

Development of the Proposed Revised Current Population Survey

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I. INTRODUCTION

The Current Population Survey (CPS), a monthly survey of approximately 60,000 households, is the primary source of information on labor force characteristics of the U.S. population. The survey, conducted for the Bureau of Labor Statistics (BLS) by the Bureau of the Census, uses a scientifically selected sample of households, representative of the civilian noninstitutional population of the U.S.

The current CPS questionnaire has remained essentially unchanged since the last major revisions in January 1967, which were based in part on recommendations of the 1962 Gordon Committee (President's Committee to Appraise Employment and Unemployment Statistics 1962). Additional revisions were proposed in the late 1970s and early 1980s, most notably by the Levitan Commission (National Commission on Employment and Unemployment Statistics 1979); however, no major changes were implemented due to the lack of funding for a large overlap sample necessary to assess their effects on the CPS data series.

Current efforts in questionnaire redesign, which began in 1986, resulted from joint BLS and Census Bureau planning for a major redesign of all aspects of the CPS (Butz and Plewes 1989; BLS 1986; and Census 1988). In the last 5 years, the BLS and the Census Bureau have conducted a number of research projects related to the CPS questionnaire, including interviewer and respondent focus groups, respondent debriefings, cognitive laboratory interviews, and a test of interviewers' knowledge of concepts. Development of alternative questionnaires has been based on the results of these research projects. (Campanelli, Rothgeb, and Martin 1989; Edwards, Levine, and Cohany 1989; Fracasso 1989; Gaertner, Cantor, and Gay 1989; Martin 1987; and Palmisano 1989a, 1989b.)

The overall redesign includes testing of alternative questionnaires through a two-phase project. Both phases use centralized computer-assisted telephone interviewing (CATI) and a random digit dialing (RDD) sample. (Questionnaire versions were randomly assigned, and a household was interviewed with the same questionnaire for four consecutive months.) Following Phases I and II, a test of a fully automated

environment of CATI and CAPI (computer assisted personal interviewing) is planned. The CATI/CAPI test will be followed by a national overlap sample survey of 13,000 households per month for 18 months. The results from the overlap sample will be used to benchmark differences in the estimates due to the new questionnaire and new modes of interviewing. The CPS redesign plan calls for the introduction of a new questionnaire in January 1994.

The objectives of the CPS questionnaire redesign are five-fold: (1) to better operationalize existing definitions and reduce reliance on volunteered responses; (2) to reduce the potential for response error in the questionnaire-respondent-interviewer interaction and improve measurement of CPS concepts; (3) to implement minor definitional changes within the labor force classifications; (4) to expand the labor force data available from the CPS and improve longitudinal measures; and (5) to utilize computer-assisted interviewing for improving data quality and reducing respondent burden. (Copeland and Rothgeb 1990)

II. CATI/RDD PHASE I DESIGN AND ANALYSIS

Two alternative questionnaires were developed during 1989, which incorporated results from the research described above, the recommendations of the Levitan Commission (1979), and recommendations of the BLS-Census Questionnaire Redesign Task Force (U.S. Bureau of Labor Statistics 1986). The two alternative questionnaires, Version B and Version C, were very similar in many respects; however, different wordings or wording sequences were used in several areas of the questionnaires. The alternative versions of the CPS questionnaire were administered along with the current CPS as the control (Version A) in a large-scale CATI/RDD field test conducted from a centralized telephone interviewing center. Phase I was conducted from July 1990 through January 1991. Interviews were obtained for 71,899 persons during the 7-month period. (Copeland and Rothgeb 1990) The primary objectives of the analysis of the Phase I CPS CATI/RDD data were to assess whether new questions did better than the current questions; to select the best version of a question; and to identify problem areas in question wording and sequences in order to finalize development of a single alternative questionnaire (Version D) for testing in Phase II (July - October 1991). Both

quantitative and qualitative information was included in the analysis in order to identify problems and potential solutions in question wordings and sequences. Analysis was based on item nonresponse measures, response distributions, respondent debriefings, interviewer debriefings, and interview monitoring. No single piece of the analysis determined which question version was better; instead, decisions were based on the combination of information from the various sources. (Campanelli, Rothgeb, Esposito and Polivka 1991 and Esposito, Campanelli, Rothgeb and Polivka 1991)

Most of the discussion of results presented in this paper covers the response distribution data and respondent debriefing data. For the most part, these were the most useful techniques in identifying differences among comparable questions across the three questionnaires. The monitoring data and interviewer debriefing data were less useful, because fewer cases were available for analysis and because these techniques were not as successful in identifying differences among similar versions of a question.

