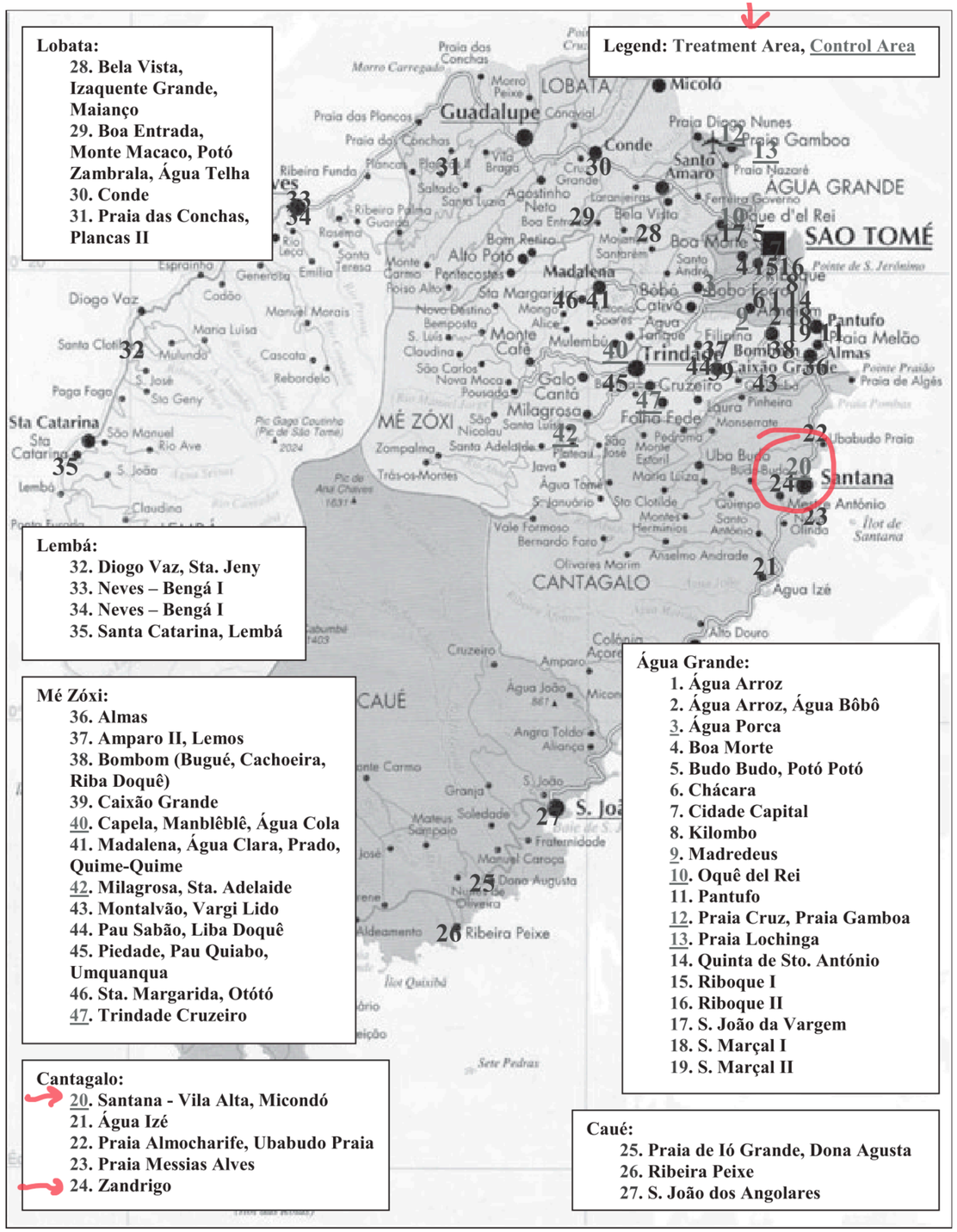
  ☑ **That is, it did change actual electoral outcomes**.

- **One important question: Since field experiments take place in *real* life ("the field"), what can *ethically* go wrong here?**

Vote Buying

Discussion

- Did you notice the **geographical distribution** of treated/control areas**?**
  - **Spillover effects: cross-contamination**.
- Trade-off: field experiments are more **realistic** (**good**), but the researcher has **less control over assignment to treatment** (**bad**).
- **SUTVA violation**: What is it**?** And how can this happen**?**



Vote Buying

Discussion

☑ The author does a nice job showing **covariate balance**.

- **How can you tell?**
- **What do you want to see in this table?**
- **Why is this important?**

	Baseline survey		
	Control	Treatment	Difference
Basic demographics			
Age	37.746	37.448	−0.297 (1.634) 0.790
Household size	5.187	5.272	0.085 (0.220) 0.696
Single	0.290	0.280	−0.009 (0.048) 0.798
Unmarried couple	0.576	0.635	0.059 (0.049) 0.246
Widow	0.059	0.032	−0.027 (0.029) 0.544
Married	0.036	0.029	−0.007 (0.014) 0.562
Schooling over primary level	0.539	0.468	−0.071 (0.057) 0.266
Number of children	4.043	4.082	0.039 (0.316) 0.992
Children in primary school	0.481	0.481	0.000 (0.044) 0.992
Children in secondary school	0.273	0.270	−0.002 (0.046) 0.984
Malaria in the household	0.441	0.472	0.031 (0.048) 0.494
Nationality, ethnic group, and religion			
STP nationality	0.984	0.966	−0.018 (0.013) 0.162
CV nationality	0.019	0.027	0.008 (0.011) 0.462
Forro	0.705	0.561	−0.145* (0.081) 0.098*
Angolar	0.080	0.184	0.104** (0.042) 0.030**
Contratado	0.042	0.045	0.003 (0.030) 0.938
Catholic	0.090	0.122	0.031 (0.022) 0.144 0.049

Corruption

Application #3

Corruption

Overview

- **Does corruption motivate voters to vote, or crushes hope and decreases turnout?**

  ☑ This is a great question, and one can think of **arguments going in both ways** (**?**).

- In political science there is this very old theoretical framework called "**retrospective voter**" (**?**). Why does it matter for political campaigns**?**

- Thus, what happens when voters learn about the percentage of resources the mayor spent in a corrupt manner**?**

  ☑ This experiment is just about that.

Corruption

Setup

- 450 **treatment** and 1,910 **control flyers** where distributed between treated and untreated voting precincts.
- Both flyers are the same, but:
  - **Treatment flyers**: graph about **percentage of resources spent in a corrupt way**.
  - **Control flyers**: graph about **other information**.

Treatment

Control

Corruption

Results

- What do the authors find**?**
- The **corruption-information treatment** decreased:
  - **Turnout** by 2.5% (again, a **proxy**!)
  - **Electoral support for the incumbent** in 2.5% too.
- **Again, fields experiments do alter real-life (electoral) outcomes**.

Field Experiments

Conclusion

- **Natural Experiments**:
  - ☑ They take place in realistic/ naturalistic settings.
  - ☑ Have real-life consequences.
  - ☐ **The researcher *does NOT* control assignment to treatment**.
  - ☐ **Ethical consequences**: **not** the researcher's responsibility.
    "It would have happened anyways"

- **Field Experiments**:
  - ☑ They take place in realistic/ naturalistic settings.
  - ☑ Have real-life consequences.
  - ☑ **The researcher *does* control assignment to treatment**.
  - ☑ **Ethical consequences**: the researcher's responsibility.
    It is the researcher's design/doing.

Thank you