WHY IS ASSESSMENT NECESSARY?

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In 1974 the Subsection on Survey Research of the American Statistical Association prepared a research proposal to assess survey practices. This action was initiated because it was felt that certain trends were becoming apparent.

First, there was a feeling expressed at a 1973 A.S.A. Conference on Sampling of Human Populations that there was a growing reluctance of people to participate as respondents in sample surveys. Second, there appeared to be a critical attitude on the part of the public and the users of data with respect to the quality of many surveys.

These two factors could be regarded as consequences of the great growth of the sample survey that occurred during the previous 20 years. This approach has become an instrument of public concern. Government policy decisions, wage rates in certain industries, marketing and advertising actions on the part of business, and even the survival of a television series are to some extent dependent upon the results of these surveys. Sometimes, in everyday conversation a person in order to impute authority to a statement he has made will use the phrase "According to a recent survey..."

Sample surveys are conducted by many types of organizations including government agencies and professional groups such as found in universities, non-profit organizations, marketing and opinion research companies and in many other types of private companies. In these cases people who conduct the surveys tend to be qualified. Surveys are also conducted by persons who are untrained or inexperienced in this particular application of statistics. Questionnaires are found in hotel rooms, on theatre seats, on guarantee cards accompanying newly purchases appliances.

From the view points of both the generation of data and the dissemination of the results the sample survey has become an ubiquitous part of modern life.

The reaction of the public is of great concern to us in the profession of data collection. Without the confidence of the public and its co-operation in supplying basic data we would not have a viable mechanism. To a great extent its reaction is dependent upon what practitioners in the field of data collection are doing. Are we producing reliable information? Are we abusing respondents? Are we using sound methods?

These are the types of questions that the A.S.A. program to assess survey practices is designed to answer. Back in 1973 it was felt that sooner or later such information would be desirable in order to maintain a sound public image, to encourage sound research, to improve the quality of survey results and to eliminate some of the abuses. It was felt that in the distant future

a handbook on standards of quality for surveys could be prepared.

It turned out that because of a series of events that started slowly in 1974 and mushroomed during the last year, the need for such an assessment is sooner rather than later. I would like to present a number of reasons why it is important that the assessment proceed as fast and thoroughly as possible.

The first relates to the actions of the Federal Government. The United States government is the largest user and generator of survey data in the world. Techniques and procedures of survey sampling developed here tend to be emulated by all practitioners. The control of such operations is in the hands of Congress and in the executive branches.

What happened in the White House in 1973 called attention to the vast amount of records about individuals maintained by the Federal Government and the vulnerability of these records to unscrupulous persons. In 1974 three laws were enacted by Congress designed to minimize this possibility. Nevertheless they had the effect of making survey operations of the Federal Government more difficult.

These laws are (1) The Privacy Act of 1974, (2) The Freedom of Information Act of 1974 and (3) the Buckley Amendment to the General Education Provisions Act. While these acts were designed to protect the privacy of the individual they did not distinguish between statistical records and administrative records. In a statistical record the identity of the individual with respect to the observation about him is irrelevant. For an administrative record, however, the entire purpose of the record is to get information about the person as such. Had the enactors of this legislation understood and were aware of how data are actually being used for statistical purposes then perhaps these laws would not be as restrictive to survey operations as they now are.

There is some pending legislation at the federal level which would tend to impose additional restrictions on the making of surveys by and for the Federal Government. Among these are, first, the Wicker Bill to restrict the use of Internal Revenue Service lists to the agency itself and not to allow anyone outside to make use of these lists. This would make the taking of the Censuses of Retail and Wholesale Trade, and the Census of Manufacturers almost impossible. At the time when I prepared this paper there were a number of other bits of legislation pending. Among these is the Ashbrook Amendment as part of the House bill for a mid-decade census. This amendment would change the requirements for mandatory reporting to a voluntary system for all Censuses including the decennial population

census. Since this provision is not in the Senate Bill, the Senate House Conference will determine its fate.

Another item of legislation is a House amendment to Section 13 of the Federal Energy Administration Act of 1974 that would add a provision prohibiting the Administrator from collecting or disseminating information on public opinions, attitudes or views either directly of by contract.

Regardless of the present status of these pieces of legislation it would appear that legislators are not aware of the operations of surveys in terms of the procedures used. The consequences of some hasty and seemingly minor action may have major repercussions. The assessment program of the A.S.A. will produce a document that will describe the practices that actually occur in survey operations. It should indicate that there is no motivation on the part of the survey statistician to invade anyone's personal privacy.

Now, let us examine the need for assessment as it relates to the public relations aspect of our field.

