Uses and limitations of CPS data on work disability

The objective of this paper is to help users understand the origin, use, and limitations of the CPS-based work disability measures available from the Census Bureau. These measures use several questions to determine if individuals are limited in their ability to work or are unable to work. The data from these questions are not as clear as they appear on the surface, and it is important that users of these data have the opportunity to understand the issues involved.

Researchers and others often have used the Current Population Survey to identify the population who are said to have a “work disability.” The questions used for this purpose, however, were not designed or tested with the intent of measuring disability, and thus the reliability and validity of the estimates generated from these questions is unknown. The questions were not placed in the CPS to measure disability, but rather, to achieve other goals. For example, the March work limitation question (see Q59a, below), is a screener question to identify persons who subsequently will be asked various income questions. Other questions function to streamline the CPS labor force instrument by helping eliminate repetitive and unnecessary questions, or to come up with a description of the “major activity” of someone who was out of the labor force. As indicated below, the Census Bureau has not specifically tested these questions to determine how well they identify those who actually have a work disability. As a result, the data generated from the questions can only be said to represent a count of those who said yes (or another designated response) to the questions in the criteria, and should be understood as such.

The main question used to identify people with work limitations is the income screener question from annual March CPS supplement.

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1 Researchers who design survey questions like to know the reliability and validity properties of their questions. There are several kinds of reliability and validity. In general terms, reliability means a survey question elicits the same response regardless of who is asking the question or if the question is asked in different time periods. Validity means that individuals who respond to the question fit the definition of the population they seek to measure. Specific tests of these properties have not been conducted on the CPS work disability questions. The problems highlighted in this paper suggest that the questions might fall short of having the desirable reliability and validity properties.
>Q59a< (Do you/Does anyone in this household) have a health problem or disability which prevents (you/them) from working or which limits the kind or amount of work (you/they) can do?

The respondent can fill in the name of any household member to whom this condition applies.

Tabulations of work disability are not limited to this question alone. The algorithm the Census Bureau uses to identify people with a work disability includes seven possible items. If a person is identified by any of the seven items, he or she is considered to have a work disability.

D1. Identified by the supplement question - Does anyone in this household have a health problem or disability which prevents them from working or which limits the kind or amount of work they can do?

D2. Identified by the supplement question - Is there anyone in this household who ever retired or left a job for health reasons?

D3. Identified by the basic questionnaire as currently not in the labor force because of a disability (note: this condition has been in effect since 1994; prior to that, the condition required that "Unable to work" be marked as the individual's major activity during the reference week).

D4. Identified by the supplement as a person who did not work at all in the previous year because of illness or disability.

D5. Under 65 years old and covered by Medicare in previous year.
D6. Under 65 years old and received Supplemental Security Income (SSI) in previous year.

D7. Received VA disability income in previous year.

In addition, the Census algorithm holds that a person who says “Yes” to items D3-D6 has a severe work disability.

There are many definitions of disability or work disability available, including those provided in the Americans with Disabilities Act, and those used to determine program eligibility by Social Security Administration and the Department of Veterans Affairs. Unfortunately, no household survey measures disability as defined by these agencies and their statutes. Still, there is a strong demand for information about the disability population and a paucity of quality data, so researchers have turned to the Current Population Survey.

While it is highly likely that these questions identify many individuals with a work disability, one should use the data with an understanding of the properties of the questions. As mentioned above, it is important to note that these questions were not designed with a specific concept of disability in mind. The concepts measured by the questions are embodied in the questions themselves and may or may not be useful for any other specific purpose. They were not written to identify any a particular population. Rather, data users have to look at the questions and the use to which they plan to put the data to determine the adequacy for the purpose at hand. Below are some additional issues to consider to aid researchers in their deliberations regarding several of the questions.

The March question, for example, asks if, because of a health problem or disability, the respondent is unable to work or is limited in the type of work they can do. There are several important issues with this question.
• Health and disability are not the same thing. A health problem may be short lived.

• As Table 1 illustrates, data from the Survey of Income and Program Participation show that many people who do have a condition or impairment that could reasonably be viewed as limiting the types of work they can do, respond “No” to this question.

• It is not known whether respondents to this question have clear or common understanding of terms such as “health,” “disability,” “type,” “amount,” or “work.”

Table 1.
Prevalence of a work limitation by specifically identified disability
People 16-64 Years Old
Numbers in thousands

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percent with a work limitation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>With difficulty seeing</td>
<td>3,770</td>
<td>59.1</td>
</tr>
<tr>
<td>Unable to see at all</td>
<td>692</td>
<td>77.3</td>
</tr>
<tr>
<td>Without difficulty seeing</td>
<td>168,260</td>
<td>8.7</td>
</tr>
<tr>
<td>Uses a wheelchair</td>
<td>935</td>
<td>79.9</td>
</tr>
<tr>
<td>Does not use a wheelchair</td>
<td>171,095</td>
<td>9.4</td>
</tr>
<tr>
<td>With difficulty hearing</td>
<td>3,626</td>
<td>40.6</td>
</tr>
<tr>
<td>Unable to hear at all</td>
<td>330</td>
<td>61.5</td>
</tr>
<tr>
<td>Without difficulty hearing</td>
<td>168,404</td>
<td>9.1</td>
</tr>
<tr>
<td>Needs personal assistance w/ ADLs</td>
<td>935</td>
<td>79.9</td>
</tr>
<tr>
<td>Does not need personal assistance</td>
<td>171,095</td>
<td>9.4</td>
</tr>
</tbody>
</table>

* Specifically, people who responded “yes” to the core item asking about limitation in “kind or amount of work” a person can do.

Other questions in the Census algorithm also have characteristics that make their ability to identify those who have a work disability problematic. For example:
• Question D2 asks about both health conditions and disability. Use of the term “ever” would likely cause some people who once had a health problem or disability but no longer do, to say “Yes.”

• Questions D1-D4 asks about a person’s health and disability status in the context of work. Work is an expected role for many people, and it is likely that some individuals who are not working, for some other reason, may say “Yes” to these questions because they believe this answer to be a more socially acceptable response for being without a job than the true reason. Conversely, individuals who do in fact have a work disability may be likely to say “No” to these questions if they are working. In other words, individuals may respond to these questions independent of their health or disability status.

• Question D7 identifies those who receive VA disability income as having a work disability, when it is likely that only some individuals who receive such income from the VA are substantially limited in the type or amount of work they can do. The criteria used by VA to determine whether former service personnel are eligible for disability benefits may not be consistent with the data user’s notion of a work disability.

Finally, there is an inherent problem in defining individuals into the work-limited population based largely on their stated work limitation, and then cross tabulating this with their employment status. Doing so will, as a rule, generate low employment rates. This should not be seen as confirmation that the questions identified the correct population, but rather that the employment rate for this group is low because individuals were defined into this group because they were not working.

**Conclusion**

The data define work disability with respect to a person’s responses to specific questions in the CPS. The user should assess the appropriateness of the 7-question aggregate measure published by the Census Bureau (or derived from any subset of those questions)
for their particular use and understand the limitations of these questions as measures of
disability status overall, or of work disability in particular.