

# Measuring Marriage and Cohabitation: Assessing Same-Sex Relationship Status in the Current Population Survey

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**ABSTRACT** Since June 26, 2015, marriages to same-sex couples have been legally recognized across every state in the United States, bringing new challenges to measuring relationship status in surveys. Starting in 2015 for select households and in 2017 for all households, the Current Population Survey (CPS) used a new household roster that directly identified same-sex and different-sex cohabiting and married couples. We gauge how the estimates and characteristics of same-sex couples vary according to old and new roster categories using the 2015/2016 and 2017/2018 CPS. Employing the new roster, we distinguish the sociodemographic characteristics of married and cohabiting same-sex couples. These findings have implications for the measurement of same-sex couples and our understanding of marriage among sexual minorities.

**KEYWORDS** Sexual minority • Same-gender couples • Measurement • Marriage • Cohabitation

## Introduction

The June 26, 2015, landmark U.S. Supreme Court decision *Obergefell v. Hodges* ensured the legality of marriages to same-sex couples throughout the United States. Federal social science data collection efforts have made considerable strides in keeping pace with the shifting legal landscape. The Current Population Survey (CPS) data are the first publicly released data that allow the direct measurement of marriage and cohabitation among same-sex couples. We use the term *same-sex* in this paper because it reflects the actual wording used in the surveys, but we recognize that the measurement of gender and sex are conceptually nuanced and not interchangeable.

Establishing counts and characteristics of same-sex couples in census data has been possible since 1990 using the decennial census (DC) and since 1995 using the CPS, but obtaining accurate measurement remained elusive. The identification of same-sex couples entailed a two-stage process. Respondents identified their sex and the sex of all household members, with response options of “male” and “female.” The relationship status “wife/husband” was at the top of the roster, and “unmarried

**Table 1** CPS household roster categories

A. Question and Response Categories Used to Derive the Old CPS Household Roster
How (are/is) (name/you) related to (reference person's name/you)?
Spouse
Child
Grandchild
Parent
Brother/sister
Other relative
Nonrelative
Foster child
Unmarried partner
Housemate/roommate
Roomer/boarder
B. Question and Response Categories Used to Derive the New CPS Household Roster
How (are/is) (name/you) related to (reference person's name/you)?
Opposite-sex spouse (husband/wife)
Opposite-sex unmarried partner
Same-sex spouse (husband/wife)
Same-sex unmarried partner
Child
Grandchild
Parent (mother/father)
Brother/sister
Other relative (aunt, cousin, nephew, mother-in-law, etc.)
Foster child
Housemate/roommate
Roomer/boarder
Other nonrelative

Sources: <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar16.pdf> for panel A. <https://www2.census.gov/programs-surveys/cps/techdocs/questionnaires/Demographics.pdf?#> for panel B.

partner” was at the bottom of the roster (Table 1). Same-sex and different-sex cohabiting and married couples were identified by combining the gender and relationship status questions.<sup>1</sup>

Data editing strategies have been deployed to count same-sex couples. The 1990 DC and the 1995 CPS assumed that the sex responses were errors for those who responded as same-sex married couples and recoded them as different-sex married couples (Cohn 2011; Gates 2010). Starting in 2000 for the DC, 2010 for the CPS, and 2008 for the American Community Survey (ACS), sex was assumed to be correctly identified, and same-sex married couples were reclassified as same-sex cohabiting couples (Cohn 2011; Gates 2010; Lofquist and Ellis 2011). Significant measurement error was identified (Black et al. 2007; Gates 2015; Gates and Steinberger 2009; Kreider and Lofquist 2015; O’Connell and Feliz 2011; O’Connell and Gooding 2006): relatively few errors in a large population of different-sex married couples had a substantial impact on the estimates of the relatively small population of same-sex

<sup>1</sup> In 2007, the CPS introduced the direct cohabitation question that established the “line number” of partners.

married couples. Recognition of these errors lead to the release of preferred DC estimates, and Gates (2015) modified ACS counts based on allocation flags for sex, marital status, and marriage year. In 2013, the Census Bureau released data distinguishing same-sex married and cohabiting couples using the ACS. However, until 2017, the CPS continued recoding same-sex married couples as same-sex cohabiting couples through data edits.