In this paper, some of the primary differences among questionnaires will be discussed, along with the results from Phase I and the proposed recommendations for the alternative questionnaire for Phase II. This paper limits the focus to the most important test items, as there are too many items in the alternative questionnaires to discuss all of them. Also, the data based on Phase I testing are not adequate to assess the impact of the questionnaire revisions on the labor force estimates. Limitations of an RDD sample, along with the small sample size, and the subsequent large variances of the estimates, preclude the detection of significant differences.

III. RESULTS OF PHASE I AND RECOMMENDATIONS FOR PHASE II

During development of the alternative questionnaires, careful attention was given to the inclusion of direct questions in order to reduce reliance on volunteered responses and clarify operational definitions for key labor force concepts. Efforts were also made to incorporate the use of dependent interviewing and to implement recommended definitional changes. Examples of how each of these was accomplished are provided below.

A. Better operationalization of existing definitions/less reliance on volunteered responses

1. Identification of Business in Household/Unpaid Work in the Family Business

In the current CPS questionnaire, the question asking about last week's work activities has parenthetical

instructions telling the interviewer to ask about unpaid work if a farm or business operator is in the household. The current questionnaire does not, however, provide a mechanism for interviewers to directly establish the existence of a business or farm in the household. The interviewer may not learn of a family business until a person is identified as self-employed in the industry and occupation questions. (This can be after data are collected for other household members).¹

To obtain a better measure of unpaid family workers and a more complete picture of economic activity, a question on the existence of a household business was included at the beginning of the two alternative questionnaires. For households that had a family business, direct questions were asked about unpaid work in the family business for all eligible persons who were not reported as working for pay or profit.

Two alternative wordings for the question inquiring about the existence of a business were tested, as shown below.

(Version B) "Do you or anyone in this household have your own business or farm?"

(Version C) "Do you or does anyone in this household operate their own business or farm?"

The response distribution analysis demonstrated that the percentage of interviewed households reporting a business was larger at a statistically significant level in Version B than in Version C (15.9% vs. 13.8%; $n=11,377$ and $11,468$; $X^2=7.76$; $df=1$; $p=.005$). (It is suspected that this difference was due to broader interpretation of Version B's wording "have a business" compared to Version C's wording of "operate a business".) Respondent debriefing data indicated that the proportion of businesses that met the official criteria² was high for both versions (90.4% and 91.0% for Versions B and C, respectively).

Response distribution data also demonstrated that the proportion of employed persons that are unpaid family workers (working 15+ hours) is significantly higher in Versions B and C than in Version A as displayed in Table 1. (.8% vs. .5% vs. .2% A/B $X^2=15.44$, $df=1$, $p<.000$; A/C $X^2=8.28$, $df=1$, $p=.004$; B/C $X^2=2.31$, $df=1$, $p=.13$).

From respondent debriefing data, it was determined that nearly 6 percent ($n=790$) of Version A households (with no one classified as self employed) reported the existence of a business. This indicates a high rate of undetected businesses under current procedures. It also results in undetected work activity because unpaid family workers would more than likely be classified as not in the labor force in households where no one was reported as having a business.

Based on the data described above and information conveyed during the interviewer debriefings, it was

decided to retain direct questions on the presence of a business in the household and unpaid work in the family business for persons not reported to be working for pay. A modified Version B question on household businesses was adopted for Phase II which reads, "Does anyone in this household have a business or farm?"

2. Hours Series

The current question (Version A) on hours worked asks for the number of hours worked last week at all jobs. During the interviewer debriefings in 1988 (U.S. Bureau of Labor Statistics, 1988), it was reported that respondents do not always hear the last phrase "at all jobs," so some respondents who work at two jobs might only report hours for one job. Additionally, it is not known if people report their exact actual hours, their usual hours, or some approximation of actual hours. Data on hours worked are important because they are used to determine the size of the full-time versus part-time labor force.

