

Same-Sex Unmarried Partner Couples in the American Community Survey: The Role of Misreporting, Miscoding and Misallocation

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Abstract:

The past quarter century has seen a large amount of research on the demographic characteristics and economic decisions of gay and lesbian Americans. The majority of the nationally representative research on same-sex couples in the United States uses the U.S. Census and American Community Surveys as their data source. We utilize differences in data collection methods in the American Community Survey (ACS) from 2005-2007 to explore the role of misallocation in the identified same-sex unmarried partner sample. By comparing demographic and economic characteristics over the entire distribution of responses, we show a significant portion of identified same-sex households are likely incorrectly allocated opposite-sex married couples. Based on our analysis, we provide empirical guidance to researchers interested in obtaining accurate demographic and economic characteristics of same-sex households from the U.S. Census and American Community Survey. For completeness, we also test the robustness of our findings using the PUMS 2000 Census data.

Extended Abstract:

The past quarter century has seen a large amount of research on the demographic characteristics and economic decisions of gay and lesbian Americans. Research in this area has not existed in a policy vacuum; indeed there is also intense policy debate about the proper legal rights and protections that should be extended to same-sex couples.

The majority of the nationally representative research on same-sex couples in the United States uses the U.S. Census and American Community Surveys as their data source. A key benefit of these datasets is that their size provides for large samples of individuals living in same-sex unmarried partner households. Variables within these datasets allow researchers interested in same-sex couples to identify the couples through the sex and relationship to head of household variables.

However, as discussed in Black et al. 2007, Census Bureau editing presents potentially serious misallocation issues for researchers using these datasets. The federal Defense of Marriage Act (DOMA) prevents the Census Bureau from identifying marriage as anything other than between one man and one woman. In response, beginning with the 2000 Census, when households report two members of the same-sex as being married, the Census Bureau edits the observations and replaces the designation of “husband/wife” with “unmarried partner” (U.S. Census Bureau 2001). While this procedure correctly identifies the federal legal status of same-sex couples who self-report as married, it also introduces the possibility for a serious contamination of the data. Opposite-sex married couples who misreport their sex under the editing procedure will be

allocated to the same-sex population. Because of the dramatically larger number of married households in the surveys, even very minimal rates of sex miscoding have the potential to swamp the actual same-sex population.

The potential of misreporting or miscoding of sex in the U.S. Census is well documented (Black, et al. 2000, 2007, O'Connell and Gooding 2006, U.S. Census Bureau 1975). Even miscoding rates as low as 0.19%-0.23% (as identified by the Census Bureau) imply that over 40% of identified same-sex couples will in fact be misallocated opposite sex married couples (Black, et al. 2007). Further, sex misreporting is likely to be nonrandom, with older or non-English speakers potentially more likely to misreport their sex. The contamination of the same-sex household population with these misallocated opposite-sex married households is hence a serious issue for researchers using these datasets.

Using the American Community Survey (ACS) from 2005-2007, we will utilize a unique feature of the data to explore the role of misallocation in the identified same-sex unmarried partner sample. The American Community Survey uses three separate modes of data collection: mailout/mailback, computer assisted telephone interviews (CATI) and computer assisted personal interviews (CAPI) (U.S. Census Bureau 2008). The computer assisted telephone and personal interview procedures provide additional safeguards to minimize the potential for sex miscoding that the mailout/mailback responses do not. Specifically, the CATI and CAPI collection methods specifically double-check with the respondent when a household identifies as both same-sex and married. In this way the computer assisted procedure provides a secondary check to decrease the possibility of sex miscoding in the CATI and CAPI samples. Because the mailout/mailback responses do not have this secondary check, they will provide a baseline for the standard Census Bureau allocation procedure.

Identified same-sex observations possibly affected by the Census Bureau allocation procedure can be identified through allocation flags on the "marital status," and "relationship to head of household" variables. Two types of observations would show such an allocation flag: same-sex households who identified as married, and opposite-sex married households with a miscoding of sex for one of the spouses.

Our analysis will hence focus on the characteristics of three sub-samples in the ACS data. The first subsample is all observations, regardless of collection method, whose responses indicate they were likely unaffected by the Census Bureau allocation procedure. The second subsample is of observations whose data was collected from the mailout/mailback survey, but who had allocation flags indicating they were likely affected by the Census allocation procedure. The final subsample is of observations whose responses were collected through the CATI or CAPI methods, and similarly showed allocation flags on the variables of interest. Because this final set of observations had their sex double-checked, it is less unlikely this final subsample includes misallocated opposite-sex married households.

