PSC 202
SYRACUSE UNIVERSITY

INTRODUCTION TO POLITICAL ANALYSIS

EXPERIMENTS, PART 2

EXAM

- Next week Monday: Exam #3
  - Can bring a calculator (no phone etc.)
  - Allowed to bring one single-page letter-size (8.5x11) sheet with you. Front side only. What you put on it is up to you, but it has to be your own.
- Wednesday: Review
  - Email questions etc. by tomorrow evening
- If you take exams at CDR, please sign up now!

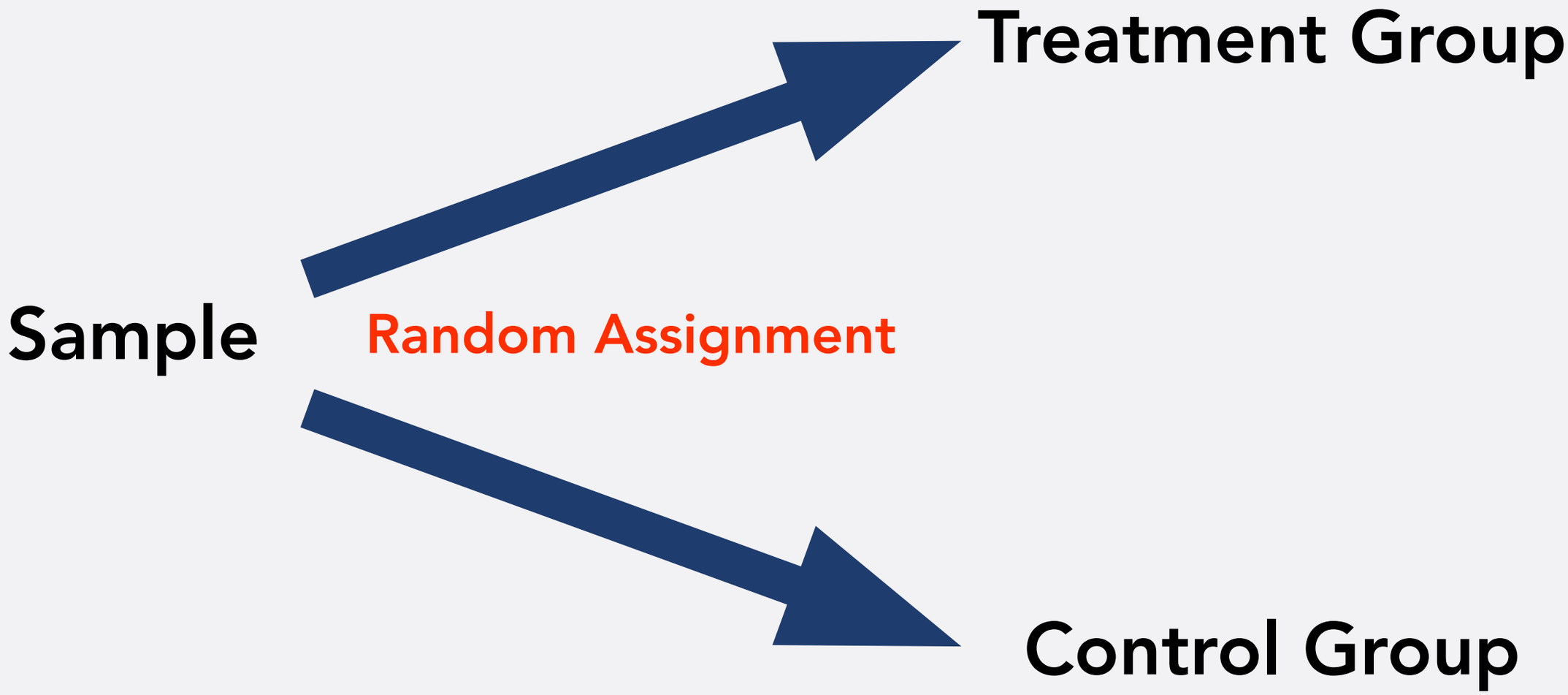
HOUSEKEEPING

- May 5: Final homework due
  - Counts double

RECAP

- Observational approach: Researchers *observe* independent and dependent variable as it happens in the real world, try to control for potential alternative explanations
- Experimental approach: Researchers *decide* whether subjects are exposed to treatment (independent variable) or not, measure difference in dependent variable between those treated and those not treated