In order to obtain a better measure of actual hours, address the issue of changing work schedules more completely, and obtain separate data on hours worked at a main job and other jobs for multiple jobholders, two new series of questions for hours were tested in Versions B and C. In both versions, all employed persons were asked if they worked at more than one job "last week" to identify multiple jobholders and improve reporting of hours. The number of multiple jobholders has increased by 50 percent between 1980 and 1989. In May 1989, 6.2 percent of all employed persons were reported to be multiple jobholders.³ (Stinson 1990; Flaim 1989)

In Version B, a question was asked to determine if the usual hours worked were 35 or more per week. Then, a question on actual hours worked last week was asked. Information on actual hours was obtained separately for the main job and other job(s) if the person was a multiple jobholder.

The Version C questions were designed to impose an anchor and recall estimation strategy on respondents. First the person was asked about the number of hours usually worked at his/her main and other jobs. Subsequently, separate questions were asked to determine if a person worked any extra hours or took any time off. Finally, the number of actual hours worked was requested. The theory behind this approach was that respondents would think about what they usually do, be reminded about any possible exceptions, and then report their actual hours more accurately.

Overall, we found that the Version C series was more sensitive in discerning measures of usual part-time workers (less than 35 hours per week) than Version B. Response distribution data indicated that Version B produced a greater proportion of employed persons who

were usual full-time workers than did Version C (82% vs. 79%; $n=14,567$ and $14,708$; $X^2=11.25$; $df=1$; $p=.000$). It is believed that usual hours were estimated by respondents in Version B, since the question simply requires a "yes/no" response and does not convey that a precise number is desired. Consequently, a person who usually works 33 or 34 hours may respond "yes" to the question asking if they usually work 35 hours or more. In Version C, however, the question requires a response of the number of hours a person usually works, and consequently it may be clearer that a more precise response is being requested. (It should be noted that Version A data are not comparable since usual hours are only asked of all private wage and salary workers in the outgoing rotation.

With respect to actual hours, the response distribution data provide evidence that the recall strategy in Version C was also more sensitive in obtaining responses indicating actual hours of less than 35 per week. (It had been suspected that without the probes inquiring about time off or extra time worked that persons overreported actual hours worked by reporting the hours they typically worked instead of those they actually worked.) The proportion of employed persons at work during the reference week who worked full time was 68 percent in Version A, 73 percent in Version B, and 65 percent in Version C ($n=14,000$, $13,666$, and $13,741$; B/C $X^2=116.42$, $df=1$, $p=.000$; A/C $X^2=17.56$, $df=1$, $p=.000$; A/B $X^2=43.16$, $df=1$, $p=.000$)⁴. Mean hours worked were 38 hours ($sd=14.5$) for Version A, 39 hours ($sd=14.5$) for Version B and 37 hours ($sd=14.7$) for Version C. (The t-statistic for differences between the means for A/C were 11.11, $p=.001$; B/C = 9.8220, $p=.001$.) These data are summarized in Table 2.

Evidence from the main survey, in conjunction with the respondent debriefing, indicates that responses obtained in Version C were more accurate. For weeks in which there were legal holidays (e.g. Independence Day, Memorial Day, Labor Day, etc.), the mean number of reported hours worked for Version B was 38.02, while for Version C the mean number of reported hours was 36.00. (The value of the pair-wise t test for differences in the means was 4.25; $n=2,798$ for Version B and $n=2,769$ for Version C.) To help verify whether this difference was due to better reporting, a Version B comparison group was constructed using debriefing questions to identify a sample of Version B workers who had worked extra hours and a sample of workers who had lost hours. For those workers who were identified as losing hours, the mean number of hours worked was 37.2 for Version B ($n=162$) and 31.3 for Version C ($n=151$). (The t statistic for differences in the means was 4.33.)

It is interesting to note that interviewers had voiced

support for the Version B hours series because it was shorter and less burdensome than either Versions A or C; however, the response distribution data clearly indicated that Version C worked better than Versions A or B at detecting part-week absences. It was decided to retain the Version C hours series for the Version D alternative questionnaire for Phase II.