After considerable testing, the Census Bureau invoked a new strategy to measure same-sex couples. The new roster included relationship options of “opposite-sex” or “same-sex” spouse/husband/wife and partners, and it reorganized the categories so that partners followed spouses (Table 1). The new roster categories were introduced for select households in 2015 and were distributed to all households in 2017. This new roster will be included in the 2020 DC and the 2019 ACS.

We have two key objectives. First, we examine how estimates and characteristics of same-sex couples differ using the old roster in the 2015/2016 CPS and the new roster in the 2017/2018 CPS. Although some variation may be due to change over time, the time frame is quite narrow and affords the only opportunity for direct contrasts of the results based on the new categories and sequencing.<sup>2</sup> We expect that the characteristics of respondents answering the new roster will more strongly reflect the sociodemographic profile of cohabiting couples (younger, more mobile, and fewer resources) because of the shift in the identification of cohabitators. At the same time, the new roster may result in greater counts of both same-sex cohabiting and married couples because individuals in same-sex relationships see a clearly labeled option for them to respond. The new roster may also reflect more general growth as a result of increased social and legal support for sexual minorities.<sup>3</sup>

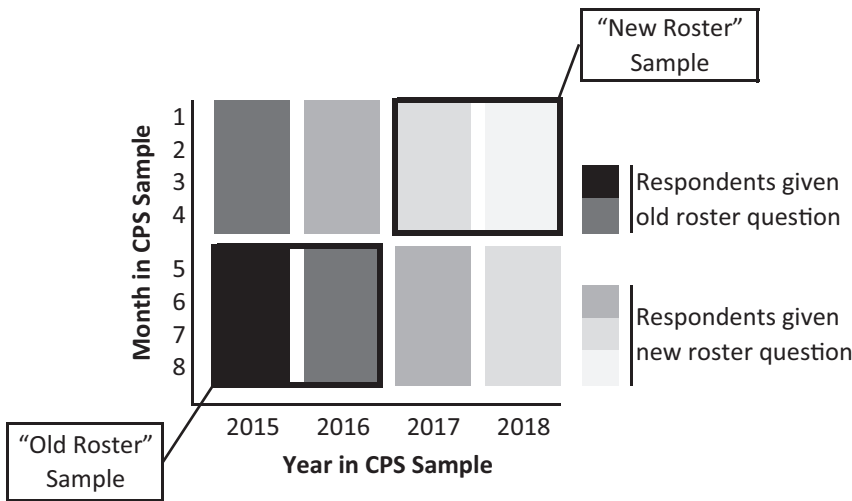
Second, we report the first census-based sociodemographic characteristics of cohabitation and marriage among same-sex couples applying the new roster. We anticipate that same-sex married couples will be more socioeconomically advantaged, will have more residential stability, will have higher rates of homeownership, and will be older than same-sex cohabiting couples. These results have implications for our understanding of the levels and correlates of cohabitation and marriage among same-sex couples.

## Data and Methods

Our analysis of the identification of same-gender couples relies on data spanning 2015 to 2018 from the March Annual Social and Economic Supplements (ASEC) of the Integrated Public Use Microdata Series-Current Population Survey (IPUMS-

<sup>2</sup> Kreider and Gurrentz (2019) extensively detailed the CPS data editing and processing of same-sex couples. They identified more cohabiting and fewer married couples when relying on the new roster categories than when recoding the data by replacing the old roster using the new roster categories. This strategy provides evidence based on recodes of the new roster, not an actual comparison of the old and new rosters.

<sup>3</sup> The increase in the count of same-sex couples in the ACS using the old roster and no change in data edits was about 12% over the period (U.S. Census Bureau 2019). The Census Bureau does not recommend comparing CPS and ACS estimates of same-sex couples because of the distinct interview modes, data edits and processing, and weighting strategies (Kreider and Gurrentz 2019).



**Fig. 1** Analytic samples by March CPS year and month in the sample. Each respondent is in the sample for two cycles of four consecutive months. The first cycle of four consecutive months is designated as Months 1–4, and the second is designated as Months 5–8. Like-shaded months in the CPS sample represent Months 1–4 and 5–8 of the data collection cycles for each group of respondents. The analysis of the old roster is based on Months 5–8 in 2015 and 2016. The analysis of the new roster sample is based on Months 1–4 in 2017 and 2018. This strategy ensures that the pooled data represent just one interview per household respondent.