EXPERIMENTS



BASIC STEPS

1. *Randomly* assign participants
2. *Manipulate* independent variable
   - Control group, treatment group
3. *Measure* dependent variable
4. *Analyze differences* in dependent variable between treatment and control groups
   - Because of random assignment, only independent variable can explain differences
   - All other variables are "balanced" between treatment and control group
   - Not necessary to control for potential confounding variables

TYPES OF EXPERIMENTS

- Field Experiment
- Lab Experiment
- Survey Experiment
- Natural Experiments

FIELD EXPERIMENTS

- Organization tries to arrange meeting between its members and congressional officials
  - Per e-mail
- Experimental manipulation
  - Control group: “local constituents”
  - Treatment group: “local campaign donors”
- Outcome: Is a meeting granted, and who will it be with?

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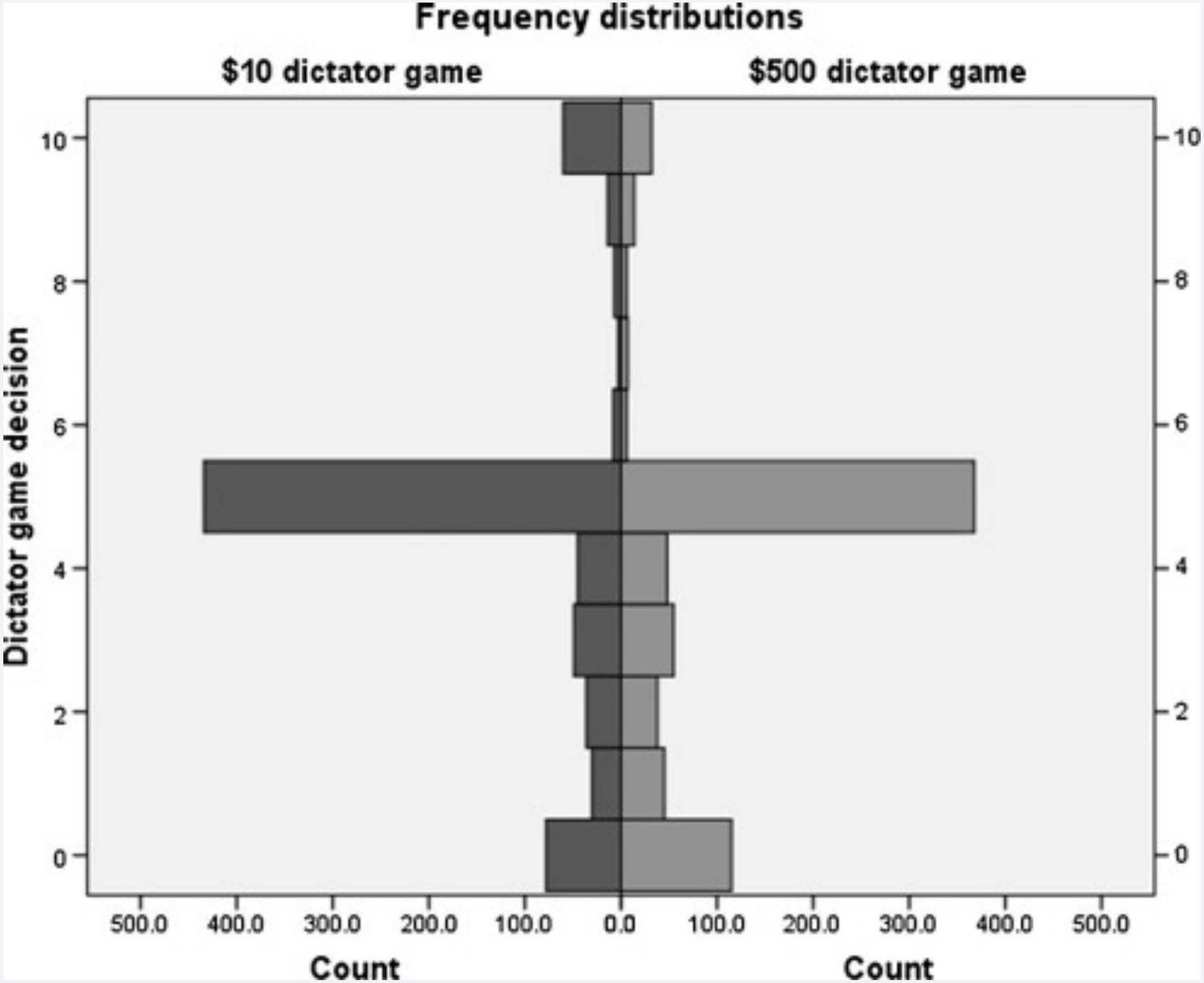
LAB EXPERIMENTS