During the past year the media have become very interested in the issues of confidentiality and privacy. Reports, commentators and editors have interpreted these issues as they relate to survey operations in the light of their knowledge of survey practices. These interpretations have a decided effect upon the attitudes of prospective respondents and as we shall see to some extent upon legislators.

I would like to review the publicity we received since the last annual meetings of the A.S.A. that were held in Atlanta. At these meetings a number of sessions dealt with privacy and confidentiality as they relate to statistical applications. A reporter of the New York Times, who was well versed in the objectives and techniques of survey taking was present. He took notes and spoke to many of the speakers and participants.

He prepared an article which appeared in the <u>Sunday Times</u> of October 26, 1975. The title was, "Polling Encounters Public Resistance; Decision Making Process is Threatened." The article dealt with many of the current problems involved in maintaining privacy and confidentiality, the apparent decline in response rates and the consequences of futher declines. It was a good article and treated the issues on an objective basis.

The story, sent over the New York Times News Service, was picked up by subscribing newspapers and columnists and appeared in many areas of the country. In this process the local editors were able to express their feelings and direct their influences since they had the options of making up their own headlines. First, let us examine some of these headlines:

- 1. Original article Sunday Times, October 26, 1975.
- 2. Shreveport Journal October 31, 1975. "Decline in Response Rates Worries Survey Experts"
- Arkansas Gazette November 2, 1975.
 "Twitching Curtain Phenomenon Makes Polling Harder"
- 4. Fort Lauderdale News November 9, 1975.

 "Twitching Curtain Phenomenon Oversaturation Threatens Future of Surveys"

What is this "twitching curtain phenomenon?" Reading from the original article,

"It's called the 'twitching curtain phenomenon' by one survey expert. The interviewer approaches a suburban home clutching a questionnaire. Hamburgers are sizzling on the patio grill, the television flickers in the den, but the only sign of human habitation elicited by the visitor's persistent knock is a slight twitching of the curtain."

In an article unrelated to the Sunday Times story.

5. National Observer - November 1, 1975.
"The invisible ink Caper"

The National Observer, a weekly newspaper, had commissioned a mail survey to determine the characteristics of its subscribers. The research company that was selected specialized in this type of operation. First, they selected a sample from the subscription list and then mailed out a questionnaire to each person in the sample under the name of the publication. The questionnaire bore the title, "A confidential survey among our subscribers." Every subscriber who was asked to fill out the questionnaire had good reason to believe that his individual response was, in fact, confidential. He was not asked to sign his name and in addition, there was a question which asked, "In what state do you live?"

One of the persons in the sample was a professor of optics at the University of Wisconsin. He was in his lab one evening and was about to fill out the questionnaire when, "for the heck of it" he put the form under an ultraviolet light--and a set of code numbers showed up. He was quite upset about it and at the suggestion of the director of the Wisconsin Survey Research Laboratory, wrote to the editor who published the story entitled, "The Invisible Ink Caper."

Now, for some of the comments.

Washington Evening Star - November 11, 1975.
 Editorial, "Trouble for Poll Takers"

I would like to quote part of this editorial. It referred to the story sent by the New York Times News Service and noted the decline in response rates. Then, "Some external factors are blamed--like fear of crime that makes householders reluctant to open their doors. But the more persuasive explanations have to do with the onerous practices of the surveyors themselves..."

"The surveyor who seeks indulgence to ask a few questions is likely to have an interminable list. Instead of a couple of moments, it takes many minutes to satisfy the statistical thirst of a client who may or may not have the public interest at heart. The aim and sponsorship of the survey frequently is kept obscure. The questions, after an innocent start, may get increasingly personal. If you escape queries about sex and birth-control practices, be prepared for the inevitable one about how much money you earn. When invasion of privacy is not the primary insult, there are seemingly dumb, ambiguous questions to cope with. Is someone playing a psychological game, probing in devious ways to locate hidden attitudes? The surveyor, in one variation, may turn out to be leading up to a sales pitch for some unwanted product."

"Pollsters bemoan the resistance of survey targets on public-service grounds, voicing fear that government and business will have trouble assessing our needs and desires. But what did our past patience with supposedly scientific sampling get us? Inane television programs bracketed by inane commercials. Junk on the supermarket shelves. Political candidates that are all image and no substance. Large, inefficient automobiles that supposedly were the only kind marketable in this country."

"It will be a small loss if the surveyors eventually find every door closed."

7. Indianapolis Star - December 4, 1975. Jim Flebig, columnist, "Mums the Word to Stop Pollsters"

I have cited these news items to illustrate and to indicate the types of thinking that are in the minds of people who can very easily influence public opinion. When someone reads these articles and editorials he or she may get the impression that the practices so elegantly described are the rule. How often does the twitching curtain phenomenon occur?

