

Survey Design for Procession of the Species Street Mandalas:

How does the community of Olympia define itself? What symbols can represent these ideas?

THE STEPS IN A SURVEY PROJECT

1. Establish the goals of the project -
What you want to learn?
2. Determine your sample -
Who you will interview?
3. Choose interviewing methodology -
How you will interview?
4. Create your questionnaire -
What you will ask?
5. Pre-test the questionnaire, if practical -
Test the questions.
6. Conduct interviews and enter data -
Ask the questions.
7. Analyze the data -
Produce the reports.

SURVEY DESIGN TIPS

Most problems with questionnaire analysis can be traced back to the design phase of the project. Well-defined goals are the best way to assure a good questionnaire design. When the goals of a study can be expressed in a few clear and concise sentences, the design of the questionnaire becomes considerably easier. The questionnaire is developed to directly address the goals of the study.

One of the best ways to clarify your study goals is to decide how you intend to use the information. Do this before you begin designing the study. This sounds obvious, but many researchers neglect this task. Why do research if the results will not be used?

Avoid the temptation to ask questions because it would be "interesting to know".

As a general rule, with only a few exceptions, long questionnaires get less response than short questionnaires. Keep your questionnaire short. In fact, the shorter the better. Response rate is the single most important indicator of how much confidence you can place in the results. A low response rate can be devastating to a study. Therefore, you must do everything possible to maximize the response rate. One of the most effective methods of maximizing response is to shorten the questionnaire.

If your survey is too long, try to eliminate questions. Many people have difficulty knowing which questions could be eliminated. For the elimination round, read each question and ask, "How am I going to use this information?" If the information will be used in a decision-making process, then keep the question... it's important. If not, throw it out.

One important way to assure a successful survey is to include other experts and relevant decision-makers in the questionnaire design process. Their suggestions will improve the questionnaire and they will subsequently have more confidence in the results.

ESTABLISH THE GOALS OF YOUR SURVEY.

What are you trying to find out? Be very specific. Write them down.

EXAMPLE:

Here are a few goals for a museum survey:

Is this the visitor's first time visiting the museum?

How did people find out about the exhibit?

Which part of the exhibit did people find most informative?

What types of exhibit displays do people prefer: interactive, video and film, or text?

What suggestions for improvement do people have?

WHO WILL YOU ASK? WHO WILL BE YOUR SAMPLE?

EXAMPLE:

We are going to ask the following people to fill out our survey:

Every 3rd group leaving the exhibit.

People with children accompanying them.

WHAT METHOD OF SURVEYING WILL YOU USE?

Here are some choices from most expensive to least expensive:

Personal Interview - face-to-face interviewing - sometimes on site or on the street.

Telephone - probably one of the most popular methods.

Mail - inexpensive, also there is no interference by an interviewer, so there is less bias. However, motivations for filling out and returning the survey create a bias.

Web based - only use if your target population would be online.

EXAMPLE:

We are going to use a web-based survey, because we have a new online ticket booking system and want to find out who is using it.

DESIGN THE SURVEY.

Write the survey based on the method that you have chosen (Number 3 above.)

PRETEST.

Pretesting will help you determine if the survey is easy to understand, if people are able to fill it out, and other problems that may occur. Rewrite the survey if you need to.

EXAMPLE:

Pretest your survey to about 15 people - people that you are fairly sure will respond. DON'T SKIP IT. It actually can tell you things that are wrong with your survey—confusing questions, multi-dimensional questions.

TEST.

Do the actual survey. Collect the data and write a report in an organized format.

RECOMMENDATIONS FOR WRITING EFFECTIVE QUESTIONNAIRES

ISSUES FOR DESIGNING QUESTIONS

Double-Barreled Questions

Questions that ask for opinions about two different things will often cause confusion among respondents and produce result that cannot be interpreted.

For example, if a respondent answers the question *"Do you believe that air bags are unsafe and expensive?"* with a "no", you may conclude that he believes that air bags are safe and affordable when he really thinks air bags are safe but expensive.

You can easily avoid this issue by breaking the question into two different questions: *"Do you believe that air bags are unsafe?"* and *"Do you believe that air bags are expensive?"*

Biased Questions

Another form of question that can easily lead to misinterpretation of results is a "biased" questions. A question is biased if the wording is such that it leads the respondent to a particular conclusion.

For example, the question *"Given the failure of welfare in the United States, do you feel welfare programs should be eliminated?"* will most certainly result in agreement. After all, who would want to keep a program

around that has already failed?

By leading the question with the phrase “Given the failure of...”, you will influence results. A better way to phrase the question is “*Do you feel welfare programs should be eliminated?*”

Halo Effect

Watch out for questions that link a position with a particular person or group. The respondent’s attitude about the person or group may influence their attitude about the position.

Take the question “*Do you agree with President Bush that tobacco firms are waging war on our children?*” for example. If the a respondent is against President Bush, he might answers “no” to the question because of the phrase “do you agree with President Bush” even though he believes that tobacco firms are waging war on our children.