- Experiment conducted in a laboratory
- Iyengar and Kinder (1987): Effect of media coverage on issue priorities
- Participants come into lab and watch news broadcast
  - Control: Actual newscast
  - Treatment: Doctored version, highlighting other topics

LAB EXPERIMENTS

- Games in lab experiments to study how people make decisions
  - Behavioral economics
  - Example: dictator game
  - 2 players, one (randomly selected) player is given $10
  - Can chose any split between the two players

LAB EXPERIMENTS



TYPES OF EXPERIMENTS

- Lab Experiment
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MALFEASANCE

- **Imagine that you live in a neighborhood similar to your own but in a different state. The member of Congress of that district is called *John Davis*. During his time in office, he has secured federal funding to improve the district's infrastructure, and he has put efforts into trying to attract companies into the district.**
- **Davis was also found to have *violated ethics regulations* by using his influential committee position to t*rade on insider information*. He denies the allegations. Other politicians have called on Davis to resign. What do you think he should do?**

MALFEASANCE

- He should definitely not resign
- He should probably not resign
- Not sure whether he should resign or not
- He should probably resign
- He should definitely resign

OUR SURVEY

- **Imagine that you live in a neighborhood similar to your own but in a different state. The member of Congress of that district is a Democrat called *John Davis*. During his time in office, he has secured federal funding to improve the district's infrastructure, and he has put efforts into trying to attract companies into the district.**
- **Davis was also found to have *violated ethics regulations* by using his influential committee position to t*rade on insider information*. He denies the allegations. Republican politicians have called on Davis to resign. What do you think he should do?**

