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ABSTRACT

A study was undertaken to develop a checklist of desirable characteristics of mail questionnaires. The checklist was to reflect some degree of consensus among experts in survey research and to be used as a general guide by novice questionnaire designers. A second objective was to take a first step toward development of an objective measure of quality of questionnaires. A review of the literature on the design of mail survey questionnaires indicated that seven categories were most essential in influencing response rate and quality of responses to mail questionnaires: (1) general appearance; (2) instructions; (3) choice of items; (4) order of items; (5) item format; (6) choice of response options; and (7) wording. A survey instrument based on the literature review was formulated. Six authors of books on survey research and six members of the American Educational Research Association's Special Interest Group on Survey Research in Education were surveyed; five of the former and six of the latter responded to the survey. Results are disappointing. The reluctance of the experts to indicate that any but the most fundamental of characteristics were applicable to all mail surveys underscores the often-stated principle that questionnaires should be tailored to the particular population being surveyed. Alternative approaches to future research are enumerated. Eleven data tables are included. The "Desirable Characteristics of Mail Questionnaires" Questionnaire is appended. (TJH)

Seeking Consensus on Empirical Characteristics of Effective Mail Questionnaires: A First Step

by

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Seeking Consensus on Empirical Characteristics of Effective Mail Questionnaires: A First Step

Introduction

Mail surveys are used frequently, particularly in higher education institutions (Fuqua, Hartman, & Brown, 1982).[1] According to Babbie (1973), "survey research is probably the best known and most widely used research method in the social sciences today. . . . To some extent, everyone in the United States at least has been affected by surveys" (p. i). While the research instrument is only one component of the overall research endeavor, in mail surveys the questionnaire takes on added importance. The potential respondent encounters it in isolation, with no interviewer present to encourage the respondent to participate or to provide explanations. The individual must be motivated to complete the questionnaire, and the questionnaire must be designed to facilitate the respondent's providing valid responses. "The task required of respondents must appear to be easy and attractive. . . . Anything [respondents] particularly dislike about the layout, wording, or emphasis of the questions may deter them (Hoinville, 1978, p. 127)." Anderson, Berdie, and Niebuhr (1986) concur, noting that "poorly constructed formats [(the physical arrangement of questions on the page)] influence not only response rates but also the quality of responses obtained" (p. 23).

Objectives of Current Effort

Guidelines for the novice. A common occurrence for those who have reputations as knowledgeable, experienced, and/or successful survey researchers is to be approached by novice questionnaire-designers and asked for some general guidelines for developing questionnaires or to review a tentative survey instrument and provide feedback. Survey research literature includes a number of works that describe various authors' systems of survey design that include the construction of the instrument itself, sampling considerations, choosing questions, cover letters, follow-up procedures, etc. Frequently, authors' recommendations seem to directed toward questionnaires in general, but upon closer reading it can be determined that they (the authors) are focusing on questionnaires used in telephone or face-to-face interviews rather than paper-and-pencil instruments

[1]Fuqua, D.R., Hartman, B.W., & Brown, D.F. (1982). Survey research in higher education. Research in Higher Education, 17(1), 69-80.

completed by the respondent himself/herself and returned through the mail. Also in the literature is a plethora of studies dealing with various effects (e.g., on response rate, on completeness of responses, on turnaround time) of alternative forms of one or more elements of questionnaire design (e.g., structured choice versus open-ended responses, variations in length, manifold style versus booklet style).

It might be difficult, however, to identify a simple checklist of widely agreed upon characteristics of good mail questionnaires that would be helpful to the novice The total system concept seems to be too restrictive for this purpose: not only do the suggestions offered represent just a single point of view, but the guidelines may be so specific that they are difficult to generalize to a situation other than that for which they are illustrated. The problem with journal-type recommendations is that they are likely to be too narrow in scope for the purpose described. One objective of the present study is to develop a simple checklist of desirable characteristics of mail questionnaires (a) that reflects some degree of consensus among experts in survey research, and (b) that can be used as a general guide by novice questionnaire designers.

Research tool. There are numerous examples in the literature of inconsistencies in findings related to survey research. Many explanations have been offered for these apparent discrepancies, including basic differences in the studies with regard to such factors as the survey population and subject matter of the questionnaire. Another source of uncontrolled variation that may affect dependent measures is the quality of the survey instrument itself, but no acceptable measure of this quality currently exists. If such a measure were available, it might be useful in interpreting the contradictory findings of ostensibly comparable studies. A second objective of the present study is to take a first step in developing an objective measure of the quality of a mail questionnaire.

