Attachment B-3

Computer and Internet Use Cognitive Testing Round 2 Findings 3/28/2017

## **General Testing Comments and Respondent Characteristics**

- **Respondent Geography:** Respondents from Round 2 resided in the following states: Maryland (6 respondents), Washington, DC (4 respondents), Pennsylvania (2 respondents), Virginia (2 respondents), and West Virginia (2 respondents).
- Participants: CSM recruited 4 paired interviews from unrelated households, and 4 paired interviews from related households (N=16 total). CSM was unable to recruit participants whose first language is Spanish, but were able to recruit participants who identified as Hispanic ethnicity. There was also 1 participant who is a French national. CSM was also able to recruit a 66 year old participant, and an 89 year old participant.
- **Use of Proxies**: The section of medical questions continued to prove difficult during Round 2 for proxies to answer regardless of their relationship to their household members. For several questions, reference persons were unaware that their roommate or family member takes certain actions to communicate with their doctor or monitor their health. The quality of data for medical questions would be very low if a proxy answered these questions in the field.

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Table 1: Select Demographic Characteristics of All Respondents\*

		Round 2		
		Related	Unrelated	Total
		(n=8)	(n=8)	(n=16)
Age (mean)	Age (mean)		24	35
Sex	Male	3	3	6
Sex	Female	5	5	10
	White	6	2	8
	Black or African American	2	3	4
Race**	American Indian or Alaska Native	0	0	0
Race	Asian	0	3	3
	Native Hawaiian or other Pacific Islander	0	0	0
F4louisite.	Hispanic	1	1	2
Ethnicity	Non-Hispanic	7	7	14
	Laptop	0	7	7
Lanton	Desktop	1	0	1
Laptop	Both	5	0	5
	Neither	2	1	3
Smart Phone	Yes	6	8	14
Siliart Pilolie	No	2	8	2
	Several times a day	7	8	15
Internet Frequency	About once a day	0	0	0
Internet Frequency	A few times a week	1	0	1
	A few times a month	0	0	0

<sup>\*</sup> Data in this table comes from both the survey screener and household roster.

## **Question 2 - DESKTP**

# **Round 2 Wording**

2. [Do you/Does anyone in this household, including you,] use a desktop computer?

(If needed) A desktop is a personal computer that is too large or heavy to be frequently moved from place to place.

- Yes<sup>1</sup>
- No

(If yes & is multi-person household) Who is that?

## **Findings**

During Round 2 of testing, 10 of the 16 respondents stated that a desktop computer is used by someone in their household. All respondents appeared familiar with a desktop computer and did not experience any comprehension issues. Two pairs disagreed about desktop usage by members of their household. One pair was classified as related, the other unrelated.

## Suggested Final Wording (same as Round 1)

2. [Do you/Does anyone in this household, including you,] use a desktop computer?

(If needed) A desktop is a personal computer that is too large or heavy to be frequently moved from place to place.

- Yes
- No

(If yes & is multi-person household) Who is that?

# **Question 3 - LAPTOP**

## **Round 2 Wording**

3. What about a laptop or notebook? [Do you/Does anyone in this household] use a laptop or notebook computer?

(If yes & is multi-person household) Who is that?

#### <u>Findings</u>

When asked if anyone in their household uses a laptop or notebook, 14 respondents said "yes". All 8 pairs were in agreement about a laptop being used by someone in their household. When probed on the definition of a notebook computer, most respondents stated a notebook is very similar to a laptop. They also stated that notebooks can be smaller than a laptop, or similar to a tablet with a detachable keyboard.

<sup>&</sup>lt;sup>1</sup> CAPI response options are yes/no for Q2-Q18, Q24-Q48, and Q50-Q64.

Three respondents provided incorrect answers. One respondent guessed that a notebook may be the ability to record notes on the internet. The second respondent thought of a paper notebook, and the third stated she was unsure. Even though some respondents were not familiar with the term "notebook", they could still identify if they should respond "yes" or "no" to this question.

## <u>Suggested Final Wording (modified from Round 2 Wording)</u>

3. What about a laptop or notebook? [Do you/Does anyone in this household] use a laptop or notebook computer? A notebook is...

(If yes & is multi-person household) Who is that?

# **Question 4 - TABLET**

# **Round 2 Wording**

4. What about a tablet or e-book reader, such as an iPad or Kindle?

(If needed) [Do you/Does anyone in this household] use a tablet or e-book reader?

(If yes & is multi-person household) Who is that?

## **Findings**

No respondents had difficulty interpreting the meaning of this question during Round 2. Out of 8 pairs, 1 unrelated pair provided conflicting information about a tablet or e-book reader being used in their household. No recommendations were made to this question.

#### Suggested Final Wording (same as Round 1)

4. What about a tablet or e-book reader, such as an iPad or Kindle?

(If needed) [Do you/Does anyone in this household] use a tablet or e-book reader?

(If yes & is multi-person household) Who is that?

# **Question 5 - MPHONE**

## **Round 2 Wording**

5. What about a smartphone, or a cell phone that connects to the Internet?

(If needed) [Do you/Does anyone in this household] use a smartphone?

(If yes & is multi-person household) Who is that?

#### Findings

All 16 respondents recruited for cognitive testing during Round 2 responded "yes" to this question because at least one person in their household uses a phone that can connect to the internet. The terminology used in this question was familiar amongst all participants. No one reported any comprehension issues with this survey item.

## Suggested Final Wording (same as Round 1)

5. What about a smartphone, or a cell phone that connects to the Internet?

(If needed) [Do you/Does anyone in this household] use a smartphone?

(If yes & is multi-person household) Who is that?

## **Question 6 - WEARAB**

## **Round 2 Wording**

6. [Do you/Does anyone in this household] use a wearable device that is connected to the Internet, such as a smart watch or fitness band? Examples include an Apple Watch, Fitbit, or Microsoft Band.

(If yes & is multi-person household) Who is that?

## <u>Findings</u>

During Round 2, nine respondents reported that no one in their household uses a wearable device that can connect to the Internet. All respondents except one were familiar with wearable devices. The respondent who was unfamiliar with this product is 89 years old. When asked about people in her home using this type of technology, she replied 'don't know". Alternatively, the other member interviewed from her household stated 'yes'. The seven other interview pairs agreed with their answers on wearable devices. The examples that respondents commonly gave include fitness bands, Fitbits, Apple watches, iwatch, and an algorithm pacemaker. When probed if they included their smartphone or cell phone when answering this question, one respondent replied "yes".

## Suggested Final Wording (same as Round 1)

6. [Do you/Does anyone in this household] use a wearable device that is connected to the Internet, such as a smart watch or fitness band? Examples include an Apple Watch, Fitbit, or Microsoft Band.

