

# **Cognitive Testing of the International Labour Organization’s Revised Labor Force Module of Persons with Disabilities: Results from Cognitive Testing in the United States and India**

**Annie MacFadyen  
Kristen Miller  
Lauren Creamer**

**May 2021**

## **Summary of Conclusions**

This report presents findings from the evaluation of the revised labor force module developed by the International Labour Organization (ILO) and the Washington Group for Disability Statistics (WG).<sup>1</sup> The module covers barriers to employment, workplace accommodation and attitudes toward those with disabilities in the workplace. A total of 62 interviews were conducted with respondents of varying disability and work statuses. Twenty of the interviews were conducted in Hyattsville, MD by the National Center for Health Statistics’ Collaborative Center for Questionnaire Design and Evaluation Research (CCQDER) in May 2017. Forty-two of the interviews were conducted in Mumbai, India by Able Disabled All People Together (ADAPT), contracted by the ILO, in January 2018.

This report provides question-by-question summaries of study findings and documents changes made to questions based on these findings. The summaries make note of changes to the wording of specific questions and response categories. Three primary changes to the questionnaire were made after the United States round of testing. The first allowed all non-employed respondents, regardless of disability status or effort seeking employment, to receive questions about barriers to employment. Secondly, all respondents reporting at least some degree (as opposed to a lot) of disability received accommodation questions in the second round of testing in Mumbai, India. Finally, two questions were added to the beginning of the questionnaire. These additions were made based on the assessment of CCQDER researchers and input from ILO’s expert review of the United States round findings. The first question, ILO1, is a general question about limitations due to a health problem asked in the following way: “For at least the past six months, to what extent have you been limited because of a health problem in activities people usually do?” The second question, ILO2, is an employment question, “What is your correct

---

<sup>1</sup> Testing of the original questionnaire, conducted in 2016, revealed out-of-scope interpretations primarily among respondents without a disability. This revised questionnaire reflects changes made in light of the 2016 round of testing.

working status?” Collaborators at the ILO were interested in testing this employment question alongside the existing question, Question 14, from the United States round of testing, “What was your employment status last week,” adapted from the Bureau of Labor Statistics. These two additional ILO questions were not used to determine skip patterns in the questionnaire, and they did not replace any items from the question set used in the United States round of testing.

Findings indicate that most questions perform within scope, but some questions, such as the accommodations and attitude questions, involved broad interpretations with respondents considering diverse phenomena—which may or may not pose a problem depending on question intent. Also, the ILO1 question, described above, elicited a range of interpretations of both the meaning of “health problem” and “activities people usually do.” Finally, the social protection questions assume a certain type of governmental financial support for people with disabilities, a program equivalent to Social Security Disability Insurance (SSDI) in the United States, that did not apply to the Indian context.

Interviews with non-employed respondents, particularly during the United States round of testing, revealed that the status of “looking for work” is not a discrete position and, therefore, using this status to screen respondents in or out of sections becomes problematic. During the India round, interviews revealed that non-traditional work statuses, particularly self-employed or working in a family-owned business, created confusion for respondents when answering questions about their employment status, their employers’ and coworkers’ attitudes, and their workplace accommodations.

### *Limitations of the Report*

A few unforeseen and uncontrollable events created challenges for this project. First, and most significantly, due to a pause in U.S. government funding from January 20<sup>th</sup>-22<sup>nd</sup>, 2018, the CCQDER team was not able to travel to India to conduct in-person training or help supervise cognitive interviews. This led to a decrease in the level of engagement possible between CCQDER staff trainers and the interviewer team. Rather than being on-site to answer questions (both technological and substantive), oversee summary note production, and provide continual feedback, CCQDER staff conducted regular Skype debriefings with the interview team. Consequently, summary notes were not always written to the level of detail necessary to fully ascertain how respondents considered the questions or what life experiences led them to answer the way they did. In an explanation for why continual feedback is vital during data collection, Miller (2018, p. 217) wrote the following:

Without fail, it has been our experience that trainees do not realize the amount of detail [in summary notes] required to perform a comparative analysis – regardless of the amount of emphasis placed during training. Thus, it is necessary to return to the quality of notes throughout data collection.

Not only does being on-site help interviewers produce more detailed summary notes, it also helps analysts better understand the ethnographic context. Without personal grounded knowledge of the Indian context, analysts relied solely on interviewer notes, written without the benefit of iterative feedback from trainers, to capture the complexity of the social context. In-person training and continual feedback between interviewer trainers and trainees throughout the data collection process are key aspects to producing the highest quality data and the highest quality analysis (Miller, 2018). In order to overcome some of the limitations caused by compromised data quality from India, analysts approached respondent narratives as a “whole” – garnering social context for each respondent holistically, across the questionnaire, before conducting comparative analyses in a question-by-question manner. Analytical methods are described in more depth below.

Another challenge for this report included CCQDER staff changes, meaning that the project was managed by different people over time. This made it difficult to track how and why decisions were made. However, this report represents the best effort to document what is known. While there may be gaps, changes were recorded using documentation of prior communications, working analysis documents, and project documents.

#### *Self-Identification as a Person Living with a Disability*

Most of the questions examined in this study refer to functional difficulties and not disabilities. However, during the cognitive interviews, respondents made self-referential statements about whether they were living with a disability. The self-identity as a person living with a disability or as a person not living with a disability was an important analytical category for identifying patterns of interpretation across the questionnaire. Respondents’ identity often times determined whether they interpreted the questions about *difficulties* from within a *disability* framework. For instance, when asked about workplace barriers and accommodations, one respondent who self-identified as living with a disability understood the concept of “barrier” to include prejudice for disabled people and “accommodation” to mean change in workplace culture:

“[There needs to be] more interaction between disabled employees and the management, [as well as] more awareness and sensitization to break pre-conceived notions. [So that] barriers are broken and mindsets changed so that persons with disability are accommodated and accepted.”

Whether or not people identify as living with a disability, they may report functional difficulties in response to the Washington Group Short Set on Functioning – Enhanced (WG-SS Enhanced) questions<sup>2</sup>. Those responses, depending on the designated cut-offs, could qualify them as having disability for the purposes of creating internationally comparable data. As a lived experience, disability is not a dichotomy, so it is not asked in a “yes” or “no” question format, but it is necessary to impose that dichotomy analytically so that outcome variables, such as employment, by disability status<sup>3</sup> can be disaggregated.

At times, those who did not identify as having a disability, but qualified as such under the cut-offs used, were unable to relate to the questions; in some cases, they expressed confusion because they felt the questions insinuated they had a disability. This was particularly true for questions about “age of onset” and “workplace accommodation.”

### *Question Set*

Following the WG-SS Enhanced, the questionnaire included an age of disability onset question, and sets of questions about barriers to employment, workplace accommodations, social protection, and attitudes towards people with disabilities. Overarching conclusions, broken down by section, are as follows:

Age of Disability Onset Question: Respondents in the United States round of testing interpreted “age of onset” in more varied ways than the respondents in the India round; however, this may be attributed more to sample composition than cultural differences. Most of the American respondents who had disabilities had multiple difficulties that were often later-onset and gradually increasing in severity, like arthritis or back pain. The Indian respondents with disabilities were more often born with their disability, and they could more easily point to ‘birth’ as the clear onset of disability-related difficulties.

Barriers to Employment Section: These questions were overall understandable for respondents in both the United States and India rounds. The response options for the question “Which of the following, if

---

<sup>2</sup> The WG-SS Enhanced includes six questions from the short set (on vision, hearing, mobility, communication, cognition, and self-care) and also two questions on upper body functioning and four affect questions (two each for anxiety and depression).

<sup>3</sup> See the analysis overview video: <https://www.washingtongroup-disability.com/analysis/analysis-overview/>

any, would make it more likely for you to seek employment. Check all that apply” were changed between the United States and India rounds; these changes clarified the question further. In considering barriers to employment, patterns of interpretation emerged along disability self-identification and employment status. The attitude question in this section, Question 16/ATT\_3, “How supportive would your family members be if you decide to work” and “In terms of you being employed, how supportive are your family members” (wording for the US and India rounds, respectively), elicited primarily one-sided answers. Respondents’ answers leaned toward reporting positive family attitudes, despite many-times relaying stories of mixed support. This may indicate that respondents were hesitant to say their families were anything less than ‘Very supportive,’ indicating that social desirability bias may have affected the performance of the question.

Workplace Accommodations Section: This question series elicited a range of interpretations by respondents— particularly during the first question of the series, Question 17/WA\_1 (“has your/[your/his/her] workplace been set up in a way to account for difficulties you have in doing certain activities?”). Three factors that went into respondents’ answers included the following: 1) the actual provider of the accommodation—whether it was the employer, the respondent or both, 2) whether or not the respondent asked their employer for an accommodation and whether that request was granted or denied, and 3) whether a particular accommodation was a special accommodation for the respondent or whether it was offered to everyone on the staff. Interpretations primarily overlapped across questions in this set, causing many respondents, particularly in the India round, to find this question series repetitive and fatiguing. The additional follow-up questions, added for the India round, elicited repetitive responses, particularly WA\_2b and WA\_3b which ask “Would you need your work schedule to be changed” and “Would you need your tasks to be changed”, respectively after previous follow-up questions asking “Would you need any other arrangement of your work schedule” and “Would you need any other arrangement of your tasks?” (WA\_2a and WA\_3a respectively). That questions may be repetitive led respondents to simply refer to their responses from prior questions, to stop answering the questions, or, in a few cases, to attempt to come up with new interpretations. Complicating these factors and likely increasing fatigue overall were common skip pattern errors for interviews in the India round of testing. For example, some respondents who should not have been asked follow-up questions about workplace accommodations based on the screening criteria were asked follow-ups.

Social Protection Section: The idea of receiving “cash benefits” from the government is context-specific. In India, respondents reported that there was no federal program equivalent to a program like the Social Security Disability Insurance (SSDI) in the United States. Further, respondents did not assume that the government could or should provide cash benefits in a fair, consistent manner. Among the India round respondents, the questions did elicit discussion of a wide range of state programs and federal non-cash benefit programs which were important to recipients. Nonetheless, those non-cash benefits were not captured by these questions.

Attitudes Section: Like the accommodation questions, these questions elicited broad interpretations with respondents formulating their answers on different criteria. Some considered hypothetical scenarios, some used personal experience, and others considered what *should* be the case as well as what was. Among the Indian respondents, cultural assumptions about people with disabilities and the resulting discrimination faced by many permeated the discussions of these questions and affected answer selection.

## **Methods**

### **Cognitive Interviewing**

Questions were evaluated using cognitive interviewing methodology. This is a qualitative method of question evaluation that can be used both to uncover potential response errors and as a means of assessing construct validity (Willis, 2005; Tourangeau et al., 2000; Miller et al., 2014).

This cognitive evaluation study was performed by conducting in-depth, qualitative interviews with a sample of 62 respondents. The aim was to investigate how well the survey questions performed; in that, the study examined if respondents understood the questions according to their intended design and whether respondents were able to provide accurate answers according to that intent. The interview structure consisted of respondents first answering the evaluated question and then answering a series of follow-up probe questions that revealed what respondents were thinking and their rationale for that specific response. In this regard, the cognitive interviews elicited rich narratives from respondents that were often personal and were unique to each respondent. Through this semi-structured design, the interviewers gained insight into how the respondents interpreted each question, what aspects of their lives were relevant to their interpretations, and how they then formulated a response to each question.

The cognitive interviewing method allowed for an in-depth understanding of the ways in which each question operated, including occurrence of response errors, and the kind of phenomena that each question captured.

As a qualitative method, the sample selection for a cognitive evaluation project is purposive. Respondents are not selected through a random process, but rather are selected for specific characteristics such as gender or race or some other attribute that is relevant to the type of questions being examined. When studying questions designed to identify persons with disabilities, for example, the test sample would ideally consist of respondents with a previously known disability and, to discover potential causes of false positive or false negative reporting, some respondents with no known disability. Because of the small sample size, not all social and demographic groups are represented. Analysis of cognitive interviews does not produce generalizable findings in a statistical sense, but rather, provides an explicit exploration of response processes including patterns of interpretation which could lead to response error.

### **Sampling and Respondent Characteristics**

For the evaluation of the ILO's revised labor force module, a purposive sample of 62 respondents was recruited across two field sites to participate in cognitive interviews. Twenty respondents were interviewed in the United States and 42 were interviewed in India. The respondents were recruited with the goal of producing a diverse sample across a range of characteristics, including gender, race, disability and work status. Respondents in the United States were recruited through a variety of media, including newspaper and online advertisements. Their ages ranged from 22 to 62 years old. Thirteen of the 20 respondents were employed and the remaining seven were unemployed. Five of those unemployed indicated that they were looking for work, although to varying degrees of activity. The 42 respondents in India were recruited directly by ADAPT from across the Mumbai metropolitan area. Their ages ranged from 19 to 65 years old. Twenty-eight of the 42 respondents were employed, including self-employed or working in family businesses, and 14 were unemployed. Table 1 presents the sample by demographic characteristics across the two countries.

**Table 1. Respondent demographics.**

	United States (n = 20)		India (n = 42)	
	n	Percent	n	Percent
<b>Gender</b>				
Female	13	65%	25	60%
Male	7	35%	17	40%
<b>Age</b>				
18 – 30 years	2	10%	10	24%
31 – 40 years	2	10%	7	17%
41 – 50 years	6	30%	15	36%
51 – 60 years	9	45%	9	21%
61 and older	1	5%	1	2%
<b>Race/Ethnicity</b>				
Non-Hispanic White	4	20%	*	*
Non-Hispanic Black or African American	12	60%	*	*
Non-Hispanic Asian	1	5%	*	*
Non-Hispanic Multiple Race	2	10%	*	*
Hispanic or Latino	1	5%	*	*
<b>Education</b>				
High school or less	3	15%	*	*
Some college or 2-year degree	8	40%	*	*
Bachelor’s degree	7	35%	*	*
Graduate degree	2	10%	*	*
<b>Household Annual Income</b>				
\$0 - \$19,999	8	40%	*	*
\$20,000 - \$44,999	3	15%	*	*
\$45,000 – 79,999	3	15%	*	*
\$80,000 or more	4	20%	*	*
Refused	2	10%	*	*

\* Respondents in Mumbai, India were not asked for their race, ethnicity, educational attainment, and household annual income.

### Washington Group Disability Status

WG disability status, as opposed to the disability identity described above, was determined by the way in which respondents answered the Washington Group Short Set on Functioning - Enhanced questions during the cognitive interview (presented in Appendix A and B for the American and Indian respondents, respectively). Tables 2 and 3 below present frequencies of these questions among the American respondents to the questions on physical disability functioning (Table 2) and emotional disability functioning (Table 3). Respondents often reported difficulty in more than one domain. As the tables illustrate, the 20 American respondents represented a range of types and severities of disability.

