

# Instrument Programming for Web and Phone Multi -Mode Administration

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THE OHIO STATE UNIVERSITY

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# National Longitudinal Surveys

- Sponsored by the Bureau of Labor Statistics, with additional funding from NIA, NICHD, and other Federal agencies
- A set of surveys designed to gather information at multiple points in time on labor market activities and other significant life events
  - **NLS Youth 1997 (NLSY97):** Men and women born in the years 1980-84
  - **NLS Youth 1979 (NLSY79):** Men and women born in the years 1957-64
  - **NLSY79 Children and Young Adults:** Biological children of women in the NLSY79
  - **NLS Young and Mature Women (NLSW):** Young women born in the years 1943-53 and mature women born in the years 1922-37
  - **NLS Young and Older Men (NLSM):** Young men born in the years 1941-52 and older men born in the years 1906-21

# NLSY97 Cohort

- Longitudinal Sample of 8984 respondents born 1980 -1984
  - Aged 12 -17 during first interview in 1997
  - Oversamples of Black and Hispanic individuals
- Annual interview through 2011 then biennial
- Prior rounds conducted by interviewers, either in -person or by phone
  - Early in-person interviews included a small self-administered portion
- Round 21 currently in the field
- Round 20 data (collected 2021 -22) available in early December



# COVID-19 Response: Onset March 2020

- **NLSY97 Round 19 data collection**
  - Scheduled field period fall 2019 – summer 2020
  - Moved to full phone effort
- **NLSY79 Round 29 response**
  - Scheduled fall 2020 – fall 2021
  - Worked with OMB to add COVID questions
    - Focused on impacts to work, health, and income
- **NLSY97 response**
  - Developed an interim survey: COVID-19 supplement
    - Collect information on the short-run impacts outside of the normal schedule
  - Fielded Round 20 as planned (fall 2021-2022)
    - Included questions on impacts to work, health, and income

# NLSY97 COVID-19 Supplement

- **Fielded February - May 2021**
  - Between Round 19 (2019 -2020) & Round 20 (2021 -2022)
- **5,616 respondents completed**
  - Ages 36-41 at the time of the supplement
- **Designed to be a maximum of 12 minutes**
  - Average time across all modes=8.83 minutes
- **Both interviewer -administered phone and self -administered web modes**
- **Preload-free due to concerns about confidentiality**
  - Questions couldn't build on historical information
  - Challenge for validation

# Building the NLSY97 COVID-19 Supplement



## Questionnaire programming challenges

Multi-modal administration: mode determination

On-screen presentation: Variations in question text and response options by mode

Questionnaire programming



## Security and confidentiality issues

Protecting information collected in survey

Email security

Verifying correct respondent

# CHRR Survey Suite Software

- Survey Suite Components: Designer, Survey, and Investigator
- Survey Features
  - In-house software created specifically for longitudinal surveys
  - Uses a central database to present questions within a web server
    - No need for respondents to download a separate app
  - Allows for multimodal administration
    - Display adjusts depending on device



# Mode Determination

- **Different links provided to respondents and interviewers**
  - Access the same survey instrument
  - Determined appropriate survey presentation
- **Automated process determined which link accessed each question**
  - Seamlessly present each question in correct format depending on mode
  - Allows for multiple mode switches during the survey

**Example | Alternate non-response categories depending on mode**

Interviewer version	Self-administered version
Don't know	I don't know
Refused	I prefer not to say



# On-Screen Presentation

## Simplified appearance

- Streamlined screen to remove information
  - Section title
  - Question name
- Reduced possibility of respondent error
  - Fast forward
  - “Go to question” box

Household Information Logout

Go to Question...

YHHI-1230

If the contacts you have provided offer the names of other people who may help us reach you, may we contact those people as well?

YES

NO

Don't Know

Refuse

Next

*Traditional survey*

Logout

Did you receive an advance email or an advance letter in the mail that explains this supplemental survey?

Select one answer: (Required)

YES

NO

DON'T KNOW

REFUSED

Next

*Covid survey*

# Questionnaire programming

- **Shorter survey length to prevent breakoffs**
  - 46 potential questions
- **Review of question wording to simplify language**
  - Respondent versus interviewer non-response wording
- **Removal/rewording of interviewer instructions**
- **Limited response category lists**
- **Time-saving matrix questions were split into separate components**
- **Minimum and maximum values limited response options on subsequent questions**

# Survey Mode Differences

Survey Length	Time to complete
Web - only	8.18 minutes
Phone-only	12.55 minutes
Mixed mode	13.67 minutes

Responses	Average number
Web - only	32.83 responses
Phone-only	32.39 responses
Mixed mode	32.55 responses



# Item Nonresponse by Mode

	Web - only	Phone-only	Mixed
At least one don't know	20.7%	9.3%	27.6%
At least one refusal	8.9%	1.5%	6.9%
At least one nonresponse answer	26.7%	10.4%	27.6%

- **Highest # refusals:** whether the respondent had on-line banking
- **Highest # don't know answers:** whether the respondent received an advance letter/email

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# Protecting Respondent Data

- Preload-free
- Only personally identifying information (PII) collected in survey was used for incentive payment
- Disabled backing up on the contact information questions



# Email Security

- Respondents sent an individual link to the survey by advance letter and email
- Links used non - sequential random IDs
  - Respondents cannot be connected to public-use data
  - Non-sequential IDs prevent guessing of multiple unique links
- Some email products were found to have an automated process that opened the link when the email was sent

# Verification Process

- Could not present or collect PII to verify that the actual respondent was doing the interview
- Presented three questions about known characteristics
- Post-fielding, matched answers to previously collected data





# Verification Outcomes



- Fewer than 100 respondents missed one or more of three verification questions
- Incentive payment information compared to contact information in past rounds
- NORC called cases for verification if no match
- Fewer than 10 cases were dropped due to lack of verification

# Conclusions

- 1 Item nonresponse was significantly higher in the internet survey
- 2 Interview length significantly shorter for self-administered surveys
- 3 Content was limited by confidentiality concerns, with no preloads or collection of PII
- 4 Additional verification techniques could be explored to further mitigate confidentiality concerns

# Thank you!



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