EVALUATING THE DISPLACED-WORKER/JOB-TENURE SUPPLEMENT TO THE CPS: AN ILLUSTRATION OF MULTIMETHOD QUALITY ASSESSMENT RESEARCH [1]

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Key Words: Questionnaire evaluation, behavior coding, interviewer debriefing, respondent debriefing, probe questions, displacement, specification error, measurement error.

I. Background

In the early 1980s, the American economy was staggered by two recessions that were especially hard on manufacturing industries—particularly steel and automobile production. Manufacturing plants were closed, shifts were eliminated, and workers lost good-paying jobs. In an effort to assess the effects of these developments on the labor force, a small group of economists at the Bureau of Labor Statistics set about to develop a questionnaire that would estimate the number of workers displaced from jobs. This survey, which is known as the Displaced Worker Survey **(DWS)**, was administered as a supplement to the Current Population Survey (CPS) in 1984. And even though the DWS was intended to be a *one-time survey*, the data it generated had utility for both internal and external users and, as a result, it has been administered biennially ever since. Displaced workers (some prefer the term "dislocated workers") have been defined as follows:

> "While there never has been a precise definition for [displaced workers], the term is generally applied to persons who have lost jobs in which they had a considerable investment in terms of tenure and skill development and for whom the prospects of reemployment in similar jobs are rather dim." (Flaim and Sehgal, 1985)

> "Dislocated workers are individuals with established work histories who have lost their jobs through no fault of their own and who are likely to encounter considerable difficulty finding comparable employment. Such individuals are thought to have lost their jobs because the industries or occupations in which they worked are in long-term decline." (Browne, 1985)

This research effort expands on an earlier assessment of the DWS conducted in 1996 (Esposito and Fisher, 1998). In the following section, I describe the methods used in the second phase of this multiphase evaluation of the DWS.[2] In section three, I review some of the more important findings relevant to the measurement of displacement in the U.S. labor force—the discussion will be limited to a review of information/data for the first two supplement questions (SD1 and SD2, see Table 1). In section four, I utilize a framework delineated by Stanley Freedman (Federal Committee on Statistical Methodology, 1988) in an effort to suggest how our interdisciplinary research team might minimize response and measurement error in redesigning the DWS.

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[2] This multiphase research effort reflects the Bureau's commitment to survey evaluation research as a means towards the goal of collecting accurate and reliable labor force data. This commitment to collecting high-quality survey data was made explicit in 1996 when Katharine Abraham issued Commissioner's Order No. 2-96,

II. Research Methodology

In evaluating the DWS, we relied on information/data generated by three evaluation methods: interviewer debriefing, interaction coding (i.e., behavior coding), and respondent debriefing.

Interviewer Debriefing. While there are a variety of ways to gather evaluative information from interviewers (Converse and Schuman, 1974; DeMaio, 1983; DeMaio et al., 1993), we debriefed interviewers using a focus-group format and a target-question rating form (Esposito, 1999). Focus groups generally consist of a moderator and 8-12 participants who come together to discuss a particular topic. The role of the moderator is to raise specific topics for discussion and to regulate interactions among the various participants. We conducted three debriefing sessions, one at each of the Census Bureau's three telephone centers. The purpose of these debriefing sessions was to obtain feedback from CPS interviewers regarding several aspects of the supplement. More specifically, interviewers were asked: (a) to identify any question-specific problems that manifested themselves during administration of the supplement and to rate the difficulty level of target questions they had identified as problematic; (b) to respond to a series of structured questions regarding the effectiveness and comprehensibility of twelve DWS target questions; (c) to provide opinions/perceptions (and written comments) about the functioning of these twelve target questions and about the flow, sequence, and structure of the supplement; and (d) to provide feedback on any additional concerns about the DWS they may have had. An extensive protocol was used to guide the focus group discussion and stimulate interviewer feedback. All three sessions were audiotaped and written summaries were prepared from these tapes. Senior staff supervisors from the telephone centers were responsible for selecting the interviewers who participated in these debriefing sessions. Twenty-six of the thirty-four participants were female, and, as requested by the moderators, they differed in terms of interviewing experience.

