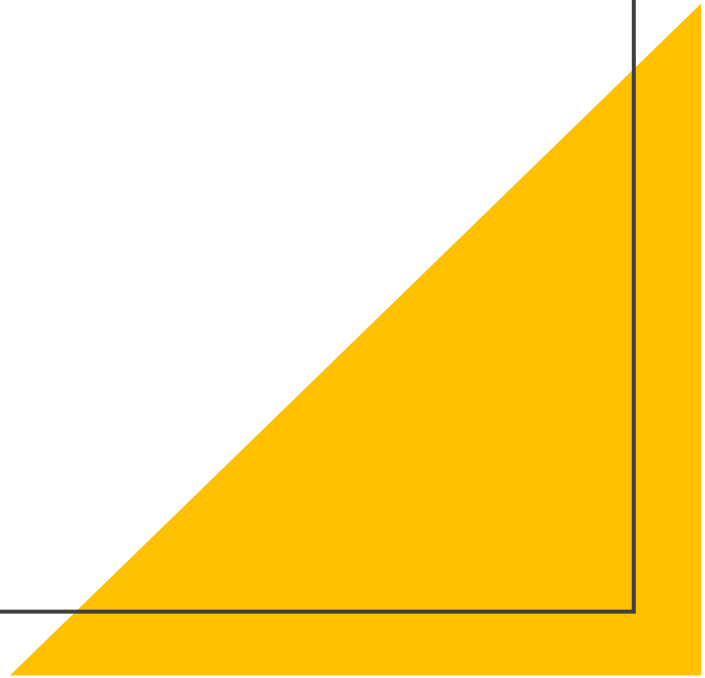




# Experiments

**Doing Political Research**



# Observational and Experimental Research

## Observational studies

- We observe subjects (people, institutions, regions etc) without controlling the independent variable, which is not randomly assigned

## Experimental studies

- We control and randomly assign values of the independent variable to the subjects

## Natural experiments

- The independent variable is randomly assigned by some form of 'natural' process

# Why Experiment?

- Observational studies have problems with endogeneity
  - Does X cause Y, Y cause X or Z cause X and Y?
  - For example, how does the newspaper you read affect your vote choice?
- Experimental studies help us to make causal inferences by randomising who gets the 'treatment' (the independent variable)
- But experiments are only suitable for certain types of projects and must be designed very carefully

# An Early Political Research Experiment

In 1940, Hadley Cantril asked c3000 Americans either:

Do you think the U.S. should do more than it is now doing to help England and France?

13% said Yes

Do you think the U.S. should do more than it is now doing to help England and France *in the fight against Hitler?*

