Implementing the Revised Relationship Question in the American Community Survey

Laquitta Walker

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Overview

- Describe changes to the ACS relationship to householder item
  - Expansion of the "husband or wife" and "unmarried partner" categories
  - Changes to edit procedures

- Show estimates from recently published brief

Background:

Changes to ACS Relationship Data

Data Quality Challenges

- A statistical problem: a low rate of random error in a large group (opposite-sex married couples) creates issues in the estimates of a small group (same-sex married couples)
  - There are some 57 million opposite-sex married couple households (ACS 2017 1-year file).
  - Only a small proportion mismark their response, but it is enough to create significant error in the estimate of same-sex married couples.
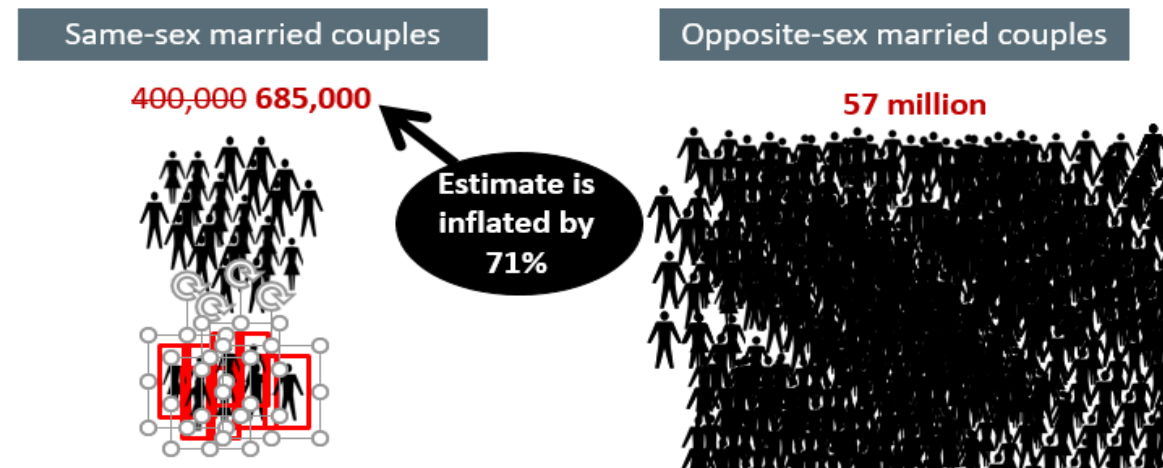
- **2013**
  - First year same-sex spouses were shown as such in the edited data. Previously, those reported as same-sex spouses were edited and shown as *same-sex unmarried partners*.
- **2019**
  - Revised relationship to householder question was implemented.
    - Added separate opposite-sex and same-sex categories for the spouse and unmarried partner categories
    - Removed 'roomer/boarder' category

Revising the Relationship Categories

ACS 2018 Categories

Spouse (Husband/Wife)

Unmarried Partner

Biological Child

Adopted Child

Stepchild

Grandchild

Brother/Sister

Parent

Parent-in-law

Son-in-law/daughter-in-law

Other relative

Foster Child

Housemate or Roommate

Roomer/Boarder

Other nonrelative

ACS 2019 Categories

Opposite-sex Spouse (Husband/Wife)

Same-sex Spouse (Husband/Wife)

Opposite-sex Unmarried Partner

Same-sex Unmarried Partner

Biological Child

Adopted Child

Stepchild

Grandchild

Brother/Sister

Parent

Parent-in-law

Son-in-law/daughter-in-law

Other relative

Foster Child

Roommate or Housemate

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Edit Changes

- Now a joint age/sex/relationship edit because the relationship item contains an implied sex value for coupled households

- Inconsistent reports of relationship and sex (e.g., opposite-sex spouse, but householder and spouse are both male) will be resolved in the edit

Mismatched Couples

Relationship and Sex reports are inconsistent
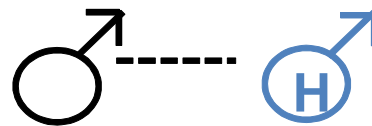
Same-sex spouse | Opposite-sex spouse

Is this a same-sex or opposite-sex couple?