(If yes & is multi-person household) Who is that?

# **Question 7 - TVBOX**

**Round 2 Wording** 

7. [Do you/Does anyone in this household] use a smart TV, a game or video system, or another device that connects to the Internet and plays through a TV? Examples include an Xbox, Apple TV, PlayStation, Roku, or a Blu-Ray player that can access the Internet.

(If yes & is multi-person household) Who is that?

#### **Findings**

During Round 2, nine respondents stated someone in their household uses a smart TV, game or video system, or another device that connects to the internet and plays through a TV. One respondent was 89 years old and replied that she does not know. When this same respondent was asked what this question is asking, she replied that she was unsure. For the other 15 respondents, their answers included a gaming system, something you can interact with and compete with other people, a SMART TV or another TV that can connect to the internet, and Chromecast. The gaming systems that people thought about when they answered this question were Wii and Xbox. Even though some respondents did not have this type of device in their home, they were still capable of comprehending this question.

Out of the eight household pairs, three interview pairs disagreed if someone in their household uses a device that connects to the internet and plays through a TV.

## Suggested Final Wording (same as Round 1)

7. [Do you/Does anyone in this household] use a smart TV, a game or video system, or another device that connects to the Internet and plays through a TV? Examples include an Xbox, Apple TV, PlayStation, Roku, or a Blu-Ray player that can access the Internet.

(If yes & is multi-person household) Who is that?

# **Question 9 - INHOME**

## **Round 2 Wording**

9. [Do you/Does anyone in this household, including you,] use the Internet at home? This includes accessing the Internet with a cell phone, computer, tablet or other device.

(If yes & is multi-person household) Who is that?

#### Findings

All 16 respondents recruited during Round 2 revealed they use the internet at home regardless of the device used to access the internet. Interviewers probed respondents to discuss how they connect to the internet at home. Six respondents mentioned mobile phones, two respondents mentioned using a tablet, and two respondents mentioned using a laptop to use the internet at home. Six respondents also revealed they use the Wi-Fi installed in their homes to connect to the internet. Two respondents were living in hotels at the time of the interview and use the free Wi-Fi offered by the hotel. Respondents did

not express any confusion or comprehension issues with this question. No recommendations are made to this question. The wording tested in Round 2 is final.

## Suggested Final Wording (same as Round 2)

9. [Do you/Does anyone in this household, including you,] use the Internet at home? This includes accessing the Internet with a cell phone, computer, tablet or other device.

(If yes & is multi-person household) Who is that?

## **Question 10 - INWORK**

## **Round 2 Wording**

10. What about at work? [Do you/Does anyone in this household] use the Internet at work?

(If yes & is multi-person household) Who is that?

# **Findings**

Respondents did not report or demonstrate any comprehension issues with this question. Three respondents revealed during the roster that they were currently unemployed, and two stated they were retired so this question was not applicable to them. Out of the 16 respondents, 13 stated that someone in their household does use the internet at work. Only 1 of the paired interviews did not agree with the answer to this question.

#### Suggested Final Wording (same as Round 1)

10. What about at work? [Do you/Does anyone in this household] use the Internet at work?

(If yes & is multi-person household) Who is that?

## **Question 11 - INSCHL**

## **Round 2 Wording**

11. What about at school? [Do you/Does anyone in this household] use the Internet at school? Please count students only, and do not include online classes.

(If yes & is multi-person household) Who is that?

#### **Findings**

Out of the 16 respondents recruited during Round 2, 10 revealed that people in their household use the internet at school, and one person said she does not know if anyone does this. Of these respondents, no one exhibited any comprehension issues with this question. Comparing proxy reports, four out of eight paired interviews provided conflicting answers to this question.

## Suggested Final Wording (same as Round 1)

11. What about at school? [Do you/Does anyone in this household] use the Internet at school? Please count students only, and do not include online classes.

(If yes & is multi-person household) Who is that?

## **Question 12 - INCAFE**

## **Round 2 Wording**

12. What about at a coffee shop or other business that offers Internet access?

(If needed) [Do you/Does anyone in this household] use the Internet while at a coffee shop or other business that offers Internet access?

(If yes & is multi-person household) Who is that?

## **Findings**

All respondents were presented with this question, and 13 indicated that someone in their household uses the Internet while at a coffee shop. During probing, respondents were asked to describe what they thought of when they answered this question, and if there are other businesses that offer internet access. Four respondents mentioned they thought about the Wi-Fi at Starbucks, 3 respondents mentioned McDonalds, 2 respondents mentioned coffee shops, 1 respondent mentioned restaurants, 1 respondent mentioned Panera, 1 respondent mentioned Best Buy, and another respondent mentioned Barnes and Nobles.

One of the respondents from Round 2 was a non-native English speaker, whose first language is French. This respondent was confused by one of the probes in this question. His interviewer asked what he was thinking about when he answered this question. His reply was that he uses his phone in public spaces when outside of the home. However, when he was first probed further about examples of businesses, he initially said he could not think of any. He then followed up and stated that DC offers free public Wi-Fi which is very slow. Comparing proxy data, only 1 of the 8 paired interviews offered conflicting answers to this question.

#### Suggested Final Wording (same as Round 1)

12. What about at a coffee shop or other business that offers Internet access?

(If needed) [Do you/Does anyone in this household] use the Internet while at a coffee shop or other business that offers Internet access?

(If yes & is multi-person household) Who is that?

# **Question 13 - INTRAV**

## **Round 2 Wording**

13. What about while going from one place to another? Examples include using the Internet while riding public transit, or using the GPS on your cell phone while driving.

(If needed) [Do you/Does anyone in this household] use the Internet while going from one place to another?

(If yes & is multi-person household) Who is that?

## **Findings**

During Round 1 of cognitive testing, multiple respondents struggled to comprehend this question because they thought this was limited to certain actions such as traveling for work or business. However, during Round 2, no respondents displayed any comprehension issues with this question. All 16 respondents said someone in their household uses the internet while going from one place to another. Interviewers asked respondents to phrase this question in their own words, and provide examples of how an individual may do this. Four respondents said this is asking if you use the internet while commuting, whether driving or on public transportation. Ten respondents said they do this when they need to navigate and look up directions. Two respondent suggested they do this when they are idle, such as sitting in the car or at a park. Besides looking up directions while commuting, respondents said they will also text, use social media, stream music, or watch video content. No additional recommendations are made to this question.

# Suggested Final Wording (same as Round 2)

13. What about while going from one place to another? Examples include using the Internet while riding public transit, or using the GPS on your cell phone while driving.

(If needed) [Do you/Does anyone in this household] use the Internet while going from one place to another?