22% said Yes

The 'Hitler effect' was  $22\% - 13\% = 9\%$  points



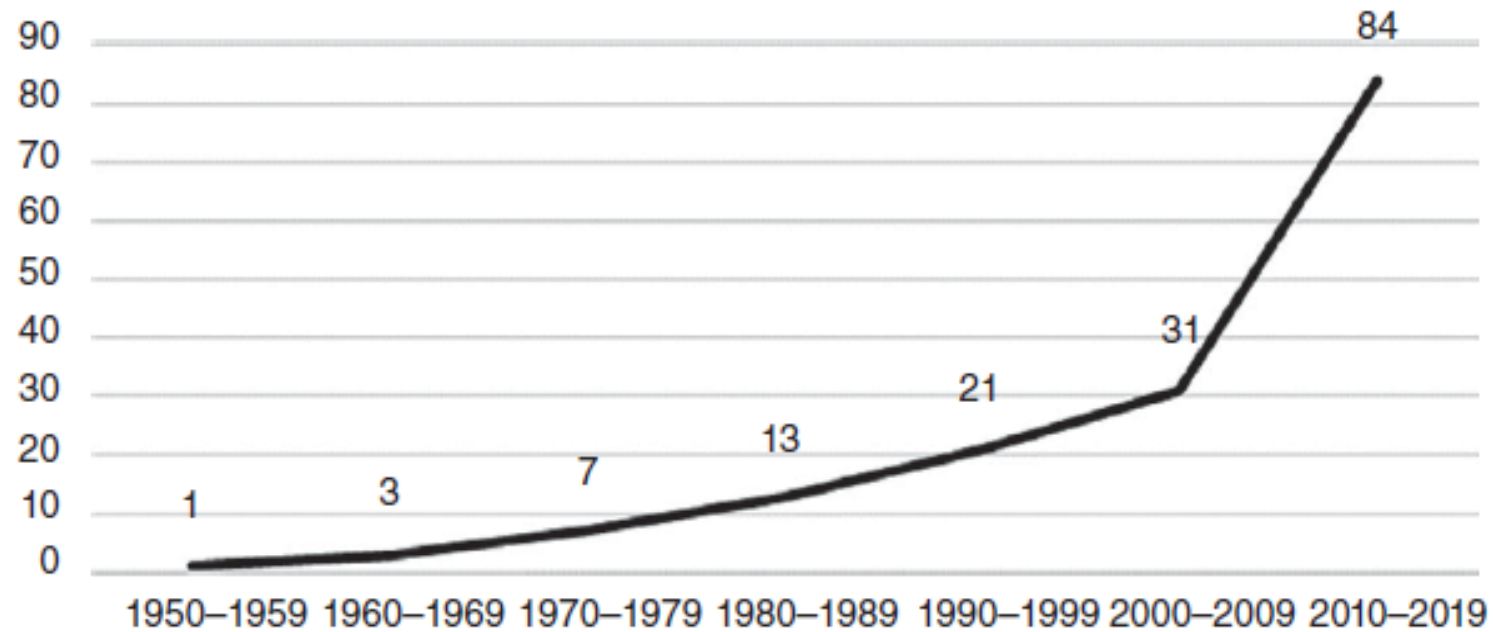
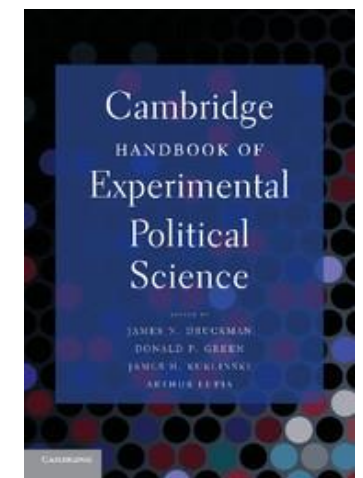
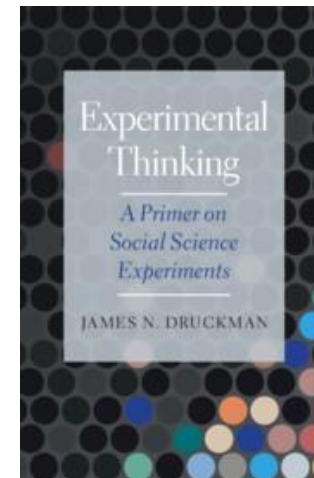
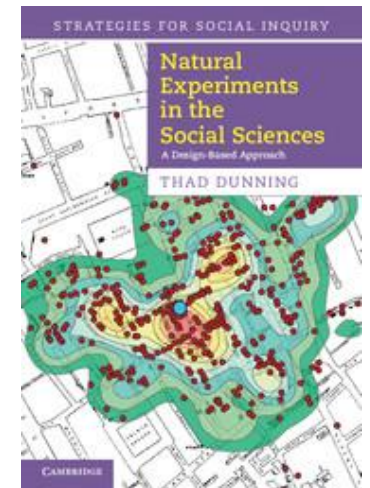
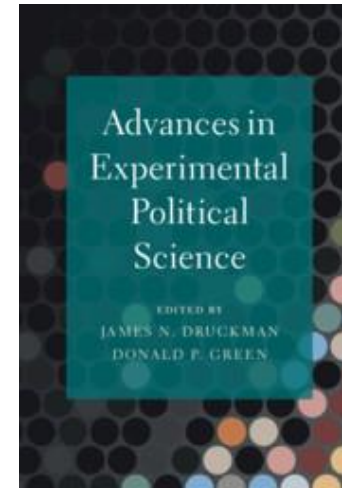


