## METHODOLOGICAL AND INTERVIEWING PROBLEMS IN HOUSEHOLD SURVEYS OF EMPLOYMENT PROBLEMS IN URBAN POVERTY NEIGHBORHOODS

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## Description of the Survey

Despite the relative abundance of National data relating to poverty and employment problems in the United States, the amount of current information available for specific urban poverty neighborhoods has been negligible. Although many persons had called for study and several major action programs had begun earlier, the Nation's attention began to focus on problems of the urban poor after the Watts riot of 1965. At that time, the Census Bureau was asked to conduct a Population and Housing Census of the area to provide officials with an up-to-date inventory of social and economic conditions.

Since then, several Federal agencies, including the Department of Labor, the Department of Housing and Urban Development, and the Office of Economic Opportunity, have established programs to combat the perceived problems of urban poverty neighborhoods. During the development and operation of these programs, it became clear that information more current and in some respects more detailed than decennial Census data would be valuable for efficient allocation of program resources. Several National poverty-oriented studies were undertaken during this period, including the Survey of Economic Opportunity, sponsored by the Office of Economic Opportunity. and longitudinal surveys sponsored by the Department of Labor and the Social Security Administration. However, these did not meet the needs for data for individual poverty areas.

Accordingly, in July 1968, the Department of Labor initiated the Urban Employment Survey in selected poverty neighborhoods of six large cities. The Census Bureau is responsible for collecting and compiling the survey data and the Bureau of Labor Statistics, for analyzing and publishing the survey results.

Although not a case history, this paper describes the principal features of the survey, problems encountered to date, and some concerns regarding potential problems.

The survey covers a broad range of topics, some of which are covered Nationally and on a regular basis by the Current Population Survey. Other topics are specifically focused on poverty neighborhood problems and would have limited relevance to other populations.

The principal subjects covered are current labor force status, work experience, and family income, which are regularly included in the Current Population Survey, and work history, job training, migration history, ethnicity, barriers to employment, and job attitudes, which are not. Because of the importance of the topic and the need to explore each category of involuntary nonparticipants in the labor force in detail the inquiry on barriers to employment constitutes the largest single set of questions.

The required information on household membership and characteristics, and on the current labor force status of persons not present at the initial interview, is provided by a responsible adult household member. Each adult (16 years old and over) is then interviewed personally to verify the current labor force status reported for him and to provide information on the other topics covered in the survey. Approximately 15 minutes are required to complete the household questions, and 20 minutes per adult for the personal interview.

The six cities included in the UES are Atlanta, Chicago, Detroit, Houston, Los Angeles, and New York. They were selected because the Labor Department operates a concentrated Employment Program in each, and because of the ethnic and regional diversity they encompass. In each, a set of Census tracts, not necessarily contiguous, was designated as the sample area. In addition, the remainder of the city in Atlanta and in Detroit were designated as separate sample areas, in large measure to serve as control groups.

The reliability objective for each area is to produce an annual average estimate of a characteristic held by two percent of the population, with a coefficient of variation of ten percent. Accordingly, a probability sample of 3500 interviewed households (7700 persons 16 years and over) per area, per year was designated for the survey. This is divided into 52 weekly subsamples of approximately 70 households. Interviewing is spread uniformly through the year for efficiency of data collection and to control for the effects of seasonal variation. After the initial year of operation, July 1968-June 1969, one-half of the sample each week is being interviewed for the first time and one-half are retained from the previous year's sample. This partial sample rotation pattern, when compared with use of a new sample each year, is expected to yield improved reliability for estimates of year-to-year change.

The data are collected by a staff of interviewers who, for the most part, work full-time on the survey and who reside in the neighborhoods covered by the survey. They are under the direction of the Census Bureau's full-time field supervisory staff which, in five of the cities (all except Houston), is located in the same city. In three of the cities, separate offices are maintained in the poverty neighborhoods for ease of communication with the interviewers.

Each beginning interviewer receives several days of classroom training, followed by one or two days of on-the-job training. Thereafter, he periodically is given self-study assignments and further personal training and is observed by a supervisor while working. In addition, all of his questionnaires are edited and a sample of his work is reinterviewed by supervisory personnel. Corrective action is taken as required.

Because a major purpose of the survey is to meet data needs for the individual poverty neighborhoods, separate tabulations are prepared for each of the eight sample areas. Tables based on the approximately 175 items on the questionnaires are prepared for the total population of each sample area and for major ethnic groups within it. The data for individual cities are analyzed and published by the Bureau of Labor Statistics Regional Offices.

The operations and design features described above relate to the cross-sectional aspect of the survey, which describes the characteristics of the current residents of these neighborhoods. It is possible that, if anti-poverty efforts in these areas are successful, the characteristics of the current neighborhood residents might not fully reflect that success. Those who acquire better jobs and higher income through the efforts of the programs may seek better housing and a more favorable environment in different neighborhoods. They may be replaced by persons of lower economic status or the population of the area may decline.