3. Reasons Usually Working Part Time

Persons who usually work part time (less than 35 hours a week) as measured by the CPS are divided into two groups: voluntary part-time workers (part-time for noneconomic reasons) and involuntary part-time workers (part-time for economic reasons). To be classified as economic part time, individuals must give reasons for their short hours such as slower business or an inability to find full-time work.

During development of the two alternative questionnaires, it was decided to attach two additional criteria to the classification of part time for economic reasons. Currently, there is no test of a part-timer's desire or availability for full-time work. Phase I of CATI/RDD tested these two additional criteria. Of all persons usually working part-time, 22 percent in Version B (n=2383) and 24 percent in Version C (n=2828) responded that they wanted a full-time job. Respondent debriefing data indicated that over 70 percent of those who said they wanted a full-time job had looked for one during the last year. Nearly 94 percent of Version B (n=199) and 90 percent of Version C (n=396) persons classified as usually part time for economic reasons were reported to be available for full-time work the previous week. The criteria of desire for full-time work and availability were retained for the Phase II Version D questionnaire.

The CATI/RDD test included alternative ways of asking about the reason for usually working less than 35 hours, as a result of perceived problems with the current design, which involves an open-ended question. Previous research indicated that a basic problem with open-ended questions on "reasons" for doing or not doing something is that the survey designer and respondents sometimes do not share a common frame of reference. It also may be that a reason which respondents do not think of spontaneously may be preferred once it is suggested. (Schuman and Presser 1981).

The three different designs used to obtain the reason persons usually work part time are as follows. (Version A)

1. "What is the reason you usually work less than 35 hours a week?"

(Version B)

1. "What is the main reason you are not

working full time?"

(Version C)

1. "Is the main reason you are working part time because you could only find part-time work?" (If no, ask 2.)
2. "Is the main reason because of business conditions or financial problems at your place of employment?" (If no, ask 3.)
3. "What is the main reason you are not working full time?"

(It should be noted that interviewers coded responses to a list of response categories and the list of response options was not read to respondents.)

Response distribution data indicated that the use of closed questions in Version C produced a significantly higher proportion of persons (who want to work full time) usually working part time for economic reasons than did Version B (65 percent versus 40 percent of people wanting to work full time who were usually part-time, n=645 and 521; $X^2=73.26$; $df=1$; and $p=.000$). (Note that, due to the different universe in Version A, direct comparisons among Versions A, B, and C are not meaningful.)

In Version C, over half of all persons asked the first closed question responded "yes." (Fifty four percent in Version C compared to 12 percent in Version B were reported to be working part time because they couldn't find full time work.) It has been conjectured that this is because, to many respondents, this question sounded like a truism--(i.e., Are you working part time because you found a part-time job?). Additionally, the high proportion of "yes" responses may be due in part to "yea sayers" and acquiescence on the part of some respondents.

The high proportion of affirmative responses to the first question in Version C also meant that fewer persons received the second question, and, consequently, a much lower proportion of persons (usually part time but who want full-time work) were reported to be working part time due to slack work in Version C compared to Version B (11.16% vs. 28.21%, n=645, and 521).

In sum, there was strong evidence that the direct closed-ended approach taken in Version C resulted in a suspected overestimate of the proportion of part-time workers who are part time for economic reasons and also an overestimate of the proportion part time for economic reasons due to an inability to find full-time work. Version B, however, was felt to be too vague and arbitrary, since its success depended on a high degree of understanding of the intent of the question on the part of the respondent. To address these problems, a revised question was developed for Phase II which provides examples of voluntary and involuntary part-time

workers. The Version D question is:

"Some people work part time because they cannot find full-time work or because business is poor. Others work part time because of family obligations or other personal reasons. What is your MAIN reason for working part time?"

4. Persons on Layoff

Previous research (Rothgeb 1982a; Palmisano 1989b) indicated that persons reported to be "on layoff" did not always meet the official criteria of having an expectation to be recalled to their job. In an effort to better operationalize existing CPS definitions, questions concerning expectation of recall were included in the alternative questionnaires.

