OVERVIEW

- Goals of survey research
- Does and Don’ts of survey design and implementation
  - Questions
  - Response scales
  - Administration
- Q & A
DO YOU NEED TO DO A SURVEY?

<table>
<thead>
<tr>
<th></th>
<th>Surveys</th>
<th>Focus Groups</th>
<th>One-on-one Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explore relationships between and among variables</td>
<td>Dig deeper into an issue, exploration of an idea</td>
<td>Can get at the “what” and the “how”</td>
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<tr>
<td>Need to consider sampling issues, summarizing a population</td>
<td>May need multiple focus groups to achieve diversity</td>
<td>Can be highly structured or very unstructured</td>
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<tr>
<td>Development takes longer, easier to recruit</td>
<td>More resources, harder to recruit</td>
<td>Fewer resources, but can be hard to recruit</td>
<td></td>
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<tr>
<td>Analysis is generally quick</td>
<td>Takes longer to analyze the data</td>
<td>Data analysis depends on the interview format</td>
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TIP #1

Think carefully about what you need to know
BEFORE YOU THINK ABOUT THE SURVEY:

• What do you want to measure and why?
• Define your research objective and goal
• If not, you will not be able to create meaningful questions
• Review the literature

IDENTIFY RESEARCH GOALS

• How are you going to use the data?
• Are you looking to change a policy or process?
• Are you looking for a “temperature reading” or reactions?
• Who is interested in the data? Consider the stakeholders.
• Think about an analysis plan.
TIP #2

Think about how you would report the results

EXAMPLE:
CURRICULUM TO IMPROVE THE DISCHARGE PROCESS

• Want to evaluate curriculum – Why? Who? What?
• Need to operationalize “improvement”
• Need to define “discharge process”
• Which variables are you most interested in?
• Coordination of care
• Follow-up care
• # of team members

• Parent education
• Discharge materials
• Info recall

• Caregivers
• Equipment
• # of home care visits

• Diagnosis
• Medications
• Readmission rates

• Caregivers
• Equipment
• # of home care visits

• Health Literacy

• Home Environment

• Medical Team

• Health Status
RESEARCH OBJECTIVES

What do you want to know or assess?

- Affective - emotions, satisfaction, perceptions, reactions
- Behavioral - recall of events, how many times something happened
- Cognitive - attitudes, knowledge about a topic
- Combination

TIP #3

Generate lots of questions but be willing to drop any of them
TIP #4

Consider **must know** vs. **useful to know**
vs. **nice to know**
Drop ‘nice to know’

WHAT MAKES A GOOD SURVEY QUESTION?

• Easily understood
• Same understanding and interpretation across all respondents
• Low cognitive effort
• No double-barreled questions
• Unbiased questions
LANGUAGE MATTERS

• No ambiguous or vague words
• No words or phrases with multiple meanings
• Watch for similar spellings or pronunciations of key words

EXAMPLES OF UNCLEAR QUESTIONS

<table>
<thead>
<tr>
<th>Question</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>How afraid are you to tell your friends or family about problems in your life?</td>
<td>double-barreled, vague</td>
</tr>
<tr>
<td>How difficult is it for you to keep friends?</td>
<td>assumption</td>
</tr>
<tr>
<td>How honest are you able to be about your behaviors?</td>
<td>honest with who? vague</td>
</tr>
<tr>
<td>How much are you able to communicate with your friends and family?</td>
<td>poorly written, mismatch</td>
</tr>
<tr>
<td>How much do you trust your family?</td>
<td>assumption</td>
</tr>
<tr>
<td>How much do you worry that your family will abandon you?</td>
<td>unclear, charged</td>
</tr>
<tr>
<td>How much do your friends support healthy behaviors?</td>
<td>vague</td>
</tr>
<tr>
<td>How much is your family embarrassed by your behaviors?</td>
<td>vague, hard to answer</td>
</tr>
<tr>
<td>Question</td>
<td>Considerations</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Compared to other people, how sensitive to pain are you?</td>
<td>How would R know how other people experience pain?</td>
</tr>
<tr>
<td>How good do you feel about your health insurance plan?</td>
<td>Need Screener: Do you have a health insurance plan now?</td>
</tr>
<tr>
<td>How much older do you look than you actually are?</td>
<td>What is being assessed? Self-perception of appearance?</td>
</tr>
<tr>
<td>How much money do you receive from the government for a physical disability?</td>
<td>Need Screener: “Do you have a physical disability?” Otherwise 'None' could mean they don't receive money because they don't have a physical disability OR that they have a physical disability but don't receive money.</td>
</tr>
<tr>
<td>How much access do you have to medical care?</td>
<td>Would need to define &quot;medical care&quot; Is this urgent care, ambulatory care, off hours, or emergency room care?</td>
</tr>
<tr>
<td>How much do you work at staying healthy?</td>
<td>Staying healthy&quot; implies that R is currently healthy.</td>
</tr>
</tbody>
</table>

