Rules of Thumb for Designing and Administering Mailed Questionnaires

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The purpose of these rules of thumb is to improve the rate of response to mailed questionnaires and to enhance the accuracy of the data obtained. This paper covers four topics: questionnaire format, question design, the cover letter, and administration of a questionnaire. The rules are based on the experience of the staff in the Research Division at the Federal Judicial Center and on several useful publications on questionnaire design:

> Don Dillman, Mail and Telephone Surveys, Wiley and Sons, Inc. (1978)
> Jean Converse and Stanley Presser, Survey Questions: Handcrafting the Standardized Questionnaire, Sage Publications (1986)
> GAO, Developing and Using Questionnaires, 1986

A mailed questionnaire is much more likely to be completed and returned if it makes sense and is friendly and easy to use. The rules of thumb listed below have these goals in mind. They were originally developed for general population surveys, but most appear to be applicable to specialized audiences as well (e.g., judges and attorneys). Unlike general audiences, however, specialized audiences will probably tolerate more complex questions and response categories.

Although the wording of individual questions is extremely important, you should also give careful attention to the questionnaire's layout, since a confusing or unattractive layout can provoke a negative reaction from respondents and can make data entry more difficult and therefore error-prone. Likewise, you will want to spend some time preparing a cover letter that will persuade the respondents to return the questionnaire.

You will also want to give attention to the administration of the questionnaire, such as whether to have it printed and how many follow-up mailings to do. Administration of a questionnaire requires careful advance planning and is an important factor in getting questionnaires into the hands of the correct recipients and back into your hands.

This document assumes you've decided a mailed questionnaire is the best method for getting the information you need. That decision should be made carefully, with full recognition of the limitations as well as the advantages of questionnaires. (For a discussion of limitations and advantages see the GAO publication listed above, which is particularly helpful because it is aimed at developing questionnaires for specialized audiences.) Although questionnaires can reach many subjects at a relatively low cost compared to other methods, they are limited to the words on paper. That is why books on questionnaire design put so much emphasis on the wording of questions. Each word you choose stimulates a thought or picture in the mind of the reader. The more precise the word, generally, the more precise the picture in the mind of the reader.

Where it is hard to find precise words, questionnaires may not be a very good instrument for your study. If your subject matter is complex or volatile or unfamiliar, for example, you should think about whether a questionnaire can obtain the information you need. For some types of inquiries, methods such as face-to-face or telephone interviews may be more appropriate. When designing your study, you should also make sure those who've asked you to use a questionnaire understand the limitations of the method and of the information it will obtain.

But for now we're assuming you've satisfied yourself on those issues and you need some guidance on how to conduct a survey using mailed questionnaires. We hope the guidelines set out below will help you carry out your survey and achieve a high response rate and meaningful information.

Designing the Questions

1. Questions may be open-ended or closed. An open-ended question is followed by a space where the respondent may write an answer in his or her own words. A closed question lists a set of options—or response categories—and invites the respondent to select one or more of these options. Keep open-ended questions to a minimum. They are burdensome for the respondent, which is likely to reduce response rate, and burdensome for you because they are difficult to code and analyze. Open-ended questions also are more likely to be answered by those who have strong feelings, either positive or negative, and thus are not likely to be representative.

2. Each response category for a question should have a code. For example, a set of response categories might be numbered 1, 2, 3, and 4, as in the examples at #3. Numbers or letters should be used, never simply a line or a box, as lines or boxes cannot be entered into the computer. If you use lines or boxes alone, you will either have to code the questionnaires when they are returned, or you will have to depend on the data entry staff to translate the responses into numbers. The first will take a lot of your time, the second invites error.

3. Response categories should always be listed vertically, never horizontally. Respondents are too likely to mark the wrong choice when categories are presented horizontally, as below.

   Poor:

   [ ] $_1$ Very satisfied [ ] $_2$ Somewhat satisfied [ ] $_3$ Somewhat dissatisfied [ ] $_4$ Very dissatisfied

   A vertical list, like the one below, will increase accuracy and also leaves more white space on the page, which enhances the overall appearance of the questionnaire. Listing the responses on the right is helpful to data entry staff—and also maximizes the white space.

   Better:

   [ ]$_1$ Very satisfied
   [ ]$_2$ Somewhat satisfied
   [ ]$_3$ Somewhat dissatisfied
   [ ]$_4$ Very dissatisfied

4. Make sure the response categories are balanced. The first example below is not balanced and is likely to produce a higher approval rate than the second example.

