Module 3a: Survey Methods
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SA3 Modules
1. Asking a Question (Purpose)
2. Designing an Assessment Study
3. Assessment Instruments (validity and reliability)
4. Analyzing Results
5. Using and Communicating Results
6. Celebrating results (follow-through and reflection)

Activity:
Complete a short survey

Suggested Resources:
• Schuh, chapter 5
• Dillman, Mail and Internet Surveys
Survey Methods

• Much more to a successful survey than writing high-quality items (although, clearly that is important!)
  – Establishing what you want to know and determining that a survey is the best tool
  – Being clear about your participants
  – Strategies for supporting responses
  – Deciding how and how many contacts to make
  – Receiving accurate, meaningful data
  – Getting answers to your questions!

Why do People Respond to Surveys?

• Altruistic
  – Believe research is important, want to be helpful to researchers, civic duty, etc.
• Egoistic
  – Enjoys surveys, would benefit, interest in results, etc.
• Survey characteristics
  – Interest in topic, respect for organization, length of survey, etc.

Your Goal

“Reduce survey errors from coverage, sampling, measurement, and nonresponse” (Dillman, 2000, p. 27)

The likelihood of a respondent accurately completing your survey “is greater when the respondent trusts that the expected rewards of responding will outweigh the anticipated costs.”
It's a system approach – there's no single change or modification you can make to meet this goal (like using green paper).

Rather, it must be carried throughout the survey process.

Dillman uses a theory called “social exchange” to frame why some people respond to a survey.

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Social Exchange

“actions of individuals are motivated by the return these actions are expected to bring, and in fact usually do bring, from others” (Dillman, p. 14).

- Altruistic: believe participation is helpful and researchers are grateful (norms of cooperation)
- Egoistic: personally benefit (perhaps from incentive or through seeing results or use of results by organization – self interest)

Key elements are trust, rewards, and costs (survey design is important too, but we will first focus on the people).

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Dillman’s Principles: Trust

- Provide token or incentive in advance
- Sponsorship by legitimate authority
- Important task (or appears important)
- Invoke exchange relationships
**Dillman’s Principles: Rewards**

- Show positive regard
- Say thank you
- Ask for advice
- Support group values
- Give tangible rewards
- Make the questionnaire interesting
- Give social validation
- Communicate scarcity of response opportunities
- Share results and feedback (Jeremy's)

**Dillman’s Principles: Reduce Social Costs**

- Avoid subordinating language
- Avoid embarrassment
- Avoid inconvenience
- Make questionnaire appear short and easy
- Minimize requests to obtain personal information
- Emphasize similarity to other requests (people who respond to 1st survey in series much more likely to respond to 2nd survey)

**Survey Implementation Steps**

1. Determine what you want to learn / purpose (often overlooked but is critical!)
2. Identify your target population and seek to understand them
3. Develop survey protocol (contacts, incentives, etc.)
4. Create instrument
5. Implement protocol and monitor responses
6. Analyze results
2. Understand Target Population

- Will they be more likely to respond to paper request or email (or phone, or other)?
- Do you already have a relationship with the target population? Do they trust you?
- What can be exchanged for their participation?
- What incentives might be most effective? It's only an incentive if the participants perceive it as one!
- Can you draw a sample?
- Will they likely be more motivated by altruistic or egoistic approaches (or both)?

3a. Survey Contacts

- Multiple contacts (5 recommended)
- Different types of contacts (what works for the first group of respondents may not work for others)
  - Paper pre-notice letter
  - Email survey link (along with token incentive)
  - Email reminder (or text message?)
  - Postcard thank-you and reminder
  - Paper survey and final reminder w/ stamped return envelope
  - Could also try variety of different electronic contacts (e.g., email, text, tweets, Facebook)?

3b. Timing Multiple Contacts

- Most who respond do so very quickly after the contact is made
- But, don’t want contacts to be too close together
- Paper surveys use approximately two-weeks between contacts
  - Shorten this for web / email (no delivery time)
3c. Incentives
Singer, 2013:
• Incentives increase response rates to surveys in all modes of survey delivery
• Monetary incentives work better than gifts; prepaid better than promised or lotteries (but difficult to do prepaid in web surveys)
• No good evidence for amount of incentive; declining rate of return for higher amounts

3c. Prepaid Token Incentive
• “generates feeling that one needs to reciprocate,” creates goodwill and social exchange (I have given you something, can you give me something back?)
• $1 - $5 as prepaid token incentive (more recent studies suggest $5 or $10 – but know your target population)
• Produces sense of reciprocal obligation
• Prepayment difficult in web surveys; try to appeal to altruistic or egoistic motivations in other ways if cannot work out way to do prepayment

