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Cognitive Testing of the American Community Survey Language Questions in Spanish

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ABSTRACT

The U.S. Census Bureau's American Community Survey (ACS) is the primary source of data on languages spoken in the U.S. Respondents are asked a three-part language question for all household members five years old or older. The first part of the question asks whether the person speaks a non-English language in the home. For those who do, respondents are asked to specify the language and then to report how well the individual speaks English (*Very well, Well, Not well, Not at all*). ACS language data are central to the implementation of federal language policy, including the language minority provisions of the Voting Rights Act and Executive Order 13166, which requires federal agencies to take "reasonable steps" to provide Limited English Proficient (LEP) individuals "meaningful access" to programs and activities, and they are also widely used by researchers and commercial entities.

Previous Census Bureau studies have examined data quality utilizing a quantitative approach, for example, by utilizing reinterviews to investigate consistency of reporting survey responses or by comparing responses to other measures of English language ability. However, researchers have not employed qualitative methods to examine respondents' subjective interpretations of the questions or their reasons for responding as they do. In order to address this gap in the research, 61 Spanish-speaking adults completed an abbreviated version of the Spanishlanguage version of the ACS and then participated in cognitive interviews regarding their interpretations of the three-part language question and the basis of their language evaluations. Results revealed frequent false negatives in interviewer-administered surveys regarding whether respondents spoke a language other than English at home. Other findings included a great deal of variability in the criteria that participants used to evaluate their own and others' English speaking ability.

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1 INTRODUCTION

1.1 Background

Although all decennial censuses from 1890 to 2000 except one inquired about language knowledge or use, the focus and the formulation of these questions varied widely. In different years, the questions have asked about mother tongue, childhood language, language spoken prior to arriving in the U.S., English ability, and home language use. In addition to asking about different aspects of language knowledge or use, over the years the questions have been asked about different sub-populations: in some cases, they were asked of all residents; in others, only of the foreign-born or those with foreign-born parents. Changes in the language questions reflect changing understandings of the relationship among language, race and ethnicity, as well as changing policy needs and legislative mandates such as determining the ethnoracial composition of the immigrant population or assessing the need for services in languages other than English (Leeman 2004, 2013; Stevens 1999).

The current language question is designed to quantify the use of non-English languages in U.S. households as well as to assess the English proficiency of individuals who speak other languages at home. This information is elicited via a three-part language question added to the decennial long form for the 1980 Census and now contained on the American Community Survey (ACS).

Since the 1970s the U.S. Census Bureau has conducted several quantitative studies of the three-part language question. However, there have not been any qualitative studies examining respondents' subjective interpretation of the language question or the basis of their English proficiency self-assessment. Further, previous research has not explored the criteria that respondents use to assess and report the English proficiency of other household members. Nor have previous studies investigated the possible impact of collecting language use data in languages other English. In order to address these gaps in the research, the present study utilized cognitive interviews to investigate Spanish-speaking respondents' interpretations of the language questions as well as the basis of their responses.

1.2 The current language question

The three-part ACS language question focuses on home language use and English language proficiency. Part A asks whether household members who are five years old or older "speak a language other than English at home." If the answer is yes, respondents are asked to identify the non-English language in part B, and then to report how well the individual speaks English in part C (see Figure 1).

Figure 1. ACS language question (2012)

1	4) a.	Doe Engl	s this person speak a language other than lish at home?		
			Yes No → SKIP to question 15a		
	b. What is this language?				
		Fore	example: Korean, Italian, Spanish, Vietnamese		
	c. How well does this person speak English?				
			Very well		
			Well		
			Not well		
			Not at all		

1.3 Uses of ACS language statistics

The ACS language question data are used to produce statistics crucial to the implementation of federal language policy. In particular, statistics about the English proficiency of language minorities are used together with information about educational attainment to determine which electoral districts must provide voting materials in languages other than English for compliance with the Voting Rights Act.