Method

Instrument Development

Significant journal and book sources that provide general guidelines for designing mail questionnaires were identified through an investigation of current books in print and ERIC listings. Those sources containing guidelines only for other survey techniques (e.g., telephone or face-to-face interviews) were not included unless it could be determined that

the recommended procedures were equally applicable for mail surveys. The final list of sources is attached.

The specific recommendations from each of these books or articles were listed and categorized. Only those characteristics which were deemed desirable by several of the authors were retained; those characteristics mentioned by only a few authors and those about which there was disagreement were excluded from the list. The remaining list of desirable characteristics was edited to exclude redundancies and re-categorized independently by the two authors. The authors then compared and discussed their respective lists, ultimately producing the 83 items and seven categories contained in the instrument. Throughout their discussions the authors recognized that there was more than one way in which items could be categorized, and that the categorization of items and the labels selected were somewhat arbitrary. An examination of a copy of the instrument (which is attached), showing the categories and items, should help clarify the conceptual basis for the categories.

The final grouping of items resulted in seven categories requiring varying numbers of responses. The categories and their respective numbers of items (responses) are as follows:

General Appearance	14
Instructions	8
Choice of Items	8
Order of Items	15
Item Format	16
Choice of Response Options	10
Wording	12

Once the characteristics had been selected, it was apparent that some might be more important than others. It was decided to first determine which characteristics should be included (the focus of this study), then to focus on the relative importance of each characteristic. The respondents were asked to indicate, for each item, the extent to which the characteristic would be recommended for mail survey questionnaires using the following ratings: ALL (recommended for all mail questionnaires); SOME (recommended for some but not all mail questionnaires); or NONE (not recommended for mail questionnaires). There was space following each section under a heading of "other" for the respondents to add other characteristics that they thought should have been included in that section.

The questionnaire was photocopied and assembled in booklet format (7" by 8-1/2") using two sheets of ivory colored, legal-sized paper that were printed on both sides, folded, collated, and saddle-stitched. The front page served as a cover and the last (or eighth) page was reserved for comments. Identical directions for responding to the items were placed at the top of each of the six inside pages.

Participants

It was considered important that the participants in this study be knowledgeable and experienced in survey research and represent various research environments. Six authors of books on survey research (from the attached bibliography) were invited to participate. Their publications contained guidelines for the total development of mail questionnaires (including wording, order, and format or layout) and were not specific to a particular research emphasis (academia, public opinion polls, marketing research). Six experienced practitioners of survey research were selected from the membership of the American Educational Research Association's (AERA's) Special Interest Group on Survey Research in Education on the basis of their activities in the group and on their survey research background.

Detailed background information was provided by ten of the eleven individuals who participated in the study. In addition to the five who were authors of books on survey methodology, each of the remaining six had made formal presentations on issues of survey research methodology at national professional conferences. Each of the five authors is in a leadership position in an organization which has a focus on survey research. Four of the other participants are employed in postsecondary institutions in units that focus on research and/or evaluation.

The ten who supplied background information had amassed a total of 172 years of experience in survey research, with individual experience varying from 7 to 40 years (median = 15.5 years). All ten had carried out surveys in 1988 and most considered it a typical year. These researchers had conducted from 1 to 30 surveys themselves, as well as providing consultation on others. The research focus and the target population varied both within and across individuals. The major types of surveys were described as public opinion, needs assessment, program evaluation/effectiveness, and institutional, consumer, and attitude studies. Target groups enumerated included the following: the general public; program participants; students; alumni; consumers; client groups; various occupational

groups, including professionals (e.g., judges, lawyers); and groups of employees within organizations (e.g., supervisors, managers).

Procedures

A copy of the instrument, an explanatory cover letter, and a pre-stamped reply envelope, were mailed to each of twelve experienced survey researchers who are well known in the field and/or who have been active members of AERA's SIG on Survey Research in Education. One follow-up reminder which included another copy of the instrument was mailed to each of the nonrespondents approximately one month after the initial mailing. Only one of the twelve potential participants in this phase of the study did not respond, for a response rate of 92 percent.

