"Survey" vs "Questionnaire"

Survey – systematic collection of information

Questionnaire – instrument used to collect information
The Big Picture – Survey Design

- Define target population
- Define sampling methodology
- Define mode(s)
- Define distribution plan
- Define how results will be used
- Develop questionnaire
- Collect, clean, and analyze data
- Share and use results
Questionnaire design

- Determine question:
  - content
  - structure
  - wording
  - order

- Format questionnaire

- Pre-test

- Refine, Re-pre-test
Question Format

Comprehension  Retrieval  Judgement  Format
If you can’t articulate how you’re going to use the information, don’t ask the question.

There is SO much stuff that would be SO cool to know!

I need people to complete my questionnaire...
Question structure

Open-ended

Closed-ended
- Multiple choice
- Dichotomous (binary)
- Scales*

*Every scale is not a Likert Scale!
Q structure: Scales

- Use same number of points
- Points should be equidistant
- Scale should reflect what you’re trying to measure
- Include neutral option only if you will use in analyses
- **ALL** points should be labeled

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<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Frequently</td>
<td>Every time</td>
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Q structure: Response options

Focus response options on what you want to measure

Agreement:
“To what extent do you agree or disagree that the workshop provided useful information?”
  - Strongly agree
  - Agree
  - Disagree
  - Strongly disagree

Usefulness:
“How useful was the information that the workshop provided?”
  - Very useful
  - Somewhat useful
  - Not very useful
  - Not at all useful
Q structure: Response options (what not to do)

Not mutually exclusive:

“How much time do you spend watching TV on a typical day?“

- 1 hour or less
- 1 - 3 hours
- 3 or more hours

Not inclusive/exhaustive:

“What was your household’s total income 2017?“

- $10,000 - $19,999
- $20,000 - $34,999
- $35,000 - $49,999
- $50,000 - $74,999
- $75,000 - $99,999
- $100,000 or more
Q wording: Use plain and positive language

Plain language

“How long have you lived in your community?”

vs

“For how long have you lived in your community?”

Positive language

“Do you doubt that the moon landing actually happened or not?”

vs

“Do you believe that the moon landing actually happened?”
Q wording: Avoid double barrels

“How satisfied are you with your pay and benefits?”
Quintuple-Barreled and Poorly-Scaled:

These are five different constructs. If you truly want to know if the activity (is the activity the conference?) affected participants in all of these areas, there should be five separate questions, one for each construct.

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<tr>
<th>Please rate the projected impact of this activity on your knowledge, practice, competence, patient care/outcomes, and interpersonal communications with physicians. Note: Competence is defined as the ability to apply knowledge, skills, and judgment in practice (knowing how to do something).</th>
<th>No change</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<tbody>
<tr>
<td>Describe the Improvement Project and ways to become involved in the WI Rural Stroke Improvement Project</td>
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<td>Describe the Program and define ways in which the program is helping hospitals and EMS improve stroke quality of care in WI.</td>
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<td>List ways in which the Task Force pilot project impacted hospitals capability to provide acute stroke ready care.</td>
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<td>Verbalize and/or demonstrate strategies to enhance stroke quality improvement and data analysis.</td>
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<td>Describe criteria for certification and identify ways in which the hospital can prepare for an Certification survey</td>
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<td>Give examples of biggest challenges and greatest successes of fellow stroke programs</td>
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<td>Use stroke survivor perspective to improve stroke patient experience within their hospital</td>
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<td>Identify the importance of follow-up care and patient support</td>
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<td>Summarize the 2015 AHA/ASA Focused Update regarding</td>
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Are these things you want participants to be able to do after the conference?

If yes, perhaps the question is, “How confident do you feel doing the following:” with a very/not at all confidence scale for response options. If you’re interested in
Q wording: Standardize language

“Did you often, sometimes, rarely, or never worry that your food would run out before you had money to buy more in the past 12 months?”

VS

“During the past 12 months, how often did you worry that your food would run out before you had money to buy more?”

Often
Sometimes
Rarely
Never
Q wording: Avoid biased/loaded questions

“Given the failure of welfare in the United States, do you feel welfare programs should be eliminated?”

vs

“Do you feel welfare programs should be eliminated?”
“We can’t change that question, we’ve been using it for years and we don’t want to mess up our longitudinal data!”
1. Gun violence is a problem in my neighborhood.
2. I feel safe living in my neighborhood.

1. Did you play on any sports teams in college?
2. Please rate your level of interest in joining the Dunn County Kickball League.
Q order: Use transitions and strategy

“These next questions are about...”

General ➔ Specific
Less personal ➔ More personal
Most important ➔ Least important
Questionnaire design: Formatting

Formatting matters!

- Be consistent
- Keep it simple
- Always include the three i’s:
  - introduction
  - identification
  - instruction
Questionnaire design: Formatting, Continued

Example of bad formatting:

6. Where do you get most or all of your information about current events in the nation and the world?
   _radio_   _Newspapers_   _Magazines_   _internet_

- Squished text (aka, not enough white space)
- Uneven alignment of text
- Inconsistent case
- Inconsistent spacing
- No instructions (check one or all that apply?)
Questionnaire Design: Pre-Test

- **ALWAYS** pre-test
- Pre-test everything
- Make changes and then pre-test **AGAIN**
Cost considerations

- Staff/vendor time for:
  - Planning the survey and steering it through the various stages
  - Developing and pre-testing the questionnaire
  - Administering the questionnaire
  - Data entry or scanning
  - Cleaning the data
  - Analysis of the data and report preparation

- Postage
- Printing
- Software
Well-designed questionnaires:

- Consider respondent burden
- Optimize survey length/number of questions
- Have a logical question order
- Are well-formatted
- Include an introduction, instructions, and a thank you
- Are pre-tested
Well-designed questions:

- Consider respondent burden
- Are not double-barreled
- Have appropriate response options
- Include labeled scale points
- Use consistent, positive, plain language
- Are not biased or leading
QUESTIONS

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