

PSC 202

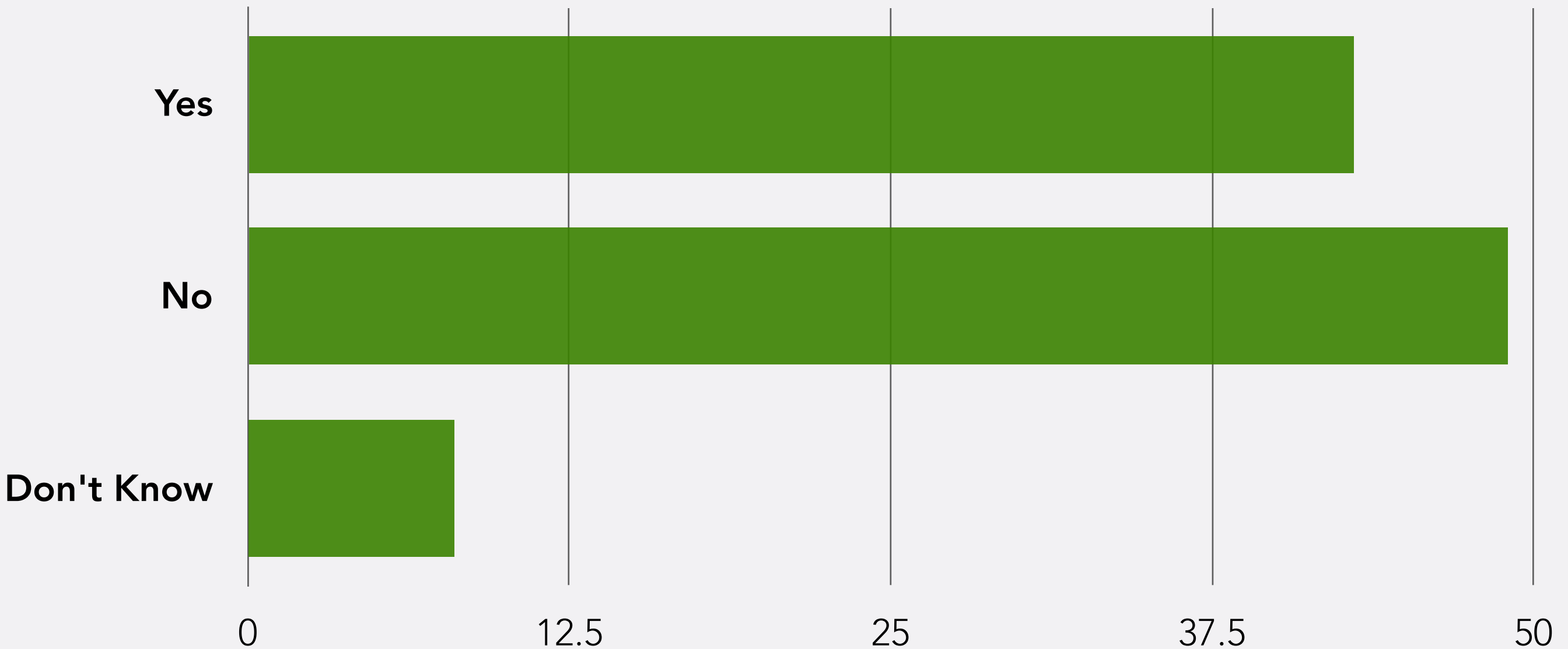
SYRACUSE UNIVERSITY

# INTRODUCTION TO POLITICAL ANALYSIS

MORE ON QUALITATIVE ANALYSES

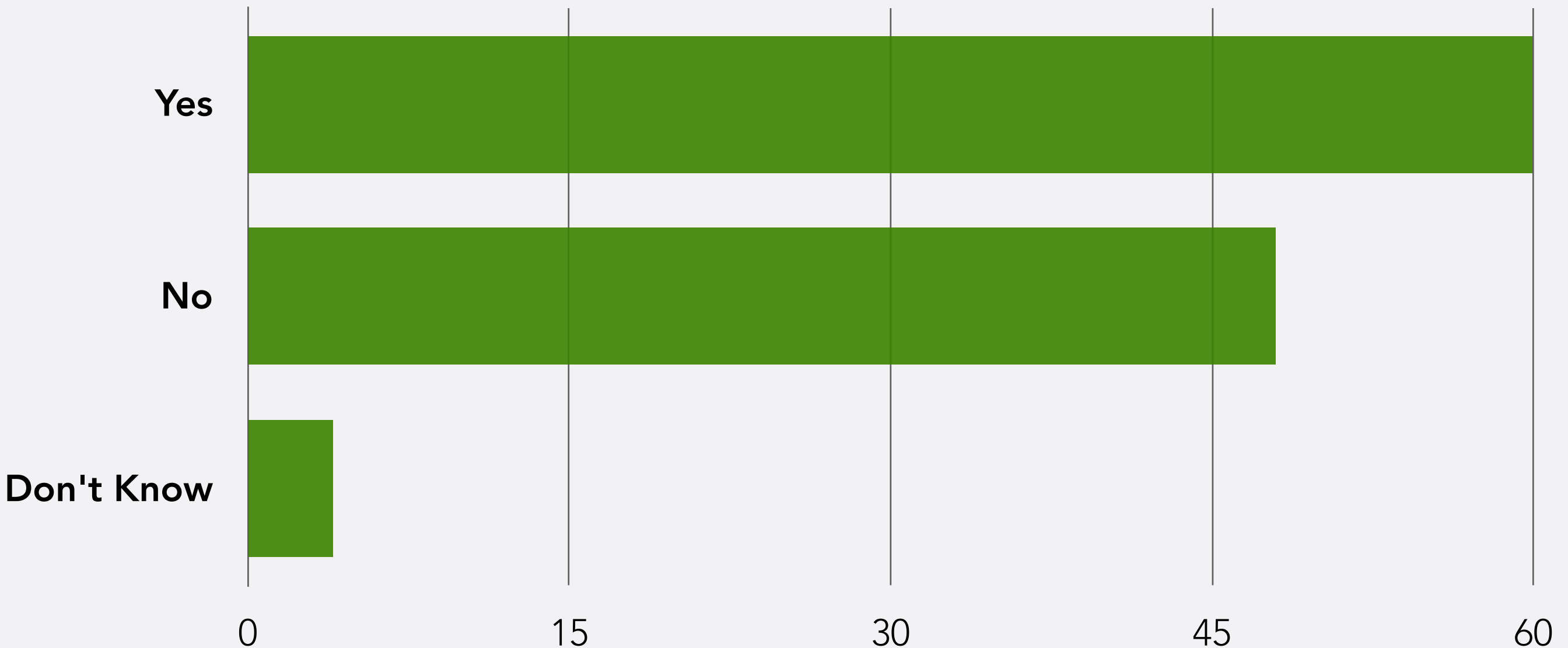