(If yes & is multi-person household) Who is that?

## **Question 14 - INLICO**

## **Round 2 Wording**

14. What about at a library, community center, park, or other public place?

(If needed) [Do you/Does anyone in this household] use the Internet at a library, community center, park, or other public place?

(If yes & is multi-person household) Who is that?

## **Findings**

Most respondents did not display any comprehension or confusion issues with this question. Thirteen respondents replied "yes" when asked if anyone in their household uses the internet at a library,

community center, park, or other public place. Another respondent said she does not know and is unsure if anyone in her household uses the internet at these places. One respondent wanted to verify that the reference period for this question is still within the last 6 months because she has used her smartphone in "public spaces". One respondent who said "yes", mentioned that she does this at parks and libraries, and one respondent said they use their cell phone. Another respondent thought about using their computer at work even though this is not considered a public space. Three of 8 interview pairs provided conflicting answers to this question.

Despite one respondent's confusion with this question, no additional recommendations are made at this time. Examples of public places are already provided in the wording of this question to provide respondents with context.

## Suggested Final Wording (same as Round 1)

14. What about at a library, community center, park, or other public place?

(If needed) [Do you/Does anyone in this household] use the Internet at a library, community center, park, or other public place?

(If yes & is multi-person household) Who is that?

# **Question 15 - INELHO**

#### Round 2 Wording

15. What about at someone else's home?

(If needed) [Do you/Does anyone in this household] use the Internet at someone else's home?

(If yes & is multi-person household) Who is that?

## **Findings**

The majority of respondents from Round 2 stated that people in their household have used the internet at someone else's home. Fifteen of 16 respondents answered "yes", and one said that they do not know what others have done outside of their home. Overall, respondents did not display any comprehension issues with this question. Although respondents were not explicitly probed on this question, several revealed while administering the questionnaire that they will use their phone while visiting someone's home. Only one of the eight paired interviews provided differing answers to this question, and this is because one member replied "don't know".

Suggested Final Wording (same as Round 1)

15. What about at someone else's home?

(If needed) [Do you/Does anyone in this household] use the Internet at someone else's home?

(If yes & is multi-person household) Who is that?

## **Question 16 - INOTHR**

# **Round 2 Wording**

16. [Do you/Does anyone in this household] use the Internet at some other location we haven't covered?

(If yes & is multi-person household) Who is that?

## **Findings**

Similar to Round 1, respondents did not report or demonstrate any comprehension issues with this question. When asked if anyone uses the internet at another location that has not been covered, 11 replied "no", four replied "yes", and one replied "don't know". Those who said "yes" did not provide specific answers as to why, other than because they use the internet wherever they go. Four of eight paired interviews provided differing responses to this question.

# Suggested Final Wording (same as Round 1)

16. [Do you/Does anyone in this household] use the Internet at some other location we haven't covered?

(If yes & is multi-person household) Who is that?

## **Question 17 - NETCHK**

## **Round 2 Wording**

17. Based on your responses, it sounds like (*list names where all IN\** != 1) [does/do] not use the Internet. [Does/Do] [he/she/these people in your household] use the Internet from any location, and for any purpose?

(If additional users) Who uses the Internet from any location, and for any purpose?

#### **Findings**

During Round 2 of testing, item 17 was skipped for all 16 respondents. All respondents reported that all persons from their household has used the internet in at least one of the locations asked about in the questionnaire.

Suggested Final Wording (same as Round 1)

17. Based on your responses, it sounds like (*list names where all IN\** != 1) [does/do] not use the Internet. [Does/Do] [he/she/these people in your household] use the Internet from any location, and for any purpose?

(If additional users) Who uses the Internet from any location, and for any purpose?

# **Question 18 - MOBDAT**

## **Round 2 Wording**

18. [Do you/Does anyone in this household] access the Internet using a data plan for a cell phone, smartphone, tablet, mobile hotspot, or other device?

This type of Internet service is provided by a wireless carrier, and may be part of a package that also includes voice calls from a cell phone or smartphone.

#### **Findings**

During Round 2, 15 of 16 respondents reported that they access the internet using a mobile internet service or a data plan for their mobile devices. One respondent said that she does not have a cell phone, and opted for don't know because she is not sure how the other members of her household access the internet on their phones. This same respondent provided a different response than the other person from her pair.

All respondents were probed to discuss what data plan for a cell phone means to them in question 18. Their answers included a data plan means that they can access the internet, it is how much they use on their phone, it is a plan paid bi-monthly that provides internet access and cell phone usage, it is how much you are allowed from your plan before going over, it is the cell phone provider you have and the amount of megabytes used each month, a limited amount of data before being charged or cut off, and accessing the internet through your cell service and not needing Wi-Fi. Respondents described their mobile service as having unlimited, limited or rollover data plans. One respondent was more specific stating they believe their speed is 4G.

One elderly respondent was not sure how others in her household access the internet using a data plan. Other respondents indicated that they were aware of the phone providers who provided internet service to their other household members. They were always confident in their response.

Suggested Final Wording (same as Round 2)

18. [Do you/Does anyone in this household] access the Internet using a data plan for a cell phone, smartphone, tablet, mobile hotspot, or other device?

This type of Internet service is provided by a wireless carrier, and may be part of a package that also includes voice calls from a cell phone or smartphone.

## **Question 21 - HOMTE**

## **Round 2 Wording**

- 21. I am going to read a list of ways that people access the Internet from their homes, other than a mobile data plan. At home, [do you/does anyone in this household] access the Internet using:
- 1. High-speed Internet service installed at home, such as cable, DSL, or fiber-optic service? (If needed) This type of Internet service is often provided by a cable company or phone company.
- 2. Satellite Internet service? This type of Internet connection is received through a satellite dish.
- 3. Dial-up service?
- 4. Some other service?

#### **Findings**

Of those respondents that had internet connections installed in their home, 11 respondents said they have a high-speed internet service, 1 has satellite service, 2 respondents said some other service, and two respondents did not choose a response because they did not know. Only one of the eight paired interviews provided non-matching responses to this question. Respondents were probed on how difficult this question was to answer. Ten respondents felt the question was easy, whereas only three thought it was difficult to answer.

To ensure that respondents had an idea of the different types of internet being measured in this question, respondents were also probed on their understanding of the difference between satellite and high-speed internet. Four respondents did not know the difference between the two internet options, 4 respondents mentioned that high speed is faster than satellite, 6 stated satellite internet uses a satellite or satellite dish, and 1 respondent said they guess that a satellite has to be clear.