**AVOID BIAS IN QUESTIONS**

- The way the question is worded or the way the response options are offered.
- People like to please. Be wary of acquiescence.
- Power of suggestion include assumptions. Avoid adjectives and adverbs.

"What do you like about your chief resident?"

"What did you think of ...."

"Given the large increase in child obesity in recent years, how likely do you think Type II diabetes will increase in the next 5 years?"
TIP #5

Remember that the response scale is just as important as the question. Make sure it ‘matches’ the question.

QUESTION OBJECTIVE GUIDES RESPONSE SCALES

- Affect - satisfaction, confidence, liking – Rating Scales (1-10)
- Behavior – report frequency (never --- always)
- Cognitive – attitudes, Likert scale (agree – disagree)
RESPONSE SETS

Measuring Frequency (behavior)

• Problem: Assumes people do things a regular basis, but people are irregular.
• Solution: ask for times in a specific time frame, provide meaningful range (0, 1-2, 3-4, 5 or more)

“In the past 14 (30 days), how many different times have you called your child’s pediatrician?”

MORE ABOUT FREQUENCY

“In the past year, how often were you offered leadership opportunities?”

Problem: Is past year academic or calendar, too long of a timeframe?

“Since January 1, 2021, how many times…”

What is a leadership opportunity? Need to operationalize leadership and opportunity. Run a code? Present at rounds? Organize brown bag talk?
MEASURING QUANTITY

The idea of “how much”

“How much of a problem is it to complete your documentation before ending your shift?”

• 0-10 scale provides more range (0 is no problem and 10 is a major problem) What number would you assign to the size of the problem?

RESPONSE SCALES

The 3 most common questions:

• Should you have a middle/neutral option?
• Should it be a unipolar or bipolar scale?
• Should there be an even or odd number of options?
**THE FAMOUS LIKERT SCALE**

- Agree - Disagree scale used to evaluate the level of agreement or disagreement towards a statement.
- Simple to design
- Require a lot of cognitive effort from respondents
- Acquiescence bias – propensity to agree
- Use sparingly – only when interested in opinion/attitude not reaction

**SCALE POLARITY**

Every concept has theoretical range of polarity

- Bipolarity: positive to negative, with neutral midpoint
  - Very Satisfied ------ Very Dissatisfied (neutrality, direction, intensity)
- Unipolarity: zero to maximum number – no neutral midpoint
  - Important ------ Not important at all (one-sided, only intensity)
**TIP #6**

Pretest!
Be sure to have others review the items before administering the survey.

**TIP #7**

Observe a couple people completing your survey.
Ask them to explain their responses while thinking aloud.
TIP #8

The survey format matters
Make it appealing, interesting and concise

HOW TO ENCOURAGE PARTICIPATION

• Send notification prior to survey. Tell them when it’s coming; why it’s important, how long it take to complete - and how the data will be used.

• Actual survey – Need to tell respondents why their responses matter and how the data will be used

• Limited or no scrolling; 1 question per click
HOW TO ENCOURAGE PARTICIPATION

- Length matters, but not as much as you think.
- Tell respondents how long it will take to complete
- Make survey look inviting – ample white space
- Neutral image or icon on initial communication.

“Next Tuesday be on the lookout for our survey. When you see this icon the subject line, you’ll know it’s from us!”

CONCLUSIONS

- Survey development takes time
- Resist the urge to jump to writing the questions
- Continually ask yourself, “Will this help me achieve my objective?”
- Let research goals guide the survey development
- Keep questions concise and clear
- Pretest survey for interpretation of questions and responses
...and as our statistical analysis shows...

Is this a good time to give you the rest of the surveys?