International Migration and Educational Assortative Mating in Mexico and the United States

Kate H. Choi · Robert D. Mare

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Abstract This paper examines the relationship between migration and marriage by describing how the distributions of marital statuses and assortative mating patterns vary by individual and community experiences of migration. In Mexico, migrants and those living in areas with high levels of out-migration are more likely to be in heterogamous unions. This is because migration increases the relative attractiveness of single return migrants while disproportionately reducing the number of marriageable men in local marriage markets. In the United States, the odds of homogamy are lower for migrants compared with nonmigrants; however, they do not vary depending on the volume of migration in communities. Migrants are more likely than nonmigrants to "marry up" educationally because the relatively small size of this group compels them to expand their pool of potential spouses to include nonmigrants, who tend to be better educated than they are. Among migrants, the odds of marrying outside of one's education group increase the most among the least educated. In Mexican communities with high rates of out-migration, the odds of marrying outside of one's education group are highest among those with the highest level of education. These findings suggest that migration disrupts preferences and opportunities for homogamy by changing social arrangements and normative climates.

Keywords International migration · Marriage · Educational assortative mating

Introduction

Mexican migration to the United States follows a pattern of high rates of circular migration of men between Mexican sending communities to the United States and relatively low rates of migration by women (Durand et al. 2001; Frank and Wildsmith 2005; Hondagneu-Sotelo 1994; Kanaiaupuni 2000). Despite increases in women's

K. H. Choi (🖂)

R. D. Mare

Department of Sociology, University of California-Los Angeles, Los Angeles, CA 90095, USA e-mail: mare@ucla.edu

The Bendheim Thoman Center for Research on Child Wellbeing, Wallace Hall, Princeton University, Princeton, NJ 08544, USA e-mail: hychoi@princeton.edu

migration since the 1970s, Mexican migrants to the United States continue to be predominantly young, single men¹ (Batalova 2008; Durand et al. 2001; Marcelli and Cornelius 2001; Riosmena 2005). Migration affects marriage patterns by changing social arrangements and normative climates that affect both individuals and communities. At the individual level, return migrants may become more attractive in their local marriage markets due to their enhanced socioeconomic position relative to nonmigrants (Parrado 2004). At the community level, the volume and pattern of migration alter not only the number of potential spouses in sending and receiving communities but also the composition of their marriage markets. Combined, these changes influence both the likelihood that individuals marry and the socioeconomic characteristics of the spouses they marry.

This paper reports on analysis of marriage and assortative mating patterns of return migrants in Mexico and Mexican immigrants in the United States. A full demographic model of these processes should simultaneously consider how single men and women in Mexico are at risk of union formation and migration; patterns of interregional, international, and return migration; marriage patterns in receiving communities, including marriages to U.S.-born partners; differentials in these processes among persons of varying socioeconomic levels; and assortative mating patterns in sending and receiving communities. Although one can enumerate the stocks and flows of individuals and couples whose behaviors make up these processes, data limitations make a complete study of these processes impossible. Ideal data would include complete marriage and migration histories of large samples of Mexicans in sending and receiving communities.

In this paper, we take an indirect approach to these issues by comparing distributions of marital statuses and assortative mating patterns among spouses with different types of migration experiences and who live in communities in Mexico and the United States that vary in their migration patterns. Specifically, we investigate (1) whether marriage rates among Mexicans vary by individual migration statuses and levels of migration in the community; (2) whether the educational resemblance of spouses varies by individual migration statuses and levels of migration in a community; and (3) to the extent that the educational resemblance between spouses varies by individual migration statuses and levels of in- and out-migration in communities, how these patterns vary across the education distribution. We focus on educational assortative mating because education is a key socioeconomic consequence of family background as well as a central determinant of labor market success and socioeconomic attainment (Mare 1991). The clustering of couples on educational attainment may be a source of inequality among families and children (Schwartz and Mare 2005).