Unbalanced:	[ ]$_1$ Very much approve	Balanced:	[ ]$_1$ Very much approve
	[ ]$_2$ Somewhat approve		[ ]$_2$ Somewhat approve
	[ ]$_3$ Disapprove		[ ]$_3$ Somewhat disapprove
			[ ]$_4$ Very much disapprove

5. Make sure the response categories are mutually exclusive and provide an opportunity for every answer. For example, the set of response categories “1-2 years,” “2-3 years,” and “3-4 years” is not a mutually exclusive set. A respondent who wants to answer “2 years” will not know which category to check. An alternative format, “1-2 years,” “3-4 year,” is also problematic because it provides no box for the person who wants to answer 2 1/2 years. The following is a better format:

[ ]$_1$ Less than one year
[ ]$_2$ 1.0-2.9 years
[ ]$_3$ 3.0-4.9 years
[ ]$_4$ 5 years or more

6. To the extent possible, use consistent response codes throughout the questionnaire. If “no” is represented by “1” and “yes” by “2”, try to retain this meaning throughout the questionnaire.

7. Make questions as specific as possible. For example, avoid the following vague question. It will produce a high number of “yes” responses because nearly everyone will have experienced delay in some case for some reason, and it will, therefore, overstate the extent of delay. Further, it’s not clear what kind of delay is at issue here—for example, delays in case processing, a long wait for the elevator, or telephone calls not returned.

Poor: Have you ever experienced delay in this court?

[ ]$_1$ No
[$_2$ Yes

If the interest is the court’s management of cases, a more precise way to ask this question is to use a questionnaire that focuses on a particular case, which would permit the question below. The combination of all respondents’ answers to this question will give an accurate picture of disposition time if a representative sample has been chosen.

Better: Was this case brought to termination

[ ]$_1$ Too quickly
[ ]$_2$ In a reasonable amount of time
[ ]$_3$ Too slowly

Even if your questionnaire is not case-specific, you can still improve the question by asking about the respondent's most recent case, as below:

Better: In your most recent closed case in this court, was the case brought to termination

[ ]$_1$ Too quickly
[ ]$_2$ In a reasonable amount of time
[ ]$_3$ Too slowly

8. Response categories should be ordered so they work against your hypothesis. That is, if you hypothesize that most attorneys believe disposition time is too long, your response categories should start with the disconfirming choice—that disposition time is "too short"—and end with the choice you expect to be most frequent—that disposition time is "too long." For an example, see the ordering of the response categories at #7 above.

9. Don't ask double-barreled questions. For example, respondents who think only cost is a problem will not be able to answer the following question:

Poor: Did you experience excessive cost and unnecessary delay in this case?

[ ]$_1$ No
[ ]$_2$ Yes

You should, instead, write two questions, one asking about cost, the other about delay:

Better: Were the overall litigation costs in this case too high?

[ ]$_1$ No
[ ]$_2$ Yes

Was the time to disposition in this case too long?

[ ]$_1$ No
[ ]$_2$ Yes

10. Avoid agree/disagree statements. Respondents have a tendency to agree with these statements regardless of their substantive content. A second problem, shown in the example below, is that one end of the scale is often missing. Here, for example, a "Strongly agree" response is clear—a cap would lower costs. The opposite, that a cap would increase costs, cannot be inferred from a "Strongly disagree" response.

Poor: A local rule setting a cap on contingency fees would lower the cost of litigation.

[ ]$_1$ Strongly agree
[ ]$_2$ Somewhat agree
[ ]$_3$ Somewhat disagree
[ ]$_4$ Strongly disagree
[ ]$_5$ No opinion

A better approach is to use forced-choice questions, which make respondents think more carefully about their choices.

Better: Do you believe a local rule setting a cap on contingency fees would lower litigation costs, or do you believe adoption of a cap would increase litigation costs?

[ ] 1 A cap would increase litigation costs
[ ] 2 A cap would decrease litigation costs
[ ] 3 A cap would not affect litigation costs
[ ] 4 No opinion

11. Consider whether you should provide a “no opinion” or “don’t know” option. Some respondents may have given little thought to an issue or may have too little experience to answer a question. They should be given a response choice that lets them answer correctly, as in the examples at #10 above. Where respondents can be expected to have an answer, a “no opinion” or “don’t know” choice is less necessary, as in the examples at #9 above.

12. Avoid a long series of questions with the same response categories or same format—for example, a long set of satisfied/dissatisfied or approve/disapprove statements. Such repetition can bore the respondent and can result in response error.

13. If you need to use an open-ended question, make it as pointed as possible, so all respondents are focusing on the same issue. For example, the first question below will prompt less useful responses than the second one.

Poor: Please comment on the mediation program in this court.

Better: What were the three most significant disadvantages, if any, in having your case mediated in the court-annexed mediation program in this court?