Mismatched Couples

Household	Relationship to Householder	Sex	Name
A	Householder	Male	**John**
A	Same-sex Spouse	Female	**Mary**

Inconsistent reports of relationship and sex (e.g., opposite-sex spouse, but householder and spouse are both male) will be resolved in the edit

- Edit considers the reported information (sex for both people, reported relationship, how often first name is male) and reconciles

  1. First name index—score out of 1000 for how often this name is reported as male
  2. High degree of concurrence between the index at 95 percent level and Social Security value of sex (https://www.census.gov/library/working-papers/2015/demo/SEHSD-WP2014-36.html)

Same-Sex Couple Households Brief

- https://www.census.gov/content/dam/Census/library/publications/2021/acs/acsbr-005.pdf

Figure 2.
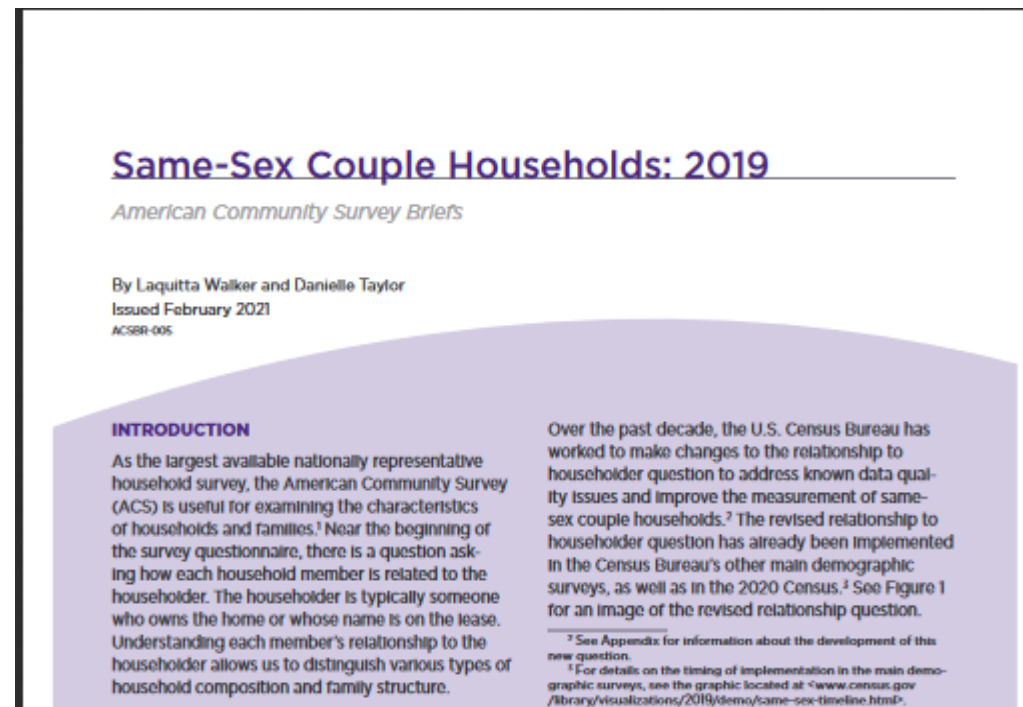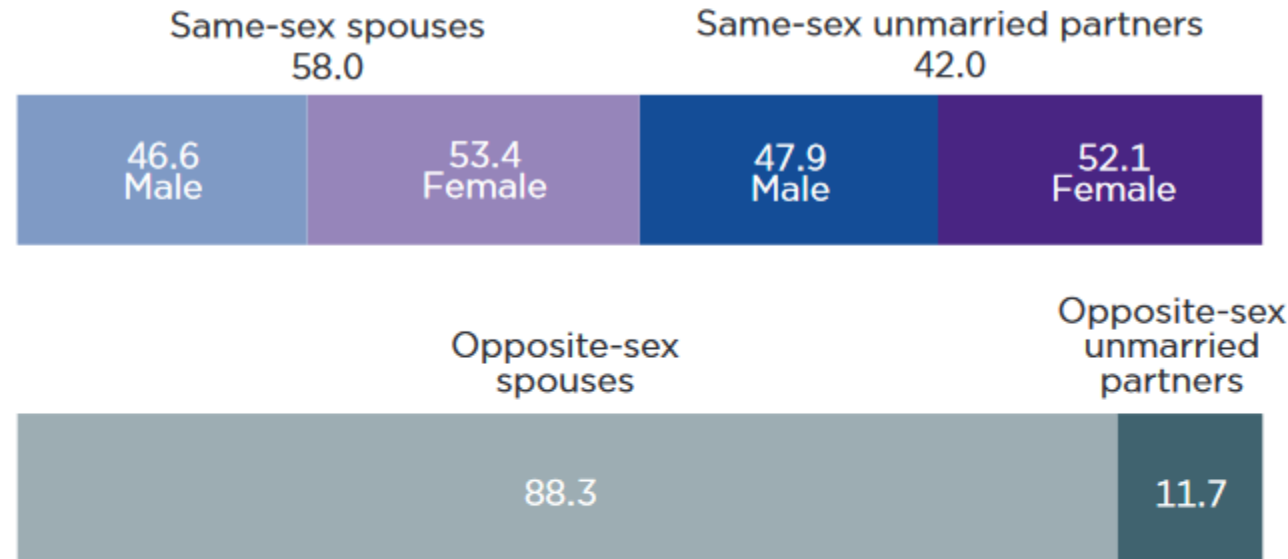**Same-Sex and Opposite-Sex Couple Households by Type: 2019**
(In percent)

