

Survey Respondent Segmentation: Trust in Government Surveys

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FedCASIC Workshop
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The Glass Half Full

- **Surveys are universally experiencing falling response rates and rising data collection costs.**
- **Numerous studies focused on nonrespondents and the risk of bias**
- **Many people don't respond to surveys.**
- **Many people DO.**
 - Focus on them
 - Finding out the reasons why they participate will inform ways to motivate more people to respond.
- **Sparked by the market research conducted for the 2010 Census, we investigate attitudinal motivators and barriers to government survey participation, particularly health surveys.**



Latent Class Analysis

- **Latent classes created based on patterns of the independent characteristics**
 - Choose number of classes
 - Estimate class probabilities based on characteristics
 - Assign to a class based on maximum probability
 - Evaluate class characteristics
- **4 Segments**
 - The Disengaged
 - Compliers
 - Fence Sitters
 - Distrusters

THE BIG REVEAL—

Creating Salient Levers: Social and Psychological Dimensions of Participation and Nonresponse Bias

WHERE: AAPOR's 74th Annual Conference in Toronto, Canada

WHEN: Saturday 5/18/2019 - 10:00 AM - 11:30 AM (Concurrent Session G)

Independent Characteristics

- **Health Affinity (index of 5 ratings: 5-Strongly Agree, 4-Somewhat Agree, 3-Neither Agree/Disagree, 2-Somewhat Disagree, 1-Strongly Disagree)**
 - I make a point to read and watch stories about health
 - I really enjoy learning about health issues
 - When I take medicine, I try to get as much information as possible about its benefits and side effects
 - I need to know about health issues so that I can keep myself and my family healthy
 - Before making a decision about my health, I find out everything I can about the issues
- **Survey Affinity (2 survey questions)**
 - How do you feel about participating in surveys (Indifferent/unfavorable, Somewhat favorable, Very favorable)
 - Personally benefit (Y/N)
- **Community engagement (4 survey questions)**
 - How much impact do you think people like you can have in making your community a better place to live?(Small/none, Moderate, Big)
 - Number of friends (0-2,3-6, 7+)
 - Which best describes you? (Most of my close friends share my views on government and politics, Some of my close friends share my views, but many do not; I don't really know what most of my close friends think about government and politics)
 - Would you say that Most people can be trusted; Can't be too careful; Not sure
- **Trust in Gov't (2 factors)**
 - F1 Loss of data control
 - F2 Trust the Gov't to do what they need
- **Gov't survey attitudes (3 factors)**
 - F1 No value, no point
 - F2 Personal obligation
 - F4 Results won't help me



Trust in Government

For each of the statements below, please indicate to what extent you agree or disagree.

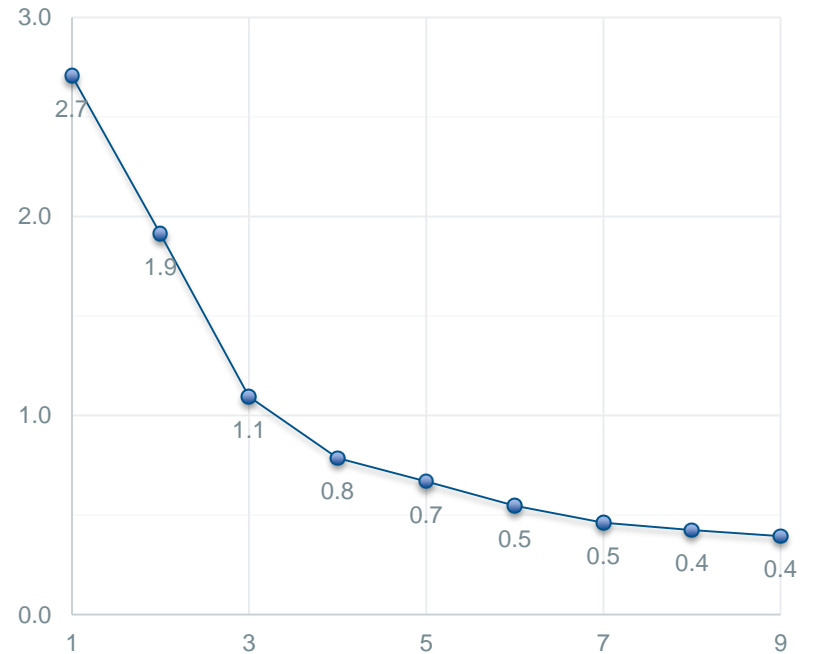
5. Strongly Agree
4. Somewhat Agree
3. Neither Agree nor Disagree
2. Somewhat Disagree
1. Strongly Disagree