# SURVEY

- Have you taken out a student loan?



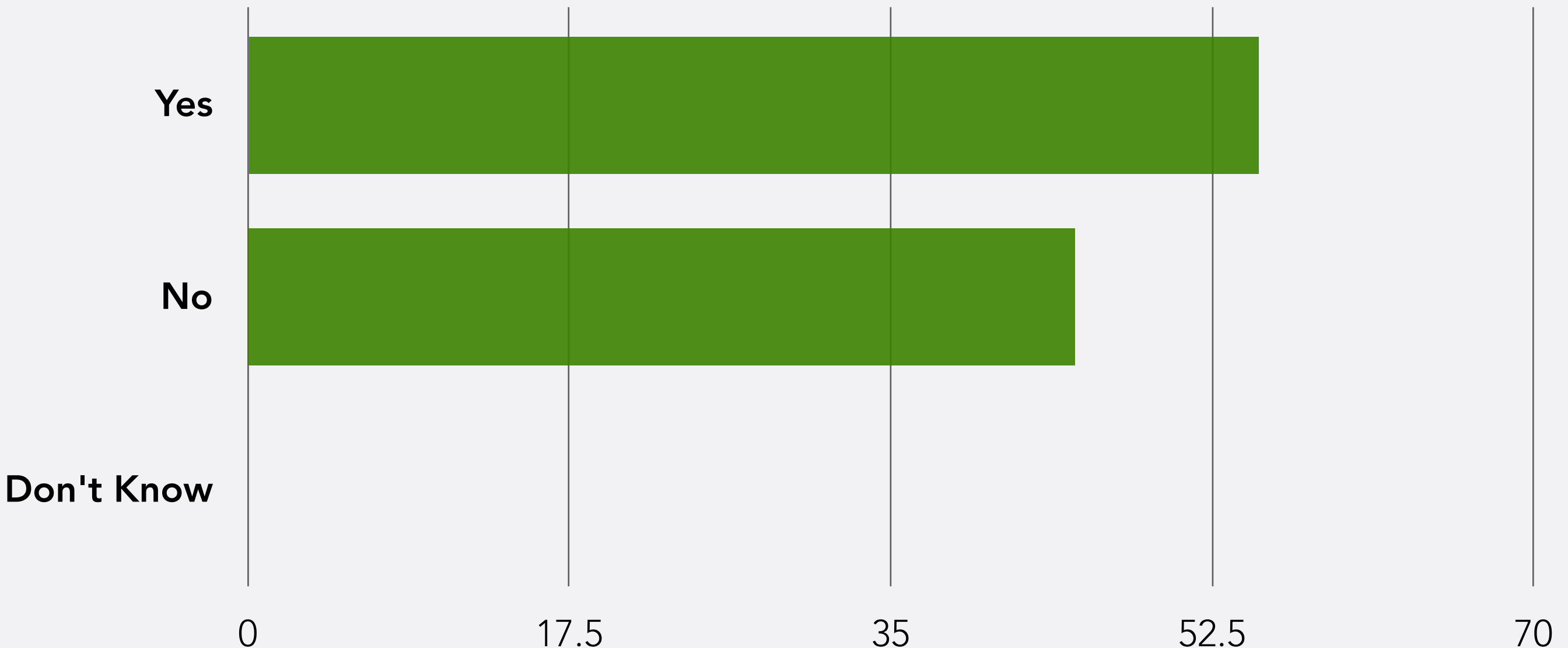
# SURVEY

- Did you receive tutoring for standardized tests (e.g. SAT)?