Based on the responses to the Washington Group Short Set on Functioning - Enhanced questions, ten respondents were considered to have a disability, meaning they answered at least ‘a lot of difficulty’ to at least one of the physical functioning domains or ‘a lot’ to either of the emotional functioning questions (anxiety or depression), at any frequency<sup>4</sup>.

The remaining American respondents, although not reporting at least ‘a lot of difficulty’ for any of the physical domains or ‘a lot’ to either of the emotional domains reported having multiple difficulties across numerous domains—the average having difficulty in 4 domains.

**Table 2. Respondent reports to Washington Group physical functioning items<sup>5</sup> (USA)**

	No difficulty	Some difficulty	A lot of difficulty	Cannot do at all
Vision	4	13	3	0
Hearing	10	9	0	1
Mobility	4	9	7	0
Communication	11	9	0	0
Cognition	1	15	4	0
Self-Care	13	7	0	0
Upper Body	16	3	1	0
Hands	12	7	1	0

**Table 3. Respondent reports to Washington Group emotional functioning items<sup>6</sup> (USA)**

	A little	Somewhere in between a little and a lot	A lot
<b>Anxiety</b>			
Daily	2	7	2
Weekly	0	4	0
Monthly	0	1	0
A few times a year	1	2	0
<i>Never = 1</i>			
<b>Depression</b>			
Daily	0	0	1
Weekly	1	3	0
Monthly	4	0	1
A few times a year	4	3	0
<i>Never = 3</i>			

<sup>4</sup> The ILO Labour Force Survey add-on module on functional difficulties and barriers to employment (ILO 2020) utilizes cut-offs of at least ‘a lot of difficulty’ to any one of the physical functioning domains or ‘daily’ to one of the emotional functioning questions to indicate disability (ILO 2020).

<sup>5</sup> See questions 1 through 8 in Appendix A.

<sup>6</sup> See questions 9 through 12 in Appendix A.

Tables 4 and 5 below presents frequencies of the Washington Group Short Set on Functioning - Enhanced questions among the Indian set of respondents to the questions on physical disability functioning (Table 4) and emotional disability functioning (Table 5). Like respondents in the United States set, these 42 respondents represented a range of difficulties and levels of severity. Based on the responses to the Washington Group Short Set on Functioning – Enhanced questions, and using the same cut-offs as the USA round, 29 Indian respondents were considered to have a disability.

**Table 4: Respondent reports to Washington Group physical functioning items<sup>7</sup> (India)**

	No difficulty	Some difficulty	A lot of difficulty	Cannot do at all
Vision	26	12	2	1
Hearing	32	2	1	0
Mobility	14	12	12	4
Communication	31	6	5	0
Cognition	27	11	4	0
Self-Care	31	5	6	0
Upper Body	33	5	3	1
Hands	29	9	4	0

**Table 5. Respondent reports to Washington Group emotional functioning items<sup>8</sup> (India)**

	A little	Somewhere in between a little and a lot	A lot	Don't Know <sup>9</sup>
<b>Anxiety</b>				
Daily	3	5	2	1
Weekly	3	3	0	0
Monthly	1	2	1	0
A few times a year	4	7	1	2
Don't know	0	1	0	0
<i>Never = 4</i>				
<b>Depression</b>				
Daily	1	1	0	0
Weekly	2	0	1	0
Monthly	1	2	0	0
A few times a year	4	8	5	4
Don't know	1	0	0	1
<i>Never = 7</i>				

<sup>7</sup> See questions VIS\_1 through UB\_2 in Appendix B

<sup>8</sup> See questions ANX\_1 through DEP\_2 in Appendix B

<sup>9</sup> “Don’t know” in the table indicates a non-response to an item. Respondents in the United States round provided answers to all items.

### *Disability Identity and WG Disability Status Compared*

Most respondents from both rounds who identified as living with a disability were categorized as such based on their answers to the Washington Group Short Set on Functioning - Enhanced questions. The WG questions were overall more inclusive in categorizing respondents as living with a disability than respondents were themselves in their self-identity. This was an expected outcome, in that the WG questions are intended to identify people at risk of social exclusion because of activity limitations – not just to identify those who see themselves as having a disability or who received disability benefits from the government. Therefore, some respondents who did not self-identify as living with a disability were categorized as such by the WG set. Less often, some of those who self-identified as living with a disability did not meet the cut-offs in the WG set. That is also expected, since it is not necessary for the WG questions to capture everyone with disabilities.<sup>10</sup> Throughout this report, we make note of places in the analysis where there are meaningful differences between these two definitions of “disability.”

### **Language and Location**

Interviews in the United States were conducted in the National Center for Health Statistics’ Questionnaire Design Research Laboratory in Hyattsville, MD and were video recorded. Each interview was a maximum of an hour in length, and respondents were given a token incentive of \$40 after completing the interview.

ILO contracted ADAPT to conduct at least 40 cognitive interviews in the Mumbai area. The interviews were conducted at ADAPT’s Bandra Center, with the exception of four interviews that were conducted over video conferencing software (Skype and Facetime) because the respondents could not make it to Bandra. As described above (“Limitations of the Report”), due to the temporary lapse in U.S. Government funding in January 2018, CCQDER staff were not able to travel to India and help supervise the cognitive interviews in person. Instead, CCQDER staff conducted Skype debriefings with the interview team.

While the original intent was to test the questionnaire only in English (and respondents were sampled by ADAPT with this in mind), five respondents in the India respondent set spoke a language other than

---

<sup>10</sup> <https://www.washingtongroup-disability.com/wg-blog/does-the-wg-ss-identify-all-people-with-disabilities-and-does-it-matter-70/>

English during the cognitive interview, including four who conducted parts of the interview in Hindi and one in Marathi. Interviewers translated the questionnaire for these respondents during the interview.

### **Method of Analysis**

Analysis of interviews consisted of a process involving data reduction and theory building (i.e. drawing conclusions). First, original interview text from every interview was summarized into interview notes. Complete summary notes, when available, specified the way in which individual respondents answered every survey question, including each respondent's interpretation of questions and key terms, activities and experiences considered by respondents, and any response difficulties and errors. Next, comparisons were made across all interviews, identifying interpretive patterns (including patterns of response errors). Findings from this second level of analysis depict the phenomena captured by each question and allow for the assessment of construct validity. Finally, thematic patterns were compared across subgroups of respondents to determine whether questions might perform differently across various groups. For example, in the analysis of the barrier to employment questions discussed below, comparisons of question performance were made between those who specifically thought of themselves as having a disability to those who did not in order to determine how the WG functioning questions (which assess ability as opposed to identity) operate as a screener to that section. A data entry and analysis software application (Q-Notes) was used to conduct analysis.<sup>11</sup>

Results for each survey question are presented in the following section.

## **Question-By-Question Evaluation Findings**

### **Introductory Questions**

**ILO1  
(India) For at least the past six months, to what extent have you been limited because of a health problem in activities people usually do?**

---

<sup>11</sup> Available at <https://wwwn.cdc.gov/qnotes>

Answer	Cases (USA)	Cases (India)
Severely limited	*	0
Limited but not severely	*	19
Not limited at all	*	23

\*Respondents in the United States round of testing did not receive this question.

All 42 respondents in Mumbai, India received this question. Responses to this question did not determine skip patterns for any other question.

The majority of respondents found the question unclear, and, as a result, the question did not consistently capture functional limitations. The varied interpretations of this question stemmed primarily from differential understandings of both the term “health problem” and the phrase “activities people usually do.”

The effects of inconsistent question interpretations were particularly evident among people who had functional limitations or who, during the cognitive interview discussion, self-identified as a person living with a disability. Many respondents who were living with a disability according to their WG set responses answered ‘Not limited at all’ – including some with severe mobility or communication difficulties. Indeed, none of the respondents answered ‘Severely limited,’ an indication that the question did not capture limitations due to the full range of functional limitations found within the sample. This was due to how “health problem” and “everyday activity” were interpreted.

The pattern of responses showed that the question did not “overcount” people without functional difficulties, emotional or physical. The respondents who answered ‘Limited, but not severely’ either self-identified as having a disability or were categorized as such by responses to the WG-SS Enhanced questions. As expected, only people with functional difficulties responded that they had limitations. However, ILO1 appeared to “undercount” those with functional difficulties. People who responded ‘Not limited at all’ included both those with and those without functional difficulties.

*Perception of the term “health problem”*

Often times, respondents were confused by the term “health problem” and were unsure on what factors to base their answers – limitations from a disability, from an illness, or from something else. For example, one respondent who eventually answered ‘Limited, but not severely’ said, “What does ‘health problem’ mean? I am confused about ‘health problem.’ Are [you] referring to my disability? So, I am confused what I should answer.”

Many of the respondents who self-identified as having a disability specifically excluded considerations of their disability when determining their answers; instead, they considered limitations from illnesses within the past six months. Most respondents with physical difficulties who considered the question to be only asking about illnesses answered, ‘Not limited at all.’ For example, one woman said, “I am not counting my disability,” answering ‘Not limited at all.’ Similarly, another respondent, who used a wheelchair and required assistance with self-care, answered ‘Not limited at all’ because, as he explained, “I don’t have any issues except cold and cough. I don’t take any medicines. If someone has asthma or diabetes, they are limited in jobs. I don’t have any disease, so I am not limited.”

Some respondents felt that the question likely was intended to capture functional limitations from disabilities, but they believed that that the question was written in a misguided way. The question, in their view, should not refer to disabilities as a limitation the respondent has, rather, the limitation is with society. One respondent said, “The term ‘health problems’ and our disability-related issues are getting overlapped and causing a confusion and I feel that they should be kept separately.”

Of note: The number of respondents viewing the term “health problem” as an illness or injury may have been heightened by the initial phrase, “for at least the past six months.” Most respondents did not mention this timeframe during discussions, but those who did indicated limiting their responses to issues occurring *within* the past six months. Additionally, there was very little consideration of mental issues, such as anxiety and depression, as just three respondents considered difficulties associated with a mental disability in their responses.

### *Activities People Usually Do*

Respondents interpreted the phrase “activities people usually do” in a variety of ways. For instance, many respondents thought of going out or doing chores such as driving to the bank, taking their children to school, socializing with friends, or helping around the house with cleaning and gardening. Others –

primarily those who self-identified as having a disability – thought specifically of going to work, while a few considered sports.

For respondents who self-identified as having a disability, the meaning of “activities people usually do” was generally considered in terms of the respondent’s own abilities and activities of life rather than the abilities of the general population. This was reflected in the few interpretations of “activities people usually do” which were only considered by those who self-identified as having a disability and were categorized as having a disability based on their WG Short Set on Functioning - Enhanced responses. Those interpretations included walking, being independent, and taking care of activities of daily living, such as eating, dressing, and other activities essential for self-care. Additionally, apart from one respondent with a slipped disc injury, the meaning of “activities” as “whatever I can do” was primarily discussed by respondents with a disability. For example, one respondent who answered ‘Not limited at all’ said that he was able to do the activities that help him survive. He said, “My inability has limited me to do things that my friends do. I am ok with whatever I can do.” In this case, he answered ‘Not limited at all’ because he considered activities that he personally was able to usually do, rather than what people in general usually do. Similarly, several respondents living with disabilities who were employed focused on work as the primary activity they considered when answering this question. For example, one respondent with cerebral palsy said that because he could go to work and be there on his own, he was not severely limited. Again, the phrase “activities people usually do” was considered in terms of the respondent’s personal abilities and daily life and did not identify persons with limitations as was the intent of the question.

### *Changed Response*

Only one respondent indicated that she wanted to change her response after discussion. Initially, she stated that she was ‘Limited but not severely’ because infrastructural challenges limit her activities. This respondent self-identified as living with a disability, used a communicator and powered wheelchair, and had challenges eating. She had a stroke the prior year, and during recovery she was very limited and was unable to go out or work normally. After discussing her disability with the interviewer, the respondent indicated that she would change her response to ‘Severely limited.’ Otherwise, no respondents in the set of 42 interviews indicated they would respond ‘Severely limited.’

**ILO2  
(India)**

**What is your correct working status?**

<b>Answer</b>	<b>Cases (USA)</b>	<b>Cases (India)</b>
Working for pay at a job or business	*	18
With a job or business but not at work	*	4
Looking for work	*	6
Working, but not for pay, at a family-owned job or business	*	7
Not working at a job or business and not looking for work	*	6
No Data Entered	*	1

\*Respondents in the United States round of testing did not receive this question.

All 42 respondents in Mumbai, India received this question.

Respondents understood that this question was asking about employment. Those working full-time for pay at a business or were not working at all had a relatively easy time answering. However, some respondents had difficulty choosing a response category, particularly those who worked part-time, were self-employed, were students, or volunteers, because they felt the available categories did not capture their work experiences. Finally, the category ‘With a job or business but not at work’ was interpreted inconsistently, causing some confusion and error.

The category ‘Working for pay at a job or business’ was the easiest to understand and primarily captured respondents who had regular full-time work at an office. Additionally, the answer category captured the following seven other types of paid work, accounting for one respondent each: part-time, teleworker, paid volunteer, freelancer, consultant, contractor, and self-employed.

The response option ‘Working, but not for pay, at a family-owned job or business’ was also well understood, and most respondents who chose this answer were within scope. Most respondents who chose this response option lived off profits from the family business or dividends from other investments. This type of non-wage income was not accounted for by this question, and respondents did not receive a formal salary or wage from their family businesses. One outlier for this response option was a respondent with a severe physical disability who did chores around the home and helped his

family with various writing projects and tasks. He considered this a “family business” because these tasks had to do with the daily activities of the family.

The categories ‘Not working at a job or business and not looking for work’ and ‘Looking for work’ were relatively clear and the responses were in scope. Respondents who selected ‘Not working at a job or business and not looking for work’ had varying life situations including two respondents who were not interested in working, one retiree, one student, one housewife, and one respondent with a disability who wanted to work but felt it would put a burden on his mother. The response ‘Looking for work’ was chosen by respondents interested in entering the workforce but with varied levels of activity pursuant to their job search – from generally wanting to work to actively searching on a daily basis. For example, one respondent who had retired recently after decades of working explained that she was interested in working again to keep her mind off her recently deceased husband. Another respondent, a student, said that her priority was her studies but that she would take a part-time job if it was offered to her.

Several respondents did not fit neatly into the provided categories or covered more than one category, and consequently, they had trouble understanding and responding to the question. Two cases of response errors occurred in which the respondents wanted to change their answers. These two respondents were both employed part-time, and one was also a student while working part-time. Initially they chose the answer category ‘With a job or business but not at work,’ and after discussion with their interviewer, they both wanted to change their responses to ‘Working for pay at a job or business.’