- I trust the government in Washington to keep my best interests in mind
- The government in Washington should collect information about the population so that it can make the right decisions
- I trust my state government more than the government in Washington
- I trust my city, town and county government more than the government in Washington
- I don't think public officials care much what people like me think
- People's right to privacy is well protected
- People have lost all control over how personal information about them is used
- The government knows more about me than it needs to
- Businesses and private industry have too much information about me

Factor Analysis

- Polychoric correlations
- Principal components
- Varimax rotation
- Unweighted

- Chose 3 factor solution



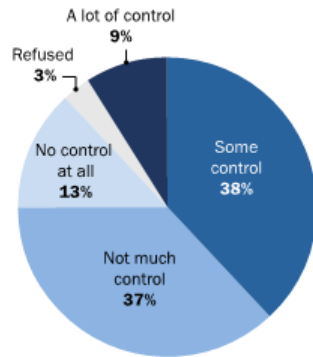
Trust in Government Factor Loadings

	F1: Loss of Data Control	F2: Trust in Gov	F3: Pro local government
I don't think public officials care much what people like me think	0.62	-0.20	0.08
People have lost all control over how personal information about them is used	0.79	-0.04	0.02
The government knows more about me than it needs to	0.77	-0.09	0.08
<u>Businesses and private industry have too much information about me</u>	0.79	-0.04	0.07
I trust the government in Washington to keep my best interests in mind	-0.24	0.78	0.00
The government in Washington should collect information about the population so that it can make the right decisions	0.14	0.72	0.10
<u>People's right to privacy is well protected</u>	-0.29	0.72	0.11
I trust my state government more than the government in Washington	0.07	0.10	0.88
<u>I trust my city, town and county government more than the government in Washington</u>	0.10	0.08	0.88

Pew Research Survey: Aug-Sep 2014

Few Say They Have “a Lot” of Control Over Information

% of adults who say they have varying degrees of control over the information that is collected about them in daily life



Source: Pew Research Center's Privacy Panel Survey #2, Aug. 5, 2014-Sept. 2, 2014 (N=498).

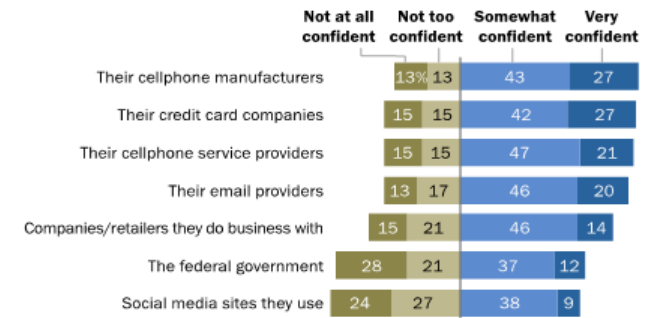
PEW RESEARCH CENTER

<https://www.pewinternet.org/2015/05/20/americans-views-about-data-collection-and-security/#few-feel-they-have-a-lot-of-control-over-how-much-information-is-collected-about-them-in-daily-life>

Pew Research Survey: Mar-May 2016

Roughly half of Americans do not trust the federal government or social media sites to protect their data

% of U.S. adults/tech users (see note below) who are ___ in the ability of the following institutions to protect their data



Note: Data on cellphone manufacturers and service providers based on cellphone owners; data on email providers based on internet users; data on social media sites based on social media users. Data for credit card companies recalculated to exclude “does not apply” responses. Otherwise, refusals and “does not apply” responses not included in this chart. Source: Survey conducted March 30-May 3, 2016. “Americans and Cybersecurity”

PEW RESEARCH CENTER

<https://www.pewresearch.org/fact-tank/2018/03/27/americans-complicated-feelings-about-social-media-in-an-era-of-privacy-concerns/>