Follow NDSU Guidelines on Incentives
• http://www.ndsu.edu/accounting/ap/expenses/
• Not allowable for current employees (or terminating or retiring employees)
• Have to weigh benefits and challenges of using incentives
  – If using alternative incentive (such as a drawing), design to create goodwill and social exchange (not payment for time)
• Waiting on statement from Accounting – not supportive of prepayment and some fund sources may have limitations
3d. Other Incentives (non-monetary)

- Appeal to altruistic (benefits to others and for cooperation) and egoistic (benefits to individual) reasons for participating
- Better response rate when topic is of interest to the respondents
  - Asking current NDSU students about the Bison Football game experience
    - High for those who attended
    - Low for those who did not or are not interested in football
  - More incentive required for those who do not attend the games (survey is not inherently relevant or interesting; no perceived benefit to those who do not attend)

Response Rates: How much is enough?

- If 1 person accurately represented the views of the group, then that would be "enough"
- But people often have very different views
- You worry when those who respond are systematically different than those who do not (non-response bias)
  - Can use weighting to adjust for demographic issues (e.g., female / male)
- In many settings getting over 50% response rate takes heroic effort

Final Note on Incentives

- Incentives can be a pain and only address nonresponse bias (and may even make it worse by bringing more of those who are already overrepresented into the sample)
- Students should have interest in helping us improve (both for themselves and for future students) – don’t neglect this!
- Drawing a reasonable sample can allow focus of more resources on smaller number
- Incentives not a silver bullet – don’t neglect other aspects of good survey development
4a. Survey Design

- Some may complete survey on phones or other smart devices
  - Limit required scrolling by using multiple pages
- Can use branching to route certain questions based on responses, or can insert text or response from prior question
  - Requires careful planning; not all software systems can do this (Campus Labs and Qualtrics both can)

4b. Develop Items

Develop questions that every respondent will:
- Interpret in the same way
- Be able to respond to accurately
- Be willing to answer
(Dillman, 2000)

4c. Question Format

- Open-ended
- Multiple choice or Likert scale
- Check all that apply

- Implications for data analysis, length, use of results (e.g., breadth versus depth)
  - Cover a wide range of topics, or fewer topics more deeply?
4d. Use Complete Sentences and Simple Words

“The efficacy of this program’s ability to avoid obfuscation was:”

“The program requirements were clear”

4e. Use Precise (but not overly) Non-Overlapping Quantifiers

Please select the category that represents your current age

a. More than 26,297,400 minutes
b. 27,000,000 to 10,000,000 minutes
c. Less than 8,000,000 minutes

*Note the impact on your data analysis choices with this type of question
4e. Use Precise (but not overly) Non-Overlapping Quantifiers

Please enter the year you were born: ____

Even better, don’t ask and pull this information from the NDSU student record.

4f. Avoid Double-Barreled Questions

“To what extent were the employees pleasant and the room temperature comfortable?”

“To what extent were the employees pleasant?”

“Was the room temperature comfortable?”

4g. Use Neutral Language

“I was highly engaged in my program.”

“The leader was excellent.”

“Please state your level of engagement in your program.”

“Please provide an overall rating for the leader.”
4h. Align Question Stem with Response Categories
“How frequently did you miss scheduled program events?”
- Strongly agree
- Agree
- Do not know
- Disagree
- Strongly Disagree

4h. Align Question Stem with Response Categories
“How frequently did you miss scheduled program events?”
- Never
- Once or twice during the semester
- Three to four times during the semester
- Five or more

4i. Be Careful with Placing “does not apply” and “Neutral” Categories
- Does not apply = do not know / cannot answer
- Neutral = middle opinion (between “agree” and “disagree”
4j. Use an Equal Number of Positive and Negative Categories

“Please provide an overall rating for the program.”

• Excellent
• Above average
• Good
• Poor

4k. Do respondents have a ready-made, accurate response?

“The content covered in this program was important to my future career.”

• May not have future career planned (or be very different between respondents)
• All respondents may not agree what “content” was in the course
• Hard to predict what will be “important” in the future
4I. Ordering Questions

- Would you alphabetize a grocery list? (Dillman, 2000)
- Group questions by topic and response categories (for ease of answering)
- Choose first question carefully
  - Interesting, apply to everyone, easy to answer
- Demographic questions go last
  - Better to pull these data from NDSU system if possible

5. During the Survey

- Be prepared for unusual questions or contacts regarding your survey
  - Try to respond to every question received
  - Remove individuals from contact list when appropriate
  - Encourage response to survey when it might be possible
- Monitor your response rate to see if there are any issues

Going Forward

- Developed a “checklist” for teams to use during the planning, development, and implementation of a survey
- Goal is not to “check” every item on the list – rather goal is to encourage thoughtful reflection and opportunity to catch errors before they occur