

Cultural and Linguistic Competence in Survey Design and Methodology Workshop

Session 2: Survey Operations

November 1, 2022

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ENGAGE EVERYONE

Consider participants' needs (e.g., visual, auditory, sensory, cognitive, physical, and language). Establish meeting norms to encourage participation. Ask participants to alert the meeting facilitator if they have difficulty seeing the content and/or hearing the presenter. Designate a meeting monitor to address audiovisual issues, monitor the chat box, and respond to participants as needed.

MINIMIZE NOISE

Avoid moving around or shuffling materials on your desk during the meeting. Eliminate crunching or chewing noises and loud typing, which interfere with sound quality for virtual participants and are amplified by microphones and sensory aids for visual or auditory impairments. Speak from a stationary position to keep the audio clear. Mute your phone or your computer microphone when you are not speaking.

ACKNOWLEDGE SPEAKER

Provide an auditory or visual cue before speaking to identify yourself as the speaker. State your name for those who cannot see you. When asking for questions or comments, meeting facilitators should allow five to seven seconds for participants to use the "raise the hand" tool, unmute their phones, or provide a response in the chat box. Be comfortable with the wait time.



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BE HEARD AND SEEN

Project your voice when speaking. Only one person should speak at a time. Avoid overlapping and sidebar conversations. Position everyone present so that they can be seen on screen. Encourage virtual participants to use their webcams if they feel comfortable doing so. Let people see your facial expressions and body language clearly if you are using your webcam.

MAXIMIZE MICROPHONES

Presenters should use microphones to ensure that their voice is loud enough for all to hear. Microphones are needed for face-to-face and virtual meetings and are critical for engaging remote colleagues as well as persons with hearing loss. During virtual meetings, use headphones with a built-in microphone to make sure that the facilitator and attendees can hear you. During face-to-face meetings, set up microphones for the facilitator, presenters, and attendees. Make sure that hand-held microphones are available for meetings that include audience participation. Make sure that speakers are positioned near a microphone.

MAXIMIZE VISUAL DISPLAYS

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Email materials to participants before the meeting. Display meeting documents on screen and capture the main discussion points verbally and visually by taking notes, restating key concepts, or using the chat box. If a participant asks for clarification, rephrase the content instead of repeating it. Assign a meeting note taker so that the meeting leader and monitor can focus on engaging participants. Notes also ensure access for individuals with executive function-related needs, processing disorders, or visual/auditory impairments.

These guidelines are intended to improve the meeting experience for all participants, including meeting facilitators, monitors, and attendees, as well as people with hearing loss or visual impairment, and those for whom English is an additional language. Some of the guidance presented here may apply only to in-person meetings, or virtual meetings, while other guidance applies to both meeting types. Developed by the Access AIR and AIR CREW Employee Resource Groups with support from the AIR Diversity, Equity, and Inclusion Office.



Agenda

- 1. Welcome and Overview
- 2. Pretesting Survey Items
- 3. Survey Sampling
- 4. Survey Administration
- 5. Reflections on the Day

Chat Activity: Temp Check!

In the Chat box, share which cat best represents you today.





Meet the Presenters



Christina Davis

Researcher <u>cdavis@air.orq</u>



Yan Wang

Principal Researcher ywang@air.org



Rebecca Medway

Senior Researcher rmedway@air.org

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Pretesting Survey Items

Christina Davis

Pretesting Survey Items

In this section, we will consider the following:

- Understanding the purpose of pretesting survey items
- Exploring methods to test survey items:
 - Expert reviews
 - Cognitive interviews (and practice)

Chat Activity: Purpose of Pretesting

Pretesting is a set of processes for reviewing items before using them in the final survey.

- Why should you pretest items for a survey?
- Please enter your thoughts in the Chat.





Purpose of Pretesting

- Pretesting items helps
 - ensure validity,
 - reduce measurement error, and
 - ensure items are clear and concise.
- What are the first steps in pretesting?
 - Set pretest goals.
 - Create a comprehensive design plan.