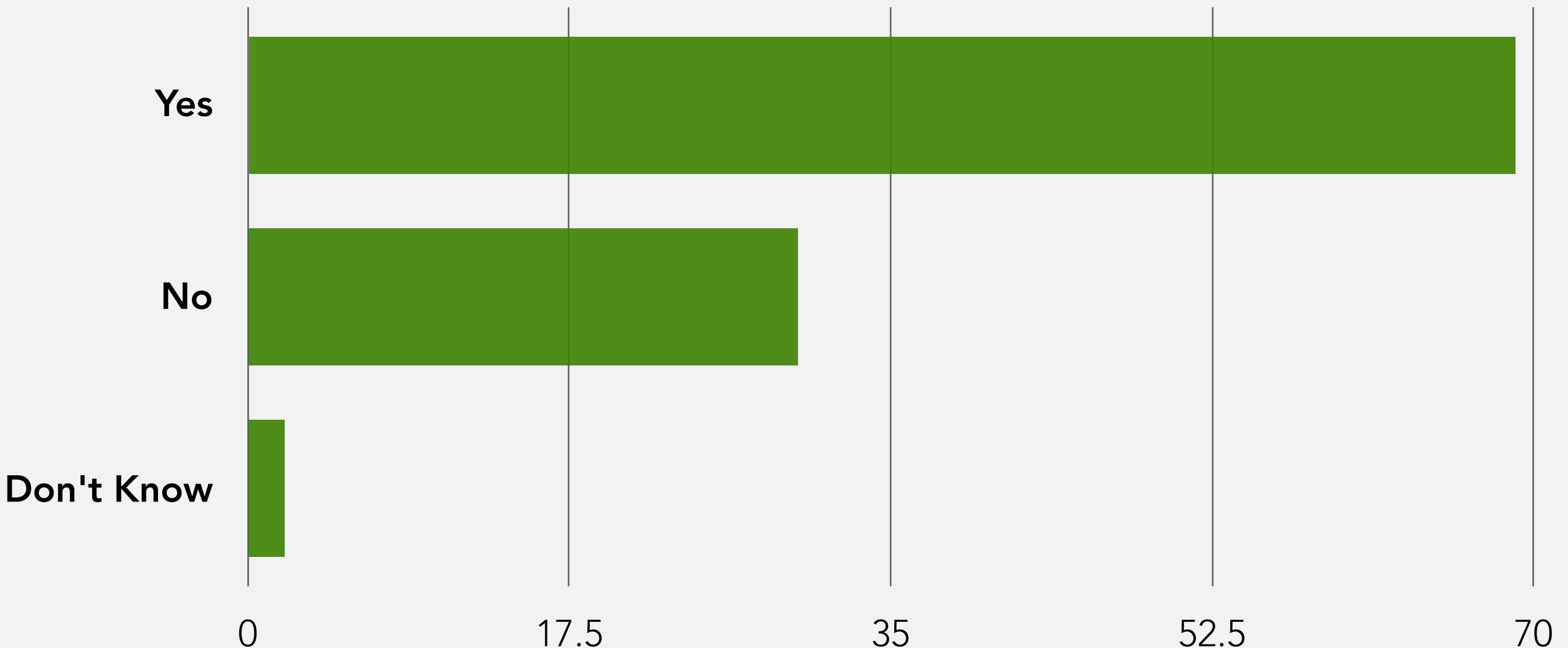
# SURVEY

- Did you receive tutoring for standardized tests (e.g. SAT)?
  - Only students *with* student loan



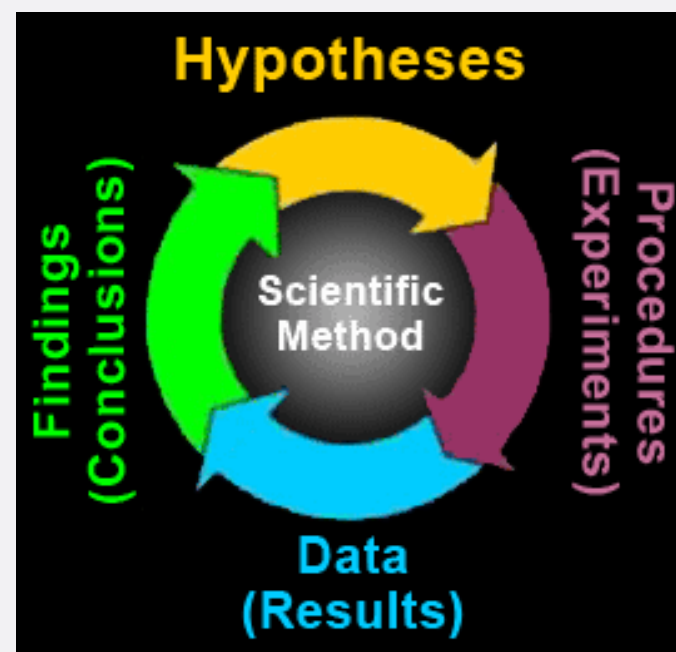
# SURVEY

- Did you receive tutoring for standardized tests (e.g. SAT)?
  - Only students *without* student loan



# WHERE WE ARE

- Formulate research question
- Propose explanation/theory, hypotheses
- Data collection process
- Use data to evaluate hypotheses
- Reassess explanation



# RECAP

- Two ways to do empirical studies:
  - Qualitative, small n
  - Quantitative, large n
  - n=number of observations

# CASE STUDY

- One form of small-n study: case study
- Key technique: "Process tracing"
  - Method to identify the causal relationship in a particular case through detailed examination of each step in the causal chain
  - within-case analysis



# HOW TO DO A CASE STUDY



# PROCESS TRACING



# HOW TO DO THAT

- **Goal: Uncover each step along the way from X to Y**
  - **Observe the entire causal process**
  - **Quantitative research often goes from X to Y, without examining the steps in between**
- **Simple process-tracing example**

# EXAMPLE

- Presidential election 2000
- Al Gore (D) vs. George W. Bush (R)
- 7:50pm (10 minutes before many polling stations in Florida closed):



# EXAMPLE

- Later that night:



# EXAMPLE

- Official end result:

		
Nominee	George W. Bush	Al Gore
Party	Republican	Democratic
Home state	Texas	Tennessee
Running mate	Dick Cheney	Joe Lieberman
Electoral vote	25	0
Popular vote	2,912,790	2,912,253
Percentage	48.847%	48.838%