14. Examine each question carefully for bias. For example, words that carry emotional weight may prompt respondents to answer more negatively or positively than would a more neutral word. In the court setting, a list of words likely to bias respondents would include “caseload crisis,” “excessive cost,” and “discovery abuse.” Seek substitutes for these words. For example, instead of asking about “discovery abuse” ask about specific discovery events or practices, such as number of depositions or document requests.

15. Use words with clear, everyday meanings. Avoid sophisticated words when simple words will do.

16. Use indicators of emphasis (e.g., underlines) sparingly. When you must emphasize a word or phrase, use the most visible graphics, such as underline or bold.

17. If instructions for selecting response categories are necessary—for example, "circle one" or "circle all that apply"—insert them in each question rather than giving a general instruction at the top of the questionnaire. Rarely does a single instruction apply to all questions. Unless there is absolutely no ambiguity about how a response is to be chosen, include an instruction for each question.

18. When asking a respondent for a number—for example, the time spent on civil litigation—make sure you specify the unit of measurement. If the respondent answers "30", do they mean 30 hours a week, 30 weeks out of the year, or 30% of their time? A better way to ask this question is as follows:

> "What percentage of your work hours have been devoted to federal district court civil litigation during the past five years (or, if less than five years, during the time you have been in practice)?

19. Another way to avoid the problem at point 18 is to provide response categories. For example, you might provide the following categories for the question above:

[ ]1 1-10%
[ ]2 11-20%
[ ]3 21-35%
[ ]4 36-50%
[ ]5 >50%

A great advantage of providing categories is that you will receive more precise answers. If you provide only a blank on which to write a response, you will get such answers as "a small percentage" or "30-40%." Responses such as these are hard to enter into electronic databases and are difficult to analyze numerically.

20. Sometimes you will want to invite respondents to "check all that apply" when you list a set of response categories, such as below:

> Please indicate which type of client you represented.

Check all that apply:
[ ]1 Myself
[ ]2 A business or corporation
[ ]3 Federal, state, or local government
[ ]4 An individual or individuals
[ ]5 Other ______________________

Although it may be necessary to permit respondents to check more than one category for some questions, your analysis will be much more complicated. Use such a question sparingly and, when tempted to use it, consider whether supplying the "other" category covers the options well enough to permit you to say "Check only one."

Designing the Questionnaire Format

1. The questionnaire should be well-organized. It should have a logic to it and should not skip around from subject to subject. Group together all questions on one subject and use topic headings to set off each subject.

2. Guide the respondent through the questionnaire. Use sentences to introduce shifts in topic or to explain complex response categories.

3. If you think some of those who receive the questionnaire may not be the correct recipients—for example, the questionnaire was sent to the attorney listed on the docket sheet but a different attorney may have attended the mediation session being evaluated—you should begin with a question that screens out inappropriate respondents. In the example just cited, you could ask the recipient to write the correct name and address in a space provided on the questionnaire and to return the questionnaire to you so you can send it to the correct attorney. Or you could ask the recipient to forward it to the right person.

4. Other than the screener question, always start the questionnaire with a question that is clearly related to the subject matter of the inquiry, interesting, easy to answer, and applies to all respondents. Such a question will pull respondents into the questionnaire, while its opposite is likely to reduce their interest and the likelihood that they'll complete it. The demographic questions—for example, type of legal specialty, years spent in current job, name of district—should come as the last set.

5. Place sensitive or demanding questions near the end, where they will be encountered after the respondent has made an investment in the questionnaire.

6. The final question should provide respondents an opportunity to comment, for example: "If you have anything you would like to add regarding these issues, please use the space below" (or the reverse side, etc.).

7. End the questionnaire with a thank you and instructions: name and address of the person to whom to send it; date by which to respond; name and phone number to call if there are questions. You may also, if appropriate, provide an opportunity, such as a box to check, by which the respondent can let you know they would like to see the survey results (such as the final report).

8. The questionnaire should be visually friendly and easy. It should be open in appearance, with plenty of white space. As noted above at #3 in *Designing the Questions*, a vertical listing of the response categories enhances openness. You should minimize the use of boxes around sets of questions and vertical or horizontal lines, which make a questionnaire cluttered and forbidding.

9. Number every question, so respondents will not accidentally skip a question.

10. Try not to place questions calling for written comments at the bottom of a page. In this position, they are easily overlooked by respondents and by data entry staff.

11. When the text of a question takes more than one line, indent the additional lines so the question number stands out. This will reduce the number of questions missed by respondents.

12. The text of a question should not break between pages. Nor should response categories run from one page to the next. Both make it considerably more difficult for the respondent to choose the right answer and for the data entry staff to enter the data accurately.