Behavior Coding. Behavior coding involves a set of procedures which have been found useful in identifying problematic questionnaire items (e.g., Cannell and Oksenberg, 1988; Oksenberg, Cannell and Kalton, 1991). These procedures include developing a coding form, monitoring interviews, coding interviewer-respondent exchanges, transferring coded data to a database, and summarizing coded data for individual questionnaire items. The coding form used in this research effort included six *interviewer codes* [exact question reading, minor change in wording, major change in wording (i.e., meaning of question affected by change in wording), probe, verify (i.e., a previous answer), and feedback] and eight *respondent codes* [adequate answer, qualified answer, inadequate answer (i.e., answer does not meet question objectives), request for clarification, interruption, don't know, refused to answer, other (i.e., a miscellaneous category)].
Behavior coding was conducted during the first four days of CPS survey week at two telephone centers (Hagerstown, MD, and Tucson, AZ) and was done *on-line*, that is, while CPS/DWS interviews were in progress. One researcher (the author) monitored CPS interviews, selected cases to code, and coded interactions between interviewers and respondents during DWS administration. Only data from the *first exchange* between interviewer and respondent was analyzed, and, at either end of the exchange, a maximum of two behavior codes was assigned

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"Ensuring Quality in the Data Collection Process." This research is also consistent with the Bureau's Quality Measurement Model (1994) and with the pretesting policy of the U.S. Bureau of the Census (1998).

(e.g., two possible codes assigned for the respondent's end of the exchange might be "adequate answer" and "interruption"). The researcher/coder monitored a CPS interview until it was time for the DWS to be administered; when the first supplement question appeared (SD1), he started coding the case using a paper-and-pencil coding form. Sixty-three (63) household interviews were monitored and a total of 145 person-interviews were coded; sixty (60) different interviewers conducted the 63 CPS/DWS person interviews.

Telephone-center interviewers are very efficient at reading questionnaire items as worded within a computer-based interviewing environment. With regard to coded interviewer behaviors, previous work has led us to expect very high percentages of exact question readings (Esposito and Rothgeb, 1997). When the percentage of exact question readings falls below 90%, we flag the item as having potentially problematic wording. With regard to coded respondent behaviors, diagnostic procedures are not quite as straightforward. While it may be comforting to find that respondents provide adequate answers over 85% of the time, researchers tend to focus on other codes to gain insights into the types of problems that may exist. For example, a high percentage of interruptions (10% or more) often *suggests* that a questionnaire item is too wordy and/or that the item is not relevant for the target person. A high percentage of requests for clarification (10% or more) *suggests* that there may be problems with various terms/words used in the survey item. We should note here that while behavior coding is useful in isolating problematic survey questions, it is necessary and prudent to use other evaluation methods to identify the potential causes of those problems and to provide insights as to what types of modifications might be made to improve data quality.

Respondent Debriefing. While there are various techniques available for gathering evaluative information/data from survey respondents (Forsyth and Lessler, 1991), we used the follow-up probe question approach pioneered by Belson (1981) for this purpose. A small interdisciplinary team of questionnaire-design and subject-matter specialists drafted the respondent debriefing questionnaire. A total of 28 debriefing items were developed that specifically targeted DWS questions (and concepts). More specifically, the debriefing items were designed: (a) to gather job-related information that was relevant to the displacement concept, and (b) to determine whether question-specific problems existed that might jeopardize an accurate count/estimate of displaced workers. Each debriefing question was designed with a specific objective in mind. For example, for persons who separated from an employer during the reference period (i.e., "yes" response to SD1), the research team wanted to know: (a) if the target person lost or left that job; (b) why she/he lost or left that job; (c) if the job was temporary—that is, "if the job was supposed to last a limited time or until the completion of a project"; (d) if the job leaver had received written advance notice prior to separation; (e) if the target person had lost or left more than one job during the reference period and, (f) if so, how many jobs did the person lose/leave.

Answers to debriefing questions of this sort were useful in helping the research team to detect potential sources of response error. In an effort to minimize costs and respondent burden, the research team restricted respondent debriefing to month-in-sample four and eight households, which together constitute approximately 25% of the full CPS sample. The sequencing of questions went as follows: respondents were first asked the basic CPS questions for all eligible household members, then supplement questions for all eligible household members, and then the debriefing questions. Certain demographic and/or labor force criteria determined which

displacement questions the respondent was eligible to be asked. These criteria (and responses to specific supplement items) determined which debriefing questions the respondent was asked.