**537 votes!**

# EXAMPLE

- **How did calling the state prematurely (and incorrectly) change the results?**
  - **Might have cost Gore: Supporters who thought he'd won did not vote**
  - **Might have cost Bush: Supporters who thought he'd lost did not vote**

# QUANTITATIVE APPROACH

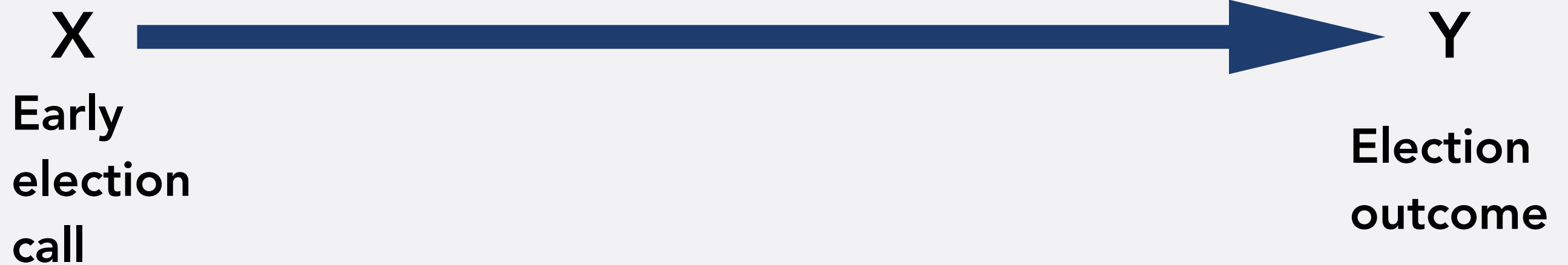
- **John R. Lott (American Enterprise Institute)**
- **Large-n study of voting results in different counties**
- **Conclusion: Bush lost ~10,000 votes**



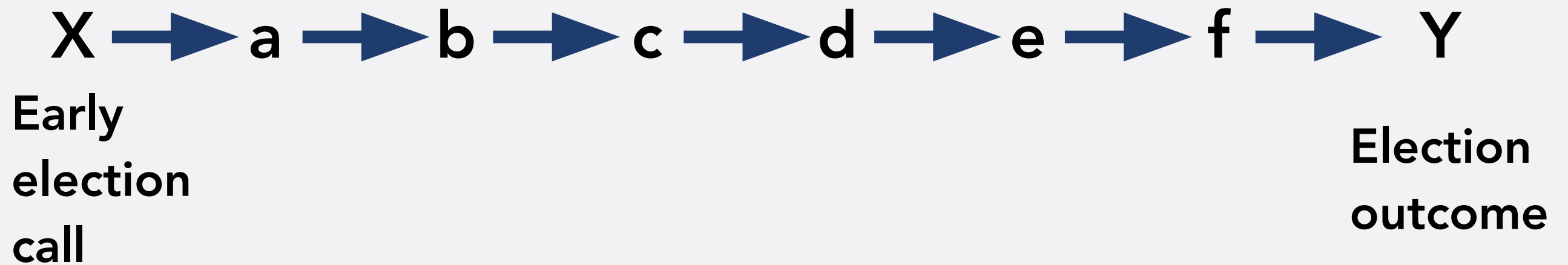
# PROCESS TRACING

- **Henry Brady (2004): Process-tracing to estimate the effect of calling election early on lost votes**

# PROCESS TRACING

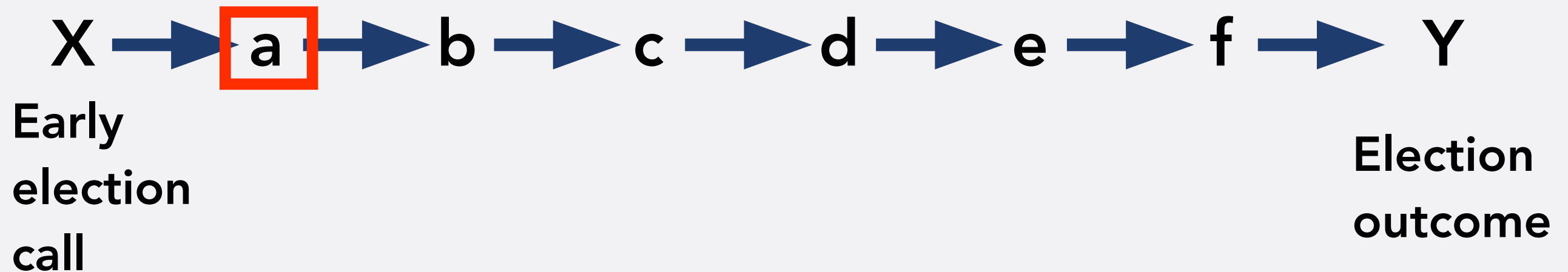


# PROCESS TRACING



# PROCESS TRACING

- When did the networks call the race?

