

11.945  
Katrina Practicum  
Session 8

## ***Developing a Survey Instrument***

### **Using Surveys as a Tool in the Course**

2 Potential options:

- Students do a survey and feed data back to the client;
- Students learn how to do surveys and teach residents how to do the survey.

Students cannot do more than one survey during the trip to New Orleans – any survey that students choose to do must be determined by the class as a whole.

Reasons to do a survey:

- Understanding what housing problems local residents are facing
- Understanding what residents would like to see in an environmental community center

### **Survey Research Methods**

<http://www.socialresearchmethods.net/kb/survey.htm>:

Materials from Cornell Professor; provides very useful information with modules that students can tap into.

“Research on” vs. “Research with”

- Community Based research:
  - o You go out, find something, feed it back to a client
- Collaborative Research
  - o Working with client group with a transfer of skills and knowledge in both directions:
    - You bring in expertise; they feed local knowledge so that data collection is really meaningful.
    - Program evaluators use it as an opportunity to transfer a skill set

Treme Research

- Purpose:
  - o What do you want to learn?
    - Big Picture: Information to help client figure out what they should be focusing on?
      - Housing:
        - o How are people currently meeting their housing needs?
        - o How do they envision their future situation?

- Housing configurations: what was there vs. new construction/new styles
  - Neighborhood Characteristics
    - What did you like about the past neighborhood?
    - What goods/services would you like to see in the future?
  - Environment:
    - Contamination: (Part of Housing Questions)
      - What do people already know about contamination?
      - What have people heard about contamination?
      - What is your risk perception?
      - Have you done testing?
      - Have you been in touch with public officials?
      - Try to learn about institutional support networks – identify bottlenecks
  - Environmental Center: (part of Neighborhood Services)
    - What kinds of information do you want to know?
    - People's age, length of tenure, etc.
- Population (Who should participate)?
  - Any unit.
  - The key is that the questions and the population need to match
    - E.g. If I am asking about a community level issue, need to identify a population at that level:
    - most of these questions are going to be more at the individual level.
      - Residents?
      - All residents?
      - Relocated residents?
  - The Population is the complete set (100%)
    - This is the group that you will generalize to (all residents)
    - This is a group that you can study (residents still in Treme)
- Sample
  - A portion of the population
    - Must be a representative sample to allow for use of representative statistics
    - Sample is selected from the population
  - Sampling frame:
    - Population from which the sample is drawn
    - Who is the population for this study?
      - Residents in Treme

- What are their needs?
      - What do they want to see in the future?
    - Residents relocated from Treme
      - What do they need to return?
      - Reaching out to them may help them come back
      - Feasibility depends on how much information the community partners have on relocated residents
    - How can you contact them?
      - Bring people together and have people gather information on the spot
        - Self-selection bias
        - People who are more marginalized/out of the loop may not be able to be there.
- Types of Random Samples
  - Random
    - Not biased
    - No time to talk to the whole population
  - Simple
    - Everyone has the same probability of being chosen from the population.
  - Stratified
    - If two groups in a population might answer differently, and want to be sure that you don't over/under sample, you sample from each group
  - Systematic
    - Based on decision-rules
      - Requires thinking through decision rules
- Sampling Frame Development;
  - Creating a list of the population
    - How complete is the list?
  - Usually takes longer to develop the sampling frame than to develop and implement the survey.
- Non-Random Samples
  - Can introduce bias
  - Convenience Sample:
    - Talk to the people you find in a location
  - Criterion
    - Set up some criterion and follow it
  - Snowball
    - Ask people and ask them to tell you other people
    - Use technique with incomplete sampling frame or population is incomplete
      - Ask other people to help
        - Important technique for interviews