FIGURE 1.1. *American Political Science Review* experimental articles by decade

The Rise of  
Experiments  
in Political  
Research  
(Druckman  
2022)

# Why the Rise in Experiments?

- Increased computing power
- Easier to find participants through mobile phones, the internet etc
- Methodological developments and shared standards for experimental research
- Improved research infrastructure





# Types of Experiment



Lab

Survey

Field

Natural

---

# Lab Experiments

- You invite a group of people to play a game or simulation
- The rules, set-up or types of players are varied randomly to see how they effect the outcomes of the game
- For example, the Dictator Game
  - one player is given a sum of money and can choose to divide it between themselves and another player in any way they want
  - the other player can either accept the division and keep the money allocated or reject the division, in which case neither player keeps the money
  - can be varied in terms of who the players are, how much money is given, whether the players are observed, how many rounds are played
- Lab-in-the-field experiments: conduct the game in the community in a more realistic setting



# Field Experiment

- Experiment run in a natural setting, benefitting from greater realism
- For example, Gerber and Green (2000) contacted 30,000 voters in New Haven with non-partisan get-out-the-vote message by a) personal canvassing b) post and c) phonecalls before the 1998 US election
- Personal canvassing had a strong effect, post a small effect and phonecalls no effect
- Audit experiments are a type of field experiment which send a variety of messages to a certain set of organisations and see how many respond and in what way

## The Effects of Canvassing, Telephone Calls, and Direct Mail on Voter Turnout: A Field Experiment

ALAN S. GERBER and DONALD P. GREEN *Yale University*

*We report the results of a randomized field experiment involving approximately 30,000 registered voters in New Haven, Connecticut. Nonpartisan get-out-the-vote messages were conveyed through personal canvassing, direct mail, and telephone calls shortly before the November 1998 election. A variety of substantive messages were used. Voter turnout was increased substantially by personal canvassing, slightly by direct mail, and not at all by telephone calls. These findings support our hypothesis that the long-term retrenchment in voter turnout is partly attributable to the decline in face-to-face political mobilization.*

During the last half-century, a dramatic transformation has occurred in the manner in which voters are mobilized. The election campaigns described by Gosnell (1937), Sayre and Kaufman (1960, chap. 6), and Wolfinger (1974, chap. 4) relied heavily on face-to-face contact between voters and those seeking their support. Notably absent from such accounts are professional campaign consultants, direct mail vendors, and commercial phone banks, all of which have gradually replaced work performed by party activists. The advent of modern campaign tactics (Broder 1971; Ware 1985) has coincided with a decline in the proportion of adults who report working for a political party. Based on an annual aggregation of Roper surveys between 1973 and 1994, Putnam (2000, 41) reports a steady decline in this proportion: Whereas 6% of the public reported working for a political party in the early 1970s, just 3% did so in the mid-1990s.

At the same time, there has been a marked decline in the size and vitality of nonpartisan organizations. In the mid-1960s, 2.4 of every 1,000 women over the age of 20 belonged to the League of Women Voters, compared to .79 in 1998 (Putnam 2000, 438–44). A similar fate has befallen such civic organizations as the Lions, Rotary, and Kiwanis Clubs, which have experienced sharp membership declines since the 1960s. Due to the changing character of both partisan and nonpartisan organizations, voter mobilization has become increasingly impersonal, and messages that once might have been delivered in person are now communicated using mass marketing techniques.

The decline of personal mobilization has arguably contributed to the erosion of voter turnout in the United States since the 1960s. This hypothesis is related to, yet distinct from, Rosenstone and Hansen's (1993) contention that diminishing rates of turnout are a result of a decline in the volume of mobilization

activity. As Abramson, Aldrich, and Rohde (1998, 85) point out in their discussion of Rosenstone and Hansen, there has been no clear trend over time in the proportion of American National Election Study (ANES) respondents who report some form of contact with political parties or campaigns, whether personal or impersonal. When read in conjunction with the trend lines compiled by Putnam, the ANES data are consistent with the view that campaigns are reaching as many people as ever but through less personal means.

