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**MEMORANDUM**

**TO:** Mark Denbaly, USDA Economic Research Service

**FROM:** Nancy Cole

**SUBJECT:** FoodAPS: Cognitive Tests of Spanish Training Video

**DATE:** 5/7/2012

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This memorandum provides a summary of the cognitive tests conducted for the Spanish version of the Household Training video for FoodAPS, which were required by OMB. We previously conducted and reported on cognitive tests of the English-language training video and protocols. After the English-language tests, we revised the practice portion of household training to include a concrete example of a McDonald's meal for Red page practice, and to include "model" Red and Blue pages as feedback for respondents on how to complete a page. These revised protocols were used for Spanish language cognitive tests.

The English language video script was translated to Spanish by Mathematica's in-house Spanish translator (in-house translations go through a quality review process). The script was reviewed by a bilingual interviewer, who made minor revisions to improve the conversational tone prior to recording the video. The bilingual interviewer worked in the telephone center during the FoodAPS field test, receiving telephone calls from households who reported their food acquisitions by phone. She was therefore thoroughly familiar with the content of both the food books and the training script prior to working on the video.

The Spanish version of the household training video is available at: <http://www.usdafoodstudy.org/espanol/index-9.html#selected>

## **COGNITIVE TESTS**

Mathematica recruited five Spanish speaking respondents for cognitive testing. Characteristics of respondents are shown in Table 1. We recruited the Spanish speaking custodian of our office building, two residents of an apartment complex occupied by predominantly Spanish speakers, and two Spanish-speaking spouses of MIT graduate students.

Cognitive tests were designed to mimic the primary respondent training that will be done in the field. Testers read from the "Script for Initial Visit" to introduce the video and complete the Daily List, Red Page, and Blue Page practice sections.

Cognitive tests were conducted by three bilingual staff members in the Mathematica Cambridge office (two staff members each completed two tests; the third staff member completed on test). These staff had not worked on FoodAPS previously. Prior to administering the cognitive tests, the testers reviewed both the English and Spanish versions of the household

training video, and discussed the protocols for leading respondents through practice sessions with a FoodAPS staff member.

**Table 1. Respondents to Cognitive Tests**

	Respondent Gender	Respondent Age	Children in Household	Duration of Cognitive Test
1	Male	50	Yes	65 minutes
2	Female	27	No	70 minutes
3	Female	20	No	75 minutes
4	Female	30	Yes	55 minutes
5	Female	28	Yes	60 minutes

The Spanish training video is 44 minutes in length, compared with 28 minutes for English (Spanish content tends to be 30 percent longer than English). The cognitive tests lasted from 55 to 75 minutes, and averaged 65 minutes (compared with 63 minutes on average for the English tests, including one outlier at 83 minutes.) Total time included time for the video and interactive training.

Interactive training has three parts to practice the Daily List, Red page and Blue page. For Daily List practice, respondents are asked to write places where they obtained food the day before the cognitive test (or where they typically get food). For Red page practice, respondents are shown an example of a McDonald’s meal and receipt. For Blue page practice, respondents are provided a grocery bag of items and a receipt.

## **RESULTS OF COGNITIVE TESTS**

Cognitive test results were recorded on a standard form, shown in Figure 1. This form has a section to record observations of the practice sessions, and a list of debriefing questions for respondents.

### **Practice Page Observations**

Similar to the English tests, the practice page observations showed that respondents had an increasingly easier time with each practice session: they struggled a little with the Daily List, had a few questions about the Red page, and an easy time with the Blue page. As noted for the English tests, this observation may simply reveal “test anxiety” since the Daily List was the first of the three practice sessions.

For the Daily List practice, two respondents needed coaching to complete the page; one respondent jumped to the Red page and self-corrected and went back to the Daily List; two respondents completed the Daily List but asked questions as they completed it.

