# Considerations for Online Testing for Research at Federal Agencies

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\*Opinions expressed are those of the authors and do not constitute policy of the Bureau of Labor Statistics.



## Why BLS has used online testing for non-probability research

- Hard to recruit populations
  - Contingent workers (e.g., Task Rabbit, Uber)
- Geographic dispersion
  - Expenditure testing (EZpass = SunPass = ePass)
- Need data quickly
  - Testing respondent brochures
- Large samples
  - Experimental conditions
- Confirm qualitative findings



### Why Use Online Testing for Non-Probability Research?

- ■Studies using online non-probability panels have shown similar results to panels that were population-based (e.g., Mullinix et al., 2016; Buhrmester et al., 2011).
- Online samples tend to be more representative of the general population than other convenience samples (e.g., Berinsky et al., 2012).
- ■Internal validity rather than representativeness of a particular population or demographic group



#### **How BLS Has Used Online Testing**

- Question Pretesting:
  - ► Comprehension of terms
- ■Survey Methods research:
  - ► Effect of include/exclude definitions on data
- ■Comparing mode effects:
  - ► Contrasting data from in-person cognitive interviews to online, self-administered versions of the same questions



#### **Using Online Testing in Conjunction with Lab Testing**

#### **Online before Lab** Lab and Online **Online after Lab** Concurrently Augment ongoing lab Inform research Confirm findings from qualitative lab study using research where a quick questions and protocol turnaround was needed for a future in-lab study a quantitative online sample



### **Advantages**

- Fast(er)
- Cheap(er)
- Geographic dispersion
- Larger sample sizes
- Experienced audience (esp. TryMyUI)
- Can target specific groups (e.g. Facebook)
- Pre-fund research whenever funding is available



#### Disadvantages

- Potential panel bias
  - There may also be a bias, though in a different direction, for lab work
- Mode differences
  - May not be possible to test some questions, issues
- Lack of flexibility
  - Shorter tasks, limited attention span
- Fixed protocols and probes
  - Simple CI tasks may not need follow up (e.g. comprehension)
  - Follow-up may be more important for more complex tasks (e.g. response strategies)

## Logistics of Running Online Studies



#### **Data Collection Logistics**

In-Lab

- Recruit and schedule
- Set up room and materials for every participant
- Spend many hours with participants
- Enter their data into the computer

Online

- Post the study, including a study description
- Come back later and download your data



### **Take Aways**

- Lots of academics using online testing in cool, new ways
- Possible to take advantage in the government setting, too!
- Consider how to incorporate it into current question evaluation studies, where there is a potential for added value



#### **Contact Information**

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#### **Extra Slides**



## Qualtrics Panel Recruitment and Payment

- The exact amount and form that each respondent receives can vary from respondent to respondent depending on their panelist profile, how they were recruited, and the form of incentives they have elected to receive (i.e. e-gift cards, points, cash, etc.).
- Generally speaking, respondents receive ~\$1.00-\$1.50 or a relative equivalent value for completing a 15-minute consumer survey.



### **BLS Qualtrics Panel Demographics**

- Gender (47.5% male; 51.9% female)
- Age (M = 46.5; SD = 17.2)
- Education:
  - Less than high school 4.3%
  - High school diploma/GED 34.3%
  - Some college (no degree) 23.4%
  - Associates degree 9%
  - Bachelors degree 18.4%
  - Graduate degree 10.6%



#### **BLS Qualtrics Panel Demographics**

- Hispanic, Latino, Spanish origin (6.2%)
- White (87.0%)
- Black or African American (7.3%)
- American Indian or Alaska Native (2.8%)
- Asian (5.0%)
- Native Hawaiian or Other Pacific Islander (.07%)



## mTurk: Online marketplace for labor

- Also known as mTurk, Turk, AMT...
- A tool for recruitment of participants
- Tasks are posted publicly or to targeted groups and participants can view them and sign up
  - Can also email directly to participants who have participated previously in your tasks
- Designed for tasks that are tough for a computer but easy for a human; research and surveys are only a small part of what is on offer
- Used in academic research with increasing frequency



### mTurk Participant Demographics

- Within the United States
  - 55-65% female
  - Most make <\$60k/year</p>
  - Median age in 30s
  - Bachelor's degree
  - Distribution similar to US internet population

Ipeirotis, et al. (2010); Mason and Siddharth (2011)

Can also use screeners (mTurk's or design your own)



#### **Panel Composition**

- Younger
- More highly educated
- White
- Politically liberal and active
- Fewer privacy concerns
- More willing to express opinions
- More technologically experienced
- More interested in survey topic

