

ELN101: Intro to Bilingualism
Week 10: Survey Research

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What is a survey?

A survey is a method of collecting standardized information from a sample through questions, then using responses to describe or analyze a larger population's characteristics, attitudes, opinions, or behaviors.



Key components of the survey research

- **respondent**: The person answering.
- **questionnaire**: The questions and response choices.
- **sample vs. population**: Respondents are a sample of the population.
- **open-ended vs. closed-ended**
- **biases and errors**

Examples of the survey research

- Election polls
- *Current Population Survey (CPS)* surveys employment, unemployment, and other labor-force statistics.
- *Pew's American Trends Panel (ATP)* surveys U.S. public opinions.
- *Pew's Religious Landscape Study* surveys U.S. adults's religious identity, beliefs, and practices.
- Workplace and school surveys (e.g., *How do you like your class?* etc)
- Consumer satisfaction surveys (e.g., *Are you satisfied with our call center operator? Yes or no?* etc)

Population vs. Sample

- **Population**: The whole group of a study is interested in examining. The population is usually large and is not fully observable.
- **Sample**: The smaller group **randomly** selected from a population that a study is interested in. Researchers use the responses from a sample to draw conclusions about the population.



Who are the population of these survey studies?

1. The MTA surveys selected residents of Queens about bus frequency, reliability, and access to subway stations. The findings will help plan local bus changes. The MTA wants to learn the views of residents, including those who do not currently use their bus services.
2. The MTA surveys selected residents of Queens about their satisfaction with bus services. The findings will help plan local bus changes. The MTA wants to learn the views of frequent users of its bus services.
3. The MTA surveys selected residents of Queens about current accommodations for elderly bus users. The MTA wants to learn whether it should create more priority seating on its buses.

4. The Community Education Council 1 (Lower East Side and East Village) wants to know parents/guardians' satisfaction about communication with schools, student safety, and access to after-school programs in the public schools in their district.
5. A public hospital in Brooklyn surveys employees about shift scheduling, communication, and access to childcare. The hospital will use the results to review workplace policies and improve the patient experience. The study specifically addresses patient-facing services by clinical staff (doctors and nurses, etc.) and nonclinical staff (security guards, desk clerks, etc.) are not included in this survey.
6. LaGuardia Community College surveys selected students about food choices on campus. College leaders will use the findings to plan food services such as school cafeterias and snack vending machines.

7. The New York Public Library surveys selected residents of Manhattan about library programs, opening hours, and digital services. The NYPL is interested in learning why some residents never use library services and will use the survey results to improve those services for them.

Different types of sample biases/errors

- **Coverage error**: Some members of the population are missing from the list or method used to reach people.
- **Selection bias**: The selection process makes some kinds of people more likely to be included.
- **Nonresponse error**: People who do not respond differ in important ways from those who do.
- **Response or measurement error**: Answers do not accurately reflect what participants think, do, or experience. Confusing or leading questions, poor recall, and pressure to give socially acceptable answers can cause this.
- **Processing error:** Responses are entered, coded, or analyzed incorrectly.

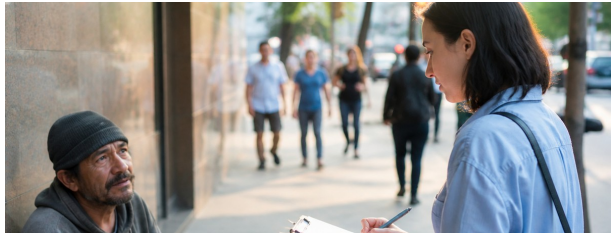
What kinds of biases or errors are there in the following samples?

The MTA surveys selected residents of Queens about bus frequency, reliability, and access to subway stations. The findings will help plan local bus changes. The MTA wants to learn the views of residents, including those who do not currently use their bus services.

1. The MTA surveyed passengers at five busy Queens bus stops between 9am and 5pm and collected over 1,000 responses.
2. The MTA mailed a survey to 10,000 randomly selected residents in Queens. Many do not return it, but the MTA managed to receive 500 responses since it mailed so many surveys.



3. The MTA used survey, in which one question asks, ”How often is your bus late?” Some passengers count a bus as late if it arrives one minute after the scheduled time, while others count only longer delays.
4. The MTA randomly selected 100 residents who live in the neighborhoods served by the routes.
5. After collecting the surveys, a staff member at the MTA accidentally enters several responses saying ”satisfied” as ”dissatisfied.”