The other two respondents who chose the category ‘With a job or business but not at work’ were a paid volunteer who worked at a non-governmental organization and a self-employed person. The paid volunteer who selected ‘With a job or business but not at work’ explained her answer, albeit imperfect, in the following way: “I get paid, but the pay does not compare to what I would be drawing at a company that works for a profit. I work for a nonprofit, so my salary is not that high. So, I do a service. So, I think there should be another category.” She went on to explain that there should be additional categories for paid and unpaid volunteerism. On the other hand, the self-employed respondent considered the phrase ‘not at work’ to mean that he was not “confined [to] desk work.” Therefore, he chose ‘With a job or business but not at work’ because he worked from home and was not obligated to be in an office. Many respondents who did not choose this answer wondered what it meant. For

example, one respondent who chose ‘Looking for work’ said that the category ‘With a job or business but not at work’ probably referred to online or part-time employment.

*Of note*

The interview instrument used the following wording: “What is your correct working status.” In six cases, the interviewer used the term “current” rather than “correct.”

**13 / ONS\_1  
(USA/India)**

**[You/He/She] mentioned having a lot of difficulties doing some things. When did the first of these difficulties start?**

<b>Answer</b>	<b>Cases (USA)</b>	<b>Cases (India)</b>
At birth	1	13
Between the birth and the age of 15	3	13
Between the ages of 15 and 29	4	2
Between the ages of 30 and 65	12	6
After age 65	0	0
DK/REFUSED	0	1
No Data Entered	0	7

This question intended to capture the age of onset for disability, meaning “the age at which a disability becomes a dominant factor in a person’s life” (Mont, 2020). The point in a person’s life when disability onset occurred – at birth, during development, or in adulthood, for example – is important because it impacts how that disability affects a person’s life. Those who had a developmental or congenital disability had an easier time answering, because they could often times connect their difficulties to a specific, medical diagnosis. Those with later, adult-onset difficulties sometimes had difficulty answering, particularly if they had difficulties in multiple domains which gradually became worse over time.

Respondents answering at least ‘A lot of difficulty’ to any of the physical domain questions or ‘a lot’ to either of the emotional domain questions in the WG-SS Enhanced question set were screened automatically into this question. For those respondents, their answers to the WG questions identified them as having a disability<sup>12</sup>. In several cases from both rounds, the interviewer decided to ask the age of onset question despite the respondent not meeting the screening criteria. This decision was based on other factors within the interview such as the respondent self-identifying as a person living with a disability or the respondent answering ‘Some Difficulty’ to numerous questions within the disability question set. As a result, all 20 respondents from the United States round of testing and 35 respondents from the India round of testing received this question.

Four factors emerged that could potentially increase measurement error. First, this question requires that respondents will remember the prior WG Short Set Enhanced question set, connect their answers to this question, and respond accordingly. When respondents did not make that connection, they were unclear as to the purpose of the question. Second, respondents interpreted the term “difficulties” in two different ways: 1) specific diagnosable medical conditions, like cerebral palsy, and 2) salient physical or emotional problems affecting one’s life but not necessarily seen as a discrete, diagnosable condition. Third, respondents with multiple difficulties varied which difficulties were used to measure age of onset. Some measured onset from the most problematic issue and others measured onset from their earliest issue. And fourth, respondents counted their age at onset from different points: when they noticed symptoms, when those symptoms began affecting functioning, or when they were diagnosed.

### *Connecting to the WG Questions*

This question asks respondents to connect the prior WG-SS Enhanced question set, and their answers to that set, to this question before then assessing their difficulties. One respondent commented on the cognitive task of the question saying, “Hmm, I have to remember all the things we talked about.” Most respondents who received this question made that connection and based their answers on at least one of the conditions captured from the WG-SS Enhanced questions. Those who did not immediately connect this question to their prior answers were unclear as to the intent of the question. For example, one respondent said, “Now, you said difficulty doing some things. What things? Are you referring to the seeing?” Another respondent mis-interpreted the question as asking about instances she was presented

---

<sup>12</sup> See the section above titled “WG Disability Status”

with difficult situations or tasks, and she answered ‘Between the ages of 30 and 65’ because that is when her workplace underwent a period of restructuring.

### *Interpreting “Difficulties”*

Some respondents thought about difficulties as a diagnosable medical issue, while others conceptualized “difficulties” as functional difficulties (such as walking or the ability to raise or lower a bottle of soda). These two interpretations led the respondents to answer about two separate concepts: the former answered about the age of onset of their underlying condition, while the latter group answered about the onset of a specific difficulty or symptom. The question was clearer for respondents who had a diagnosable condition or disability from birth or during childhood. For example, those born with cerebral palsy could identify their one medical condition as the root cause of a variety of functional challenges. Those respondents then often chose “birth” as the age of onset. However, respondents whose disabilities or difficulties progressed over time during their lives, in some cases through illness or injury and in other cases through a combination of factors, including aging, considered what their difficulties were and when those difficulties arose in more diverse ways. For instance, one woman in her 50s who reported having ‘A lot of difficulty’ remembering and concentrating answered ‘Between the ages of 30 and 65.’ However, she thought of her difficulties as being an “annoying sign” that she was “declining,” but also said that her difficulties were “within a normal range” for people her age – not anything diagnosable. Another respondent, who had a series of accidents which contributed to her back pain, thought of that pain when answering ‘Between the ages of 30 and 65.’ Unlike the respondent previously described, this respondent felt that her pain was debilitating, got in the way of her functioning, and was not typical for someone her age (also in her 50s).

### *Respondents with Multiple Difficulties*

Respondents with multiple difficulties varied which difficulty or underlying condition upon which they based their answer. Some respondents did not “count” the difficulty which affected their functioning when answering this question, but instead focused on the difficulty that was most salient to them at the time of the interview. For example, one respondent thought about the first time she was fitted with reading glasses. Rather than reporting on her knee pain which affected her mobility, she answered, ‘Between the ages of 30 and 65’ and said, “I like to read books and magazines, and now it [difficulty seeing] makes me not want to read as much!”

In addition, some respondents across both rounds of testing focused on salient physical conditions while simultaneously discounting their anxiety, depression, or other mental difficulties. For example, one respondent who answered ‘Between the ages of 30 and 65’ thought about his physical difficulties but not his earlier-onset post-traumatic stress disorder (PTSD) or human immunodeficiency virus (HIV) status, which was why he reported having anxiety and depression. One reason for this could be that the questions about anxiety and depression are worded differently from the physical disability domain questions and do not specifically ask about “having difficulty.”

By contrast, respondents who had difficulties or diagnosed conditions in childhood, including those with multiple difficulties, some of which occurred later in life, pointed to those early, medically diagnosed conditions – either as the root cause of their multiple difficulties or as their earliest issue. For instance, one respondent chose “at birth,” since he was born with complications associated with a tumor diagnosed at his birth. Despite the fact that his early tumor caused serious complications during childhood, his current difficulties, and the cause of his disability, had their root cause in a more recent car accident.

#### *Reporting Age of Onset*

Respondents decided which answer category to choose in several different ways, depending on their circumstances. The cognitive task of selecting a response is different for those who do not remember their onset and those who do. For those born with a disability or condition, like cerebral palsy or complications from being born premature, respondents relied on what they learned from others about their condition or difficulties when growing up. They often chose ‘At birth’ as the onset of the condition. However, some also chose ‘Between birth and the age of 15’ despite having the condition since birth, particularly if the condition was not detected or diagnosed until later.

Respondents with later-onset disabilities or multiple, intersecting difficulties, typically chose their response options depending on the age they noticed symptoms or the age the symptoms started affecting their daily life. For example, one respondent with several physical difficulties including vision problems and leg pain reported ‘Between the ages of 30 and 65,’ explaining that his problems started around age 50. Despite having dry eye problems his whole life, his body aches and pains lately had been getting worse and getting in the way of his functioning – thus he thought about those recent functional changes when answering.

**14**                    **What was your employment status last week?**  
**(USA)**

**EM\_1a**                **What was [your/his/her] employment status last week?**  
**(India)**

<b>Answer</b>	<b>Cases (USA)</b>	<b>Cases (India)</b>
Employed (worked for pay or profit)	12	25
Unemployed (i.e. not in employment, carried out activities to seek/find employment and were available to take up employment given a job opportunity)	3	7
Inactive (Not employed and not looking for work)	4	6
DK/REFUSED	0	1
No Data Entered	1	3

All respondents were screened into this question, (indicated for ages 15+ in the United States and 18+ in India. Nineteen respondents in the United States round of testing and all 42 respondents in the India round of testing received this question. One United States respondent was not asked this question because time was running low for the interview.

This question performed differently between the two rounds of testing. Among the American respondents, confusion and errors were limited to the answer category ‘Inactive (Not employed and not looking for work).’ Two respondents needed the term ‘Inactive’ explained before selecting it. Two other respondents answered ‘Inactive (Not employed and not looking for work)’ despite actively looking for work, resulting in response error. For example, one of the respondents who was looking for work thought the term ‘Inactive’ referred to being less active at work (e.g., assigned fewer hours) so he answered ‘Inactive (Not employed and not looking for work)’ despite having had several job interviews the week prior. Apart from these four respondents who had some difficulty with the term ‘Inactive,’ the United States round of respondents answered within scope.

Respondents in the India round of testing had more difficulty with this question than the United States round respondents. This was due to the response options themselves (particularly the option ‘Inactive

(Not employed and not looking for work)'), the repetition of an employment question for the India round, and the higher proportion of India round respondents engaged in work that was not traditional, paid employment.

Twenty-two of the 42 respondents asked for the question or response options to be repeated or defined. Many respondents commented that the response options were long and confusing. Because they had answered an employment question (ILO2) previously, several respondents were further frustrated by the repetition. Additionally, in the Indian context, many people viewed the term 'Inactive' as pejorative, spurring several respondents to avoid choosing that option, indicating that social desirability bias affected the performance of the question. For example, one respondent who was unemployed and not looking for work chose 'Unemployed (i.e. not in employment, carried out activities to find employment and were available to take up employment given a job opportunity)' rather than 'Inactive (Not employed and not looking for work)' because he felt the term 'Inactive' signified "someone who is lazy and does not want to work." Another respondent said that 'Inactive (Not employed and not looking for work)' should not be an option on an employment question because laziness is a personal trait. One factor complicating the Indian cultural understanding of the term 'Inactive' is that it is difficult to accurately translate into one of the Indian languages. One respondent attempted to translate the term into Gujarati as *Hu Baisi Rahu Chu*. This translation could also be interpreted as "I stay in bed" or "I live in luxury."

Those who worked but did not have traditional, salaried positions had particular difficulty choosing an answer category. The seven respondents who were self-employed and/or worked at a family business without pay all expressed confusion with the question or noted that none of the response options applied to them. They either responded by leaving the question blank, answering 'Don't know,' or 'Employed (worked for pay or profit)'. Most, even those working without pay, answered 'Employed (worked for pay or profit)'. One such respondent explained her response by saying that although she did not receive any pay, she contributed to the business profits. "If I didn't go," she said, "probably a person will be hired who may not contribute much to the profits."

Students were a group of respondents who were not well captured by this question. One left the question blank stating that he will look for a job after completing his studies. The other six either answered 'Employed (Worked for pay or profit),' 'Unemployed (i.e. not in employment, carried out activities to find employment and were available to take up employment given a job opportunity),' or

‘Inactive (Not employed and not looking for work)’. While the two employed students were completing their studies while working, the remaining four either answered ‘Unemployed (i.e. not in employment, carried out activities to find employment and were available to take up employment given a job opportunity)’ or ‘Inactive (Not employed and not looking for work),’ although none of those four reported that they were actively looking for work in the week prior. Some hesitated to answer ‘Inactive (Not employed and not looking for work)’ because, within the Indian cultural context, they felt that the term did not accurately describe their experiences.

## Barriers Questions

**15 (USA)** [Original version – USA round only] Which of the following, if any, would make it more likely for you to seek employment? Check all that apply.

**EW\_1a (India)** [Revised version – India round only] Which of the following, if any, would make it more likely for [you/him/her] to find employment? Check all that apply.

Answer (Respondents may select more than one response)	Cases (USA)	Cases (India)
Training to qualify for available jobs	1	28
Transportation from my home to available jobs	2	27
Help in locating available jobs	2	11
Greater belief that someone will hire me	2	12
Assistive devices or technology to help me do the job*	2	
<i>[Revised] Assistive devices, such as a wheelchair, or special technology to help with my difficulties**</i>		14
A work place that accommodates people with disabilities	3	17
Other: _____	1	3
DK/REFUSED	0	1
No Data Entered	0	1

\*Respondents in the India Round did not receive this response option

\*\*Respondents in the United States Round did not receive this response option

During the United States round, this question was asked of those reporting at least ‘a lot of difficulty’ to any of the physical domain questions or ‘a lot’ to either of the emotional domain questions in the WG Short Set on Functioning - Enhanced question set and who were unemployed and not looking for work (inactive). Four of the 20 United States respondents were screened into this section and received the original question.

During the India round of testing, all 42 respondents were screened into the revised version of this question regardless of employment status or responses to the WG-SS Enhanced questions.

For both sets of respondents, employment status and disability self-identification were important elements in how the question and response options were considered. Revisions made to the response option about assistive devices between the United States and India rounds clarified that the intent of that option was to capture assistive devices specifically aimed at assisting those with disabilities, not technology generally.

Additionally, both sets of respondents included in their question interpretation a focus on overarching barriers associated with their disability that impacted their ability to seek or find employment. However, these barriers differed across contexts. For three of the American respondents, obstacles to seeking employment included societal structures, such as poverty, and personal factors, including family conflict and lack of education. By contrast, the Indian respondents identified the primary impediment to finding employment as widespread discrimination against persons with disabilities. Additionally, lack of accessibility on public transit, in stores, at restaurants, and in other public spaces made some respondents feel isolated from their coworkers and the general population. Analysis of the question is divided between the original (USA) and revised (India) versions.

### **Original Version – United States Round**

#### *Assistive devices or technology to help me do the job*

In considering the various options, United States respondents understood each of the items as intended with one exception: All respondents understood the item about assistive devices as asking about anything pertaining to the field of technology, not specifically devices to help those with disabilities. For example, one respondent stated that he thought this item meant “more training to be able to use

diagnostic machines and new software.” As a result of this confusion, the two respondents who answered “yes” to this item, should have answered “no.” In order to prevent future false positive results, this response option was changed to ‘Assistive devices, such as a wheelchair, or special technology to help with my difficulties’ for the India round of testing.

### *Employment status*

Initially, the intended respondents for this section included only respondents who answered ‘a lot of difficulty’ to at least one of the physical disability domains or ‘a lot’ to either of the emotional disability domains and who were also unemployed and not looking for work (inactive). In some cases, however, it seemed that respondents who were screened out of this section and not asked these questions actually should have been screened into this section. This is because, upon further elaboration during the interview, they did not appear to be actively looking for work, only “open to the possibility” of employment. For this reason (and given the small sample), for the remaining interviews, interviewers included all unemployed respondents regardless of whether they said they were looking for work. In these few cases, the question was reworded: “Which of the following, if any, would make it more likely for you to find employment?” In these cases, the question appeared to function appropriately. For example, one respondent with severe, debilitating depression reported looking for phlebotomy jobs given a recent degree, although he was only applying to a position “every one or two months.” In providing an answer, he interpreted the question as asking “what would make it easier for you to find work?” He reported that it would be useful if he had 1) ‘Help in locating available jobs,’ 2) ‘Greater belief that someone will hire me,’ and 3) ‘A work place that accommodates people with disabilities.’ (He also answered ‘Assistive devices or technology to help me do the job,’ but, along with the other respondents, he interpreted this as computer and software training, not an assistive device to overcome his disability.)