Results

Response Patterns

The characteristics included in the questionnaire consisted of those that were endorsed by at least several authors of the survey research literature examined, so it is not surprising that most of the 913 possible responses (83 items X 11 respondents) were either in the ALL or SOME category (61 percent and 33 percent, respectively). Only 4 percent of responses fell in the NONE category, and 2 percent were left blank.

Response tendencies differed from one individual to another. On the two extremes, one person selected the ALL category for 86 percent of the characteristics, while another selected ALL for only 41 percent of the characteristics. The median number of times a respondent choose the ALL category was 51 times, or for 61 percent of the characteristics. The median for responses in the SOME category was 33 percent. Responses in the NONE category ranged from 0 to 12 percent across individuals, with the median being 4 percent.

The individuals responding to the survey were five authors of books on survey research and six experienced practitioners of survey research, so it was deemed inadvisable to make statistical comparisons in response patterns between the two groups.

Experts' Assessment of Desirable Characteristics

Confusing items. Based on the hand-written comments of the respondents and/or their failure to respond, several items were believed to have been confusing to at least some of the respondents. Table 1 lists these items and the response distributions for each. These items are excluded from subsequent analyses.

Characteristics of somewhat limited application. Despite the overwhelming tendency of respondents to indicate that the characteristics listed were applicable to at least some mail surveys, 2 or more of the 11 respondents felt that 7 of the characteristics should not apply to any mail survey (See Table 2).

Overall assessment of characteristics. Tables 3 through 11 summarize the opinions of the experts surveyed on the characteristics presented (excluding those in Table 1). The tables appear in order of decreasing applicability of the characteristics to all mail questionnaires. That is, Table 3 contains those items that all of the experts felt should be characteristics of all mail surveys, while Table 11 lists characteristics that less than 30 percent of the responding experts judged to be desirable for all mail surveys.

Discussion

In terms of the original objectives of the study, the results were disappointing. Upon reflection, however, they were not surprising. The reluctance of this group of experts to indicate that any but the most fundamental of characteristics were applicable to all mail surveys underscores the oft-stated principle that questionnaires be tailored to the particular population being surveyed. This is an especially compelling point in this study, since only those characteristics for which there was general agreement (or at least lack of disagreement) among the authors considered were extracted from the literature.

Many of the hand-written comments contained qualifiers or described exceptions to particular practices. More importantly, these hand-written comments pointed out that the characteristics presented in the questionnaire are of varying importance to the likelihood of success of a mail survey. This supports the view--as the authors had proposed in the cover letter--that at least one more step is necessary in order to establish the relative importance of each of these characteristics to the probable success of a mail survey.

The Next Step

Unfortunately, this study also reveals a lack of a substantial "core" of characteristics that are essential to all mail questionnaires. Recall that the authors' ultimate goals for the long-term effort, of which this study was conceived to be an initial step, were to develop (a) a list of widely-agreed-upon characteristics that can be used as a checklist for novice questionnaire designers, and (b) an evaluation form that can be used as a means of comparing the quality of instruments across research studies. The outcome of the present study suggests that at least two different approaches could be considered as the possible next step.

Broaden the universal applicability. One general approach would be to pare down the existing list to include only those characteristics that apply to all successful mail questionnaires. This would require revising the wording of many items and eliminating others altogether. The advantage of this approach would be the broad applicability of the resulting list. The disadvantage is that the resulting list might contain too many items like those in Table 3, with which virtually nobody would disagree, but which, by themselves, offer very little guidance for the novice.

Narrow the focus. Another approach would be to try to address relevant factors that are inherent in the SOME responses and to develop several different lists of characteristics, perhaps, based on certain attributes of the target population, purpose and topic of the survey, etc. Depending on how specifically one might define his/her frame of reference, it might then be possible--in addition to making a lengthier, more situation-specific list of desirable questionnaire characteristics--to broaden the scope of the list to cover other observable aspects of the survey methodology (e.g., cover letter, stamp, original and reply envelopes). The disadvantage of such an approach is the concomitant decrease in generalizability of the characteristics so identified and the resultant increase in the likelihood that a checklist or evaluation instrument would not be available for a given application.

Validation. After a revised list is devised (using either of the approaches above), its quality and appropriateness could be tested using an approach similar to that used in the present study (i.e., relying on a panel of experts to establish face validity). A less direct, more overtly empirical approach might entail identifying instruments that had been used in survey efforts with varying degrees of success. A determination could then be made about

how consistent the quality of the instruments (and possibly associated materials) used in these surveys--as reflected in the tentative list of desirable characteristics--is with the gauged success of the survey endeavor. Such an approach would require that a researcher operationalize the concept of "success," which is apt to vary depending on such factors as the population, the topic or objectives of the questionnaire, and the resources used.