CLC Pause Point: Reliability and Validity

Consider the following when developing culturally appropriate surveys:

- Comprehension
- Appropriateness

- Language
- Authorship

• Usefulness of

information generated

How does attention to these factors strengthen the reliability and validity of your survey?





Methods for Pretesting: Expert Reviews

- Determine who the experts are in the area you want to study.
- But . . . experts often don't represent the viewpoint of the respondent.
- In addition, pretesting surveys with potential respondents is encouraged.





Methods for Testing: Cognitive Interviews

What is a cognitive interview?

- A one-on-one interview is designed to reveal how respondents understand and respond to survey items.
- A cognitive interview is NOT a test. Researchers are interested in not only respondents' answers but also
 - how they arrive at the answer,
 - how they interact with items, and
 - what the respondent says.





What Is a Cognitive Interview?

Investigate four processes:

- **Comprehension:** Understanding and interpreting items
- **Retrieval:** Recall and retrieve information to answer an item
- Judgment: Making decisions
- **Response:** Answering items



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Cognitive Interviews: Schedule





How to Conduct Cognitive Interviews

- Recruit individuals from the target population.
- Identify who will conduct the interviews.
- Train interviewers on the cognitive interviewing protocol.
- Conduct the interviews.
- Complete analysis and make revisions.



Identifying and Recruiting Respondents

- Identify and recruit people who reflect the makeup of the intended respondents.
- To recruit, use social media, flyers, brochures, newspapers, points of contact, community centers, and community-based organizations.
- Consider the comprehensiveness and accessibility of the recruitment materials.



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Identifying and Recruiting Respondents

Decide how many interviews to complete.

- There is no consensus on adequate sample size.
- Batches of five to 15 participants are common.
- Time and resources typically dictate how many are conducted.



CLC Pause Point: Identifying and Recruiting Respondents

What are some key aspects of recruitment that you need to consider to ensure that you reach your target population?





Identifying Interviewers

- Culturally and linguistically competent
- Ensure safety/comfort of respondents, especially when study material is sensitive or may make respondents feel vulnerable
- Emotionally intelligent: interpersonal skills/relational style
- Reflect the respondent population, when possible
- Familiar and engaged with study purpose and materials



Cognitive Interviewing Techniques

- Concurrent "think-aloud" and retrospective probing
- Both can be used in the same interview protocol





Concurrent "Think-Aloud"

- The interviewer asks the respondent to read the item aloud and verbalize what he or she is thinking.
- This enables the interviewer to understand the respondent's cognitive processes in answering the item.



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Concurrent "Think-Aloud"

Example: "Does your child have any regularly scheduled relative care arrangements in a typical week?"

The interviewer should prompt the respondent on what they think about to answer the item.

- How does the respondent interpret key concepts of the item?
 - Who does the respondent consider when they think of relatives (e.g., grandparents, aunts/uncles, stepparents)?
 - What does "regularly scheduled" (e.g., the same day each week, one day/week but the day changes, alternating weekly arrangements) mean?
 - What does "relative care arrangement" (e.g., at relatives' house, relative comes to your house, child attends relative-owned childcare center) mean?
- Has the respondent considered all days of the week (e.g., relatives care for the child for one hour each Saturday morning)?



Considerations for the Concurrent "Think-Aloud" Approach

Strengths

- There is less concern for interviewers leading respondents and causing bias.
- The open-ended format lends itself to richer information that otherwise may not be collected (e.g., language, reading level).

Challenges

- It is time consuming.
- Interviewers must spend time making sure the interviewee is comfortable.
- The burden is on respondents because they must verbalize their thoughts while interviewers actively listen and jot down notes.



Retrospective Probing

- Interview questions are asked after the respondent has completed a task: a section of the survey or the entire survey.
- This strategy provides targeted information about how respondents interact and answer items.





Considerations for the Retrospective Probing Approach

Strengths

- Interviewees may find it a more natural way to be interviewed.
- Interviewers can ask specifically about an item that concerns them (e.g., what do you think the word ____ means?).