### *Disability self-identification*

Respondents interpreted this question through the lens of their personal identification as someone with a disability or someone without a disability, which generally aligned with their WG categorization. One of the four U.S. respondents who were asked this question did not think of himself as having a disability. In answering the question, he reported “yes” to all except ‘a work place that accommodates people with disabilities’ specifically because he did “not have a disability.” The respondent answered based on “the obstacles that we all face as far as job searching and how would those things help with those obstacles.”

In comparison to the respondent who did not identify as having a disability, all three of the other respondents who answered this question did self-identify as having a disability, and they interpreted the item ‘greater belief that someone will hire me’ from within a disability framework. For example, one respondent stated that he was specifically thinking that “someone won’t discriminate against him” based on his disabilities and that “they will give me a chance to see if I can do the work.” Additionally, these respondents answered “yes” to the item about accommodation because it meant that the workplace would have to be a more open environment. For example, one respondent explained that “that way they can’t fire me because of my disabilities.” He explained that when he was employed, he used to hide his arthritis from his employer and co-workers when he was feeling pain in his hands and ankle because he was afraid that he would lose his job.

### *Social determinants of health*

Other factors apart from those listed in this question affected the respondents’ ability to find work. Additionally, those who thought of themselves as having a disability did not identify their disability as the sole reason for unemployment. While this did not result in response error, primary reasons for an individual’s unemployment may not be captured fully. For example, one respondent had recently become homeless because his wife, who was the sole breadwinner, was killed in a car accident. He stated that his greatest need (and barrier to employment) was finding a place to live. His life was complicated by poverty, lack of education, and grief. He said that he could not consider job training until his housing issue was resolved, commenting that paying for training and finding transportation would just “slow him up.” In addition to each of the other items that he reported needing, he also reported “other—housing.”

### **Revised Version – India Round**

All respondents, regardless of their employment or job searching efforts or disability status, received this set of questions. The stem of the question was reworded to account for both those who are working or looking for work and those who are not: *Which of the following, if any, would make it more likely for you to find employment? Check all that apply.* Consideration went into determining whether the word “seek” or “find” should be in the question; “seek” applies to those who were not looking for work and “find” applies to those who were already looking for work. It is also possible to use “seek or find” or

“seek and find.” In the end, “find” was chosen for the next round of testing because it implies seeking and is simpler.

To clear up the assistive device misunderstanding, the category was changed to: *Assistive devices, such as a wheel chair, or special technology to help with my difficulties.*

### *Interpretation of Response Options*

The Indian respondents did not display confusion over the question’s content. However, several noted that the response options were lengthy and needed questions to be repeated. Additionally, one respondent who was employed felt the question did not apply to him. Another felt the question was directed toward respondents with disabilities or those at the beginning of their career.

The response option ‘Training to qualify for available jobs’ was interpreted differently by those working and those not working. Those non-working interpreted this as referring to training for basic job qualifications whereas working respondents interpreted this as training needed for job growth or promotion. Two respondents (both without disabilities) noted that people with disabilities may need more training than others to secure employment.

Respondent considerations of the second response option, ‘Transportation from my home to available jobs,’ differed between those with and without disabilities. Those without disabilities or functional difficulties generally interpreted this response option in terms of distance to work and/or the length of the commute to work. Those respondents with a disability and those who answered from the perspective of someone with disabilities all discussed the expense and challenge of transportation in India for those with disabilities. Public transit is crowded and generally inaccessible, requiring many to take more expensive forms of transportation – like taxis or private cars. A few respondents with disabilities suggested that employers should help subsidize transportation costs because people with disabilities in India spend a larger proportion of their salary on transportation than others.

The revision of the response option ‘Assistive devices or technology to help me do the job’ to ‘*Assistive devices, such as a wheel chair, or special technology to help with my difficulties*’ clarified this option to be specifically about devices assisting people with disabilities. In an explanation of one such device, a respondent said, “I use an assistive keyboard and use the mouse option on keyboard itself – I use the

arrow keys [to move the mouse].” Another mentioned “software for the visually impaired.” Only respondents who self-identified as having a disability or answered this question from the perspective of someone with a disability marked this option, most of whom also were categorized as living with a disability according to their responses to the WG Short Set Enhanced questions as well. Examples of assistive devices respondents described included specialized software, wheelchairs, and lifts.

For respondents with disabilities, the response options, ‘Greater belief that someone will hire me’ and ‘A work place that accommodates people with disabilities’ were not mutually exclusive in the constructs they captured. Respondents with disabilities (WG and self-identified) viewed ‘Greater belief that someone will hire me’ as referring to amicable workplaces where employers and coworkers are not discriminatory towards applicants living with disabilities. Likewise, respondents interpreted ‘A work place that accommodates people with disabilities’ as either a workplace with physical accessibility, such as elevators and accessible toilets, or with coworkers and employers that are not discriminatory to workers with disabilities. This pattern was not clear among American respondents, potentially due to the small number screened in for the United States round.

#### *Employment status*

All respondents received this question, regardless of employment status. Most respondents who were currently not seeking employment understood the revised question as a hypothetical, “If I wanted to seek employment, what would help me do so?” However, one respondent who was working for pay at a job or business refused to answer this question because she interpreted this question to be only applicable to those who are currently looking for employment.

#### *Disability self-identification*

As with the United States round, respondents primarily interpreted this question through the lens of their personal identification as someone with a disability or someone without a disability, which generally aligned with their WG categorization. Most respondents who did not identify as having a disability (12 total) were also categorized as such by their WG Short Set on Functioning - Enhanced question responses and interpreted the categories as services that could help “anyone” looking for employment. For example, one respondent who did not identify as having a disability and who was not working at a job or business and not looking for work selected ‘transportation from my home to available jobs’ because she would only choose to take a job that had a reasonable commute. However, unlike in the

United States round of testing, Indian respondents without disabilities sometimes viewed this question within a disability framework. Four of those who did not identify as living with a disability answered, as one respondent described, “from the perspective of someone with a disability,” imagining what would be needed for a person with a disability to find employment. This may be due in part because the interviews took place at ADAPT, a center aimed to assist those with disabilities.

**16 (USA)**            **[Original version – USA round only] How supportive would your family members be if you decide to work?**

**ATT\_3 (India)**            **[Revised version – India round only] In terms of you being employed, how supportive are your family members?**

Answer	Cases (USA)	Cases (India)
Very supportive	2	37
Somewhat supportive	0	3
Not supportive	0	0
DK/REFUSED	0	0
No Data Entered	18	2

Respondents screened into the prior Barriers question, 15/EW\_1a (“Which of the following, if any, would make it more likely for you/[you/him/her] to seek/find employment? Check all that apply.”) from the United States and India Rounds respectively, were also screened into this question. However, just two United States respondents were asked the original question version. This was because one of the four respondents to the prior question was running low on time, and another was not asked this question because he had recently lost his family in a car accident. All 42 Indian respondents were asked the revised version of this question. Below, the analysis of the question is divided between the original and revised versions.

### **Original Version - United States Round**

Only two of the United States respondents were screened into and asked this question. Both respondents answered ‘Very supportive.’ Interestingly, both respondents were surprised and taken aback when

asked the question. Neither respondent saw themselves as having a disability that would prevent them from working and, consequently, did not interpret the question within a framework of disability. Instead of hearing the question as “Given your disability, does your family think it is safe or productive for you to have a job?” they heard the question as asking “Does your family want you to have a job?” Unable to grasp the true intent, one respondent at first thought he misheard the question. When first questioned, he asked “If I decide *to* work or *not* to work?” After hearing the clarification, he called the question “dumb” and said, “Who won’t be excited if someone started to work?” When asked to explain his answer, the other respondent laughed and stated sarcastically, “Because they want me to succeed?”

### **Revised Version – India Round**

The question was revised to account for all respondents with varying work statuses and degrees of functional difficulties: *In terms of you being employed, how supportive are your family members? Very Supportive, somewhat supportive, not supportive.* All 42 respondents in India received the revised question.

Several patterns emerged for this question. First, respondents considered different levels of support across family members. In doing so, they focused on the “family support” aspect of the questions – at times overlooking the “employment” aspect of the question. Second, respondents discussed three overall types of family support. And finally, when selecting their responses, there was little variation in response selection, even among those who described scenarios where a family member was not supportive. These patterns are discussed next.

When respondents considered varying degrees of support from different family members, they had to weigh those variations. Four respondents specifically mentioned such variations in the discussion of this question. For example, one respondent answered ‘Somewhat supportive’ because her father-in-law was very supportive of her and her husband was less so. Another respondent said that his parents were very supportive, and his wife was somewhat supportive, and he answered ‘Very supportive.’ In these two examples, respondents both had mixed levels of support in their families, but they ultimately chose two different response categories.

Overall, respondents tended to focus on the family support aspect of this question, and at times people did not connect their response to employment at all. Nine respondents (including those who were and were not employed) did not connect their responses to employment and six additional respondents answered in vague terms that may or may not have been connected to employment.

Respondents considered three types of support when thinking about this question, which may all be considered in scope. Financial support, in the form of housing, a caretaker, or a driver; physical support, referring to help with dressing, feeding, and transport; emotional and moral support; or a combination of these. Respondents, both with and without disabilities, most commonly referred to emotional and moral support as the type of family support received. For example, one respondent who was unemployed at the time of the interview said, “I have worked all my life. My mother will be very happy if I start working.” Different types of support from family represented different relationships and experiences. One respondent was thinking of financial support and said that her family helps pay for her training, and once she is finished, she will not take any more money from her parents. Another respondent, referring to the physical support she received said, “My parents are very supportive in my going to office. Like sometimes they find a cab for me. Whenever there is any problem in the office, they help me to come out of it.” Both respondents answered ‘Very supportive.’

#### *Response selection*

There was very little variance in response category selection. In that, three respondents answered ‘Somewhat supportive,’ and none answered ‘Not supportive.’ All three who answered ‘Somewhat supportive’ were categorized as having a disability according to their WG answers. One respondent explained her ‘Somewhat supportive’ response in the following way: “My father says, ‘why [do you] want to earn? Every [thing] is there. Sit at home...why...stretch yourself?’” This account suggests a lack of support. Likewise, another respondent, who answered ‘Very supportive,’ said that his mother was his primary caretaker and he did not want to bother her by getting a job. This explanation also lacks evidence of support for the respondent being employed. This question may be affected by social desirability bias; respondents may hesitate to suggest that their families are not supportive of them in any way – even in the more specific realm of employment.

#### **Accommodations Questions**

For the following three accommodations questions, additional follow-up questions were added for the India Round. There was one follow-up question added to WA\_1, and two follow-up questions were added for both WA\_2 and WA\_3. The summaries for the accommodations questions and follow-up questions are below. Interview notes were particularly limited for the follow-up questions of WA\_3 (see the above section Limitations of the Report for clarification).

**17 (USA) Has your workplace been set up in a way to account for difficulties you have in doing certain activities?**

**WA\_1 (India) Has [your/his/her] workplace been set up in a way to account for difficulties you have in doing certain activities?**

Answer	Cases (USA)	Cases (India)
Yes, fully	3	11
Yes, partially	6	9
No*	3	*
<i>Not at all (go to WA_1a)**</i>	**	3
<i>I do not have difficulties that require accommodation**</i>	**	4
DK/REFUSED	0	3
No Data Entered	8	12

\*Respondents in the India round of testing did not receive this response option because it was revised.

\*\*Respondents in the United States round of testing did not receive this response option.

For the India Round, if the respondent answered ‘Not at all,’ they were then asked one follow-up question: **WA\_1a – “Would you need any modification?”** The follow-up question will be discussed after the initial workplace accommodations question (WA\_1).

Respondents who were employed and who responded ‘A lot of difficulty’ or ‘Cannot do at all’ for at least one of the WG physical disability questions or ‘a lot’ to at least one of the emotional disability questions were screened into this question. In several cases from both rounds, the interviewer decided to ask the workplace accommodations question set despite the respondent not meeting the screening criteria. This decision was based on other factors within the interview such as the respondent self-identifying as a person living with a disability or a respondent having a work situation not captured in

the employment question (14/EM\_1a, What was your employment status last week?). Twelve of the 20 United States round respondents were asked this question. Thirty of the 42 India round respondents were asked this question with revised answer categories. Both groups considered a similar set of accommodations in the workplace and the same type of factors affecting their answer, such as whether accommodation was denied or approved. The main differences between the groups came from the respondents in India having different types of work settings and situations. Several respondents were self-employed or working for family-owned businesses. These respondents answered in a number of different ways, creating response errors that did not arise in the United States group.

### *Types of Accommodations*

In formulating their answers, respondents in the United States considered a range of accommodations that could be provided in a workplace setting. They included: ergonomic aids, such as special chairs and armrests; computer adjustments, such as font size; environmental control, for example, providing a quiet space for the employee to do their work; comfort aids, such as foot stools and heating pads; and maintaining accessible buildings, for example, having elevators and ramps. Respondents also considered a number of intangible accommodations, including a variation in activities and allowing the employee to work different schedules or fewer hours. Finally, two respondents considered the attitudes of other employees. For example, one of those respondents answered ‘Yes, partially’ because, while she was fully provided for in terms of tangible accommodations, she does not feel accepted by co-workers in regard to her sleep disorder, explaining that they have “no patience” for her when she is “half asleep in morning meetings.”

Like respondents in the United States round, the Indian respondents also considered a range of possible tangible and intangible workplace accommodations. They included: computer adjustments, environmental control, comfort aids, accessible buildings, variation in activities, and different schedules (including flexible start times). Five respondents also mentioned the attitudes of coworkers and employers as an important part of workplace accommodations. For example, one respondent answered ‘Yes, partially’ because although the workplace had created a ramp and made the bathroom accessible, he was fired three months after being hired due to his disability. He said, “But, then I approached the court and they had to give me the job back.” Unique accommodations described during the India round included transportation assistance, meaning a private pick-up and drop-off and at-work help, referring to personal assistants, or coworkers lending a hand.

### *Response selection*

Several factors went into respondents' answers to this question, including the actual provider of the accommodation—whether it was the employer, the respondent, or both, whether a particular accommodation was a special accommodation for the respondent or whether it was offered to everyone on the staff, and whether or not the respondent asked their employer for an accommodation and whether that request was granted or denied. At times respondents considered a combination of these factors simultaneously when choosing an answer. How respondents considered these components impacted their response to the question and will be discussed next.

