Asking Questions About Sexual Orientation and Gender Identity on the Experimental Household Pulse Survey: Evidence from Initial Evaluations

Presentation for the 2022 FCSM Annual Meeting

Thomas File, Social, Economic, and Housing Statistics Division
Zachary Scherer, Social, Economic, and Housing Statistics Division
U.S. Census Bureau

October 25, 2022

Any opinions and conclusions expressed herein are those of the authors and do not represent the views of the U.S. Census Bureau.

The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release.

CBDRB-FY22-POP001-0103; CBDRB-FY22-POP001-0075

United States® Census Bureau

Today You Will Hear About…

- Quick reminder of what SOGI questions are asked
- Evaluations:
  - Allocated sex at birth (SAB)
  - SAB/gender identity confirmation
  - Question order experiment
  - Characteristics of ‘residual’ respondents and nonrespondents to SOGI questions
- Research in progress

United States Census Bureau

HPS Methodology

- HPS remains an experimental survey
- HPS has relatively low overall response rate
- Questions asked only of respondents (i.e., no proxy response)
- Questions asked only of those aged 18 years and over
- Self-response, online survey (no interviewer-administered option)
- Quick turnaround – data released less than two weeks after collection ends
- Census Bureau dissemination policies determine granularity of products
- Limited time for Census to cognitively test revisions to baseline SOGI items

United States Census Bureau

HPS SOGI Questions

Sexual Orientation

Q1. Which of the following best represents how you think of yourself?

- Gay or lesbian
- Straight, that is not gay or lesbian
- Bisexual
- Something else
- I don't know

Gender Identity

Q1. What sex were you assigned at birth, on your original birth certificate?

- Male
- Female

Q2. Do you currently describe yourself as male, female or transgender?

- Male
- Female
- Transgender
- None of these

Q3. Just to confirm, you were assigned {FILL} at birth and now you describe yourself as {FILL}. Is that correct?

- Yes
- No <skip back to Q1 and/or Q2 to correct>

United States® Census Bureau

Impact of Allocating Sex at Birth (SAB) on Transgender Estimates

- Rapid response framework = limited data editing
- Data edited only for age, race, Hispanic origin, sex at birth, education, and total number of adults in households (required for survey weighting)
- Respondents categorized as transgender in one of two ways:

  1. Specifically select transgender on current identity question
  2. Different values on sex at birth and gender identity

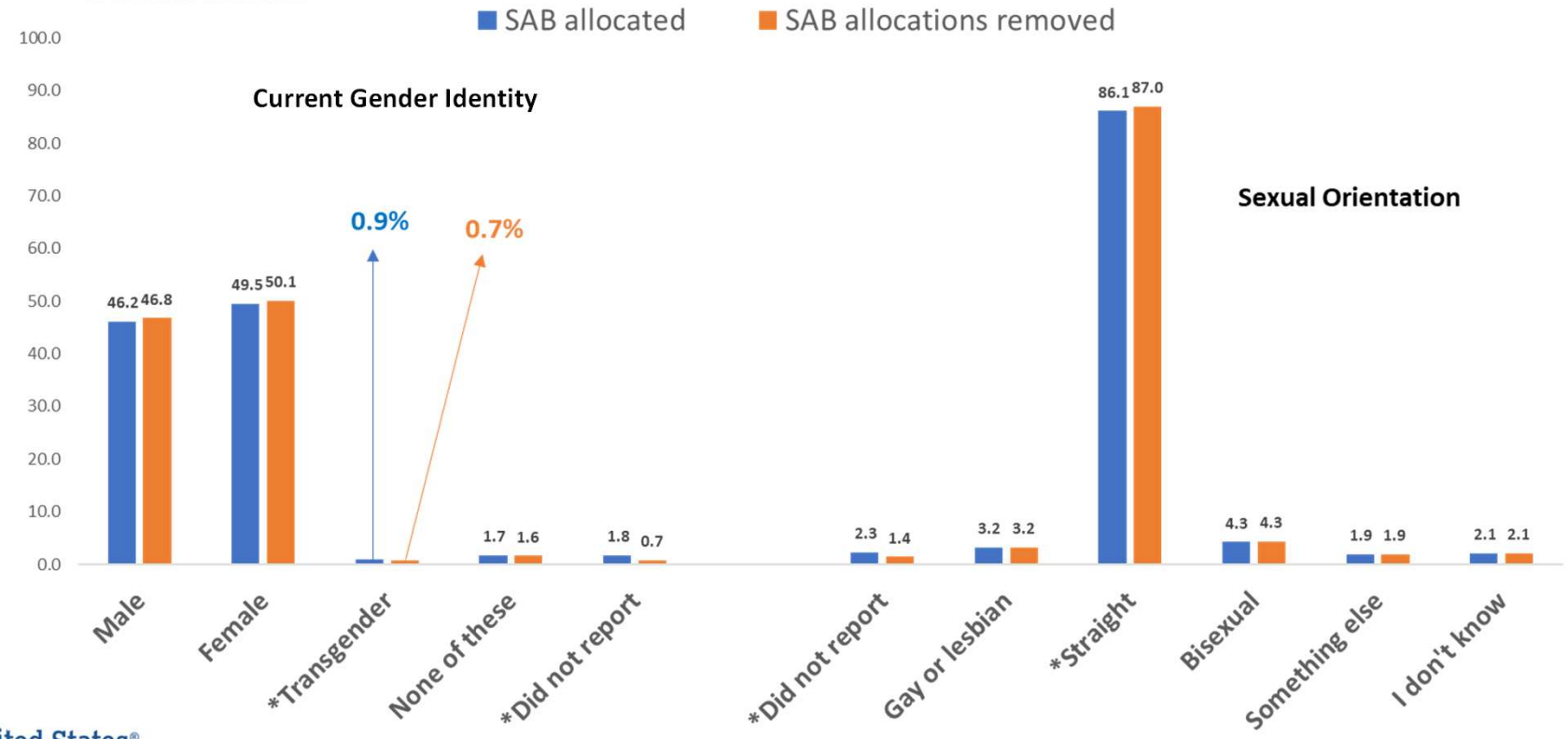
United States Census Bureau

Impact of Allocating SAB on Transgender Estimates

- Imputation of SAB raises possibility of incorrectly categorizing respondents as transgender based on edited value
- Errors influencing small population estimates in big ways (i.e., estimates of same-sex couples)
- Need to assess ramifications of removing allocations from sample on transgender estimates overall and by characteristics