To analyze the respondent's ability to serve as proxies, interviewers asked them how do they know if other household members have access. Six respondents revealed they use the same connection, 2 said this is because the internet is in their name, 2 respondents said because others have access to the Wi-Fi password, 1 respondent stated that she sees others use the internet, a different respondent stated they know because others would speak up if they did not have internet access, and the remaining respondent said he knows because the other roommate pays for the bill. Three respondents were 100% sure in their responses, one respondent said they are very confident, and one was confident.

- 21. I am going to read a list of ways that people access the Internet from their homes, other than a mobile data plan. At home, [do you/does anyone in this household] access the Internet using:
- 1. High-speed Internet service installed at home, such as cable, DSL, or fiber-optic service? (If needed) This type of Internet service is often provided by a cable company or phone company.
- 2. Satellite Internet service? This type of Internet connection is received through a satellite dish.
- 3. Dial-up service?
- 4. Some other service?

## **Question 23 - HOMSU**

## **Round 2 Wording**

Thinking about the company or organization that provides your home Internet service, who provides your Internet service?

- 1. Internet service is provided by a company that sells Internet service, such as a cable or phone company.
- 2. Internet service is provided by a public agency, nonprofit, or cooperative that sells Internet service. Include example/definition.
- 3. Internet service is provided for the entire apartment building, condominium, campus, or other community and included in housing costs.
- 4. Internet service is publicly available and provided at no charge.
- 5. Internet service is provided through some other method.

#### **Findings**

When asked about the companies or organizations that provide home internet service, 14 respondents said it is provided by a company that sells internet such as a cable or phone company. No respondents identified public agencies or non-profits as the providers of their internet service, and 10 mentioned they could not provide examples because they were not familiar with this type of internet provider. However, one respondent thought of RCN, but when talking through the question, thought this is a private company. Another respondent thought about a program under Barack Obama's presidency that offered free or low cost mobile service, and thought the same was applied to internet such as Comcast. Three respondents said their internet is provided for the entire apartment, condominium, etc.

Two respondents indicated their internet service is publicly available and provided at no charge. When asked to give examples of how this could be offered, two respondents thought of the internet on a college campus, two mentioned public libraries even though the question is about home internet, and another two could not provide examples. Additional respondents gave examples such as hotspots, the airport, coffee shops, free smart phones, and "companies with AT&T service", or Comcast subscribers who can access Xfinity hotspots. Alternatively, one respondent did provide the District of Columbia's public Wi-Fi network as an example.

When asked if internet is provided through some other method, two respondents said theirs is but could not explain how. When comparing proxy match rates, 7 pairs agreed whether or not their internet is from a public agency, 4 agreed on their internet being provided for the entire apartment/condo/campus/community, 5 agreed on whether or not their internet is publicly available, and 5 agreed if the internet is provided through some other method.

## Suggested Final Wording (same as round 2)

Thinking about the company or organization that provides your home Internet service, who provides your Internet service?

- 1. Internet service is provided by a company that sells Internet service, such as a cable or phone company.
- 2. Internet service is provided by a public agency, nonprofit, or cooperative that sells Internet service. Include example/definition.
- 3. Internet service is provided for the entire apartment building, condominium, campus, or other community and included in housing costs.
- 4. Internet service is publicly available and provided at no charge.
- 5. Internet service is provided through some other method.

# **Question 24 - PECOMP**

## **Round 2 Wording**

24. To the best of your knowledge, are there other companies or organizations where you live that would offer high-speed Internet service installed in your home, such as cable, DSL, or fiber-optic service?

(If needed) This type of Internet service is often provided by a cable company or phone company.

#### Findings

Some of the respondents from Round 2 were aware of the presence of competing internet providers where they lived. Nine respondents stated there are other companies they could go to for high-speed internet service; and one respondent was unaware of the presence of other companies. Some of the companies in the areas where our respondents live include HughesNet, Time Warner, Dish, MetroNet, Verizon and AT&T. Seven respondents said that Comcast is offered in their area, and four mentioned Verizon. Other respondents appeared to be confused because they provided examples of cell phone providers such as Sprint, or brands of routers/modems such as Linksys, Belkin, and Netgear.

In Question 24, respondents were also probed on their understanding of fiber optic service. Five respondents associated fiber optics with Verizon Fios, one respondent thought Comcast offered this capability, and another stated RCN's network has fiber optics.

Four respondents could not give examples of fiber optic service. The majority of respondents felt this question was easy to answer. However, two respondents needed additional guidance to understand the scope of what this question is asking. Comparing proxy reports, three of the 8 paired interviews provided matching responses to this question.

## <u>Suggested Final Wording (modified from Round 2)</u>

24. To the best of your knowledge, are there other cable or phone companies or organizations where you live that would offer high-speed Internet service installed in your home?

# **Question 26 - EMAIL**

## **Round 2 Wording**

26. [Do you/Does NAME] use email?

## **Findings**

From Round 2 we learned that many of our participants use email. All respondents answered "yes" to this question. The elderly respondent exclaimed that this is all she does when it comes to technology. She uses email as a way to keep in touch with friends and family. Respondents did not express any confusion or comprehension issues when asked this question. All proxy reports were accurate for this question.

## Suggested Final Wording (same as Round 1)

26. [Do you/Does NAME] use email?

# **Question 27 - TEXTIM**

#### Round 2 Wording

27. What about texting or instant messaging? [Do you/Does NAME] use text or instant messaging?

## **Findings**

The majority (15) of our respondents during Round 2 said they use a text or instant messaging service. However, one elderly respondent said that she does not. Participants were asked to tell their interviewer in their own words what this question is asking. Respondents described texting as the ability to type and send messages to communicate with other people through the phone. They suggested texting is different from voice calling. The 89 year-old respondent that does not text was not familiar with this capability and therefore terminology.

Respondents were also familiar with the ability to send instant messages. For one respondent, "instant messages is when you are on the computer and can instantly type a message and it goes to that

person". She has used the internet for text and instant messaging. Other respondents also stated they use the internet to send messages using WhatsApp, GroupMe, and Facebook's messaging features. When examining proxy rates for this question, there were 15 matches and 1 non-match.

## Suggested Final Wording (same as Round 2)

27. What about texting or instant messaging? [Do you/Does NAME] use text or instant messaging?

## **Question 28 - SOCIAL**

## **Round 2 Wording**

28. What about using social networks, such as Facebook, Twitter, Snapchat, or Instagram?

(If needed) [Do you/Does NAME] use social networks?

## **Findings**

All respondents were confident in their ability to understand and answer this question. No participants from Round 2 expressed any confusion or difficulty. Fourteen of the 16 respondents stated they use social networks such as Facebook, Twitter or Instagram. While respondents were not probed on these questions, the 89 year old respondent from this round stated that she does not use any social media, and she is unaware of what others in her home may use. When comparing proxy match rates for this question, there were 13 matches, and 3 non-matches.