Most studies examining the effect of migration on marriage and assortative mating patterns focus on either sending or receiving communities (Choi 2011; Esteve 2005; Esteve and McCAA 2006; Parrado 2004).² Our study examines the educational

¹ About 56% of Mexican male migrants in the United States aged 18-40 years were single in 2000.

² Esteve and McCAA (2006) also examined educational assortative mating patterns for Mexicans in the United States and Mexico. Our studies differ in several respects. Their study examined how the educational assortative mating patterns of individuals of Mexican ethnicity (i.e., Mexican-born and Mexican ethnicity) in the United States compares with Mexicans in Mexico and non-Hispanic whites. In contrast, our study investigates how individual migration statuses and community-level migration affect educational assortative mating in the United States and Mexico. Our analyses also include more extensive comparisons through the inclusion of broader age groups.

resemblance of spouses among Mexican immigrants in the United States, return migrants in Mexico, and nonmigrants in Mexico and the United States. Most studies of the relationship between migration and union formation focus solely on the influence of individual migration statuses (Parrado 2004; Riosmena 2005). We examine how the level of migration in communities and individual migration statuses affect union formation and assortative mating. Finally, whereas most studies on educational assortative mating are restricted to the examination of marriage patterns of majority or total populations (Lewis and Oppenheimer 2000; Qian and Preston 1993; Schwartz and Mare 2005), we focus on educational assortative mating patterns of Mexican immigrants, the largest immigrant group in the United States.

Background

Migration and Marital Outcomes

Over the short term, international migration removes single migrants from marriage markets in their home communities. Their absence, combined with the economic uncertainties accompanying the early stages of migration, may lower their likelihood of marriage (Parrado 2004). Over the long run, however, migrants' chances for marriage may improve as their relative economic standing advances. Higher wages in the United States allow some migrants to accumulate financial resources (Massey and Espinosa 1997). If some of these migrants are to delay marriage until after their return to Mexico, their improved economic circumstances not only increase their chances for marriage (Parrado 2004) but also give them access to more desirable partners who are willing to overlook their low levels of education. Because of the large educational differences between Mexico and the United States, single migrants in the United States are more likely to encounter potential spouses who average higher levels of education than in Mexico. Thus, for the few migrants who marry in the United States, migration may also provide opportunities to "marry up" educationally.

Migration may also shift patterns of assortative mating by changing norms concerning the attractiveness of a potential spouse. After experiencing prolonged exposure to U.S. norms about family formation, male migrants may favor wives who are better equipped to contribute to the financial well-being of their family (Angoa Perez and Fuentes Flores 2006; Sweeney 2002). As a result, migrants may place a greater premium on their prospective wives' educational attainments and employment statuses. This normative shift may increase the likelihood that they marry women who are as educated or better educated than they are themselves.

Migration and Marriage Markets

At the community level, the volume and pattern of Mexican migration may have complex effects on union formation in sending and receiving communities. Mexican migration to the United States disproportionately removes single men from the local marriage markets in Mexico. It may also deplete sending communities of the men regarded as most "marriageable" inasmuch as migrants may be more resourceful, have higher motivation to succeed, are in better health, and have greater promise as breadwinners (Feliciano 2005; Hondagneu-Sotelo 1994). Gender imbalances in the numbers and characteristics of men diminish marriage opportunities for single, nonmigrant women and force these women to delay union formation (Choi 2011; Riosmena 2005). Conversely, in the United States, immigration may create a surplus of single men who may suffer poor marriage prospects and possibly enhance the opportunities for the relatively small number of migrant women and U.S. women who deem immigrants potential spouses.