United States Census Bureau

Percentage Impact of Removing Allocated SAB on Overall SOGI Distributions

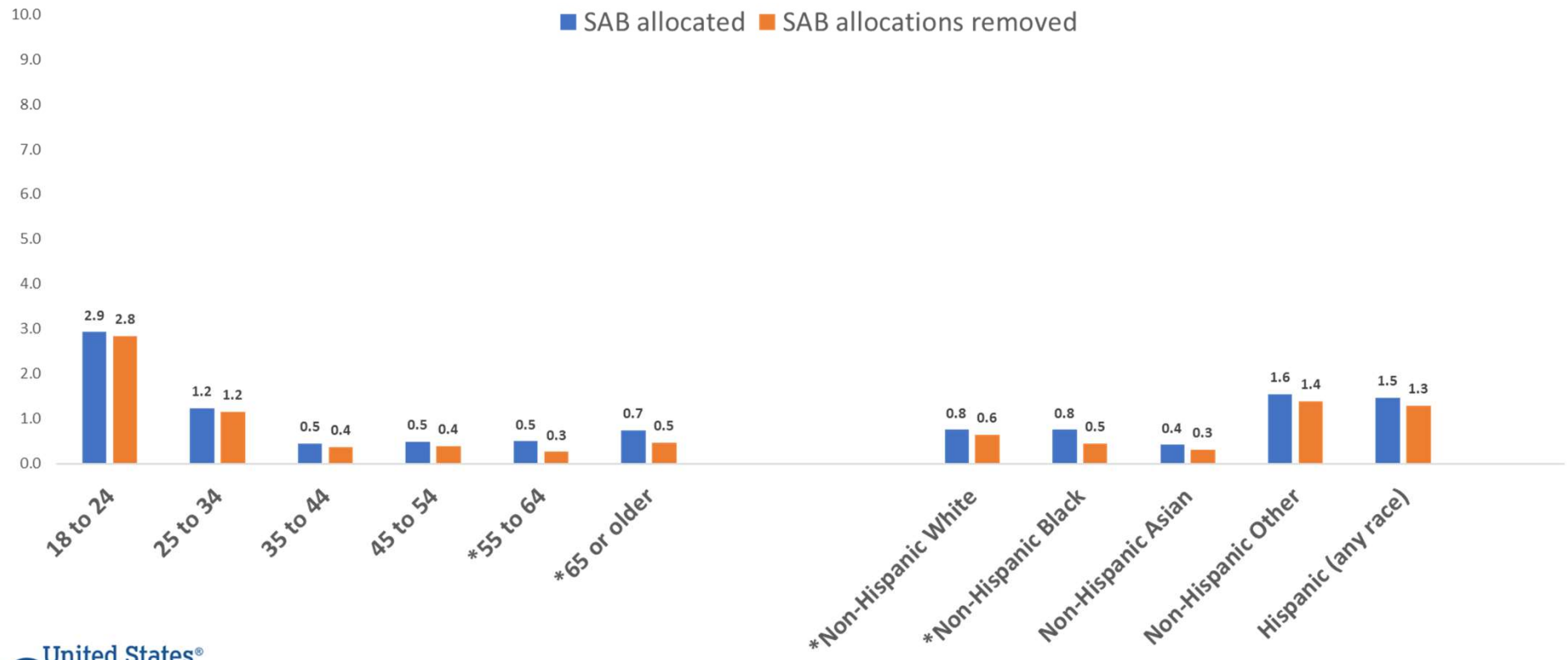


Source: U.S. Census Bureau, 2021 Household Pulse Survey, Phase 3.2 (Weeks 34 - 39)

Note: X-axis labels with * indicate statistical significance (95%)

United States Census Bureau

Percentage Transgender Before and After Removing Allocated Sex at Birth, by Age and Race/Hispanic Origin



Note: X-axis labels with * indicate statistical significance (95%)
Note: "Non-Hispanic other" includes those reporting 2+ races

Source: U.S. Census Bureau, 2021 Household Pulse Survey, Phase 3.2 (Weeks 34 - 39)

Impact of Allocating Sex at Birth (SAB) on Transgender Estimates

- Although removing allocated SAB values does not radically shift SOGI distributions, it does matter
- There does appear to be some differential impact by age and race/Hispanic origin
- Overall distribution of transgender is younger and less likely to be non-Hispanic White and non-Hispanic Black once we remove SAB allocations