#### Suggested Final Wording (same as Round 1)

28. What about using social networks, such as Facebook, Twitter, Snapchat, or Instagram?

(If needed) [Do you/Does NAME] use social networks?

## **Question 29 - CONFER**

## **Round 2 Wording**

29. In the past six months, [have you/has NAME] participated in video or voice calls or conferencing over the Internet, such as with Skype or FaceTime?

(If needed) [Do you/Does NAME] participate in video or voice calls or conferencing?

#### **Findings**

During Round 2 of testing, 12 respondents have participated in video or voice calls or conferencing over the internet in the past six months. Most respondents did not exhibit any comprehension issues with this question. After examining the proxy data for this question, there were 13 matches and 3 non-matches.

Interviewers probed respondents about the types of things they thought about when answering this question. Respondents thought about making conference and video calls, using applications such as FaceTime, Skype, Google video, Zoom, Imo, Facebook and WebEx. One respondent mentioned she was unfamiliar with this type of technology.

## Suggested Final Wording (same as Round 1)

29. In the past six months, [have you/has NAME] participated in video or voice calls or conferencing over the Internet, such as with Skype or FaceTime?

(If needed) [Do you/Does NAME] participate in video or voice calls or conferencing?

# **Question 30 - VIDEO**

# **Round 2 Wording**

30. What about streaming or watching videos? [Do you/Does NAME] watch videos over the Internet? Examples include YouTube and Netflix.

#### **Findings**

Respondents did not display any comprehension issues with this question. All but one respondent from Round 2 streams or watches video content over the internet. Respondents were not explicitly probed about this question during testing. However, while administering the questionnaire, some respondents revealed they use YouTube and Netflix. One respondent from our sample appeared not to be savvy when it comes to most technology, however this person said that she does watch videos when someone sends her an email with a video URL link. All proxy reports were accurate for this question.

## Suggested Final Wording (same as Round 1)

30. What about streaming or watching videos? [Do you/Does NAME] watch videos over the Internet? Examples include YouTube and Netflix.

# **Question 31 - AUDIO**

# **Round 2 Wording**

31. What about streaming or downloading music, radio programs, or podcasts?

(If needed) [Do you/Does NAME] stream or download music, radio programs, or podcasts?

## **Findings**

Streaming or downloading music or audio content was less common than watching or streaming videos. There were five respondents during Round 2 who do not engage in this type of activity. Alternatively, for those that answered "yes" enjoy downloading music, and/or listening to podcasts and radio programs.

Respondents did not struggle comprehending this question because they were all familiar with this type of technology. The proxy data from this round reveals 11 matches, and 5 non-matches. It was more challenging for respondents to serve as proxies for this question than previous ones.

# Suggested Final Wording (same as Round 1)

31. What about streaming or downloading music, radio programs, or podcasts?

(If needed) [Do you/Does NAME] stream or download music, radio programs, or podcasts?

## **Question 32 - PUBLSH**

## **Round 2 Wording**

32. What about posting or uploading blog posts, original videos, or other content that [you/NAME] created? Exclude pictures and videos that you take and record for personal use and shared to social media.

(If needed) [Do you/Does NAME] publish or upload original content that [you/NAME] created to the Internet?

#### **Findings**

Question 32 is one of the items that was most problematic during Round 1 of testing. Revisions were made to this item following Round 1. Only one respondent struggled with comprehending this question. This individual was 89 years old and unfamiliar with a lot of the more advanced technology discussed throughout the questionnaire.

For all other respondents, their responses to the various probes suggested they understood the scope of the question. Three respondents said they post or upload original content to the internet that they created. One person has a dog and records and posts videos of his pet doing humorous things on YouTube. Another respondent operates a blog an often creates content for this blog. The remaining respondent who said yes was unable to go through the probes due to time constraints.

Most of the respondents who said no chose this response because they only post and share things on social media, such as pictures or videos on Facebook which was excluded from the question. Interviewers also probed respondents on what personal use means to them in the context of this question. They described this phrase to mean sharing things with friends and family, posting to your Facebook or other social media accounts, and information that is not meant for the 'larger community'.

Comparing the accuracy of proxy responses, there were 12 matches and 4 non-matches. These non-matches mostly occurred because some respondents believed or assumed the other person from their pair operated a blog, whereas others did not know or forgot that the other person from their pair

operates a blog. Due to the lack of confusion for Question 32 in this round of testing, no additional recommendations are made.

# Suggested Final Wording (same as Round 2)

32. What about posting or uploading blog posts, original videos, or other content that [you/NAME] created? Exclude pictures and videos that you take and record for personal use and shared to social media.

(If needed) [Do you/Does NAME] publish or upload original content that [you/NAME] created to the Internet?

# **Question 33-TELEWK**

## **Round 2 Wording**

33. [Do you/Does NAME] use the Internet to telecommute or work while away from [your/his/her] usual workplace?

#### **Findings**

During Round 2, five of our 16 respondents had been unemployed or were retired. From the remaining 11, six of those respondents have telecommuted within the last six months. Telecommute was commonly defined as working outside of the workplace, or performing your work responsibilities at home. Two respondents displayed comprehension issues when probed on what telecommute means. One respondent stated this is teleporting, and another initially stated this means using public transportation apps or GPS before mentioning the time he video-conferenced from home with colleagues in the office about work.

Although most respondents were familiar with telecommuting, they struggled to serve as a proxy for this question. There were 7 matches, and 9 non-matches between pairs for this question.

## Suggested Final Wording (modified from Round 2)

33. [Do you/Does NAME] use the Internet to telecommute or work while away from [your/his/her] usual workplace, such as working from home?

#### **Question 34 - JOBSCH**

## **Round 2 Wording**

34. In the past six months, [have you/has NAME] used the Internet to search or apply for a job?

(If needed) [Do you/Does NAME] use the Internet to search or apply for a job?

## **Findings**

Many of our respondents have reported they have searched for jobs within the past six months. Four respondents said that they have not done this. This question was very easy for respondents to interpret. No one exhibited any issues with comprehension. When providing proxy reports about online job searches, there were 11 matches, and 5 non-matches. Proxies often stated they believed they knew the answer to this question because they recalled discussing this with the other member of their pair.

# Suggested Final Wording (same as Round 1)

34. In the past six months, [have you/has NAME] used the Internet to search or apply for a job?

(If needed) [Do you/Does NAME] use the Internet to search or apply for a job?

# **Question 35 - EDTRAI**

# **Round 2 Wording**

35. What about online classes or job training?

(If needed) [Do you/Does NAME] use the Internet for educational classes or job training?

