

## Improving Measurement of Same-sex Couples

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### Abstract:

Since the latter half of the 20<sup>th</sup> century, marital and household relationships in the U.S. have become more complex. Important shifts in American family life include a growth in cohabiting couples and greater recognition of same-sex couples. Since 2003, 13 states and the District of Columbia have passed laws recognizing same-sex marriage. Since same-sex marital and nonmarital relationships are receiving greater recognition, researchers have started to focus on how same-sex couples report their relationship and marital status on demographic surveys. Prior research shows that improvements in relationship measurement are needed. In the proposed paper, we will review four research projects aimed at further enhancing the measurement of same-sex couples. These four research projects—American Community Survey-Questionnaire Design Test, American Housing Survey, Survey of Income and Program Participation-Event History Calendar, and administrative linkage—will provide an update on the quantitative testing and research the Census Bureau is conducting as we work toward our goal to produce high-quality estimates of same-sex couples.

*This report is released to inform interested parties of ongoing research and to encourage discussion of work in progress. The views expressed on statistical or methodological issues are those of the authors and not necessarily those of the U.S. Census Bureau.*

## INTRODUCTION

Since the latter half of the 20<sup>th</sup> century, marital and household relationships in the U.S. have become more complex. Some important shifts in American family life include a decrease in families consisting of married couples with children, an increase in one-person households, and corresponding decrease in household size (Vespa, Lewis, and Kreider 2013). Other trends include a growth in cohabiting couples and greater recognition of same-sex couples. A variety of social and economic factors help account for this change, and the operation of these factors is complicated.

Data from the U.S. Census Bureau are used in a variety of applications including research on family change, stability, and instability. Although American family life has altered, measures of household and family relationships have failed to keep pace with this change. Demographic surveys must adapt measures that reflect the complexity of contemporary relationships so that we can accurately portray and better understand American households and families. In addition, better measures are necessary to evaluate and administer government programs impacting families at the national, state, and local levels.

One change that has accelerated in the early 21<sup>st</sup> century is the recognition of same-sex couples. Starting in 2004, same-sex couples were legally able to marry in the state of Massachusetts. Currently, fourteen states (or equivalents) perform same-sex marriage. These are listed with the year they legalized same-sex marriage: Massachusetts (2003), California (2008; 2013), Connecticut (2008), Iowa (2009), Vermont (2009), New Hampshire (2009), Washington, DC (2009), New York (2011), Washington (2012), Maine (2012), Maryland (2012), Rhode Island (2013), Delaware (2013), and Minnesota (2013). In addition, several other states recognize domestic partnerships or civil unions between partners of the same sex. Since same-sex marital and nonmarital relationships are receiving greater recognition, researchers have started to focus on how same-sex couples report their relationship and marital status on demographic surveys.

The June 2013 Supreme Court ruling on the Defense of Marriage Act (DOMA) heightens the need for research on this topic. Although this ruling upheld state determination of legal recognition of marriage, it simultaneously struck down DOMA as a means to deny federal benefits to same-sex married couples. Because the federal government has extended benefits to same-sex spouses, the Office of Personnel Management will need data to estimate new beneficiaries. Although less clear, it is also possible that other federal agencies will soon need estimates of same-sex married couples for programmatic purposes, since there are some 1,100 federal regulations that include marital status.

For these reasons, the Census Bureau is aiming to improve measurement of same-sex unmarried and married couples. In the proposed paper, we will present results from four recent quantitative research projects at the Census Bureau. One major aim of these projects is to quantitatively test new and revised survey items on relationship and marital status. A second goal is the comparison of estimates and characteristics of same-sex couples in administrative versus survey data.

## BACKGROUND

### History

In its demographic surveys, the Census Bureau collects the relationship of each member of the household to the householder (the person who owns or rents the home). In 1990, the category “unmarried partner” was added to the relationship item in the decennial census to measure the growing complexity of American households and the increasing tendency for couples to live together before getting married. The “unmarried partner” category was also added to the Current Population Survey (CPS) in 1995, the Survey of Income and Program Participation (SIPP) in 1996, and has been on the American Community Survey (ACS) since it was fully implemented in 2005. Same-sex unmarried partners were first reported in the 1990 decennial census, and Census 2010 marked the first published reports in decennial data of those who identified themselves as same-sex married couples. Data from Census 2000 reported all same-sex couples as unmarried couples, as no states performed same-sex marriages at that time. The Census Bureau has also released yearly estimates of same-sex married couple households in ACS going back to 2005.