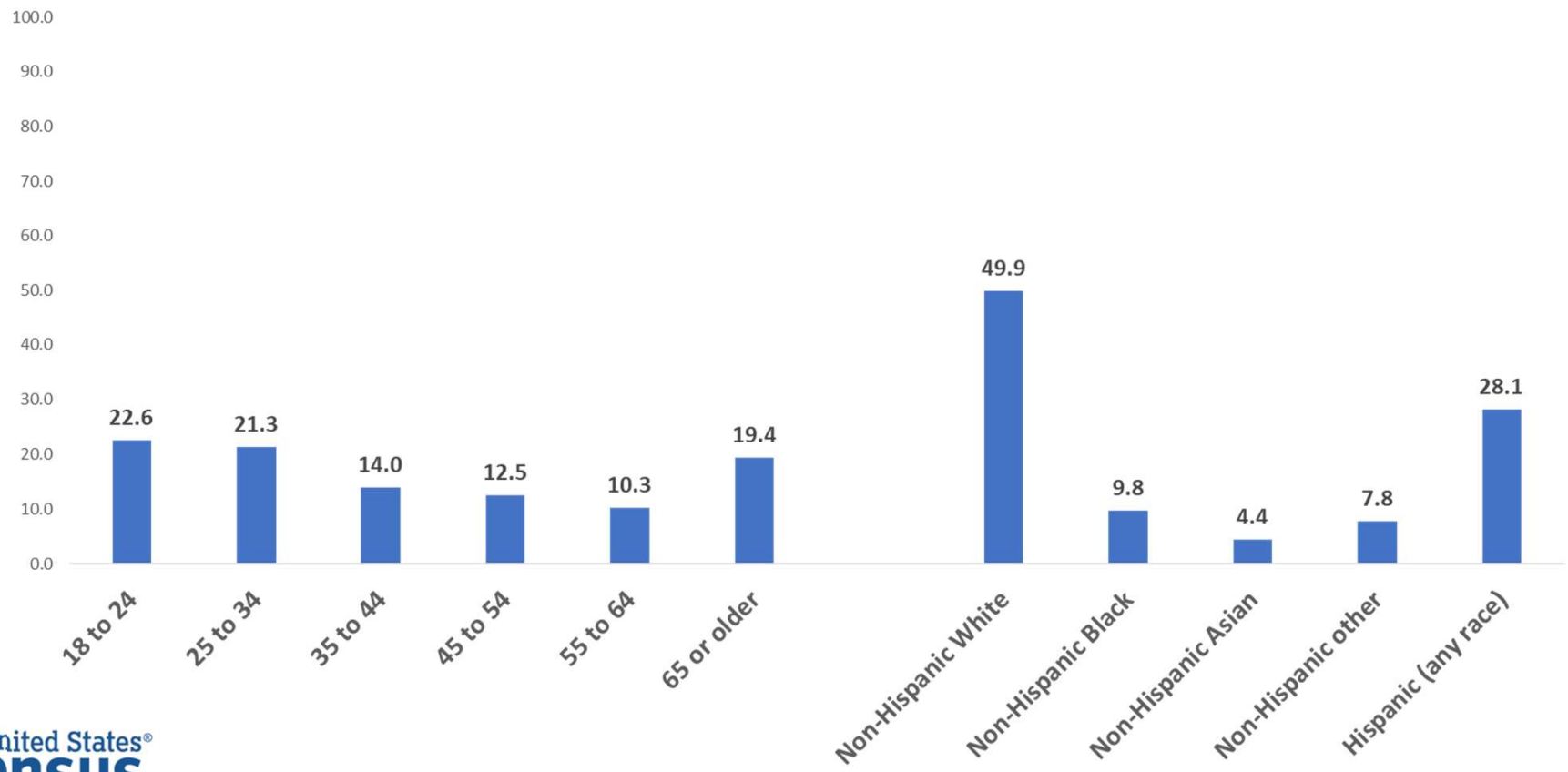
United States® Census Bureau

Impact of SAB/Gender Identity Check

- Since July 2021, reported binary sex replaced with two questions (SAB and gender identity)
- Only non-matching reports received confirmation check
- Once again, goal is to limit errors in small populations
- Who gets the check, and are there differences in outcomes?
- Of unweighted sample, only 1.7 percent receive the check
- Of those who receive the check, most (86 percent) affirm original responses