With regards to who supplied the accommodations, one respondent answered 'Yes, fully,' thinking specifically that her employer has provided some accommodations, but she has also brought in her own belongings (e.g. wrist supports, bottle openers, heating pads, etc.) to use at work. When asked to explain her answer, she stated "Because I contribute to myself.... I try to handle it myself, but I know that if it ever got out of hand, by law, they are supposed to help me." Another respondent, by contrast, answered 'Yes, partially' because she independently adjusts her tasks to accommodate her pain – her employer does not contribute.

At times, respondents felt they were less accommodated if the accommodation was not specific for them. For example, one respondent reported 'Yes, partially' as opposed to 'Fully' because "it's available to everyone.... There's nothing specific for me." For this accommodation, she was referring to the ability to magnify her computer to 135% when reading documents. Likewise, another respondent explained his answer, 'Yes, partially,' by saying, "I guess they follow handicap rules – they have an elevator – but I wouldn't say they're accommodating for me in particular. There's nothing extra that they do for me that they wouldn't have to do for anybody else."

The event of being denied a request strongly influenced respondents' answers. No respondent that was denied an accommodation answered 'Yes, fully.' However, one respondent who was denied when he asked for a quieter work environment, answered 'Yes, partially' because he was given other accommodations including a varied work schedule. Additionally, two respondents in the United States did not ask their boss for an accommodation specifically because they were worried that they would be fired. Both had physically demanding jobs (one was a house cleaner and the other worked in a patient

care facility), and neither had received any form of accommodation from their employer. While the respondent who was a house cleaner answered ‘No,’ the respondent in patient care answered ‘Yes, partially’ because she has tried to make physical adjustments herself when bending and reaching for things. In explaining her answer, she stood up and supported herself on the interview table to demonstrate the ways she bends down to reach for items that have fallen off beds in patient rooms. She explained, “I have to do the job, so I have to figure it out,” meaning she needs to devise ways to get the job done despite her pain.

Response Error (United States): Finally, two respondents in the United States experienced a great deal of confusion when asked this question; they did not define themselves as having a disability nor did they realize that their responses in the prior WG-SS Enhanced question set identified them as “having difficulties” and screened into the accommodations question set. And so, as a result, they could not make sense of the question. Specifically, both respondents stated that they did not understand what was meant by “difficulties,” and both asked for the question to be repeated multiple times. In the end, one respondent interpreted the question as asking about her work ethic (answering ‘Yes, fully’ because she is a good worker) and the other believed it was asking about how well she got along with her co-workers (answering ‘No’ because she has no difficulties with her colleagues).

*Revision:* To prevent this type of confusion, response categories were changed to:

1. *Yes, fully*
2. *Yes, partially*
3. *Not at all*
4. *I do not have difficulties that require accommodation*

*India Round:* Respondents in India received the revised response categories.

The response option changes appeared to remove confusion and error for respondents who did not identify as living with a disability.

Response Error (India): Finally, errors arose with respondents who were self-employed or running a family business from their home. In those cases where the employer and employee were the same person, and the workplace was the home, this question did not produce consistent responses. For example, one self-employed respondent who identified as having a disability answered ‘I do not have difficulties that require accommodation’ because, despite requiring ramps, elevators, and an accessible

bathroom, he was comfortable working from home where those accommodations were already installed. Another respondent with a disability answered ‘Not at all’ because he interpreted this response to mean “No accommodation needed” rather than “Not at all accommodating.” This issue did not arise with people working in family businesses that were described as off-site workplaces that had accommodations for people with disabilities.

### Follow-up Question

#### **WA\_1a – Would you need any modification?**

**-Yes**

**-No**

Respondents in the United States round of testing did not receive this question. This question was designed to be administered to people in the India round who answered ‘Not at all’ to the question about workplace accommodations (WA\_1).

The three Indian respondents who answered ‘Not at all’ to the question on workplace accommodations (WA\_1) considered the question in one of two ways: either as referring to requiring additional modifications to those already discussed or as referring to requiring any modifications, including those already discussed. One respondent considered the question to be asking, “Would you need any *additional* modification to those already discussed?” This interpretation led him to answer ‘No’ to the follow-up (WA\_1a) because he did not need modifications in addition to accessible bathrooms which had not yet been installed, but that he still required. The problem of accessible bathrooms had led that respondent to answer ‘Not at all’ to WA\_1 (workplace accommodations). The other two respondents considered the question to be asking about *any* accommodation. For example, one respondent answered ‘Yes,’ because she needed accommodations described during discussion of WA\_1, but she also noted that she did not want to ask for anything from her employer.

**18 (USA) Is your work schedule arranged to account for difficulties you have in doing certain activities?**

**WA\_2 (India) Is [your/his/her] work schedule arranged to account for difficulties you have in doing certain activities?**

Answer	Cases (USA)	Cases (India)
Yes, fully	5	13
Yes, partially	5	4
No*	1	*
<i>Not at all ** (Go to WA_2a)</i>	**	4
<i>I do not have difficulties that require accommodation**</i>	**	4
DK/REFUSED	1	2
No Data Entered	8	15

\*Respondents in the India round of testing did not receive this response option because it was revised.

\*\*Respondents in the United States round of testing did not receive this response option.

For the India Round, if the respondent answered ‘Not at all,’ they were then asked two follow-up questions: **WA\_2a** – “**Would you need any other arrangement of your work schedule?**” and **WA\_2b** – “**Would you need your work schedule to be changed?**” These follow-up questions will be discussed after the initial work schedule question (WA\_2).

Respondents who were employed and who responded ‘A lot of difficulty’ or ‘Cannot do at all’ for at least one of the WG physical functioning questions or ‘a lot’ to at least one of the WG emotional functioning questions were screened into this question. Like 17/WA\_1 (Has your/[your/his/her] workplace been set up in a way to account for difficulties you have in doing certain activities?) described above, in several additional cases, the interviewer decided to ask Question 18/WA\_2 based on other factors within the interview such as the respondent self-identifying as living with a disability or having a work situation not captured by the employment question (14/EM\_1a, What was your/[your/his/her] employment status last week?). Twelve of the 20 United States respondents were asked this question. Twenty-seven of the 42 India respondents received this question.

#### *Types of Accommodations*

For the most part, respondents in the United States and India rounds considered similar aspects of their work schedule and tasks, such as flexibility to set their own hours or to determine when to do particular tasks, which tasks to do, the ability to telework, as well as being offered traditional sick or annual leave that many employees already received. In a few cases, respondents based their answers not on actually

changing their schedule but rather on other accommodations made so that their situation was more amenable. For example, one respondent said that while she was unable to adjust her schedule, and sometimes even had to come in very early, answered ‘Yes, fully’ because her employer had allowed her to set up her cubicle in a comfortable way so that this was not a problem for her. Another respondent, who also answered ‘Yes, fully,’ explained that his employer gave him computer software which, in turn, allowed him to telework.

Multiple respondents described being able to vary their activities in order to “make it” through the whole workday. For example, one respondent who answered ‘Yes, fully,’ explained that she had a regular schedule but was able to decide what tasks to perform and in what order, so was able to pace herself throughout her shift to minimize pain: “I just get up after 20-30 minutes and do something else. I do my own things...There are certain things I need to do, but [my boss] doesn’t say anything about how I need to get it done.”

Several Indian respondents answered ‘Yes, fully’ because they were able to do the assigned tasks as given. Therefore, they based their answers on their ability to do the work tasks, rather than changes to their schedule that had been made to account for their difficulties. In these cases, the respondents were only assigned work that their supervisors knew was within the respondents’ abilities. As one woman explained, “I am able to do all my work as allotted to me [...] They assigned me work that I can do. They did not give me work that I cannot do.” A respondent from the United States, who also answered thinking of adjusting activities answered, ‘Yes, partially,’ because his employer allowed him to sit for half of his shift as a night watchman because he was unable to walk around the building. He answered ‘Yes, partially’ because he was able to sit for only half of a full-time shift. The respondent who in the previous question answered ‘partially’ because of co-workers’ attitudes shown at morning meetings, answered ‘partially’ to this question as well explaining that her workplace would be more accommodating if they did not schedule meetings early in the morning. Those who specifically considered accommodations to their work tasks in this question then subsequently either provided redundant answers for or were confused by the following question about work tasks, WA\_3 (“Are [your/his/her] work tasks arranged to account for difficulties you have in doing certain activities?”).

### *Response selection*

The same factors that went into respondents’ answers to the previous question were also considered in this question. Those factors included the actual provider of the accommodation, whether the respondent

asked and was denied a request, whether a particular accommodation was a special accommodation for the respondent or whether it was offered to everyone on the staff. One respondent, for example, who said that he wanted to be able to telework three instead of two days a week, answered ‘fully’ because he has not formally requested that accommodation. One woman who included sick time and annual leave answered ‘partially’ specifically because that form of flexibility is given to all employees and is not a special accommodation for her. This question produced repetitive and overlapping responses for a few respondents who had already thought about and discussed their tasks and schedules when answering about workplace accommodations (17/WA\_1). For example, one respondent with an ankle injury answered ‘Yes, partially’ for both the workplace accommodations question (17/WA\_1) and this question about work schedules (18/WA\_2) because his employer allowed him to fill his work schedule with desk work but had in turn reduced his hours. The same considerations informed the answers to both questions.

Response Error (United States): Finally, the two United States respondents who were confused in the previous workplace accommodations question (17/WA\_1) because they did not identify as having a disability, were also confused by this question. Like the workplace accommodations question (17/WA\_1), one of respondents stated that she could not understand why she was being asked the question because she does not have a disability. She did, however, answer ‘Yes, fully.’ On the other hand, the other respondent understood the question as asking “Is your schedule presenting any difficulties?” After asking for the question to be repeated multiple times, she answered ‘Don’t know.’

*Revision:* As in the previous question (17/WA\_1: Has your workplace been set up in a way to account for difficulties you/[your/his/her] have in doing certain activities?), response categories were changed to:

1. *Yes, fully*
2. *Yes, partially*
3. *Not at all*
4. *I do not have difficulties that require accommodation*

Respondents in India received the revised response categories.

### *India Round*

Like the question about workplace accommodations (WA\_1) above, the response option changes appeared to remove error for the respondents without disabilities.

Response Error (India): Also, as with the question on workplace accommodations (WA\_1) above, errors arose for those who were self-employed or working for a family business, and respondents who expressed the most confusion were unemployed. For example, a respondent who was self-employed answered ‘Not at all.’ This did not indicate that his schedule was not accommodating at all, but rather that there was no need for accommodations because he worked in his own family business where hours were flexible. Another self-employed respondent answered according to prior work experience, when he had worked in an office. This respondent also wanted to change his response from ‘Yes, fully’ to ‘I do not have difficulties that require accommodation.’

### Follow-up Questions

#### **WA\_2a – Would you need any other arrangement of your work schedule?**

**-Yes**

**-No**

This question was designed to be administered to respondents who had answered ‘Not at all’ to the question about work schedules (WA\_2). Respondents in the United States round of testing did not receive this question.

The four respondents who answered ‘Not at all’ to the question on work schedules above (WA\_2) all understood this question as intended and answered without error. Those who answered ‘No’ to this follow-up were satisfied with their schedule and those who answered ‘Yes’ wanted a change to their schedule. For example, one respondent said his schedule “depends on the workload.” Even though he said his schedule was ‘Not at all’ arranged to accommodate his difficulties, at that time the schedule was fine, so he answered ‘No’ to this question.

#### **WA\_2b – Would you need your work schedule to be changed?**

**-Yes**

**-No**

This question was designed to be administered to respondents who had answered ‘Not at all’ to the question about work schedules (WA\_2). Respondents in the United States round of testing did not receive this question.

The four respondents who answered ‘Not at all’ to the question on work schedules above (WA\_2) all provided the same responses here (WA\_2b) as to the prior follow-up question (WA\_2a). There did not appear to be any change in consideration from the first follow-up question to the second.

**19 (USA) Are your work tasks arranged to account for difficulties you have in doing certain activities?**

**WA\_3 (India) Are [your/his/her] work tasks arranged to account for difficulties you have in doing certain activities?**

Answer	Cases (USA)	Cases (India)
Yes, fully	5	9
Yes, partially	3	5
No*	3	*
<i>Not at all**</i>	**	5
<i>I do not have difficulties that require accommodation**</i>	**	8
DK/REFUSED	1	1
No Data Entered	8	14

\*Respondents in the India round of testing did not receive this response option because it was revised.

\*\*Respondents in the United States round of testing did not receive this response option.

For the India Round, if the respondent answered ‘Not at all,’ they were then asked two follow-up questions: **WA\_3a – “Would you need any other arrangement of your tasks?”** and **WA\_3b – “Would you need your tasks to be changed?”** The follow-up questions will be discussed after the initial work tasks question (WA\_3).

Respondents who were employed and who responded ‘A lot of difficulty’ or ‘Cannot do at all’ for at least one of the WG physical functioning questions or ‘a lot’ to at least one of the WG emotional functioning questions were screened into this question. Like 17/WA\_1 (Has your/[your/his/her] workplace been set up in a way to account for difficulties you have in doing certain activities?) and 18/WA\_2 (Is your/[your/his/her] work schedule arranged to account for difficulties you have in doing certain activities?) described above, in several additional cases, the interviewer decided to ask Question

19/WA\_3 based on other factors within the interview such as the respondent self-identifying as living with a disability or having a work situation not captured by the employment question (14/EM\_1a, What was your/[your/his/her] employment status last week?).. Twelve of the 20 United States respondents were asked this question. Twenty-eight of the 42 India respondents were asked this question with revised response categories.

### *Selecting a response*

When formulating their answers, respondents in the United States and India rounds considered the same set of factors as in the previous two questions: the actual provider of the accommodation, whether the respondent was ever denied a request, and whether or not a particular accommodation was offered to an entire staff. As described earlier, respondents' answers varied depending on their consideration of each factor. For example, while some respondents only counted an accommodation if it was provided by the employer, others included self-empowered changes (e.g., adjusting schedules, taking breaks, moving differently) as a valid accommodation.

To the extent that respondents considered their work tasks when answering the previous questions, respondent's answers to this question also reflected much of their previous thinking. Like the hotel security guard who was only allowed to sit for half of a shift, the actual task figured central to his first two answers. Consequently, for him as well as others who focused on the actual task in the earlier questions, this question was repetitive. Likewise, an Indian respondent said, "But I answered about my tasks in the previous question. I have already said that at my level tasks are not assigned to me." This respondent had described her task and schedule together during the question on work schedules (18/WA\_2) above.

Similarly, there were respondents from both the United States and India rounds who, for this question, did not focus on the actual task, but rather on their ability to adjust their schedule or their environment to more comfortably complete their tasks—aspects of their work that the two questions directly asked about. For example, one woman, who answered 'Yes, fully,' explained that having the printer, printer paper, and file cabinets near her desk, made it such that she does not have to get up and move around. Another respondent, who answered 'Yes, fully,' referred to discussions from the previous "Accommodations" questions when discussing this question; she has learned to take breaks because her pain increases when she does the same task for too long. As she previously explained and discussed

here again, she has never specifically requested changes to her work tasks to accommodate her pain difficulties. The same woman with the sleeping disorder answered ‘partially’ to this question because, as she explained earlier, she does not have control over the schedule of the meetings. Another respondent answered ‘Not at all’ because, although he could do his work tasks, he had faced discrimination at work and had been denied a promotion due to his disability. For these respondents, while the question was not entirely repetitive, there was a great deal of overlap with prior workplace accommodation and work schedule questions (17/WA\_1 and 18/WA\_2).