- Opposite-sex spouses
- Same-sex spouses: male
- Same-sex spouses: female
- Opposite-sex unmarried partners
- Same-sex unmarried partners: male
- Same-sex unmarried partners: female

Same-sex spouses 58.0 | Same-sex unmarried partners 42.0

| 46.6 Male | 53.4 Female | 47.9 Male | 52.1 Female |

Opposite-sex spouses | Opposite-sex unmarried partners

| 88.3 | 11.7 |

Source: U.S. Census Bureau, 2019 American Community Survey, 1-year data.

Figure 3.
Percent of Coupled Households That Were Same-Sex Couple Households: 2019

Compared to national percent

- Above national percent
- No difference
- Below national percent

United States: 1.5 percent

Source: U.S. Census Bureau, 2019 American Community Survey, 1-year data.

Table 2a.

Selected Metropolitan Statistical Areas Among the Highest Percentage of All Same-Sex Couple Households: 2019

(For information on confidentiality protection, sampling error, nonsampling error, and definitions in the American Community Survey, see <www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>)

| Metropolitan statistical areas[1,2]	Total coupled households	Margin of error[3] (±)	All same-sex couple households	
			Percent of coupled households	Margin of error[3] (±)
San Francisco-Oakland-Berkeley, CA	953,939	9,801	2.8	0.27
Portland-Vancouver-Hillsboro, OR-WA	548,325	8,635	2.6	0.31
Seattle-Tacoma-Bellevue, WA.	878,709	13,181	2.4	0.30
Orlando-Kissimmee-Sanford, FL	501,674	11,137	2.4	0.59
Austin-Round Rock-Georgetown, TX	451,691	8,470	2.2	0.41
Miami-Fort Lauderdale-Pompano Beach, FL . . .	1,110,820	12,708	2.2	0.23
Boston-Cambridge-Newton, MA	1,008,283	10,819	2.1	0.23
Denver-Aurora-Lakewood, CO	639,286	9,631	2.0	0.29
Phoenix-Mesa-Chandler, AZ	993,119	13,091	2.0	0.24
Baltimore-Columbia-Towson, MD.	554,091	7,651	2.0	0.35

[1]Metropolitan statistical areas (MSAs) listed in table may not differ statistically from other MSAs not listed.
[2]MSAs include a minimum of 100 unweighted same-sex couple households.
[3]Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90 percent confidence interval.
Source: U.S. Census Bureau, 2019 American Community Survey, 1-year data.