United States® Census Bureau

Percentage of Adults Receiving the Check, by Age and Race/Hispanic Origin

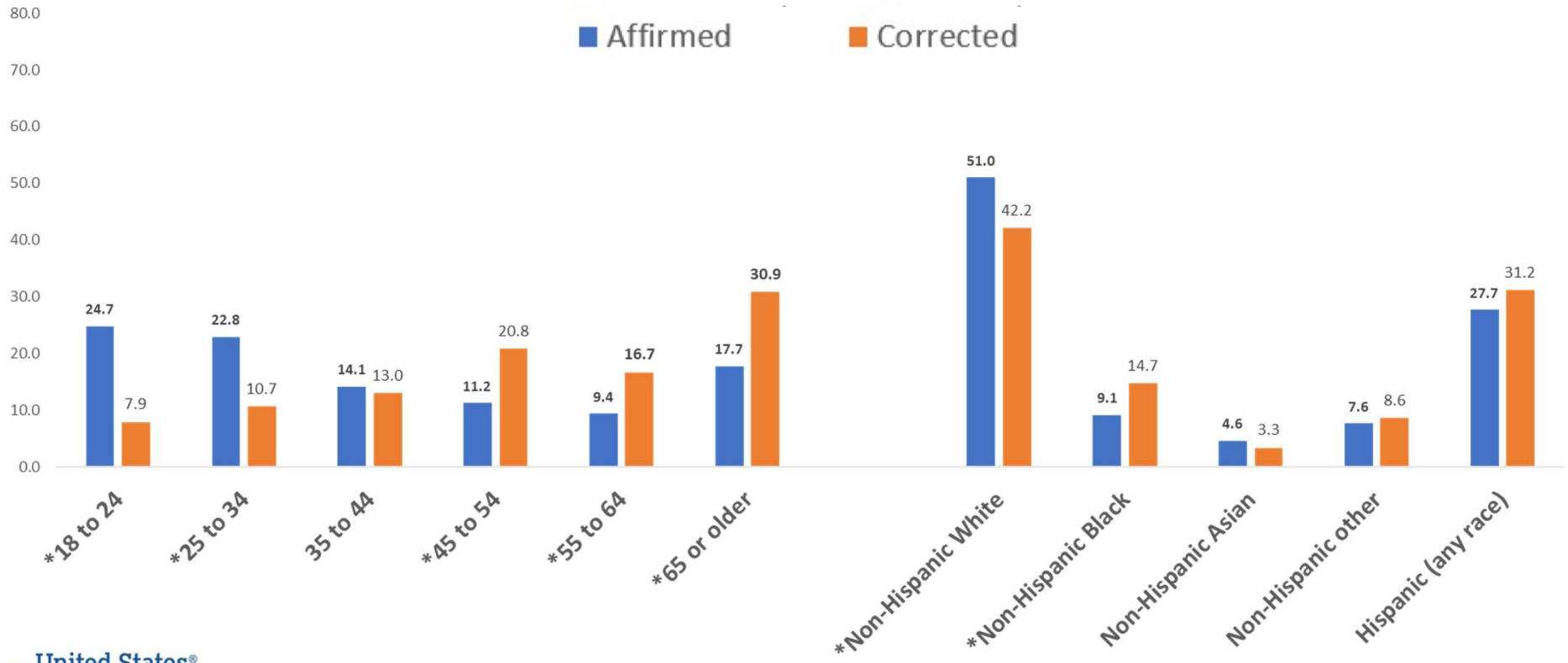


United States® Census Bureau

Note: "Non-Hispanic other" includes those reporting 2+ races

Source: U.S. Census Bureau, 2021 Household Pulse Survey, Phase 3.2 (Weeks 34 - 39)

Percentage Distribution of Those Who Affirm and Correct Responses, by Age and Race/Hispanic Origin



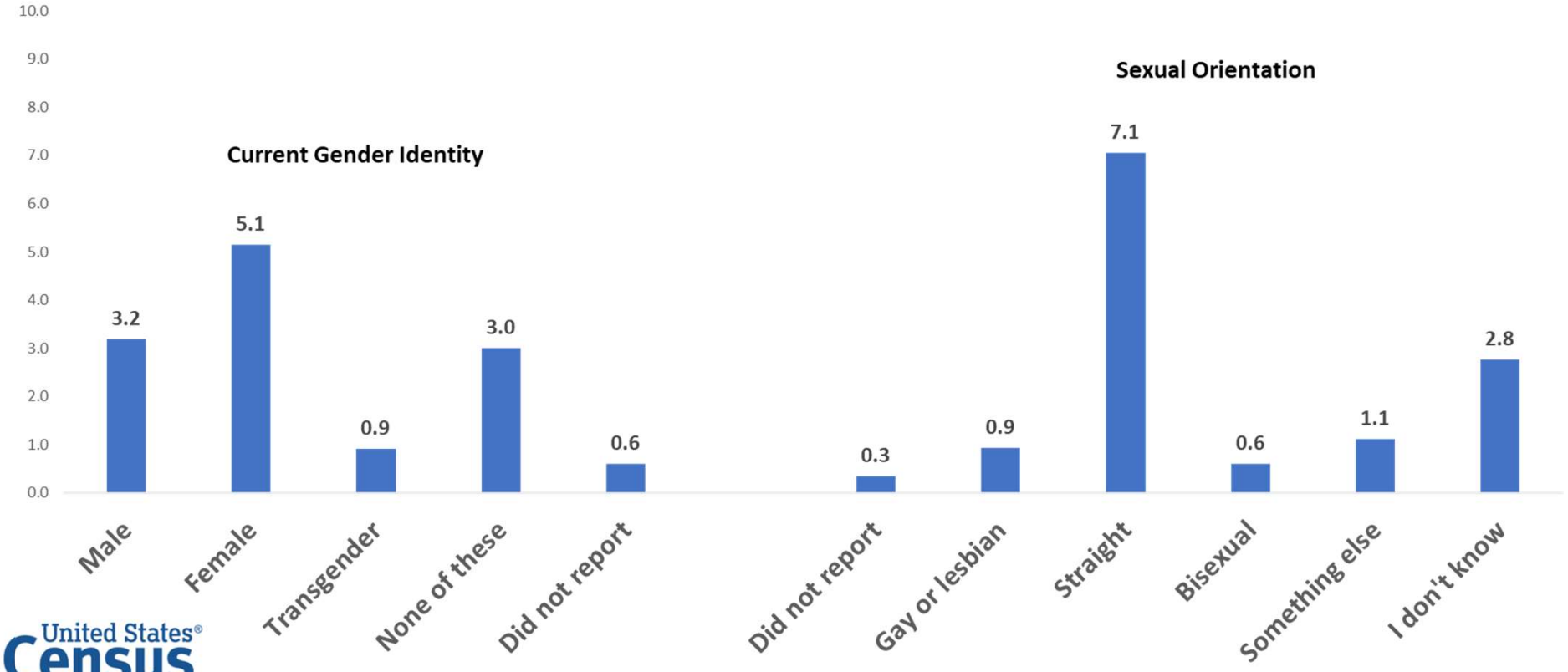
United States Census Bureau

Note: X-axis labels with * indicate statistical significance (95%)