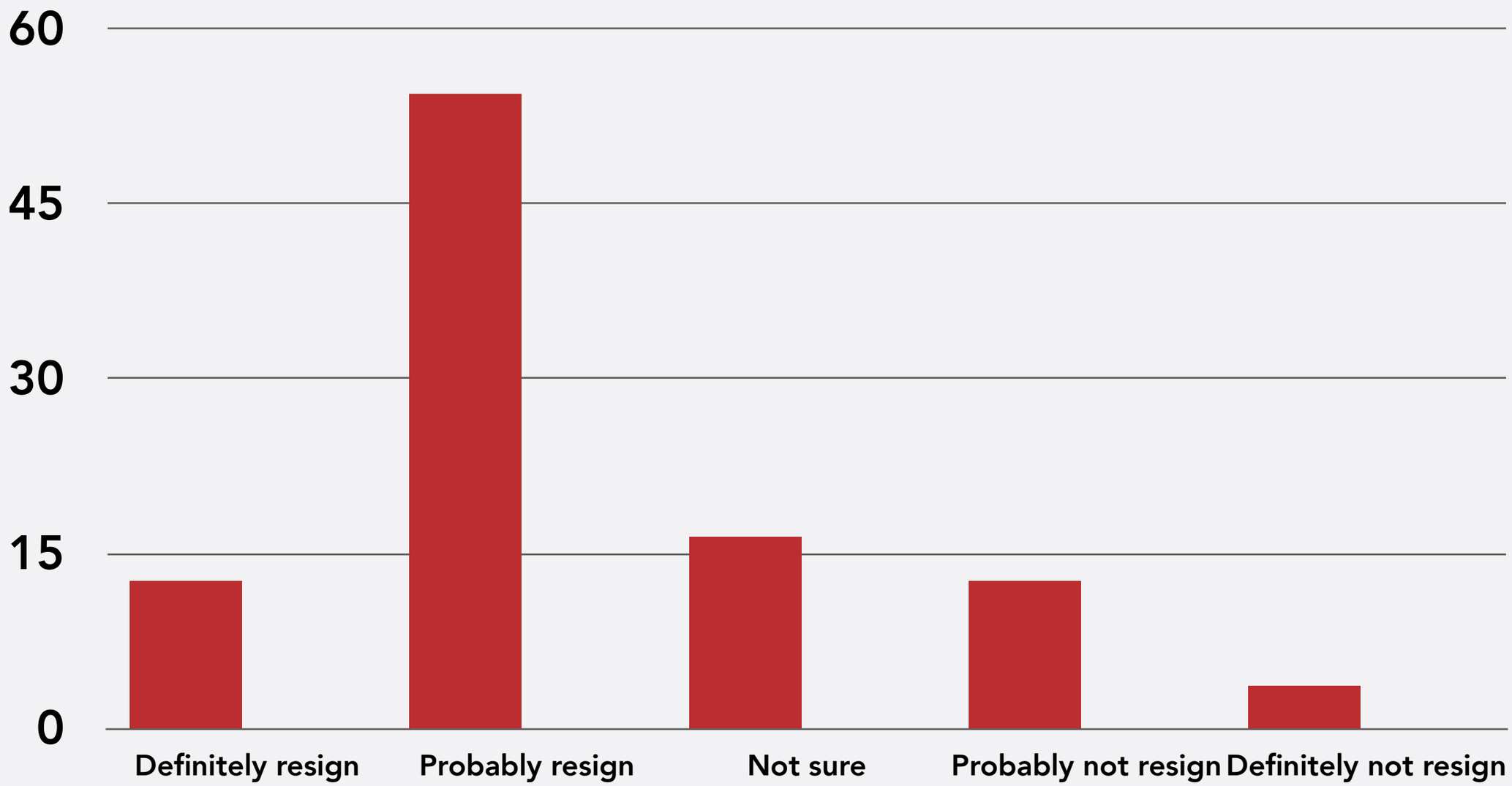
OUR SURVEY

- **Imagine that you live in a neighborhood similar to your own but in a different state. The member of Congress of that district is a Republican called *John Davis*. During his time in office, he has secured federal funding to improve the district's infrastructure, and he has put efforts into trying to attract companies into the district.**
- **Davis was also found to have *violated ethics regulations* by using his influential committee position to t*rade on insider information*. He denies the allegations. Democratic politicians have called on Davis to resign. What do you think he should do?**