Challenges

- Interviewees may have a hard time remembering.
- It can be difficult to capture what words or phrases the respondent stumbles over.



Cognitive Interviewing Techniques: Types of Probes

Scripted

- Predetermined interview questions that all respondents are asked
- Should be asked if respondents don't address a certain topic

Spontaneous

- Interview questions that arise out of something that the respondent said or did
- Based on the topical focus of each question
- Use with caution. Scripted probes provide more reliable information.



Cognitive Interviewing Techniques: Example Probes

These should be included in the protocol.





Cognitive Interviewing Techniques: Example Probes

These should be included in the protocol.





Conducting the Interview

- Build rapport.
- Respondents must complete the informed consent form.
- Explain the purpose of the study.
- Provide an example of the cognitive interview technique.

Note: Interviews usually take 30–60 minutes.

Interview teams often provide incentives to participants after completing a cognitive interview.





Cognitive Interview Analysis

- Analysis is done by reviewing notes and listening to audio recordings.
 - Look for common themes/coding analysis.
 - Discuss items with the team.
 - Make revisions.
 - Conduct more interviews if needed.
- Analysis make take a while.





Determining Survey Equivalence

Semantic	Conceptual	ltem
Equivalence	Equivalence	Equivalence
Operational	Measurement	Functional
Equivalence	Equivalence	Equivalence



CLC Pause Point: Survey Equivalence

- How can CLC-based cognitive interviews be used to assess survey equivalence?
- How can assessing multiple domains of survey equivalence improve individual items and the survey as a whole?





Pair/Share: Practicing Cognitive Interview Protocols

Time: 15 minutes

Instructions

- 1. Share the survey items developed for your Day 1 homework with your partner (see Google Doc, Part 4).
- 2. Select a cognitive interviewing approach to use for a mock interview.
- 3. Practice conducting the interview. Team members should practice both roles for each set of survey items.
- 4. Do you need to make any adjustments to your survey items based on this practice? Would a different interview technique work better?



5. Enter your notes in your Google Doc.



Questions?





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Survey Sampling

Yan Wang

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Learning Objectives

In this section, we will:

- define a target population,
- review sampling approaches,
- conduct a census, and
- discuss other considerations.



Defining a Target Population

- The target population is the group of people or organizations whom the survey results will represent.
- Your research questions will define the parameters of the target population.

Examples

- All students in a district
- Users of iPhones
- Health organizations that are researching COVID-19



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Creating a Sampling Frame

What is a sampling frame?

- A list of all those within a population who **can** be sampled.
- It helps define parameters (narrow) from which your final sample will be drawn.
- In other words, it defines those in the population **you can potentially reach** and that fit the parameters for your target population.

What are some common sampling frames?

- Voter registries
- Administrative data sets
- Census records



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Narrowing Your Target Population

What is your general population?



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Activity, Part 5: Target Population and Sampling Frame

Time: 5 minutes

Instructions

- 1. Enter information on how you will identify and reach your target population in your Google Doc.
- 2. Indicate how your sampling frame will be inclusive and reflect the diversity of the population.

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CLC Pause Point: Reflecting the Diversity of the Population

- Does your sampling framework allow you to generate a sample that reflects the diversity of the population of interest?
- Is your target population inclusive?
 Does it consider all facets of the population of interest?





Sampling Strategies

You do not need to survey every member in your sample population to collect high-quality, reliable data.



Sample

- Collects data from a **proportion of the** target population.
- Forms include simple random sampling or stratified random sampling.



Conducting a Census

What does it mean to conduct a census?

Why would I want to do this?

What are the drawbacks?

- To conduct a census, you attempt to survey every person or organization in your target population.
- Electronic survey platforms make administering surveys easier than ever. Surveys can be formatted for a computer or a cell phone.
- Your response rate might be low.
- Those who respond may have certain characteristics and may not be representative of your target population (e.g., those who have access to internet versus those who do not).
- It may be costly to execute.





