K. Jill Kiecolt & Mark A. Fossett

MATE AVAILABILITY AND MARRIAGE AMONG AFRICAN AMERICANS

Patterns of marriage in the United States have changed dramatically in recent decades, as reflected by trends toward older ages at first marriage, lower marriage rates, higher rates of divorce and separation, and a greater prevalence of female-headed families. Although these trends are pervasive, they are more pronounced among African Americans (Tucker & Mitchell-Kernan, 1995). Some of the factors that may help to explain these changes in marriage and family also differ by race: shortages of men due to mortality and institutionalization (Guttentag and Secord, 1983; Jackson, 1971; Tucker, 1987; Wilson & Neckerman, 1987); growing unemployment and underemployment for men (Horton & Burgess, 1992; Lichter et al., 1992; Oppenheimer, 1988; Tucker & Taylor, 1989; Wilson & Neckerman, 1987); and, less certainly, greater relative economic equality for women, as indicated by education, employment, and occupation (Bennett, Bloom, & Craig, 1989; Oppenheimer, 1988).

Our research investigates the effects of mate availability and labor market position on marriage among

African Americans. In this article we review theories about how mate availability should affect marriage, describe

how we measure mate availability, and then summarize the findings of our research concerning mate availability.

THEORIES OF HOW MATE AVAILABILITY INFLUENCES MARRIAGE

Both the *sex ratio hypothesis* (Guttentag & Secord, 1983; Heer & Grossbard-Shechtman, 1981) and *marital search theory* (e.g., Oppenheimer, 1988) predict that mate availability affects entry into marriage. Mate availability is usually measured by the sex ratio, most generally the number of men for every 100 women. The sex ratio is approximately *balanced* when it is near 100. The sex ratio is *low* when it is below 100 (men are scarce), and it is *high* when it is above 100 (men are abundant).

Marital search theory considers only how imbalances in the sex ratio constrain marriage. This theory predicts that the higher the sex ratio (the more men relative to women), the higher is women's likelihood of marriage, and the lower is men's likelihood of marriage. That is, whichever gender is in short supply should be more likely to marry and to marry at younger ages.

The *sex ratio hypothesis*, in contrast, considers how imbalanced sex ratios interact with gender inequality to affect marriage. The theory assumes that members of the scarcer gender, whether men or women, have a bargaining

advantage in male-female relationships because they have more potential mates (Guttentag & Secord, 1983; Heer & Grossbard-Shechtman, 1981). But men and women are predicted to use their bargaining advantage differently, because men control more economic resources than women and they depend less on marriage for financial support (Guttentag & Secord, 1983).

Consequently, the effect of the sex ratio on marriage should differ by gender. The sex ratio hypothesis predicts that the effect will be linear and positive for women (Cox, 1940; Guttentag & Secord, 1983; Heer & Grossbard-Shechtman, 1981). The higher the sex ratio, the higher is women's likelihood of marrying. Because women depend more on marriage for financial support, they are predicted to use their bargaining advantage when potential mates are plentiful to marry, and to marry higher-status mates than they could otherwise attract.

In contrast, the sex ratio is expected to be curvilinearly related to men's likelihood of marrying. When the sex ratio is low (men are scarce), the relationship is expected to be positive. When the sex ratio is high (men are abundant), the relationship is expected to be negative. Men should be most likely to marry when the sex ratio is approximately balanced. The rationale for this prediction is that the further the sex ratio is above 100, the less likely men are to marry because they lack potential mates. The further the sex ratio is below 100 (men are scarce), the less likely men are to marry because they can obtain companionship and sexual relationships outside marriage (Guttentag & Secord, 1983).

The sex ratio hypothesis predicts similar effects of mate availability on the likelihood that people are married at a given time (i.e., marriage prevalence), because mate availability affects married people as well. The lower the sex ratio, the weaker is husbands' commitment to marriage (Heer & Grossbard-Shechtman, 1981), the fewer "benefits" husbands provide to wives (Heer & Grossbard-Shechtman, 1981), and the lower is women's marital satisfaction (Guttentag & Secord, 1983). Ultimately this imbalance is predicted to heighten the risk of separation and divorce (Guttentag & Secord, 1983; Heer & Grossbard-Shechtman, 1981).

MEASURING THE SEX RATIO

The sex ratio, an indicator of mate availability in marriage markets, is best measured at the local level, since people usually choose mates who live nearby. We assume that metropolitan areas and nonmetropolitan counties approximate local marriage markets, and we compute sex ratios for those local areas using published data from the U.S. Census. For example, we used data from the 1980 U.S. Census to compute sex ratios for the

metropolitan areas and counties (depending on where respondents live) in the sampling frame of the 1980 National Survey of Black Americans (Jackson, Tucker, & Gurin, 1980), then attached this contextual data on sex ratios to the individual person records in the NSBA.

It is well known that the differential undercount of African American men biases sex ratios downward. Nevertheless, the undercount is not problematic for comparative studies. Adjustments for undercount increase the sex ratio by several percentage points on average, but adjustments do not affect inter-community variation in the sex ratio. We consistently find that the adjusted and unadjusted sex ratios are highly correlated (r is at least 0.98) and that they have the same effects on family formation and family structure (see Fossett & Kiecolt, 1991).