Finally, of the two United States respondents who were confused in the previous questions on workplace accommodations (17, “Has your workplace been set up in a way to account for difficulties you have in doing certain activities?” and 18, “Is your work schedule arranged to account for difficulties you have in doing certain activities?”) because they did not identify as having a disability, only one continued to be confused—saying “nothing is difficult” and answering ‘Don’t know.’ The other respondent answered ‘Yes, fully’ but also stated that the question did not apply to her.

*Revision:* As in the previous questions, WA\_1 and WA\_2, response categories were changed to:

1. *Yes, fully*
2. *Yes, partially*
3. *Not at all*
4. *I do not have difficulties that require accommodation*

Respondents in India received the revised response categories.

### *India Round*

Like the two accommodations questions above, WA\_1 and WA\_2, the revised categories seemed to remove error for respondents without disabilities.

Possible Response Error (India): Two issues arose in the India round of testing that were unique to this set of respondents and could be a source of error: inconsistent interpretations among those who could do their tasks without any specific accommodations for their disability and respondent fatigue. Among the Indian respondents, several people who could perform their tasks at work but also for whom tasks were not arranged specifically for their disabilities varied their responses between ‘Yes, fully,’ ‘Not at all,’ and ‘I do not have difficulties that require accommodation.’ For example, one respondent who did mostly online work answered ‘Yes, fully’ because, as he explained, “It does not affect or is [not] affected by my disability.” Whereas another respondent said, “My job is based on my capability,” and

answered ‘Not at all.’ Indeed, most of those who answered ‘Not at all’ noted that they could do their job tasks as assigned without special accommodation. Finally, another respondent who was able to do her tasks well said, “I manage to do it and I do not have difficulties,” and she answered ‘I do not have difficulties that require accommodation’ – the expected response for this scenario and the two others described here.

Another factor that arose during the India round of testing was respondent fatigue. Perceived question repetitiveness caused some to respondents to simply refer to prior question discussions or comment that they had already discussed their work tasks.

### Follow-up Questions

#### **WA\_3a – Would you need any other arrangement of your tasks?**

**-Yes**

**-No**

This question was designed to be administered to respondents who had answered ‘Not at all’ to the question about work tasks (WA\_3). Respondents in the United States round of testing did not receive this question.

Five respondents answered ‘Not at all’ to the question about work tasks (WA\_3). Of those, there were two respondents who provided no response to this follow-up. The interview notes for this follow-up question are very limited, making in-depth analysis of this question’s performance not feasible. From the notes available, it appeared that one respondent understood the follow-up and answered within scope. He answered ‘No’ to the follow-up because he owns his own family business, so no arrangement was necessary for him.

#### **WA\_3b – Would you need your tasks to be changed?**

**-Yes**

**-No**

This question was designed to be administered to respondents who had answered ‘Not at all’ to the question about work tasks (WA\_3). Respondents in the United States round of testing did not receive this question.

Five respondents answered ‘Not at all’ to the question about work tasks (WA\_3). As with the previous follow-up question about other task arrangements (WA\_3a), there were two respondents who provided no response to this follow-up. Again, the interview notes here are very limited, making in-depth analysis of this question’s performance not feasible. From the notes available, it seems that one respondent who answered ‘Yes’ to the prior follow-up (indicating that she would need another arrangement of her work tasks), answered ‘No’ to this follow-up, noting “I am happy with the task.” It is unclear what this indicates in relation to question performance. Finally, the respondent with his own family business who answered ‘No’ to the prior follow-up about needing another work task arrangement (WA\_3a) also answered ‘No’ to this follow-up about needing tasks changed.

### Social Protection

**20 / SP\_1** Do you receive any cash benefits from the government linked to your disability? *[for those (USA/India) who are employed]*

Answer	Cases (USA)	Cases (India)
Yes	0	4
No ( <i>Go to 24 / ATT_1</i> )	12	23
DK/REFUSED	0	0
No Data Entered	8	15

Respondents who were employed and who responded ‘A lot of difficulty’ or ‘Cannot do at all’ for at least one of the WG physical functioning questions or ‘a lot’ to at least one of the WG emotional functioning questions were screened into this question. Twelve respondents in the United States round were asked this question, all of whom answered ‘no.’ Twenty-seven respondents in the India round were asked this question.

**22 / SP\_2** Do you receive any cash benefits from the government linked to your disability? *[for those (USA/India) who are unemployed/inactive]*

Answer	Cases (USA)	Cases (India)
Yes	1	2
No ( <i>Go to 24 / ATT_1</i> )	3	7
DK/REFUSED	0	0
No Data Entered	16	33

Respondents who were unemployed or inactive (unemployed and not looking for work) and who reported ‘A lot of difficulty’ or ‘Cannot do at all’ to at least one of the WG physical functioning questions or ‘a lot’ to at least one of the WG emotional functioning questions received this question, 22/SP\_2. Four respondents in the United States round were asked this question and nine respondents in the India round were asked this question. The findings for both this question, 20/SP\_1 and the question 22/SP\_2 are written together below.

Sixteen respondents from the United States round of testing were asked these questions. Thirty-three respondents from the India round of testing were asked these questions. In some cases in both the United States and India rounds the interviewer decided to ask additional respondents who did not meet the screening criteria for these questions. Reasons for including additional respondents included the respondent self-identifying as living with a disability or the respondent answering ‘some difficulty’ across many domains of functioning. Additionally, there were a few cases of interview administration error for the social protection series of questions during the India round of testing, in that three respondents were asked both SP\_1 and SP\_2. However, these respondents all answered ‘No’ for both questions.

The overarching difference between the United States round and the India round of testing was the difference in cultural contexts. While the United States has a federal program for disability benefits, India has no equivalent federal program. Additionally, societal expectations of what the government can and should provide differ between the two countries. The analyses of the two rounds are presented below.

#### *United States Round*

Sixteen respondents were asked one of these questions; only one answered ‘Yes’ (to Question 22, for those who were unemployed). The one respondent who answered ‘Yes’ was unemployed and explained that he has been receiving Social Security Disability Insurance (SSDI) benefits since 2007 because of ongoing nerve damage related to a car accident in the late 1980’s. Two respondents who answered ‘No’ indicated that they had applied for SSDI benefits in the past but were either denied or were still waiting to hear if they were approved.

All respondents considered cash from the government for people with disabilities, with some specifically mentioning SSDI benefits. Then, as expected, respondents who did not identify as having a disability immediately answered ‘No’ to the question on this basis – which is consistent, given that persons would need to self-identify as having a disability to apply for the program. For example, one respondent who does not define her difficulty as being a disability answered, “No... I don’t have a disability.” Another respondent, thinking out loud as he answered stated:

First of all, cash benefits from the government. I’m thinking Social Security, which I don’t receive. I’m thinking Welfare, which I don’t receive. I do receive TANF, but that’s food assistance. And then you said, ‘through the disability’ which I am not disabled, so when you throw disability in there, that basically just disqualifies everything.

Many respondents, regardless of whether they identified as having a disability, mentioned that they would not be classified as “disabled” by the government because their disability was not “severe enough.” A few respondents mentioned that they considered applying for SSDI in the past or that they have plans to apply for SSDI when they “need it” in the future. For example, one respondent elaborated, “I do have a disability, but I think I’m still mobile... maybe 20 years from now I might have to apply.”

### *India Round*

The overarching issue with this question is that the idea of “cash benefits” from the government is not culturally universal. In India, both interviewers and respondents frequently noted that there was no federally-based disability program equivalent to SSDI in the United States. Many respondents said that the very idea of social protection was a Western concept. For example, one respondent answered ‘No’ and explained, “I am not aware of any benefits. Know that happens in the West. There they have medical benefits, career support.” No respondents were part of an overarching federal security program with cash benefits from India. Rather, respondents noted that India had many smaller programs designed to assist a wide variety of people, from people with disabilities to those in – as described by

respondents – “backward” castes and tribes. For example, one respondent received an annual cash benefit (equivalent to about \$34 USD) and materials to build a house as part of a state-based, non-federal disability program from her home state. Other non-cash benefits mentioned by respondents included employment reservations, in which 3% of government employees must have a disability, travel concessions, and tax deductions.

Respondents expressed other context-specific concerns and lack of trust about government protection programs. These impressions and opinions about the government affected respondent considerations of this question. Many respondents who answered ‘No’ said that the benefits that are available were difficult to get due to long bureaucratic processes, government corruption, and loopholes that slow down or prevent people from getting their benefits. For example, one man noted that the possibility of being involved with corrupt officials kept him from looking into disability benefits. “It is corrupt,” he said, “I don’t want to do anything.” Three respondents said that the benefits were too small to justify the effort it takes to get them. For example, one man said, “I have heard of disability pension, but since it is such a small amount, I have not even bothered about it.” Another respondent said that each state government gives a different amount, which he felt was ridiculous. He said, “I don’t need cash, I need a job. The government should provide equal job opportunities to all by providing vocational and job training.” Those answers were a product of not only access to benefits but also of respondent interest, awareness, and willingness to engage with governmental processes and bureaucracy.

In addition to distrust in government institutions, respondents who answered ‘No’ did so for a variety of other reasons, including the following: that they were unaware of benefits, they haven’t tried to get them, their employer received a tax benefit for hiring them, they were not in a low enough income bracket to qualify, and that they do not need benefits. Several respondents living with disabilities in this sample were supported financially by their families. A different, lower-income sample set may yield different responses and reasons.

Response Error (India): There were two clear instances of error for SP\_1 (for those who are employed). One respondent who answered ‘Yes’ was not living with a disability. Rather, she was speaking from the perspective of someone with a disability since she had some knowledge of disability programs. Another respondent answered, ‘Yes’ because he received the Section 80U tax deduction, not a cash benefit, based on his disability. The concept of “benefits from the government linked to your disability” was

also problematic because a number of respondents mentioned that the social welfare programs were for the unemployed, people of low income, and (as described by respondents) “backward” castes or tribes. This led to potential response error because some were unsure under what program their benefit belonged.

Apart from the two errors, four other respondents answered ‘Yes.’ Two received cash benefits from different state governments, one received disability benefits from the United Kingdom where she worked part-time, and the other did not specify.

**21 / SP\_1a [Original – USA Round] Will the amount of the benefit change if your salary increases? (USA/India)**

*[Revised – India Round] Do you know if the amount of the benefit will change if your salary increases?*

Answer	Cases (USA)	Cases (India)
Yes	0	6
No	0	4
DK/REFUSED	0	3
No Data Entered	20	29

This question was designed for respondents who were employed and answered ‘Yes’ to the first social protection question, 20/SP\_1 (“Do you receive any cash benefits from the government linked to your disability?”). Zero respondents from the United States round of testing were asked this question. Thirteen respondents from the India round of testing were asked this question.

### **Original Version – United States Round**

As stated above, the original version of this question was designed to be asked of employed respondents that answered ‘Yes’ to the first social protection question, Question 20. Because no American respondents who answered ‘Yes’ to Question 20, all respondents in the United States round of testing skipped out of this question.

## Revised Version – India Round

The original question was revised based on expert review and was administered to 13 of the 42 respondents in India. Respondents who answered at least ‘A lot of difficulty’ to any of the WG physical functioning questions or ‘a lot’ to at least one of the WG emotional functioning questions, answered ‘employed (worked for pay or profit)’ to EM\_1a, and answered ‘Yes’ to SP\_1 were screened into the revised question: *Do you know if the amount of the benefit will change if your salary increases?* Those who did not receive cash benefits were intended to be screened out of this question; however, some were asked it, possibly due to interviewer error. These were not included in the analysis here. Only the four intended recipients were included in the below analysis.

This question was the follow-up question to SP\_1, and, as mentioned above, those who answered ‘Yes’ to SP\_1 were the intended recipients. Respondents within the intended question universe understood this question to be asking if their income level affects their disability benefits. This confused some respondents because, in India, there are separate social welfare programs for unemployment and for disability. One respondent who answered ‘No’ elaborated in the following way: “This does not apply to India as we do not have this differentiation.” The respondent mentioned above for the prior question, SP\_1, who worked part-time in the United Kingdom, noted that her benefit would change, answering ‘Yes,’ but she did not know any of the details.

### *Possible Response Error*

The complexity of governmental disability benefits puts this question at risk for error. Respondents often were not able to remember the details of their benefits without referencing documents.

Another possible source of error is the wording of “Do you know” in the revised version, because ‘No’ and ‘Don’t know’ have overlapping meanings. It is possible for a respondent to answer if they *know* the benefit will change or not without indicating whether or not the benefit will actually change, yes or no.

**23 / SP\_2a Will you keep the benefit if you find a paid job?  
(USA/India)**

Answer	Cases (USA)	Cases (India)
Yes, the same amount**	1	**
Yes, but lower amount**	0	**
Yes*	*	1
Yes, but the benefit will decrease*	*	0
No	0	3
DK/REFUSED	0	3
No Data Entered	19	35

\*Respondents in the United States did not receive this response option.

\*\*Respondents in India did not receive this response option because it was revised.

This question was designed to be asked of unemployed or inactive respondents that answered ‘Yes’ to the social protection question 22/SP\_2 (“Do you receive any cash benefits from the government linked to your disability?”). One respondent from the United States round of testing was asked this question. Seven respondents from the India round of testing were asked this question. Additional respondents were asked this question during the India round, possibly due to interviewer error. Only the intended recipients’ considerations, those of one person in the United States and two people in India, were included in the analysis of this question.

The one American respondent who received this question answered ‘Yes, the same amount,’ thinking only of taking a paid part-time job—not a full-time job. As he later explained, the program allows him to work for up to 4 hours per day and keep the same SSDI benefits. If he were to work full-time, he would be able to still receive benefits, but a lesser amount.

The response categories were changed after the United States round of testing to be clearer for respondents.

*Revision:* Response categories were changed to:

1. *Yes*
2. *Yes, but the benefit will decrease*
3. *No*
4. *Don’t know/Refused (note: not offered proactively)*

Respondents in India received the revised response categories.

### *India Round*

For the India round of testing, respondents who answered at least ‘A lot of difficulty’ to any of the WG physical functioning identification questions or ‘a lot’ to at least one of the WG emotional functioning questions, answered ‘unemployed (i.e. not in employment, carried out activities to find employment and were available to take up employment given a job opportunity)’ or ‘Inactive (Not employed and not looking for work)’ to EM\_1a, and answered ‘Yes’ to SP\_2 were the intended recipients of the revised question.