Conclusion

Survey research is certainly not a "clean" discipline; in fact, it is probably not a discipline at all. Mail questionnaires are used for a multitude of very different purposes and are targeted to populations that can vary widely on almost any dimension one might name. Perhaps it is unreasonable, therefore, to expect that there might be some underlying "truths"--beyond those that are very obvious--which apply to all good mail surveys. This heterogeneity of purpose and of target population may mean that attempts to establish such global truths are likely to be fruitless. The authors would argue, nevertheless, that the effort to establish guidelines and rating tools should not be abandoned; they might perhaps be re-directed. The question should become "At what level of specificity (in terms of purpose and target population) should 'standards' be established for mail questionnaires?" The abundance of mail surveys that increasingly seem to flood the mail--and the astoundingly poor quality of some of them--suggest that a definite need exists to improve and/or assess (for purposes of comparison) the quality of the instruments used. Hopefully, the present study has shed some light on how this might be accomplished.

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Table 1. Questionnaire Items That Were Probably Confusing to Experts Surveyed

No. Who Did Not Respond	Of Those Responding % ALL	% SOME	% NONE	Characteristic
3	25%	50%	25%	A.10. The back page does not contain items but may be used for comments.
2	67%	33%	0%	C.1. The respondent is capable of providing the answers (i.e., s/he has the information).
2	67%	22%	11%	C.3. One item does not provide the answer to another item.
2	44%	44%	11%	E.7. For closed-end items, response options are precoded.
2	67%	33%	0%	E.14.c. For checklists, column headings are presented horizontally.

Notes:

Potential confusion about the meaning of an item was based on the frequency and nature of hand-written comments.

These items are excluded from the tables that follow.

Table 2. Characteristics of Mail Questionnaires Which More Than 15% of Responding Experts Indicated Should Not Apply to Mail Surveys

No. Who Did Not Respond	Of Those Responding % ALL	% SOME	% NONE	Characteristic
0	36%	45%	18%	C.5.d. For items used for skip/filter/screen purposes, items pertaining to only some of the respondents are indented beneath the filter question.
1	0%	70%	30%	D.3. Open-ended items appear last.
0	36%	45%	18%	D.7.c. Within a topic/content area, the items progress from least objectionable to most objectionable.
0	45%	36%	18%	E.2 If necessary, either sublettering (e.g., 4a, 4b, 4c) or numbering by sections (i.e., starting each section with item 1) is used to limit the apparent number of items.
0	45%	27%	27%	E.5. If an item stem requires two or more lines, the second and subsequent lines are indented.
0	36%	45%	18%	E.14.a. For checklists, if long, a line is skipped after every three to six items.
0	27%	45%	27%	G.3.j. [Instrument does not contain] the word "questionnaire" or "checklist" in heading or text.

Table 3. Characteristics of Mail Questionnaires Which 100% of Responding Experts Indicated Should Apply to All Mail Surveys

No. Who Did Not Respond	Of Those Responding % ALL	% SOME	% NONE	Characteristic
0	100%	0%	0%	A.5. Printing does not bleed through paper.
0	100%	0%	0%	A.6. Type is clear and legible.
0	100%	0%	0%	B.3.a. [Instructions] specify when to put a check mark and when to write in a response.
0	100%	0%	0%	E.11. There is adequate space for responding.
0	100%	0%	0%	E.14.b For checklists, column headings are carried over from one page to another.
0	100%	0%	0%	F.1.g. Response options are appropriate for the item.
0	100%	0%	0%	G.1. The choice of words is appropriate to the literacy level of the survey population.
0	100%	0%	0%	G.3.d. [Items do not contain] double negatives . . . and/or response options.

Table 4. Characteristics of Mail Questionnaires Which 90%-99% of Responding Experts Indicated Should Apply to All Mail Surveys

No. Who Did Not Respond	Of Those Responding % ALL	% SOME	% NONE	Characteristic
0	91%	9%	0%	A.2. Instrument looks easy to complete.
0	91%	9%	0%	A.11. Appreciation for completing the form is expressed.
1	90%	10%	0%	B.3.b. [Instructions] indicate whether multiple responses are allowed.
0	91%	9%	0%	C.4. All items are essential and relevant to the purposes of the survey.
0	91%	9%	0%	C.5.b. Instructions [for skip/filter/screen items] are few and simple.
0	91%	9%	0%	E.3. Each item and its response options are on the same page.
0	91%	9%	0%	E.9. Response options are close to the item stem.
0	91%	9%	0%	F.1.b. Response options are mutually exclusive.
0	91%	9%	0%	F.1.d. Response options do not contain more than one alternative that could be correct unless multiple responses are allowed.