The Census Bureau edits data to correct inconsistencies and protect respondent confidentiality. The procedure for editing the responses of those who report being married to a same-sex partner has changed over time. Currently, for cases where no imputations are made due to non-response on either the person’s relationship or gender, a same-sex partner who reports being a “spouse” of the householder is changed to an “unmarried partner” of the householder. This procedure has been in place for the decennial census since 2000, and since 2005 for the ACS. Previously, in the 1990 Census, the relationship category remained the same (spouse), but the sex of the partner was changed.

### Previous Research

The Census Bureau conducts ongoing research to improve measurement. For this topic, recent work began in earnest in the mid-2000s, when studies began to investigate whether estimates of same-sex couples based on the sex and relationship questions were inflated due to accidental mismarking of sex by a very small proportion of opposite-sex married couples. Since opposite-sex couples are far larger in number than same-sex couples, this would result in a large overcount of same-sex couples.

**ACS.** Census Bureau research has shown that form layout changes made in the ACS, along with processing changes, resulted in a decline in the number of same-sex spouses reported between 2007 and 2008. These changes appeared to reduce mismarks on sex by opposite-sex married couples. Two basic kinds of change occurred between 2007 and 2008: 1) processing and editing changes, and 2) formatting changes to the questionnaire. The first reflects technological improvements in data collection by interviewers and efforts to make the processing and editing more consistent between data in the ACS and the 2010 Census. The second changed the layout of the gender question to make it more difficult to accidentally mark both male and female. The drop in the reported number of same-sex couples between 2007 and 2008 can be attributed to these changes, which have resulted in a more reliable estimate of same-sex couple households.

**Decennial Census.** Issues were also found with the 2010 Census. Initial comparisons between the 2010 Census and the 2010 ACS indicated the 2010 Census number of same-sex couple households was 52 percent higher than the ACS estimate (O’Connell and Feliz 2011). Further investigation of this discrepancy indicated that the form structure of the 2010 Census for the follow-up component of data collection may have caused sufficient data capture errors in the gender item that inflated the Census counts, especially for the numbers of same-sex spousal households. These errors likely included mismarks in the gender item by opposite-sex couples. In particular, the form problems identified in the pre-2008 ACS questionnaire were present in the non-response follow-up (NRFU) form of the 2010 Census.

The 2010 Census estimates were adjusted using the probability that the first names of the couple members were the sex reported for them. For example, when a name had at least a 95 percent chance of being male, but female was reported, the gender of that spouse was changed. This adjustment reduced the number of same-sex married couples reported, since the mismarks had inflated the number by roughly 28 percent. Using this method, an adjusted (labeled as “preferred”) set of estimates was released.

**Focus groups.** Qualitative research to date on same-sex couples has taken place in two phases. During the first phase, focus groups were conducted to learn how individuals think about relationship and marital status. In all, the Census Bureau conducted 18 focus groups in 7 locations across the country. Fourteen were with individuals in same-sex relationships of various types (i.e., married, unmarried, in a domestic partnership or civil union), and 4 were with unmarried opposite-sex couples. The locations of the tests were Boston, MA, San Francisco, CA, Washington, DC, Houston, TX, Topeka and Wichita, KS, Ft. Lauderdale, FL, and three rural locations in Georgia. These focus groups explored the meaning and interpretation of the current decennial Census and ACS relationship and marital status items and sought alternative ways to ask the questions in hopes of reducing measurement and classification error.

Based on this research, researchers developed two alternative versions of the relationship and marital status questions. In both versions, the question on marital status was followed by a direct cohabitation question. In addition to the focus groups, the inclusion of a direct cohabitation question is supported by other research. A direct cohabitation question was introduced to the CPS in 2007. One advantage of having a direct question, in addition to a category for “unmarried partner” in the relationship to householder question, is its ability to capture couples in which neither partner is the householder. Additionally, asking the direct question—“Do you have a boyfriend/girlfriend or partner in this household?”—resulted in a higher number of cohabiting couples including the householder (Kreider 2008).

**Cognitive interviews.** In the second phase of qualitative research, the two alternative versions of the relationship and marital status question series were tested via one-on-one cognitive interviews conducted with persons from various types of same- and opposite-sex households. A total of 40 cognitive interviews were conducted in 4 locations: Ohio, North Carolina, Nevada, and Washington, DC. The respondents first completed a test questionnaire while being observed by the researcher. Afterwards, the researcher asked a series of probing questions to determine: 1) why the respondent

answered the relationship and marital status questions the way he/she did, 2) whether the respondent felt that the questions adequately captured his/her situation, and 3) how the respondent interpreted specific response categories of interest. Then the researcher gave the respondent another questionnaire, which contained the other version of both the relationship and marital status questions, and asked the respondent to complete those questions. The cognitive interviews were tested only in paper form and in English.