In Versions B and C, persons reporting to be on layoff were subsequently asked, "Has your employer given you a date to return to work?" If they said "no," they were then asked "Have you been given any indication that you will be recalled to work in the next six months?" In order to be classified as on layoff and thus unemployed, an individual had to expect to be recalled and have been available to return to work during the previous week. Individuals who did not expect to be recalled had to respond that they had been looking for work in the previous 4 weeks in order to be counted among the unemployed.

Only 47.5 percent of persons reported as "on layoff" in Version B (n=316) and 48.5 percent in Version C (n=402) expected to be recalled to their jobs. Over 95 percent of persons reported to be on layoff in Version B (n=147) and 93 percent of those in Version C (n=190) were available to return to their jobs if they had been recalled during the previous week. Given the high percentage of persons reported to be on layoff who had no expectation to be recalled to their jobs and who consequently did not meet the official criteria of "on layoff," the questions on expectation of recall were retained for Version D so the measure of persons on layoff will be more consistent with the BLS criteria.

It should be noted that it is unlikely that the estimate of the unemployed would be markedly affected by the reduced estimates of persons on layoff, since over three-fourths of persons without an expectation of recall were reported to have looked for work during the past 4 weeks. Consequently, the estimates of the unemployed would not change very much (a small decline), though the proportion of the various components of the unemployed (i.e., layoff, other job losers, job leavers, entrants) would shift.

5. Retired/Disabled

One of the more common complaints about the CPS

questionnaire is that it is burdensome for retired individuals who have no attachment to the labor force. Currently, if individuals say they are retired in response to the question on major work activity, interviewers must continue to ask if they worked last week, were absent from a job, looking for work, and, in the outgoing rotations, their job history. Given the increasing number of older persons and their declining labor force participation rates, it is likely that these complaints will increase if current procedures are not changed.

In Versions B and C, a response category of "retired" was added to each of the labor force status questions. If individuals volunteered that they were retired in response to any of these questions, they were skipped to questions inquiring whether they wanted a job and when they last worked. If they did not want to work, the interview was concluded and they were classified as retired (not in the labor force). If they did want to work, they were asked if they were seeking work (unemployed). In addition, persons 50 years of age or older who have not previously indicated that they are retired and are currently not working were asked at the conclusion of the survey if they were retired from a job or business.

The effectiveness of these changes in reducing burden was evaluated by examining at what point in the survey persons were classified as retired. Approximately 43 percent of retired persons in Versions B and C combined (n=5985) were classified as such based on their responses to the first labor force question about "work" last week; 24 percent were classified as retired prior to the conclusion of the survey; and, 32 percent were classified as retired based on the last question. Less than 3 percent of all persons responding "retired" to the major labor force items indicated that they wanted a job.

Therefore, it was decided to retain the "retired" response category for Version D and the appropriate skip patterns. In addition, to reduce respondent burden even more, it was decided to introduce dependent interviewing in Phase II for persons classified as retired during the previous month.

Dependent interviewing uses information obtained during the previous month's interview in the current month's interview.

A similar revision was made to reduce the burden for persons reporting that they are "unable to work" or "disabled." It was tested during Phase I and will be included in the Phase II (Version D) questionnaire.

B. Incorporation of Dependent Interviewing

In CPS, over half of the data are collected through proxy interviews (persons responding for other household members in addition to themselves).

Additionally, the household respondent frequently varies from one month to the next. It is sometimes difficult for a self respondent or a proxy to describe an occupation and industry in such a way to allow accurate coding of the appropriate occupation and industry. Moreover, change in occupation and industry (gross flow measures) is measured at the 3-digit level, that is, at the most detailed classification categories, which can sometimes imply very subtle distinctions, particularly in occupation groups. For these reasons, the industry and occupation (I and O) data are not always consistent from month to month for the same person in the same job. Under the current method of obtaining independent measures of I and O classifications, about 32 percent of the three-quarters of the sample that overlap between two consecutive months have a change each month in their 3-digit occupational classifications and about 16 percent have a change in their 3-digit industry classifications.

In order to make full use of an automated interviewing environment, dependent interviewing for the I and O questions was implemented in the alternative questionnaires during the second, third, and fourth months that a household was in the sample. Different variations of dependent interviewing were used in Versions B and C.