Our hypothesis about declining turnout rates rests on the claim that personal canvassing mobilizes voters more effectively than other modes of contact that have taken its place, such as direct mail or telephone appeals. The literature on collective action and prosocial behavior supports this conjecture. Studies of blood donations, recycling, and "good deeds" underscore the importance of delivering urgent requests and making vivid the obligation to act (Christensen et al. 1998; Wang and Katzev 1990), and these blandishments seem particularly effective if delivered in person (Spaccarelli, Zolik, and Jason 1989). The special force of face-to-face contact is illustrated by Reams and Ray (1993) and Jason et al. (1984), whose experiments demonstrate that recycling and blood donations are particularly responsive to in-person appeals.

There is good reason to suspect that personal canvassing is an effective means by which to mobilize voter turnout, but its effects have seldom been gauged reliably. Nonexperimental studies, beginning with Kramer (1970), tend to rely on survey data to examine the relationship between turnout and reported contacts with political organizations or candidates (Blydenburgh 1971; Cain and McCue 1985; Caldeira, Clausen, and Patterson 1990; Kramer 1970; Lupfer and Price 1972; Price and Lupfer 1973; Wiehhouwer and Lockerbie 1994; see also Huckfeldt and Sprague 1992). Rosenstone and Hansen (1993), for example, regress reported voter turnout on reported contact with candidates or political parties. An important drawback to this approach is that political contact may not be an exogenous predictor of turnout. If parties direct their appeals disproportionately to committed partisans, those most likely to vote will also be most likely to receive contact, and the apparent link between contact and turnout may be spurious. Regression analyses generally include a host of control variables, but it is

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The authors are grateful to the Smith Richardson Foundation and the Institution for Social and Policy Studies at Yale, which funded this research but bear no responsibility for the content of this report. We are grateful to the League of Women Voters, New Haven Chapter, to Barry McMillion and Claire Nee, who coordinated the voter mobilization campaign.

# Survey Experiments

## Question wording experiments

- Randomly change the question wording
- For example, there is more support for 'Assistance to the poor' than 'Welfare'

## Vignette experiments

- Ask respondents to read a randomly-varying passage or watch a randomly-varying video before answering the questions