Percent of Coupled Households With Children <18 Present, by Type: 2019
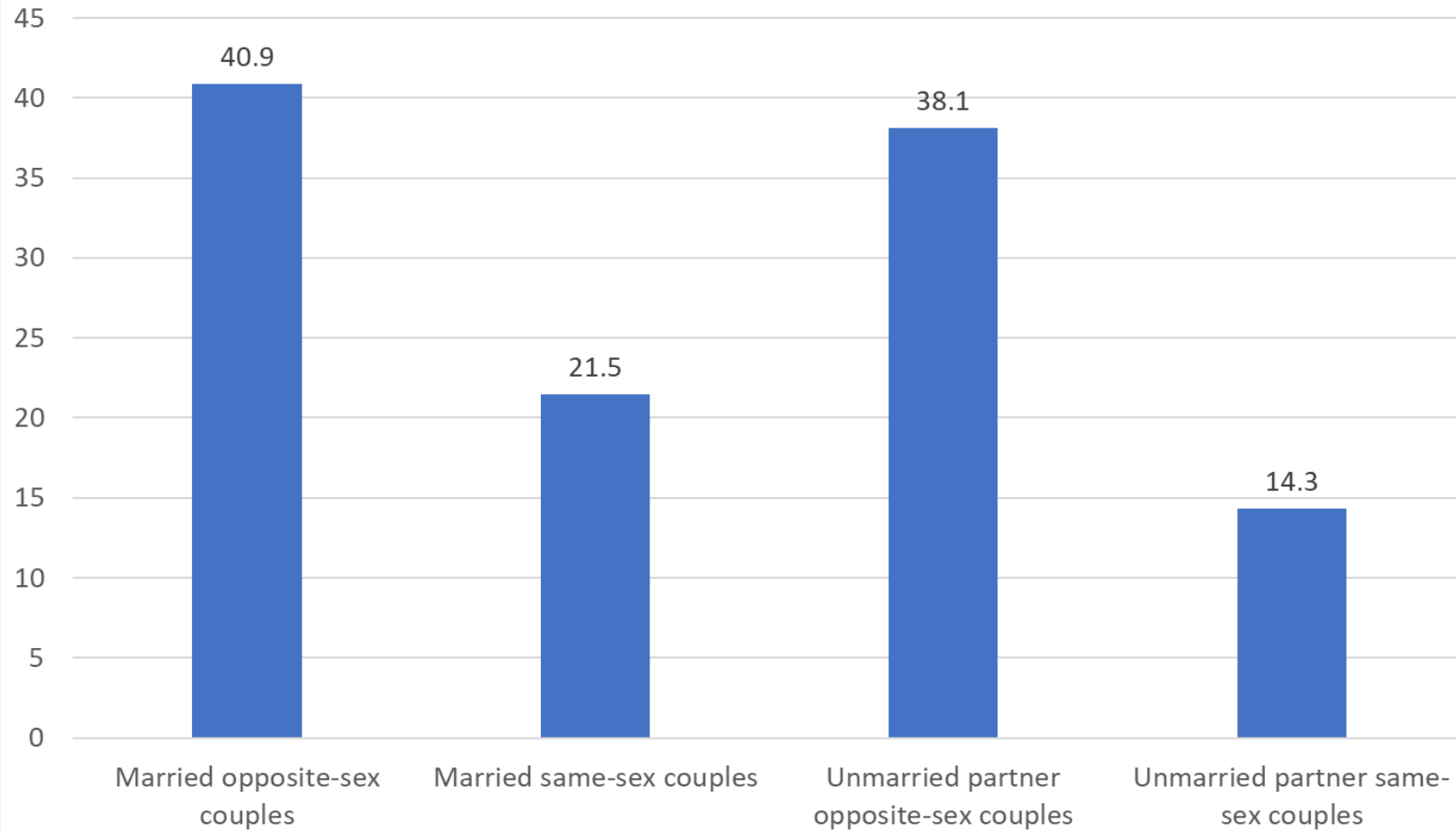
Source: U.S. Census Bureau, 2019 American Community Survey, 1-year data.

Percent of Coupled Households with Children, by Type of Relationship to the Child

- Households with ONLY **biological** children of the householder:
  - Married opposite-sex couples: 83.8 percent
  - Married same-sex couples: 51.6 percent
  - Unmarried partner opposite-sex couples: 70.7 percent
  - Unmarried partner same-sex couples: 44.0 percent

Percent of Coupled Households with Children, by Type of Relationship to the Child

- Households with ONLY **adopted** children of the householder:
  - Married opposite-sex couples: 1.7 percent
  - Married same-sex couples: 17.2 percent
  - Unmarried partner opposite-sex couples: 0.6 percent
  - Unmarried partner same-sex couples: 5.9 percent

Conclusion

- The revised relationship categories in ACS are part of a broader effort to get more accurate same-sex estimates across all Census data products
  - The same revised relationship categories appear in 2014 SIPP, 2019 CPS and 2020 Decennial Census

- Changes made to relationship to householder allow better measurement of specific types of family/living arrangements, especially for same-sex couples and their children

- Further work will evaluate the data quality improvements

Contact Information

Laquitta Walker

301-763-1720

Laquitta.m.walker@census.gov

American Community Survey

https://www.census.gov/programs-surveys/acs

For papers about the testing of the revised relationship question, please see: https://www.census.gov/topics/families/same-sex-couples/library/working-papers.html