In Version B, respondents were provided with the name of their employer as of the previous month and asked if they still worked for that employer. If so, they were provided with the previous month's description of their usual duties at that job and asked if that was an accurate description of their current job. If it was not, they were asked the reason (e.g., job duties have changed, or description was not accurate or complete). If any information had changed, the new information was recorded.

In Version C, once interviewers had verified that the person was working for the same employer as last month, respondents were asked if their usual activities and duties had changed significantly. If so, respondents were asked to describe the current usual duties and activities. If the duties had not changed, no additional questions were asked and the prior month's responses and occupational codes were carried over.

A problem in evaluating the Phase I data was the lack of current estimates of true monthly gross flows. In one job mobility study it was estimated that about 9 percent of persons were true job changers (at the 3-digit level) over a 2-month period (Collins 1975). A more current measure of true change was desired and was accomplished by the use of "expert coders" analyzing a sample of people's job descriptions (from Version A) collected for three pairs of consecutive months (between September and December 1990) from the same respondent and determining if, in fact, a true change at

the 3-digit level occurred (Cantor 1991). Under contract with BLS, Westat, Inc. designed and analyzed the results of the expert coding test as well as the data obtained from Phase I dependent I/O questions. Results are provided in Table 3.

These estimates, especially for occupation, are subject to both a positive and negative bias. Overestimates occur because the coders could not judge the difference between "real" change and that attributable to the respondent describing the job differently at two points in time. Underestimates occur because the respondent may not provide all the details on changes in the job which occurred between interviews. Based on previous studies on this issue, Cantor judged that, overall, there is a greater tendency for respondents to report their occupations differently than to underreport changes in duties.

Although the estimates of change from the expert-coding test do not include any kind of reconciliation with the respondent who actually provided the information (as did the Collins study), they are the benchmark against which estimates of change from Versions A, B, and C were compared.

In summary, if one accepts the expert coding results as a measure of the "true" change between interviews, Version A greatly overestimates gross-flow rates, and Versions B and C underestimate the gross-flow rates, although Version C comes closer to "truth" than Version B.

For Version D it was decided to retain the Version B/C dependent employer question and adopt a combination of the Version B and C dependent occupation questions that allows the respondent to verify the information provided in the previous month as follows:

"Have the usual activities and duties of your job changed since last month?"

If "yes," the person is asked the independent questions on occupation, activities or duties, and class of worker. If "no," the person is asked to verify the previous month's description through the following question:

"Last month, you were reported as (previous month's occupation) and your usual activities were (previous month's duties). Is this an accurate description of your current job?"

If "yes", the previous month's occupation and class of worker are brought forward and no coding is required. If "no", the person is asked the independent questions on occupation, activities and duties, and class of worker. This redesign permits a direct inquiry about job change before the previous month's information is provided to the respondent.

C. Implementation of New Discouraged Worker Definition

The current definition⁵ of discouraged workers has been widely criticized (National Commission on Employment and Unemployed Statistics 1979) because it is based primarily on the subjective "desire for work" rather than more objective measures of job search activity. To make the measure of discouraged workers more objective, the Levitan Commission recommended that the definition be changed to include the criteria of recent job search and availability for work.

Both the B and C versions included questions on job search during the past 12 months and availability to start a job during the reference week. It is important to note that the current CPS question on the reasons a person is not currently looking for work was not included in Version B, although it is part of the current classification procedure. It was included in Version C but was not used as part of the criteria for classification. The rationale for excluding this question from the classification criteria was that these were subjective responses collected from an open-ended question that the interviewer had to classify into a prescribed list of categories.

Based on an analysis of 1978 supplements to the CPS and the early 1980's Methods Development Survey, the number of discouraged workers was expected to decrease by 50 percent under the revised definition (Hamel 1979; Rothgeb 1982b). (It should be noted that the reasons for not looking were included as part of the definition in these earlier analyses.)

Contrary to what was expected, the new series of questions resulted in a significantly larger percentage of those not in the labor force being classified as discouraged workers (1.36% vs. 5.63% vs. 5.44%, for Versions A, B, and C, respectively; $n=1398, 7053, \text{ and } 6855$; $A/B X^2=79.21, df=1, p=.000$; $A/C X^2=68.89, df=1, p=.000$; $B/C X^2=.13, df=1, p=.70$). The Version A estimate is comparable to the current CPS estimate. These results indicate that the alternative wording of the questions may be misclassifying a portion of those not in the labor force as discouraged, either because the alternative questions are too leading or because the reasons for not currently searching for work were eliminated from the criteria. An examination of the verbatim responses to the Version C question on reasons for not currently looking adds credence to the latter possibility. Of those classified as "discouraged" ($n=285$), only 8 percent provided a reason that would have classified them as true discouraged workers.