# **Findings**

None of the respondents recruited during Round 2 expressed confusion or comprehension with this question. Ten of the 16 respondents have taken online classes or job training using the internet. Most proxies provide yes or no responses for the other member of their pair. However, one proxy said they do not know if their roommate has taken online classes or job training. When comparing proxy reports for this question, there were 11 matches and 5 non-matches.

#### Suggested Final Wording (same as Round 1)

35. What about online classes or job training?

(If needed) [Do you/Does NAME] use the Internet for educational classes or job training?

# **Question 36 - USESVC**

# **Round 2 Wording**

36. What about requesting services provided by other people, for example hailing a ride using Uber or Lyft, or reserving a room through Airbnb?

(If needed) [Do you/Does NAME] use the Internet to request services provided by other people?

## **Findings**

During Round 2 of testing, four of 16 respondents revealed they do not request services by other people using the Interviewers probed respondents to describe this question in their own words. The

examples they gave included using the internet to reserve an Uber, request home repairs, and book appointments to have your car serviced online.

One respondent was confused as she mentioned reserving a room through a hotel as opposed to Airbnb or concert tickets. This respondent lives in a rural area and did not offer examples of car share services like the other respondents. It could be helpful to list an example that is not associated with big cities. Her grandmother also did not understand this question.

Two respondents thought about goods in this question as opposed to services. It is challenging for them to separate services from goods. The data from the proxy reports reveal 13 matches, and three non-matches.

## Suggested Final Wording (modified from Round 2)

36. What about requesting services provided by other people, for example hailing a ride using Uber or Lyft, or reserving a room through Airbnb, or requesting home repairs?

(If needed) [Do you/Does NAME] use the Internet to request services provided by other people?

## **Question 37 - ESRVCS**

# Round 2 Wording

37. What about offering [your/their] own services for sale via the Internet? Examples include offering rentals on Airbnb and driving for Uber or Lyft. Do not include any goods or possessions sold online, such as, clothing, shoes, or crafts.

(If needed) [Do you/Does NAME] offer [your/their] own services for sale via the Internet?

## **Findings**

Only two of our respondents from Round 2 sell their own services for sale via the internet. One respondent has listed her home on Airbnb before. The other respondent's information was inaudible from the recording and their explanation could not be verified with the interviewer. Five respondents did not comprehend this question because they thought about selling goods on Craigslist, Etsy, and eBay. Respondents also confused services with goods in this question as they did with Question 36. After examining proxy reports, there were 12 matches and 4 non-matches. No recommendations are made at this time as the best revision would be to combine goods and services into one question. An example is provided below for combing both questions.

"What about offering [your/their] own services for sale online, or sell goods via the Internet? Examples include offering rentals on Airbnb and driving for Uber or Lyft. As well as selling items, such as, clothing, shoes, or crafts."

#### Suggested Final Wording (same as Round 2)

37. What about offering [your/their] own services for sale via the Internet? Examples include offering rentals on Airbnb and driving for Uber or Lyft. Do not include any goods or possessions sold online, such as, clothing, shoes, or crafts.

(If needed) [Do you/Does NAME] offer [your/their] own services for sale via the Internet?

## **Question 38 - EGOODS**

## **Round 2 Wording**

38. [Do you/Does NAME] use the internet to sell goods? Examples include selling items on Etsy or eBay.

## **Findings**

During Round 1, this question was item 39 in the survey but the order was moved up to Question 38. This revision was made because respondents reported on goods they have sold when asked about services they have offered for sale. By changing the order, researchers believed this may cause respondents to notice the difference between services and goods, and modify their answers if necessary.

Interviewers asked respondents how they came up with their answers to this question. Majority of respondents said they know they have not sold anything online, therefore the answer is "no". Two respondents have sold goods online within the past 6 months. For the two respondents that replied "yes", they have sold items on eBay. There were 12 matches, and 4 non-matches for the proxy data.

## Suggested Final Wording (same as Round 1)

38. [Do you/Does NAME] use the internet to sell goods? Examples include selling items on Etsy or eBay.

# **Question 39 - ECOMME**

#### Round 2 Wording

39. In the past six months, [have you/has NAME] used the Internet for online shopping, travel reservations, or other consumer services on the Internet?

(If needed) [Do you/Does NAME] use the Internet for online shopping, travel reservations, or other consumer services?

## **Findings**

During Round 1 of testing this was Question 38 but the order changed for Round 2. Nearly all of the respondents recruited during Round 2 engage in e-commerce. Only one respondent said they do not use the internet for consumer services or to buy things online, and she was also unaware if anyone else in

her household does. Respondents did not display any comprehension or confusion issues with this question. As this was a common activity within households, there were 13 matches and 3 non-matches for proxy reports.

## Suggested Final Wording (same as Round 1)

39. In the past six months, [have you/has NAME] used the Internet for online shopping, travel reservations, or other consumer services on the Internet?

(If needed) [Do you/Does NAME] use the Internet for online shopping, travel reservations, or other consumer services?

## **Question 40 - FINANC**

## **Round 2 Wording**

40. [Do you/Does NAME] use the Internet for financial services such as banking, investing, or paying bills online?

#### **Findings**

Respondents did not report any confusion or comprehension issues with this question. Using the Internet for financial services is commonly done by 15 of our 16 participants. The only participant who does not engage in online services such as banking or investing is our respondent that is 89 years old. Although she does not do this, she is very certain that her granddaughter does who was also interviewed from their household. Proxy reports for this question were fairly accurate with 14 matches and 2 non-matches.

## Suggested Final Wording (same as Round 1)

40. [Do you/Does NAME] use the Internet for financial services such as banking, investing, or paying bills online?

## **Question 41 - HOMIOT**

# **Round 2 Wording**

41. What about interacting with household equipment or appliances that are connected to the Internet, such as a connected thermostat, light bulb, or security system?

(If needed) [Do you/Does NAME] use the Internet to interact with household equipment or appliances?

#### **Findings**

During this round, only seven respondents said they have interacted with household equipment or appliances that are connected to the internet. Interviewers probed respondents on the types of things they thought about when asked this question. Respondents thought about thermostats, a washing

machine, security systems, home automation to control lights, Amazon Echo, and a Google Home device. One of the respondents who mentioned the Echo device asked her interviewer for clarity if this was right. When asked what she thinks, she said she would consider it. After reviewing proxy reports, there were 14 matches, and 2 non-matches for this question.

## Suggested Final Wording (same as Round 1)

41. What about interacting with household equipment or appliances that are connected to the Internet, such as a connected thermostat, light bulb, or security system?