The key findings from both the focus groups and cognitive interviews included: 1) respondents generally interpret both the relationship and marital status questions to be asking about legal status; 2) respondents desire new categories to reflect legal unions other than marriage (i.e., civil unions and domestic partnerships); 3) respondents desire to move the “unmarried partner” category next to “spouse” in the list of relationships; and 4) although some interpreted the term “partner” to apply more to same-sex intimate relationships, opposite-sex unmarried couples were generally comfortable selecting “unmarried partner” as their relationship category. Further, in cognitive interviews, researchers did not find evidence of a backlash against revised categories or language.

Although research to date has been informative, leading to the development of revised items on relationship and marital status, quantitative testing is needed. Since the incidence of some household relationships—such as same-sex couples—is relatively low in the general population, these revised items need to be tested with large, representative samples prior to routinely including them in data collection instruments.

## **CURRENT TESTING**

The proposed paper will provide findings from four projects currently underway at the Census Bureau. The first three projects involve quantitative tests of the proposed relationship and marital status questions in surveys administered by the Census Bureau. These surveys include the 2013 American Community Survey-Questionnaire Design Test (ACS-QDT), the 2013 American Housing Survey (AHS), and the 2013 Survey of Income and Program Participation-Event History Calendar (SIPP-EHC). The fourth project links administrative and survey data in order to compare estimates and characteristics of same-sex couples in these two types of data.

### **Data Collection and Approach**

**ACS-QDT.** The ACS-QDT is a test version of the American Community Survey (ACS), a repeated cross-sectional survey providing annual information on American communities in order to aid planning by communities, state governments, and federal programs. Data collection for the ACS-QDT took place from June through August 2013. It featured multiple panels, including a control panel with the relationship and marital status questions currently used in production, and a test panel with the revised questions. The total sample for the test is 50,000 households, with about 10,000 households receiving the revised questions. Respondents provided information through either a mail questionnaire or an

internet instrument. The mail questionnaire was English-only, whereas the internet instrument was offered in both Spanish and English.

**AHS.** The AHS, sponsored by the Department of Housing and Urban Development (HUD), is a national housing survey collecting information on a variety of housing topics, including the size and composition of the U.S. housing inventory. The AHS data we plan to analyze was collected in the summer of 2013. It was a split-panel test, with about half of the sample of 180,000 households receiving the control version of the relationship and marital status questions, and the other half receiving the revised items. However, it is important to note that, because the AHS is a panel survey, those in the control group were asked the full relationship and marital status items only if a change had occurred since the previous wave. Otherwise, the interviewer simply confirmed relationship and marital status indicated at the previous wave. For this reason, the control group we will use in analysis is smaller than the test group. The AHS was interviewer administered, with a first stage of Computer-Assisted Telephone Interviewing (CATI). Cases for which a CATI interview could not be obtained were followed up using Computer-Assisted Personal Interviewing (CAPI). The instrument was offered in both English and Spanish.

Once more, the main aim of the ACS-QDT and AHS projects is to quantitatively test the revised questions developed through focus groups and cognitive interviews. In particular, we plan to compare results from the control and test panels. In this way, we will assess data quality of the revised items, looking specifically at estimates of same-sex couples, item distributions, unit non-response, and item non-response. Depending on the results of this research, our eventual goal is to implement revised relationship and marital status questions in these and other Census Bureau surveys.

**SIPP-EHC.** The SIPP-EHC is a longitudinal survey representing the civilian, noninstitutionalized population. As its name implies, the primary purpose of the survey is to describe the income and program participation of U.S. individuals and households. This information is used to determine the effectiveness of and estimate future costs of government programs. The 2013 test was in the field February through May, and all respondents answered the revised relationship and marital status questions. These estimates will be compared to those in the production SIPP (2008 panel), with the sample subset for the same geography used for the test. The 2013 SIPP-EHC has a sample of 3,727 households, and was administered via CAPI interviewing. The instrument was English-only.

Research in all three surveys will help us to develop improved measures of relationship and marital status. That is, results will be useful in enhancing the data collection phase of estimate production.

**Administrative Linkage.** The administrative linkage project will be composed of two subprojects, both of which combine survey and administrative data. The first subproject will link data from the 2010 decennial Census to the 2010 Census Numident and Selective Service file (Numident data), an administrative data set containing information on sex and other selected characteristics. In order to look at validity both from the perspective of inaccurate 2010 Census classification and inaccurate Numident classification, we will assess two types of cases: 1) those that identify as same-sex couples in both

decennial and Numident data; and 2) those that identify as same-sex couples in the 2010 Census, but not in Numident data. Ultimately, the goal of this subproject is to evaluate the consistency in estimates of same-sex couples in decennial Census and Numident data.