CPS) (Flood et al. 2018), the U.S. Census Bureau Research File (2017 March ASEC), and the U.S. Census Bureau Bridge File (2018 March ASEC).<sup>4</sup> The CPS is a nationally representative survey that is jointly sponsored by the Bureau of Labor Statistics and the Census Bureau. All data are weighted; replicate weights are applied to generate empirically derived standard errors. The CPS questionnaires are administered by telephone or in-person.

In May 2015, the CPS provided incoming sample members with new response options for the question on relationship to the householder. Spouses and partners were able to identify as “opposite-sex” or “same-sex,” and partners were moved from the end of the roster to near the top (Table 1). By the 2017 ASEC, all rotation groups received the new roster.

We pool the 2015/2016 data (prior to the full implementation of the new roster) and pool the 2017/2018 data (following the full implementation of the new roster). To generate the cleanest parallel samples possible while maximizing sample size and avoiding the double counting of households, we pool two sets of consecutive CPS files for these analyses (Figure 1). Pooling years in the CPS requires caution because the same household is interviewed across multiple months following an interview rotation cycle (Figure A1, online appendix). The first set represents relationship data collected via the old roster categories from respondents in Months 5–8 of their data

<sup>4</sup> The Research and Bridge files include the coding and edits following the new roster categories. The Research files are available from <https://www.census.gov/data/datasets/2017/demo/income-poverty/2017-cps-asec-research-file.html>. The Bridge Files are available from <https://www.census.gov/data/datasets/2018/demo/income-poverty/cps-asec-bridge.html>.

collection cycles in 2015 and 2016 ( $N=394$  same-sex couples). The second set represents data collected via the new roster response categories from respondents in Months 1–4 of their collection cycles 2017 and 2018 ( $N=537$  same-sex couples); this set produced the first data allowing researchers to distinguish couples who were married and cohabiting using the new roster.

All variables are constructed at the couple level. Given the small share of the U.S. population living in same-sex coresidential relationships, the coding strategy aims to optimize couple-level detail without compromising statistical power. *Same-sex couples* are identified with the CPS coding based on the roster, sex, direct question about cohabiting partners, and marital status (Kreider and Gurrentz 2019).

*Household composition* is recoded into three categories to distinguish among couples who lived in (1) couple-only households, (2) households with the couple and at least one biological/step-/adopted child (and possibly others), and (3) households with the couple and others who were not biological/step-/adopted children.

We include gender, age, race/ethnicity, nativity status, and residence of the couple. *Couple sex* is coded as a binary variable, with 1 indicating male and 0 indicating female. Although this coding offers a limited conceptualization of gender, it is the only option available. We determine the age of the younger partner and code it categorically: 18–29, 30–39, 40–49, and 50+. We compute the couple's *age gap* by subtracting the younger member's age from the older member's age. The couple's *race/ethnicity* is coded into one of four categories: (1) both non-Hispanic Black, (2) both non-Hispanic White, (3) both Hispanic, and (4) interracial/interethnic and/or non-Hispanic other (Asian, American Indian, or two or more racial/ethnic groups). *Nativity* of the couple is coded as 1 if at least one member of the couple is foreign-born, and as 0 otherwise. *Residential history* identifies couples in which at least one member moved in the previous year. Couples currently living in a *metropolitan area* are identified with a binary variable (metro = 1). *Region of current residence* is coded based on census regions: Northeast, Midwest, South, and West.

We include four indicators of socioeconomic status. *Educational attainment* of the couple is coded as (1) both members had a high school diploma or less, (2) only one member had at least a bachelor's degree, or (3) both members had at least a bachelor's degree. Couples' *employment status* is coded as (1) both members worked full-time, (2) one member worked full-time, or (3) neither member worked full-time. *Housing tenure* is based on whether respondents owned their home or rented. The mean *household income* per person in the household is coded in 2018 dollars.