(If needed) [Do you/Does NAME] use the Internet to interact with household equipment or appliances?

# **Question 43 - MEDDOC**

## Round 2 Wording

43. What about communicating with a doctor or other health professional using the Internet?

(If needed) [Do you/Does NAME] communicate with a doctor or other health professional using the Internet?

#### **Findings**

The order of this item was moved up in the questionnaire because the variables MEDREC and MEDINF are similar. During Round 2, respondents did not display any comprehension issues with this question. Many of our respondents do not use the internet to communicate with a health professional. Only four of 16 respondents said they have done this in the past six months. Participants were probed on what this question is asking about. Some of their responses included communicating with your doctor through email, setting up doctor appointments online, and viewing or accessing health records or test results online. Proxy reports reveal that there were 10 matches, and 6 non-matches.

Despite respondents not experiencing any comprehension issues with this item during both rounds of testing, it would flow better if the if needed question was read. Respondents are first provided the introduction that we are about to discuss medical questions, and then asked "what about...".

## <u>Suggested Final Wording (modified from Round 2)</u>

43. [Do you/Does NAME] communicate with a doctor or other health professional using the Internet?

**Question 44 - MEDREC** 

Round 2 Wording

44. What about accessing health records or health insurance records online?

(If needed) [Do you/Does NAME] access health records or health insurance records online?

## **Findings**

Respondents did not have any comprehension issues with this question in Round 2. Only six of 16 respondents have used the internet to access their health records or health insurance records. When interviewers probed respondents on what "access" means to them in this question, some of the answers they provided included being able to get x-rays, checking personal records online, reviewing health insurance policies, and viewing paperwork electronically as opposed to having physical copies. Proxy reports for this question reveal 11 matches, and 5 non-matches.

## Suggested Final Wording (same as Round 1)

44. What about accessing health records or health insurance records online?

(If needed) [Do you/Does NAME] access health records or health insurance records online?

## **Question 45 - MEDINF**

## **Round 2 Wording**

45. [Do you/Does NAME] research health information online, such as with WebMD or similar services?

#### **Findings**

Many of our respondents from Round 2 used the internet to research health information or similar services online. Thirteen respondents said they research health information online, and two of the 13 respondents who research this said this is common for them because they do not have health care. Other respondents mentioned they research this information when they start to experience new symptoms. Eight of the 13 respondents said they use WebMD and Google to research their questions. After comparing self-responses against proxy reports, there were 10 matches and 6 non-matches.

## Suggested Final Wording (same as Round 1)

45. [Do you/Does NAME] research health information online, such as with WebMD or similar services?

# **Question 46 - MEDMON**

#### Round 2 Wording

46. [Do you/Does NAME] use an electronic health monitoring service that collects and sends data to [you/his/her] doctor or health care provider through the Internet? Examples include connected devices that monitor vital statistics, blood glucose levels, or blood pressure.

## **Findings**

Most of the respondents from Round 2 do not use any type of electronic health monitoring service with the exception of one person. Interviewers probed respondents on what types of devices could be considered in this question. Five respondents incorrectly identified Fitbits as examples, and another stated a smart watch. One respondent did think that the data from the Fitbit is sent to his relative's doctor. The others did not convey this. Respondents also thought about health monitors and blood pressure monitors. NTIA, are Fitbits used to transmit data to health care providers?

Comparing the proxy data, there were three non-matches. From one pair, a person stated his girlfriend has a device that reports data to her doctor but she did not report this during her interview. For the second pair, a respondent did not realize his aunt uses this type of device that she reported during her interview. And for the third non-match, one member from a pair reported "don't know" when asked to provide an answer to this question on behalf of someone else.

## Suggested Final Wording (same as round 1)

46. [Do you/Does NAME] use an electronic health monitoring service that collects and sends data to [you/his/her] doctor or health care provider through the Internet? Examples include connected devices that monitor vital statistics, blood glucose levels, or blood pressure.

## **Question 48 - PSPRE**

#### **Round 2 Wording**

- 48. During the past year, have concerns about privacy or security stopped [you/anyone in this household] from doing any of these activities online:
- 1. Conducting financial transactions such as banking, investing, or paying bills online?
- 2. Buying goods or services online?
- 3. Posting photos, status updates, or other information on social networks?
- 4. Expressing an opinion on a controversial or political issue on a blog or social network, or in a forum, email or any other venue?
- 5. Searching for information using a platform such as Google Search, Yahoo Search, Microsoft Bing, or another web search engine?

#### Findings

Due to the length of the introduction paragraph for this question, several respondents said "no" before item 48 had been read, interrupting the interviewer. A total of 14 respondents answered this question. After asking what privacy or security concerns has stopped their household from doing, one respondent said conducting financial transactions online, one person said buying goods or services online, two respondents said posting photos, statuses or other information on social networks, and four respondents said expressing their opinion on online venues.

During probing, respondents were asked if anyone in their household has these concerns. Eight respondents who were answering for themselves said privacy and security concerns has stopped them

from doing certain things. Two respondents said their other household members have stopped, and three respondents were unsure if their other household members have stopped doing any of the things listed in item 48. One respondent said that no one in their home has any of these concerns.

## Suggested Final Wording (same as Round 1)

- 48. During the past year, have concerns about privacy or security stopped [you/anyone in this household] from doing any of these activities online:
- 1. Conducting financial transactions such as banking, investing, or paying bills online?
- 2. Buying goods or services online?
- 3. Posting photos, status updates, or other information on social networks?
- 4. Expressing an opinion on a controversial or political issue on a blog or social network, or in a forum, email or any other venue?
- 5. Searching for information using a platform such as Google Search, Yahoo Search, Microsoft Bing, or another web search engine?

# **Question 49 - PSCON**

## Round 2 Wording

- 49. Overall, what concerns [you/members of this household] the most when it comes to online privacy and security risks?
- 1. Identity theft
- 2. Credit card or banking fraud
- 3. Data collection or tracking by online services
- 4. Data collection or tracking by government
- 5. Loss of control over personal data such as email or social network profiles
- 6. Threats to personal safety, such as online harassment, stalking, or cyber-bullying
- 7. No concerns

R	Other:			
v.	Ouici.			

## **Findings**

When asked what concerns members of their household the most, four respondents mentioned identity theft, two mentioned fraud, six had no concerns, and four provided a response that applied to the "other" category. The "other" responses included concerns about IP addresses and passwords. Respondents did not have any difficulties providing responses to this question. Our household pairs did not always provide the same answers to this question. However, one pair both said "yes" for identity theft, one pair said "yes" for fraud, and two pairs said "yes" for no concerns.