III. Findings

Before summarizing findings, let us review how respondents enter and leave the displaced-worker question stream. First, the CPS labor force questions are asked for all eligible persons in the household. Then, after a very brief transition statement, the respondent is asked SD1. If the respondent believes the target person has lost or left a job for one of the reasons stated in the question—or if the phrase "or another similar reason" seems appropriate—the respondent answers "yes" and then she/he is asked SD2. Responses of "no" to SD1 are skipped out of the displacement series. In SD2, the interviewer reads the question *and* all six response options; the respondent is asked to identify the reason that most closely reflects why the target person lost or left her/his job during the three-year reference period. Responses coded 1-2-or-3 remain in the displacement question stream; only these persons can be categorized as displaced workers. Responses coded 4-5-or-6 are channeled out of the displacement question stream; these persons can not be categorized as displaced workers. As shown in Table 1 (SD1: "no" equals 92.6%; SD2: options 4-6 equals 36%), most persons are not classified as displaced.

Questionnaire design experts will recognize almost immediately that there are various content and design problems associated with SD1 and SD2. However, unless it can be demonstrated that such problems are responsible for significant response error, survey sponsors are generally loathe to make changes in a questionnaire—this is especially true if a time series is being jeopardized. As specialists in questionnaire design and evaluation, our responsibility is to provide survey sponsors with information/data they can use to make informed decisions as to whether changes in the target questionnaire are warranted. A summary of findings with respect to SD1 and SD2 can be found in Tables 2 and 3. Behavior coding data *suggest* that both questions pose challenges for interviewers and respondents. Because of their length, interviewers have difficulty reading these questions exactly as worded. The phrase "or another similar reason" apparently causes problems for some respondents. [Note: If respondents interpret this phrase literally, that is, if the reason the target person lost/left a job is similar to *one of the three reasons* listed in SD1 (i.e., if SD1=yes)—but not similar enough to trigger an exact match in the respondent's mind—then it follows that at least some job losers/leavers will be missed as displaced workers when skipped out of the displacement question stream via SD2/option 6.] Some respondents appear to interpret the phrase "lose a job or leave one" too broadly (e.g., left for better job). Difficulty ratings for SD1 and SD2 (see Table 4) *suggest* that a potentially large minority of respondents experience problems in their attempts to provide adequate answers to these questions. Though suggestive, findings from behavior coding and interviewer debriefing do not provide "hard data" regarding response error; uncertainty remains as to how serious these problems with SD1 and SD2 might be. Fortunately, the method of respondent debriefing generated quantitative data that were useful in producing estimates of response error. For respondents who answered "yes" to SD1 *and* "some other reason" to SD2, a debriefing question [SDB3] was asked to determine which target persons might be classified as *false negatives* (i.e., persons not categorized as displaced who really should have been). Recall that "some-other-reason" responses are skipped out of the DWS question stream and, as a result, cannot be categorized as displacements. A false negative would be a person for whom a *displacement reason* is given to SDB3 (see Table 5, middle column). Summing these five response options, it appears that, of the "some-other-reason" responses to SD2, about 16% may actually be false negatives. The good news is that the other 84% probably were not cases of displacement—though one has to wonder what was going through minds of

respondents when they encoded the phrase "or another similar reason" in supplement item SD1. A second debriefing question [SDB17] was asked of respondents who answered "no" to SD1 to determine if the target person had left *any* job during the reference period. Those that had (about 13%) were then asked why the target person was no longer working at her/his former job [SDB20]. The results appear in Table 5—and the same reasoning applies with respect to false negatives. Summing the appropriate response options (third column), it appears that, of the persons who had lost or left a job during the reference period but who had answered "no" to SD1, approximately 6% may actually be false negatives. While this percentage is smaller than that noted above for the *some-other-reason* group (16%), the larger numbers of persons answering "no" to SD1 actually mean that there is more response error associated with the *SD1=no* group.

