Do They Read It? Using Paradata to Evaluate the Extent to Which Respondents Attend to Confidentiality Pledge Language

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*Disclaimer: This presentation is released to inform interested parties of ongoing research and to encourage discussion of work in progress. Any views expressed are those of the author(s) and not necessarily those of the U.S. Census Bureau or the Bureau of Labor Statistics.



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Research Question

Do respondents notice the new confidentiality language?





Spoiler: Main Takeaway

Respondents did NOT particularly focus on the new language and did NOT spend more time on it.





Methodology

	Census	BLS	
Paradata	Eye Tracking	Timing & Response Rate	
Mode	In-person	Online	
Sample	Volunteers in DC Metro area	Amazon Mechanical Turk Workers	
Number of Respondents	30	1,067	
Test Elements	 Demographics Invitation letter Confidentiality pledge Cognitive interview 	 Disclaimer Confidentiality pledge Demographics 	





Pledge Versions Tested

Census Paradata	DHS	Further, your data are protected from cybersecurity risks by the Department of Homeland Security through security monitoring of the systems that transmit your data.
Census Paradata	Cybersecurity	Further, your data are protected from cybersecurity risks by security monitoring of the Census Bureau information systems.
BLS Web Survey: with and without	Enhancement Act	Per the Cybersecurity Enhancement Act of 2015, Federal information systems are protected from malicious activities through cybersecurity screening of transmitted data.





Census – Eye Tracking

- –SMI BeGaze 2.5 software for analysis of eyetracking data (capture rate = 250Hz)
- Analysis Methods:
 - Heat maps
 - Focus maps
 - Gaze plots





Heat Maps

Control

Your Answers Are Confidential

The U.S. Census Bureau is required by U.S. law to keep your answers confidential. This means that the Census Bureau cannot give out information that identifies you or your household to anyone, including other government agencies. The Census Bureau chose your address, not you personally, as part of a randomly selected sample.

We are conducting this survey under the authority of Title 13, United States Code, Sections 141 and 193. Federal law protects your privacy and keeps your answers confidential (Title 13, United States Code, Sections 9 and 214).

For more information about this survey, visit www.census.gov.

For more information about how we protect your information, please visit our website at: www.census.gov and click on "Data Protection & Privacy Policy" at the bottom of the homepage.

 Heat maps – Show in warmer colors where the most and longest fixations (places the eye stops) occurred





Heat Maps

Cybersecurity

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Focus Maps

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Focus maps –
 Highlight with black and white contrast where attention was focused





Focus Maps

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Eye Tracking Conclusions

Participants read the confidentiality language but did NOT particularly focus on the new content in either the "Cybersecurity" or "DHS" versions of the pledge.





BLS - Timing

- On average, participants spent 31.4 seconds on the page with their assigned pledge version
- No significant difference in timing between standard and new pledge versions (73 words without the new language, 94 words with)
 - Also, no meaningful differences found in unit or item nonresponse rates to survey questions by pledge version
- Probably just long enough to skim content
- Other results (such as recall) suggest respondents may rely on heuristics/prior beliefs rather than close reading to understand the pledge content



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Timing Conclusions

Participants did NOT take more time to read the longer pledge version ("Enhancement Act") with new confidentiality language.





Discussion

- Based on the paradata alone it does not seem that respondents attended to specific details of the confidentiality language.
- Paradata offers objective information about respondent behavior, but interpretation is difficult without other information.
- Limitations:
 - Volunteer respondents
 - Small number of participants with valid eye tracking data
 - Time/eye fixations may not accurately reflect attention
 - Paradata captured on initial read-through of confidentiality language only





Questions or comments?

Contact me at: census.gov

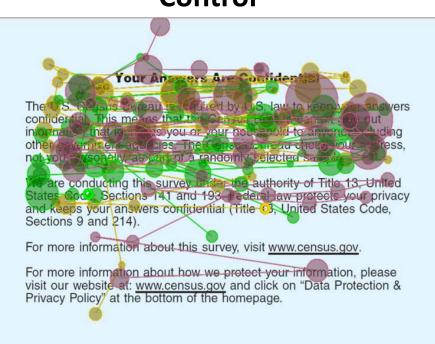




ADDITIONAL SLIDES

Gaze Plots

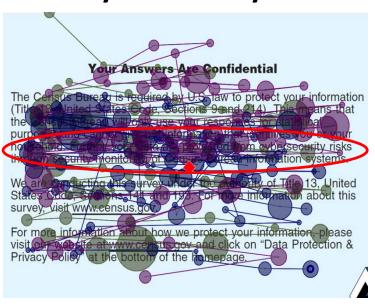
Control



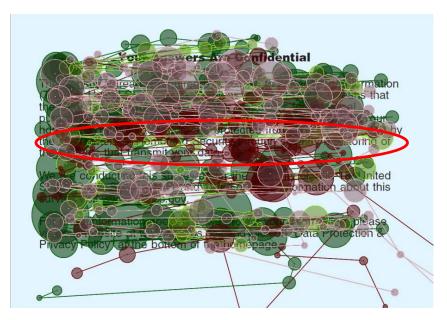
Gaze plots – Where
 the eye stops
 (fixation) is illustrated
 by a dot (longer
 fixations represented
 by larger dots)

Gaze Plots

Cybersecurity



DHS



Pledge Versions - Census

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<u>Cybersecurity</u>: Further, your data are protected from cybersecurity risks by security monitoring of the Census Bureau information systems.

<u>DHS</u>: Further, your data are protected from cybersecurity risks by the Department of Homeland Security through security monitoring of the systems that transmit your data.

Pledge Versions - BLS

The Bureau of Labor Statistics, its employees, agents, and partner statistical agencies, will use the information you provide for statistical purposes only and will hold the information in confidence to the full extent permitted by law. In accordance with the Confidential Information Protection and Statistical Efficiency Act of 2002 (Title 5 of Public Law 107-347) and other applicable Federal laws, your responses will not be disclosed in identifiable form without your informed consent.

Enhancement Act: Per the Cybersecurity Enhancement Act of 2015, Federal information systems are protected from malicious activities through cybersecurity screening of transmitted data.