Table 5. Characteristics of Mail Questionnaires Which 80%-89% of Responding Experts Indicated Should Apply to All Mail Surveys

No. Who Did Not Respond	Of Those Responding % ALL	% SOME	% NONE	Characteristic
0	82%	18%	0%	A.3. Margins are adequate; instrument doesn't look crowded.
0	82%	18%	0%	A.9.a. The front page (or cover) contains the study/instrument title, prominently displayed.
0	82%	18%	0%	B.2. Instructions are brief.
0	82%	18%	0%	B.6. If items appear on both sides of the page, an indication is given that the instrument continues on the reverse side (e.g., "please turn over").
0	82%	18%	0%	C.5.c. [For items used for skip/filter/screen purposes,] instructions appear immediately after the response options.
0	82%	18%	0%	D.1.d. The initial items are nonthreatening.
0	82%	18%	0%	F.1.a. Response options exhaust all possibilities or include "other," "undecided," or "neutral" category.
0	82%	18%	0%	G.3.b. [There are no] "loaded" items (that use emotionally colored words).
0	82%	18%	0%	G.3.c. [There are no items that contain an] assumption of an existing state of affairs (e.g., "Do you still. . .").

Table 6. Characteristics of Mail Questionnaires Which 70%-79% of Responding Experts Indicated Should Apply to All Mail Surveys

No. Who Did Not Respond	Of Those Responding % ALL	% SOME	% NONE	Characteristic
0	73%	18%	9%	A.9.c. The front page (or cover) contains the name of the sponsor.
0	73%	27%	0%	B.5. The tone of the directions is polite (e.g., "please").
0	73%	27%	0%	C.2. Each item seeks just one piece of information.
0	73%	27%	0%	D.1.a. The initial items are clearly connected to the stated purpose of the survey.
0	73%	27%	0%	D.1.b. The initial items are applicable to all members of the survey population.
0	73%	27%	0%	D.1.e. The initial items are interesting.
0	73%	27%	0%	D.8. Items that require recall are organized by logical time sequence.
0	73%	27%	0%	F.1.f. Response options are brief.

Table 7. Characteristics of Mail Questionnaires Which 60%-69% of Responding Experts Indicated Should Apply to All Mail Surveys

No. Who Did Not Respond	Of Those Responding % ALL	% SOME	% NONE	Characteristic
1	60%	40%	0%	A.1. The title of the study/questionnaire is likely to appeal to the survey population.
0	64%	36%	0%	A.7. Size and style of type used for headings is consistent throughout the instrument. Consistency is also evident for items and response options.
0	64%	27%	9%	B.1. General instructions that apply to the entire instrument are provided at the beginning of the instrument.
0	64%	27%	9%	C.5.a. The use of [skip/filter/screen items] is justified.
0	64%	27%	9%	D.4. Classification or demographic information is solicited at the end of the instrument unless needed for screening purposes.
0	64%	36%	0%	D.6. Items with similar content are grouped together; within each content group, items with the same response format are presented together.
0	64%	36%	0%	E.8. Response options are arranged vertically (or in columns if several consecutive items use the same response options).
0	64%	36%	0%	E.10. The space for responding to items is on the same side of the page throughout the instrument.
0	64%	36%	0%	F.2.b. Items with Likert-type response options use a balanced scale.
0	64%	36%	0%	G.3.a. [Items do not contain] jargon, technical terms, or uncommon abbreviations.

Table 8. Characteristics of Mail Questionnaires Which 50%-59% of Responding Experts Indicated Should Apply to All Mail Surveys

No. Who Did Not Respond	Of Those Responding % ALL	% SOME	% NONE	Characteristic
0	55%	45%	0%	D.1.c. The initial items are easy.
0	55%	45%	0%	D.7.b. Within a topic/content area, the items progress from most familiar to least familiar.
1	50%	50%	0%	E.13. When ranking, the number of items to be ranked is limited (e.g., three best and three worst).
1	50%	50%	0%	G.2. Both sides of an issue (or neither side) are included in the item stem.
0	55%	45%	0%	G.3.e. [Instrument does not contain] negatively worded items coupled with agree/disagree response format.
0	55%	45%	0%	G.3.g. [Items do not contain] "giveaway" words (e.g., "all").