OUR SURVEY

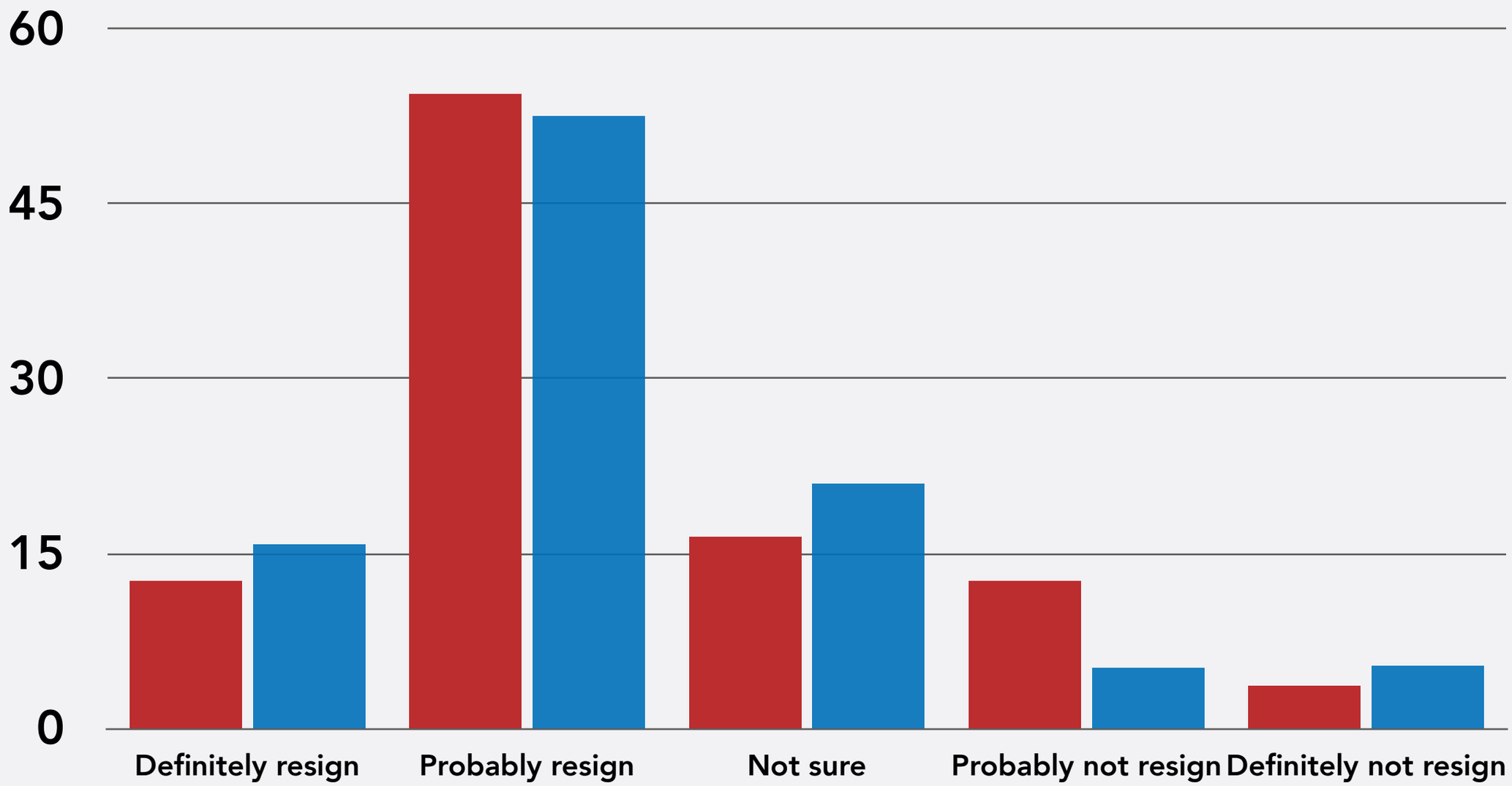
- All students were told about the same scenario
- Students randomly assigned into two groups
- One group: Politician in party they support
- Another group: Politicians in party they do not support

RESULTS



- Red: Candidate of same party as student
- Blue: Candidate of different party than student

RESULTS



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ISSUES WITH EXPERIMENTS

- May lack external validity
- Ethics issues
- Cannot study many things we are interested in experimentally

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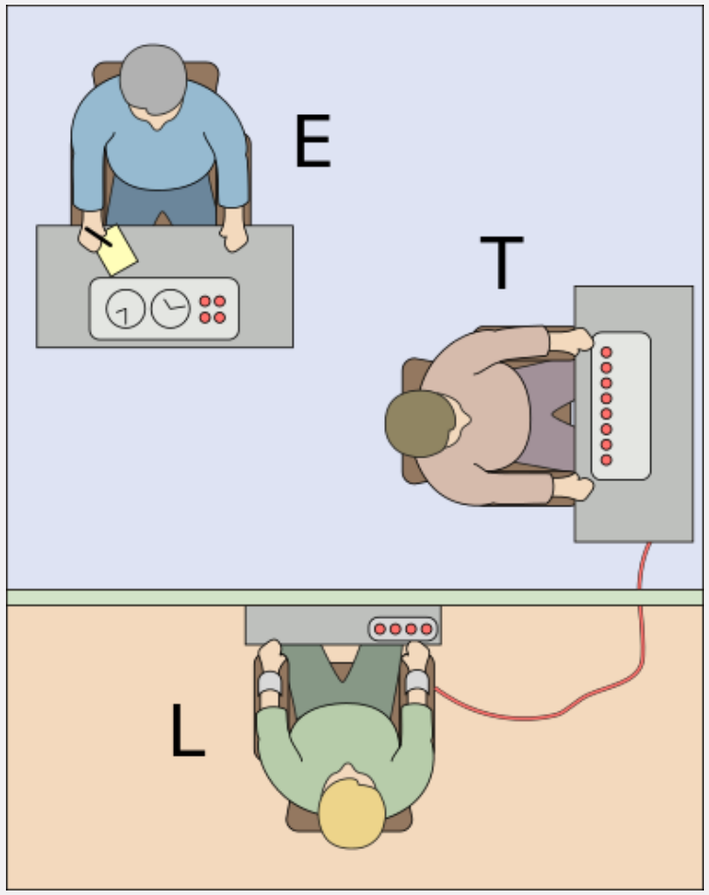
ETHICS: MILGRAM EXPERIMENT