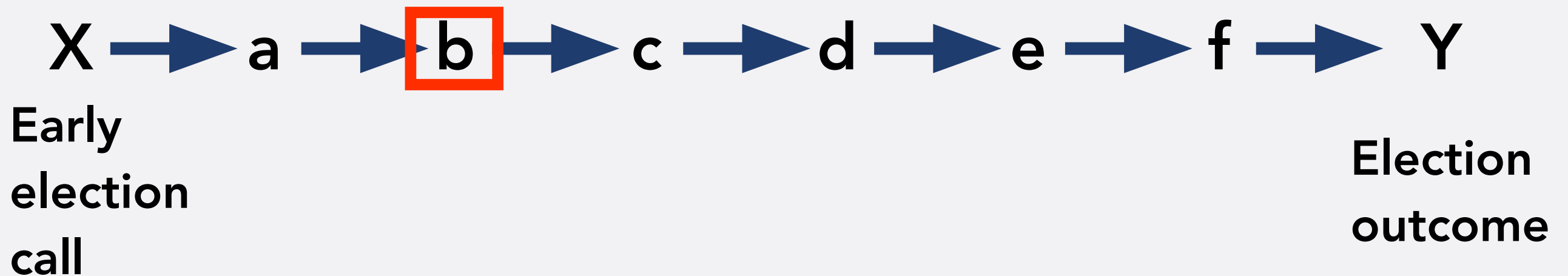


# PROCESS TRACING

- **When did the networks call the race?**
  - **7.50, 10 minutes before polls closed**

# PROCESS TRACING

- How many voters usually vote in those 10 minutes?



# PROCESS TRACING

- **How many voters usually vote in those 10 minutes?**
  - **Total: 303,000 voters in the 10 affected counties**
  - **Past data: about 1/12 of voters vote in last hour**
    - **$303,000/12=25,250$**
  - **Only last 10 minutes of last hour affected**
    - **1/6 of last hour**
    - **$25,250/6=4,200$**

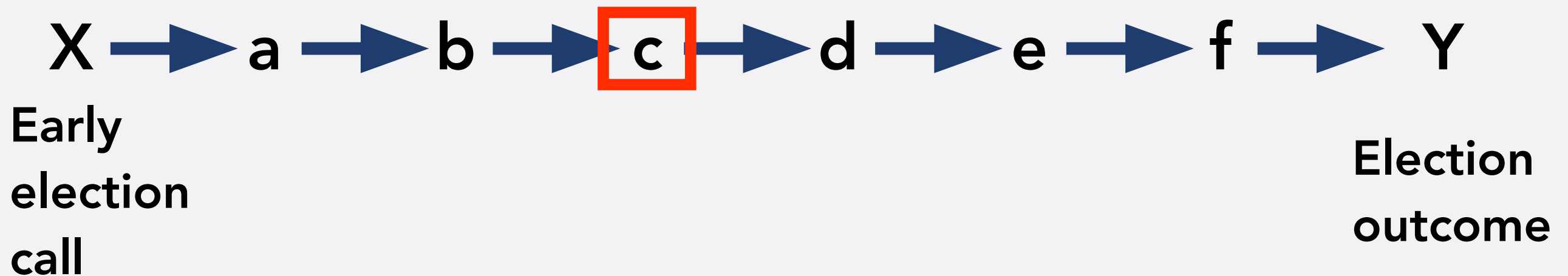
# PROCESS TRACING

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    - $303,000/12=25,250$
  - Only last 10 minutes of last hour affected
    - 1/6 of last hour
    - $25,250/6=4,200$



# PROCESS TRACING

- Of those 4,200 voters, how many actually heard that election was called?

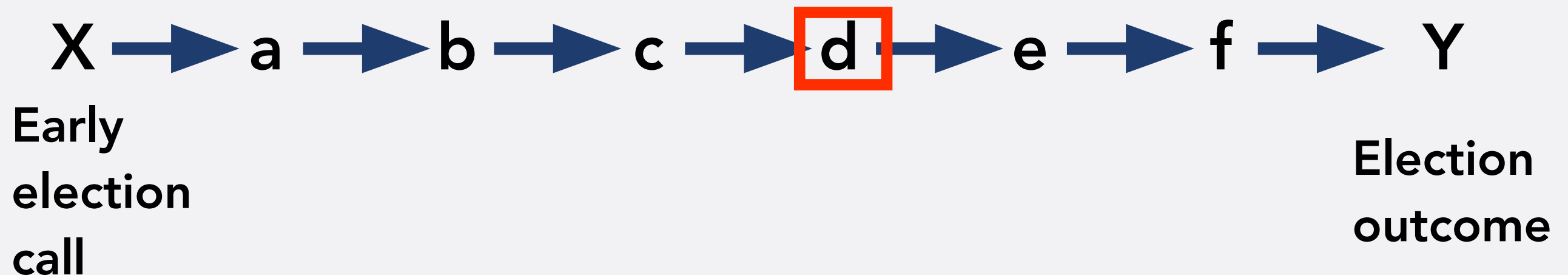


# PROCESS TRACING

- **Of those 4,200 voters, how many actually heard that election was called?**
  - **Based on studies of media exposure, best guess is 20%**
  - **So about 840 people heard early call**

# PROCESS TRACING

- How many of those 840 voters would have voted for Bush?

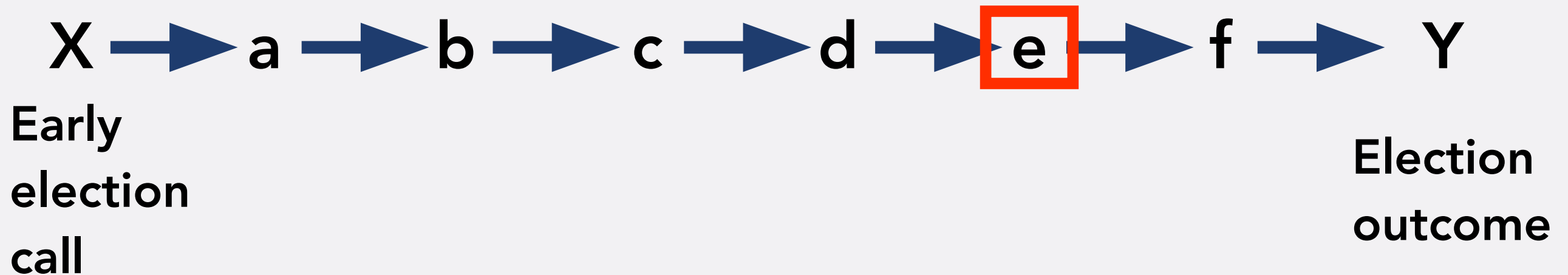


# PROCESS TRACING

- **How many of those 840 voters would have voted for Bush?**
  - **In 10 counties affected, Bush got roughly 2/3 of vote**
  - **So  $840 \times (2/3) = 560$  Bush voters heard early call**
  - **$840 \times (1/3) = 280$  Gore voters heard early call**

# PROCESS TRACING

- Out of those who heard it, how many would decide not to vote?