Likelihood to Participate in Surveys

F1: Loss of Data Control



F2: Trust the Gov't to do what they need



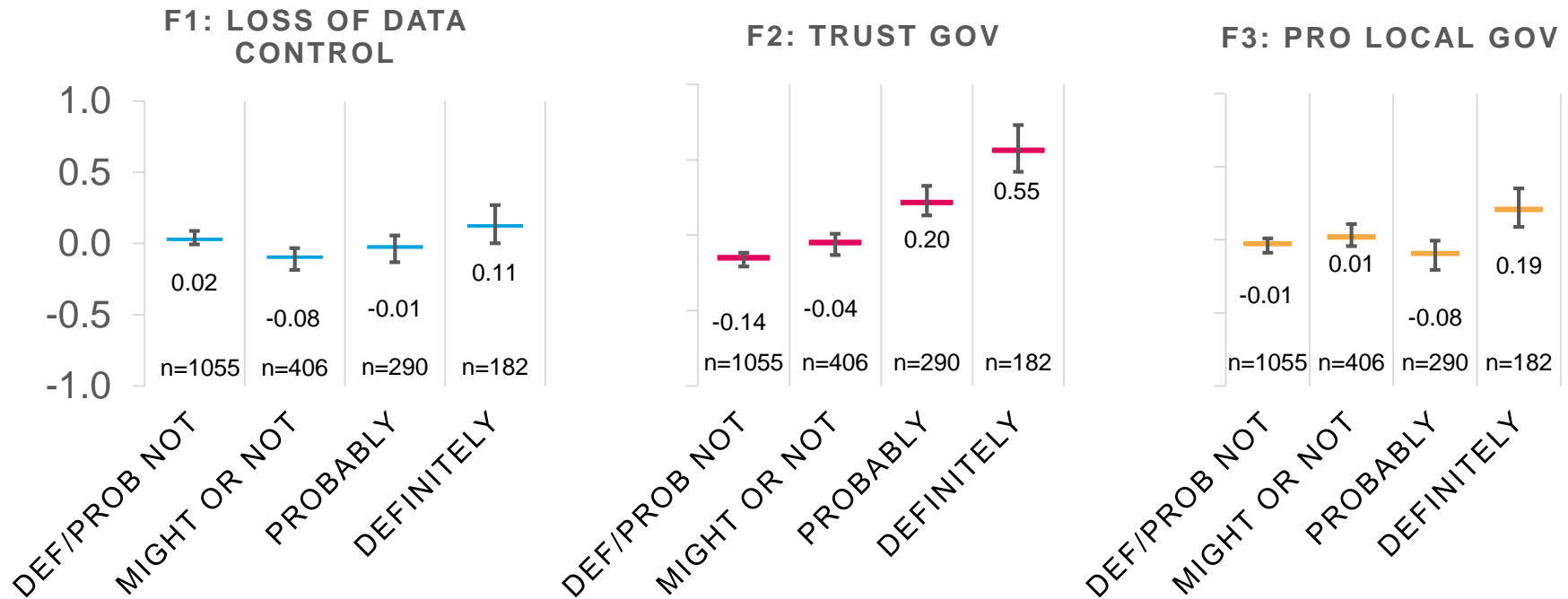
F3: Pro local government



In general, how likely would you be to do a survey on a moderately interesting topic that was not too burdensome, if it was conducted...

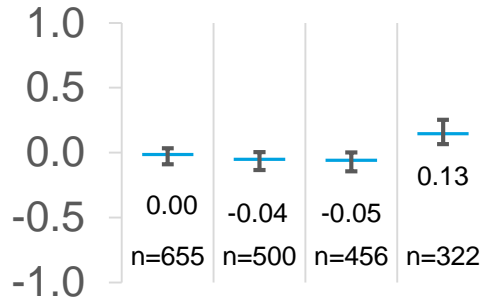
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2. By telephone
3. By mail
4. By web