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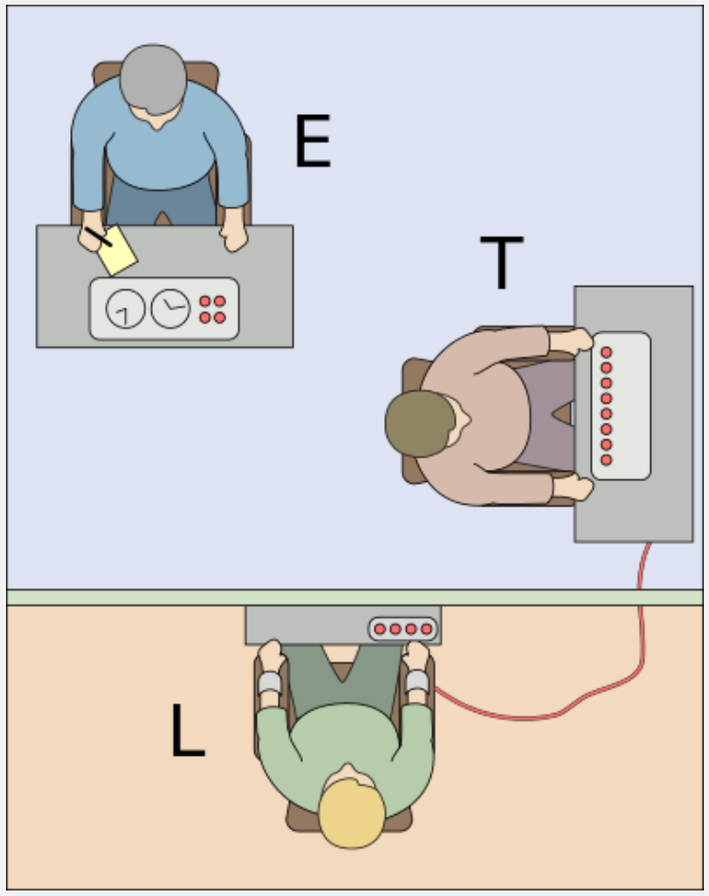
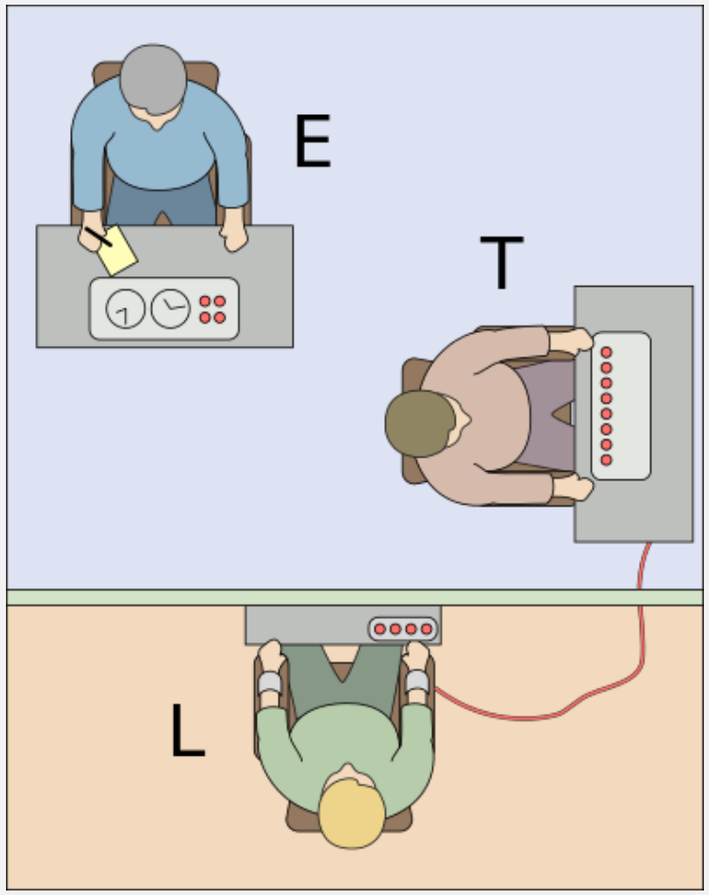