The volume and pattern of migration may also influence patterns of assortative mating by generating imbalances of men and women with various markers of spousal desirability, including education. As a result of men's outmigration, unmarried women may widen the range of men whom they consider for marriage. For example, women living in Mexican communities with high levels of out-migration may be more likely than women living in areas with low levels of out-migration to marry men who have lower levels of education than they do. This pattern is likely to be particularly salient among single women in the highest education categories. Their pool of potential spouses, already small because of the low levels of education in Mexico, is further depleted by emigration. If they wish to marry, these women may have to expand their pool of potential mates to include less-educated men. Empirical results on the effects of gender imbalances on assortative mating are mixed. Some studies have suggested that the composition of local marriage markets has little effect on educational assortative mating (Lichter et al. 1995; Qian and Preston 1993). Others have suggested that shortages of potential spouses with some preferred characteristics compel women to lower the minimum qualities expected in a partner and, thus, to marry down (Lewis and Oppenheimer 2000).

Data and Methods

Data Sources

To examine the relationship between migration, marriage, and educational assortative mating, we use the 10.6% Integrated Public Use Microdata Series (IPUMS) sample of the 2000 Mexican census, the 5% IPUMS sample of the 2000 U.S. census, and the International Migration Supplement of the 2000 Mexican census (INEGI 2002; Minnesota Population Center 2007; Ruggles et al. 2004).

The 2000 Mexican and U.S. censuses contain information on age, completed years of schooling, migration status, and marital status. In addition, the sample for Mexico contains information on current and 1995 state and municipality of residence. The sample for the United States contains information on current and 1995 state and metropolitan area of residence and country of birth. The Mexican International Migration Supplement asks respondents to provide proxy reports about the last international trip that a household member took between January 1, 1995, and the date of interview. *Household member* is defined as an individual who lived in the respondent's household in 1995 prior to migration, regardless of his or her place of residence in 2000. The proxy reports contain information about the migrant's age at

the time of migration, sex, date of departure, country of destination,³ country of residence in 2000, and date of return to Mexico.

Sample

Because the 2000 Mexican and U.S. censuses do not collect information about the sociodemographic characteristics of absent spouses or partners, our couple-level measures are restricted to couples in which both partners are present.⁴ We restrict our analyses of U.S. couples to those who are married⁵; for Mexico, we also include couples who are explicitly identified as being in consensual unions. Such unions often serve as surrogate legal marriages for individuals with lower socioeconomic status in Mexico (Castro Martin 2002). Our samples consist of couples in which the wife is aged 18 to 40 in 2000, regardless of the age of her husband. The resulting samples include 1,033,479 couples in Mexico and 1,054,175 couples in the United States.

Measurement

Couple Migration Status

For Mexico, we classify each individual as either a recently returned migrant (i.e., individuals who lived in the United States in 1995 and returned to Mexico prior to 2000) or a nonmigrant.⁶ Classifying each spouse as one of these two categories yields four types of couples: (1) both nonmigrants, (2) husband nonmigrant and wife recently returned migrant, (3) wife nonmigrant and husband recently returned migrant, and (4) both migrants. For the United States, we classify each spouse into one of three categories: recent migrants, pre-1995 migrants, and nonmigrants. Recent migrants lived in Mexico in 1995 but were in the United States in 2000. Pre-1995 migrants were born in Mexico and living in the United States in 1995 and 2000. Nonmigrants⁷ were not born in Mexico and did not live in Mexico in 1995.

 $[\]frac{3}{3}$ 97.3% of all migrants in the International Migration Supplement of the 2000 Mexican census migrated to the United States.

⁴ Despite an increasing trend toward permanent Mexican immigration to the United States, migration flows are still predominantly made up of circular moves by men, many of whom first migrate while single (Cerrutti and Massey 2001; Frank and Wildsmith 2005). Therefore, it is likely that many married migrants who are separated from their spouses on the date of the interview were single return migrants prior to marriage. Because single return migrants are more likely than nonmigrants to "marry up" educationally, the exclusion of these individuals and their spouses may understate the degree to which migration reduces homogamy.