To gain some insight into this problem, a sample of persons who were interviewed for the survey are interviewed one year later. Most will be found at the addresses at which they were originally interviewed, but others will be followed to their new addresses anywhere in the conterminous United States. The sample of persons who moved is not considered large enough to provide sufficiently reliable data for the individual poverty neighborhoods, and will be tabulated at the end of the second year of the survey for all six poverty neighborhoods combined.

## Methodological and Interviewing Problems

The problems of conducting the Urban Employment Survey are basically similar to those for other household surveys, but their severity and implications may be greater in UES. To the extent that they vary in degree between cities and over time, they may also make inter-city and time series comparisons difficult.

The first problem area is coverage of the population. How complete is the sample and does it include proportionally all elements of the sample area population?

The designation of addresses for inclusion in the sample was from reasonably complete sampling frames, was carefully checked, and appears not to account for any substantial undercoverage. Any problem of population coverage there may be would, therefore, relate largely to missed persons at the designated sample addresses.

Unfortunately, there is little direct information available regarding the size and characteristics of the current population of poverty neighborhoods, as defined for this survey. Such information would be required to determine whether a coverage problem exists, how great it is, and which sub-groups are most affected.

Independent population estimates are available Nationally and are used in evaluating coverage in the Current Population Survey and in decennial Censuses of Population. The general conclusion of coverage evaluations for these programs is that population groups of major concern in a study of poverty neighborhood employment problems—Negroes and young males—present a substantial coverage problem.

Siegel (1) has prepared estimates of population undercoverage in the Current Population Survey (CPS) in 1965. Since the coverage procedures used in the CPS and the UES are similar, Siegel's estimates can be considered indicative of the magnitude of the problem that might be expected in the UES. Unfortunately, however, they relate to National population estimates and not to the central cities of large metropolitan areas that are the UES areas.

Siegel's data (2) (Table 1) were derived by comparing population estimates from the CPS before adjustment to independent population controls with a "corrected" or best estimate of the population based on demographic analysis. They indicate that the CPS, with its reasonably well trained interviewing staff and its stress on quality control, has a significant undercoverage problem and that the problem is greatest among Negroes and other races.

TABLE 1. Estimated Percentage Net Understatement of the Population 14 Years and Over, by Age, Sex, and Color, in the Unadjusted Current Population Survey Estimates: 1965

Age	Negro and Other Races		White	
	Male	Female	Male	Female
Total, 14 and over	16.8	8.8	7.0	4.2
14-19	7.3	5.2	2.8	3.1
20-24	30.1	16.5	10.9	7.8
25-29	20.9	11.7	9.2	6.0
30-34	23.7	8.3	9.3	2.8
35 <b>-</b> 39	22.6	2.3	6.8	2.7
40-44	18.1	0.2	4.3	*
45-49	15.8	6.0	6.7	1.0
50-54	13.0	9.6	6.0	4.3
55-59	18.5	20.5	8.0	6.9
60-64	13.3	7.2	7.5	6.4
65 and over	6.4	13.4	8.7	5.7

<sup>\*</sup> Percentage between + 0.05 and - 0.05

Only thirty percent of the poverty neighborhood population covered by UES is white, and of this thirty percent, most are Puerto Ricans or Mexican Americans who possibly present coverage problems of the same nature as Negroes and other races. Thus, the data in Table 1 for Negroes and other races imply much regarding the UES results. If UES does miss close to one-fifth of the Negro males in the prime working years, what is the impact on such measures as family income, unemployment rates, and participation in job training programs?

At present, there is no fully adequate direct measure of UES coverage. Although a reinterview program is conducted using supervisory personnel, this method has not, in other current surveys, measured the full extent of undercoverage. Comparisons of UES estimates with data from the 1970 Census will be made, but this will provide only a measure of relative coverage.

A second major problem is that of nonresponse. There are two types of nonresponse in the UES. The first is a failure to contact and interview any adult member of a household. This household respondent, as noted earlier, provides information on the characteristics of the household. current labor force status of persons not at home during the initial interview, and all required information relating to himself. In this type of noninterview virtually no information relating to the household is available. The second type of nonresponse is failure to interview each person 16 years of age and older to confirm his current labor force status, and obtain the required data on work history, income, barriers to employment, job attitudes, and other subjects reserved for the individual's interview. Thus, in this type, most of the required information is obtained from the household members who are interviewed. Only the part of the report to be obtained from missed individuals is lacking.

Interviewers are allowed nine days to complete their assignments. Thereafter, the field supervisor personally attempts to reduce the number of noninterviews. In some cities noninterviews are reduced by about half through this procedure.

Although imputations are made for missed household and personal interviews, they are undesirable substitutes for reports from the designated households or individuals. Since several studies have indicated that the characteristics of nonrespondents often differ markedly from those of respondents, it is reasonable to conclude that the survey results are subject to noninterview bias of unknown magnitude which is proportional to the noninterview rate.