Note: "Non-Hispanic Other" includes those reporting 2+ races

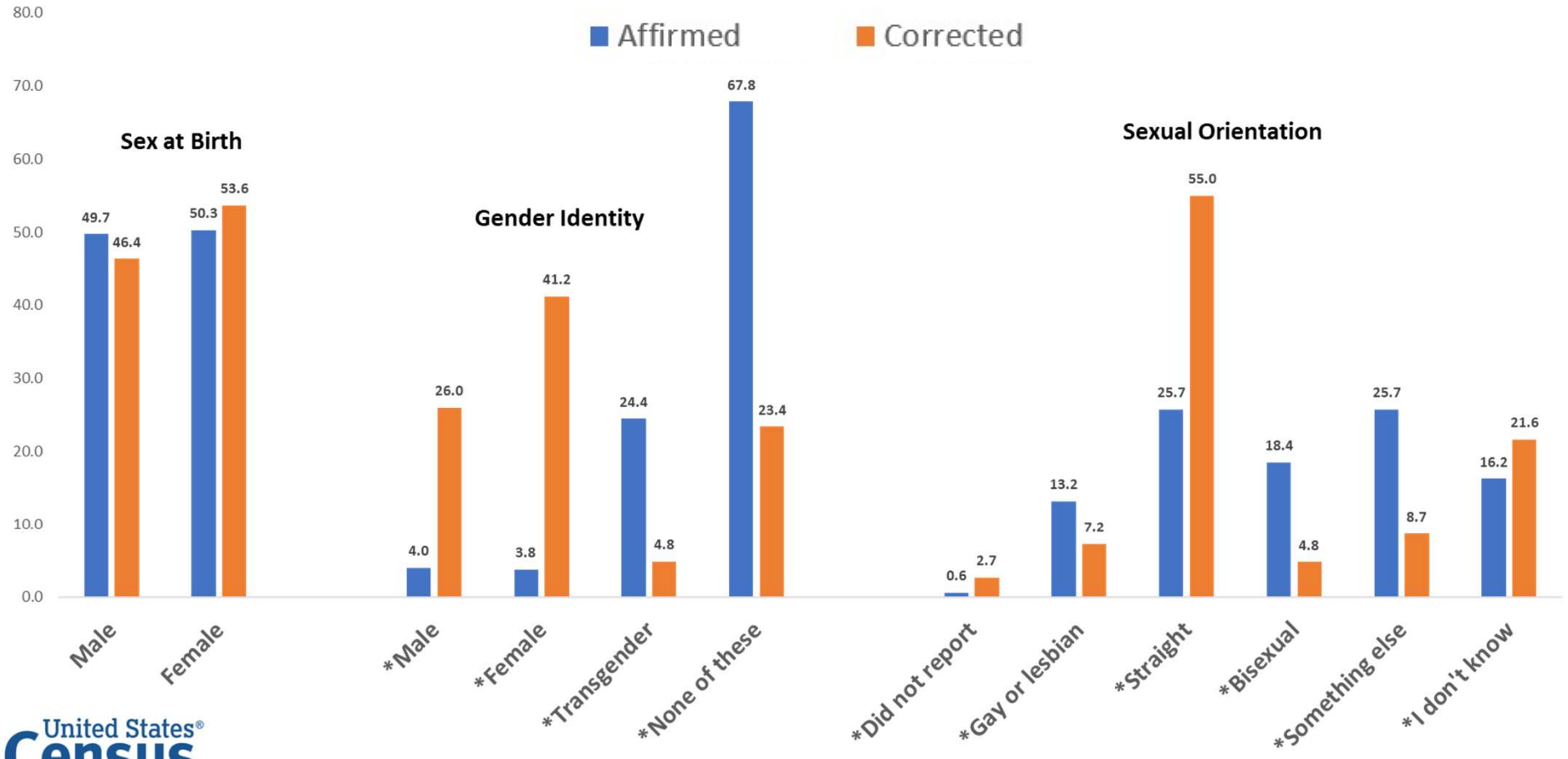
Source: U.S. Census Bureau, 2021 Household Pulse Survey, Phase 3.2 (Weeks 34 - 39)

Percentage Distribution of Those Receiving the Check Who Also Correct Original Reports, by SOGI Outcomes



Source: U.S. Census Bureau, 2021 Household Pulse Survey, Phase 3.2 (Weeks 34 - 39)

Percentage Composition of SOGI Outcomes for Those Who Affirm and Correct Responses



Source: U.S. Census Bureau, 2021 Household Pulse Survey, Phase 3.2 (Weeks 34 - 39)

Note: X-axis labels with * indicate statistical significance (95%)

Impact of SAB/Gender Identity Check

- Most reports of inconsistent SAB and gender identity are affirmed as accurate when checked
- Those who affirm are younger, while those who correct are older
- The White non-Hispanic population was more represented among those who affirm; the Black non-Hispanic population was more represented among those who correct
- On SOGI outcomes, sexual and gender minorities more represented among population that affirmed; cisgender male/female and straight respondents more prevalent among those who correct

