# MEXICAN MIGRATION AND EDUCATIONAL ASSORTATIVE MATING IN A BINATIONAL CONTEXT
## (Abstract)

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## Introduction

Mexican migration is characterized by relatively high rates of circular migration of men between Mexican sending communities in the United States or other Mexican communities and relatively low rates of migration by women (Kanaiaupuni 2000; Durand, Massey, and Zenteno 2001; Hondagneu-Sotelo 1994). Despite increases in women's migration since the 1970's, in the mid-1990's 80% of Mexican migrants to the U.S. were men. Young, single men living in areas with limited economic opportunities have particularly high migration rates (Riosemena 2005). Because a large portion of Mexican migrants are single men, the volume and pattern of Mexican migration may have a variety of complex effects on union formation in sending and receiving communities. In Mexican sending communities, migration may delay marriage for men and reduce marriage opportunities for women who remain behind (Choi 2006; Parrado 2004; Riosemena 2006). In receiving communities in the U.S. or elsewhere in Mexico, migration may diminish marriage opportunities for men and possibly enhance the opportunities for the relatively small number of women who migrate or regard male migrants as potential spouses. These imbalances, in concert with the selective migration of individuals with varying socioeconomic opportunities, may alter not only the level and timing of union formation, but also the kinds of unions that are formed. Patterns of assortative mating as well as marriage rates may vary across sending and receiving communities in Mexico and the U.S. that have varying rates of in and out-migration. At the same time, migration patterns may be consequences as well as causes of marriage behavior. Low marriage rates or patterns of delayed marriage in a community that result from either residents' preferences or their marriage opportunities may increase rates of out-migration, further altering the marriage patterns of those who remain behind.

Not only are migration and union formation interdependent, but also marriage patterns in sending and receiving communities are, as a result of selective migration, themselves interdependent. The level and timing of marriage and the types of marriages that form in one community may alter the corresponding patterns in another community. This paper reports an initial analysis of these phenomena by describing marriage and assortative mating patterns in Mexico and for Mexicans and Mexican-Americans in the United States. A full demographic model of these processes must take account of how cohorts of young men and women in Mexican communities are at risk to both union formation and migration, of patterns of interregional and international migration and return migration, of marriage patterns in receiving communities (that may include U.S. born partners of both Mexican and non-Mexican descent), of differentials in these processes among persons of varying socioeconomic levels, and of assortative mating patterns in sending and receiving communities. Although it is relatively straightforward to enumerate the stocks and flows of individuals and couples whose behavior makes up these processes, because of data limitations it is difficult to study them directly. Ideal data would include complete marriage and migration histories of large samples of Mexicans in a number of sending and receiving

communities. In this paper, we take an indirect approach to these processes by comparing distributions of marital statuses and assortative mating patterns in two census years (1990 and 2000) in communities within Mexico and the United States that vary in their migration patterns. More specifically, we investigate: (1) whether marriage rates among Mexicans vary by the levels of migration in sending and receiving communities; (2) whether levels of migration in a community influence the educational resemblance of spouses; (3) whether the relationship between levels of migration in the community and the educational resemblance of Mexican spouses in sending and receiving communities have changed between 1990 and 2000, a period of dramatic increase in migration; and (4) how marriage, the educational resemblance of spouses, and their trends differ between Mexico and Mexican-Americans in the U.S.

We focus on the education levels of individuals and patterns of educational assortative mating because educational attainment is a key socioeconomic consequence of family background as well as a key determinant of labor market success and socio-economic attainment (Mare 1991). We focus on assortative mating patterns as well as marriage rates because the clustering of couples on educational traits may be a source of inequality among families and children (Schwartz and Mare 2005; Mare and Schwartz 2006). Indeed, the recent increase in the resemblance of husbands and wives in the United States is concentrated at the bottom of the education distribution and may be partly attributed to the unique marriage patterns of poorly educated immigrants (Schwartz and Mare 2005).

This project extends previous research in several ways. Most studies on the relationship between migration and union formation examine the impact of migration at the individual level (Parrado, 2004; Riosemena, 2005). Few studies explore how community level rates of migration affect union formation (Choi, 2006, Frank & Wildsmith, 2005). We examine how migration experiences at the community level affect both union formation and assortative mating. Most studies on educational assortative mating limit the scope of their analyses to marriage patterns of majority populations such as non-Hispanic Whites or the total U.S. population (Lewis and Oppenheimer, 2000; Qian, 1993; Schwartz and Mare 2005). This study focuses on educational assortative mating patterns on Mexican-Americans, the largest contemporary immigrant group in the U.S. Furthermore, although levels of migration may affect union formation patterns in both sending and receiving communities, the majority of studies on the effect of migration on union formation focus on either sending or the receiving communities (Esteve and McCAA, 2006). In contrast, we examine the relationship between Mexican migration and the educational resemblance of Mexican spouses in both sending and receiving communities.

**Data and Methods**

To examine the relationship between migration, marriage, and educational assortative mating, we use the 1 percent Integrated Public Use Microdata Samples of the United States for 1990 and 2000. We use the 10% sample of Mexico for 1990 and 10.6% sample of Mexico for 2000. At the individual level, each sample contains information on the joint distribution for unmarried persons and husbands and wives of age, educational attainment, migration status, and other social characteristics. The samples for Mexico contain information on the current state and municipality of residence and state of birth. The samples for the U.S. contain information on current state and metropolitan area of residence and country of birth. Our couple sample consists

of unions in which the wife is aged 18 to 40 regardless of the age of the husband at the time of the interview. We observe 938,240 couples in Mexico for 1990, 967,234 couples in Mexico for 2000, 228,123 couples in the United States for 1990, and 219,977 couples in the United States for 2000. The U.S. couples include 15,091 Mexican Americans in 1990 and 23,223 in 2000.

