Response Consistency between the Ancestry Question and the Detailed Race and Ethnicity Questions from the 2016 American Community Survey Content Test

Gregory J. Mills
American Community Survey Office

Sarah K. Heimel
Decennial Statistical Studies Division

Angela Buchanan
Population Division

American Association for Public Opinion Research Annual Meeting
Denver, Colorado
May 16, 2018
American Community Survey (ACS) Basics

- Conducted by US Census Bureau
- Samples 3.5 million addresses in 12 panels per year
  - Visit 20,000 Group Quarter facilities and sample approximately 194,000 residents each year
- Data previously collected on the decennial long form
- Estimates for small areas and small population groups for 35+ topics
- Two types of releases each year
  - 1-year estimates (12 months of data)
  - 5-year estimates (60 months of data)
Respondent Experience Concerns

Production Hispanic Origin/Ethnicity Question

Production Race Question

Production Ancestry Question
ACS Content Test Basics

- Tests changes to questions
- Occurs about every 5 years
- Split-sample, separate from production
- Nationally representative sample of 70,000 addresses
- ACS Content Test tested both separate and combined race/ethnicity questions
  - Presentation focuses on separate format, proposed for 2020
Respondent Experience Concerns

Production Hispanic Origin/Ethnicity Question

Production Race Question

Production Ancestry Question
### Content Test Hispanic Origin/Ethnicity Question

**Is Person 1 of Hispanic, Latino, or Spanish origin?** Mark all boxes that apply AND print origin. Note, you may report more than one group.

- No, not of Hispanic, Latino, or Spanish origin
- Yes, Mexican, Mexican American, Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, another Hispanic, Latino, or Spanish origin – Print details, for example, Salvadoran, Dominican, Colombian, etc.

### Content Test Race Question

**What is Person 1’s race?** Mark all boxes that apply AND print origins in the spaces below. Note, you may report more than one group.

- White – Print details, for example, German, Lebanese, Egyptian, etc.
- Black or African American – Print details, for example, African American, Jamaican, Nigerian, etc.
- American Indian or Alaska Native – Print name of enrolled or principal tribe(s), for example, Navajo Nation, Mayan, Native Village of Barrow Inuit, Traditional Government, etc.

### Content Test Ancestry Question

**What is this person’s ancestry or ethnic origin?**

(For example: Italian, Jamaican, African American, Cambodian, Cape Verdran, Norwegian, Dominican, French Canadian, Haitian, Korean, Lebanese, Polish, Nigerian, Mexican, Taiwanese, Ukrainian, and so on.)
Content Test Version

Content Test Hispanic Origin/Ethnicity Question

Is Person 1 or Hispanic, Latino, or Spanish origin? Mark all boxes that apply **AND** print origins. Note, you may report more than one group.

- No, not of Hispanic, Latino, or Spanish origin
- Yes, Mexican, Mexican Am., Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, another Hispanic, Latino, or Spanish origin – Print details, for example, Salvadoran, Dominican, Colombian, etc.

72% direct match rate

Content Test Race Question

What is Person 1’s race? Mark all boxes that apply **AND** print origins in the spaces below. Note, you may report more than one group.

- White – Print details, for example, German, Lebanese, Egyptian, etc.
- Black or African Am. – Print details, for example, African American, Jamaican, Nigerian, etc.
- American Indian or Alaska Native – Print name of enrolled or principal tribe(s), for example, Navajo Nation, Mayan, Native Village of Barrow Inupiat Traditional Government, etc.
- Chinese
- Filipino
- Korean
- Japanese
- Native Hawaiian
- Samoan
- Chamorro
- Other Pacific Islander – Print details, for example, Tongan, Fijian, Marshallese, etc.
- Some other race – Print race(s) or origin(s).

Content Test Ancestry Question

What is this person’s ancestry or ethnic origin?

(For example: Italian, Jamaican, African Am., Cambodian, Cape Verdean, Norwegian, Dominican, French Canadian, Haitian, Korean, Lebanese, Polish, Nigerian, Mexican, Taiwanese, Ukrainian, and so on.)
Main Limitations

- ACS CT data for Race and Ethnicity were unedited, and did not include weighting adjustments for seasonal variations in ACS response patterns, nonresponse bias, or undercoverage bias.
- ACS CT was not carried out in Alaska, Hawaii, Puerto Rico, or in Group Quarters.
  - We excluded these groups from ACS Production estimates when making comparisons.
Research Objectives

1. To examine differences between group estimates made from ancestry data compared with group estimates made from race and ethnicity data

2. To find out what percent of each group had:
   (1) matching information in both race/ethnicity and ancestry responses,
   (2) information provided in only the detailed race response, or
   (3) information provided in only the ancestry response
Research Objective 1

To find out how different ancestry group estimates are from similar estimates made with detailed race/ethnicity data.

Data: Compared 2016 ACS 1-year production national ancestry estimates to ACS CT estimates using detailed race/ethnicity data.