The respondent debriefing data confirmed that persons were being incorrectly classified as discouraged workers, in that, of those persons classified as discouraged workers who had worked during the past 12 months,

only 36.0 percent, 33.3 percent, and 41.5 percent (Versions A, B, C respectively) had looked for work since they last worked. If persons had not looked for work since their last job, they should not be classified as discouraged workers.

Based on these results, it was decided to restructure and add questions to the alternative discouraged worker series to determine if potential discouraged workers had worked in the past 12 months and, if so, whether they had looked since that job ended. To avoid falsely classifying individuals who had reasons for not currently looking for work that disqualified them from being discouraged, a question on the reason persons were not currently looking for work was included in Version D.

IV. ENHANCEMENTS TO PHASE II QUESTIONNAIRE (VERSION D)

In addition to revisions tested in Phase I discussed above, the Version D questionnaire for Phase II includes several other features based on information obtained during analysis of the Phase I data. New features include:

- increased use of dependent interviewing for persons identified as retired or disabled during the previous month's interview;
- the use of dependent interviewing for duration of layoff;
- collection of industry and occupation of the second job for multiple jobholders (outgoing rotation only); and,
- more extensive use of carrying over industry and occupational information about prior jobs for persons unemployed and not in the labor force.

V. QUESTIONNAIRE IMPLEMENTATION/FUTURE ACTIVITIES

The revised alternative questionnaire (Version D) is being tested, along with the control questionnaire (Version A), in a large-scale test, again using an RDD sample. The test is being conducted from July through October 1991. Approximately 30,000 interviews will be obtained. The primary objective is to identify problem areas in question wording in Version D in order to finalize development of the revised CPS questionnaire. It is expected that only minor revisions to Version D will be made as the final CPS questionnaire is developed.

BIBLIOGRAPHY

Butz, William P., and Thomas J. Plewes, (1989). "A Current Population Survey for the 21st Century," in

Proceedings of the Fifth Annual Research Conference, Washington, DC: U.S. Department of Commerce, Bureau of the Census, pp. 3-13.

Campanelli, Pamela C., Jennifer M. Rothgeb, and Elizabeth A. Martin, (1989). "The Role of Respondent Comprehension and Interviewer Knowledge in CPS Labor Force Classification," In Proceedings of the Section on Survey Research Methods, Alexandria, VA: American Statistical Association

Campanelli, Pamela C., Jennifer M. Rothgeb, James L. Esposito, and Anne E. Polivka, (1991). Methodologies For Evaluating Survey Questions: An Illustration From A CPS CATI/RDD Test. Paper presented at the annual meeting of the American Association for Public Opinion Research, Phoenix, AZ.

Cantor, David. (1991). "Draft Recommendations on Dependent Interviewing" Unpublished memorandum.

Collins, Candace L. "Comparison of Month-to-Month Changes in Industry and Occupation Codes with Respondent's Report of Change: CPS Job Mobility Study" Response Research Staff Report No. 75-5, U.S. Bureau of the Census, May 15, 1975.

Copeland, Kennon, and Jennifer M. Rothgeb, (1990). "Testing Alternative Questionnaires for the Current Population Survey," In Proceedings of the Section on Survey Research Methods, Alexandria, VA: American Statistical Association.

Edwards, W. Sherman, Roger Levine, and Sharon R. Cohany, (1989). "Procedures For Validating Reports of Hours Worked and For Classifying Discrepancies Between Questionnaire Reports and Validation Totals," In Proceedings of the Section on Survey Research Methods, Alexandria, VA: American Statistical Association.

Esposito, James L., Pamela C. Campanelli, Jennifer M. Rothgeb, and Anne E. Polivka, (1991). Determining Which Questions Are Best: Methodologies For Evaluating Survey Questions. Paper presented at the annual meeting of the American Statistical Association, Atlanta, GA.