Table 9. Characteristics of Mail Questionnaires Which 40%-49% of Responding Experts Indicated Should Apply to All Mail Surveys

No. Who Did Not Respond	Of Those Responding % ALL	% SOME	% NONE	Characteristic
0	45%	45%	9%	A.4. Paper is white or light-colored with dark ink.
0	45%	55%	0%	A.8. There are not too many variations in size and style of type.
0	45%	45%	9%	A.9.b. The front page (or cover) contains general directions.
0	45%	55%	0%	A.9.d. The front page (or cover) contains the address of the sponsor.
1	40%	50%	10%	B.3.c. Instructions provide guidance for expected length of open-ended responses.
0	45%	45%	9%	B.4. Instructions are visually different from the body of the instrument (e.g., in size and/or style of type).
0	45%	55%	0%	E.1. Items are numbered with Arabic numerals.
0	45%	36%	18%	E.2. If necessary, either sublettering (e.g., 4a, 4b, 4c) or numbering by sections (i.e., starting each section with item 1) is used to limit the apparent number of items.
0	45%	27%	27%	E.5. If an item stem requires two or more lines, the second and subsequent lines are indented.
0	45%	55%	0%	E.6. The respondent is asked to circle or underline responses already presented rather than write them on a blank.
0	45%	55%	0%	E.12. Open-ended items are used sparingly.
0	45%	55%	0%	F.2.a. Items with Likert-type response options have an appropriately labeled midpoint.
0	45%	45%	9%	G.3.i. [Items do not contain] vague terminology (e.g., "the country," "just," "fair," "you").

Table 10. Characteristics of Mail Questionnaires Which 30%-39% of Responding Experts Indicated Should Apply to All Mail Surveys

No. Who Did Not Respond	Of Those Responding % ALL	% SOME	% NONE	Characteristic
0	36%	43%	18%	C.5.d. For items used for skip/filter/screen purposes, items pertaining to only some of the respondents are indented beneath the filter question.
0	36%	55%	9%	D.2. If there are any sensitive or difficult items, they appear in the middle or near the end of the instrument, but not at the very end.
0	36%	55%	9%	D.5. If reference is made to a previous item, that item appears on the same page or on the facing page.
0	36%	45%	18%	D.7.c. Within a topic/content area, the items progress from least objectionable to most objectionable.
0	36%	55%	9%	E.4. Statements or questions, rather than phrases, are used in collecting demographic information (e.g., "How old were you on your last birthday?" instead of "Age").
0	36%	45%	18%	E.14.a. For checklists, if long, a line is skipped after every three to six items.
0	36%	64%	0%	F.1.e. Response options include both sides of issue in question.
0	36%	55%	9%	G.3.f. [Items do not contain] qualifying clauses, especially at end of stem

Table 11. Characteristics of Mail Questionnaires Which Less Than 30% of Responding Experts Indicated Should Apply to All Mail Surveys

No. Who Did Not Respond	Of Those Responding % ALL	% SOME	% NONE	Characteristic
1	0%	70%	30%	D.3. Open-ended items appear last.
0	27%	64%	9%	D.7.a. Within a topic/content area, the items progress from general to specific.
1	10%	80%	10%	D.7.d. Within a topic/content area, the items progress from objective to subjective.
0	9%	91%	0%	F.1.c. Include a "don't know" option.
0	18%	82%	0%	F.3. Sensitive information (e.g., age, salary) is collected using ranges for response options.
0	18%	73%	9%	G.3.h. [Items do not contain] inexact words or phrases (e.g., "any," "most," "several," "usually," "often," "regularly," "much the same").
0	27%	45%	27%	G.3.j. [Instrument does not contain] the word "questionnaire" or "checklist" in heading or text.

Note: ***The questionnaire is reduced in size for inclusion in this paper.***

COMMENTS:

Thank you for sharing your experience and expertise with us in this research.

Please return to Judy Boser, The University of Tennessee, 212 Claxton, Knoxville, TN 37996.