IV. Discussion

When the DWS was administered in 1998, data for the first supplement item (SD1) was collected for over 79000 target persons. Data for the second item (SD2) was collected for over 5800 persons; of this number, approximately 3700 responses (64%) were coded into one of the three displacement response categories and another 1700-plus responses (30.5%) were coded as "some other reason" (see Table 1). These two questions carry an enormous classification burden and the tasks we impose on survey participants are indeed challenging; for example, respondents and interviewers collaborated to map/match over 5800 survey responses into six response categories. Given the myriad manifestations that job separations can assume, it would be truly amazing if there were not some measurement error associated with this process. The quality assessment research described herein was an attempt to provide some insights as to the potential sources of response and measurement error and, with respect to SD1 and SD2 only, some rough estimates of potential misclassification. For some, the collection and subsequent analysis of respondent debriefing data probably would have been quite sufficient to set in motion plans to redesign the DWS—in fact, some may wonder what the utility of the other two methods might be. But issues raised by interviewers and their supervisors—corroborated by behavior coding data—point to potential root causes for the misclassified cases (i.e., false negatives) detected by the respondent debriefing method. Their comments have prompted a reexamination of the conceptual foundations of the DWS and raised a lot of very interesting questions, like: What counts as a job? What does it mean to be displaced from a job? Can persons who work at temporary jobs be considered displaced? What are the principal causes of displacement in today's economy? What should we do about persons who leave a job in anticipation of being displaced? Once these conceptual issues have been resolved, the chances improve that we will be able to construct a questionnaire for collecting displacement data that minimizes response and measurement error.

A useful analytical framework for addressing measurement issues, originally proposed for establishment surveys but readily adaptable for household surveys, has been delineated by Freedman (Federal Committee on Statistical Methodology, 1988). Freedman defines specification error as: "…the error that occurs in the planning stage of a survey because data specification is inadequate or inconsistent with respect to the objectives of the survey" (p. 34). In Table 6, we utilize his *specification-error* framework as a means of addressing some of the measurement and conceptual issues associated with the DWS. It is our hope that recommendations offered in Table 6 might prove useful in the redesign of the DWS.

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Table 1: DWS Items SD1 and SD2 [Edited Data, 1998]

SD1 [N=79503]	During the last 3 calendar years, that is January 1995 through December 1997, did (you/fill name) lose a job or leave one because: (Your/His/Her) plant or company closed or moved, (your/her/his) position or shift was abolished, insufficient work, or another similar reason?
7.4% 92.6%	<1> Yes (Go to SD2) <2> No (Go to Tenure Series)
SD2 [N=5838]	Which of these specific reasons describes why (*fill name* is) (you are) no longer working at that job? READ IF NECESSARY: If (you/she/he) lost or left more than one job in the last 3 years, refer to the job (you/she/he) had the longest when answering this question and the ones to follow. **[Note: Interviewers are instructed to read all six response options to the respondent.]**
25.3%	<1> Plant or company closed down or moved (Go to SD3)
	Plant or company still operating but lost or left job because of:
22.4%	<2> Insufficient work (Go to SD3)
16.3%	<3> Position or shift abolished (Go to SD3)
4.1%	<4> Seasonal job completed (Go to Tenure Series)

1.4%	<5>	Self-operated business failed	(Go to Tenure Series)
30.5%	<6>	Some other reason	(Go to Tenure Series)