ACS statistics are also used by various federal agencies for the implementation of Executive Order 13166, which requires federal agencies to take "reasonable steps" to provide Limited English Proficient (LEP) individuals "meaningful access" to programs and activities. They are also used by the U.S. Department of Education for its report to Congress on the social and economic status of children in school districts, as well as in the allotment of grants and sub-grants for English language acquisition and language enhancement under section 3111 of the No Child Left Behind Act.

Within the Census Bureau, ACS language statistics are used in the determination of the non-English languages in which to produce various survey materials as well as the locations in which such materials are distributed.

1.4 Methodological and measurement issues

Researchers have identified various possible measurement issues and concerns regarding the current ACS language question (Crawford 2001; Kominski 1989; Siegel, Martin and Bruno 2001; Stevens 2000; Zentella, Urciuoli and Graham 2007). One concern cited by researchers is

the difficulty of LEP individuals completing the survey in English, which might lead to higher rates of non-response as well as increase the likelihood of proxy responses or responses in languages other than English (Kominski 1989; Siegel, Martin and Bruno 2001). However, in recent years the American Community Survey has increased language access programs that allow respondents to complete the survey in languages other than English. For example, the paper and online instruments are now available in Spanish, and printed language assistance guides are available in Chinese and Korean. In addition, advance letters include information in multiple languages, and multilingual telephone and field representatives facilitate survey completion for non-English-speaking respondents.

Researchers have also expressed concern regarding the possible ambiguity of the expression "at home" in part A of the question – which might be interpreted as current residence, childhood home, or home country (Siegel, Martin and Bruno 2001). The meaning of "at home" might be particularly unclear for individuals residing in group quarters such as prisons or rehabilitation facilities. Respondents may also have uncertainty regarding whether or not to report languages spoken infrequently, in which they have limited proficiency, or that they learned in school (Crawford 1995, 2001; Siegel, Martin and Bruno 2001). Further, part B, which asks respondents to specify the non-English language spoken at home, presents challenges for the coding and classification of responses.

However, of the three parts of the question, the one that has received the most attention is the four-response-option inquiry on English speaking ability. There are numerous measurementerror concerns regarding this part of the question. First, language proficiency assessment is a notoriously difficult task, even for professional evaluators who undergo training and socialization. Respondents may use different standards of comparison, depending on their social circles, ethnolinguistic community, the proficiency of the interviewer, or the language of interview administration (Siegel, Martin and Bruno 2001; Zentella, Urciuoli and Graham 2007), although some have suggested that even if responses were not reliable for the evaluation of *individuals*, they might balance each other out such that the aggregate data could be used for assessing the English proficiency of *groups* (Pear 1984).

A second concern is that there is reason to be wary of proxy data; for example, the person completing the survey may not speak English him or herself, raising questions about the basis of evaluations of other household members. Third, the negative portrayal of non-English speakers in public discourse and social desirability of speaking English may lead respondents to overstate their, or household members', English ability. On the other hand, linguistic insecurity (Labov 1968) may cause respondents to underrate their ability.

1.5 Previous research

Prior to its inclusion on the 1980 Census long form, the three-part question was field-tested on the Current Population Survey (CPS) in July of 1975 (Macías 1993; McArthur 1981). Since that time, new and revised legislative mandates have both increased the need for language data and led researchers to investigate the reliability and validity of the data produced by the three-part question. One area where educational language policy has changed since 1975 is in the greater attention paid specifically to English language literacy, rather than simply speaking ability. For

example, whereas the 1968 Bilingual Education Act focused on "limited English-speaking" children, the 1978 reauthorization added "reading and writing" to the definition and began using the term "limited English proficient" (Macías 1993).

Given the growing recognition of the need for educational accommodation for non-English speaking children, Congress directed the Department of Education to provide state-level counts of LEP children and adults from non-English language backgrounds. This mandate was fulfilled by the English Language Proficiency Study (ELPS), carried out by the Census Bureau for the Department of Education, which involved the administration of English proficiency tests to individuals in households where at least one person had been reported as speaking a language other than English at home on the 1980 Census (U.S. Department of Education 1987). A smaller sample of households that did not report any such individuals was also included as a control. Researchers visited the households in the study and administered a total of 29,230 proficiency exams; 7,296 of these were administered to adults, and 18,207 were an age-specific children's version. The adult proficiency exam included listening, speaking, reading and writing and emphasized everyday bureaucratic tasks, such as applying for a driver's license or filling out a form, as well as following simple directions. The children's versions emphasized school-oriented language skills. Using a pass/fail cut-off point on test scores, individuals were classified as either LEP or not LEP.