To improve this question, eliminate the link to the specific person or group. You can do this by attributing positions to an unnamed group (e.g. “some people believe... while other people believe... what do you think?”) or eliminate the position altogether, for example, “*Do you believe that tobacco firms are waging war on our children?*”

Loaded Questions

Avoid questions that present only one side of an issue. For example, the question “*Do you support cutting the defense budget in order to reduce the federal deficit?*” does not give the respondent enough opportunity to state his opinion. If cutting the defense budget is the only option, then maybe this question has merit. However, since there are other alternatives, a better way to ask the question would be “*Some people support cutting the defense budget in order to reduce the federal deficit. Other people believe defense spending is important, and suggest reducing the federal deficit by reducing wasteful spending. What do you think?*”.

Avoid loaded questions by presenting both sides of the issue.

ISSUES FOR DESIGNING RESPONSES

Neutral Bias

When presenting a scale of responses like Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, responses will tend to be biased toward the center since most people use a neutral response as a dumping ground when they would prefer not to have to choose, don’t care, or have no opinion.

Using a 6-point scale in place of the traditional 5-point will improve the validity of the question and reduce the neutral bias that occurs with an answer in the middle. By forcing the respondent to take a side (even if is to only “tend” to agree or disagree), the results will be more indicative of the polarized opinions around the issue.

Overlapping Responses

Another common mistake is to ask a question and then provide responses that are not mutually exclusive. For example, if you asked: *How much time do you spend watching TV on a typical day?*

- (a) 1 hour or less
- (b) 1 - 3 hours
- (c) 3 or more hours

And the respondent wanted to answer 1 hour, which option would he choose? Both option a and b are valid responses for the answer 1 hour. Because of the overlapping responses, you would not be able to differentiate between those that answered with option a and those that answered with option b.

Before conducting your survey, carefully review your response options and make sure that each one is mutually exclusive. Otherwise your results for the question will not be accurate.

Agreement Bias

Survey research indicates that for opinion or attitudinal questions (rather than factual or knowledge-based questions), respondents are generally more likely to agree more often than they disagree. This tendency to agree is called the *acquiescence response factor*, and has been documented extensively in survey design research as a problem associated with opinion or attitudinal questions.

Use a forced-choice response rather than “yes/no” or “agree/disagree” formats. A forced-choice response rephrases the key point of the question as both positive (agree) and negative (disagree) statements.

Survey design research demonstrates that forced-choice responses deliver more valid results than “yes/no” or “agree/disagree” formats. This is because they minimize the effect of the acquiescence response factor, thereby significantly improving the validity and reliability of the question.

Original:

Nuclear proliferation is a threat to U.S. national security.

- (a) Agree
- (b) Disagree

Improved:

Nuclear proliferation is a threat to U.S. national security.

- (a) Proliferation is a threat
- (b) Proliferation is not a threat

INTRODUCING THE SURVEY

1. Write a descriptive title for the questionnaire.
2. State who you are (you may not want to state your affiliation if you think it will influence the answers).
3. Introduce the purpose of the survey—just a few sentences to let your sample know what you're doing this for. A written introduction to the questionnaire helps ensure uniformity to minimize interviewer interference with results.
4. Tell your respondents the type of survey they'll be filling out. There are three choices of survey types:
 - i. multiple choice (for results you can easily quantify, use this type.)
 - ii. open numeric - "How many employees do you have?" _____
 - iii. open text - "What is your occupation?" _____

5. Keep your survey short and sweet. More Specifics:

Use basic vocabulary unless you are positive that your respondents are well-educated. Do not use jargon or language that your sample might not understand.

Explain to respondent the reasons for asking the questions.

Make response categories as broad as possible.

Word the question in a nonjudgemental style that avoids the appearance of censure, or, if possible, make the behavior in question appear to be socially acceptable.

Present the request as factual matter as is possible.

Guarantee confidentiality or anonymity.

Make sure the respondent knows the info will not be used in any threatening way.

WRITING REPORTS OF QUESTIONNAIRE RESEARCH

Your report should be a minimum of 2 pages of text plus a minimum of 1 graphic representation and is due on Friday, April 9th.

Academic reports should begin with a formal introduction that cite literature or other polls on the same subject. Non-academic should begin with an introduction that describes purpose and a summary of what you wanted to learn from the survey.

The second section of the reports should describe the research methods.

The third section of the reports should describe the results.

The last section of the reports should be a discussion. Acknowledge any weakness in your research methodology.

Describing and Formatting Results

For open-ended response questions, make a list of responses and the quantities of each. List in order of popularity or prepare a table of frequencies.

For multiple choice questions, quantify responses. Calculate percentages and arrange them in a table with the frequencies. For nominal data (a spread across a range of responses), consider constructing a bar graph. For this type of data you can also prepare a histogram to display a distribution of scores.