Table 2. A Summary of Quality Assessment Results for DWS Item SD1

Behavior Coding: We have data for 135 administrations of SD1. These data suggest that interviewers had difficulty reading this question exactly as worded (i.e., 71% exact readings). The percentages of minor and major changes in question wording, 16% and 13% respectively, were quite high relative to other supplement items. On the other side of the interaction, respondents interrupted with an answer to SD1 (almost always a "no" answer) 25% of the time and provided an inadequate/uncodable answer 10% of the time. Most of the inadequate answers were the results of respondents reporting a particular situation that did not reflect the intent of the question (e.g., person said she moved) or that was ambiguous as to cause. For example, one respondent reported that he did not have sufficient work at his two part-time jobs, so he found a full-time job that provided sufficient work. What makes this response inadequate is uncertainly as to the cause of the insufficient work. And while 88% of responses to SD1 could be coded as adequate, in about 6% of these cases the respondent simply reported her/his situation and left it for the interviewer to make the correct entry. [Note: Due to the fact that two unique codes were permitted on either side of the exchange, the sum of interviewer and respondent codes can, and usually does, exceed 100%.] Part of the problem with SD1 is the length of this question and the propensity of some respondents to interrupt with an answer after they have heard the first part of the question: "During the last 3 calendar years, that is January 1995 through December 1997, did you lose a job or leave one?" When this happens, the interviewer is less likely to read the second part of the question; the result is a relatively high percentage of major changes in question wording (13%) and an increased potential for heading to SD2 rather than to the next section of the supplement (i.e., tenure series).
Interviewer Debriefing: Interviewers in all three focus groups mentioned problems that respondents appeared to have in interpreting various features of this question. Particularly problematic was the meaning of the phrase "or another similar reason". Given their answers to subsequent questions (i.e., SD2), some respondents clearly interpreted the question more broadly than intended—to include jobs that may have been lost or left during the reference period for *any reason* (e.g., to take a better job; to go back to school; to start a business). Interviewers themselves were not completely sure what this phrase encompassed. Most apparently assumed that it meant for a reason *similar to* one of the reasons that was specifically mentioned in the body of the question. In fact, when interviewers realized (at SD2) that the reason was not similar (e.g., the target person had left a job voluntarily to take something better with a different employer), some interviewers felt obligated to skip back to SD1 and change the entry from "yes" to "no". Moving on to other problems, one interviewer mentioned an interesting case that involved a person who the respondent said had lost her job; in actuality, the company changed her status from full-time to part-time. She had the same duties, but all the full-time jobs like hers were made into part-time jobs. Another interviewer noted: "I had difficulty coding answers such as: (1) husband was transferred with the military; (2) company was sold—buyout; (3) self-employed business went bankrupt; and (4) respondent was fired." Interviewers also mentioned a variety of pragmatic issues. For example, parents sometimes found it difficult to report for their children. One respondent stated that his "… son may have had 50 jobs during that time [the three-year reference period] that he's left. One for a few days, one for two weeks, then he would quit a job and he wouldn't tell me his reason." The respondent had no idea at which job his son had stayed at the longest. Interviewers in all three focus groups asked if it was really necessary to ask these questions of retired persons—especially those individuals who were very old, disabled, or long-term retired. Several interviewers mentioned being interrupted as they tried to read SD1 in its entirety. Another mentioned that she had to repeat the reference period approximately half the time she read this question. **Difficulty Ratings:** SD1 was identified as problematic by interviewers in all three focus groups. The mean difficulty rating for this question was 2.18 (see Table 4).
Respondent Debriefing: As noted in the text and in Table 5, respondent debriefing data indicate that, of the persons for whom a "no" response was given to SD1, about 13% separated from an employer during the three-year reference period. Of that number, approximately 6% may have been displaced from jobs (false negatives). Other respondent debriefing data will be useful in making decisions on how to re-conceptualize displacement when the DWS is redesigned. For example, we know from a crosstab involving debriefing item SDB1 that, of the persons for whom a displacement reason was provided in supplement item SD1, about 20% left their jobs. This is significant because, in the redesigned DWS, job-leavers (but not job-losers) will have to satisfy additional conditions to be classified as displaced (e.g., written advance notice that their jobs will be ending).

