

Discussion

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1. Introduction

Tracking time series on important social and economic measures is a necessary method for understanding the changes in a society. Unfortunately, these changes may, in themselves, require periodic revisions in measurement of the underlying series. Otherwise, the data will not provide an accurate picture of reality at a particular point in time in a rapidly changing society. Of course, this cross-sectional need conflicts with the interest in a stable longitudinal measure. Madans (2008) offers a method (bridging) to allow both approaches to be accommodated. A similar bridging method had been proposed by the Interagency Committee for the Review of the Racial and Ethnic Standards (see Tucker, Miller, and Parker 2002), but the one Madans describes goes considerably beyond the earlier work. The model developed by Schenker, Parker, and their colleagues (Parker et al. 2002; Schenker and Parker 2003; Schenker 2003; Parker et al. 2004) addresses the vexing problem of comparing ratios (e.g., mortality and morbidity rates) when there is conceptual change in the measurement of the denominator.

The research that Madans summarizes required a considerable devotion of resources on the part of NCHS. This followed several years of efforts, beginning in 1994, on the part of the Interagency Committee to evaluate a number of alternative measures of race and ethnicity. That work began with gaining an understanding of the measurement problem (including the political context) and extended to a review of previous research, questionnaire design experiments, selection of appropriate methodologies in several areas (e.g., change measures, editing, allocation, and bridging), the evaluation of the consequences of change, and the development and implementation of recommendations. My discussion focuses on the resources required to carry out these activities and the unique role played by methodological research in responding to changes in society by the statistical system, where race and ethnicity is only one example.

2. Developing a Research Program

In order to fully understand the problem, the committee (consisting of both substantive and methodological experts from the interested Federal agencies) had to review the criticisms of the then-existing measurement system for race and ethnicity in a variety of policy areas and administrative contexts. This entailed examining public comments that discussed measurement shortcomings and provided suggestions for change. The public input came in the form of testimony in Congressional hearings, meetings sponsored by the Office

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of Management and Budget (OMB) held around the nation, feedback from a technical workshop at the National Academies of Science, and a summary of comments from a June 1994 *Federal Register* notice.

As a result of this process, a number of issues were identified. Besides concerns about the definitions of race and ethnicity and the particular set of racial and ethnic categories in use at the time, the need to continue satisfying statutory and program requirements and the financial cost of any changes were of major interest. A number of methodological questions were raised, including maintenance of data continuity, methods for reporting more than one race, question wording and ordering effects as well as other possible threats to data quality, primary versus secondary data collection, the need for aggregate as opposed to individual data, best methods for distinguishing Hispanic ethnicity from race, and the use of appropriate terminology. All of these issues and the concerns of various interest groups and political institutions (including the states) had to be addressed by the committee (see OMB 1997a).

After the identification of the various issues that had to be considered, the committee reviewed previous research and developed a set of research priorities. The most extensive work involved questionnaire design. These research projects included split-panel tests in the Current Population Survey (McKay and de la Puente 1995; Tucker et al. 1996) and the National Content Survey (U.S. Bureau of the Census 1996). Other research by members of the committee was also conducted (Bennett, McKenney, and Harrison 1995; Carter-Pokras and LaViest 1996; Gerber and de la Puente 1996; Hahn, Truman, and Barker 1996; Harris-Kojetin and Mathiowetz 1998; Schechter, Stinson, and Moy 1999). These studies took considerable financial resources and staff time.

Once the research was completed, the committee examined and documented all of the findings on the various issues and made its recommendations to OMB (OMB 1997a). The new standards were published in the *Federal Register* in October 1997 (OMB 1997b) after a final review by OMB, but the committee was not yet done with its work. Guidance on the implementation of the changes in the measurement of race and ethnicity had to be developed (OMB 2000a, 2000b), including reporting requirements. Part of that guidance also involved the evaluation of bridging methods.

3. Conclusion

Societal change necessitates conceptual change in underlying survey measures. The consequences of these changes obviously can be far-reaching and result in a great deal of work on the part of the statistical system. Not only did the Interagency Committee have to consider questionnaire changes, it also had to deal with public policy implications, data quality, and other aspects of the survey process (e.g., mode of administration, interviewer training, data adjustment such as allocation and imputation, and analytical methods).

Although conceptual change should be guided by substantive experts, it will have to be implemented by survey methodologists. Survey methodologists also play an important role in helping the public understand the implications of change. Unfortunately, it will be difficult for both substantive experts and survey methodologists to stay ahead of the curve on societal change. As Madans reports, the fact that the bridging models used by NCHS can quickly become out-of-date illustrates this point. For instance, in the case of race

and ethnicity, changes in the levels of interracial marriage and immigration could outpace our ability to adapt.

4. References

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