- Challenges
  - o What will a survey tell us?
    - What will it not tell us?
    - What biases come with the language you choose?
      - “Mult-unit”
      - “Environmental”
  - o Will it be possible to do focus groups / pre-testing?
  - o Will the survey happen if not over Spring Break?
  - o Would it be more realistic to do Rapid Rural Appraisal
- Other Methods of Data Collection:
  - o Wentworth Institute of Technology:
    - Group working with issues of design and space
      - Held design charette
      - We will get the outcome from that
- Types of Surveys:
  - o Questionnaires (self-complete)
    - Mail
      - Becoming less-common
    - Electronic
      - Less-expensive, easier to administer
      - Minimizes mistakes
    - Group-administered
      - Go to a meeting and administer it where there is a captive audience
      - Instant access / instant credibility
  - o Interviews (enumerator complete)
    - Telephone
    - Face-to-face
- Which approach should be used?
  - o Consider:
    - Accessibility of the population
    - Types of information required
      - More sensitive – more personal contact
    - Types of questions
    - Resources
      - Time
      - Money?
- Survey Construction:
  - o Types of Questions
    - Dichotomous (yes/no)
    - Categorical
      - More difficult to work with
      - Eats up degrees of freedom
    - Rank order
    - Interval (Likert scale)

- Don't include a middle – four not five – force people to make a choice one side or another
  - Contingency with skip patterns
    - “If yes, go here”
    - Often one of the biggest problems in surveys
  - Open-ended
- Question content
  - Is the question necessary/useful?
    - Do you need the level of specificity?
  - Do respondents have the needed information?
  - Does the question need to be more specific?
    - What are you really trying to get at?
  - Is the question biased or loaded?
    - Are you forcing people to answer with a biased result?
  - Will the respondent answer truthfully?
    - e.g. salary
- Response format
  - Check box
  - Fill in the blank
  - Ranked
  - Circle number or statement
  - Open Ended
    - Biggest problem: handwriting
- Wording
  - What assumptions does the question make?
  - Is the time frame specified?
  - Double-barreled?
    - some questions ask two things, if someone answers “yes” can't assume that it applies to both
  - How personal/direct is the wording?
    - Questions about feelings are more personal
      - More difficult to answer
      - Respondents are less likely to answer
      - They make respondents less likely to complete survey
    - More objective questions are easier to answer
- Placement
  - Is the answer influenced by prior questions?
    - Did you give someone information that would bias them?
    - Did you need to ask something else first?
  - Does the question come too early or too late to arouse interest?

- If you are going to ask something outside of what is expected, must frame that through transitional questions / framing statement
  - Personal questions should come at the end of the survey
- Recommendations
  - Start with easy, non-threatening questions
  - Put more difficult, personal, threatening questions near end
  - Never start a mail survey with an open-ended question
  - For historical demographics, follow chronological order
  - Ask about one topic at a time
    - Topic headers
  - When switching topics, use a transition statement
  - Reduce response set
    - People tend to check the same response if it is too long
  - For filter or contingency questions, make a flowchart / use arrows
- Response Rate Matters
  - Outcome is influenced by outliers
    - Shorter is better
      - People tend to answer shorter surveys
    - Important, interesting way to promote participation
      - T-shirts for participation
    - Ways to keep interest
      - Focus on things that people care about
      - Face validity
        - Ask about things that really resonate
      - Who is funding the survey / how will you use these results?
        - Disclosure can add bias
      - Clear rationale / need for survey
        - Takes time, energy, resources
  - Professional Presentation
    - Partner with local community
    - Well-thought-out
    - No typos
    - Name tags, credentials
  - Pretest and refine to catch mistakes
    - Series:
      - Variation on outcome
      - Face validity – does this resonate?

- Embedded mistakes

## Preparing for Research

- COUHES: Research on Human Subjects
  - Research ethics
    - Informed consent
      - People know why you are doing the research
      - They agree to participate
    - Confidentiality
      - Need to take some measure to ensure confidentiality
  - COUHES training
    - MIT required to take the test
    - Faculty required to continue requalifying
      - Informed consent
      - Confidentiality
    - Came out of post-world-war II
      - Unethical experiments on human subjects
  - COUHES approval
    - Need to get approval for anything you do
    - Work for this class probably qualifies as expedited / exempt
      - Medical research / research on children requires review process in front of committee
      - Exclude children from the study (use parents as a proxy).