

Tore Dalenius, University of Stockholm

The growing difficulties which the authors refer to in the beginning of their paper are not specific to the United States; they have appeared in most other democracies. There is a widespread consensus among survey statisticians that these difficulties are caused to a large extent by the public's concern about invasion of privacy. But it is also clear that our knowledge about the causes is rather scanty.

Consequently, in the last ten years, efforts have been made to get a better understanding of these causes; statistical studies of various kinds have played an instrumental role in these endeavors. The paper just presented is an example in kind.

The paper focusses on areas of prime concern to the Census Bureau and especially its plans for the 1980 censuses of population and housing. It is, however, of a broad scope and should prove useful to most survey statisticians; the data collected represent a most valuable source for action-oriented research aiming at improving the quality of surveys by making their execution more faithful to their design.

In my discussion, I will concentrate on the two studies referred to as "the Behavioral Experiment" and "the Attitude Survey". The designs of these studies both reflect the high competence of those in charge of them, as does the manner in which these designs were implemented. The points of criticism that I will present should not detract from the high appreciation which we should have of these studies.

#### The Behavioral Experiment

1. The objectives called for testing the effects (if any) on the response rates as well as quality of varying promises of confidentiality. The design properly was one of a comparative experiment with 5 treatments A, B, ..., E in terms of such promises.

It is worth noting that the treatments were verbal stimuli administered by the interviewers as part of the interviews. I suggest that in the final report the authors should discuss the possible effect of these treatments on respondents who prior to the interviews had a conception of the confidentiality of Census Bureau records different from that expressed to them by their interviewers.

2. The analysis of the data is far from final; what is available in the paper represents, I understand, only a minor part of what will appear in the final report.

It is noticeable that the differences in response rates between the five treatment groups are "small". But - as pointed out by our chairman in his opening remarks - even small differences are of great practical significance in the context of the problems likely to be present in the 1980 censuses. Consequently, a seemingly "small" bias may prove serious. As an indication of a

possible bias, I refer to the percent "no-one-home": for the group given treatment E it is 5.2%, which is indeed higher than the corresponding percentages for the other four groups.

In the analysis, the authors use two non-parametric procedures. This finds my approval. In addition, they carry out a regression analysis to study the trend in the variable Y = "proportion refused", when the variable X = "treatment" varies in unit steps from X = 3 (the score given for treatment A) to X = -1 (the score given for treatment E). As the authors themselves admit, this scoring is arbitrary. May I suggest that they discard this type of analysis in the final report!

3. The experiment raises an ethical issue which deserves our critical attention. Treatments B, C and E are in fact "misleading"; they misrepresent the policy of the Census Bureau. After the interview, each respondent was informed about the true state of affairs with respect to the promise of confidentiality. We should ask ourselves - as those in charge of the experiment did - if the procedure just described ("temporary deception") is ethically acceptable. I will not pass any judgment of my own here; I want to add, however, that irrespective of which answer we may give to the question, the procedure was a risky one from the viewpoint of the potential harm it might have caused the Census Bureau.

#### The Attitude Survey

4. The objectives called for measuring attitudes and knowledge about surveys, survey organization, government, confidentiality issues, etc. The design was technically one of a comparative experiment with 2 treatments in terms of the auspices: a government organization and a university organization.

5. Again it is true that the analysis of the data is not final. In my discussion I will focus on three interesting results.

First, the government organization (= the Census Bureau) had a considerably smaller non-response rate than the university organization (= the Survey Research Center at the University of Michigan), mainly due to a smaller refusal rate. This is indeed gratifying to the Census Bureau. A word of warning may nonetheless be in place: according to Brooks and Bailar (1977), the refusal rate in one of the Bureau's key surveys (the CPS) tends to be increasing.

Second - and most surprising to me - the survey indicates that the public is very ignorant about or has a rather low, perhaps dangerously low, opinion about the Census Bureau. Thus 18% of the public thinks that the Bureau's records are open to the public, while 47% do not know if this is the case or not. And many, by far too many, think that the Bureau cannot protect the confidentiality of its records.

Third, the results obtained by the Census

Bureau are in some instances strikingly different from those obtained by the Survey Research Center. Results like these should be kept in mind when we discuss the accuracy of surveys, and especially when we do so on the basis of estimates of the sampling error only.

#### Some Possible Benefits to the Census Bureau of These Studies

The question whether these studies meet the objectives of the sponsoring agency (= the Census Bureau) should, of course, be answered by that agency itself. This does not preclude, I hope, my discussion of the matter here.

The two findings mentioned before:

- i. the positive effect of promises of confidentiality; and
  - ii. the Census Bureau's poor public image
- suggest in my interpretation that the Census

Bureau should launch a nationwide "educational" campaign aimed at removing erroneous conceptions and related fears in the public and at enhancing the public's trust in the intentions and capability of the Census Bureau to protect the data collected in surveys and censuses. Just as the Census Bureau has long exercised a leadership in survey and census methodology, it now has the opportunity to exercise a leadership in developing better, much better relations between survey organizations and the public. Action must start now - 1980 is but two years ahead!

#### Reference

Brooks, C.A. and Bailer, B.A. (1977): An Error Profile: Employment as Measured by the Current Population Survey. Paper presented at the 137th Annual Meeting of the American Statistical Association, Chicago, Ill., August 15-18, 1977.