In the second subproject, we plan to evaluate the 2010 ACS against the 2010 Numident data and 2010 tax year Internal Revenue Service data (IRS data). Because the ACS data is more detailed than decennial Census data, in addition to exploring consistency in estimates of same-sex couples between administrative and survey data, we can also look at the characteristics of these couples.

### Example Questions

We present examples of the revised relationship and marital status items below, highlighting improvements. The question wording we present here is from the ACS-QDT. Question wording in the AHS and SIPP-EHC is very similar, with only minor, nonsubstantive differences.

**How is this person related to Person 1? Mark (X) ONE box.**

<input type="checkbox"/> Opposite-sex husband/wife/spouse	<input type="checkbox"/> Grandchild
<input type="checkbox"/> Opposite-sex unmarried partner	<input type="checkbox"/> Parent-in-law
<input type="checkbox"/> Same-sex husband/wife/spouse	<input type="checkbox"/> Son-in-law or daughter-in-law
<input type="checkbox"/> Same-sex unmarried partner	<input type="checkbox"/> Other relative
<input type="checkbox"/> Biological son or daughter	<input type="checkbox"/> Roomer or boarder
<input type="checkbox"/> Adopted son or daughter	<input type="checkbox"/> Housemate or roommate
<input type="checkbox"/> Stepson or stepdaughter	<input type="checkbox"/> Foster child
<input type="checkbox"/> Brother or sister	<input type="checkbox"/> Other nonrelative
<input type="checkbox"/> Father or mother	

Figure 1: Revised Relationship to Householder Question from ACS-QDT, Form ACS-1(X)QDRM

Figure 1 displays the revised relationship to householder question. It incorporates gender-neutral language by expanding the response for “husband or wife” to include the term “spouse.” Moving the category for “unmarried partner” directly under that for “husband/wife/spouse” signals to respondents that we recognize these as salient relationships. Further, adding separate categories for opposite-sex and same-sex couples provides an additional check on gender, which should reduce the occurrence of opposite-sex couples misreporting gender.

**a. What is this person's current marital status?**  
Mark (X) ONE box.

Now married → SKIP to question 21

Widowed

Divorced

Separated

Never married

**b. Is this person currently living with a boyfriend/girlfriend or partner in this household?**

Yes

No

**c. Is this person currently in a registered domestic partnership or civil union?**

Yes

No

Figure 2: Revised Marital Status Series from ACS-QDT, Form ACS-1(X)QDRM

The revised marital status series is presented in Figure 2. The first question in the marital status series is very similar to items currently in use. This similarity means that data users will be able to make comparisons between new and historical data. However, we expanded the marital status series by adding two new questions, one on cohabitation and one on domestic partnerships and civil unions. These new questions allow respondents to report partnerships other than marriage.

## RESEARCH QUESTIONS

Our review of these four research projects will investigate the following research questions:

- ***What is the public reaction to the revised questions?***
- ***Does survey or item response vary between control and test questions?***
- ***Do estimates or distributions vary between control and test questions?***
- ***Does response consistency vary between control and test questions? Is there consistency among sex, relationship to householder, and marital status?***
- ***Who does not report consistently? Are there specific characteristics of those whose reports of sex, relationship, and marital status are inconsistent?***

## PROSPECTIVE FINDINGS

Although data collection for these projects has finished, files are still undergoing processing. Thus, although analysis will take place shortly, we do not have results to present at this time. We plan to organize our findings from this research as follows:

- Revised questions
  - Public reaction
  - Response rates
  - Estimates and distributions
  - Inconsistent reporting
- Administrative vs. survey data
  - Inconsistent reporting
  - Specific characteristics of those whose reports are inconsistent

## CONCLUSION

The measurement of relationships among household members is complex. However, previous research shows that improvements in relationship measurement are needed. In the proposed paper, we will review four research projects aimed at further enhancing the measurement of same-sex couples. Although our current focus is on same-sex unmarried and married couples, we are mindful that our research will also improve the measurement of opposite-sex couples.

Together, these four research projects—ACS-QDT, AHS, SIPP-EHC, and administrative linkage—will provide an update on the quantitative testing and research the Census Bureau is conducting as we work toward our goal to produce high-quality estimates of same-sex couples. As these data improve, we will be able to produce more same-sex couple data products, thus helping data users to address critical policy issues.

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