Face to Face with an Interviewer at my Home

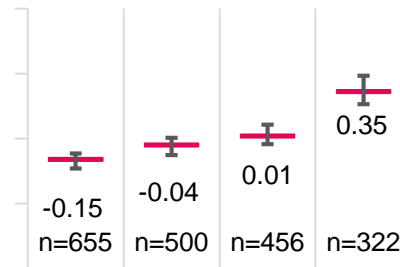


By Telephone

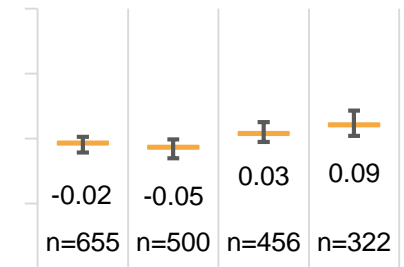
F1: LOSS OF DATA CONTROL



F2: TRUST GOV



F3: PRO LOCAL GOV

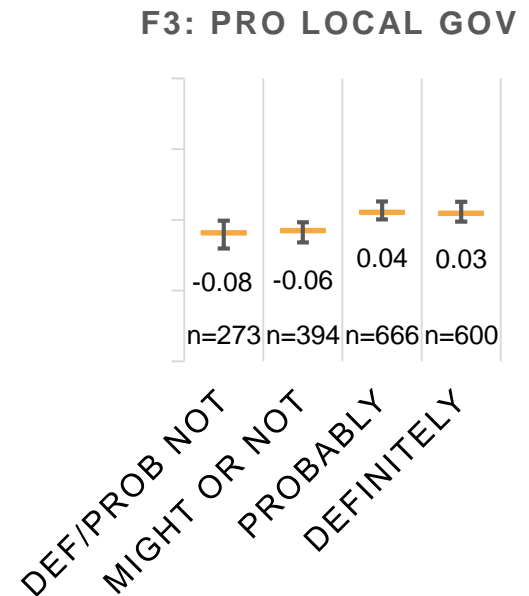
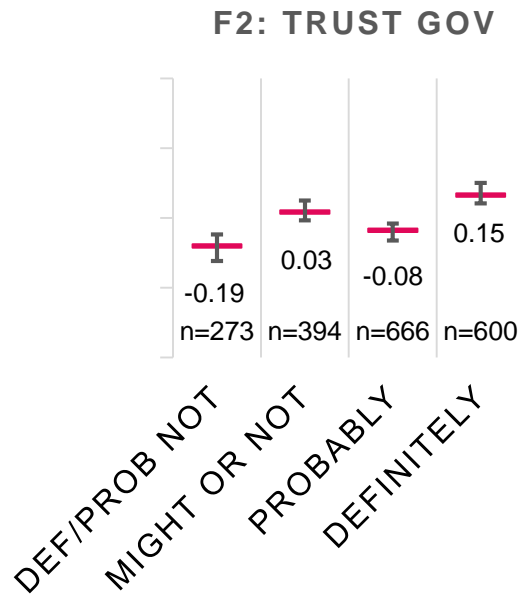
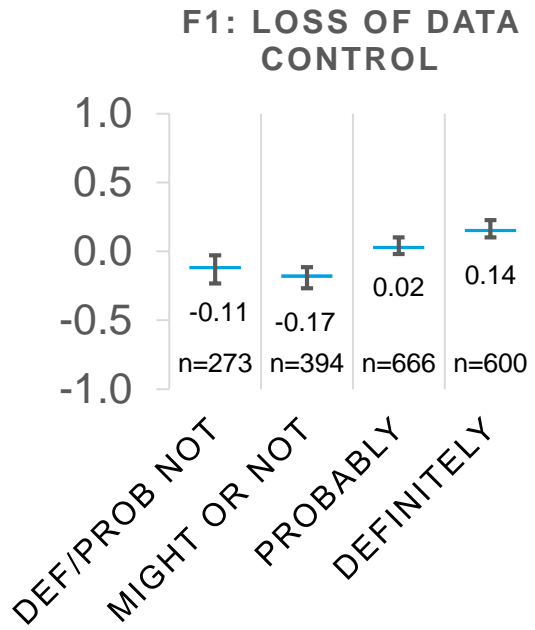