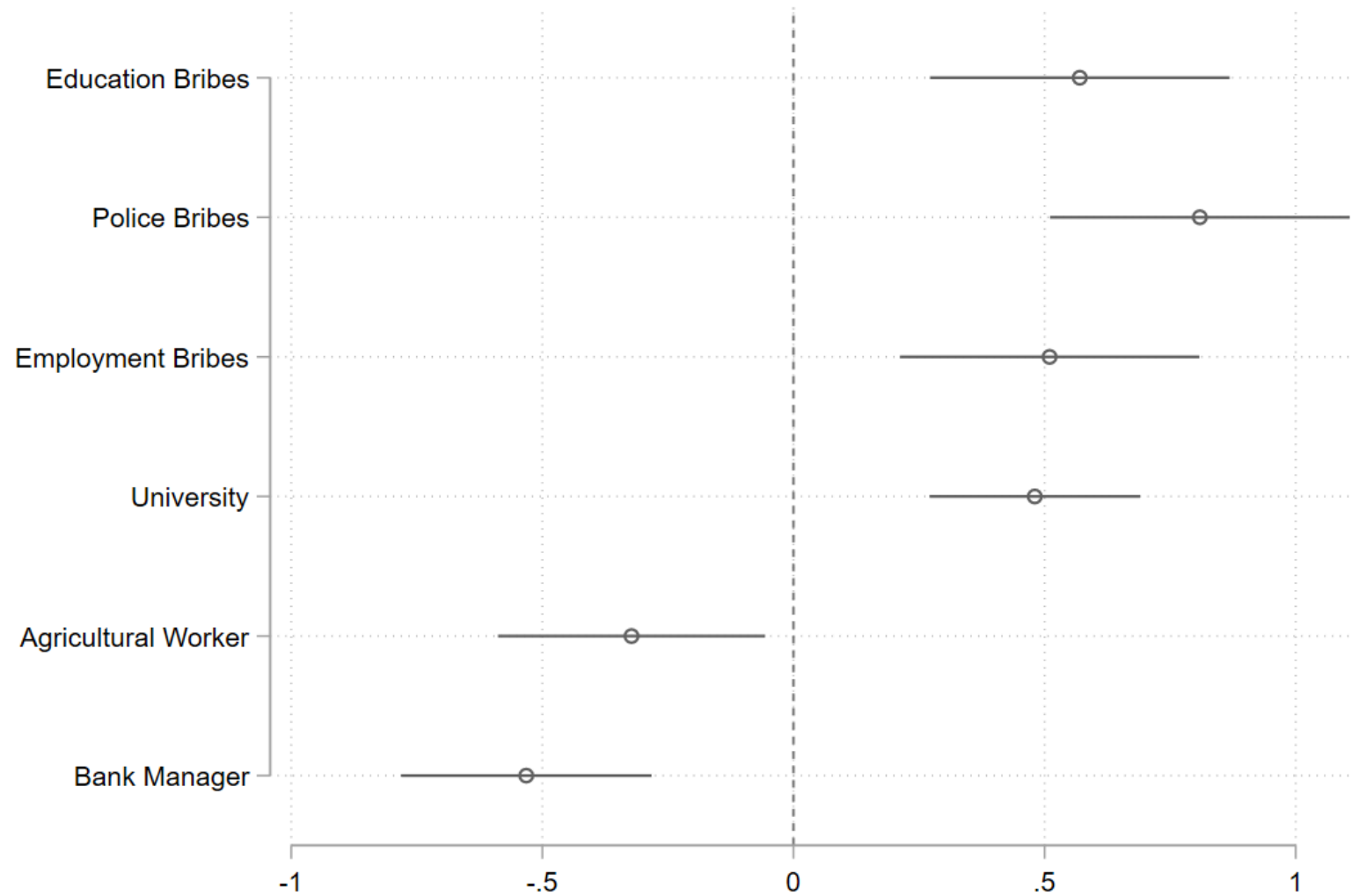
## List experiments

- Give half the respondents a list of innocuous attitudes/behaviours and ask how many they hold/do
- Give the other half the same list with one extra sensitive item
- Looking at the difference in the mean average between the two halves gives us the percentage of respondents who had/did the sensitive attitude/behaviour