In the three months ending in June 1969, the noninterview rate for households was 4.1 percent and for persons, 5.4 percent. Although the overall household noninterview rate compares favorably with that for poverty areas in other surveys and has declined in recent months, the combined effect of the two types of noninterviews on the survey results can be important. Close to one-tenth of the data derived from the personal interview portion of the survey are imputed, based on the reports of interviewed persons. This rate varies widely by city, with the result that the imputation rate for two of the six cities is approximately 50 percent higher than the six-city average.

The major burden of a successful data collection operation falls on the interviewing staff. Reaching difficult to contact persons, evoking cooperation from the reluctant, and obtaining full and accurate responses to the questionnaire are skills that must be developed. In a long interview with the culturally deprived, perhaps suspicious or cynical poverty neighborhood residents, a higher than ordinary skill would seem appropriate.

The interviewers employed for the survey are high school graduates and some have attended college. The majority work full-time as Census Bureau interviewers although some work on other surveys, as well as the UES. Their rate of pay is approximately 20 percent higher than other Census Bureau interviewers. About 40 percent are males.

A study of learning curves for Current Population Survey interviewers has shown that two and one-half years (3) are required for an interviewer to achieve peak performance on the survey as measured by noninterview rates and the frequency of edit problems. A high rate of staff turnover, therefore, can be interpreted as an indication that there is insufficient time for the average interviewer to develop and accumulate higher level interviewing skills.

Interviewer turnover, defined as the number trained in excess of the number of positions, was over 100 percent during the first year of the survey. Of the 72 interviewer positions in July 1969, only 27 are filled by persons trained a year earlier at the start of the survey.

The reasons for the high turnover rate cannot be fully determined, but several categories of separations are indicative of the problems of optimum selection and retention of staff. First, there are competing opportunities in the job market. Some interviewers have left for more remunerative or desirable employment. Second, others have lacked basic language, quantitative, or other skills required for adequate job performance. Next, a number of interviewers were unable to function adequately in a situation wherein they establish their own work schedule and are required to stay current with their work and meet Census Bureau performance standards.

Another reason for separation is a reluctance to be exposed continuously to the crime problem in poverty neighborhoods. Several interviewers have been beaten and robbed while interviewing.

Finally, a few were dismissed because the reinterview program disclosed that they had falsified some interviews. Falsification is not an uncommon problem in surveys. Steinkamp(4) noted that three of twenty-one interviewers used in a Consumer Savings Project were found to have "curbstoned." Gallup (5) was interviewed by the New York Times after curbstoning by two of twenty-six interviewers had been discovered in an attitude survey of Harlem residents. He stated that "the difficulties of doing a scientific poll in Harlem are extreme ... [and that] a few other ghetto districts might be equally tough .... The normal living patterns are completely disarranged .... They just don't want to talk to a stranger."

The importance of the interviewer's role in the communication process and the quality and money costs of turnover, make this one of the major problems of the program.

The final major category of methodological problems relates to the comparability of UES data with the results of other surveys and Censuses. Certainly, comparisons of data from the UES and the Current Population Survey will be made.

Even with the use of identical questionnaires in two surveys, differentials in the degree of error or in the procedures followed can account for some of the differences in the results. In addition to the problems of coverage and noninterview bias cited earlier, the relative frequency of response error and processing error can have a major effect on comparability. It is seldom possible to measure the total error in surveys adequately, but there is reason to believe that for some subjects it is of sufficient magnitude that sharp variations can effect the comparability of survey results.

There are two notable aspects in which UES procedures differ from those in CPS which may reduce comparability. While not specifically problems of conducting surveys in poverty neighborhoods, they do reflect on possible uses of the UES results. They are also indicative of the concerns of the survey practitioner in designing a survey program, the results of which will be linked with other programs.

One is the sample rotation pattern. In CPS, households are interviewed four times at monthly intervals, are dropped for eight months, and then returned for four more monthly interviews. There is a pattern of differences in unemployment rates by month in sample. the UES, on the other hand, retains sample households for only two interviews, scheduled one year apart. If there is a differential conditioning effect in the two surveys, it will produce spurious differences in the data. This effect in the UES data will be studied as the second year results become available.

The other example of noncomparable procedures is the use of a household respondent in CPS and a direct interview with each person in UES. Although the effect of this might vary for the many topics covered in the surveys, it cannot be disregarded.

The separate effects of several of the categories of problems mentioned here can, in time, be measured or at least estimated. They have been presented here primarily as illustrations of problems in household surveys in general and specifically of their impact in applications in urban poverty neighborhoods.

## REFERENCES

- (1) Jacob S. Siegel, "Completeness of coverage of the Nonwhite Population in the 1960 Census and Current Estimates, and Some Implications." Social Statistics and the City, Report of a Conference Held in Washington, D.C., June 22-23, 1967.

  David M. Heer (ed.) published by the Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, 1968.
- (2) Ibid., 48-49.
- (3) Thirty assignments of approximately 60 households during one week of each month. This is in contrast with the UES pattern, which is weekly assignments of about 10-12 households.
- (4) Stanley W. Steinkamp, "The Identification of Effective Interviewers," <u>Journal of the American Statistical Association</u>, 59 (1964) 1167.
- (5) George H. Gallup, interview with the New York Times, November 1, 1968.