Open-Ended and Closed-Ended Questions (1)

Babbie's example: The most important U.S. issue

- **Open-ended**: Respondents name the issue. Difficult to analyze.
- **Closed-ended**: Respondents choose from a list. Easy to analyze.

1. What is the biggest problem you experience when using the MTA bus in your neighborhood?
2. Are you satisfied with the current bus services in your neighborhood?
   - Yes / No
3. Are you satisfied with the current bus services in your neighborhood?
   - Very satisfied / Somewhat satisfied / Neither satisfied nor dissatisfied / Somewhat dissatisfied / Very dissatisfied
4. What issues have you experienced when riding an MTA bus in the past month? Select every answer that applies.
   - Bus arrived late / Bus did not arrive / Bus was too crowded / Bus passed without stopping / Bus was difficult to board / Bus was unclean / None of these

Changing between open-ended and closed-ended questions

1. Topic: Bus use
   - How often do you ride an MTA bus?
   - Have you ridden an MTA bus in the past seven days?
     Yes / No
2. Topic: Bus delays
   - Tell us about a time your MTA bus was delayed.
   - In the past 30 days, has an MTA bus you were waiting for arrived later than expected?
     Yes / No
3. Topic: Long waits
   - What is your experience waiting for an MTA bus?
   - In the past 30 days, what was the longest wait for an MTA bus?
     0-10 min / 11min-20min / 21-30min / more than 30 min

Open-Ended and Closed-Ended Questions (3)

Create open-ended and closed-ended questions

4. Bus frequencies
5. Bus cleanliness
6. Crowding
7. Bus stop conditions
8. Safety
9. General service
10. Fare affordability



Typical problems in the survey items (1)

Exhaustive and mutually exclusive

- **Exhaustive**: Every possible answer fits.
- **Mutually exclusive**: Categories do not overlap.

1. How often have you ridden an MTA bus in the past 30 days? Choose one.
   - 0 days
   - 1-29 days
   - Every day
2. How satisfied are you with the cleanliness of the MTA buses you have ridden in the past 30 days? Choose one.
   - Very satisfied
   - Somewhat satisfied
   - Neither satisfied nor dissatisfied
   - Somewhat dissatisfied
   - Very dissatisfied

Typical problems in the survey items (2)

3. Which of these problems have you experienced on an MTA bus in the past 30 days? Select all that apply.
   - The bus arrived later than expected
   - The bus was too crowded
   - The bus was unclean
   - The bus passed my stop without stopping
   - I had difficulty boarding the bus
   - I experienced none of these
4. How did you pay your fare on your most recent MTA bus trip? Choose one.
   - OMNY card
   - Contactless bank card or mobile wallet
   - MetroCard
   - Another payment method: _____
   - I have not ridden an MTA bus

Typical problems in the survey items (3)

Double-barreled question

- **Double-barreled**: A person may support only one proposal.
- Ask about each proposal separately.
- Use clear, short wording; avoid confusing negatives.

1. How satisfied are you with the frequency and cleanliness of MTA buses on your route?
2. Do you support more frequent buses and later service at night?
3. Are you satisfied with bus cleanliness and the condition of bus stops?
4. Should the MTA add shelters at bus stops and install more benches?

Typical problems in the survey items (4)

Leading question

- Avoid loaded wording and appeals to authority.
- Offer balanced response choices.
- Pretest even neutral-looking questions.

1. Don't you agree that the MTA should add more buses to reduce frustratingly long waits?
2. Since transportation experts say bus shelters are essential, should the MTA install more shelters at Queens bus stops?
3. How satisfied are you with the MTA's excellent new bus service?
4. How much has unreliable MTA bus service disrupted your daily routine?

Validity vs. reliability and generalizability (1)

Validity vs. reliability

- **Validity:** The extent to which the survey measures what it intends to measure.
- **Reliability:** The extent to which the survey gives consistent results when used in similar circumstances.
- **Generalizability:** The extent to which findings from a study's sample can apply to the broader population the researcher wants to describe.

- Example 1: A survey can give consistent answers but still measure the wrong thing.
- Example 2: A survey measures the accurate thing, but it gives different answers when it's repeated multiple times.
- Example 3: A survey uses non-random sample from the population to make a claim about the population.