DESIRABLE CHARACTERISTICS OF MAIL QUESTIONNAIRES

INSTRUCTIONS: Listed on the following pages are some generally agreed upon characteristics of effective mail questionnaires. Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:

ALL = recommended for all mail survey questionnaires
SOME = recommended for some but not all mail surveys
NONE = not recommended

Space is provided at the end of each section for you to add any questionnaire characteristics which are not listed but which you think should be included in a list of characteristics recommended for all mail survey questionnaires.

SHELDON B. CLARK
Oak Ridge Associated Universities

JUDITH A. BOSER
The University of Tennessee

Note: ***The questionnaire is reduced in size for inclusion in this paper.***

Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:
ALL = recommended for all mail survey questionnaires
SOME = recommended for some but not all mail surveys
NONE = not recommended

A. General Appearance

1. The title of the study/questionnaire is likely to appeal to the survey population..... ALL SOME NONE
2. Instrument looks easy to complete..... ALL SOME NONE
3. Margins are adequate; instrument doesn't look crowded..... ALL SOME NONE
4. Paper is white or light-colored with dark ink..... ALL SOME NONE
5. Printing does not bleed through paper..... ALL SOME NONE
6. Type is clear and legible..... ALL SOME NONE
7. Size and style of type used for headings is consistent throughout the instrument. Consistency is also evident for items and response options..... ALL SOME NONE
8. There are not too many variations in size and style of type..... ALL SOME NONE
9. The front page (or cover) contains:
   a. the study/instrument title, prominently displayed..... ALL SOME NONE
   b. general directions..... ALL SOME NONE
   c. the name of the sponsor..... ALL SOME NONE
   d. the address of the sponsor..... ALL SOME NONE
10. The back page does not contain items but may be used for comments..... ALL SOME NONE
11. Appreciation for completing the instrument is expressed..... ALL SOME NONE

Other:

Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:
ALL = recommended for all mail survey questionnaires
SOME = recommended for some but not all mail surveys
NONE = not recommended

B. Instructions

1. General instructions that apply to the entire instrument are provided at the beginning of the instrument..... ALL SOME NONE
2. Instructions are brief..... ALL SOME NONE
3. Instructions are clear:
   a. They specify when to put a check mark and when to write in a response..... ALL SOME NONE
   b. They indicate whether multiple responses are allowed..... ALL SOME NONE
   c. They provide guidance for expected length of open-ended responses..... ALL SOME NONE
4. Instructions are visually different from the body of the instrument (e.g., in size and/or style of type)..... ALL SOME NONE
5. The tone of the directions is polite (e.g., "please")..... ALL SOME NONE
6. If items appear on both sides of the page, an indication is given that the instrument continues on the reverse side (e.g., "please turn over")..... ALL SOME NONE

Other:

C. Choice of Items

1. The respondent is capable of providing the answers (i.e., s/he has the information)..... ALL SOME NONE
2. Each item seeks just one piece of information..... ALL SOME NONE
3. One item does not provide the answer to another item..... ALL SOME NONE
4. All items are essential and relevant to the purposes of the survey..... ALL SOME NONE
5. For items used for skip/filter/screen purposes:
   a. The use of this type is justified..... ALL SOME NONE
   b. Instructions are few and simple..... ALL SOME NONE
   c. Instructions appear immediately after the response options..... ALL SOME NONE
   d. Items pertaining to only some of the respondents are indented beneath the filter question..... ALL SOME NONE

Other:

Note: ***The questionnaire is reduced in size for inclusion in this paper.***

Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:
ALL = recommended for all mail survey questionnaires
SOME = recommended for some but not all mail surveys
NONE = not recommended

D. Order of Items

1. The initial items are:
   a. clearly connected to the stated purpose of the survey..... ALL SOME NONE
   b. applicable to all members of the survey population..... ALL SOME NONE
   c. easy..... ALL SOME NONE
   d. nonthreatening..... ALL SOME NONE
   e. interesting..... ALL SOME NONE
2. If there are any sensitive or difficult items, they appear in the middle or near the end of the instrument, but not at the very end..... ALL SOME NONE
3. Open-ended items appear last..... ALL SOME NONE
4. Classification or demographic information is solicited at the end of the instrument unless needed for screening purposes..... ALL SOME NONE
5. If reference is made to a previous item that item appears on the same page or on the facing page..... ALL SOME NONE
6. Items with similar content are grouped together; within each content group, items with the same response format are presented together..... ALL SOME NONE
7. Within a topic/content area, the items progress from:
   a. general to specific..... ALL SOME NONE
   b. most familiar to least familiar..... ALL SOME NONE
   c. least objectionable to most objectionable..... ALL SOME NONE
   d. objective to subjective..... ALL SOME NONE
8. Items that require recall are organized by logical time sequence..... ALL SOME NONE

