DISCUSSION

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KEY WORDS: Race-ethnic data, data quality, oversampling

I would like to begin with a few observations about my own experiences with the collection of race-ethnic data. At the time when the Office of Management and Budget (then OFSPS) was developing Directive 15, I was employed by the Social Security Administration and played a role in the research that led to the revision of the Social Security number application form to include the new categories (until then, only the categories white, black and other had been used). I remember a session on this topic at the 1980 annual meeting in Houston. The research described in that session suggested that, at least in terms of response rates, the combined race-ethnic format was working better than the versions with separate race and ethnic inquiries. So it isn't surprising to hear about the kinds of problems Census has been having with the twoquestion approach and to hear that some researchers, Reynolds Farley for one, are recommending a return to the combined format.

The Social Security Administration was, of course, obtaining race-ethnic information on a voluntary basis, solely for statistical and research purposes. It's rather ironic that today the agency is no longer capturing this information for such uses, as a consequence of arrangements that were worked out with the states for the enumeration at birth program, in which birth certificates and Social Security numbers are issued simultaneously to most newborn babies. In the longterm, if this data gap is permitted to continue, we can expect to have great difficulty determining how different race-ethnic groups are faring under the social security system. In a broader context, we should consider the consequences of the fact that there is now no federal administrative data system that covers most of the U.S. population and contains acceptable raceethnic information. This was the main reason given by the Census Bureau for rejecting the possibility of conducting a 2000 census based mostly on administrative records. Administrative records offer exciting prospects for the development of data systems that would provide more frequent and less costly smallarea statistics, but unless a conscious decision is made

to include race-ethnic information (again, for statistical and research purposes only) in at least one federal datasystem, it will not be a part of any new demographic data systems based on administrative records.

On a different subject, in the past 3 or 4 years I have been looking at the use of statistics in monitoring compliance with international human rights treaties, like the International Covenant on Economic, Social and Cultural Rights. That covenant and most other human rights treaties include nondiscrimination clauses similar to the one that is part of the Universal Declaration on Human Rights:

Everyone is entitled to all the rights and freedoms set forth in this Declaration without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.

To monitor compliance with nondiscrimination provisions, one would think that it would be necessary to have access to data disaggregated by race, ethnicity and other characteristics that identify these population subgroups, so it may come as a surprise to some to learn that by no means all countries collect race-ethnic data in their censuses. In the 1970 round of population censuses, 40 percent of 143 countries for which information is available provided no information on national or ethnic characteristic or language. In the 1980 round 36 percent of 155 countries did not collect data on any of these topics (United Nations, 1992). The absence of such data leads to the question: How does one monitor discrimination in countries where the necessary data are unavailable from official sources?

Although I sometimes think we should all decide to call ourselves tellurians and let it go at that, this is not a practical possibility in the U.S. today. The U.N., although it doesn't recommend specific race-ethnic categories, does say that data on tribal or racial characteristics are essential for the analysis of nonhomogeneous populations, and that adjective is becoming ever more appropriate as a descriptor of the U.S. population. It is also essential that, as statisticians and survey researchers (or even as government statisticians), we recognize that we have only limited control over the collection of these data. This fact of life was aptly stated by McKenney and Cresce (1992) when they said "... throughout the United States census history, sociopolitical factors have influenced the development and evolution of the ethnic questions, their categories and terminology."

I will now make some brief remarks about two of the three papers. (The paper by Shinigawa was not available to me in time to comment in any detail.) I would like to congratulate Pat Golden, the session organizer, for her choice of topics and authors. The papers cut across a broad spectrum: two of them are about the collection of race-ethnic data in specific settings, one covering the decennial census, and one covering a national household survey, the National Health Interview Survey. The third paper is about conceptual and classification issues relating to the Asian and Pacific Islander population and presents some interesting data about trends in intermarriage within and outside of this broad group. All three papers illustrate the methodological and conceptual difficulties that attend this topic.

The paper by McKenney, Bennet, Harrison and del Pinal (subsequently referred to as the Census paper) builds on and adds to previous efforts by these and other Census authors. The full paper provides a wealth of information about the character and quality of raceethnic data from the 1990 Census, plus some comparisons with 1980 results. Census should be congratulated for its continuing openness in presenting information about these topics. This meticulous documentation helps users to interpret the data and will be useful in developing inquiries for the next census. The major new element presented here is the findings from the Content Reinterview Survey (CRS) for the 1990 Census. There are also some new analyses based on published Census and PUMS data which look for possible inconsistencies between race-ethnic data and data on language and ancestry. The new findings deserve careful study.

The CRS was not a simple replication of the Census, so the observed differences for identical persons do not provide a direct estimate of the simple response variance for the race-ethnic items. There were differences between the Census and the CRS in the item formats, in the data collection modes (mainly mail, selfadministration in the Census, mainly CATI in the CRS) and in the respondent rules (uncontrolled in the Census, but probably primarily household respondents, and primarily self response for each person in the CRS). Thus it seems proper to treat the CRS data as the standard, or at least as being closer to "truth", as the authors have done in some of the analyses.