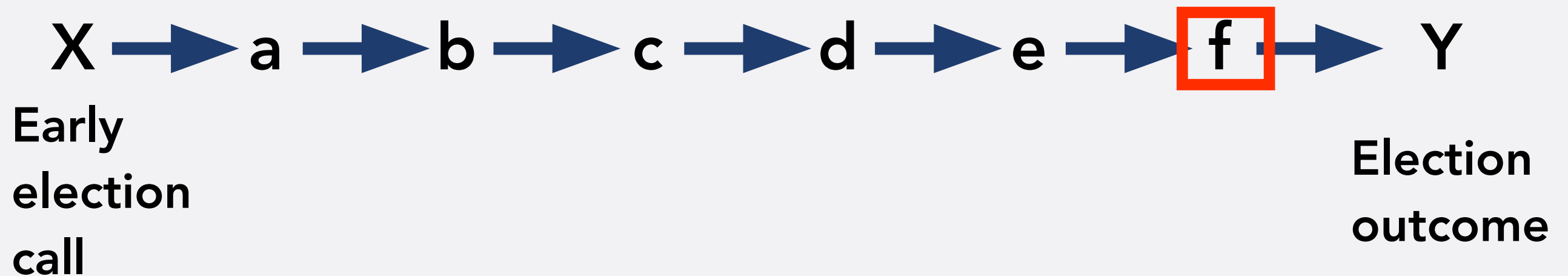


# PROCESS TRACING

- **Out of those who heard it, how many would decide not to vote?**
  - **Based on past research of impact of early calls, best guess is 10%**
  - **560 Bush voters heard early call, 10% of those is 56**
  - **280 Gore voters heard early call, 10% of those is 28**

# PROCESS TRACING

- What is the net effect?



# PROCESS TRACING

- **What is the net effect?**
  - **56 Bush voters heard early call and decided not to vote**
  - **28 Gore voters heard early call and decided not to vote**
  - **So Bush lost  $56-28=28$  votes to Gore**



# PROCESS TRACING



- Results of large-n study (Bush lost ~10,000 votes) not tenable once examining the steps in the causal chain
  - Suggests problems with this large-n study

# HOW TO DO CASE STUDY

- **Key: Detailed knowledge of case**
  - Interviews
  - Focus groups
  - Participant observation, ethnographic research
  - Archival research
  - etc.
- **Goal: Uncover each step along the way from X to Y**

# GOFFMAN

- In Goffman's research, what are the steps that prevent her research subjects from having "successful" lives as adults?



Growing up in poor  
neighborhood

Future  
Earnings

# (DIS)ADVANTAGES

- **What are the benefits and drawbacks of small-n case studies?**

# INTERNAL VALIDITY

- Does the study isolate the effect of the independent variable on the dependent variable?
  - If yes: high internal validity
  - If no: low internal validity
- Case studies tend to have *high* internal validity
  - Researcher knows and understands case very well
  - Case study can uncover complex causal processes

# EXTERNAL VALIDITY

- Can we generalize the finding of the study to other settings?
  - If yes: high external validity
  - If no: low external validity
- Case studies often have *low* external validity
  - Not clear if results would be similar if study done in other contexts
  - Limited ability to generalize findings

# MULTIPLE METHODS

- **Case studies often performed together with other analyses**
  - **Comparative case study (later this class)**
  - **Large-n statistical analysis (later this week)**
- **Helps illuminate the causal process behind the findings using these other approaches**

# QUALITATIVE STUDIES

- **Small-n studies**
  - **Case studies**
  - **Comparative method**



# SPANISH CIVIL WAR





# SPANISH CIVIL WAR



Pablo Picasso, *Guernica*

- 1936-1939, Republicans (left-leaning) vs. Nationalists (right-leaning)
- ends with Nationalist victory and dictatorship of Franco
- hundreds of thousands of deaths

# SWEDEN IN 1936



Signing of Saltsjöbaden Accord

- 1936: a lot of class conflict between left and right as well
- But: no civil war
- Instead: Negotiation of long-lasting agreement between left and right. Why?