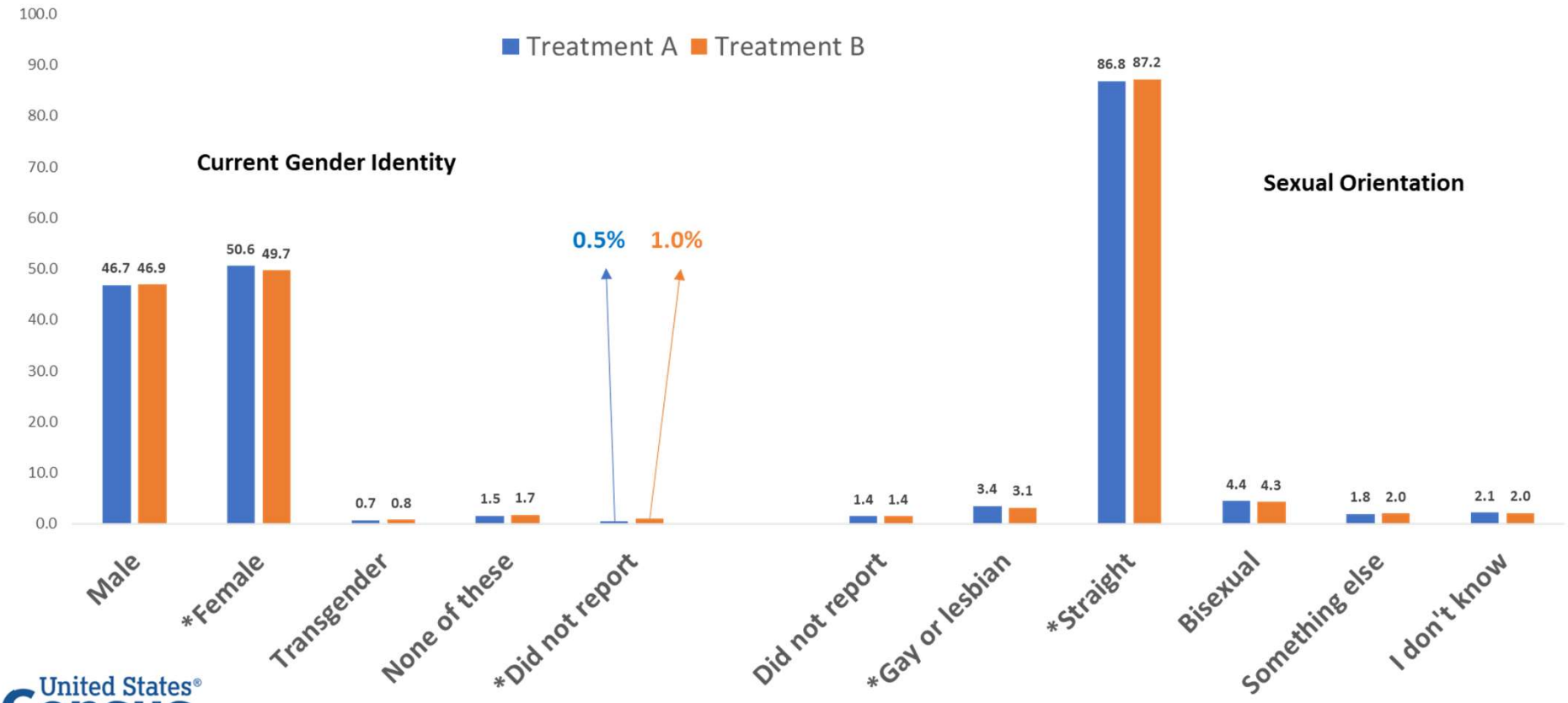
United States® Census Bureau

Results From Built-In Question Order Experiment

- Built-in question order experiment was included when new SOGI items were added
- Half sample received sexual orientation question before SAB/current gender identity questions, and vice versa
- In both treatments, SOGI questions asked at end of survey's first section (demographics)
- Treatment Group A: sex assigned at birth → gender identity → sexual orientation
- Treatment Group B: sexual orientation → sex assigned at birth → gender identity
- Does question order matter?

United States Census Bureau

Percentage Distribution of SOGI Outcomes, by Experiment Group



United States Census Bureau

Source: U.S. Census Bureau, 2021 Household Pulse Survey, Phase 3.2 (Weeks 34 - 39)

Note: X-axis labels with * indicate statistical significance (95%)

Results From Built-In Question Order Experiment

- Overall, question order did not drastically change LGBT outcomes
- Non-response for gender identity summary measure was slightly lower in Treatment A (SAB and gender identity asked before sexual orientation) than in Treatment B (sexual orientation asked first)
- Characteristics of LGBT population stable across treatment groups

United States® Census Bureau

Characteristics of 'Residual' Respondents and Nonrespondents

- Accurate survey measurement requires not only understanding those who clearly report being part of the SGM and non-SGM populations, but also those who select less definitive responses ('none of these' for their current gender identity, and 'something else' or 'I don't know' for their sexual orientation)
  - The choice of including or excluding those who respond with "something else" to a sexual orientation question as part of the SGM population has been found to affect research findings
- Some respondents may use 'residual' categories if they are unsure of their sexuality or uncomfortable with labels
- Others may use these categories if they do not understand or wish to voice objection to the relevant questions

United States® Census Bureau

‘Residual’ Respondents and Nonrespondents

Which of the following best represents how you think of yourself?

6.4% of weighted respondents selected a residual response option or did not report

Gay or lesbian (3.2%)	Straight (86.1%)	Bisexual (4.3%)	Something else (1.9%)	Don’t know (2.1%)	Did not report (2.3%)

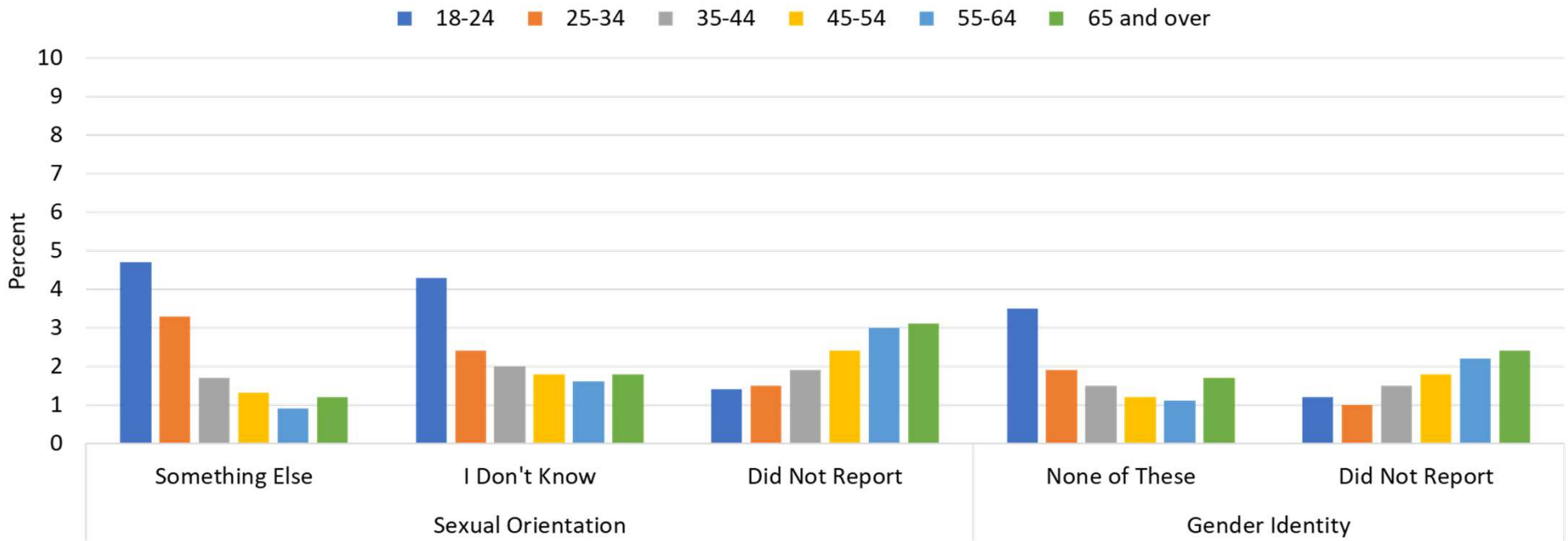
Do you currently describe yourself as…

3.4% of weighted respondents selected none of these or did not report

Male (46.4%)	Female (49.7%)	Transgender (0.6%)	None of these (1.7%)	Did not report (1.8%)