We classify communities by their level of in or out migration as low, medium, and high. In Mexico, we classify individuals by the proportion of recent return migrants in their municipality of residence.[1] In the U.S., we classify individuals by the proportion of Mexican immigrants in their metropolitan area or state-specific non-metropolitan area.

Our analysis has two parts. First, we describe the relationship between Mexican migration and union formation. We estimate marital status distributions by levels of migration in the community, age, gender, year, and country. We establish whether marriage patterns for men and women vary among Mexicans living in communities with high, middle, and low levels of migration. We also examine marriage patterns in of Mexicans in sending and receiving communities and examine how marital status distributions vary across communities with varying levels of immigration . We then compare the marriage rates between 1990 and 2000 and assess the possible effects on marriage of the large increases in migration in the 1990s.

In the second part of our analyses, we describe the relationship between migration and educational assortative mating using a variety of log linear models, such as the homogamy and crossing models, for our contingency table (e.g. Agresti 2002; Mare 1991; Schwartz and Mare 2005). Log linear models show the association between couples' educational characteristics controlling for the marginal distributions of husbands' and wives' schooling (Mare 1991). We cross-classify husbands' highest educational attainment (<5, 5-8, 9-11, 12, 13-15, $\geq$ 16) with wife's highest educational attainment (<5, 5-8, 9-11, 12, 13-15, $\geq$ 16), by individual migration experience, migration experience at the community level (low, middle, high), year (1990, 2000), and country (Mexico, U.S.).

**Preliminary analyses**

Our preliminary analyses indicate that Mexicans living in receiving communities with high levels of Mexican migration are more likely to be married compared to others. Mexicans living in sending communities with low levels of migration are more likely to enter into unions compared to others. Additionally, Mexicans living receiving communities with low levels of Mexican immigration had higher degree of educational resemblance compared to others. The degree of educational resemblance between spouses is the highest among Mexican migrants living in sending communities with low levels of migration. Our preliminary results suggest that whereas the educational resemblance of Mexican born spouses in the U.S. was stable between 1990 and 2000, the degree of educational resemblance between spouses in Mexico decreased

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[1] An ideal measure would capture the proportion of persons born in a sending municipality who reside in the U.S. at the time of the census. Because this information is unavailable, however, we calculate the proportion individuals residing in the municipality who were living in the U.S. or elsewhere in Mexico five years prior to the interview. This measure reflects the volumes of both out-migration and return migration, which may have offsetting effects on marriage patterns. In our ongoing work we expect to experiment with alternative measures that may distinguish these offsetting effects.

substantially over this period.  In our ongoing work we will investigate the degree to which the latter change is attributable to migration pattens or to large increased in average educational attainment over this period.

**References**

Agresti, Alan. 2002. *Categorical Data Analysis*. Hoboken, NJ: John Wiley and Sons, Inc.

Blau. P. 1977. Inequality and Heterogeneity. New York: Fress Press.

Choi, K. 2006. "Mexican migration and its effect on the union formation patterns of women in sending communities" Presented in the Annual Meeting of the Population Association of America in Los Angeles, CA

Esteve Palos, A. & R. McCaa. 2006. "Educational homogamy of Mexicans in Mexico and in the US: What is the difference does gender, generation, ethnicity, and educational attainment make in marriage patterns? Presented in the Annual Meeting of the Population Association of America in Los Angeles, CA

Frank, R. & E. Wildsmith. 2005. "The Grass of Mexico: Migration and Union Dissolution in a Binational Context". *Social Forces* 83: 919-947.

Fussell, E. 2004. "Sources of Mexican Migration Stream: Rural, Urban, and Border Migrants to the United States". *Social Forces* 82: 937-967.

Hondagneu-Sotelo, P. 1994. *Gendered Transitions: Mexican Experiences in Immigration*. Los Angeles: University of California Press.

Kalmijn. M. 1998. "Intermarriage and Homogamy: Cause, Patterns, Trends". *Annual Review of Sociology* 24: 395-421.

Kanaaipuni, S. 2000a. "Reframing the Migration Question: An Analysis of Men, Women, and Gender in Mexico" *Social Force*s 78: 1311-1347.

Kanaiapuni, S. 2000b. "Sustaining Families and Communities: Non-migrant Women in Mexico-U.S. Migration Process". University of Wisconsin. Center for Demography and Ecology Working Paper.

Lewis, S.K. and V.K. Oppenheimer. 2000. "Educational Assortative Mating Across Marriag Markets: Non-Hispanic Whites in the United States." Demography 37:29-40.

Mare, R. 1991 "Five Decades of Educational Assortative Mating" *American Sociological Review* 56: 15-32.

Mare, R. D. and C. R. Schwartz. 2006. Educational Assortative Mating and the Family Background of the Next Generation: A Formal Analysis." *Riron to Hoho* (*Sociological Theory and Methods*).

Parrado, E. 2004. "International migration and men's marriage in Western Mexico". *Journal of Comparative Family Studies*. 35: 51-75.

Qian, Z. and S.H. Preston. 1993. "Changes in American Marriage, 1972 to 1987: Availability and Forces of Attraction by Age and Education." *American Sociological Review* 58: 482-95.

Riosmena, F. 2005. "Unraveling the Life Course: Marriage, Family, and U.S. Migration in Mexico. Presented in the Annual Meeting of the Population Association of America in Philadelphia, PA

Schwartz, C. R. and R.D. Mare. 2005. "Trends in Educational Assortative Marriage from 1940 to 2004".  *Demography* 42: 621-646.