

Disability Items From the Current Population Survey (2008–2015) and Permanent Versus Temporary Disability Status

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Objectives. To examine longitudinal responses to the disability indicator questions that have been adopted as the standard across national surveys sponsored by the US Department of Health and Human Services.

Methods. Data from the Current Population Survey between 2008 and 2015 were linked to create a longitudinal sample of 721 178 individual respondents.

Results. Responses to the disability questions fluctuated significantly. Although 17% of all respondents reported a disability at some point, only 3% consistently reported the same set of disabilities. Demographic differences were found between people who always reported a consistent set of disabilities and those whose responses fluctuated.

Conclusions. The disability questions capture 2 discrete groups: people who experience a permanent disability and those who experience a temporary disability. Demographic differences between these groups suggest that this is not simply due to measurement error. (*Am J Public Health.* 2017;107:706–708. doi:10.2105/AJPH.2017.303666)

Identifying people in national surveys who experience disabling conditions is challenging because disability is dynamic and subject to contextual factors.^{1–4} This measurement challenge manifests itself in varying national estimates of disability prevalence (e.g., 12.1%⁵ to 29.5%⁶).

The Affordable Care Act mandated standardized collection of health statistics, including disability, in national surveys sponsored by the US Department of Health and Human Services.¹ To meet this mandate, the US Department of Health and Human Services adopted 6 questions from the American Community Survey (ACS) to measure disability.^{1,3} These questions are also included in the Current Population Survey (CPS), American Housing Survey, and Survey of Income and Program Participation. Researchers have used data from these questions to characterize the disability population.^{5,6} Importantly, results from these questions are being used to guide planning.⁷

A critical assumption about the 6 disability questions is that they identify people with long-term stable disabilities. Indeed, the ACS

interview manual states that participants should be informed that these questions are not intended to identify people with temporary disabilities but are instead designed to identify people who experience a permanent disability.⁸ We used longitudinal data collected for the CPS to examine this long-term disability assumption.

METHODS

The CPS queries households monthly for 4 months, followed by an 8-month hiatus, and then queries monthly for another 4 months. Typically, the disability questions are asked twice; first in wave 1 and then 12 months later in wave 5.

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The CPS began including the 6 ACS disability questions in November 2008.⁸ For this analysis, we obtained the CPS data collected between November 2008 and December 2015 from Integrated Public Use Microdata Series–CPS.⁹ Our analysis included only people who responded to the disability questions in waves 1 and 5. The analysis included 721 178 individual respondents (and 5 531 871 person-month observations). From the original 2 152 655 respondents, 1 242 918 were excluded because they did not respond to wave 1 or wave 5, and 188 559 were excluded because they were not in the universe for the disability questions in at least 1 wave. Although linking individual observations to create longitudinal data in the CPS was challenging, we relied on the method described by Drew et al.¹⁰ and available from Integrated Public Use Microdata Series–CPS.

We used Stata version 13.1 (StataCorp LP, College Station, TX) to compute descriptive statistics for respondents who always or never endorsed each item across all data waves and for those who gained or lost a disability. We then described how those who always reported disability differed from those who sometimes reported disability.

RESULTS

Overall, 17% of the respondents reported at least 1 disability in either CPS wave (Table 1). However, of those reporting any disability,

TABLE 1—Response Percentages to Each Current Population Survey Disability Question Across 2 Waves: United States, 2008–2015

	Disability Question						
	Hearing, %	Seeing, %	Remembering, %	Walking, %	Errands, %	Dressing, %	Any, %
Total population							
Never	94	97	95	89	94	97	83
Gain	2	1	2	3	2	1	4
Lose	2	1	2	3	2	1	5
Always	2	1	2	4	2	1	8
Ever	6	3	5	11	6	3	17
Ever-disabled population							
Gain	31	34	35	30	36	39	26
Lose	38	44	37	31	31	34	30
Always	31	22	28	39	33	27	44