This question was the follow-up question to SP\_2, and, as mentioned in the above paragraph, those who answered ‘Yes’ to SP\_2 were the intended recipients. The two respondents within scope understood this question to be asking if their disability benefits would be affected if they started working for pay and earned an income. One respondent incorporated her own decision about taking the benefit into their response. She did not know if the government would pay her, or if she would take the benefit in the event she had a job. In that case, her response ‘Don’t know’ referred to both the government’s behavior and hers.

Possible Response Error: Again, the complexity of governmental disability benefits puts this question at risk for error, like SP\_1a. Respondents may not be able to remember the details of their benefits without referencing documents.

### **Attitudes**

**24 / ATT\_1    How willing are employers to hire people with disabilities?  
(USA/India)**

<b>Answer</b>	<b>Cases (USA)</b>	<b>Cases (India)</b>
Unwilling	7	15
Somewhat willing	12	24
Very willing	1	1
DK/REFUSED	0	2
No Data Entered	0	0

This question was for all respondents. All 20 of the United States round respondents were asked this question. All 42 of the India round respondents were asked this question.

Overall, respondents in both countries interpreted the question similarly. While drawing upon diverse sets of experiences, respondents' considerations were generally within scope. Two unique issues that emerged in the India round of evaluation were concerns for people with disabilities keeping current employment and varied levels of acceptance based on the severity of the disability. Those two considerations are described below in a separate section.

### *Understanding the Question*

Respondents generally understood this question as asking about the inclination of people to hire those with disabilities. However, in formulating their answers, respondents varied in terms of who they considered to be “employers” and those considered “people with disabilities.” While many respondents considered “employers” as not specific to themselves or their own employment – others based their answer on more personal experiences—thinking of either their own employer or, more rarely, of themselves as hypothetical employers. For example, one respondent with Postural Orthostatic Tachycardia Syndrome (POTS) answered ‘Somewhat willing’ and reasoned, “The fact that I was able to get employment when I did disclose that [I have POTS] to an employer makes me feel like they’ve got to be at least somewhat willing.” In thinking of himself as the employer, one respondent, who also answered ‘Somewhat willing,’ explained,

I would hire someone with a disability that at least I know has a work history [rather] than somebody that I don’t even know... I would trust a vet [with disabilities], prior military, he

served the country and has a work history. Versus somebody that never worked a day in their life.

An Indian respondent, who also answered ‘Somewhat willing,’ explained her answer with more skepticism, “A friend of mine had a maid who had dyslexia but not diagnosed. This maid could not take instructions. She put up with her for some time, but eventually she let her go. I don’t think I can support a person with disability at this time.”

Similarly, when conceptualizing “people with disabilities” respondents thought of a generalized population (e.g., “They could be physically handicapped or they could have autism”) or more personally, thinking of either themselves or someone they know. Drawing upon personal experience was more common for those with disabilities (both those who identified as such and those categorized as with a disability based on the WG questions). For example, one respondent with mobility problems and early stage glaucoma answered “unwilling” because, he reasoned, “I have had two job interviews in a month... and I felt the reason I was disqualified was because of my disability.”

### *Selecting a Response*

While many respondents expressed uncertainty or doubt in selecting an answer, all respondents, apart from two from the India round of testing, ultimately provided an answer, basing their responses on personal experiences, hearsay, or imagined hypothetical scenarios. One respondent, for example, who at first responded “How am I going to know what an employer is thinking?” ultimately answered ‘Somewhat willing’ because he was able to recall hearing about a lawsuit in which a company was being sued for age discrimination, thus, giving him something on which to base an answer. On the other hand, some respondents formed hypothetical scenarios to think through the question and decide on an answer. For example, one respondent who answered ‘Somewhat willing’ explained that an employer for a construction job cannot say, “You’re in a wheel chair, so I can’t hire you.” Instead, the employer must say, “The work demand for this job might not be good for what you're experiencing health wise. You may not be capable to complete all the projects... I don't want you to get hurt.” A few respondents included the types of messages that came across in employment advertisements and in news stories when formulating an answer. For example, one respondent answered ‘Somewhat willing’ and explained, “I don't really know. I just guessed on it because I have seen commercials saying that they hire people with disabilities, but I don’t know much about that.” The two respondents who answered

“Don’t know” in the India round felt they did not have enough experience or up-to-date knowledge to answer.

In many ways, respondents, like those respondents above, had seemingly random methods for settling on an answer, particularly when they did not feel knowledgeable or equipped to answer. For example, one respondent who finally answered ‘Somewhat willing’ explained, “Since I’m not disabled, I would say ‘somewhat.’ Why would an employer want to hire a person with a disability? I can see why an employer would want to, but on the same token I can see why an employer would not... That’s why I answered ‘somewhat.’”

Likewise, several Indian respondents seemed to weigh what is, in their experience, and what should be. One respondent who answered ‘Somewhat willing’ said that a lot of organizations are unwilling to hire people with disabilities. “HR persons are unwilling to comment as they want to be politically correct [...] If the HR team were aware of disability issues, they would know how to work with them.” This respondent thought that organizations were overall unwilling, but due to their potential to be willing – what could and should be – he answered ‘Somewhat willing.’

Weighing Motivations and Hindrances: In an attempt to reason out an answer, many respondents thought of potential motivations and hindrances to hiring people with disabilities. Among American respondents, the main motivation mentioned was the existence of anti-discrimination laws. A few respondents also mentioned that some employers want to give people with disabilities a chance to work. “Giving people a chance to work” was the most commonly mentioned motivation among respondents in India. Employer tax benefits for hiring people with disabilities and governmental rules and regulations were also mentioned by several respondents. The most salient hindrance that came out during the cognitive interviews in the United States was the feeling that people with disabilities may not be able to perform all of the tasks needed for a job. As one respondent who answered ‘Unwilling’ explained, “If they have to hire either person A or person B, and person A can 100% fully do everything and B cannot, they still have to pay the same amount, so why would they want to hire B?” Some respondents also mentioned that people with disabilities may be considered a “liability,” whereby employers may want to avoid the financial cost of accommodations. Concerns about people with disabilities not being able to do the job was also commonly mentioned during the India round of interviews, along with possible

inconvenience for coworkers, financial cost of accommodations, and discrimination by employers and coworkers.

Discrimination was the most salient hindrance for respondents with disabilities in India, whereas respondents without disabilities mentioned the other hindrances more often (discrimination was also noted for question 15/EW\_1a above, “Which of the following, if any, would make it more likely for you/[you/him/her] to find employment? Check all that apply.”). For example, one respondent with a disability who answered ‘Somewhat willing’ said that a lot depends on the employer’s judgement and mentality. He explained this in the following way:

At my job the employers are very willing but from my knowledge I know that many are not so willing [...] They cancel interviews, they don’t turn up for scheduled meetings, they change the job descriptions so that there are tasks they know you will not be able to do, they add travel bits to your JD [job description] knowing that you will have a difficulty in traveling and therefore will not take up the job. They do their best to deter you from taking up the job.

### *India Round*

Two issues emerged that were unique to the Indian respondents. First, eight of the 42 respondents specifically mentioned the challenges of people with disabilities *keeping* their jobs and receiving promotions, rather than just *finding* jobs, while considering their answers. Respondents living with disabilities relayed personal experiences of being expected to stay on at a job without receiving a raise, being passed for promotions, being forced out after the development of a late-onset disability, and not given equal career path opportunities. For example, one respondent said that employers lack awareness about disabilities, and “as a result it was not only that people with disability did not get employed there was also discrimination and exploitation of those who were employed.” He then gave the example of someone he knew signing for a higher salary than the person actually received.

A second concern raised by Indian respondents when considering their answers was that employer willingness depended on the severity of the disability. Six respondents, who variously answered ‘Very willing,’ ‘Somewhat willing,’ and ‘Unwilling,’ all considered people with disabilities as a diverse group of varied abilities, rather than a single monolith population considered by employers equally. Several respondents said that for government positions, where there is a 3% required employment reservation for those with disabilities, only the people with the most mild disabilities are hired – not people with severe disabilities. One respondent, who answered ‘Very willing,’ said “I feel they are hiring people

with disabilities, but again, it's not severely disabled as per my experience I see people hiring minimal or moderate disabled people.”

**25 / ATT\_2    How willing are people to work alongside people with disabilities?  
(USA/India)**

<b>Answer</b>	<b>Cases (USA)</b>	<b>Cases (India)</b>
Unwilling	5	9
Somewhat willing	11	26
Very willing	3	5
DK/REFUSED	1	2
No Data Entered	0	0

This question was for all respondents. All 20 respondents from the United States round of testing were asked this question. All 42 respondents from the India round of testing were asked this question.

Respondents in both the United States and India generally interpreted the question in similar ways. Unique issues that emerged in the India round are described in a separate section below.

*Understanding the Question*

All respondents understood this question as asking about the openness of people without a disability to working with coworkers with disabilities. Considerations were generally within scope, whether or not respondents considered their own willingness or other people’s willingness when answering. For example, one respondent, thinking of people in general, explained her answer, ‘Unwilling’: “I think people will say that ... they want to be willing, just like people want to think they’re not racist, but at the same time, they’re clueless.” On the other hand, a respondent thinking specifically of himself, explained his answer, ‘Very willing,’ in the following way: “I mean I would like to help someone at my job who has a disability. If they have a problem with something, I would like to help them and make their job a little easier.” As with this respondent, other respondents who answered thinking of themselves—as

opposed to people in general—reported that they would be at least ‘Somewhat willing’ to work alongside people with disabilities.

Similarly, respondents conceptualized “people with disabilities” as either people in generic terms or, more personally, as themselves or someone they know. Thinking broadly, for example, one respondent explained what he was considering: “People with challenges. It could be mental challenges. It could be physical challenges.” Another respondent expressed, “You’re running the gambit here [in this survey question]: physical disabilities, mental health issues....” In some cases, respondents based their answers on people with certain types of disabilities, to the exclusion of others. One respondent, explaining his answer, ‘Somewhat willing,’ said, “We got some good people out here that no matter what your disability are, they are helpful.” He said he’d been thinking about people in a wheelchair or with muscular dystrophy, and, he also felt that people who are “mentally challenged” should not be working at all.

On the other hand, many respondents with disabilities based their answers on personal experiences with coworkers. For example, one respondent with mobility problems and early stage glaucoma, explained his answer (‘Somewhat willing’) in the following way: “In my job sometimes people are willing to lend a hand. They empathize with me. But at the same time... Sometimes they let you be by yourself. They don’t want to help when they can.”

### *Selecting a Response*

In formulating their answers, most respondents considered either the potential positive or negative, or both the positive and negative, aspects of having co-workers with disabilities. Those who considered both the positive and the negative aspects, answered ‘Somewhat willing’ because they took an average. However, some respondents with disabilities with particularly negative work experiences chose “Unwilling” even when they had other positive work experiences. Nearly half of the American respondents and one quarter of the Indian respondents mentioned the desire to be, or appear to be, empathetic toward people with disabilities. For example, one respondent answered ‘Very willing’ and explained, “Because I think that more people than not have empathy, and if they don’t have empathy, they don’t want to be seen as not having empathy!” In thinking about the negative aspects of working alongside people with disabilities, half of the respondents expressed that it could be “a hassle” with a workload that could increase for the workers without disabilities. For example, one respondent

answering 'Somewhat willing' explained, "They [employees without disabilities] would have to pick up the slack... Some people don't want to do extra work." A few respondents mentioned a concern that people with disabilities may not be able to perform all of the tasks. Other potential negative aspects included risk of bodily harm and envy for the person's accommodations. Those with disabilities, particularly those in India, noted that colleagues can be discriminatory, holding misconceptions and stereotypes about workers with disabilities. For example, one respondent who answered 'Somewhat willing' said, "We are conditioned since younger years that people with disability are lesser mortals. We need to be sensitized, it all starts at home with family, with society."

Additionally, respondents borrowed from personal experiences or constructed hypothetical scenarios when formulating their answer. For example, one respondent who answered 'Unwilling' thought of his own experience as a person with a disability, explaining, "A person will be okay with you, but once they learn you have a disability, everything changes." Similarly, another respondent, who answered 'Somewhat willing,' thought of the trouble his nephew, who has physical deformities, had in finding work that he enjoys and instead must work at jobs doing menial tasks. Contrastingly, one woman concocted a theoretical scenario whereby she imagined how she would respond to a person with a disability working in the mailroom at her own place of employment. She explained her answer ('Very willing') stating that, if needed, she would take a break from her own duties to help deliver the mail.

The few respondents who did not select a response (answering 'Don't know'), felt they could not respond based on their own experiences. For example, one person did not personally work with any people with disabilities, so he did not want to select a response. Another stated that she could only answer for herself, not for others, as she considered the question to be asking about people's general willingness.

### *India Round*

A few considerations were unique to the India round of testing. First, like question ATT\_1 above ("How willing are employers to hire people with disabilities?"), several Indian respondents said that supportiveness depended on the severity of a person's physical disability. One respondent who answered 'Somewhat willing' noted that her nephew's colleagues were "very supportive because his disability is mild and causes no hindrance." Similarly, a respondent with a disability said,

Generally you have to prove for them [your coworkers without disabilities] by showing your willingness to work. Disabled can inspire other colleagues. But, I am sure with severely disabled the colleagues don't come forward so easily.

Second, the different cultural context in India (as opposed to the United States) played a role in the way people with disabilities perceived their coworkers, and how those without a disability perceived coworkers with disabilities. Several respondents noted that there are assumptions about the role of people with disabilities in society that impact people with disabilities, particularly when entering the workforce. For example, one respondent described these cultural challenges in the following way: "People have loads of apprehension working with disability. In the rural [area] the disabled are treated as a curse – acceptance is very poor." Similarly, another respondent said that people "find them [people with disabilities] as a burden and feel disabled are taking up their jobs. Girls are especially left, and they do not even reach the workplace because of the family and community attitude." Some respondents with mobility difficulties said they have been told by potential employers that they "should stay at home" and let family take care of them. When answering this question, many respondents living with a disability considered their society as a whole, as well as personal experiences and stories they had heard.

Despite the discrimination described by respondents with disabilities, many also noted that there have been gradual improvements in people's attitudes over time. This was due, several said, to the younger generation's willingness to work with people with disabilities. These respondents averaged past and current attitudes in answering 'Somewhat willing.' One respondent argued that because the elder generation was the problem, "I think after 20 years the gap between the normal and disabled will be filled." Another said, "This is the 21<sup>st</sup> century," one man said, "Inclusiveness has gone a long way. My interactions with fellow peers has been more accepting. There have been changes since I was in school."