• A sample is a proportion of your target population. What does it mean • The sample would ideally be representative of the total target to use a sample? population. Why would I want • Samples can be less costly to collect data from, in money, time, to do this? and human resources. • Your response rate might be low. • Those in the sample who respond may not be representative of What are the the target population. drawbacks? • Without careful sampling techniques, your survey results may be skewed or nonrepresentative of the target population.



Census or Sample?

- A high response rate from a representative sample is ideal.
- Representative samples are more important than large samples.
- Census approaches can be used when resources are adequate to ensure a high response rate, or when it is more complicated to survey a sample.





Activity, Part 6: Census or Sample Approach

Time: 5 minutes

Instructions

Add in which approach (census or sample) you will use given your research questions, target population, capacity to execute your plan, timeline, and funding.



Sampling Approaches

There are many different approaches to creating a survey sample. In this section, we will begin with **simple random sampling**.





Simple Random Sample

What is a simple random sample?

- All members of a target population have an equal chance of selection.
- Allows for inferences about responses from the general population.

Creating a random sample

- Use Microsoft Excel or a random number generator.
- Assign members/units of your sample to numbers generated.

More information on how to do this in the supplementary materials.





More Survey Sample Approaches

Stratified Sampling	 What is it? Sorts participants into strata defined by specific mutually exclusive characteristics and draw samples from each strata. Pro: Ensures representative samples from all groups of interest. Con: Not always necessary or possible considering your research question and sample.
Convenience Sample	 What is it? Administering a survey at a convenient gathering of target population members (e.g., at a conference or meeting). Pro: Convenient to capture responses. Con: May be biased and not representative of your full target sample.
Snowball Sampling	 What is it? Using previous contacts to identify new survey respondents. Pro: Can be useful in surveying hard-to-reach groups. Con: May be heavily biased and not representative of your full target sample.



Sampling: Additional Considerations for Survey Research



Ensure that your total sample is large enough to ensure representative sample(s) but manageable from a resource standpoint.



Use purposive sampling to represent patients from diverse racial and ethnic backgrounds.



Assume that not everyone will respond to your survey. Develop a plan for follow-up measures and integrate these numbers into your sampling plan.



Beware of convenience sampling because it may not be representative of your target sample.



Be attentive to subgroup size and use oversampling methods or stratified sampling if needed. Be attentive to the ability to detect effects in your subsample.



Consult a statistician for large-scale, high-stakes surveys to conduct analyses to determine sampling sizes.



Pair/Share: Revisit Target Population and Approaches

Time: 8 minutes

Instructions

- 1. With your breakout partner, review target population information in your Google Doc (Part 5):
 - Should any changes be made?
 - Add in more specifics?
- 2. Re-evaluate your approach (census or sample, see Part 6), given your research questions, target population, your capacity to execute your plan, timeline, and funding?



3. Capture your notes in your Google Doc.



Questions?



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Survey Administration

Rebecca Medway

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Learning Objectives

In this section, we will learn about

- data collection modes,
- survey implementation, and
- response rates.



Zoom Poll: Survey Administration

Have you ever administered a survey?





Chat Activity: Administering Surveys

Please use the Chat box (or unmute) to share what challenges you have experienced when administering a survey.





Survey Modes

Choose your

- Contact mode(s)
- Response mode(s)

When choosing modes, consider the following:

- What contact information **you have** for your sample members
- What response modes **are accessible** to your sample members

Can be the same as each other or different.

Example:

Contact mode	Response mode
Telephone	Telephone
Telephone	Paper
Mail	Paper



Contact Mode Options





Response Mode Options



Paper

In-person or face-to-face **Web** (desktop, laptop, smartphone, tablet) **Telephone** (call, text)



Self-Administered Surveys

Self-administered surveys (paper, web) are generally less expensive than interviewer-administered ones (telephone, in-person).

However, keep in mind the following:

- What is respondents' reading ability?
- What is respondents' confidence with computers and the internet?
- Lack of second party to motivate respondent during a confusing or long survey.
- Response rates of online and paper surveys can be lower than those of in-person surveys.