Our analysis will focus not only on average differences, but also distributional differences between these subsamples to determine the size and potential role of misallocation in the sample of same-sex couples identified in the ACS, and by extension, the U.S. Census. A number of studies have documented differences between same-sex and married households in the prevalence of children (Gates and Ost 2004), occupational sorting (Antecol et al. 2008), and labor market earnings (Clain and Karen Leppel. 2001, Black et al. 2003). Using these differences we will compare demographic and economic characteristics between the three subsamples to explore the potential role of contamination of the identified same-sex population with misallocated opposite-sex married responses. For completeness, we will also test the robustness of our findings by comparing results for the allocated sample with PUMS 2000 Census data.

We anticipate that our results will show a significant amount of contamination of opposite-sex married households in the allocated same-sex households identified by the Census Bureau. Preliminary analysis shows significant similarity between the unallocated responses (subsample 1) and the CATI and CAPI allocated responses (subsample 3). However observations identified as same-sex who responded by mail but had relevant allocation flags (subsample 2, that is, the group most likely to contain contamination by opposite-sex married households), differ greatly in their demographic and economic characteristics relative to the identified same-sex observations from the other two collection methods. The observations in the second group appear more similar to opposite-sex married households than to other same-sex households.

Our findings directly address a methodological hurdle faced by researchers of same-sex couples using the 2000 U.S. Census and American Community Surveys. As the prevalence of state recognized marriage of same-sex couples spreads, Census procedures to identify same-sex couples must also evolve. However, the dramatically larger population of married households combined with the small possibility of sex miscoding represents a significant drawback to current Census allocation procedures. Based on our analysis, we hope to provide empirical guidance to researchers interested in obtaining accurate demographic and economic characteristics of same-sex households.

References:

- Antecol, Heather, Anneke Jong, and Michael Steinberger. 2008. "The Sexual Orientation Wage Gap: The Role of Occupational Sorting and Human Capital." *Industrial and Labor Relations Review*, Vol. 61, No. 4 (July), pp. 518-543.
- Black, Dan, Gary Gates, Seth Sanders, and Lowell Taylor. 2000. "Demographics of the Gay and Lesbian Population in the United States: Evidence from Available Systematic Data Sources," *Demography* 37: 139-154.
- Black, Dan, Gary Gates, Seth Sanders, and Lowell Taylor. 2007. "The Measurement of Same-Sex Unmarried Partner Couples in the 2000 U.S. Census," CCPR Working Paper Series CCPR - 023 - 07.
- Black, Dan A., Hoda R. Makar, Seth G. Sanders, and Lowell J. Taylor. 2003. "The Earnings Effects of Sexual Orientation." *Industrial and Labor Relations Review*, Vol. 56, No. 3 (April), pp. 449-69.
- Clain, Suzanne Heller and Karen Leppel. 2001. "An Investigation into Sexual Orientation Discrimination as an Explanation for Wage Differences." *Applied Economics*, Vol. 33, Issue 1 (January), pp. 37-47.
- Gates Gary, Randall Sell. 2006. "Measuring Gay and Lesbian Couples" in *The Handbook of Measurement Issues in Family Research*, eds. S Hofferth and L Casper. Lawrence Erlbaum Associates, Inc.
- O'Connell, Martin and Gretchen Gooding. 2006. "The Use of First Names to Evaluate Reports of Gender and Its Effect on the Distribution of Married and Unmarried Couple Households." Poster presented at the *Annual Meetings of the Population Association of America*, Los Angeles, CA.
- U.S. Census Bureau. 2008. "Accuracy of Data (2007)." *American Community Survey, How to Use the Data: Accuracy of the Data*. Washington, DC: U.S. Census Bureau.
- U.S. Census Bureau. 1975. "Accuracy of Data for Selected Population Characteristics as Measure by the 1970 CPS-Census Match." *1970 Census of Population and Housing, Evaluation and Research Program Report*. Washington, DC: U.S. Government Printing Office.
- US Census Bureau. 2001. Technical Note on Same-Sex Unmarried Partner Data From the 1990 and 2000 Censuses. *Population Division, Fertility & Family Statistics Branch*.