

Guidelines for effective survey planning, design, and implementation

Ask yourself, “what is my research question?”

- You MUST have a research question!
 - Better yet, have one (or more!) testable hypotheses.

Ask yourself, “is a survey the most appropriate method for addressing my research question?”

- Secondary research comes FIRST!
 - Don't bother surveying merely to support something that has already been convincingly demonstrated
 - Don't use a survey to collect data you can get in any other way
 - Almost all other types of data are more reliable than self-reported survey data
 - An unnecessary survey is a sure sign of a lazy researcher
- If you must conduct primary research, ask yourself if other primary research methods are more appropriate to test your hypothesis:
 - Focus groups
 - Interviews
 - Intercepts
 - Observational
 - Opinions of experts

Survey DOs and DON'Ts

- DO respect your respondent's time by writing the tightest survey instrument you can
- DO keep it short
 - DON'T ask a survey question that collects data that you already know, can infer, or can merge in from other sources
 - DO write a first-draft of your questions and divide them into 3 piles: “must haves, nice to haves, fluff.”
 - Include all of the 1st, some of the 2nd, and dump all of the 3rd
 - DON'T ask a question that doesn't address your research question in some way
 - Ask yourself, “how would the information derived from this question shed light on my hypothesis?” If it doesn't, dump the question.
 - DON'T ask a question whose answer will not result in any change.
 - Ask yourself, “will knowing the answer to this question change anything?” If not, it is a candidate for being dumped.
 - DON'T ask a question you don't intend to analyze.
 - Ask yourself, “what am I going to do with the data from this question?” Are you interested in its frequency? Are you going to crosstab by it? If you can't see yourself using it, dump it.
- DO keep it simple
 - Use short sentences and plain language. Run your question text through <http://gobbledygook.grader.com/>
 - Aim for a grade level appropriate for (or below) your intended audience
- DO pay attention to flow
 - Put easier questions first. Warm up your respondents before getting into pointed questions. This will reduce your abandonment rate
 - Group similarly-themed questions together
 - Put boring demographic questions at the end (if at all)
- DON'T write sloppy questions
 - NO double-barreled questions
 - e.g. “How happy are you with the cafeteria's menu choices and prices?”
 - NO leading questions! No push polls!
 - E.g. Stephen Colbert's classic, “George Bush. Great president or Greatest president?”
 - If your question is selling an idea, then you are not conducting a legitimate survey, you are marketing
 - DON'T over-use open-ended questions. (see below)

- DON'T obsess about your response rate. Response rate is less important than margin of error.
 - Good margins of error can be achieved with relatively small samples of big populations
 - Some research questions merit more precision than others. Remember you are not developing a life-saving drug. High precision comes at high cost. Sometimes it is OK simply to be “more likely right than wrong.” Gauge your need for precision against the importance of your research question.
 - Estimate your MOE with this tool www.raosoft.com/samplesize.html
 - Provide your overall MOE in your analysis to help readers interpret your findings

Selecting your sample

- Always sample. There is almost never a need to census
 - Needlessly censusing the population wastes the goodwill of the population and cannibalizes the response rates of future researchers.
- Sampling considerations:
 - A representative sample will reflect the population from which it is drawn
 - A larger sample improves precision but the rate of improvement decreases as the sample size increases
 - Avoid a biased sample. Biased samples lead to biased results
 - “Stratified samples” can ensure representation from key groups
 - E.g. when you want to approximate a 50/50 male/female respondent ratio then make sure your sample starts out with ~equal male/female targets
 - When in doubt, start with a small sample and launch additional waves of invitations as needed to achieve the response count (n) you need
 - Your sample size should only be big enough to achieve the margin of error you desire, and no more. Do not waste respondents.

Two main types of survey questions

- Closed-ended questions
 - Limit respondents’ answers to a predefined set of items
 - Almost all of your survey questions should be closed-ended
 - Highly analyzable
 - Easy to calculate frequencies and to apply crosstabs (see below)
 - Two main **types of closed-ended** questions:
 - Single choice
 - Respondent is asked to pick a single item from a finite list of provided items
 - Can be dichotomous; e.g. “True/false”, “yes/no”
 - Or a list of categories; e.g. “soccer, baseball, basketball, football, hockey, volleyball”
 - Or scaled questions (see below)
 - Multichoice
 - Respondent can pick multiple items from a finite list of provided items
 - E.g. “Choose all that apply...”
 - For all closed-ended questions:
 - Make sure you provide for all likely (anticipated) answer choices
 - List them in a logical order
 - YES: “Red, orange, yellow, green, blue, violet”
 - NO: “red, blue, orange, violet, green, yellow”
 - Usually good to provide an “other, please specify” option as a choice at the bottom of the list
 - Radio buttons are almost always better than pulldown lists (minimize respondents’ effort!)

- Open-ended questions
 - Too often used out of sheer laziness on the part of the researcher
 - When tempted to write an open-ended question ask yourself, “how could I make this closed-ended?”
 - Two main **types of open-ended** questions:
 - Short “fill in the blank”-style text boxes
 - Used when precise numeric data is desired (but ask yourself, is such precision really necessary? These could almost always be made closed-ended by using ranges!
 - E.g. “what is your age?”
 - Or when a finite list of single-choice items is too unwieldy to provide
 - E.g. zip codes in a national population
 - Essay questions:
 - Good for collecting rich qualitative data
 - Use sparingly if at all! These are better in theory than they are in practice
 - Use only at the END of the survey, often only one, and often as the very last question
 - E.g. “Please use the space below to comment on any aspect of _____ not adequately covered in this survey.”
 - If your draft survey has a more than a handful of essay questions it is a sign that a survey is NOT the most appropriate mechanism for your data collection. If you want rich qualitative anecdotes then consider using interviews or focus groups instead – or reduce your sample size to something you will actually be able to analyze qualitatively.
 - Very difficult and time-consuming to analyze. Hard for the researcher to properly weight responses that vary so much in length and quality.