Quick Note: Online Versus Paper

Reasons to use an email contact/web response mode

- You have email addresses or don't have mailing addresses.
- Easy/inexpensive to send emails to a large group. Sample members expect to have a web option.
- Web instrument offers tech benefits that can ease burden.



Reasons to use a mail contact/paper response mode

- You have mailing addresses or don't have email addresses.
- Concerns about availability of the internet or computers among sample members.
- Concerns about comfort with technology among sample members.



CLC Pause Point: Power Dynamics

• How might **power**

dynamics come into play with an inperson or telephone survey versus a self-administered survey?

• When using online surveys, who might get left out and why (access)?





Planning for a Survey Administration

- Finalize your questionnaire; prepare your data collection instrument.
- 2. Draw your sample.
- 3. Create a data collection plan.
 - Create a contact plan and contact materials.
 - Decide about incentives.
- 4. Deliver survey invitation and contacts.
- 5. Follow-up with nonrespondents.





Preparing Your Instrument: Web

- Identify the survey platform, program the instrument, have people test it.
 - Examples: Qualtrics, SurveyMonkey, Survey Gizmo, Web Surveyor, RedCap, Google Forms
 - Free versions may not always be feasible or available.
- Make sure the platform can handle
 - the number of respondents,
 - the number of questions,
 - skip logic (if that's needed), and
 - additional languages.
- Consider whether the platform keeps track of who responded.
- Consider whether the platform has customer support.



Preparing Your Instrument: Other Modes

Paper

- Format questions in a way that is easy to follow.
- Identify printer.

Telephone or in-person

- Create an "interviewer friendly" instrument that includes instructions.
- Conduct mock interviews with interviewers.



Preparing Your Instrument: Informed Consent

- Surveys also must include informed consent:
 - Information about the study
 - Explanation that participation is voluntary
 - Risks and benefits
 - What will happen to the information given
 - Information about confidentiality and anonymity
 - Contact information
 - Documentation of consent
- Participants must give their consent before the survey can start.
- Children also need to give consent (called assent), and parental/guardian consent is required.



Preparing Your Instrument: Assurance of Data Security and Confidentiality

- Provide users with logins/personal identification numbers or use a survey platform that creates a personalized link for each sample member.
- Aggregate data so that specific persons cannot be identified.
- Understand that confidential and anonymous aren't the same thing.



Preparing Contact Plan and Materials

- Contact sample members regularly and, if possible, in a variety of modes.
- But be mindful of not being overbearing.
- Explain what the survey is about and why it is important.



- Can increase response rate
- Can help identify bad contact information

link

- Allow time for people to respond ٠ between contacts
- Can be in a different mode than earlier contacts



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Incentive Strategy

- In general, a prepaid incentive works better than a promised reward for completing the survey.
- Cash incentives tend to work better than nonmonetary gifts (e.g., coffee mug, pen, magnet).
- Guaranteed incentives tend to work better than lotteries.
- Consider whether your incentive is coercive. Small, prepaid cash incentives can be effective.



Institutional Review Board Approval

- All universities have an Institutional Review Board (IRB).
- Before collecting data, you need IRB approval.
- Your IRB submission must include all survey materials (e.g., survey instrument, informed consent, recruitment materials).



• Check out this <u>video</u>.

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Pair/Share: Administering Your Survey

Time: 10 minutes

Instructions

- 1. With your breakout partner, talk about the contact approach that would work best for your target population.
 - Will your contact mode(s) and response mode(s) be the same?
 - Will you offer an incentive?
- 2. Capture your notes in your Google Doc.





Pair/Share: Administering Your Survey

¥ ¥ ¥	How will you administer the survey?	 Will the administration method be equally accessible for all? What additional options can be used? What are the financial implications?
	What is your time frame for data collection?	 Does this include time to form relationships with individuals in the community who can support your efforts?
*** ***** ******	How will you recruit?	 Will recruitment strategy yield a diverse sample?
\$	Will you offer incentives?	Could an incentive be considered coercive?