DEF/PROB NOT
MIGHT OR NOT
PROBABLY
DEFINITELY

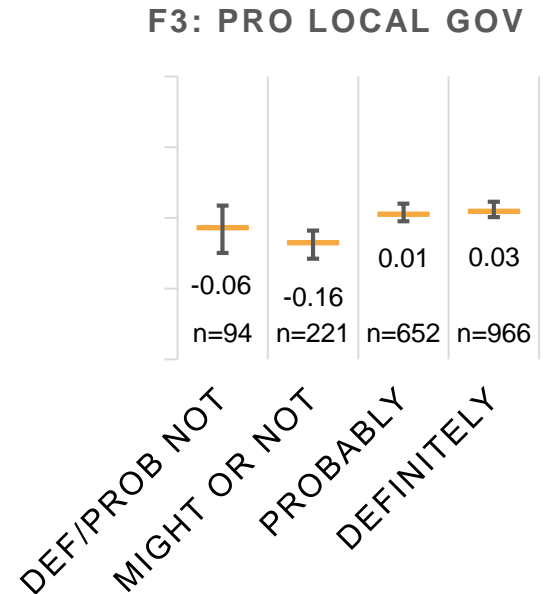
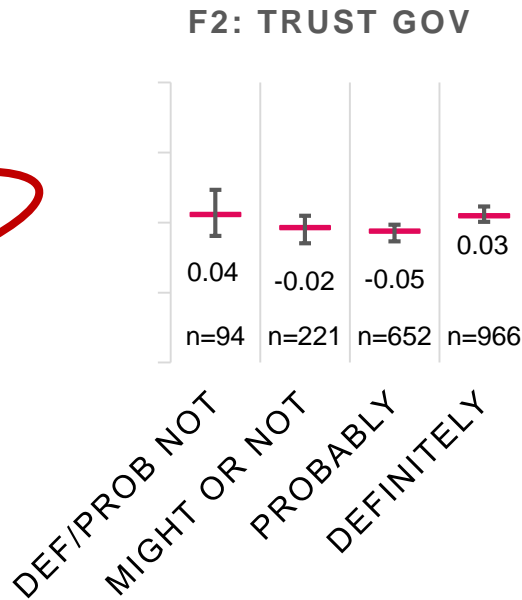
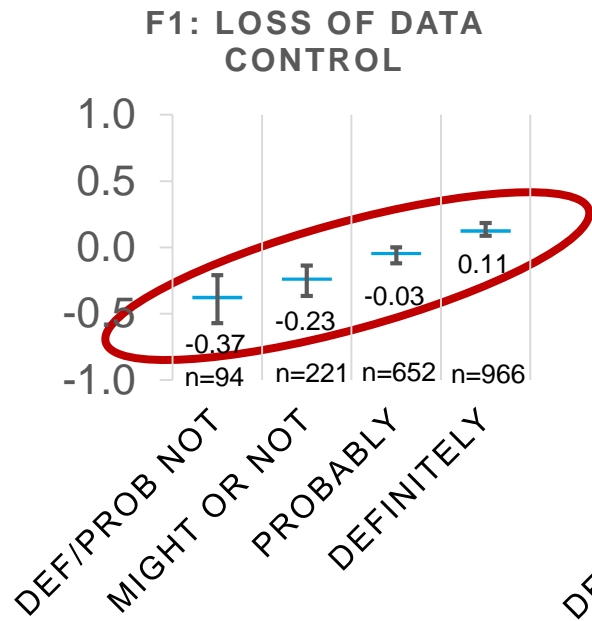
DEF/PROB NOT
MIGHT OR NOT
PROBABLY
DEFINITELY

DEF/PROB NOT
MIGHT OR NOT
PROBABLY
DEFINITELY

By Mail



By Web



Government Survey Attitudes

Below are opinions that some people may have about government surveys. Please indicate how much you agree or disagree with each statement.

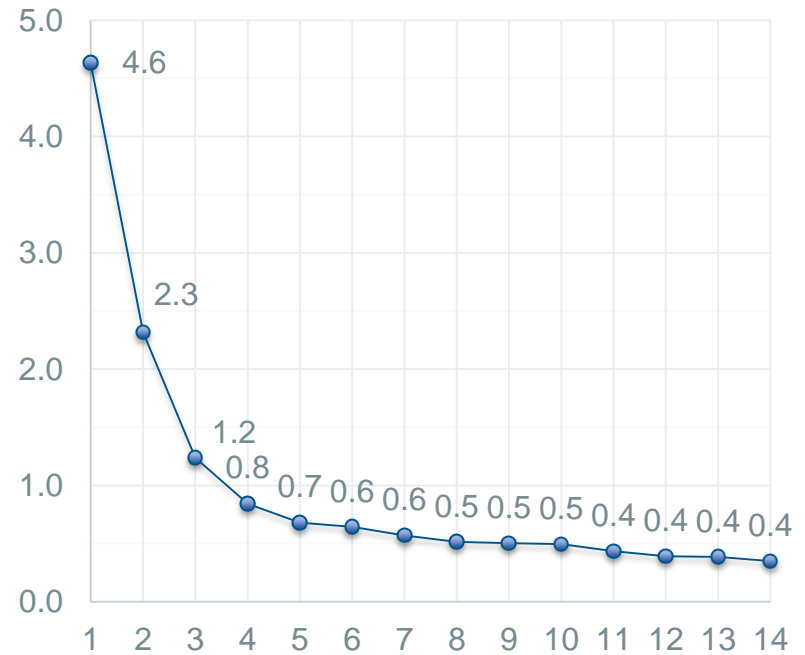
Strongly agree, Agree, Disagree, Strongly disagree

