Learning Outcomes

• By the end of section today, you should:

• Be able to list, define, and identify examples of the types of variables
  • Nominal
  • Ordinal
  • Interval
  • Ratio

• Be able to use a codebook to find
  • Variables (and name their types) that match an operational definition
  • Values of the variables
Announcements

• Keep posting questions on the discussion board!

• Homework 1 is posted on TritonEd: Content (scroll down) → Homework Assignments
  • **DUE: January 30th 12pm (NOON) in class**
  • **STAPLE your assignment!**
  • Start early and come get help if you need it

• Office Hours:
  • Monday 1:15-2:30pm SSB 368 (Prof. Desposato)
  • Tuesday 12pm-2pm (Garrett)
  • Wednesday 1pm-3pm SSB 446 (Skyler)
  • Thursday 9am-11am SSB 341 (Taylor)
  • Friday 9am-11am SSB 326 (Liesel)
IMPORTANT!!!

• Next week’s sections (January 24th) will be in ERC 117

• You will need a code to get into the lab, which you can find here: [https://sdacs.ucsd.edu/~icc/index.php](https://sdacs.ucsd.edu/~icc/index.php) (log in with your UCSD username and PID, it’s then under Poli30D)

• Location: [http://m.ucsd.edu/maps/nearby_point?id=7001220898651747&mylat=32.87749&mylng=-117.23528](http://m.ucsd.edu/maps/nearby_point?id=7001220898651747&mylat=32.87749&mylng=-117.23528)
What questions do you have?
## Types of Variables

<table>
<thead>
<tr>
<th>Nominal</th>
<th>Description</th>
<th>Example Variables</th>
<th>Example Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio</td>
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</tr>
</tbody>
</table>
Check In

• Please take out a piece of paper and answer the following questions.

• Name

1. What type of variable is party identification? What are some possible values of party identification? **Nominal, Values=Republican, Democrat, Independent, etc.**

2. What type of variable is Republican vote count (i.e. the number of votes won by the Republican candidate) in a district? What are some possible values of this variable? **Ratio, Values=0, 524,000, 853, etc.**

3. What type of variable is presidential approval? Assume I measure it by asking survey respondents: “Do you approve of the way President Trump is handling his job as president?” And the response options were: **Strongly Approve, Approve, Disapprove, Strongly Disapprove Ordinal, Values=strongly approve, approve, disapprove, strongly disapprove**
Taking a Look at Homework 1

• Part A: Questions 1-3, a-d
  • Last week’s section and lecture slides should be able to help you out
  • Today’s section practice with values should also help with (a) and (b)
  • Also see the Visualizing Poli 30 document I emailed out

• Part B:
  • Question 1: we’ll go over how to do this in the computer lab in section next week
  • Question 2:
    • (a) – (e) Week 1 section and lecture should help, as well as some practice today looking at codebooks
    • (f) We’ll work on this in section in the computer lab in section next week
ANES 2016 Example
**ANES2016 SPSS DATA SET**

Unweighted N = 3649  
FTF = 1059  
WEB = 2590

**WEIGHT VARIABLES**

PW2016_FULL  Full sample  
PW2016_FTF  FTF sample  
PW2016_WEB  Web sample

**PRE-ELECTION QUESTIONS (except where noted)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V2R</td>
<td>Race</td>
</tr>
</tbody>
</table>
|          | 1. White, non-Hispanic  
2. Black, non-Hispanic  
3. Hispanic  
4. Other |
| V3       | Spanish, Hispanic, or Latino  
1. Yes  
2. No |
| V4       | Age (18 to 90) |
| V5       | State Postal Abbreviation (2 letter USPS code) |
| V8       | Vote for president in 2012?  
1. Yes  
2. No |
Feeling Thermometers (see description in SPSS Manual)

V15  Feeling Thermometer Obama
V16  Feeling Thermometer Clinton
V17  Feeling Thermometer Trump
V18  Feeling Thermometer Democratic Party
V19  Feeling Thermometer Republican Party

Measured on a 0 to 100 scale where 0 means that you feel very cold toward X (Obama, Clinton, Trump, etc.) and 100 means that you feel very warm toward X (Obama, Clinton, Trump, etc.).
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable Label Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>state</td>
<td>ANES POSTAL CODE ABBREVIATION</td>
</tr>
<tr>
<td>stateno</td>
<td>Number of state if listed alphabetically</td>
</tr>
<tr>
<td>cd</td>
<td>Congressional district number</td>
</tr>
<tr>
<td>member</td>
<td>Name of district winner</td>
</tr>
</tbody>
</table>
| inc08         | Incumbency status of election¹  
  1. Democratic incumbent  
  2. Republican Incumbent  
  3. Open seat—previously held by Democrat  
  4. Open seat—previously held by Republican |
| party08       | Winning Party 2008  
  1. Democratic  
  2. Republican |
| dhv08         | Percentage won by Democratic candidate |
| rhv08         | Percentage won by Republican candidate |
| uvv08         | Percentage won by winning candidate |
| obama         | District vote for Obama³  
  52.93% |
| mccain        | District vote for McCain  
  45.65% |
Questions on the Bullseye Example from Class

• Helpful to think about accuracy vs. precision (see this video (0- ~2:50) https://www.youtube.com/watch?v=hRAFPdDppzs)
  • Accuracy ~ Bias
  • Precision ~ Variability

• Example: Operational definition of campaign tone
  • Positive: message makes no mention of other candidates or parties
  • Negative: message mentions opponent
  • Would we expect this to have high or low bias?
    • Are we likely to be close to the truth in deciding whether messages are positive or negative? If yes→ low(er) bias; If no→ high(er) bias
  • Would we expect this to have high or low variability?
    • Are we likely to get similar answers every time we code a message as positive or negative? If lots of different people code, will they get the same answers? If yes→ low variability; If no→ high variability

• Example: Operational Definition of Democracy (see lecture slides)
More on Sampling

• Video Examples of Stratified Random Sample:
  • https://www.youtube.com/watch?v=yW7wvMVslKA
  • https://www.youtube.com/watch?v=sYRUYYOpG0

• Video Examples of Clustered Sample:
  • https://www.youtube.com/watch?v=QOXy-y6ogs
  • https://www.youtube.com/watch?v=WEB8vb8T4-s

• Stratified vs. Clustered Sample:
  • https://www.youtube.com/watch?v=1XFU1d9XlWM
  • https://www.youtube.com/watch?v=BJ3psCgyCAg