Four of the five respondents began to complete the practice Red page when prompted by the video; one respondent completed a Red page while watching the video, although she was not prompted to do so. Respondents asked for additional explanation of specific sections of the Red page – for example, what to include in the “total paid” field; what to do if they ran out of space at the bottom of the page. One respondent had some trouble with two questions on the page but self-corrected and completed the page correctly without coaching.

**Figure 1. Cognitive Test Report Form**

**National Food Study - Cognitive Tests - March 2012**

Respondent #	
Respondent age	
Any children in household?	
Duration of test	

**Practice Page Observations**

Section of Book	Comments
Daily List	
Red Page	
Blue Page	
Scanning	
General comments	

**Debriefing Questions**

	Question	Response
1.	Did you have any trouble understanding the person who talked in the video?	
2.	Did you think the video went too fast, too slow, or was it just about right?	
3.	Was the information in the video, confusing, clear, or sometimes confusing and sometimes clear? If confusing – what part was confusing?	
4.	How often would you write in the food book?	
5.	If you go to Burger King for lunch, where would you write that in the food book? Probe- which section of the Daily List; Red or Blue page?	
6.	If you go to CVS, where would you write that in the food book? (probe – they may say it depends on whether they buy food)	
7.	Why do we ask people to save receipts?	
8.	Why do we ask people to scan barcodes?	
9.	What do you do if you have groceries that you cannot scan?	
10.	What do you do if you go out to dinner and forget your receipt?	
11.	Where would you look for help when you are completing a red page?	
12.	If you were to take part in this study for one week, how confident are you that you could remember how to fill out this book?	

Respondents had no trouble with the Blue page. One respondent had trouble scanning barcodes, and needed coaching because he tried to scan the barcode with the laser pointed vertically across the barcode, rather than horizontally. One respondent initially forgot to scan the Place code, and self-corrected; another respondent was not sure how to end the session and needed coaching to scan the End barcode. All respondents said that they enjoyed scanning.

### **Debriefing Questions**

All respondents were asked the same twelve debriefing questions which were designed to obtain feedback on the training session and test their understanding of the survey protocols. The feedback from the Spanish tests were similar to that of the English tests: respondents found the video clear and easy to understand.

- Questions 1 and 2: Respondents did not have any trouble understanding the person who talked in the video. Four of five respondents found the pace of the video to be “just right,” while one found it “a little slow.”
- Question 3: Three of five respondents found the information in the video to be clear; one said that it was clear but the Daily List section was somewhat repetitive; one said that they were initially confused by the extensive list of locations that were provided as examples for the Daily List.

All respondents answered the specific questions (questions 4-10) about protocols correctly. One respondent was unsure about a response to question 11, but understood the suggested answer that he could look for help on the instructions pages in the food book. Respondents’ understanding of protocols indicates that the video, along with the interviewer-led practice was effective in teaching the study protocols.

In response to question 12, all respondents were confident that they could remember how to fill out the food book.

### **COMPARISON OF RESULTS WITH ENGLISH COGNITIVE TESTS**

The English-language cognitive tests revealed that respondents had trouble with the Red page practice because we did not provide a concrete example of a food acquisition to document on the Red page. The English tests also suggested the following changes in training protocols:

1. Encourage respondents to follow along with the book during the video because that seemed to be very helpful for those who did it.
2. Provide concrete feedback for how the practice pages should be completed.

These changes were incorporated into training protocols for the Spanish cognitive tests. Respondents to the Spanish tests followed along in the book while the video played (as noted above, one respondent independently completed a Red page along with the video). These respondents also had fewer questions about how to complete Red pages.

## **SUMMARY**

The Spanish cognitive tests indicate that the current Spanish-language version of the training video is clear and easy to understand. Respondents had questions about specific protocols, but that is expected and interviewers are trained to answer their questions and coach respondents as needed. The training protocols, which include interviewer-led practice, were effective in guiding respondents through practice pages in the food book. The tests do not indicate any need for revision of current protocols.