## Results

Estimates of same-sex couples increased by about 45% across the period studied. Some of this increase was due to actual growth in the number of same-sex couples: the number of such couples in the ACS increased by 12% during this period (U.S. Census 2019).<sup>5</sup> Although we cannot directly examine the source of increase, these

<sup>5</sup> Confirming this magnitude of increase is analysis of Gallup data on same-sex marriages, there was a 13% increase in estimates of same-sex married couples between 2015 and 2017 (Jones and Gates 2015; Romero 2017).

**Table 2** Descriptive statistics of same-sex couples in the CPS

	2015/2016 “Old Roster” ( <i>n</i> =394)	2017/2018 “New Roster” ( <i>n</i> =537)
Sex (%)		
Male	44.01	49.13
Female	55.99	50.87
Household Composition (%)		
Couple only	72.11	70.97
Couple and 1+ bio./step-/adopted child (and possibly others)	20.85	19.53
Couple and others, no bio./step-/adopted children	7.04	9.50
Relationship Status <sup>a</sup> (%)		
Married	N/A	44.68
Cohabiting	N/A	55.32
Age of Younger Partner (%)		
18–29	18.36	24.63 <sup>†</sup>
30–39	22.27	26.52
40–49	21.53	22.57
50+	37.84	26.29**
Mean Age Gap	6.30	5.99
Race/Ethnicity (%)		
Both Black <sup>b</sup>	4.29	3.99
Both White	68.25	59.53*
Both Hispanic	4.34	7.46 <sup>†</sup>
Interracial/other/two or more	23.12	29.26
Either Is Foreign-born	16.39	14.53
Residential History (%)		
Neither moved	79.95	85.32 <sup>†</sup>
Metropolitan Area (%)	91.33	91.17
Region (%)		
Northeast	21.92	18.45
Midwest	13.95	16.86
South	34.86	33.72
West	29.28	30.97
Education (%)		
Both high school or <high school	35.04	42.38*
One college	29.40	23.02 <sup>†</sup>
Both college	35.56	34.60
Employed		
Both work full-time	41.86	54.46**
One works full-time	37.04	31.03
Neither works full-time	21.09	14.51*
Homeowner	63.33	58.84
Mean Household Income Adjusted to March 2018 Dollars	118,468	116,242
Weighted <i>N</i>	672,842	981,923

Source: Current Population Survey.

<sup>a</sup> Marital and cohabitation status were included in the roster but not released.

<sup>b</sup> Only 16 same-gender couples who are both Black are in the old roster data.

<sup>†</sup>*p* < .10; \**p* < .05; \*\**p* < .01

results suggest that the new roster was responsible for a nontrivial share of the increase in same-sex couples in the CPS.

The distribution of same-sex couples based on the old and new rosters is presented in Table 2. Same-sex couples differ in several significant ways depending on the roster. About 25% of same-sex couples had a member aged 18–29 based on the new roster, compared with 18% based on the old roster. Similarly, 26% of same-sex couples had a partner aged 50 or older based on the new roster, compared with 38% based on the traditional roster. Partners' race/ethnicity differs based on roster type: the new roster estimates that three-fifths (59.5%) of same-sex couples were both White, in contrast to two-thirds (68%) as estimated using the old roster. The new roster estimates greater shares of Hispanic couples than the old roster. Estimates of having moved in the previous year are greater in the new roster versus the old roster. Greater shares of couples with a modest education (high school diploma or less) are identified in the new than the old roster (42% vs. 35%). The employment levels are higher in the new roster in contrast to the old roster: both partners were employed full-time in 54% of couples in the new roster, compared with 42% in the old roster.

Table 3 presents, to our knowledge, the first analysis distinguishing same-sex cohabiting and married couples with new roster data. Cohabitation is slightly more common than marriage: about 55% of same-sex couples were cohabiting, and 45% were married. The distribution according to gender is split evenly. Married same-sex couples more often had children present in their home (26%) than cohabiting couples (14%). The age distribution is disparate, with 34% of cohabitators but only 13% of married same-sex couples including a partner younger than 30. About 20% of same-sex cohabiting couples included a partner aged 50 or older, compared with 44% for same-sex married couples. About one-half of same-sex cohabiting couples included a partner who is a racial/ethnic minority, in contrast to one-third of married couples. In about 21% of same-sex cohabiting couples, at least one partner had moved in the previous year, compared with 7% of same-sex married couples. Fewer cohabiting couples than married couples were homeowners. Finally, household income was higher among married couples than among cohabiting couples.