# Vignette Experiment

## Example: Corruption and Emigration in Kenya

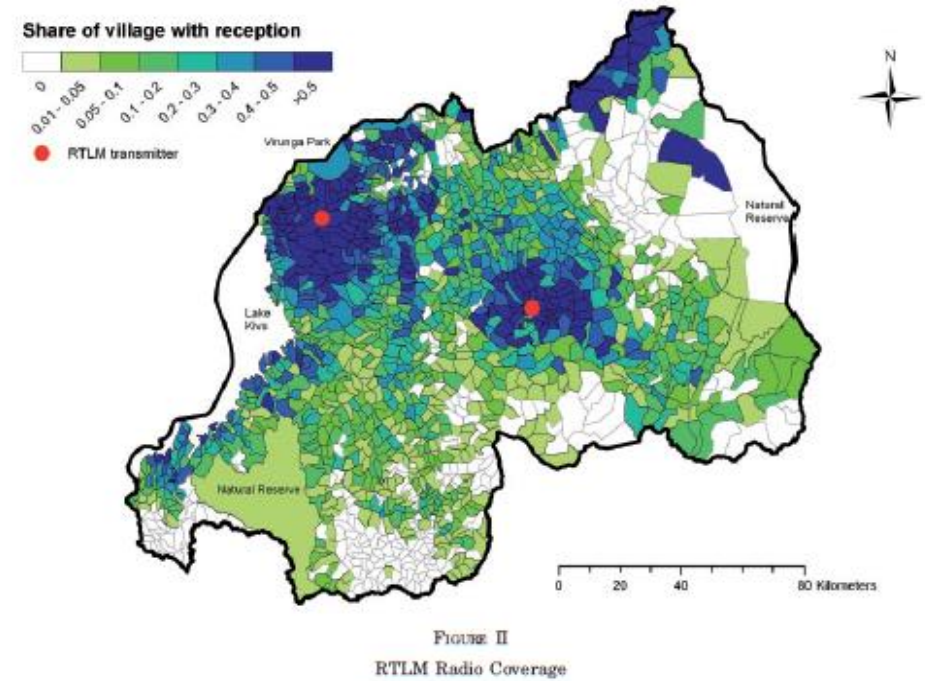
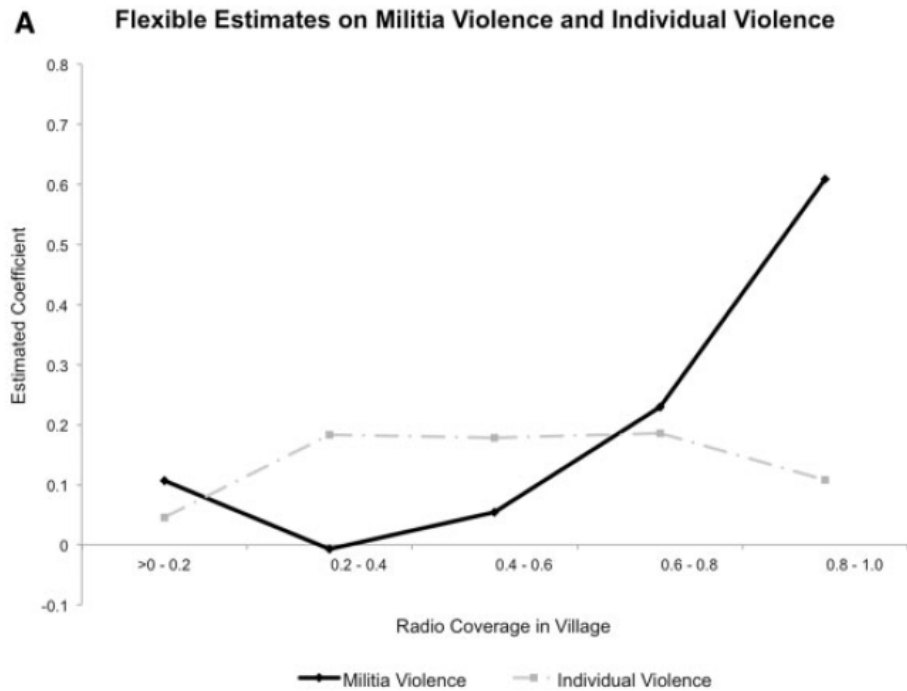
- Do corruption experiences drive emigration?
- Mobile phone app survey completed by 1200 Kenyans
- Randomised vignette:
  - "Peter is a 30-year-old resident of Nairobi. He is married and has a 9-year-old son who attends primary school. Peter has a [primary school/university] education and is currently [unemployed and looking for work/a self-employed agricultural worker/employed as a bank manager]. [Blank/He has been told that he needs to pay bribes for his son to attend a better-performing secondary school./ He sometimes pays bribes to the police to avoid a problem even though he has committed no crime./He has been told that he needs to pay bribes to obtain better employment opportunities.]"
- Question: "To what extent do you agree that Peter would benefit from emigrating to another country?"



Vignette  
Experiment  
Example:  
Corruption  
and  
Emigration in  
Kenya

# Natural Experiments

- Find a 'natural' process which randomises who receives a treatment
- Compare the 'treated' units with the 'control' units
- For example Yanagizawa-Drott (2014) studied the effect on subsequent violence of an anti-Tutsi radio station in Rwanda before the 1994 genocide
- Radio reception was randomly distributed according to topography



## Natural Experiments

- The Radio Télévision Libre des Mille Collines was responsible for 10% of the violence in the Rwandan genocide



# Problems with Experiments

- Generalisability from convenience samples
  - Realism of experimental treatments
  - Narrow range of questions that can be answered
    - Too many micro-studies
    - Very few true natural experiments
  - Focus on theory-testing rather than theory-building
-

# Conclusion

- Experiments are a powerful method for uncovering causal explanations in political research
- They come in many flavours: lab, field, survey and natural
- Randomisation is key to a good experiment
- Experiments are difficult to design and only suitable for certain research topics/contexts