Are all mail questionnaires serialized and coded with invisible ink? What about the charges brought forth in the Washington Evening Star?

The Evening Star, being published in Washington, is read by many Congressmen. To what extent had they been influenced when they vote for legislation making responses to the Census questionnaire voluntary rather than mandatory.

In order to respond to charges such as these we

ourselves have to know what goes on in our field. With the exception of some major government and non-governmental studies we really do not know. The assessment program should fill this void.

One of the long-range programs of the assessment program is to set up guidelines and standards for insuring the quality of survey research data.

The general public and segments within are being asked to rely upon the validity and accuracy of surveys. We are all aware of the uses made by government administrators of the data generated by continuous data collection surveys. The procedures have been open to public examination and scrutiny by scholars, review boards and by the Statistical Policy Division of the Office of Management of Budget. In the case of ad hoc surveys conducted by and for the executive branches, OMB clearance is required and as a result certain standards are met.

However, for the most part surveys are conducted where no clearances are required and where no quality standards exist. At the present time there is a great emphasis upon comparative advertising—where one brand is compared against another. Surveys are conducted to make claims for certain advertisers; other surveys are made to counteract the claims of competitors. The FTC comes up with another survey to show that consumers have been misled. Even though the FTC is part of the Federal Government, its surveys do not require OMB clearance because it is a regulatory agency. When dissatisfaction with the survey findings occur, surveys are challenged.

Because of the lack of quality standards, when there are disputes, legal steps are taken. Statisticians are engaged by both sides. Adversary conditions are created. Lawyers are given cram courses in sampling so that they can be in a position to challenge an opposing statistician's interpretation of the laws of probability. If standards were established for the conduct of sound research, then much of the bickering would be eliminated. Challenges would be made on the basis of relevancy and basic definitions and not upon the measurement techniques.

In carrying out the assessment program it can be expected that many benefits of a technical nature will occur. Over the past 40 years statisticians have worked to improve the survey instrument. The approach has been to examine each of the component parts of a survey and attempt to increase the efficiency of each of the parts.

The problems of sampling, interviewing, questionnaire design, refusals, not-at-homes, field travel, data processing, and estimation were all treated separately or at most in pairs. The concepts of the mean square error and amount of information per dollar were about as far as we advanced in coordinating the parts of a survey. When the assessment program gets underway it will become possible to look at a survey as a system. The assessment team will examine a large number of different surveys each with its own characteristics. In the analysis it will be possible to see how the different parts of the survey interact—how variations in one component affect the other components—and their effect on the overall accuracy.

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A final point that I would like to discuss is why should the American Statistical Association undertake such a program? My answer is simply that if the A.S.A. does not undertake this step it will be done as a by-product of some other operation and may be done by people who are inexperienced in survey methodology.

The persons who formulated the pieces of legislation of 1974 that 1 referred to previously did not distinguish between statistical or survey data and administrative data.

During the past year a number of groups have begun working in the area of confidentiality, privacy and the right of human beings.

One group is particularly interested in survey operations in this connection. This is the Panel on Privacy and Confidentiality as Factors in Survey Response under the guidance of the Committee on National Statistics of the National Academy of Science -- National Research Council. It is obtaining empirical evidence to determine whether and how much the public's concern about privacy and confidentiality has an effect upon the re-

sponse and accuracy of people selected for sample surveys. The members of this panel have had vast personal experience in their own fields. However an idea of survey practices on a broader base is necessary to enable the panel to perform its task.

There is still an official committee involved. This is the President's Committee on Privacy and Confidentiality. It is studying all aspects of these issues and is to come up with recommendations for legislative action. When the group was first formed it had not considered the role of surveys. Yet much of the legislation that they will recommend will have a direct effect on the future operations of sample surveys. The situation has now been corrected and the consequences upon survey operations are now being considered.

The third group I would like to call attention to is the National Commission for the Protection of Biomedical and Behavioral Research which was created to develop guidelines for Institutional Review Boards in judging research proposals. The Commission asked Professor Donald T. Campbell to prepare a background paper covering Evaluation Research and Social Experimentation. Campbell felt that to cover the topic he had to include and make recommendations to cover Social Indicators, Secondary Evaluations and "to some extent Survey Research." Professor Campbell sent an early draft of his recommendations to people in these five fields requesting comments. The comments he received, I am sure, reflected the personal experiences of the people who wrote him. If the assessment program had been under way a sounder set of recommendations concerning survey research would have evolved.