Common Usability Issues with Web Surveys: Results from Usability Testing of the American Community Survey/ Puerto Rico Community Survey and Census Quality Survey Online Instruments

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Census Bureau Demographic Surveys Online

- Census Quality Survey (live summer 2010)
- National Survey of College Graduates (live)
- American Community Survey (ACS)- goes live Spring 2011
- Puerto Rico Community Survey (PRCS) also goes live Spring 2010
- More coming soon!

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Small Sampler of Findings

- ACS, PRCS, and CQS- commonalities, similarities, and differences
- Benefits of Iterative Testing
- Advantages of Iterative Testing
 - 1. Login Screen- Improvements through iterative testing
 - 2. Roster & Residence Rules
 - 3. Progress Indicator
 - 4. Use (or lack thereof) of "Help" Links
 - 5. Grid formatted yes/no question (ACS/PRCS Facilities & Insurance)



ACS Round 2 USCENSUSBUREAU Helping You Make Informed Decisions

1. Login-Screens



Round 2 Login Screen

•Participant enters the example numbers



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Round 2 Login Screen



Participant 32

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Round 2 Login Screen - Xs

The example numbers were replaced with Xs.



Round 2 LoginScreen

3 of the 4 of the participants who saw this option put in the Xs from the example image (and spaces)



Participant 41

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The word "example" was also added to the image

** WARNING **

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Helping You

You have accessed a UNITED STATES GOVERNMENT computer. Use of this computer without authorization or for the purposes for which authorization has not been extended is a violation of federal law and can be punished with fines or imprisionment (PUBLIC LAW 99-474). System usage may be monitored, recorded, and subject to audit. Use of this system indicates consent to monitoring and recording.



Round 2 LoginScreen

Participant entered it correctly



Participant 45

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Round 2 Test Screen: Welcome Screen

The last participant entered both the ACS and SEQ lines *and* included the spaces



Participant 50

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Login Screen

- No one entered #s for the following rounds of ACS testing
- The image was also changed for CQS before the fully programmed instrument was tested
 - Also no #s entered
- Perhaps this is the best method (so far) of presenting an example user ID

- In general, Ps have some difficulty with deciding whom to include on their list of household residents
 - Esp. in complex household (e.g., commuters, shared custody, boarding school students, roomers and boarders, etc.)

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Instructions FAQs Logout Where Ye Please list the names of each person who was living and sleeping at 123 Any Street on January 1, 2010. (Help) Person Person Enter names until you have listed everyone who lives or stays there, then click Next. First Name MI Last Name Image: Street in the street in the street in the street integration in the street integratine integrated integration in the street integration in t	ou Are old Informa Information
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<pre> Click here to add more people Next >> </pre>	



	USCEN Helping Yo	ISUSBUREAU	
ENCUESTA SOBRE LA COMUNIDAD DE PUERTO RICO	1088		
Instrucciones	Preguntas Frecuentes	Guarde y Termine la S	Sesión
Las siguientes pregu URB LAGO DE PLATA Primero, cree una lis cualquier línea extra. E se quedan allí, y enton Nombre Inic Inic Oprima age << Anterior	Intas son acerca de todas las per 253 CALLE HIBISCUS. Ita de personas. Entre una persor Intre los nombres hasta que haya lis ces oprima en Siguiente. (Ayuda) Ital Apellidos	ersonas que viven o se quedan en na en cada línea. Deje en blanco stado a todas las personas que viven o	
			Comuníquese con nosotros
	PRCS R	OSTER A	Accessibility Privacy Security

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Rounds 3 & 4A: ACS ROSTER B Duplication –name added to Roster A and then again at Roster B



Contact Us

	USCE1 Helping X	N S U S B U R E A U ou Make Informed Decisions	
AMERICAN COMMUNITY S U R V E Y			- Contraction
Instructions	FAQs	Save & Logout	
The following quest	ions are to make sure this list is	as complete as possible.	
Other than the pers	on listed below, does ANYONE EI	SE live or stay there? (Help)	
<i>For example, roomma</i> Name Here Name Here	tes, foster children, boarders, or live-	in employees.	
C Yes			
C No			
< Previous	Next >>		
			Contact Us
		Acces	sibility Privacy Security

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2. Roster & Residence	Rules
2010 Census Quality Survey USCENSUSBUREAU Helping You Make Informed Decisions	Husband or wife Biological son or daughter Adopted son or daughter Stepson or stepdo
Instructions FAQs Logout	Where You Are
Names listed:	Period Information
Name Here Name Here Name Here We do not want to miss any people who might have been staying at 123 Any Street on January 1, 2010. Were there any additional people that you did not already list? (Help) For Example: • Children, such as newborn babies and foster children • Relatives, such as adult children, cousins, or in-laws • Nonrelatives, such as roommates or live-in babysitters • Any other people with no permanent place to live C Yes C No (< Previous) Next >>	

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- Important to make the point of Roster B/MISS type screens clear
- To include additional people NOT already listed.
- When possible, ask the question first before giving a list of names.