Table 3. A Summary of Quality Assessment Results for DWS Item SD2

Behavior Coding: As noted in the text and in Table 1, to be asked SD2 the target person has to have lost or left a job during the three-year reference period, and this did not happen with great frequency in our sample of 145 person interviews (about 12% of the time; 18 persons total). As a result, we have relatively little behavior coding data for SD2; and so, our findings for SD2 need to be interpreted cautiously. Interviewers had a great deal of difficulty reading SD2 as worded (0% exact readings); in fact, SD2 was read with major wording changes 72% of the time this question was asked (13 persons). On the other side of the interaction, in 28% of the cases (5 persons), the initial response provided by the respondent was coded as inadequate (i.e., these responses could not be coded into one of the available response options). Like SD1, part of the problem with SD2 is the length of the question and the propensity of some respondents to interrupt with an answer when they believe they have heard a response option that fits—or seems to fit—the target person's situation. Interruptions occurred about 40% of the time SD2 was asked (7 persons). It is very difficult for some interviewers to continue reading a list of response options when the respondent has identified one of these options—perhaps the first or second—as the correct answer. Data-quality problems arise when an option lower on the list of response options better describes the target person's situation than the earlier option.
Interviewer Debriefing: Interviewers found this question very difficult to read as worded—respondents often interrupted with an answer before the interviewer got through the list of response categories. One group of interviewers was asked if they recalled having read the qualifying information that precedes the second response option: "Plant or company operating but lost or left job because of:" Not all interviewers read this qualifying information; they just read the options. One interviewer said she did read this material, but added that this is where the wording became awkward. The read-as-necessary statement was problematic in that it was not always clear to interviewers when it was applicable and, if nothing else, it was intrusive if read inappropriately. Most interviewers seemed to understand that the first three response options to SD2 continued down the displacement path and that the fourth and fifth options did not; however, few knew for sure what happened when the sixth option ("some other reason") was selected. So, when it was "clear" to them that the target person was not actually displaced from a job (e.g., the person took a better paying job), some interviewers would back up and change SD1 rather than take their chances with SD2/option-6. Sometimes, the explanation an employer shares with a soon-to-be-dismissed employee is not completely accurate, and this tends to complicate the coding process. For example, one interviewer reported that she had a respondent who was told that his position was being abolished, and the person added: "But I know they filled it with somebody else." Respondents did not always know how to categorize the target person's situation (i.e., they had difficulty mapping particular situations on to one of the available response options). And, so, when they had an unusual job-loss story to tell, respondents simply described the situation to the interviewer and left it for him/her to select the correct response category—as in the case where, say, Company A bought Company B and the target person lost her/his job. The problem, in part, is that interviewers are not really sure what to do with some of these cases either—the survey instrument provides them with only one escape route (SD2/option-6), and that route sometimes produces the wrong classification outcome (i.e., a false negative). **Difficulty Ratings:** SD2 was identified as problematic by interviewers in two of three focus groups. The mean difficulty rating for this question was 2.55 (see Table 4).
Respondent Debriefing: As noted in the text and in Table 5, respondent debriefing data indicate that, of the persons for whom a "yes" response was given to SD1 and "some other reason" was given to SD2, about 16% may have been displaced from jobs (false negatives). Other respondent debriefing data will be useful in making decisions on how to re-conceptualize displacement when the DWS is redesigned. For example, we know from a crosstab involving debriefing item SDB2 that, of the persons for whom a displacement reason was provided in supplement item SD1, about 13% had held temporary jobs (i.e., a job that was supposed to last for only a limited time or until the completion of a project). This is significant because, in the redesigned DWS, persons who lost "temporary jobs" may have to satisfy tenure criteria to be classified as displaced (e.g., they may have to have worked for their employer for, say, two years or more).

Table 4: Interviewer Ratings for DWS Items SD1 and SD2

TC Center		Ratings												Mean	*SD*
TTC	*SD1:*	3	1	2	2	3	1	1	1	1	1	1	3	1.67	*0.89*
	SD2:	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HTC	*SD1:*	3	2	2	2	3	1	2	2	1	4			2.20	*0.92*
	SD2:	3	3	1	1	4	1	1	2	2	2			2.00	*1.05*
JTC	*SD1:*	4	2	2	2	4	4	4	1	3	2	2	2	2.67	*1.07*
	SD2:	3	2	3	2	4	1	3	4	5	3	3	3	3.00	*1.04*

Note: Interviewers were asked to rate problematic supplement items using the following evaluation scale: *Based on your experiences this past week, how frequently have respondents had difficulty providing an adequate answer to [the target question] when asked?*

A. [1] *Never or Very Rarely (0 to 5% of the time)*
B. [2] *Occasionally (some % in between A and C)*
C. [3] *About Half of the Time (approximately 45-55% of the time)*
D. [4] *A Good Deal of the Time (some % in between C and E)*
E. [5] *Always or Almost Always (95 to 100% of the time)*