What Is a Response Rate?

Response # of responses Rate # of eligible sample members



Why Are Response Rates Important?

The response rate is one way to gauge whether survey results are representative of the target population:

- A high response rate maximizes the chance that the results are representative of the target population.
- A low response rate increases the chance of biased results, which cannot be generalized to the target population.



Response rate is not a perfect indicator of representativeness. It is commonly used because it is available and easy to interpret.

It is not a guarantee of representativeness or lack of representativeness.



Only Eligible Sample Members Are Included in the Response Rate Calculation

Cases determined to be not eligible are not included in the response rate calculation.

Examples of noneligibility:

- Survey operations determine that two cases are duplicates.
 - Two email addresses listed on the sample file end up belonging to the same person.
- Survey screening questions determine the respondent not to be eligible.
 - A survey of teachers at an elementary school in the 2021-22 school year has a screening question confirming that the respondent worked at the school during this time.

- Who is an eligible sample member?
- How will you know if they are eligible?
- What does it mean to be a respondent in your survey?

Does someone need to complete all items? A few items? Just one?



The American Association for Public Opinion Research

- AAPOR standard definition
 - Standardized definitions of response rates
 - Aims to enable researchers to have a common language to compare response rates across surveys
- Includes six definitions of response rates to account for incomplete surveys and how cases of unknown eligibility are handled.
- Excel-based **response rate calculator** is available on the AAPOR website.



AAPOR Response Rate Calculator 4.1





Is There a Standard Target Response Rate?

- No standard target response rate exists.
- Some federal agencies have set standards for data collection response rates. For example, the National Center for Education Statistics has a response rate target of 85%.
- Survey response rates have been declining, and it can be very difficult to achieve high response rates.



What Influences Response Rates?





How Do You Maximize Response Rates?

Salience

- Ensure that sample members see the value of the survey and their responses.
- Point out sample members' personal connection to the topic.
- Appeal to people's tendency to help; ask them to help by giving their input.

Communication

- Personalize salutations.
- Draft follow-up reminders.
- Show positive regard; say thank you.
- Tailor and personalize communications about the survey and its purpose.

Data Collection Mode

- Provide return postage for mail surveys.
- Follow up by mail, by email, by telephone, or in person.
- Use a combination of survey modes (e.g., telephone plus mail, online plus mail).

Source: Dillman (2000); Scheuren (n.d.).



How Do You Maximize Response Rates?

Survey Design

- Make the survey attractive and easy to complete and return.
- Provide clear instructions about how to complete and submit the survey.

Survey Sponsor

- Send an endorsement letter from a respected leader.
- Ensure the confidentiality of the information provided.
- Use recognizable logos or graphics.
- Tailor the materials to a school or district, if appropriate or possible, using local letterhead or colors.

Cultural Appropriateness

- Clearly describe the history and context of the research.
- Use double translations/back translations.
- Develop detailed translation or adaptation guides.
- Train staff involved in translating or adapting the survey.
- Ensure accessibility and readability.

Source: Dillman (2000).



Survey Response Rates



What Are the Best Practices Regarding Response Rates?

- **Monitor** the response rate overall and within groups of interest during data collection; target additional follow-up contact if warranted.
- Calculate and report the response rate.
- Examine the data for nonresponse bias.
- **Discuss the survey results** in the context of the response rate and any possible nonresponse bias identified.

CLC Pause Point: Value for Communities

People are more likely to respond to a survey that has value/impact for them or their communities.

- What steps can you take to ensure that your study has value for participants?
- What cultural and linguistic factors should you consider when selecting an incentive?
- Does your incentive reflect the true value of participants' time and contributions?





Questions?





Day 3 Preview

Thanks for a great session today!

Workshop Schedule

Session 3: Analysis & Reporting

(Wednesday, November 2)

- Conducting nonresponse bias analysis
- CLC considerations for reporting survey results
- Closing and reflections