## Discussion

The new roster categories in the CPS offer an opportunity to track marriage among same-sex couples and establish the share married among coresiding same-sex couples. The findings show the importance of adopting new strategies to measure family relationships. The Census Bureau implemented this new household roster across surveys, including the DC, CPS, ACS, Survey of Income and Program Participation, and American Housing Survey. We expect that this new roster will result in greater counts of same-sex couples. We find that using the new roster results in the identification of a younger, more racially/ethnically diverse, and more modestly educated group of same-sex couples than employing the old roster.

A limitation of our study is that our comparisons cover a critical time following the legalization of same-sex marriage and may reflect an actual change in the number and composition of same-sex couples. However, these comparisons are the only way to compare the application of the old and new roster using the same data source.

**Table 3** Descriptive statistics of same-sex couples by relationship status with the new roster, 2017/2018

	Married ( <i>n</i> = 234)	Cohabiting ( <i>n</i> = 303)
Sex (%)		
Male	47.90	50.11
Female	52.10	49.89
Household Composition (%)		
Couple only	68.21	73.19
Couple and 1+ bio./step-/adopted child (and possibly others)	25.71	14.54**
Couple and others, no bio./step-/adopted children	6.07	12.27*
Age of Younger Partner (%)		
18–29	13.12	33.92***
30–39	26.53	26.51
40–49	26.26	19.59
50+	34.08	19.99**
Mean Age Gap	6.08	5.91
Race/Ethnicity (%)		
Both Black	0.67	6.67**
Both White	66.90	53.58*
Both Hispanic	5.48	9.05
Interracial/other/two or more	26.95	30.71
Either Is Foreign-born	15.17	14.02
Residential History (%)		
Neither moved	92.53	79.49***
Metropolitan Area (%)	94.08	88.81
Region (%)		
Northeast	21.47	16.01
Midwest	15.40	18.05
South	30.54	36.28
West	32.58	29.67
Education (%)		
Both high school or <high school	40.54	43.86
One college	22.41	23.51
Both college	37.04	32.63
Employed (%)		
Both work full-time	52.61	55.96
One works full-time	34.81	27.97
Neither works full-time	12.58	16.06
Homeowner (%)	71.70	48.50***
Mean Household Income Adjusted to March 2018 Dollars	131,646	103,802**

Source: Current Population Survey Research/Bridge Files.

\**p* < .05; \*\**p* < .01; \*\*\**p* < .001

In addition, these data are restricted to questions about sex, and new measurement of gender identity is warranted. The new roster enables improved identification of same-sex couples, and our findings are consistent with the argument that the old rosters missed some same-sex couples and underestimated cohabiting couples (Kreider and Gurrentz 2019). However, challenges in providing accurate estimates remain. Small sample sizes of same-sex partners/spouses in addition to U.S. Census Bureau edits to ensure consistency make identifying sources of change in estimates of same-sex partners difficult to establish. Even though we focus on same-sex couples in this



paper, the new roster likely provides more accurate estimates of different-sex cohabiting couples. We hope that data providers modify their rosters, and thereby change the measurement of same-sex couples, to align with the census strategy. As administrative counts (via marriage licenses) of same-sex marriages are expanded across states, they may provide another potential source of counts of the number of same-sex marriages during a specific period.

The estimates presented here are, to our knowledge, the first to distinguish relationship status using the new roster. A substantial share of same-sex couples are married (45%), and the characteristics of cohabiting and married couples differ in critical ways. Cohabiting same-sex couples less often have children present, are younger, are more mobile, more often rent their homes, and earn less than their married counterparts. The ability to measure relationship status leads to new understandings of same-sex couples and opens the door to research on whether and how marriage matters for same-sex couples.

New opportunities to study same-sex couples using census data are emerging. Our findings demonstrate the utility of the new roster in identifying family structure for same-sex couples. Given that the CPS includes questions about health, health insurance, and economic well-being, the new roster sets the stage for innovative research about the implications of marriage for adult and child well-being. ■

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