#### Suggested Final Wording (same as Round 1)

- 49. Overall, what concerns [you/members of this household] the most when it comes to online privacy and security risks?
- 1. Identity theft
- 2. Credit card or banking fraud
- 3. Data collection or tracking by online services
- 4. Data collection or tracking by government
- 5. Loss of control over personal data such as email or social network profiles
- 6. Threats to personal safety, such as online harassment, stalking, or cyber-bullying
- 7. No concerns

Other:				
	Other:	Other:	Other:	Other:

# **Question 50 - PSCYBA**

# **Round 2 Wording**

50. During the past year, [have you/has any member of your household] been affected by an online security breach, identity theft, or a similar crime?

#### **Findings**

During Round 2 of testing, two respondents stated someone in their household has been affected by an online security breach, identity theft, or a similar crime within the last year. When comparing the data from paired interviews, two of seven pairs (1 household interview pair skipped these questions) provided conflicting answers about issues of cyber security.

Interviewers probed participants on what online security breach means to them in this question. Nine respondents said this means someone has access to your personal information, including passwords, email accounts, credit card and banking information, as well as social security number. Three respondents also used the term 'hacking' to describe an online security breach. Overall, no respondents displayed comprehension or confusion issues with the wording of this question.

## Suggested Final Wording (same as Round 1)

50. During the past year, [have you/has any member of your household] been affected by an online security breach, identity theft, or a similar crime?

## **Question 51 - CBULLY**

#### Round 2 Wording

51. During the past year, [have you/has any member of your household] experienced online harassment, stalking, or cyber-bullying?

## **Findings**

During Round 2, only one respondent said that someone in their household has had experience with online harassment, stalking, or cyber-bullying. A different respondent replied that she does not know for sure if anyone has experienced this issue. Out of the seven paired interviews (1 pair skipped these questions), two provided different responses to the same question for their household.

Interviewers asked respondents what they thought about when they answered these questions. One respondent replied "trolling, having someone repeatedly try to contact you via the internet." Another respondent thought about cyberbullying because it is on TV a lot. Three respondents thought about antagonizing messages that are intended to be hurtful and unkind. Four respondents thought about cyberbullying in a social media context such as Facebook messages or posts, as well as online forums or message boards.

One respondent was a parent of school-aged children. Although she said "no" while being administered the questionnaire, she later mentioned during probing that she really does not know if her children have experienced online harassment or cyberbullying, but because they have not mentioned it, she assumes they have not.

## Suggested Final Wording (same as Round 1)

51. During the past year, [have you/has any member of your household] experienced online harassment, stalking, or cyber-bullying?

# **Question 54 EVRHOM - Question 61 PRINOO**

#### Findings

No respondents were administered these questions during Round 2 of testing.

# **Question 63 - TRADTV**

# **Round 2 Wording**

63. [Do you/Does anyone in this household] subscribe to cable TV or satellite TV? Do not include TV services accessed through the Internet, such as Netflix, Sling TV, or Hulu.

#### **Findings**

Two respondents were not administered this question during cognitive testing. Eight of 14 respondents stated that someone in their household subscribes to cable TV or satellite TV, excluding services that can be accessed through the internet. Three of the seven paired interviews offered conflicting responses. When respondents were probed on the definition of subscribe in this question, 10 stated this means you are paying for this service, two respondents described this as a contract or agreement, and one respondent stated subscribe means having a cable box in your home.

Two respondents changed their answers to this question. One respondent initially said "no" because her cable channels are through online services only. But, she later remembered that she does log in

online to a cable account to watch TV channels. Our interviewer initially thought this respondent was confused by this question, but stated that she may be thinking of logging into her parent's cable account who live in a different home.

When the another respondent was probed, she realized she answered this question incorrectly. When the interviewer asked why she misunderstood the question, the respondent revealed that she was in a rush to answer and did not think through what the question was asking. Also, one of the respondents who said 'no' while being administered the questionnaire should have said they do subscribe to cable TV. He later revealed in item 65 that they have Verizon Fios.

## Suggested Final Wording (modified from Round 2)

63. [Do you/Does anyone in this household] subscribe to cable TV or satellite TV, this often requires a cable box? Do not include TV streaming subscriptions, such as Netflix, Sling TV, or Hulu.

## **Question 64 - PREVTV**

## **Round 2 Wording**

64. [Have you/has anyone in this household] ever subscribed to a cable TV or satellite TV service? Do not include TV services accessed through the Internet, such as Netflix, Sling TV, or Hulu.

#### **Findings**

Ten of our respondents continue to subscribe to cable or satellite TV, and therefore were ineligible to answer item 64. Of the six respondents who answered this question, three replied "no", and three replied "yes" when asked if someone in their household has ever subscribed to cable TV or satellite TV. Respondents did not experience any comprehension issues with this question. Proxy rates were captured for seven of the paired interviews. After examining proxy reports for this question, three of the seven pairs provided matching responses to this question.

## <u>Suggested Final Wording (modified from Round 2)</u>

64. [Have you/has anyone in this household] ever subscribed to a cable TV or satellite TV service? Do not includeTV streaming subscriptions, such as Netflix, Sling TV, or Hulu.

## **Question 65 - NOTV**

# Round 2 Wording

65. What are the reasons why [you/members of your household] do not subscribe to a service providing access to TV channels?

- 1. Using Internet-based video services instead
- 2. Don't need it

- 3. Not interested
- 4. Can't afford it
- 5. Not worth the cost
- 6. Can watch at another location
- 7. Can watch using an antenna
- 8. Not available in area
- 9. No television, or television inadequate or broken
- 10. Household moved or is in the process of moving
- 11. Previously experienced poor customer service
- 12. Previously experienced poor quality

13. Other:
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# **Findings**

Respondents did not express any comprehension or confusion issues with this question. The six respondents who have discontinued their cable or satellite TV service provided several reasons. Three respondents said they would subscribe if it were cheaper because they cannot afford it. Two respondents stated they do not have a TV to watch it on, or their TV is broken. Other responses given were that they do not have the time, or because there are other alternatives. One respondent should not have gone down this path because his household does subscribe to cable TV. During probing for this question he mentioned they have Verizon Fios.

# Suggested Final Wording (same as Round 1)

# 65. What are the reasons why [you/members of your household] do not subscribe to a service providing access to TV channels?

- 1. Using Internet-based video services instead
- 2. Don't need it
- 3. Not interested
- 4. Can't afford it
- 5. Not worth the cost
- 6. Can watch at another location
- 7. Can watch using an antenna
- 8. Not available in area
- 9. No television, or television inadequate or broken
- 10. Household moved or is in the process of moving
- 11. Previously experienced poor customer service
- 12. Previously experienced poor quality

13. Oth	er:		