## Explaining Differences in Assortative Matching Between Same-Sex and Opposite-Sex Couples

(Abstract)

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Same-sex couples tend to be less homogamous than opposite-sex couples on several dimensions including age, education, and race/ethnicity (Andersson et al. 2006; Jepsen and Jepsen 2002; Kurdek and Schmitt 1987; Rosenfeld and Kim 2005; but see Kurdek 2003). Gay men, in particular, tend to match across relatively large age divides and are more likely to pair outside their own education and race/ethnic group than opposite-sex couples. Lesbians are also less likely to match homogamously than heterosexual women, but to a lesser extent than gay men (Andersson et al. 2006; Jepsen and Jepsen 2002).

Despite the regularity of these findings, no study has systematically examined the possible sources of differences in assortative matching between same- and opposite-sex couples. We use data from the 1990 and 2000 U.S. censuses to compare assortative mating among four types of couples: same-sex male couples, same-sex female couples, opposite-sex unmarried couples, and opposite-sex married couples. Our research extends previous studies by investigating several possible explanations for differences in assortative matching among these relationship types.

Although there are many potential explanations for differences in assortative mating across relationship type, this paper focuses on three. First, perhaps the most common hypothesis is that gay men and lesbians match less homogamously because there are fewer eligible mates from which to choose (Harry 1984; Kurdek and Schmitt 1987). Because of their restricted pool, gay men and lesbians may be forced to "cast a wider net" in their search for partners. Second, it may be that one motivation for matching homogamously is that individuals would like to ensure that their characteristics are passed on to their children (e.g., Bisin, Topa, and Verdier 2004). If this is the case, then because same-sex couples, particularly gay men, may expect to have fewer children in the household than opposite-sex couples (Black et al. 2002), their preferences for matching homogamously may in turn be lower. A third explanation pertains to geographic

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mobility and autonomy from parents who may disapprove of non-traditional unions (Kalmijn 1991; Rosenfeld and Kim 2005). Same-sex couples tend to be more geographically mobile than opposite-sex couples and thus may experience reduced parental influence over their choice of mates.

## **DATA AND METHODS**

We use the 5% samples of the 1990 and 2000 U.S. censuses from the Integrated Public Use Microdata Series (IPUMS) to examine assortative mating patterns among same-sex and opposite-sex couples. Beginning in 1990, the census included a category on the household roster for "unmarried partner." We use this item in conjunction with marital status and sex to identify four couple types: same-sex male couples, same-sex female couples, opposite-sex unmarried couples, and opposite-sex married couples. A comprehensive review of data on gay men and lesbians using the 1990 census, the General Social Survey (GSS), and the National Health and Social Life Survey (NHSLS) concluded that the 1990 census, although not without its problems, is a credible source of data for empirical studies of the gay and lesbian population (Black et al. 2000).

We measure assortative mating along three dimensions: age, education, and race/ethnicity. Because the data represent a cross-section of all co-resident couples in the population at a given time, or "prevailing unions," our results may be affected by selective union dissolution and educational upgrading after union formation. To partially counteract these effects, we restrict our sample to couples in which either partner is between the ages of 18 and 35. We do not restrict the sample to couples in which both partners are within a given age range because doing so may seriously affect our estimates of age homogamy. As a sensitivity check, we will conduct our analyses using a variety of age restrictions.

## Measures

*Availability*. We use a simple measure of "marriage market" conditions facing same-sex and opposite-sex couples in their county of residence. Our measures of market conditions vary by relationship type, and are summarized in Table 1 below. All of our measures of market conditions apply to individuals aged 18 to 64. For example, our measure of market conditions

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for same-sex male partners is the ratio of the gay population aged 18 to 64 to the lesbian and heterosexual population aged 18 to 64 by county of residence. Similar measures of market conditions have been employed by studies focusing on heterosexual marriage (e.g., Harknett and McLanahan 2004).