The 1982 reauthorization of the 1965 Voting Rights Act also brought heightened attention to the measurement of English language proficiency. Specifically, an amendment included in the authorization modified the requirements for providing ballots and electoral information in languages other than English. Under the 1975 reauthorization the Director of the Census Bureau determined which jurisdictions were covered based in part on the percentage of the population comprised by members of language minorities. However the 1982 reauthorization added a limited-English proficiency requirement: only persons unable to understand English sufficiently to participate in the electoral process were to be included in the Voting Rights Act coverage calculations. In consultation with the Department of Justice, the Census Bureau thus sought to determine whether it was possible to use data from the three-part question to produce statistics about the individuals who are "unable to speak or understand English adequately enough to participate in the electoral process," the language used in the amendment (Kominski 1985).

In order to assess the validity of the census English speaking ability question as a measure of broader English proficiency, Census Bureau researchers conducted a new analysis of data from the 1982 ELPS. Specifically, they examined the text performance of individuals in each of the four self-reported speaking ability categories and found that those who were reported as speaking English "very well" passed the test at rates similar to those reported to speak only English (Kominski 1989). In contrast, individuals who were reported to speak English "well," "not well" or "not at all" passed the test at significantly lower rates. For this reason, the determination of districts covered by the language minority provisions of the Voting Rights Act utilized data from the English speaking ability question, with reported ability of less than "very well" considered to be inadequate for the electoral participation (Kominski 1985, 1989; Wilson

2014).¹ This reanalysis of the ELPS data and the concomitant decision to use "very well" as a cut-off point for quantifying the LEP population have been influential, with many policy makers and researchers following suit (Wilson 2014).

More recently, in order to determine the validity of the ACS English ability question as a measure of literacy, Census Bureau researchers again compared responses on the English speaking ability question to a language assessment (Vickstrom, Shin, Collazo & Bauman 2015). Using data from the National Assessment of Adult Literacy (NAAL), they compared self-reported English speaking ability –on a question that is similar but not identical to the ACS question– to scores on a "prose literacy" assessment consisting of open-ended questions on a variety of texts. Results showed a clear trend in prose literacy scores, with those who reported speaking "very well" having the highest literacy scores and those who reported "not at all" having the lowest. In addition, respondents who reported speaking "very well" performed most like respondents who spoke only English. While the English-only group had higher prose literacy scores than speakers of other languages who reported speaking "very well," the average score for both groups was at the "intermediate" level, which the test defines as able to read and understand moderately dense, less commonplace texts.

The analyses of ELPS and NAAL data are the only studies to include a comparison of responses to the English speaking ability question with *direct* measures of proficiency or literacy, but other research has compared responses on that question with *self-reported* ability to complete specific tasks in English. For example, the 1980 Census reinterview asked respondents whether they had difficulty filling out a form, such as a driver's license or job application form, in English. Researchers found that their responses were "highly correlated" with their responses on the 1980 Census English proficiency question, meaning that the highest percentage of those who reported speaking English "very well" on the 1980 Census also reported being able to fill out a form without difficulty (96 percent), in comparison with those who reported speaking "well" (78 percent), "not well" (38 percent) or "not at all" (5 percent)(Siegel, Martin and Bruno 2001).

Similarly, the 1986 National Content Test (NCT) and the corresponding reinterview asked respondents whether they could read a newspaper or write a postcard in English, as well as several questions on contexts of language acquisition and use. Of those who reported speaking English "very well," 98 percent reported being able to read a book and 97 percent said they could write a postcard in English (Kominski 1989). However, a high percentage of those who reported speaking English "well" also reported being able to read a book and write a postcard in English (93 percent and 91 percent, respectively). Even 69 percent of those who reported speaking English "not well" reported being able to read a book in English, and 58 percent of them reported being able to write a postcard. In addition, there were relatively few individuals in the dataset who reported very low English speaking ability (45 responded "not well" and 10 "not at all") compared to the number who responded "very well" or "well" (452 and 140, respectively).