Tested differences for 106 ancestry groups.
Research Objective 1

1. To examine differences between group estimates made from ancestry data compared with group estimates made from race and ethnicity data
Research Objective 1

To find out how different ancestry group estimates are from similar estimates made with detailed race/ethnicity data

106 Total Ancestry Groups Tested for Differences

AFF Table B04006. People Reporting Ancestry

19 Additional Groups, criteria-based selection
Research Objective 1

To find out how different ancestry group estimates are from similar estimates made with detailed race/ethnicity data

Ancestry: based on self-identification

- Ethnic origins, “roots,” or heritage

Examples: Polish, Egyptian, Pennsylvania Dutch, Cajun
Differences in Detailed Group Estimates

Distribution of Estimates Comparisons between Race/Ethnicity and Ancestry (N=106)
Differences in Detailed Group Estimates

- Not reported or missing: 15%
- English: 0%
- Irish: 0%
- German: 0%
- Unclassified: 0%
- Scottish: 0%
- Dutch: 0%

Ancestry, 2016 ACS Production
Race/Ethnicity, 2016 ACS Content Test
Differences in Detailed Group Estimates

- Not reported or missing
- English
- Irish
- German
- Unclassified
- Scottish
- Dutch

- Ancestry, 2016 ACS Production
- Race/Ethnicity, 2016 ACS Content Test
## Differences in Detailed Reporting

### Differences in Detailed Reporting for Major OMB Race/Ethnicity Groups

<table>
<thead>
<tr>
<th>Ancestry/Detailed Race Group</th>
<th>Race/Ethnicity Data, 2016 ACS Production</th>
<th>Race/Ethnicity Data, 2016 ACS Content</th>
<th>Difference</th>
<th>Adjusted P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed, overall</td>
<td>70.8</td>
<td>74.1</td>
<td>3.3</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>White</td>
<td>42.1</td>
<td>44.7</td>
<td>2.5</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Black or African American</td>
<td>10.0</td>
<td>9.2</td>
<td>-0.8</td>
<td>0.42</td>
</tr>
<tr>
<td>Hispanic</td>
<td>14.3</td>
<td>16.0</td>
<td>1.7</td>
<td>0.01</td>
</tr>
<tr>
<td>Asian</td>
<td>5.4</td>
<td>6.7</td>
<td>1.4</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Native Hawaiian or other Pacific Islander</td>
<td>0.2</td>
<td>0.4</td>
<td>0.3</td>
<td>0.79</td>
</tr>
<tr>
<td>Some other race</td>
<td>1.3</td>
<td>1.6</td>
<td>0.3</td>
<td>0.19</td>
</tr>
</tbody>
</table>
Research Objective 2: Measuring Response Consistency

German in Race/Ethnicity

German in Ancestry
Research Objective 2: Measuring Response Consistency

German total

German in Race/Ethnicity

German in Ancestry
Research Objective 2: Measuring Response Consistency

1. German in Both

German total

German in Race/Ethnicity

German in Ancestry
Research Objective 2: Measuring Response Consistency

- 1. German in Both
- 2. German in Race/Ethnicity only

Diagram:
- German total
- German in Race/Ethnicity
- German in Ancestry
- 1. German in Both
- 2. German in Race/Ethnicity only
Research Objective 2: Measuring Response Consistency

- 1. German in Both
- 2. German in Race/Ethnicity only
- 3. German in Ancestry only

German total

German in Race/Ethnicity

German in Ancestry

1. German in Both

2. German in Race/Ethnicity only

3. German in Ancestry only
Research Objective 2: Measuring Response Consistency

To find out what percent of each group had:

(1) matching information in both race/ethnicity and ancestry responses,
(2) information provided in only the detailed race/ethnicity response, or
(3) information provided in only the ancestry response?

Data: Race/Ethnicity and Ancestry data from the 2016 ACS Content Test, 38 detailed groups compared
1. Reporting in Both Race/Ethnicity and Ancestry

- Fair amount of response consistency
- Out of 38 groups:
  - 12 with at least 75%
  - 9 with less than 50%

Source: 2016 ACS Content Test, Control Treatment.
2. Reporting in Only Race/Ethnicity

- 15 groups have at least 25%
- Wide geographic and size variation

Source: 2016 ACS Content Test, Control Treatment.
3. Reporting in Only Ancestry

- 2 groups have at least 25%
- Both groups classified as Black ancestries

Source: 2016 ACS Content Test, Control Treatment.
Summary

- Most groups showed little or no difference
- ACS CT race/ethnicity received more detailed responses overall
- Fair consistency in responses between race/ethnicity and ancestry
- When only one response, race/ethnicity more comprehensive for more groups
- On balance, detailed race/ethnicity data not vastly distinct from ancestry data
Potential Explanations

- Up to 10 write-ins per group in Race/Ethnicity, 2 in ancestry
- Some evidence of example group effects
- Location in the questionnaire
- Respondent burden from answering ethnicity, race, then ancestry
Next Steps

- Cognitive testing to more thoroughly understand relationship between race/ethnicity and ancestry responses
- Potential consideration of removal of the ancestry question would be an executive decision made in conjunction with needs of stakeholders
References

Contact Information

Greg Mills
Gregory.Mills@census.gov

Sarah Heimel
Sarah.K.Heimel@census.gov

Angela Buchanan
Angela.Brittingha.Buchanan@census.gov