Flaim, Paul O. (1989). "How Many New Jobs Since 1982? Data from Two Surveys Differ." Monthly Labor Review 112:8 (August 1989), pp. 10-15.

Fracasso, Maria P. (1989). "Reliability and Validity of Response Categories for Open-Ended Questions in the Current Population Survey," In Proceedings of the Section on Survey Research Methods, Alexandria, VA: American Statistical Association.

Gaertner, Gregory, David Cantor, and N. Gay, (1989). "Tests of Alternative Questions for Measuring Industry and Occupation in the CPS," In Proceedings of the Section on Survey Research Methods, Alexandria, VA: American Statistical Association.

Hamel, Harvey. "Two Fifths of Discouraged Workers Sought Work During Prior Six Month Period." Monthly Labor Review, March 1979, pp. 58-60.

Martin, Elizabeth. (1987). "Some Conceptual Problems in the Current Population Survey," in Proceedings of the Section on Survey Research Methods, Washington, DC: American Statistical Association, pp. 420-424.

National Commission on Employment and Unemployment Statistics. (1979). Counting the Labor Force, Washington, DC: Government Printing Office.

Palmisano, Mark (1989a). Some Results on the Application of Laboratory Research Techniques to Survey Methodology. Paper presented at the meeting of the American Association for the Advancement of Sciences.

Palmisano, Mark (1989b). "Respondent Understanding of Key Labor Force Concepts used in the CPS," In Proceedings of the Section on Survey Research Methods, Alexandria, VA: American Statistical Association.

President's Committee to Appraise Employment and Unemployment Statistics. (1962). Measuring Employment and Unemployment. Washington, DC: Government Printing Office.

Rothgeb, Jennifer M. (1982a). Summary Report of July Follow-up of the Unemployed. Unpublished Census Bureau memorandum.

Rothgeb, Jennifer M. (1982b). Summary Report - MDS Phase II. Unpublished Census Bureau memorandum.

Schuman, Howard, and Stanley Presser, (1981). Questions and Answers: Experiments on Question Form, Wording, and Context. New York: Academic Press.

Stinson, John F. Jr. (1990). "Multiple Jobholding Up Sharply in the Eighties." Monthly Labor Review 113:7 (July 1990), pp. 3-10.

U.S. Bureau of the Census. (1988). "Final Report on Planning for a Post-1990 Redesign of the Current Population Survey." Unpublished report.

U.S. Bureau of Labor Statistics. (1986). Report of the BLS-Census Bureau Questionnaire Design Task Force. Unpublished report.

U.S. Bureau of Labor Statistics. (1986). Report of the BLS-Census Bureau Questionnaire Design Task Force. Unpublished report.

U.S. Bureau of Labor Statistics. (1988). Response Errors on Labor Force Questions Based on Consultations with Current Population Survey Interviewers in the United States. Paper prepared for the OECD Working Party on Employment and Unemployment Statistics.

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1. Unpaid family workers are defined as persons working without pay for 15 hours or more in a business owned by a family member living within the household.

2. In order for a business to meet the official criteria of a business, one or more of the following conditions had to exist: a) office, store or other place of business had to be maintained, b) the product or service of the

business had to be advertised, or c) equipment that was used for the business had to be maintained.

3. In addition to improving the collection of hours data, inquiring about the existence and number of multiple jobs should help reconcile the employment figures obtained from the Current Establishment Survey (CES) and the employment figures obtained from the Current Population Survey. The increase in multiple jobholders from 1985 to 1989 is equal to 65 percent of the discrepancy in nonagricultural wage and salary employment between the two series (Stinson 1990; Flaim 1989).

4. Response distribution data were analyzed using a SAS macro program which produced adjusted chi-squares that controlled for design effects caused by the clustering of individuals within households and the repeated observations over several months. It should be noted that in most cases the design effects were close to one and in very few instances did conclusions change. All of the reported chi-squares in this paper are the adjusted chi-squares.

5. The current criteria for classification as a discouraged worker requires that a person not in the labor force "want a job" and give one of the following as the reason for not currently looking for job: believes no work available in line of work or area; lacks necessary schooling, training, skills or experience; employers think too young or too old; or, other personal handicap in finding a job.