

# Optimal Placement of Instructions and Definitions in Survey Questionnaires

Heather Ridolfo

National Agricultural Statistics Service

David Biagas, Jr.

Bureau of Labor Statistics



The findings and conclusions in this preliminary presentation have not been formally disseminated by the U.S. Department of Agriculture and should not be construed to represent any agency determination or policy.



# Background

- Establishment survey forms are complex
- Respondents don't attend to instructions
- NASS cognitive testing found respondents assert they have read instructions but they do not adhere to them
- Lack of consistent formatting of instructions and definitions



# Instruction Formatting

## Single Banked:

2. Fill in the columns below for all aquaculture raised on this operation in 2017. Report aquatic plants in SECTION 11.
- Include the value of your landlord's share, marketing charges, taxes, hauling, etc.
  - Include all sizes for each type.
  - Include food size, fingerlings, fry, and eggs.
  - Exclude wild-caught products.

Enter Aquaculture Type	Enter Code	Total pounds sold or moved in 2017	OR	Total number sold or moved in 2017	Gross Value of Sales (Dollars)
			OR		\$ .00

## Double Banked:

1. Did you or anyone else have any cattle or calves, including dairy cattle, on this operation in 2017?

INCLUDE

- cattle on this operation
- cattle on public or industrial property under a grazing permit
- cattle on land used rent free by this operation
- cattle grown or fed on this operation for others on a custom or contract basis

EXCLUDE

- cattle grown or fed by someone else on a custom or contract basis

1201

1

Yes - Complete this section

3

No - Go to SECTION 15



# Definition Placement

## Before Survey Question:

21. An **online marketplace** is a web-based platform designed for the selling of goods.

Was any of the food that this operation produced and sold directly to consumers in 2015 sold through an **online marketplace**?

xxx 1  **Yes** – Continue      3  **No** – Go to Item 24

22. In 2015, approximately what percent of online sales of food sold directly to consumers were **from buyers** living either within the same state as this operation or a 400-mile radius of this operation? . . . . .

Percent
xxx

## After Survey Question:

### SECTION 22 PRODUCTION CONTRACTS AND CUSTOM FEEDING

1. During 2017, were you a production contract grower for a processor or contractor for whom you grew a crop, raised livestock or poultry, or custom fed any livestock that **you did not own**? A production contract is an agreement setting terms, conditions, and fees to be paid by the contractor to this operation for the production of crops, livestock, or poultry. Exclude commodities grown or raised for marketing contracts.

1301 1  **Yes** - Complete this section      3  **No** - Go to SECTION 23



# Research Questions

- Are respondents more likely to fully attend to the include and exclude statements when they are presented single or double banked?
- Are respondents more likely to attend to definitions when they precede the survey question or when they follow the survey question?



# Methods

- Tracking was conducted with Tobii software
- 40 participants took part in the study
- 20 were identified as tracking well ( $<.80$ )
- Median Fixation Duration
- Median Fixation Count
- Gaze plots and heat maps