United States® Census Bureau

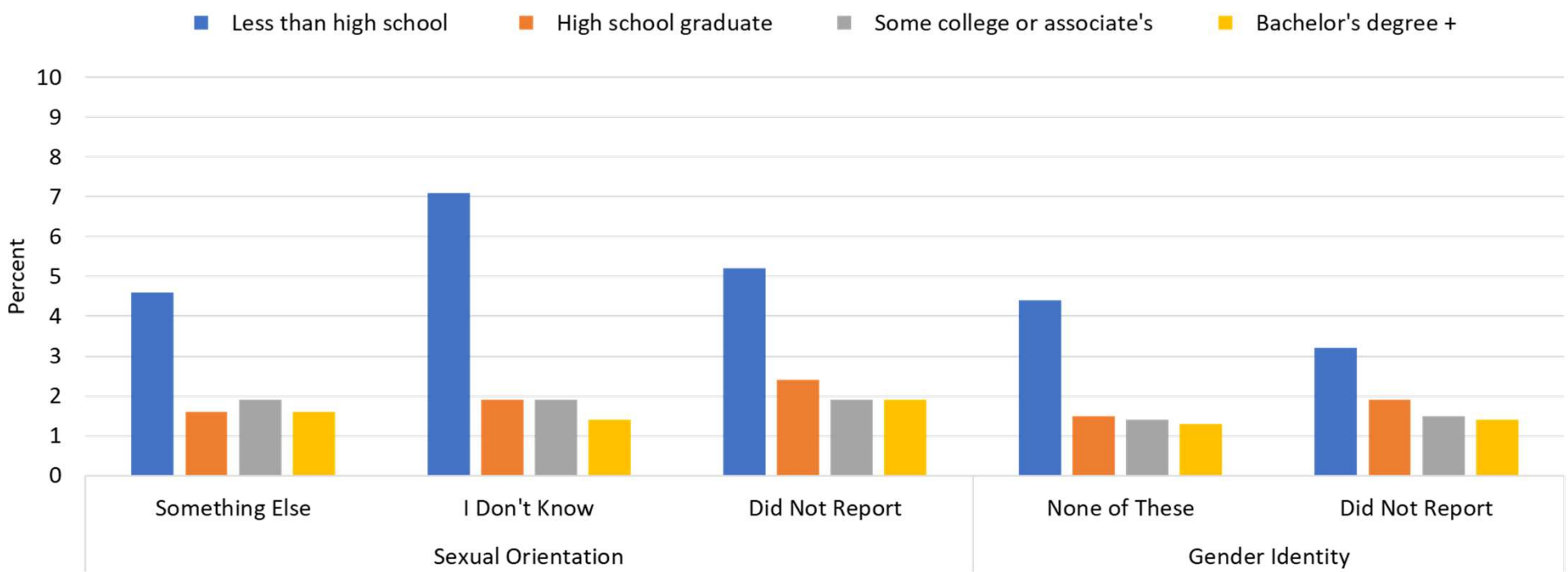
‘Residual’ And Nonresponse Distributions, by Age



Source: U.S. Census Bureau, 2021 Household Pulse Survey, Phase 3.2 (Weeks 34 - 39)

United States® Census Bureau

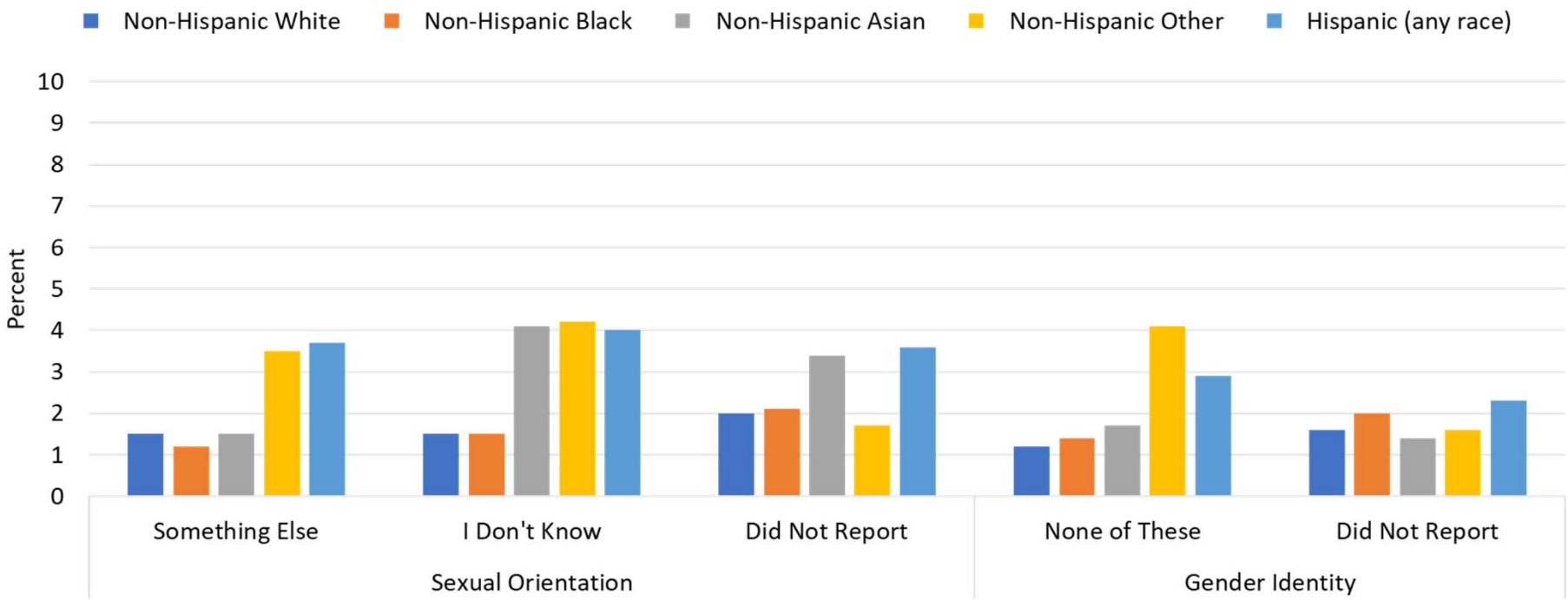
‘Residual’ and Nonresponse Distributions, by Educational Attainment



