

Designing and Developing Person-Based and Topic-Based Data Collection Instruments

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Summary

- The American Community Survey (ACS) tests proposed changes with Content Tests
- It was recommended to change the collection of Demographic data from Person-Based to Topic-Based

Background

- Large data collection operation
 - ≈ 250,000 paper forms per month
 - ≈ 100,000 CATI per month
 - ≈ 45,000 CAPI per month
- High-profile survey
- Data collection design consistent with Decennial Census

Background

- Prior testing had indicated potential advantages to Topic-based data collection for ACS
- Decennial Census data collection design preferred Topic-based method for Demographic questions

Design & Development: Client Request

- Ability to conduct a test to compare two data collection methods side by side
- Two separate respondent samples
- Instruments must be identical outside of demographic section
- Similar look and feel between two instruments

Design & Development: Specification Development

Indicating new topic-based flow

Special Instr.

2. Interviewers are to navigate vertically in the grid, that is, each question set must be answered for each person listed before moving to the next question set for each person in the grid. The relationship items for each respondent (RELP) will be answered for each person before moving to SEX.

Design & Development: Specification Development

Specifying topic groups (i.e. questions that are not strictly topic based)

Special Instr.

2. Interviewers are to navigate vertically in the grid, that is, each question set must be answered for each person listed before moving to the next question set for each person in the grid. The Hispanic origin items for each respondent (HISA and HISB and HISW, if applicable) will be answered for each person before moving to the race questions.

Design & Development: Specification Development

Variable wording

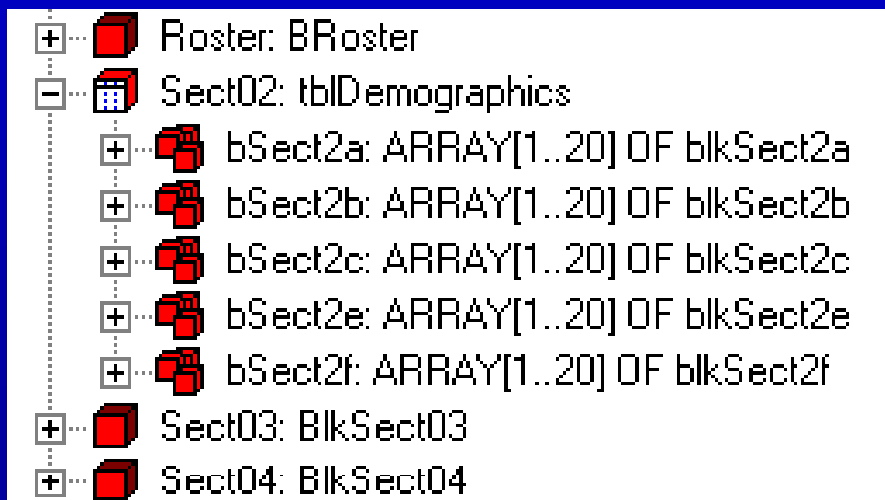
- Wording based on whether or not question has been previously asked.
- Affected by inclusion of question in a topic group.
- Certain questions could have 4 or 5 different versions of question text (example: RACE questions).

Design & Development:

Design Considerations & Implementation

Columnar (topic-based) movement

- Each question or topic group defined as arrayed block inside main demographic table



Design & Development:

Design Considerations & Implementation

Display consistency

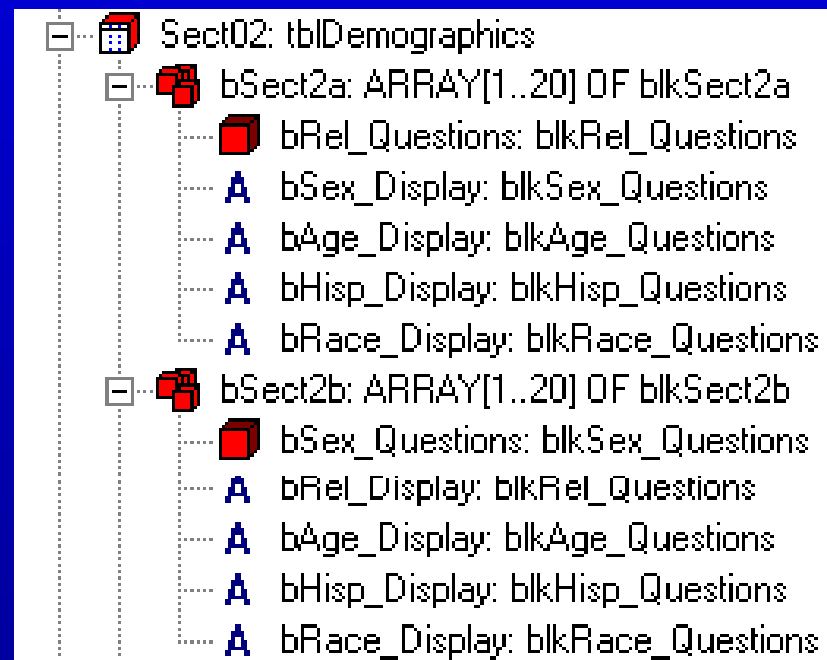
- Original person-based demographic displayed all data in a single table.
- Made each arrayed block in topic-based version identical copies, with different fields being “asked” vs. “shown”.

Design & Development:

Design Considerations & Implementation

Minimizing Duplicate Code

- Each question or question set defined as a sub-block within the arrayed block.
- Same sub-blocks were used in each arrayed block.



Design & Development:

Design Considerations & Implementation

Minimizing Duplicate Code

- Able to “ask” or “show” whole blocks instead of individual fields.

```
bRel_Questions.ASK  
bSex_Display.SHOW  
bAge_Display.SHOW  
bHispanic_Display.SHOW  
bRace_Display.SHOW
```

- Defined the “show” sub-blocks as auxfields to shrink the size of the database and avoid confusion caused by duplicate fields in output.

Design & Development:

Design Considerations & Implementation

Minimizing Duplicate Code

- Able to copy entire blocks to synchronize identical tables.

```
bSect2a[I].bSex_Display := bSect2b[I].bSex_Questions  
bSect2a[I].bAge_Display := bSect2c[I].bAge_Questions  
bSect2a[I].bHispanic_Display := bSect2e[I].bHispanic_Questions  
bSect2a[I].bRace_Display := bSect2f[I].bRace_Questions
```

Design & Development:

Design Considerations & Implementation

Other Challenges

- Checks in “show” blocks being triggered.
- Interviewer unable to use mouse to navigate between topic groups (columns).

Conclusion & Recommendations: Flexibility Within the Table

- Free navigation in 4.7 has increased flexibility; however, doesn't account for structuring flow.
- Needed ability to display multiple arrayed sub-blocks on the same page.
- Checks triggered when method applied to block.
 - Not overridden, as occurs with keep method.

Any questions?