

#### MODULE 2C CREATE AND USE SURVEYS

### **Our Agenda**

Introductions, Curriculum Overview	5 min
Review and Topic Introduction	5 min
Choosing a Data Collection Method	<b>15</b> min
Survey Questions	<b>15</b> min
Survey Fundamentals	<b>10</b> min
Using Survey Data	5 min
Group Work	<b>25</b> min
Analyzing Survey Responses	<b>10</b> min
Descriptive Statistics	5 min
Group Work	<b>30</b> min



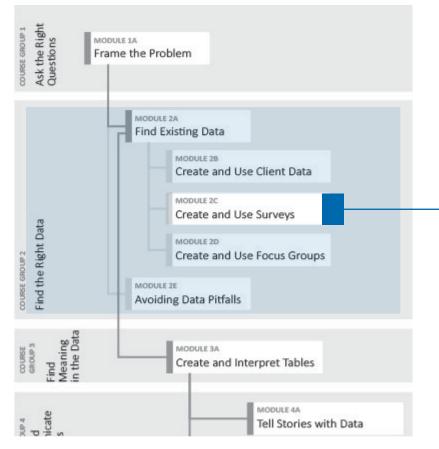
### Introductions

Let's share our name, organization, and experience with SAVI.





# Where We Are in the Training Curriculum



We are here, learning how to create a survey and use its data.

# What We Will Learn

- Learn how to create surveys
- Understand survey samples and estimates
- Analyze and interpret the survey results





# Choosing a Data Collection Method

### **Data Collection Methods**

Method	Key Facts	Advantages	Disadvantages
Surveys	Quantitative analysis Date on large groups Repeatable over time	Good for descriptive data Multiple topics Can be inexpensive Quick analysis with software	May include bias May lack depth May lack context Limited to what you ask
Focus Groups	Group interview Gathers perspectives and opinions Responses grouped into themes and categories	Richer, more detailed data Added depth Open-ended conversation Multiple perspectives	Slower to analyze Relies on moderator's skills More bias and variability
Interviews	Conducted in person or by phone Structured, semi-structured, or unstructured Clear, focused, open-ended questions	Richer, more detailed data Added depth Face-to-face contact	Time-consuming Relies on interview's skills One perspective at a time
Client data	Use any method, targeted to your clients	A lot of insight with small effort	Needs standardized collection

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# **Survey Questions**



# Let's try an exercise!



# We are going to survey to find our class' median shoe size.



# Discuss: Which Question is Best?

- A. How big are your feet?
- B. Would you consider your feet:Extra small Small Average Big Extra Big
- C. What shoe size do you wear?
- D. What shoe size are you currently wearing?
- E. What shoe size are you currently wearing? Less than 6 6-7 8-9 10-11 12 or bigger



• Survey format:



- Survey format:
  - Summary of survey at the beginning
  - Shorter = more responses
  - Organize logically: simple to more complex
  - Visually clear and simple



- Question writing basics:
  - Wording matters (i.e. work vs employment)
  - Negative and passive sentences are confusing
  - Provide answers that encompass everyone
  - Use logical response dimensions



- Types of question:
  - Multiple choice
  - Scale
    - Ranking
    - Likert
  - Matrix
  - Binary
  - Open Ended



# Choose a "Survey Instrument"

Use Handout 2c-2 to collect data from class

- A. How big are your feet?
- B. Would you consider your feet:Extra small Small Average Big Extra Big
- C. What shoe size do you wear?
- D. What shoe size are you currently wearing?
- E. What shoe size are you currently wearing? Less than 6 6-7 8-9 10-11 12 or bigger





# Now, what is the class' median shoe size?



# Survey Fundamentals



# We surveyed the class. How long did that take?



# What if we wanted to survey the entire Polis Center? Or the entire university?



#### For large populations, you need to be able to survey a portion of the population to make assumptions about the whole population.