In addition to investigating validity, or the extent to which the English speaking ability

¹ In addition to statistics about the LEP population, the Voting Rights Act formula for determining which districts must provide voting materials in languages other than English also requires statistics about illiteracy rates. In the production of those statistics, completion of five years of schooling, regardless of the language or location of that schooling, is used as a proxy for literacy.

question adequately measures broader proficiency in accordance with policy needs, researchers have also examined reliability, or whether there is consistency in the reporting of individuals' ability across time. Comparing survey responses with subsequent reinterviews, Siegel, Martin and Bruno (2001) found a high level of inconsistency (Index of Inconsistency=60.3) on the English-proficiency question, with respondents reported as speaking "very well" or "well" more frequently in the original survey than in reinterview; in other words, respondents reported lower proficiency in the reinterview than in the census.

1.6 Objectives of the present study

The data resulting from the ACS language question already are used in the implementation of the federal policy, and the policy and research needs for statistics on the LEP population are likely to continue to grow. Previous studies of the three-part language question have made significant contributions using quantitative methods, but there is a need to complement such research with qualitative studies that explore respondents' interpretation of the questions and the basis of their responses. Qualitative research can help assess the validity of the language data for its current uses as well as suggest possible improvements or identify paths for future research. Moreover, there is a need to investigate the basis of proxy reports of English speaking ability, particularly reports of other household members by respondents who are themselves LEP. As the Census Bureau, as well as other federal agencies and external organizations, increasingly conduct surveys in languages other than English, the possibilities of LEP individuals being asked to report the English speaking ability of other individuals is likely to increase.

The specific goals of the present study were to gain insights on: 1) respondents' interpretations of the question regarding whether they speak a language other than English at home, including their interpretation of the phrase "at home;" 2) the criteria used by respondents in rating English speaking ability, including whether or not they include reading and accent in their evaluations; 3) the basis for respondents' proxy reports of other household members' ability, particularly when they report limited proficiency for themselves; and 4) comparability to the yes/no language proficiency questions used in earlier U.S. censuses as well as the censuses of several other countries including Canada.

2 METHODOLOGY

The data for the present study were collected in conjunction with data collection for unrelated research on health coverage questions in English and Spanish (Pascale et al. 2013). That research involved six rounds of cognitive testing conducted in Massachusetts in 2012 by Research Support Services (RSS) and the University of Massachusetts Center for Survey Research (CSR) through a contract with the Census Bureau.

Participants were recruited via English- and Spanish-language advertisements online and in local newspapers, as well as via flyers posted at local supermarkets, health clinics, community centers, grocery stores, barbershops, churches, and other community venues. Starting with the second round, participants were also recruited through a bilingual letter sent by the Massachusetts Health Connector to enrollees. A total of 134 one-on-one cognitive interviews were conducted for the health coverage study, with participants receiving small financial incentives for participation. Only the 61 Spanish-language interviews were included in the present study. All of the Spanish-speaking participants were either monolingual or dominant in Spanish.

Although the exact protocols were modified from one round of testing to another in response to findings from early rounds, they shared a common structure. First, participants completed survey questions focused on health coverage followed by the three-part ACS language question. Next, after all the survey questions were administered, interviewers probed respondents on their interpretation of questions and the reasons for answering as they did. For example, in the case of a participant who had reported speaking English "well," the interviewer asked questions such as "You answered that you spoke English 'well." Can you tell me why you answered that way? How would you describe a person who speaks very well'? What can a person who speaks 'very well' do that you are not able to do?" During the cognitive probing, interviewers also posed additional questions about participants' English language ability, such as "Are you able to carry on a conversation in English?"

The first three rounds of cognitive testing employed an interviewer-administered questionnaire based on the Current Population Survey (CPS), while the latter three rounds employed a combination of interviewer- and self-administered instruments based on the ACS. In total, 13 participants completed the self-administered instrument and 48 completed the interviewed-administered instrument.