# BUFFET

	Mom	Dad	Brother	Sister
Oyster	Yes	Yes	Yes	Yes
Beef	Yes	Yes	Yes	Yes
Salad	Yes	Yes	Yes	No
Noodles	Yes	Yes	Yes	Yes
Gotten Sick	Yes	Yes	Yes	No

# BUFFET

	Mom	Dad	Brother	Sister
Oyster	Yes	Yes	Yes	Yes
Beef	Yes	Yes	Yes	Yes
Salad	Yes	Yes	Yes	No
Noodles	Yes	Yes	Yes	Yes
Gotten Sick	Yes	Yes	Yes	No



# DIFFERENT BUFFET

	Mom	Dad	Brother	Sister
Soup	Yes	Yes	Yes	Yes
Chicken	Yes	No	Yes	No
Shrimp	Yes	No	No	Yes
Homemade Liquor	Yes	Yes	No	No
Gotten Sick	Yes	Yes	Yes	Yes

# DIFFERENT BUFFET

	Mom	Dad	Brother	Sister
Soup	Yes	Yes	Yes	Yes
Chicken	Yes	No	Yes	No
Shrimp	Yes	No	No	Yes
Homemade Liquor	Yes	Yes	No	No
Gotten Sick	Yes	Yes	Yes	Yes

# WHAT DID WE JUST DO?

- Using  $n=4$ , we were able to identify which food (independent variable) caused illness (dependent variable)
  - At same time, were able to exclude other foods (confounding variables) as causes for illness

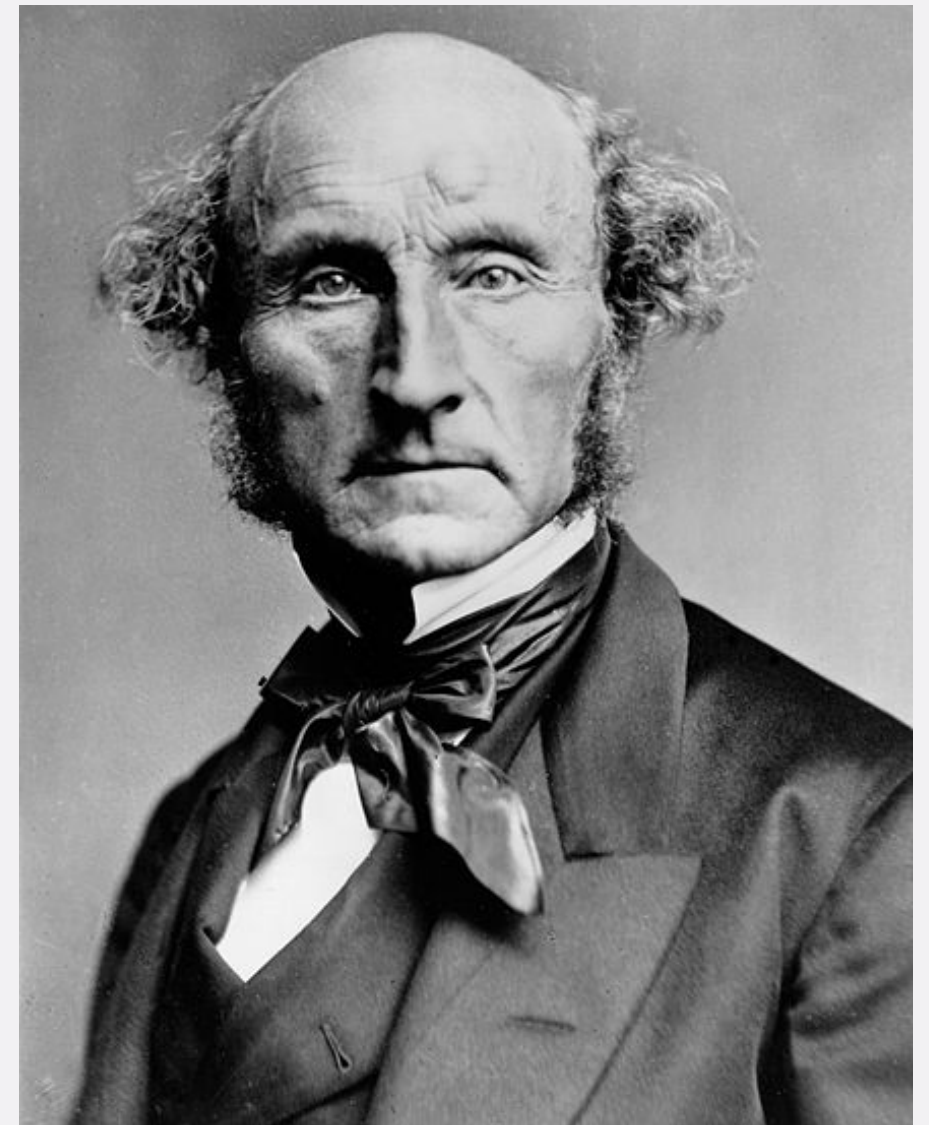


# HURDLES TO CAUSALITY

- Is there a credible causal mechanism that connects  $X$  to  $Y$ ?
- Can we rule out the possibility that  $Y$  could cause  $X$ ?
- Is there covariation between  $X$  and  $Y$ ?
- Have we controlled for all confounding variables ( $Z$ ) that might make the association between  $X$  and  $Y$  spurious?

# COMPARATIVE METHOD

- **John Stuart Mill (1806-1873)**
  - *A System of Logic* (1843)
- **Mill's methods**
  - Method of difference
    - "most-similar method"
  - Method of agreement
    - "most-different method"



# METHOD OF DIFFERENCE

	Mom	Dad	Brother	Sister
Oyster	Yes	Yes	Yes	Yes
Beef	Yes	Yes	Yes	Yes
Salad	Yes	Yes	Yes	No
Noodles	Yes	Yes	Yes	Yes
Gotten Sick	Yes	Yes	Yes	No

# METHOD OF DIFFERENCE

- Cases where dependent variable is *different* between cases
  - some people are sick, others are not
- Identify independent variable that is different among cases in the same way as DV is
- Can use this approach in political science research
  - Lapuente and Rothstein (2014): "Civil War Spain Versus Swedish Harmony: The Quality of Government Factor". *Comparative Political Studies*.