Validity vs. reliability and generalizability (2)

1. A survey asks bilingual New Yorkers what language they speak at home, but it aims to find out their language use at school, work, and with friends.
2. A researcher surveys bilingual students from several schools across in Queens since there are a lot of students with different language backgrounds. The researcher uses the data to make a claim about students in the NYC public school system.
3. A survey asks, “Which language do you speak best?” Students interpret “best” in different ways, so their answers change when they take the survey again.
4. A survey about bilingual students in NYC is given only to students from one school, but the researcher makes claims about all bilingual students in the city.
5. A Queens high school survey asks students how confident they feel speaking English and Spanish. The researcher uses confidence to assess their language proficiency.

Validity vs. reliability and generalizability (3)

6. A survey question written in English is translated into Spanish, but the Spanish version has a different meaning. The answers from the English and Spanish surveys were combined later.
7. A researcher uses a new survey to identify students who are strong in both English and Spanish, but only assesses their oral languages.
8. A researcher surveys bilingual students at one Manhattan high school and uses the results to describe all bilingual students in New York City.
9. A survey asks students how often they use two languages, but changes the response choices from a 5-choice question to 10-choice question halfway through data collection.

Designing a survey on English as the Official Language (1)

Background: On March 1, 2025, a presidential executive order designated English as the official language of the United States. The order does not prevent federal agencies from offering services or documents in other languages.

For each topic below, review the sample question. Discuss whether it is clear, neutral, and appropriate for the topic. Then revise it or write an alternative question.

1. *Awareness*
   Before taking this survey, had you heard that English was designated as the official language of the United States?
   - Yes
   - No
   - Not sure

Designing a survey on English as the Official Language (2)

2. *Source of information*

   Where did you first hear about the designation? Choose one.

   - Television or radio news
   - Newspaper or news website
   - Social media
   - Government website or announcement
   - Family, friends, or coworkers
   - Another source: _____
   - I had not heard about it before this survey
   - Not sure

Designing a survey on English as the Official Language (3)

3. *Support or opposition*

   Do you support or oppose designating English as the official language of the United States?

   - Strongly support
   - Somewhat support
   - Neither support nor oppose
   - Somewhat oppose
   - Strongly oppose
   - Not sure

Designing a survey on English as the Official Language (4)

4. *Perceived effects*

   How much do you think the designation will change the use of languages other than English in federal government services?

   - A great deal
   - Some
   - A little
   - Not at all
   - Not sure

Designing a survey on English as the Official Language (5)

5. *Federal services in other languages*

   Do you support or oppose federal agencies continuing to provide some services or documents in languages other than English?

   - Strongly support
   - Somewhat support
   - Neither support nor oppose
   - Somewhat oppose
   - Strongly oppose
   - Not sure

Designing a survey on English as the Official Language (6)

6. *English-language learning*

   In your view, how much responsibility should the federal government have for helping people learn English?

   - A great deal of responsibility
   - Some responsibility
   - A little responsibility
   - No responsibility
   - Not sure

Designing a survey on English as the Official Language (7)

7. *Personal or community relevance*

   How relevant do you think the designation is to you or your community?

   - Very relevant
   - Somewhat relevant
   - A little relevant
   - Not at all relevant
   - Not sure

Designing a survey on English as the Official Language (8)

These questions help describe who took the survey. Respondents may skip any question.

8. *Age*

   What is your age?

   - 18–29
   - 30–44
   - 45–59
   - 60 or older
   - Prefer not to answer

Designing a survey on English as the Official Language (9)

9. *Languages used at home*

   Which languages do you regularly use at home? Select all that apply.

   - English
   - Spanish
   - Chinese
   - Another language: _____
   - Prefer not to answer

Designing a survey on English as the Official Language (10)

10. *Race/Ethnicity*

    What is your race/ethnicity?

    - American Indian or Alaska Native
    - Asian
    - Black or African American
    - Hispanic or Latino
    - Middle Eastern or North African (MENA)
    - Native Hawaiian or Pacific Islander
    - White

Ink Shedding

- What is the difference between a population and a sample in survey research? Explain why researchers use samples instead of surveying an entire population.
- What is the difference between open-ended and closed-ended survey questions? Which type is generally easier to analyze statistically, and why?
- Also, write at least one question that you wanted to ask during the class.

Bibliography (1)

Booth, W. C., Colomb, G. G., and Williams, J. M. (2008). Assembling reasons and evidence. In *The Craft of Research*, pages 130–138. University of Chicago Press, Chicago. ELN101 (reference).

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