Although the health coverage questions were based on different surveys in different rounds, all six rounds of testing used the three-part language question exactly as worded on the current ACS instruments. The Spanish-language version of the ACS language question from the paper questionnaire is as follows:

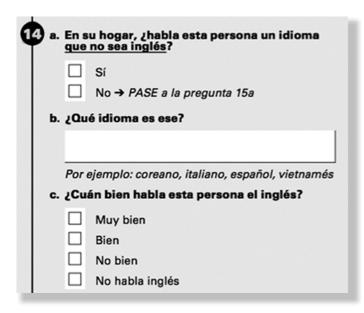


Figure 2. ACS language question - Spanish language version (2012)

For the first four rounds, participants completed the survey only about themselves; in the final two rounds they were asked to respond to survey questions for all household members, and they were probed regarding their proxy responses in addition to their responses about themselves.

Transcriptions and summaries were prepared by RSS and CSR staff following each interview.

3 FINDINGS

3.1 Part A: "Does this person speak a language other than English at home?"

3.1.1 False negatives

As shown in Figures 1 and 2, part A of the language question asks whether the person speaks a language other than English at home ("*En su hogar, ¿habla esta persona un idioma que no sea inglés?*"). Whereas the vast majority of participants (52 of 61) reported speaking a non-English at home, 9 participants responded "no," which subsequent probing revealed to be false. All of these false negatives occurred with interviewer-administered instruments. Thus, false negatives constituted 19 percent of interviewer-administered surveys (9 of 48). In addition to the false negatives, one participant who responded "yes" reported that the question was confusing.

In all but three cases of false negatives, participants did not realize they had understood the question differently from how it was intended until they were probed on their responses, after the questionnaire had been completed. In the other three cases, participants changed their answer on their own, prior to subsequent questions. If these three cases are not included, the percentage of interviewer-administered surveys producing false negatives on part A is 13 percent (6 of 48).

Cognitive probing revealed that some of the participants who responded "no" thought that the question was asking whether they spoke English, rather than a language other than English. This misunderstanding may be the result of a recency effect; in the Spanish wording of the question the word "*inglés*" ("English") appears at the end of the sentence making it more salient. However, in addition to any such recency effects, sociopragmatic factors also likely play a role. Specifically, conversational interaction is governed by the assumption that interlocutors do not request or provide obvious or redundant information (Grice 1977). Because the interview was being conducted in Spanish, the interviewer already knew that the participant spoke Spanish, and this may have favored participants' interpretation that the interviewer must be asking whether they spoke English.

Even if participants did not misinterpret part A as asking about English, sociopragmatic norms could lead respondents to interpret an implied "other than Spanish." When having a conversation in English, the question "Do you speak another language?" generally means 'another language other than English.' Similarly, in a Spanish-language conversation, the same question would mean 'other than Spanish. For this reason, participants who correctly understood that the question was asking about a non-English language might have assumed that the

interviewer meant 'in addition to Spanish.' Thus, the sociopragmatic norms of conversation can also account for the participant who responded "No, I only speak Spanish," the one who reported that he first thought that the question was asking whether he spoke a language other than Spanish, as well as the one that thought it was asking about languages "other than English or Spanish."

The present study only examined the Spanish-language version of the language question. However, other research found a similar issue in the initial translation of the language question into Korean for an ACS Language Access Guide (LAG) (Sha, Pan & Park 2012). In that study, the initial translation of the question was roughly "Does this person speak a different language other than English at home?" ("이 사람은 집에서 영어 이외의 다른언어를 사용합니까?"), which about half of the respondents found confusing and some misinterpreted as asking whether the person spoke a language other than Korean. In a subsequent round of testing the wording was revised from "other than English" to "which is not English" (이 사람은 집에서 영어가 아닌 다른 언어를 사용합니까?), which seemed to resolve the problem. In addition, they recommended underlining the phrase "which is not English" on both the Korean and Chinese LAGs. Beginning with the 2012 ACS, the corresponding phrase "que no sea inglés" was also underlined on the Spanish language instrument.