- Government surveys are an invasion of privacy
- It is important for everyone's opinion to be counted in government surveys
- Taking part in government surveys shows I am proud of who I am
- Participating in government surveys will let the government know what my community needs
- I just don't see that it matters much if I answer government surveys or not
- It is my civic responsibility to fill out government surveys
- Government agencies' promise of confidentiality can be trusted
- I am concerned that the information I provide will be misused
- I prefer to stay out of sight and not be counted in government surveys
- The government already has my personal information, like my tax returns, so I don't need to fill out government surveys
- I'll never see results from government surveys in my neighborhood
- It takes too long to fill out government surveys. I don't have the time
- Computer "hackers" could obtain government survey information about you if they really tried
- Refusing to fill out government surveys is a way for people to show that they don't like what the government is doing

Factor Analysis

- Polychoric correlations
- Principal components
- Varimax rotation
- Unweighted

- Chose 4 factor solution



Gov't Survey Attitudes Factor Loadings

	F1: No value, no point	F2: I have obligations	F3: Data security concerns	F4: Results won't help me
Government surveys are an invasion of privacy	0.74	-0.11	0.32	0.01
I just don't see that it matters much if I answer government surveys or not	0.64	-0.23	0.02	0.43
I prefer to stay out of sight and not be counted in government surveys	0.79	-0.20	0.06	0.12
The government already has my personal information, like my tax returns, so I don't need to fill out government surveys	0.77	-0.16	0.13	0.10
It takes too long to fill out government surveys. I don't have the time	0.68	-0.09	-0.03	0.31
Refusing to fill out government surveys is a way for people to show that they don't like what the government is doing	0.63	0.20	0.26	-0.21
It is important for everyone's opinion to be counted in government surveys	-0.30	0.64	0.26	0.25
Taking part in government surveys shows I am proud of who I am	-0.07	0.80	-0.03	-0.15
Participating in government surveys will let the government know what my community needs	-0.22	0.77	0.03	0.15
It is my civic responsibility to fill out government surveys	-0.06	0.76	-0.12	-0.17
Government agencies' promise of confidentiality can be trusted	0.10	0.65	-0.41	-0.08
I am concerned that the information I provide will be misused	0.45	-0.11	0.62	0.20
Computer "hackers" could obtain government survey information about you if they really tried	0.18	-0.03	0.82	0.09
I'll never see results from government surveys in my neighborhood	0.26	0.01	0.22	0.80

Likelihood to Participate in Surveys

F1: No value, no point



F2: Personal obligation



F3: Data security concerns



F4: Results won't help me



In general, how likely would you be to do a survey on a moderately interesting topic that was not too burdensome, if it was conducted...