Source: U.S. Census Bureau, 2021 Household Pulse Survey, Phase 3.2 (Weeks 34 - 39)

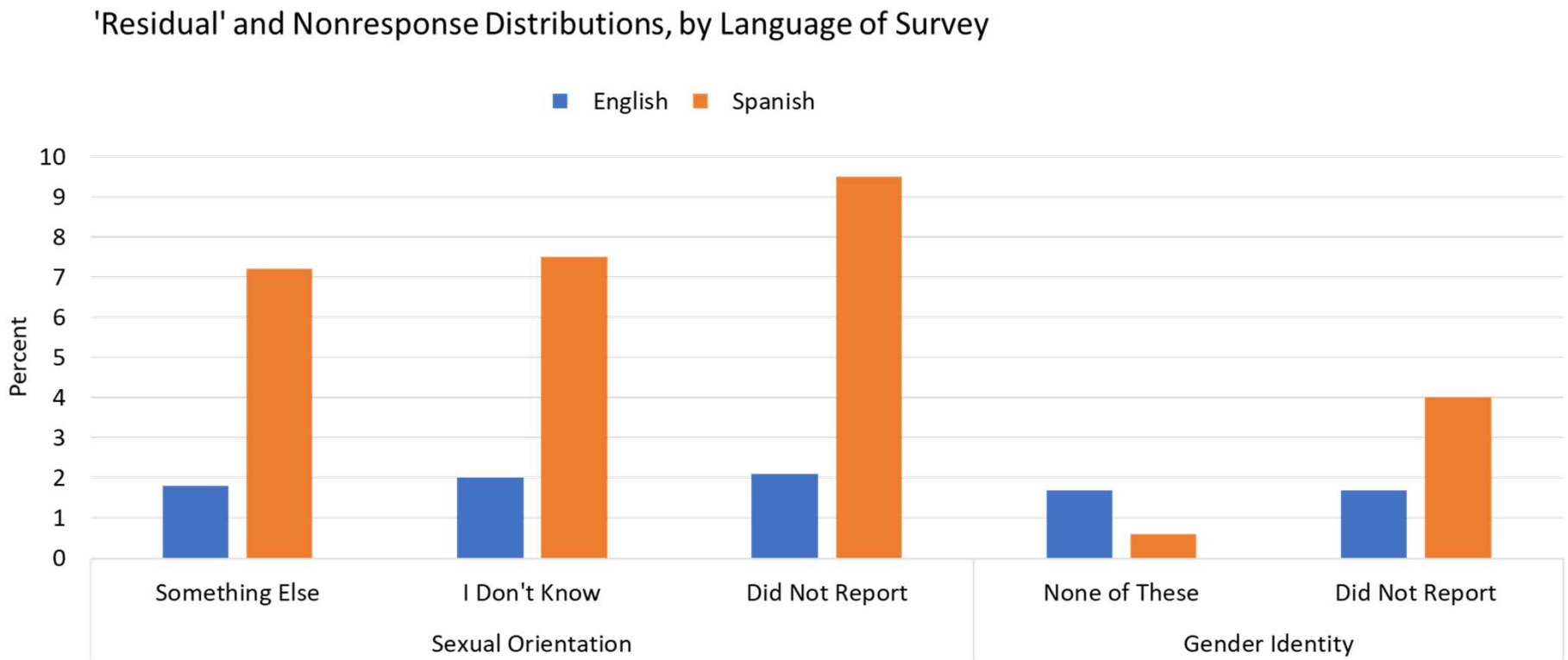
United States® Census Bureau

'Residual' and Nonresponse Distributions, by Race and Hispanic Origin



Source: U.S. Census Bureau, 2021 Household Pulse Survey, Phase 3.2 (Weeks 34 - 39)

United States® Census Bureau



Source: U.S. Census Bureau, 2021 Household Pulse Survey, Phase 3.2 (Weeks 34 - 39)

United States® Census Bureau

Key Findings from Logistic Regression Models

- In general, younger respondents were more likely to respond to SOGI questions (though they were also more likely to select a residual response category), whereas older respondents were more likely to not respond at all.
- Those responding in Spanish were more likely than those responding in English to select residual responses to the sexual orientation question or to not respond at all to either SOGI question

United States Census Bureau

In Summary…

- Data users encouraged to remove allocated SAB from SOGI analysis
- Consistency check is useful and operating as intended
- Question order does not yield drastic differences, but asking sex at birth and gender identity before sexual orientation may reduce nonresponse
- Nonrespondents to SOGI questions tend to be older with lower educational attainment; ‘residual’ respondents tend to be younger and, for sexual orientation, more likely to have completed the survey in Spanish

United States Census Bureau

Ongoing Evaluations

- Next steps include evaluating questions by COVID-19 experiences
  - HPS designed for this
- Additional characteristics and geography to consider
- Modeling and record linkage projects
- Outside research and collaboration important (and encouraged!)

United States Census Bureau

Thank you!

Thomas File
Social, Economic, and Housing Statistics Division
U.S. Census Bureau
thomas.a.file@census.gov

Zachary Scherer
Social, Economic, and Housing Statistics Division
U.S. Census Bureau
zachary.scherer@census.gov

United States Census Bureau