While there were no false negatives in Part A of the self-administered instrument, three of the 13 participants left it blank. Two of these participants went on to answer Parts B and C by writing "Spanish" and checking "not at all," as would have been expected if they had answered "yes" to part A. However, the third participant who left part A blank also left Part B blank (where respondents are asked to specific the non-English language), and then answered Part C (English proficiency rating) based on her Spanish, rather than English, proficiency, as was revealed in probing.

In the interviewer-administered cases in the present study, even when the participant reported not speaking a language other than English, the interviewer inquired about English proficiency, in order to collect as much data as possible. All but one of the participants who inaccurately responded "no" on the first part of the question reported speaking English "not well" or "not at all" ("*no bien*" or "*no habla inglés*"). As for the participant who left part A blank and reported her Spanish proficiency in part C, during probing she reported not speaking English at all.

In actual survey administration (rather than a study), false negatives on part A could mean that respondents would not be asked parts B or C. It should be noted, however, that all cases of false negatives occurred in interviewer-administered modes. It is possible that in such cases interviewers might spontaneously question negative responses when the interview is conducted in a language other than English, and they could be specifically trained to do so.

It is important to stress that these cases of misinterpretation are not caused by an inaccurate translation of the original question. Instead, the conversational context, including the language in which the interview is conducted, plays a role in the interpretation of the question. This highlights the fact that meaning does not reside exclusively in the questions themselves, but is instead influenced by sociopragmatic and contextual factors. This challenge of survey

translation highlights the need to consider adapting questions such that they elicit the same kinds of data as the original, rather than seeking to translate exactly (see Harkness, Villar & Edwards, 2010; Pan, et al. 2014 for discussion of adaptation in survey translation).

3.1.2 "At home"

As mentioned earlier, researchers have raised concerns about the potential ambiguity of the expression "at home," which could be interpreted as referring to an immigrant's home country (Siegel, Martin and Bruno 2001). However, the Spanish version of the question uses the expression "*en su hogar*," which is equivalent to "in his/her/your household," which is less ambiguous. In the first two rounds of testing, participants were probed on their interpretation of this expression, and since no problems were revealed, these probes were eliminated on subsequent rounds, in order to allow more time to explore other issues.

3.2 Part B: "What is this language?"

All respondents who reported speaking a language other than English at home reported speaking Spanish. Respondents were probed on whether they or any other household members spoke any other languages, and all responded negatively. This part of the question did not appear to pose any problems for participants.

3.3 Part C: "How well does this person speak English?"

Of the 59 participants who reported on their own English proficiency in Part C,² 11 responded "*bien*" ("well"), 33 responded "*no bien*" ("not well") and 15 reported "*no habla inglés*" ("does not speak English"). This distribution skewed to the low end of the proficiency scale as a result of recruitment and screening that specifically sought Spanish monolinguals and Spanish-dominant bilinguals in order to test the Spanish language health coverage questions. The Census Bureau practice of testing Spanish-language instruments with monolingual Spanish-speakers is based on the assumptions that LEP individuals are more likely to use instruments and materials in languages other than English and that bilinguals are more likely to understand even poor quality translations (see Goerman, et al. 2015; Pan, et al. 2007).

3.3.1 Criteria for evaluation

Participants reported a variety of criteria for the self-evaluations of English proficiency as well as for more general descriptions of the different response categories. In the case of participants who reported not speaking English at all, participants explained their responses by stating that they cannot express themselves in English, that they only speak Spanish, that they are not able to carry on a conversation in English, or that they rely on interpreters when getting medical care (a topic likely primed by the earlier questions related to health coverage).

 $^{^{2}}$ As noted above, in one case of a false negative on part A, the interviewer followed the normal skip pattern and thus did not ask Parts B or C of the language question. In addition, one participant reported her Spanish proficiency in part C (*"muy bien"*).