13. If possible, produce the questionnaire in booklet format rather than stapled sheets. Use of a booklet, with a cover page, is more professional in appearance. Consider using a graphic on the booklet . Subsequent use of the graphic in follow-up mailings will increase recognition and response rate.

14. Insert the questionnaire title and a page number on each page (e.g., through headers or footers). Page numbers are especially important if respondents are told to go to a specific page.

15. A long questionnaire is forbidding, but research shows that response rate is not affected until a questionnaire reaches 11 or 12 pages—as long as the topic is important to the respondents. In any case, it is always wise to make the questionnaire as short as possible and to ask only questions that are essential to your project.

Designing the Cover Letter

1. The cover letter is an essential part of your questionnaire and should be composed with care. It should contain several pieces of information, all in a single page if at all possible. Listed below are the critical elements of a cover letter, presented in the order in which they should appear in the letter:

   - The cover letter should begin by telling the recipient very briefly what the study is about and why it is important that they take time to complete it. Show how the results of the study may affect the respondent personally—for example, the results may influence the court’s decisions about local rule changes.

   - It should then tell the recipient why it is important that *they* complete the questionnaire. For example, you might note that only a small sample is being surveyed and thus *each* response is essential.

   - Next the cover letter should make a promise of anonymity *if anonymity will be kept.* If an ID code is used, the letter should explain the purpose of the code—i.e., that it is for follow-up purposes only. The meaning of anonymity and the use of ID codes are discussed below in *Questionnaire Administration* (see #2 and #3, respectively).

   - Finally, the cover letter should tell the respondent who to contact if questions arise.

2. Decide whether the cover letter will be a personal letter or a form letter. Personal letters are believed to produce a better response rate, but they require more preparation time. Also, if you use personal letters along with number-coded questionnaires (described below at #3 and #4 in *Questionnaire Administration*), the mailing procedure will be more complicated.

3. Consider carefully whose signature should be at the bottom of the cover letter. Using the signature of someone who is viewed with respect by the recipients will very likely increase the response rate. This person may be the chief judge, the clerk of court, or the chair of a local bar group or committee.

Questionnaire Administration

1. If at all possible, pretest your questionnaire on a randomly selected, small group of subjects who are similar to those who will receive the questionnaire. If the questionnaire is being sent to attorneys, for example, pretest it on some attorneys. This will help you identify problematic questions and permit you to revise the questionnaire before using it.

2. You should decide at the outset of your project whether you will promise your respondents anonymity. True confidentiality is usually not possible if you intend to report the results of your study or if you intend to use quotes from your respondents. You can only promise that no attribution to individuals will be made and that the study results will be reported in such a way that no individual respondent can be identified. Do not promise confidentiality or anonymity if you cannot keep the promise.

3. If you plan to do follow-up mailings or you wish for other reasons to keep track of which questionnaires have been returned, you need to know who has returned each questionnaire. If you have promised anonymity, it is best not to ask for a name on the questionnaire. Consider using a small box, placed at the end of a questionnaire, in which you can print a unique numeric ID code for each person in the sample. As the questionnaires are returned you can mark off each number on a list, which will permit you to send follow-ups only to those who have not responded.

4. If you use ID codes or names on the questionnaire, take care that the questionnaire and the mailing envelope match. If you are using personalized letters, make sure all three items match.

5. Give recipients no more than three weeks to respond to the initial mailing; the questionnaire will be forgotten if you give too much time. Avoid sending questionnaires near holidays or times when many of your recipients are likely to be on vacation. Include a post-marked, self-addressed return envelope in the mailing.

6. Follow-up mailings significantly increase the response rate. You should do at least two follow-ups, the first a simple reminder, the second another copy of the questionnaire.

   - Time the first follow-up reminder to arrive about the time the questionnaire is due to be returned. We suggest using a postcard for this follow-up. It can be sent to everyone, saying simply “Two weeks ago we sent you a questionnaire about [subject[/ If you have already returned the questionnaire, thank you very much. If you have not, we hope you will respond soon.” If you need to have the postcards professionally printed, you will need some lead time.

   - The second follow-up should include a new cover letter, a second copy of the questionnaire, and another return envelope. It should be mailed about two weeks after the postcard to those who have not yet responded.

7. If the questionnaire is asking attorneys or litigants for their views about a particular court, if possible have them return the questionnaire to an office or person not affiliated with the court. Attorneys and litigants will be less likely to return the questionnaire if they think their responses might be seen by members of the court.

8. If your survey is of court staff, try not to send questionnaires to them through supervisors. This diminishes the staff members' importance and makes it difficult for you to know who has received the questionnaire and thus what type of response rate you are getting. If you must send the questionnaire through supervisors, do not have the questionnaires returned through the supervisors. The responses to your questions are likely to be more candid if staff can return the questionnaires directly to you.