Other:

Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:
ALL = recommended for all mail survey questionnaires
SOME = recommended for some but not all mail surveys
NONE = not recommended

E. Item Format

1. Items are numbered with Arabic numerals..... ALL SOME NONE
2. If necessary, either sublettering (e.g., 4a, 4b, 4c) or numbering by sections (i.e., starting each section with item 1) is used to limit the apparent number of items..... ALL SOME NONE
3. Each item and its response options are on the same page..... ALL SOME NONE
4. Statements or questions, rather than phrases, are used in collecting demographic information (e.g., "How old were you on your last birthday?" instead of "Age")..... ALL SOME NONE
5. If an item stem requires two or more lines, the second and subsequent lines are indented..... ALL SOME NONE
6. The respondent is asked to circle or underline responses already presented rather than write them on a blank..... ALL SOME NONE
7. For closed-end items, response options are precoded..... ALL SOME NONE
8. Response options are arranged vertically (or in columns if several consecutive items use the same response options)..... ALL SOME NONE
9. Response options are close to the item stem..... ALL SOME NONE
10. The space for responding to items is on the same side of the page throughout the instrument..... ALL SOME NONE
11. There is adequate space for responding..... ALL SOME NONE
12. Open-ended items are used sparingly..... ALL SOME NONE
13. When ranking, the number of items to be ranked is limited (e.g., three best and three worst)..... ALL SOME NONE
14. For checklists:
    a. If long, a line is skipped after every three to six items..... ALL SOME NONE
    b. Column headings are carried over from one page to another..... ALL SOME NONE
    c. Column headings are presented horizontally..... ALL SOME NONE

Other:

Note: ***The questionnaire is reduced in size for inclusion in this paper.***

Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:
ALL = recommended for all mail survey questionnaires;
SOME = recommended for some but not all mail surveys
NONE = not recommended

F. Choice of Response Options

1. Response options:
   a. exhaust all possibilities or include "other," "undecided," or "neutral" category ..... ALL SOME NONE
   b. are mutually exclusive ..... ALL SOME NONE
   c. include a "don't know" option ..... ALL SOME NONE
   d. do not contain more than one alternative that could be correct unless multiple responses are allowed ..... ALL SOME NONE
   e. include both sides of issue in question ..... ALL SOME NONE
   f. are brief ..... ALL SOME NONE
   g. are appropriate for the item ..... ALL SOME NONE
2. Items with Likert-type response options:
   a. have an appropriately labeled midpoint ..... ALL SOME NONE
   b. use a balanced scale ..... ALL SOME NONE
3. Sensitive information (e.g., age, salary) is collected using ranges for response options ..... ALL SOME NONE

Other:

Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:
ALL = recommended for all mail survey questionnaires
SOME = recommended for some but not all mail surveys
NONE = not recommended

G. Wording

1. The choice of words is appropriate to the literacy level of the survey population ..... ALL SOME NONE
2. Both sides of an issue (or neither side) are included in the item stem ..... ALL SOME NONE
3. Items are simple, direct, and unambiguous. They do not contain instances of any of the following pitfalls:
   a. Jargon, technical terms, or uncommon abbreviations ..... ALL SOME NONE
   b. "Loaded" items (that use emotionally colored words) ..... ALL SOME NONE
   c. Assumption of an existing state of affairs (e.g., "Do you still...") ..... ALL SOME NONE
   d. Double negatives in items and/or response options ..... ALL SOME NONE
   e. Negatively worded items coupled with agree/disagree response format ..... ALL SOME NONE
   f. Qualifying clauses, especially at end of stem ..... ALL SOME NONE
   g. "Giveaway" words (e.g., "all") ..... ALL SOME NONE
   h. Inexact words or phrases (e.g., "any," "most," several," "ususlly," "often," "regularly," "much the same") ..... ALL SOME NONE
   i. Vague terminology (e.g., "the country," "just," "fair," "you") ..... ALL SOME NONE
   j. The word "questionnaire" or "checklist" in heading or text ..... ALL SOME NONE

Other:

(Please continue to page 8)