Questions with scales:

- Scales help respondents by offering standardized and readily-understood “patterns” of answers to questions
 - Use common scales wherever possible (see the list below)
 - Use 5 pt or 7 pt scales
 - Start scales with their negative choices first. Do not flip flop on this. BE CONSISTENT ACROSS THE SURVEY!
 - Group same-scaled (and similarly-themed) questions into matrix batteries to avoid repeating the scale.
 - Usually best to offer a “neutral”, “don’t know”, “not applicable”, or “no opinion” option
 - Two main **types of survey scales**:

- Bipolar: scale where the measured concept can be both positive and negative, usually using balanced modifiers on either side of neutral (usually 7 pt scales)

Completely dissatisfied	Mostly dissatisfied	Slightly dissatisfied	Neutral	Slightly satisfied	Mostly satisfied	Completely satisfied
-3	-2	-1	0	1	2	3

- Unipolar: scale where measured concept ranges from “total lack of the concept” to “complete possession of the concept” (usually 5 pt scales)

NOT at all satisfied	Slightly satisfied	Moderately satisfied	Very satisfied	Completely satisfied
0	1	2	3	4

- Consider the two flavors of satisfaction scales above. When you don’t know ahead of time whether most respondents will be satisfied or dissatisfied, or if you expect high levels of dissatisfaction, the balanced bipolar scale is most appropriate. If you expect low levels of dissatisfaction then the unipolar scale is preferred.

Survey launch:

- The importance of a convincing invitation/welcome message cannot be underestimated
 - Be short and to the point
 - Tell respondents who you are and why you are seeking information from them
 - Encourage them to take your survey
 - Try not to use the word “survey”
 - Give a realistic estimate of time commitment involved

Analysis:

- Once you have collected the data it is time to turn that data into information that can be communicated to others.
- A complete discussion of survey analysis is beyond the scope of this memo but here are two important types of analysis you will need to begin to analyze and report on your survey data.

- Frequency

- Tells you, “what proportion of my respondents answered the question in each possible way?”
- For example, a frequency of the survey question, “What is your favorite color?” might look like this:

Favorite color	(n)	%
red	15	28%
yellow	7	13%
green	12	22%
blue	20	37%
	54	

- Crosstab

- Tells you, “what is the difference (if any) between how two (or more) groups of respondents answered the question?”
- For example, a crosstab by gender of the survey question, “What is your favorite color?” might look like this:

Favorite color	Male		Female	
	(n)	%	(n)	%
red	2	9%	13	42%
yellow	1	4%	6	19%
green	8	35%	4	13%
blue	12	52%	8	26%
	23		31	

Common Survey Scales¹

Choose a scale that reflects the intent of the question you are asking

- Satisfaction
 - (unipolar) Not at all satisfied, Slightly satisfied, Moderately satisfied, Very satisfied, Completely satisfied
 - (bipolar) Completely dissatisfied, Mostly dissatisfied, slightly dissatisfied, Neither satisfied or dissatisfied, Slightly satisfied, Mostly satisfied, Completely satisfied
- Acceptability
 - (unipolar) Not at all acceptable, Slightly acceptable, Moderately acceptable, Very acceptable, Completely acceptable
 - (bipolar) Totally unacceptable, Unacceptable, Slightly unacceptable, Neutral, Slightly acceptable, Acceptable, Perfectly acceptable
- Agreement
 - (bipolar) Completely disagree, Disagree, Slightly disagree, Neither agree nor disagree, Slightly agree, Agree, Completely agree
- Appropriateness
 - (bipolar) Absolutely inappropriate, Inappropriate, Slightly inappropriate, Neutral, Slightly appropriate, Appropriate, Absolutely appropriate
- Awareness
 - (unipolar) Not at all aware, Slightly aware, Moderately aware, Very aware, Extremely aware
- Beliefs
 - (unipolar) Not at all true of what I believe, Slightly true of what I believe, Moderately true of what I believe, Very true of what I believe, Completely true of what I believe
- Concern
 - (unipolar) Not at all concerned, Slightly concerned, Moderately concerned, Very concerned, Extremely concerned
- Familiarity
 - (unipolar) Not at all familiar, Slightly familiar, Moderately familiar, Very familiar, Extremely familiar
- Frequency
 - (unipolar) Never, Rarely, Sometimes, Often, Always
- Importance
 - (unipolar) Not at all important, Slightly important, Moderately important, Very important, Extremely important
- Influence
 - (unipolar) Not at all influential, Slightly influential, Moderately influential, Very influential, Extremely influential
- Likelihood
 - (unipolar) Not at all likely, Slightly likely, Moderately likely, Very likely, Completely likely
- Priority
 - (unipolar) Not a priority, Low priority, Medium priority, High priority, Essential
- Probability
 - (unipolar) Not at all probable, Slightly probable, Moderately probable, Very probable, Completely probable
- Quality
 - (unipolar) Very poor, Poor, Fair, Good, Excellent
- Reflect Me
 - (unipolar) Not at all true of me, Slightly true of me, Moderately true of me, Very true of me, Completely true of me
- Use
 - (unipolar) Never use, Rarely use, Sometimes use, Often use, Always use

¹ Adapted from : <http://blog.vovici.com/blog/bid/18261/Common-Rating-Scales-to-Use-when-Writing-Questions>