1. Face to face with an interviewer at my home
2. By telephone
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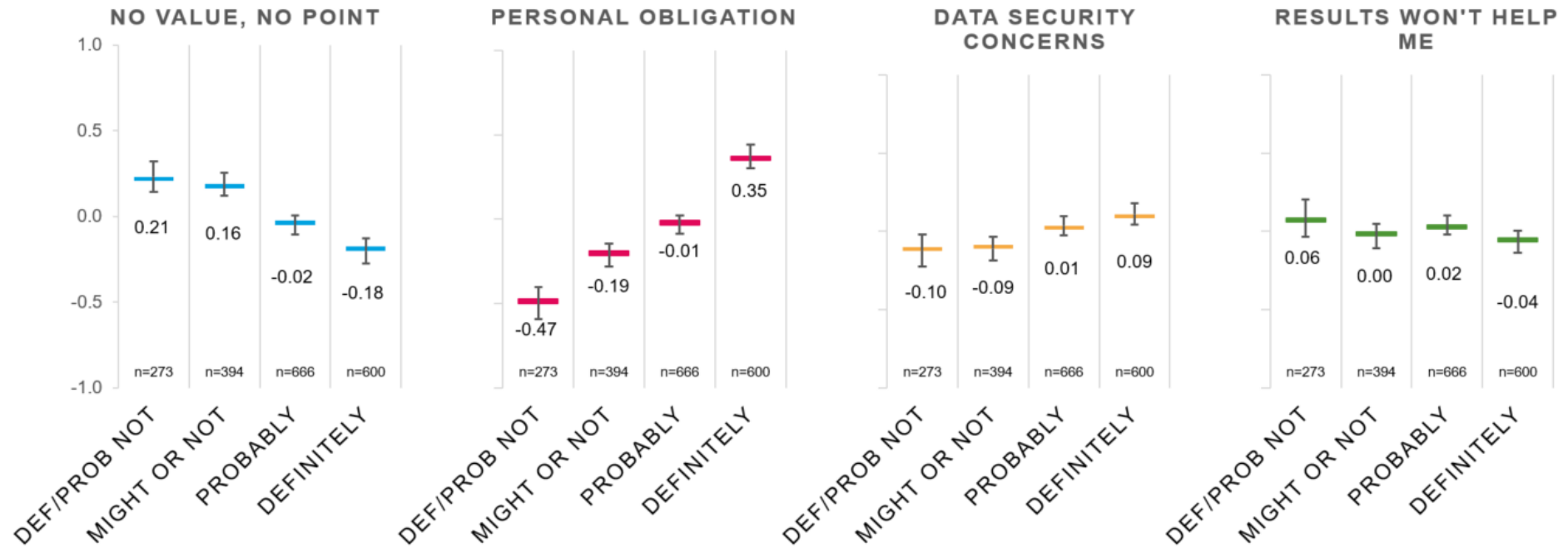
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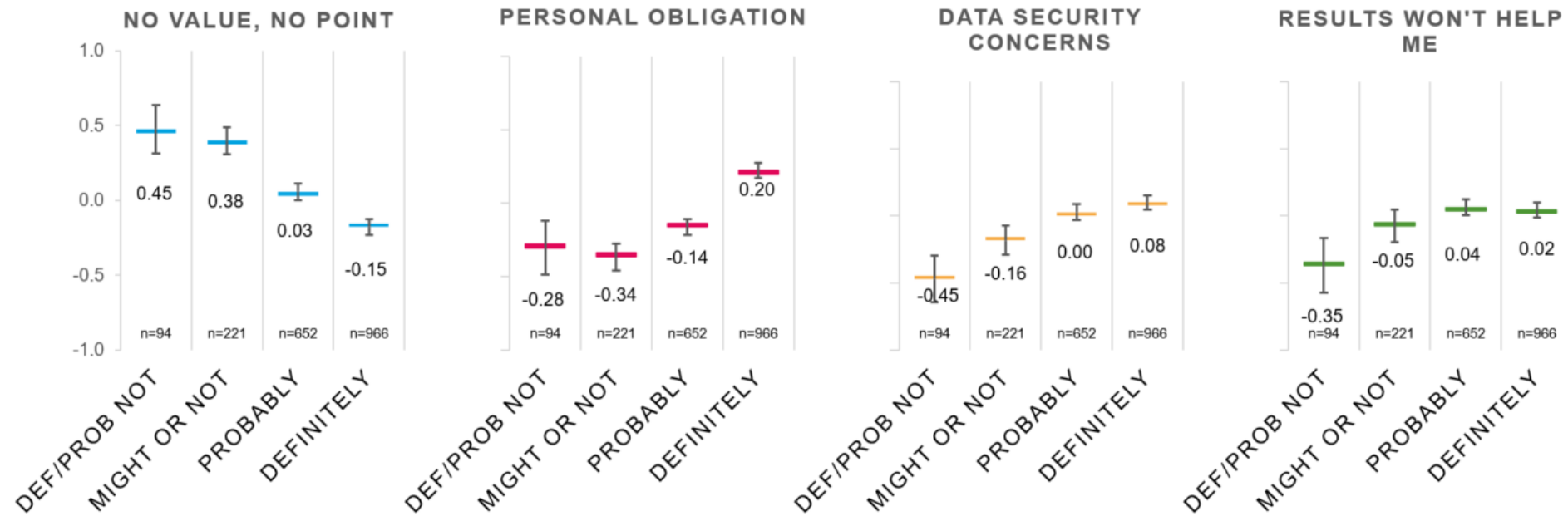
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Predict Stated Likelihood of Survey Participation