# Results: Include/Exclude Statements

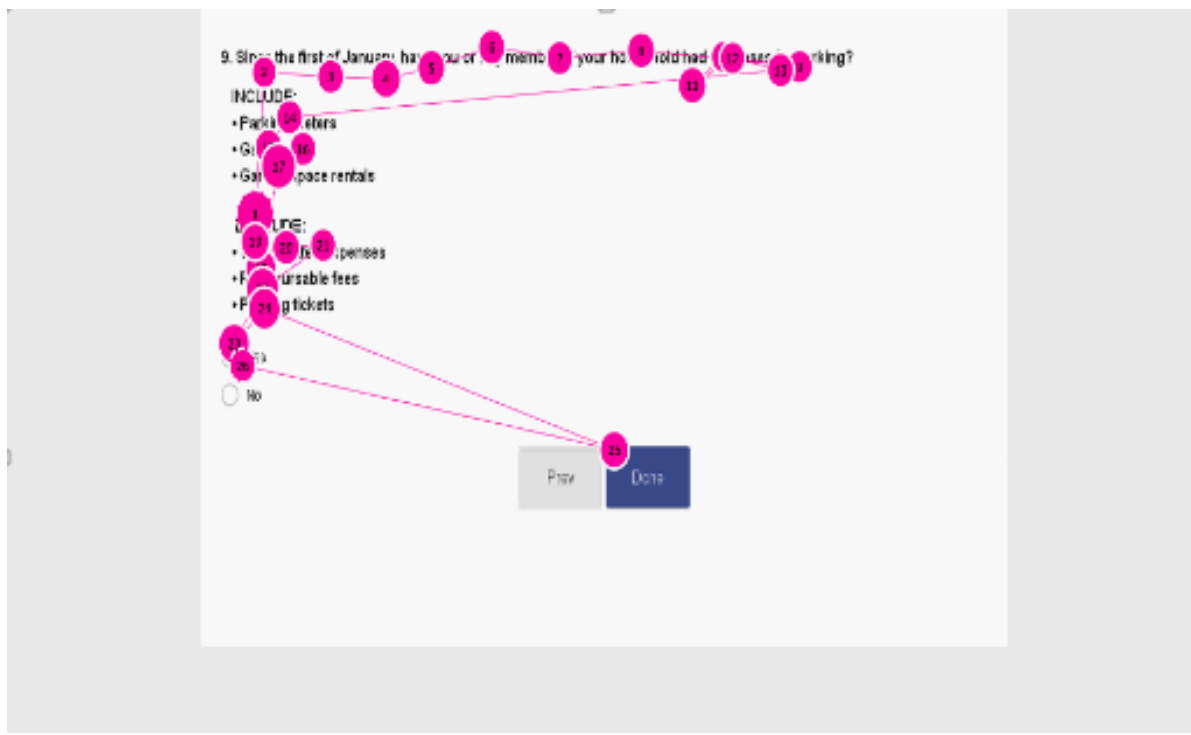
## Exclude Statements Fixation Duration and Fixation Count

	Median Fixation Duration (seconds)	Mediation Fixation Count
Single-Banked (n=7)	0.73	5.00
Double-Banked (n=7)	0.50	2.00





# Single Banked Include/Exclude Statements



# Double Banked Include/Exclude Statements





# Definition Before/After Question

	Median Fixation Duration (seconds)	Mediation Fixation Count
Definition Before (n=10)	4.68	24.5
Definition After (n=5)	1.8	14



# Definition Before Survey Question

1. Have you ever had chickenpox?

Yes

No

2. It is a contagious disease that causes a rash of small, itchy blisters. It is usually on the face, neck, chest, back, and arms. It is also known as shingles. It is caused by the same virus that causes chickenpox. It is also known as shingles. It is caused by the same virus that causes chickenpox.

3. Have you ever had the Zoster vaccine, also called Shingrix?

Yes

No

Prev Next

The image shows a survey interface. The first question is "1. Have you ever had chickenpox?" with radio buttons for "Yes" and "No". Below it is a definition for chickenpox, which is partially obscured by a large, semi-transparent pink watermark. The definition describes it as a contagious disease causing a rash of small, itchy blisters, usually on the face, neck, chest, back, and arms, and notes it is caused by the same virus as shingles. The second question is "3. Have you ever had the Zoster vaccine, also called Shingrix?" with radio buttons for "Yes" and "No". At the bottom, there are "Prev" and "Next" navigation buttons, with "Next" being highlighted in blue.

# Definition After Survey Question

4. Have you received a tetanus shot in the past 10 years?

Yes

No

Don't know

5. Have you ever received the hepatitis A vaccine?

The hepatitis A vaccine is given as a two-dose series routinely to some children starting at 1 year of age, and to some adults and people who travel outside the United States. Although it can be given as a combination vaccine with hepatitis B, it is different from the hepatitis B shot, and has only been available since 1995.

Yes

No

Don't know

Play

13

13

# Conclusions

- Include and exclude statements are more attended to when they are single-banked.
- Definitions are more attended to when they precede the survey question.



# Limitations

- Problems with tracking
- Problems with precision
- Problems with design





# Thank you!

Heather Ridolfo

[Heather.Ridolfo@nass.usda.gov](mailto:Heather.Ridolfo@nass.usda.gov)

David Biagas, Jr.

[Biagas.David@bls.gov](mailto:Biagas.David@bls.gov)