## Appendix A: Instrument tested in Hyattsville, MD (United States)

### Labor Force Module

**1. DISABILITY IDENTIFICATION [For all household members age 15+ (or above national lower age limit and/or below upper age limit for working age population) Do you have difficulty seeing, even when wearing [your] glasses]? Would you say... [Read response categories]**

Response Options
No difficulty
Some difficulty
A lot of difficulty
Cannot do at all / Unable to do
Refused
Don't know

**2. Do you have difficulty hearing, even when using a hearing aid(s)? Would you say... [Read response categories]**

Response Options
No difficulty
Some difficulty
A lot of difficulty
Cannot do at all / Unable to do
Refused
Don't know

**3. Do you have difficulty walking or climbing steps? Would you say... [Read response categories]**

Response Options
No difficulty
Some difficulty
A lot of difficulty
Cannot do at all / Unable to do
Refused
Don't know

**4. Using your usual language, do you have difficulty communicating, for example understanding or being understood? Would you say... [Read response categories]**

Response Options
No difficulty
Some difficulty
A lot of difficulty
Cannot do at all / Unable to do
Refused
Don't know

**5. Do you have difficulty remembering or concentrating? Would you say... [Read response categories]**

Response Options
No difficulty
Some difficulty
A lot of difficulty
Cannot do at all / Unable to do
Refused
Don't know

**6. Do you have difficulty with self-care, such as washing all over or dressing? Would you say... [Read response categories]**

Response Options
No difficulty
Some difficulty
A lot of difficulty
Cannot do at all / Unable to do
Refused
Don't know

**7. Do you have difficulty raising a 2 litre bottle of water or soda from waist to eye level? Would you say... [Read response categories]**

Response Options
No difficulty
Some difficulty
A lot of difficulty
Cannot do at all / Unable to do
Refused
Don't know

**8. Do you have difficulty using your hands and fingers, such as picking up small objects, for example, a button or pencil, or opening or closing containers or bottles? Would you say... [Read response categories]**

Response Options
No difficulty
Some difficulty
A lot of difficulty
Cannot do at all / Unable to do
Refused
Don't know

**9. How often do you feel worried, nervous or anxious? Would you say... [Read response categories]**

Response Options
Daily
Weekly
Monthly
A few times a year
Never

Refused
Don't know

**10. Thinking about the last time you felt worried, nervous or anxious, how would [you/he/she] describe the level of these feelings? Would you say... [Read response categories]**

Response Options
A little
A lot
Somewhere in between a little and a lot
Refused
Don't know

**11. How often do you feel depressed? Would you say... [Read response categories]**

Response Options
Daily
Weekly
Monthly
A few times a year
Never
Refused
Don't know

**12. Thinking about the last time you felt depressed, how depressed did you feel? Would you say... [Read response categories]**

Response Options
A little
A lot
Somewhere in between a little and a lot
Refused
Don't know

**13. DISABILITY ONSET [For all with at least 'a lot of difficulty' to any of Q1-8 or 'a lot' to either Q10 or Q12] You mentioned having a lot of difficulties doing some things. When did the first of these difficulties start?**

Response Options
At birth
Between the birth and the age of 15
Between the ages of 15 and 29
Between the ages of 30 and 65
After age 65
Refused
Don't know

**14. EMPLOYMENT STATUS [For all age 15+ (or above national lower age limit and/or below upper age limit for working age population) What was your employment status last week?**

Response Options
------------------

Employed (worked for pay or profit)
Unemployed (i.e. not in employment, carried out activities to seek employment and were available to take up employment given a job opportunity)
Inactive (Not employed and not looking for work)
Refused
Don't know

**15. BARRIERS** [For all who are inactive and have at least 'a lot of difficulty' to any of Q1-8 or 'a lot' to either Q10 or Q12] Which of the following, if any, would make it more likely for you to seek employment. Check all that apply.

Response Options
Training to qualify for available jobs
Transportation from my home to available jobs
Help in locating available jobs
Greater belief that someone will hire me
Assistive devices or technology to help me do the job
A work place that accommodates people with disabilities
Other: Please specify _____
Refused
Don't know

**16. How supportive would your family members be if you decide to work?**

Response Options
Very supportive
Somewhat supportive
Not supportive
Refused
Don't Know

**17. ACCOMMODATIONS** [For all who are employed and who have at least 'a lot of difficulty' to any of Q1-8 or 'a lot' to either Q10 or Q12] Has your workplace been set up in a way to account for difficulties you have in doing certain activities?

Response Options
Yes, fully
Yes, partially
No
Refused
Don't Know

**18. Is your work schedule arranged to account for difficulties you have in doing certain activities?**

Response Options
Yes, fully
Yes, partially
No
Refused
Don't Know

**19. Are your work tasks arranged to account for difficulties you have in doing certain activities?**

Response Options
Yes, fully
Yes, partially
No
Refused
Don't Know

**20. SOCIAL PROTECTION [For those with at least 'a lot of difficulty' to any of Q1-8 or 'a lot' to either Q10 or Q12 and being employed] Do you receive any cash benefits from the government linked to your disability?**

Response Options
Yes
No (skip to 24)
Refused (skip to 24)
Don't know (skip to 24)

**21. Will the amount of the benefit change if your salary increases?**

Response Options
Yes
No
Don't know
Refused

**Skip to 24**

**22. (For those with at least 'a lot of difficulty' to any of Q1-8 or 'a lot' to either Q10 or Q12 and unemployed or inactive) Do you receive any cash benefits from the government linked to your disability?**

Response Options
Yes
No (Skip to 24)
Refused (Skip to 24)
Don't know (Skip to 24)

**23. Will you keep the benefit if you find a paid job?**

Response Options
Yes, the same amount
Yes, but lower amount
No
Don't know
Refused

**24. ATTITUDES [For all] How willing are employers to hire people with disabilities?**

Response Options
Unwilling

Somewhat willing
Very willing
Refused
Don't Know

**25. How willing are people to work alongside people with disabilities?**

Response Options
Unwilling
Somewhat willing
Very willing
Refused
Don't Know

## Appendix B: Instrument tested in Mumbai, India

### Labor Force Module

ILO1 For at least the past six months, to what extent have you been limited because of a health problem in activities people usually do?

- a) Severely limited
- b) Limited but not severely
- c) Not limited at all

ILO2 What is your correct working status?

- a) Working for pay at a job or business
- b) With a job or business but not at work
- c) Looking for work
- d) Working, but not for pay, at a family-owned job or business
- e) Not working at a job or business and not looking for work

### DISABILITY IDENTIFICATION

VIS\_1 [Do/Does] [you/he/she] have difficulty seeing, even when wearing [your/his/her] glasses]? Would you say... [*Read response categories*]

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all / Unable to do
5. *Refused*
6. *Don't know*

HEAR\_1 [Do/Does] [you/he/she] have difficulty hearing, even when using a hearing aid(s)]? Would you say... [*Read response categories*]

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all / Unable to do
5. *Refused*
6. *Don't know*

MOB\_1 [Do/Does] [you/he/she] have difficulty walking or climbing steps? Would you say... [*Read response categories*]

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all / Unable to do
5. *Refused*
6. *Don't know*

COM\_1 Using [your/his/her] usual language, [do/does] [you/he/she] have difficulty communicating, for example understanding or being understood? Would you say... [*Read response categories*]

1. No difficulty
2. Some difficulty
3. A lot of difficulty

4. Cannot do at all / Unable to do
5. *Refused*
6. *Don't know*

COG\_1 [Do/does] [you/he/she] have difficulty remembering or concentrating? Would you say... [*Read response categories*]

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all / Unable to do
5. *Refused*
6. *Don't know*

SC\_1 [Do/does] [you/he/she] have difficulty with self-care, such as washing all over or dressing? Would you say... [*Read response categories*]

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all / Unable to do
5. *Refused*
6. *Don't know*

UB\_1 [Do/Does] [you/he/she] have difficulty raising a 2 liter bottle of water or soda from waist to eye level? Would you say... [*Read response categories*]

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all / Unable to do
7. *Refused*
9. *Don't know*

UB\_2 [Do/Does] [you/he/she] have difficulty using [your/his/her] hands and fingers, such as picking up small objects, for example, a button or pencil, or opening or closing containers or bottles? Would you say... [*Read response categories*]

1. No difficulty
2. Some difficulty
3. A lot of difficulty
4. Cannot do at all / Unable to do
7. *Refused*
9. *Don't know*

ANX\_1 How often [do/does] [you/he/she] feel worried, nervous or anxious? Would you say... [*Read response categories*]

1. Daily
2. Weekly
3. Monthly
4. A few times a year
5. Never
7. *Refused*
9. *Don't know*

ANX\_2 Thinking about the last time [you/he/she] felt worried, nervous or anxious, how would [you/he/she] describe the level of these feelings? Would [you/he/she] say... [*Read response categories*]

1. A little
2. A lot
3. Somewhere in between a little and a lot
7. *Refused*
9. *Don't know*

DEP\_1 How often [do/does] [you/he/she] feel depressed? Would [you/he/she] say... [*Read response categories*]

1. Daily
2. Weekly
3. Monthly
4. A few times a year
5. Never
7. *Refused*
9. *Don't know*

DEP\_2 Thinking about the last time [you/he/she] felt depressed, how depressed did [you/he/she] feel? Would you say... [*Read response categories*]

1. A little
2. A lot
3. Somewhere in between a little and a lot
7. *Refused*
9. *Don't know*

**DISABILITY ONSET [For all with at least 'a lot of difficulty' to any of VIS\_1-UB\_2 or 'a lot' to either ANX\_2 or DEP\_2]**

ONS\_1 [You/He/She] mentioned having a lot of difficulties doing some things. When did the first of these difficulties start?

1. At birth
2. Between the birth and the age of 15
3. Between the ages of 15 and 29
4. Between the ages of 30 and 65
5. After age 65
6. *Refused*
7. *Don't know*

**EMPLOYMENT STATUS [For all age 18+ (or above national lower age limit and/or below upper age limit for working age population)]**

EM\_1a What was [your/his/her] employment status last week?

1. Employed (worked for pay or profit)
2. Unemployed (i.e. not in employment, carried out activities to find employment and were available to take up employment given a job opportunity)
3. Inactive (Not employed and not looking for work)
4. *Refused*
5. *Don't know*

**BARRIERS [For all who are inactive and who have at least ‘a lot of difficulty’ to any of VIS\_1-UB\_2 or ‘a lot’ to either ANX\_2 or DEP\_2]**

EW\_1a Which of the following, if any, would make it more likely for [you/him/her] to find employment. Check all that apply.

1. Training to qualify for available jobs
2. Transportation from my home to available jobs
3. Help in locating available jobs
4. Greater belief that someone will hire me
5. Assistive devices, such as a wheel chair, or special technology to help with my difficulties
6. A work place that accommodates people with disabilities
7. Other: *Please specify* \_\_\_\_\_
8. *Refused*
9. *Don't know*

ATT\_3 In terms of you being employed, how supportive are your family members?

1. Very supportive
2. Somewhat supportive
3. Not supportive
4. *Refused*
5. *Don't Know*

**ACCOMMODATIONS [For all who are employed and who have at least ‘a lot of difficulty’ to any of VIS\_1-UB\_2 or ‘a lot’ to either ANX\_2 or DEP\_2]**

WA\_1 Has [your/his/her] workplace been set up in a way to account for difficulties you have in doing certain activities?

1. Yes, fully
2. Yes, partially
3. Not at all (go to WA\_1a)
4. I do not have difficulties that require accommodation
8. *Refused*
9. *Don't know*

(Go to WA\_2)

WA\_1a Would you need any modification?

1. Yes
2. No
3. Refused
4. Don't know

WA\_2 Is [your/his/her] work schedule arranged to account for difficulties you have in doing certain activities?

1. Yes, fully
2. Yes, partially
3. Not at all (go to WA\_2a)
4. I do not have difficulties that require accommodation
5. *Refused*
6. *Don't Know*

(Go to WA\_3)

WA\_2a Would you need any other arrangement of your work schedule?

1. Yes
2. No
3. Refused
4. Don't know

WA\_2b Would you need your work schedule to be changed?

1. Yes
2. No
3. Refused
4. Don't know

WA\_3 Are [your/his/her] work tasks arranged to account for difficulties you have in doing certain activities?

1. Yes, fully
2. Yes, partially
3. Not at all (go to WA\_3a)
4. I do not have difficulties that require accommodation
5. *Refused*
6. *Don't Know*

(Go to SP\_1)

WA\_3a Would you need any other arrangement of your tasks?

1. Yes
2. No
3. Refused
4. Don't know

WA\_3b Would you need your tasks to be changed?

1. Yes
2. No
3. Refused
4. Don't know

## **SOCIAL PROTECTION**

**[For those with at least 'a lot of difficulty' to any of VIS\_1-UB\_2 or 'a lot' to either ANX\_2 or DEP\_2 and being employed]**

SP\_1 Do you receive any cash benefits from the government linked to your disability?

1. Yes
2. No (skip to ATT\_1)
3. Refused (skip to ATT\_1)
4. Don't know (skip to ATT\_1)

SP\_1a Do you know if the amount of the benefit will change if your salary increases?

1. Yes
2. No
3. Don't know
4. Refused

**Skip to ATT\_1**

**(For those with 'a lot of difficulty' to any of VIS\_1-UB\_2 or 'a lot' to either ANX\_2 or DEP\_2 and unemployed or inactive)**

SP\_2 Do you receive any cash benefits from the government linked to your disability?

1. Yes
2. No (skip to ATT\_1)
3. Refused (skip to ATT\_1)
4. Don't know (skip to ATT\_1)

SP\_2a Will you keep the benefit if you find a paid job?

1. Yes
2. Yes, but the amount will decrease
3. No
4. Don't know
5. Refused

**ATTITUDES [For all]**

ATT\_1 How willing are employers to hire people with disabilities?

1. Unwilling
2. Somewhat willing
3. Very willing
4. *Refused*
5. *Don't Know*

ATT\_2 How willing are people to work alongside people with disabilities?

1. Unwilling
2. Somewhat willing
3. Very willing
4. *Refused*
5. *Don't Know*

## References

International Labour Organization. (2020). LFS add-on module on functional difficulties and barriers to employment: Variable derivation guide (v1) for PAPI and CAPI. July 2020.

<https://ilostat.ilo.org/resources/lfs-resources/> Accessed Jan. 19, 2021.

Miller, K. (2018). Conducting Cognitive Interviewing Studies to Examine Survey Question Comparability. In *Advances in Comparative Survey Methods: Multinational, Multiregional, Multicultural Contexts (3MC)* (pp. 203-225): Wiley.

Miller, K., Chepp, V., Willson, S., & Padilla, J. L. (Eds.). (2014). *Cognitive Interviewing Methodology*. John Wiley & Sons.

Mont, Daniel. (2020). "[When does disability begin? Identifying the age of onset.](https://www.washingtongroup-disability.com/)" [The Washington Group on Disability Statistics \(washingtongroup-disability.com\)](https://www.washingtongroup-disability.com/). Accessed Feb. 1, 2021.

Tourangeau, R., L. J. Rips, and K. Rasinski. (2000). *The Psychology of Survey Response*. New York, NY: Cambridge University Press.

Willis, G. (2005). *Cognitive Interviewing: A Tool for Improving Questionnaire Design*. Thousand Oaks, CA: Sage Publications, Inc.