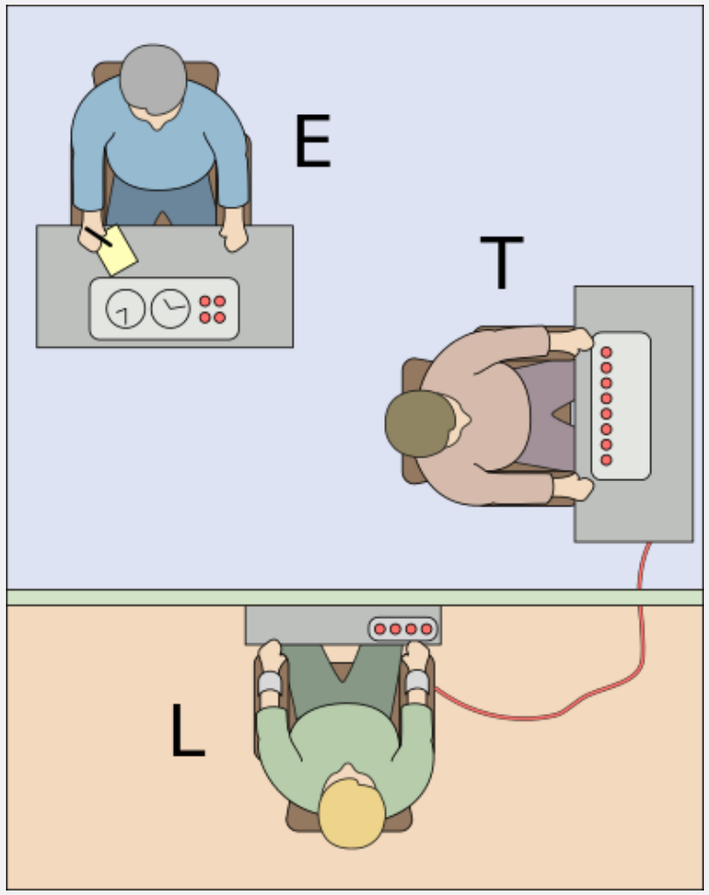
- Experiment in 1961, Yale University
- “Banality of evil”
- Do people execute orders, even if they are clearly harming other people?

ETHICS: MILGRAM EXPERIMENT



- **Ethical issues?**

ETHICS: MILGRAM EXPERIMENT



- Ethical issues?
  - Deception, potential harm to subjects (emotional stress, inflicted insight)

ETHICS: MONTANA ELECTION

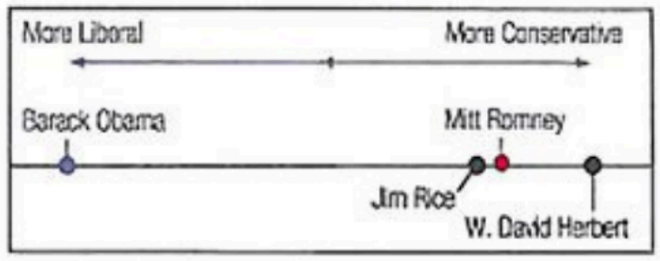
Campaign experiment found to be in violation of Montana law

VOTERS GUIDE

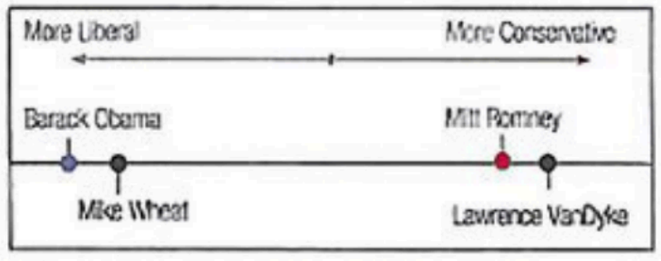
2014 Montana General Election Voter Information Guide

Election Date: November 4, 2014

Nonpartisan Supreme Court Justice #1 Race



Nonpartisan Supreme Court Justice #2 Race



For more information on how these figures were created, please see http://data.stanford.edu/time. Please note that this guide is non-partisan and does not endorse any candidate or party. This guide was created as part of a joint research project at Stanford and Dartmouth.