When asked what it means to speak English "well," or to describe what people who speak "well" are able to do, participants mentioned the ability to "defend oneself" in English, to understand and make oneself understood, and to manage without an interpreter. Several participants focused on what speaking English well would allow them to do, reporting that that a person who speaks English well would be able to get a better job, while others affirmed the importance of learning to speak English without mentioning specific benefits. A few participants mentioned that studying a language was necessary to speak it well, while others responded that people who are born in the U.S. are able to speak English well.

As for specific skills or linguistic features mentioned spontaneously by participants, these included knowledge of reading and writing, pronunciation, grammar, and vocabulary. In addition to a general probe about participants' reasons for responding as they did, interviewers were also instructed to explicitly inquire about whether the participant considered reading and accent to be relevant for the response, but interviewers did not do so in all cases, due to time constraints. Of the 43 cases in which participants said whether they would consider reading in their assessment of English ability (either because they mentioned it spontaneously or were asked directly), 29 said they would do so, while 14 said they would not. Similarly, 22 participants said that they did or would consider accent in their rating, while 13 said that they would not take accent into account. Although some of the individuals who said reading mattered for their evaluation also took accent into account, there were several participants who said they would include one but not the other.

3.3.2 "Well" versus "Very well"

As noted above, 11 participants evaluated themselves as speaking English "well," and none reported speaking English "very well." When probed regarding why they did not consider themselves to speak "very well," three participants responded that it was based on their accent, which was the most common explanation.

Several participants expressed the idea that to speak "very well" is to speak perfectly or to have complete mastery of English. For example, one respondent said that he had rated himself as speaking (only) "well" because while his vocabulary and grammar are good, they are not perfect. Similarly, another respondent described speaking "very well" as speaking perfectly and contrasted speaking "well" and "very well" by saying that "well is to hold a conversation, a not too long one, and very well is everything." The notion that a person must speak "perfectly" to be classified as "very well" was also expressed in some proxy reports; for example, one participant reported that she had classified another household member as speaking "well" because she accesses the Internet, conducts job searches and carries out job interviews in English. She explained that the household member "would need to perfect it a bit more" in order to warrant a "very well" rating, adding that "sometimes she can't understand a word."

One participant said that she evaluated herself as speaking "well," rather than "very well," because she is unable to express her feelings as well in English as in Spanish, and another said it was because she knew other people who spoke English better than her. Someone else reported that his response of "well" (rather than "very well") was based on the fact that he had never studied English and only spoke "street English." During probing, he changed his

evaluation from "well" to "not well" for this reason. Finally, one participant stated that he saw no difference between "well" and "very well."

Because several participants had stated that people born in the U.S. are able to speak English "well," a probe was added regarding whether people born outside of the U.S. are able to speak English "very well." All 12 participants who were asked this explicitly answered in the affirmative, stating for example, "There are non-American people who speak perfectly."

3.3.3 Reading versus speaking

Thirty-five of the participants were asked to report their ability to read English using the same four-point scale as the ACS English speaking ability question. In most cases participants gave the same rating for both reading and speaking. The only exceptions were one person who reported speaking English "not well" and not reading at all, and four people who said they didn't speak English at all and reported reading "not well."

3.3.4 Comparability to yes/no question

In contrast with the ACS four-option English ability rating, some national censuses employ a yes/no question on language ability. For example, Statistics Canada asks whether participants are able to carry on a conversation in English and in French. In the late 19th century the U.S. census questionnaire included a similar yes/no question about the ability to speak English (Gauthier 2002).

In order to explore the comparability of the current four-option ACS question to a yes/no question, 37 participants were asked whether they could carry on a conversation in English. Nine participants responded "yes" and 28 responded "no."

Not surprisingly, the vast majority of participants who reported speaking English "not well" or not speaking English at all reported that they were not able to carry on a conversation in English. The two respondents who reported speaking "not well" but who answered "yes" to the English conversation qualified their answers by adding "an easy conversation" in one case, and by limiting it to "personal" conversations in the other.