⁵ Our estimates are biased to the extent that assortative mating patterns of marriages that remain intact is distinct from those that dissolve and that remarriages differ from first marriages (Qian 1997). Divorced couples are more heterogamous than couples who remain together; however, the volume and selectivity of divorce is not large enough to affect the distribution of educational homogamy in the United States (Mare and Schwartz 2006). It is unclear whether the inclusion of divorced couples would alter the impact of individual migration status and community-level migration rates on assortative marriage.

⁶ Data limitations in the 2000 Mexican census prevent us from differentiating between those who had never migrated and those who migrated to the United States and returned to Mexico prior to 1995.

⁷ The measure also includes individuals who do not self-identify as Mexicans. We include these individuals because of the high intermarriage rates of Hispanics who are largely composed of Mexican Americans.

Classifying each spouse into one of these three categories yields nine types of couples: (1) both nonmigrants, (2) wife nonmigrant and husband recent migrant, (3) wife nonmigrant and husband pre-1995 migrant, (4) wife recent migrant and husband nonmigrant, (5) both spouses are recent migrants, (6) wife recent migrant and husband pre-1995 migrant, (7) wife pre-1995 migrant and husband nonmigrant, (8) wife pre-1995 migrant and husband recent migrant, and (9) both spouses are pre-1995 migrants. For our log-linear analysis, we also include alternate measures of couple migration status in which we do not take into account the gender-specific migrants within a couple.

Educational Attainment

For the U.S. data, we classify each spouse into one of five categories of education (less than 9 years, 9–11 years, 12 years, 13–15 years, and 16 or more years). For the Mexican data, we classify each spouse into one of six education categories (less than 6 years, 6–8 years, 9–11 years, 12 years, 13–15 years, and 16 or more years). We divide the "less than 9 years of schooling" category into two groups—less than 6 years and 6–8 years—because individuals in Mexico are heavily concentrated in these categories.

Levels of Community Migration

We classify communities into four categories in accordance with the gender-specific level of out- or in-migration. For Mexico, the rate of out-migration for men in a municipality is the percentage of the municipality's male residents in 1995 who migrated to the United States between 1995 and 2000 and who resided in the United States in 2000. The rate of out-migration for women is computed analogously. As the political, administrative, and economic unit similar in meaning to counties in the United States, municipality approximates migration sending communities and local marriage markets in Mexico (Parrado and Zenteno 2002; Villarreal 2002). We include 2,235 municipalities in our analysis. Municipalities are classified as communities with high (low) levels of male or female migration when the gender-specific rate of out-migration is above (below) the 90th percentile⁸ of the rates for the country as a whole. For men, the 90th percentile is 8.98%; for women it is 2.34%. Using these definitions, we classify each municipality into one of four types: (1) low male/low female (LL), (2) high male/low female (HL), (3) low male/high female (LH), and (4) high male/high female (HH).

For the United States, the immigration ratio for men in a metropolitan or statespecific nonmetropolitan area is the number of men who lived in Mexico in 1995 and were residing in the U.S. area in 2000 divided by the number of men who lived in the area in 1995. The immigration ratio for women is computed analogously. We compute the ratios for 323 metropolitan and state-specific nonmetropolitan

⁸ We also conducted analyses classifying the communities into areas with high levels of male/female migration depending on whether the gender-specific migration rates were above or below the 50th and 75th percentiles. Although the magnitude of the effect is accentuated when we classify the communities into areas with high levels of migration using higher sex-specific migration rates, our general results do not change.

areas.⁹ Metropolitan and state-specific nonmetropolitan areas are classified as having high levels of migration when the gender-specific immigration ratio is above the 90th percentile for the country as a whole. For men, the 90th percentile is 4.99%; for women, it is 4.09%. Using these definitions, we classify each state-metropolitan area into one of three types: (1) low male/low female (LL), (2) high male/low female (HL), and (3) high male/high female (HH). By our criteria, there are no communities with low levels of male migration and high levels of female migration (LH) because Mexican migrants are predominantly men, married women who migrate to be with their migrant husbands, and single women who follow their fathers or a male relative (Cerrutti and Massey 2001; Donato 1993).