Paid for by researchers at Stanford University and Dartmouth College, 616 Serra Street, Stanford, CA 94305

Take this to the polls!

ETHICS: MONTANA ELECTION

- Randomly selected voters received flyer
  - Looks official (state seal)
- *Non-partisan* supreme court race
  - Flyer informs voters about how liberal/conservative candidates are
  - One candidate is revealed to be as liberal as Obama (in Montana!)
- 100,000 flyers distributed
  - Less than 350,000 voters turned out
  - Danger than experiment could have swung election

ETHICAL RESEARCH

- Experiments have to be approved by Institutional Review Board (IRB) in advance
- Does experiment safeguard rights and welfare of participants?
- Risk-benefits analysis of whether research should be conducted

ISSUES WITH EXPERIMENTS

- May lack external validity
- Ethics issues
- Cannot study many things we are interested in experimentally

KEY ATTRIBUTES

- Key attribute of experiments
  - Control over independent variable (randomly assigned)
- Impossible for many issues we are interested in
  - war, revolution, corruption, democracy/autocracy

TYPES OF EXPERIMENTS

- Lab Experiment
- Field Experiment
- Survey Experiment
- Natural Experiment

QUASI/NATURAL EXPERIMENTS

- Researcher does *not* control independent variable
- But: Something has happened in the real world that mimics random assignment

EXAMPLE

Military Service → Later Earnings

- What is the effect of military service on people's life after they leave the military?
  - e.g. earnings, etc.

EXAMPLE

- Inherently difficult to study
  - Observational: Compare people who chose to join the military vs. people who chose not to
    - People who voluntarily join the military are different in many ways from people who do not
- Experimental: Researchers can’t randomly assign people to join the military
  - See also: Ethics Issues

EXAMPLE

1970 RANDOM SELECTION SEQUENCE, BY MONTH AND DAY

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	305	086	108	032	330	249	093	111	225	359	019	129
2	159	144	029	271	298	228	350	045	161	125	034	328
3	251	297	267	083	040	301	115	261	049	244	348	157
4	215	210	275	081	276	020	279	145	232	202	266	165
5	101	214	293	269	364	028	188	054	082	024	310	056
6	224	347	139	253	155	110	327	114	006	087	076	010
7	306	091	122	147	035	085	050	168	008	234	051	012
8	199	181	213	312	321	366	013	048	184	283	097	105
9	194	338	317	219	197	335	277	106	263	342	080	043
10	325	216	323	218	065	206	284	021	071	220	282	041
11	329	150	136	014	037	134	248	324	158	237	046	039
12	221	068	300	346	133	272	015	142	242	072	066	314
13	318	152	259	124	295	069	042	307	175	138	126	163
14	238	004	354	231	178	356	331	198	001	294	127	026
15	017	089	169	273	130	180	322	102	113	171	131	320
16	121	212	166	148	055	274	120	044	207	254	107	096
17	235	189	033	260	112	073	098	154	255	288	143	304
18	140	292	332	090	278	341	190	141	246	005	146	128
19	058	025	200	336	075	104	227	311	177	241	203	240
20	280	302	239	345	183	360	187	344	063	192	185	135
21	186	363	334	062	250	060	027	291	204	243	156	070
22	337	290	265	316	326	247	153	339	160	117	009	053
23	118	057	256	252	319	109	172	116	119	201	182	162
24	059	236	258	002	031	358	023	036	195	196	230	095
25	052	179	343	351	361	137	067	286	149	176	132	084
26	092	365	170	340	357	022	303	245	018	007	309	173
27	355	205	268	074	296	064	289	352	233	264	047	078
28	077	299	223	262	308	222	088	167	257	094	281	123
29	349	285	362	191	226	353	270	061	151	229	099	016
30	164	---	217	208	103	209	287	333	315	038	174	003
31	211	---	030	---	313	---	193	011	---	079	---	100

EXAMPLE

- 1984 average earnings of white males
  - Eligible to be drafted in 1971: $15,814
  - Not eligible to be drafted in 1971: $16,172
  - Eligibility for draft caused 2.2% drop in average earnings

NOT VERY COMMON

- Lotteries in real life are rare
- But: Sometimes circumstances create quasi-random situations in real life