More noteworthy is the fact that all of the seven participants who rated themselves as speaking English "well" responded that they are able to carry on a conversation in English. This suggests that a yes/no question would be insufficient to distinguish between individuals who self-report their ability as "very well" from those who report speaking only "well," a distinction currently utilized to determine rates of limited English proficiency among groups. However, given that none of the participants in the current study reported speaking "very well," and there were only seven participants who reported speaking "well", this is a somewhat tentative conclusion.

3.4 **Proxy reporting**

During the first four rounds of cognitive tests, respondents answered survey questions only about themselves. In the final two rounds, they were also asked to respond for all household members, as in the ACS. In total, 16 of the 61 Spanish-language participants in the present study responded to the three-part language question about one or two other household members, in addition to themselves. In many of these cases, participants who described themselves as not speaking English at all or speaking "not well" also described another household member with a similar rating. However, there were also seven cases in which such individuals rated a household member as speaking better than they did themselves.

In many cases of proxy reporting, participants explicitly compared the ability of household members to themselves or another household member. For example, one participant explained her rating of a household member as "well" because "she speaks and writes a bit more than me. She understands more." In addition, just as participants sometimes mentioned their need for interpreters as an indicator of not being able to speak English well, several participants mentioned a household member's ability to function without an interpreter or to translate for the participant, as evidence of their being able to speak "well."

Of greatest interest and possible concern are cases in which a participant with selfreported limited English proficiency evaluates another person as speaking "very well," as it raises the question of whether such judgments are accurate. There were five such cases in the present study, two in which the participants rated themselves as speaking "well," two in which they rated themselves "not well," and one in which the participant reported that she did not speak English at all.

When probed as to the reason for the "very well" proxy rating, three participants made reference to the other household member having been born in the U.S. or speaking English as a first language. One stated that she had observed the household member interacting with friends and at work, stating that, "She speaks it, understands it, reads and writes, she can hold a conversation with anyone. Hence, she speaks it very well." She went on to say that "she goes on Internet, looks for jobs, she gets called for interviews, goes to interviews in English." Another participant stated that she was able to hear, based on the accent, that the household member spoke very well. In the case of adults born in the US, it is likely that their English speaking ability is similar to that of monolingual English-speakers. As for the other cases, it is more difficult to assess the accuracy of the evaluations.

4 CONCLUSION AND FUTURE RESEARCH

The present study provides a qualitative complement to early quantitative research on the ACS language question by conducting cognitive interviews in Spanish regarding participants' interpretation of the question and their reasons for responding as they do.

The most striking finding of this study was a high rate of false negatives in part A of the question, which asks whether individuals speak a language other than English at home. These false negatives were found exclusively in the interviewer-administered oral instruments. In actual

survey administration in languages other than English, interviewers may already spontaneously confirm or question negative responses, and training them to do so may be sufficient to overcome this potential issue. Given that false negatives were also documented in earlier research on a Korean translation (Sha, Pan & Park 2012), it will be important to conduct additional research in Spanish as well as other non-English languages, in order to explore the extent of this phenomenon. In addition, research on whether false negatives also occur in English-language interviews is needed. Such research can help shed light on whether the false negatives documented in Spanish language interviews derive from the sociopragmatic implications of the language is which the questions is asked, highlighting the need to consider adaptation as a translation strategy.

Because participants clustered at the low end of English proficiency reports, and there were no respondents who reported speaking English "very well," this study was able to provide only limited data regarding the reasons for choosing between "well" and "very well" in their English proficiency self-reports. So too, there was only a small number of participants who rated another household member as speaking "very well," and most of these cases were English-dominant individuals. On the other hand, this study does provide some insights on the comparability of a yes/no English-ability question to the current four-option question. Participants seemed to set a lower bar for answering the yes/no question than for rating someone as speaking "very well," suggesting that a multiple-option question is better suited for determining limited English proficiency.

Participants exhibited a great deal of variability in the kinds of criteria they reported using to evaluate both their own and others' English speaking ability. For example, there was little consistency regarding whether or not participants took reading or accent into account in making their evaluations. Moreover, the fact that comparisons seemed to play an important role suggests that ratings may be influenced by the proficiency of other household members, which may vary across households. Future research should investigate the validity of proxy reports, particularly in the case of LEP respondents.

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