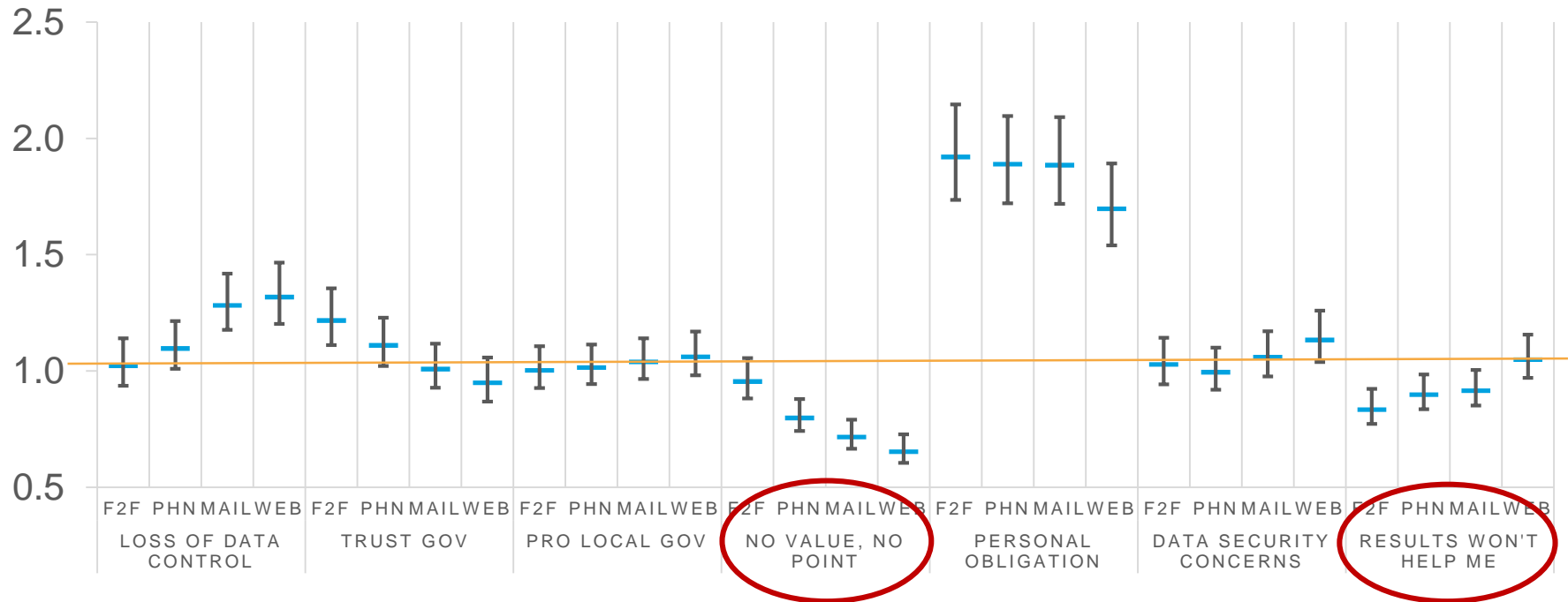
- **Ordinal regression for each mode**

- Cumulative logit

- $$P(y \leq i) = \frac{1}{1 + e^{-(\beta_{0i} + \sum \beta_j x_j)}}$$

- **Factors as predictors**

Odds Ratios Predicting Stated Survey Participation by Mode



INCREASE PERCEIVED ROI TO INCREASE RESPONSE

Conclusions

- Developed factors based on trust in government and government survey attitudes
- **“Personal obligation”** strongest positive predictor of stated likelihood of survey participation for all modes
- **“No value, no point”** and **“Results won’t help me”** strongest negative predictors of stated likelihood of survey participation for all modes
 - Both factors point to perceived ROI
- **Counterintuitive results for “Loss of data control” factor**
 - Respondents with higher scores report higher likelihood of responding to surveys
- **“Data security concerns” not a barrier to**

What Do We DO?

First—

Find all of these people...

Select them with certainty...

ALL SURVEYS!

	F1: No value, point	F2: Personal obligation	F3: Data concerns	F4: Results won't help me
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I'll never see results from government surveys in my neighborhood	0.26	0.01	0.22	0.80

What Do We DO?

Second-

- Reduce attitudes that surveys provide no personal value
- Increase attitudes that surveys are civic responsibility

Government surveys are an invasion of privacy				
I just don't see that it matters much if I answer government surveys or not				
I prefer to stay out of sight and not be counted in government surveys				
The government already has my personal information, like my tax returns, so I don't need to fill out government surveys				
It takes too long to fill out government surveys. I don't have the time				
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How We Change Perception?

Thank you!

- **Contact information:**

- Randy.ZuWallack@icf.com

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