 Table 1. Measure of Market Conditions by Type of Partner Sought

| Type of Partner Sought | Measure of market conditions                                 |
|------------------------|--|
| Same-sex male          | Gay men / (Lesbians + Heterosexuals)                         |
| Same-sex female        | Lesbians / (Gay men + Heterosexuals)                         |
| Opposite-sex male      | Heterosexual men / (Gay men + Lesbians + Heterosexual women) |
| Opposite-sex female    | Heterosexual women / (Gay men + Lesbians + Heterosexual men) |

We measure the number of gay men and lesbians as follows. For gay men, we estimate the number of same-sex male co-resident couples for each county using 1990 and 2000 census data. Data from the GSS and NHSLS contain information on the proportions of gay men who currently live with a same-sex partner using several definitions of sexual orientation (Black et al. 2000). To estimate the total number of gay men in a county (both co-residing and dating or single), we divide the number of co-resident same-sex male couples (from the census) by the fraction of the gay male population that is co-resident with a same-sex male partner (from the GSS and NHSLS). We use a similar method to estimate the numbers of lesbians by county.

Once we have determined the numbers of gay men and lesbians in a county we construct our measures of market conditions. Again for gay men, we calculate our measure of market conditions by dividing our estimate of the total number of gay men in a county by the number of lesbians and heterosexuals in the county. The denominator is calculated by subtracting the total county population by the total number of gay men. We use a similar method to calculate our measures of market conditions for the other three types of relationships. We will test the sensitivity of our results to different measures of availability, marriage markets, and sexual orientation.

*Children in the household*. 1990 and 2000 census data allow us to identify same-sex and opposite-sex couples who have children in the household. A substantial number of co-resident lesbian couples had children in the household in 1990 (21.7%), particularly when compared to co-resident gay male couples (5.2%) (Black et al. 2000). We will also attempt to differentiate

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families in which only one partner is a biological parent from those families in which both partners or neither partners are biological parents.

*Parental influence over partner choice.* Following Rosenfeld and Kim (2005), we expect that if independence from one's parents contributes to the difference in the odds of homogamy between same- and opposite-sex couples, then controlling for the higher rates of geographic mobility of gays and lesbians should reduce this difference. We define a couple as geographically mobile if either partner is living in a state other than his/her state of birth at the time of the census (Rosenfeld and Kim 2005).

## **Statistical Methods**

To examine differences in assortative mating across the four relationship types, we first provide descriptions of the association between partners' age, education, and race/ethnicity across the four relationship types. We calculate the correlations between partners' characteristics and the odds ratios of intermarriage across race/ethnic, education, and age groups. We also describe differences among the four types of relationships in market conditions, the presence of children, and geographic mobility.

Next, we estimate multinomial logit models to compare differences in assortative mating across the four relationship types. The dependent variable is whether or not the couple is a same-sex male couple, a same-sex female couple, an opposite-sex unmarried couple, or an opposite-sex married couple. Our baseline model includes the demographic characteristics of partners and their resemblance on race/ethnicity, education, and age:

$$\log \frac{\pi_j(\mathbf{x})}{\pi_j(\mathbf{x})} = \alpha_j + \boldsymbol{\beta}'_j \mathbf{x} + \boldsymbol{\delta}'_j \mathbf{z}$$

where  $\pi_j(x) = [P(Y=j | \mathbf{x}, \mathbf{z})]$ , *Y* denotes the relationship type (*Y* = 1, 2, 3, 4), **x** is a vector of the *individual* demographic characteristics of both partners, and **z** is a vector of interaction terms between both partner's individual characteristics. The **x** variables control for differences in the marginal distributions of race/ethnicity, education, and age by relationship type and the **z** variables are indicators of assortative mating. Thus, the  $\delta$ s indicate differences in the association between couples' characteristics across the four types of relationships. Jepsen and Jepsen (2002) estimate a similar model but compare same-sex and opposite-couples rather than all four couple

types. To test our hypotheses, we add measures of market conditions, whether or not there are children present within the household, and geographic mobility to our baseline model to assess whether differences in assortative mating by relationship type are reduced.

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