We routinely calculate two versions of the sex ratio. We take the natural logarithm of the ratio of either 1) noninstitutionalized men or 2) men in the labor force to noninstitutionalized women aged sixteen and older in the local area. We take the natural log of the sex ratio in order to make it symmetric; in its natural metric, it varies from 0-100 below 100 and to infinity above 100. Taking the natural log also slightly improves its correlations with the dependent variables. Inmates of institutions are excluded because they do not participate in local marriage markets; including them severely distorts the sex ratio in some areas with small populations. Men not in the labor force also may be excluded because of their disadvantage in the marriage market. For example, Wilson & Neckerman (1987) similarly exclude men who are not employed from their "male marriageable pool index." Whether we base the sex ratio on noninstitutionalized men or men in the labor force, however, its effects rarely differ. Although these two measures of mate availability are simple, they predict marital status as well or better than measures of the sex ratio based on more detailed age data, such as age-specific measures or availability ratios, from which inmates of institutions cannot be excluded using published Census data (discussed in Fossett & Kiecolt, 1991).

FINDINGS

Sex ratios for African Americans tend on average to be low, i.e., below 100, and they vary widely across metropolitan areas, nonmetropolitan counties, cities, and regions (Cox, 1940; Cready, Fossett, and Kiecolt, 1995; Fossett & Kiecolt, 1990, 1991, 1993; Horton & Burgess, 1992), due to differential migration by gender. For example, the mean sex ratio of noninstitutionalized Black men to women ages 16 and older in 270 U.S. metropolitan areas in 1980 is 90.7, with a standard deviation of 22.6. The corresponding sex ratio for those areas, computed based on Black men in the labor force, is 65.4, with a standard deviation of 23.4 (Fossett & Kiecolt, 1993). For

respondents ages 18-44 in the 1980 National Survey of Black Americans (Jackson et al., 1980), the mean labor force sex ratio is 56.6, with a standard deviation of nearly 8 (Kiecolt & Fossett, 1996). (Sex ratios vary less in individual-level analyses, because in representative national samples of individuals, respondents from a small number of large cities dominate the sample numerically.) Also notable is that sex ratios have declined during this century. For example, the sex ratio of noninstitutionalized Black men to their female counterparts in a sample of Southern nonmetropolitan counties has declined from 89 in 1960 to 78 in 1990 (Cready et al., 1995).

Evidence that mate availability affects marriage dates back at least to Oliver Cox's (1940) study of marriage prevalence using 1930 Census data on U.S. cities. Cox found strong, curvilinear effects for women and weaker, curvilinear effects for men. Similarly, we find that local mate availability positively affects female marriage prevalence in metropolitan areas (Albrecht, Fossett, Cready, and Kiecolt, 1995; Fossett & Kiecolt, 1991, 1993), nonmetropolitan Southern counties (Cready et al., 1995) and nonmetropolitan Louisiana counties (Fossett & Kiecolt, 1990). The effect is considerable: For example, the difference between 60 and 80 on the labor force sex ratio (-0.511 and -0.223 in the natural log version) implies a difference of 6.8 in the expected percentage married of Black women with children under six (Fossett & Kiecolt, 1993, p. 297). The sex ratio also is positively associated with Black women's entry into marriage at the individual level (Kiecolt & Fossett, 1996; Landale & Tolnay, 1991; Lichter et al., 1992). For example, using data from the 1980 National Survey of Black Americans, we find that the higher the sex ratio, the higher the likelihood that Black women ages 18-44 have ever married and that they are currently married (Kiecolt & Fossett, 1996).

The effects of mate availability on men's marriage patterns are not quite as strong as those of women, as the sex ratio hypothesis predicts (Cox, 1940; Cready et al., 1995; Fossett & Kiecolt, 1990, 1993). The evidence shows that men are less likely to marry when there is a shortage of women. It does not, however, clearly support either the marital search hypothesis that men are more likely to marry when women are abundant, or the opposite, sex ratio hypothesis that men are less likely to marry (a curvilinear relationship). Of six studies of men's marriage prevalence that model a curvilinear relationship, four (all at the aggregate level) find one: in U.S. cities (Cox, 1940), metropolitan areas (Fossett & Kiecolt, 1993), and nonmetropolitan counties (Cready et al., 1995; Fossett & Kiecolt, 1990). Two studies at the individual level do not find a curvilinear relationship. Using data from the 1980 NSBA, we find no effect of the sex ratio on whether men have ever married and whether they are currently married. Lloyd

& South (1996) find that the greater the surfeit of men, the later the ages at which Black men marry. Another study, which does not test for a curvilinear relationship, finds that in 1910, the more abundant men were relative to women, the lower the likelihood that rural, southern Black men had ever married (Landale & Tolnay, 1991).

CONCLUSION

We find that mate availability has large and important effects on behavior in the marriage market, as indicated by marriage prevalence and entry into marriage. Moreover, our research dispels the impression, perhaps inadvertent, that shortages of Black men and declining marriage prevalence are unique to urban areas. We find declining sex ratios and marriage prevalence in nonmetropolitan counties as well (Cready et al., 1995; Fossett & Kiecolt, 1990). Changes in nonmetropolitan economic structure and opportunities, analogous to those in metropolitan areas (Wilson & Neckerman, 1987), require further investigation as possible determinants.

Our findings also imply that given the shortage of African American men, marriage is simply not possible for many African American women. Moreover, preliminary results not discussed above show that the least-educated Black women, those with less than a high school education, have lower marriage prevalence than other Black women (Albrecht et al., 1995). This implies that low mate availability, through its association with lower marriage rates, contributes to long-term poverty for less-educated Black women, and it also implies that mate availability and men's and women's labor market position may interact in complex and as yet undiscovered ways to influence marriage patterns.

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by

K. Jill Kiecolt

Department of Sociology

Virginia Polytechnic Institute & State University

Blacksburg, VA 24061-0137

and

Mark A. Fossett

Department of Sociology

Texas A&M University

College Station, Texas 77843-4351

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