In addition to the design features I have already mentioned, the quality of the published Census data is also affected by the amount of followup carried out when there is item nonresponse and by the editing procedures used when responses to individual items aremissing or inconsistent. The comparisons in the Census paper are based mostly on the edited data. It might be useful to undertake some 3-way comparisons of Census unedited, edited and CRS data to see how effective the edit algorithms were in improving the quality of the data and perhaps to get some clues as to how the edit procedures might be improved. Followups for item nonresponse are a costly part of the Census data collection process and can only be justified if they produce significant improvements in data quality. One solution, which seems to have been used to some extent in 1990 is to restrict extensive followup efforts to the sample households.

Comparisons of the quality of Census race-ethnic data from one census to the next are even more difficult to interpret. The self-perceptions of individuals about the categories they and their family members belong to may legitimately change from one census to the next. Changes in content, question formats, nonresponse followup procedures and processing procedures can also affect the results, so that it becomes very difficult to interpret and understand the trends that the data appear to show. There are occasional exceptions: The very large 1980-90 changes for certain ancestry categories were clearly methodological artifacts resulting from differences in the specific categories that were used as illustrations in the ancestry items for the two censuses.

As stated by the authors in their summary, "... broad generalizations about the accuracy of the race and Hispanic origin data reported in the Census and CRS are inappropriate." A better approach is to present the data that provide indicators of quality, such as item response rates, indexes of inconsistency, and gross and net difference rates, describe the factors that may have affected them for different items and categories, and then leave it to others to make judgements. The authors deserve great credit for their work and for presenting findings that show the need for further improvements as well as those that demonstrate successes in some areas.

Turning to the paper by Massey, Judkins and Waksberg, I would like to congratulate them for their thorough treatment of various methods of oversampling minority populations and older members of these populations in sample surveys of households and persons. Application of the techniques they describe is by no means limited to minority race-ethnic and age groups; many of them could be used to oversample population subgroups defined by income, occupation, education and other characteristics. Therefore this paper, which reflects the authors' long experience in seeking effective solutions for this rather common survey design problem, deserves a very wide audience among survey design practitioners and students.

One of the techniques they discuss is screening on the basis of name, which can be used to oversample persons whose last names indicate that they have a high probability of belonging to a specified race, ethnic or religious category. Use of this technique is not limited to statistical surveys; a recent article in the Washington Post (1992) described its use for mail marketing and fund-raising activities that are targeted to specific race, ethnic and religious groups. Before the Census included an item on Hispanic origin, Spanish surname coding was used in an attempt to identify the Hispanic population, but errors in both directions seriously limited the value of this technique. However, when the technique is used for stratification prior to sampling, 100 percent accuracy is not necessary. Effective use requires only that the screening technique not be too expensive and that it be successful in placing a high proportion of the target population subgroups in the strata that are to be oversampled.

The use of network sampling was dropped as an option for the coming redesign of the NHIS, primarily because the method has not previously been used in large national surveys and there would be insufficient time to conduct the research and feasibility testing necessary to fully compare its advantages and disadvantages with those of other methods of oversampling. An earlier draft of the paper had a more detailed discussion of this topic, including a description of the kinds of difficulties that might occur in trying to use network sampling for oversampling minorities. I would hope that at least some of this useful information could be incorporated in a final, full version of the paper. The discussion indicated that, for Blacks and Hispanics, network sampling would not be competitive, from a cost-efficiency standpoint, with a combination of oversampling blocks and screening. However, for Asian and Pacific Islanders it might be the only feasible method.

The final table in the Massey, Judkins and Waksberg paper presents several design options for various levels of funding and shows the implications of each option in terms of relative changes in effective sample sizes for Blacks, Hispanics, all others, and total population. When we consider theimplications of these alternatives, it is clear that difficult choices must be made. Last month I heard a presentation by David Mechanic (1993) entitled "Closing Gaps in Health and Health Care: Improved Data for a New Health System". My interpretation of his thesis depends on notes taken at the time, so I hope I have it right. I understood him to assert that a socio-economic classification based on income, education and occupation would explain more of the variation in almost every variable related to health care and healthstatus than would a race-ethnic classification. On the basis of this observation I would raise the question: To obtain the data needed to focus on those segments of the population that are most disadvantaged with respect to access to health care, would it be preferable to give first priority to oversampling low-income households rather than race-ethnic minorities? I realize that it may be technically difficult to oversample low income populations. My question relates to the definition of the data requirements for the National Health Interview Survey. To put it another way, how can the survey best meet the data needs that will be associated with health care reform?

I have enjoyed the opportunity to review these excellent papers and, once again, I would like to congratulate the organizer and the authors for their valuable efforts.

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