# CIVIL WAR OR HARMONY?





# METHOD OF DIFFERENCE

	Sweden (1936)	Spain (1936)
Outcome	No Civil War	Civil War

# METHOD OF DIFFERENCE

	Sweden (1936)	Spain (1936)
Class Conflict	Yes	Yes
Outcome	No Civil War	Civil War

# METHOD OF DIFFERENCE

	Sweden (1936)	Spain (1936)
Class Conflict	Yes	Yes
Strong Left Party	Yes	Yes
Outcome	No Civil War	Civil War



# METHOD OF DIFFERENCE

	Sweden (1936)	Spain (1936)
Class Conflict	Yes	Yes
Strong Left Party	Yes	Yes
Union Mobilization	Yes	Yes
Outcome	No Civil War	Civil War

# METHOD OF DIFFERENCE

	Sweden (1936)	Spain (1936)
Class Conflict	Yes	Yes
Strong Left Party	Yes	Yes
Union Mobilization	Yes	Yes
Politicized Bureaucracy	No	Yes
Outcome	No Civil War	Civil War

# METHOD OF DIFFERENCE

- **One causal hurdle: Is there covariation between X and Y?**
  - **Spain and Sweden have different outcome, and there also is a difference in whether politicized bureaucracy existed**

# METHOD OF DIFFERENCE

- **Another causal hurdle: Have we controlled for all confounding variables (Z) that might make the association between X and Y spurious?**
  - **Sweden and Spain different on the dependent variable, different on the key independent variable**
  - **Similar on other variables (class conflict, left party strength, union mobilization), so they cannot explain the difference in the dependent variable**

# METHOD OF DIFFERENCE

- Another causal hurdle: Have we controlled for **all** confounding variables (Z) that might make the association between X and Y spurious?
  - Sweden and Spain different on the dependent variable, different on the key independent variable
  - Similar on other variables (class conflict, left party strength, union mobilization), so they cannot explain the difference in the dependent variable

# METHOD OF DIFFERENCE

- **Unlikely that politicized bureaucracy is only relevant difference between Spain and Sweden**
  - **e.g. strong Catholic church was a major actor in Spanish civil war**
  - **Catholic church not very strong in Sweden**

# METHOD OF DIFFERENCE

	Sweden (1936)	Spain (1936)
Class Conflict	Yes	Yes
Strong Left Party	Yes	Yes
Union Mobilization	Yes	Yes
Politicized Bureaucracy	No	Yes
Strong Catholic Church	No	Yes
Outcome	No Civil War	Civil War

?

# METHOD OF DIFFERENCE

- A bit confusing: called “Method of Difference” *and* “most similar method”
  - Different value of dependent variable, looking for difference in values of key independent variable
  - Most similar b/c cases are similar in everything *except* outcome and independent variable that causes outcome
- So: Method of difference because you’re looking for differences in cases that are otherwise most similar



# METHOD OF AGREEMENT

	Mom	Dad	Brother	Sister
Soup	Yes	Yes	Yes	Yes
Chicken	Yes	No	Yes	No
Shrimp	Yes	No	No	Yes
Homemade Liquor	Yes	Yes	No	No
Gotten Sick	Yes	Yes	Yes	Yes

# METHOD OF AGREEMENT

- Cases where dependent variable is *same* between cases
  - everyone is sick
- Identify independent variable that is also the same among cases
- Can use this approach in political science research
  - Skocpol (1979): "States and Social Revolutions: A Comparative Analysis of France, Russia and China". *Cambridge University Press*.

# METHOD OF AGREEMENT

	France	China	Russia
Outcome	Successful Revolution	Successful Revolution	Successful Revolution

# METHOD OF AGREEMENT

	France	China	Russia
Dominant Class With Leverage In State	Yes	Yes	No
Prosperous Economy	Yes	No	No
Autonomous Peasant Community	Yes	No	Yes
Outcome	Successful Revolution	Successful Revolution	Successful Revolution

# METHOD OF AGREEMENT

	France	China	Russia
Dominant Class With Leverage In State	Yes	Yes	No
Prosperous Economy	Yes	No	No
Autonomous Peasant Community	Yes	No	Yes
International Pressure For Reform	Yes	Yes	Yes
Outcome	Successful Revolution	Successful Revolution	Successful Revolution

# METHOD OF AGREEMENT

	France	China	Russia
Dominant Class With Leverage In State	Yes	Yes	No
Prosperous Economy	Yes	No	No
Autonomous Peasant Community	Yes	No	Yes
International Pressure For Reform	Yes	Yes	Yes
Outcome	Successful Revolution	Successful Revolution	Successful Revolution

# METHOD OF AGREEMENT

- **One causal hurdle: Is there covariation between X and Y?**
  - **Three countries have same outcome, and all experienced international pressure for reform**

# METHOD OF AGREEMENT

- **Another causal hurdle: Have we controlled for all confounding variables (Z) that might make the association between X and Y spurious?**
  - **Three countries (with same outcome) differ in other relevant independent variables**



# POSSIBLE PROBLEM, AGAIN

	France	China	Russia
Dominant Class With Leverage In State	Yes	Yes	No
Prosperous Economy	Yes	No	No
Autonomous Peasant Community	Yes	No	Yes
International Pressure For Reform Some Other Factor	Yes	Yes	Yes
	Yes	Yes	Yes
Outcome	Successful Revolution	Successful Revolution	Successful Revolution

# SMALL-N

- Can expand comparative case study to moderate number of cases
  - ~30-40
- But: If there are too many potential confounding variables, comparative case study alone not enough
- Combine with other approaches, e.g. case study, process tracing, large-n quantitative approach

# LARGE N AND SMALL N

- **Qualitative studies (small n)**
- **Quantitative studies (large n)**