Note. Always = always reported disability; any = reported any disability; dressing = "Do you have serious difficulty dressing or bathing?"; errands = "Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?"; ever = reported disability at least once; gain = moved into disability; hearing = "Are you deaf, or do you have serious difficulty hearing?"; lose = moved out of disability; never = never reported disability; remembering = "Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?"; seeing = "Are you blind, or do you have serious difficulty seeing even when wearing glasses?"; walking = "Do you have serious difficulty walking or climbing stairs?" The sample size was n = 721 178.

only 16% reported the same set of disabilities across both waves. For instance, over the 2 waves, 11% of all respondents reported an ambulatory difficulty in at least 1 wave, and 4% reported this disability in both waves; 3% gained this disability, and 3% lost this disability. Of those who ever reported ambulatory difficulty, only 39% always reported this disability. Similarly, 22% of those who ever reported vision difficulty reported this disability across both waves, and 27% of those who reported self-care difficulty reported this disability across both waves.

Next, because the CPS is a household survey, we examined these results for respondent effects. We found that 40% of the respondents reported for themselves in both waves, 38% had proxy reports in both waves, and 22% had 1 self-report and 1 proxy report. Restricting our analysis to include only people who self-reported in both waves yielded a pattern of movement similar to that described earlier. For instance, among the always self-report group, of those who reported an ambulatory difficulty, 41% reported this difficulty in both waves, which is similar to the 39% described for the full sample in the previous paragraph.

Those who reported consistent disability differed from those whose report fluctuated.

For instance, compared with those who sometimes reported ambulatory difficulty, those who consistently reported were 4.5 percentage points more likely to be older than 65 years (56.4% vs 51.9%), 3 percentage points more likely to be female (61.0% vs 58.0%), 12.8 percentage points more likely to be out of the labor force (91.7% vs 78.9%), 2.5 percentage points less likely to have a college education (13.8% vs 16.3%), and 8.5 percentage points less likely to be married (39.7% vs 48.2%). Finally, those reporting disability inconsistently were more similar to those reporting disability consistently than to those who never reported disability.

DISCUSSION

These results show that the disability population may consist of 2 groups: (1) those who report disability consistently, for whom disability is a trait like having a college education, and (2) those who report disability inconsistently over time, indicating that their disability is a temporary state.

Much of the research that uses these ACS questions implicitly assumes that disability is a stable trait.¹¹ However, our results show that in a national sample, more than half of those

identified as disabled may be in a temporary state. These participants did not report their disability consistently over 12 months. This finding has 3 important implications for how researchers should use the ACS disability questions. First, the consistently disabled population identified by the ACS questions is much smaller than often reported. Conversely, the broader disabled population (including the recently or sometimes disabled) is much larger. Second, estimates based on the ACS questions do not accurately describe the characteristics of the consistently disabled population or the correlates of those reporting consistent disability. Third, those interested in understanding a broader definition of disability that includes the recently or occasionally disabled experience the opposite problems. The ACS questions systematically underestimate the size of this population and do not yield accurate and reliable estimates for the characteristics of this population or the correlates of this level of disability. Researchers, practitioners, policymakers, and others seeking information about disability must carefully interpret any results from these questions and be aware that these estimates are inexact.

Finally, we note that the observed fluctuations are not simply random measurement errors. As noted earlier, those who consistently report disability differ from those who sporadically report disability. Furthermore, in other research, we have found that movement in individuals' responses to the ACS disability questions over time correlates with movement in other measures of health status.¹²

PUBLIC HEALTH IMPLICATIONS

This research suggests that our understanding of the population of people with disabilities on the basis of analysis of the ACS disability questions is incomplete. For instance, health disparities between people who never report a disability and those consistently disabled may actually be much greater than previously reported, resulting in insufficient policy solutions. Similarly, understanding the temporarily disabled is also important. A person does not need to be permanently disabled to experience the adverse consequences of a disability. Experiencing

a disability for a few months a year could affect employment, domestic responsibilities, and community participation. Policies targeting temporary disability may focus on employment accommodations or health promotion. *AJPH*

CONTRIBUTORS

B. Ward and A. Myers conceptualized the project, analyzed and interpreted the data, and drafted portions of the article. J. Wong and C. Ravesloot analyzed and interpreted the data and edited the article.

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HUMAN PARTICIPANT PROTECTION

This study was a secondary analysis of data collected by the US government and was exempt from human participant review.

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