Table 5. Debriefing Questions Used to Identify Potential False Negatives

Selected Response Options (see SDB3 and SDB20)[2,3]	SD2= "some other reason" [SDB3][1,2]		SD1= "no" [SDB20][1,3]	
	N	**%**	**N**	**%**
	357	*100%*	2103	*100%*
Displacement Reasons (five options)				
Employer closed down business	8	*2.2%*	20	*1.0%*
Employer moved away	2	*0.6%*	13	*0.6%*
Employer was downsizing or restructuring	36	*10.1%*	48	*2.3%*
Employer had insufficient work	8	*2.2%*	36	*1.7%*
Worker's position/shift was abolished	3	*0.8%*	12	*0.6%*
Aggregated Personal Reasons (14 options; e.g., did not like job, better job, not enough pay, own illness/injury, fired, moved away, school/training, child-care problems)	223	*62.5%*	1608	*76.5%*
Other (i.e., verbatim responses)	75	*21.0%*	329	*15.6%*

Note 1: All cases represent target persons whose jobs were reported NOT to be temporary. Also, some response options do not appear in column one (e.g., seasonal job completed, don't know); as a result, row percentages will not sum to 100% and row entries will not sum to the total N.

Note 2: Respondents who answered "yes" to SD1 and "some other reason" to SD2 (see Table 1), were asked the following debriefing question (**SDB3**): Some people leave jobs for personal reasons, such as to further their education or to care for children. Others lose or leave jobs for economic reasons, such as insufficient work or downsizing. What is the MAIN reason (you are) (she/he is) no longer working at that job?

Note 3: Respondents who answered "no" to SD1 were asked the following debriefing question (**SDB20**): What is the MAIN reason (you are) (she/he is) no longer working at that job?

Table 6: Addressing DWS Measurement and Conceptual Issues [Freedman's Framework]

Sources/Causes of Specification Error	DWS-Relevant Comments and *Recommendations* for Minimizing Response and Measurement Error
Inadequately specified uses and needs. Causes: (1) poorly stated uses and needs; (2) changing uses and needs.	Three observations regarding the DWS should be noted. First, the DWS was designed in the early 1980s as a *one-time survey*. Second, most national economic surveys developed prior to 1984 probably were not subjected to the rigorous domain-specific conceptualizing and evaluative pretesting that is considered almost mandatory today. And third, the structure of the U.S. economy has changed dramatically over the past 15 years. *The survey sponsor should state explicitly what it considers the appropriate needs and uses of DWS data and consider the views of internal and external data users when doing so. The sponsor should monitor economic conditions and user needs on an ongoing basis and consider making modifications to the survey when such changes seem justified. To the extent possible, every effort should be made to preserve an existing time series.*
Inadequately specified concepts. Causes: (1) poorly defined concepts; (2) using an existing concept that does not really fit.	Existing definitions of displaced/dislocated workers are vague and/or dated. It is very difficult to develop specific objectives for survey questions under such conditions. For example, the definition provided by Flaim and Sehgal (1985) refer to "persons who have lost jobs in which they had considerable investment in terms of tenure and skill development…" While there is a specific question on the DWS that collects displacement-relevant tenure data, there are no questions that address skill development. Moreover, what constitutes a "considerable investment in terms of tenure and skill development" probably differs according to one's occupation or employment situation. *The survey sponsor should define the concept of displacement in clear and unambiguous terms. Insofar as they will serve as the basis for preparing question objections and developing actual survey questions, all of the terms/concepts used in that definition also need to be clearly defined.*
Inadequately specified data elements. Causes: (1) ambiguous definitions; (2) elements not reflecting survey concepts; (3) ambiguous question wording and constructs.	As noted, SD1 and SD2 carry a heavy burden in classifying job losers and job leavers as either displaced or not displaced. And, as findings from the three evaluation methods suggest, respondents and interviewers often struggle with these questions. Potentially ambiguous terms (e.g., "job", "insufficient work") are not defined for respondents; other constructions ("or another similar reason") actually contribute to response and measurement error by channeling potential cases of displacement out of the appropriate question stream. Also, with regard to multiple separations, of persons for whom a displacement reason was given in SD2, about 21% lost or left more than one job during the reference period. However, the read-as-necessary instructions provided in SD2 are transparent *to the respondent*—even when the interviewer does read these instructions, it is not clear that they would help the respondent select the correct job on which to report. *To reduce burden, the sponsor should consider developing a simple screener item that removes persons from the question stream who did not lose or leave a job during the reference period. Each survey question should have an explicit question objective that relates to the overall goal of the survey. All key terms should be defined, and those that might be ambiguous for the respondent should be defined within the question itself.*