- Although a non-clickable progress indicator was added to each of the 3 surveys, no participants reliably used it
- Eye-tracking shows little interest in the feature in its current form
 - Ps only really glanced at it when something changed
- CQS is much shorter than ACS



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ACS PSELECT Screen

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PRCS PSELECT Screen

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- Should consider clickable content in the future for progress indicator
- Possibly examine and test other locations and designs for static design
- Did not seem to have negative impact. How can positive impact be improved?

- Across all 3 surveys, Ps did not tend to use the help links
- For each link that was used, only 1-2 Ps used it
 - Some people tended to click on help links more than others – inflated help link usage rates
- Possibly not prominent enough and/or Ps possibly won't click help no matter how prominent it is



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ACS Relationship 1



- For complex questions with multiple subquestions, two questions on the ACS were formatted as grids
 - Consistent with other modes
 - Facilities and Insurance questions



ACS Facilities

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Instructions FAGe				U.ngout
				Where You Are
Are you CURRENTLY covered by any of the following types of health insura	nce of hea	ith		Housing Questions
consideration of the second				More Person Info
		No		Pat Smith
a. In summer mough a current proformer employer or union (by you or another family manifum)		۲		
b. Insurance purchased directly from an insurance company (by you or another family member)	9	•		
c. Medicara, for people 65 and older, or people with certain disabilities	۲	U		
d. Medicaid, Madical Assistance, or any kind of government-assistance plan for those with low incomes or a disability	9	8		
e. TRICARE or other military health care	C	٢		
f. VA (including those who have ever used or enrolled for VA health care)	С	5		
e buancesin Series	0	•	0	
h Chryother type of health institution of health coverage plan - Specify		۲		

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Instructions	FAQs		Save & Lo	ogout
				Where You Ar
Name Here	CURRENTLY covered by any of the following types	of heal	lth	Housing Questions
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Select Treshor Wo	CTOREACH type of coverage in items a in (<u>Help)</u>			•Name Here
			No	
· Insumption	n e durent of former employer op inton for Name Here 👘 or	9	20	14
another family mental				
another territy inter		9		
c. Modicerre foi pe	opie 65 and older, or people with certain disabilities	9	B	
d. Medicard, Medic those with fow i	Assistance, or any kind of government-assistance plan for normed as a disability	Q .		
e TRICARE or oth	er military health care	С	6	
fiX/A finding the	ose who have ever used or enrolled for VA health care)	9	B	
g Indian Headen Sa		¢	6	
h. Any other type (of health insurance or health coverage plan - Specify	с		
	Uncelle			

ACS Insurance (Round 5)

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Instr	rucciones	Preguntas Frecuentes	Guarde y Termine	la Sesión
				Dónde se encuent
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5	Selectrone Sillic Mu	nala CADA tipo de coosrura en las respu	estas a-n: <u>(Ayuda)</u>	Información sobre la persona
			8 No	<u>·</u> Name Here
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	gaBerricio de Selvo In		c 🐚	
	h: Cualquier ctro tipo i	de seguro o plan medico - Especifique		
	and the second second			

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- Some questions are better asked as a grid format, like the facilities question.
- Consider asking questions like the insurance Q as separate questions, unless there is a mechanism on the back end to easily handle this pattern of response

Conclusions/Discussion

- Iterative usability testing can catch unanticipated issues with Web surveys before they go live
- Respondents do not necessarily recognize an example user ID, so explicit labels and blurry #s are a good way to go
- When rostering, ask questions, then provide lists of names if possible.
 - Ps tend not to be good at interp. & applying rules

Conclusions/Discussion

- Future work should investigate progress indicators that are helpful for long surveys with complex skip patterns
- If there is information that a P needs to answer a question, put it on the screen and not behind a help link it won't be seen much!
- Grid-formatted questions can work for some questions that are intuitively either-or in nature, but be careful when it seems like a "select one" type of question
- Leave time in the design schedule for usability testing! It works!

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Questions?

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