# **Survey Fundamentals**

• What do we need to think about before we can take measurements and make assumptions?

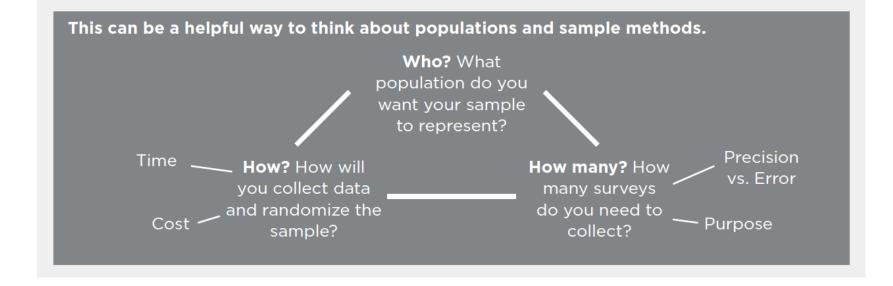


# **Survey Fundamentals**

- What do we need to think about before we can take measurements and make assumptions?
- Three major questions:
  - Who are we trying to sample?
  - How many of them to we need to sample?
  - How will we gather that sample?



# **Survey Fundamentals**





### Survey Fundamentals: Who

- Who are you studying: Population
- Who are you going to record data from: Sample
  - Using Handout 2C-3, How big does the sample need to be for:
    - A population of 100? 800? 1,000?
- How to make sure that the sample represents the population? Next



# **Survey Fundamentals: How**

- How to make sure that the sample represents the population?
- Surveying types:
  - Email
  - Mail
  - In-person Surveys
  - Phone

- Surveying sampling method:
  - Email list, or whole population
  - Random address/zip code selector
  - Systematic (every other house,
  - Random phone book selection, systematic.





# **Using Survey Data**

# **Example: SAVI training**

- Goal: To create a new SAVI educational program that builds data literacy skills.
- Survey objective: To learn what data skills people want and need, and in which skills they would want to be trained.



# **Example: SAVI training**

- The survey:
  - Was composed of 10 questions.
  - Delivered via Survey Monkey to United Way staff, SAVI mail list subscribers, and prior SAVI training participants (Over 5500 people).
  - Survey was completed by 138 people (2.5% response rate)





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# **Group Work**

Using the survey instrument in Handout 2C-4, try to decide what you can learn from this survey

**3** groups

10 minutes to work 5 minutes each to present



### Analyzing Survey Responses

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### **Analyzing Survey Responses**

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### Analyzing Survey Responses

• Counting the responses and doing some descriptive statistics.

Q1					
Α	В	С	D	E	F
0	) 1	0	0	0	0
C	) 1	0	1	1	1
1	. 1	1	1	1	0
C	) 1	0	0	0	0
C	) 1	0	0	1	1
C	) 1	0	1	0	1
C	0	0	0	0	1
1	. 1	0	0	1	0
0	) 1	1	1	1	0
1	. 1	0	1	0	1
1	. 1	1	1	1	1
(	) 1	1	1	1	1

Total Respondents: 12 A: 4 (33.3%) B: 11 (91.6%) C: 4 (33.3) D: 7 (58.3%) E: 7 (58.3%) F: 7 (58.3%)





# **Descriptive Statistics**

## Mean

• The average value





#### Mean

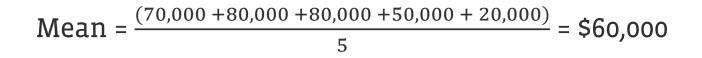






#### Mean







• The middle value













Median = \$70,000







Median = \$75,000



# Mode

• The most frequent value





#### Mode







#### Mode



Mode = \$80,000



# **Group Work**

Using the data table in Handout 2C-5, try to analyze the data (using descriptive statistics, counts, and crosstabulation).

3 groups

15 minutes to work 5 minutes each to present



## **Any Questions?**