Methods

Our analysis has two parts. In the first part, we describe how marital statuses and assortative mating patterns vary depending on couple migration status and community-level migration. In the second part, we employ log-linear models for contingency tables to document how educational assortative patterns vary by couple migration status and community-level migration. To do so, we first construct contingency tables by cross-classifying husbands' and wives' educational attainments, husbands' and wives' migration statuses, and community-level migration for each country. This yields a contingency table consisting of 576 cells ($6 \times 6 \times 4 \times 4$) for Mexico and 675 cells ($5 \times 5 \times 9 \times 3$) for the United States.

Once the contingency tables are constructed, we employ two sets of log-linear models to describe how the educational resemblance between spouses differs depending on migration experiences at the individual and community levels. Because we want to capture variation in the educational resemblance between spouses by individual and community migration experiences independent of group size, we use loglinear models that estimate the association between husbands' and wives' education while controlling for differences in the marginal distributions of husbands' and wives' characteristics (Mare 1991; Qian and Lichter 2007; Schwartz and Mare 2005). We rely on homogamy and crossing models to represent variations in the association between husbands' and wives' education by couple migration status and community-level migration. Homogamy models use a single parameter to capture the odds that husbands and wives share the same level of education (Mare 1991; Schwartz and Mare 2005). Crossing models use parameters specific to each educational barrier to capture the odds of marriage for spouses in adjacent education groups (Mare 1991; Schwartz and Mare 2005). They are meant to capture the "relative" difficulty individuals in distinct educational categories face when marrying a partner in the next higher education category. The advantage of these specific log-linear models is that they produce a straightforward summary measure of the variation in the association between husbands' and wives' education (Schwartz and Mare 2005). Because of this desirable feature, homogamy and crossing models have been widely used in past studies documenting trends in assortative mating patterns (e.g., Mare 1991, 2008; Schwartz and Mare 2005).

⁹ We conducted sensitivity analyses using alternative geographic units. Our results change little.

For each model, we estimate a baseline model in which the association between husbands' and wives' education does not vary by couple migration status and community-level migration. Our baseline model is the following:

$$\log(m_{ijcl}/t_{ijcl}) = \lambda + \lambda_i^H + \lambda_j^W + \lambda_l^L + \lambda_c^C + \lambda_{ij}^{HW} + \lambda_{il}^{HL} + \lambda_{jl}^{WL} + \lambda_{ic}^{HC} + \lambda_{jc}^{CL} + \lambda_{icl}^{HCL} + \lambda_{jcl}^{HCL} + \lambda_{jcl}^{HC$$

where, for Mexico, *H* is husband's education (i = 1, ..., 6), *W* is wife's education (j = 1, ..., 6), *L* is the community-level migration (l = 1, ..., 4), and *C* is couple migration status (c = 1, ..., 4). For the United States, *H* is husband's education (i = 1, ..., 5), *W* is wife's education (j = 1, ..., 5), *L* is the community-level migration (l = 1, ..., 3), and *C* is couple migration status (c = 1, ..., 9). The outcome m_{ijcl} is the expected number of marriages between husbands in education category *i* and wives in education category *j* with couple migration status *c* living in communities with levels of migration *l*. This model includes terms that account for differences in the distribution of husband's and wife's education by couple migration status and community-level migration as well as all lower terms. To ensure that our estimates of marital sorting are representative of the populations in Mexico and the United States, each model incorporates (wife's person) weights using offset t_{ijcl} , which is equal to the inverse of the total weighted frequency of the cell divided by the unweighted cell (Agresti 2002; Clogg and Eliason 1988; Schwartz and Mare 2005).

Next, we estimate models in which the association between husbands' and wives' education varies by couple migration status and community-level migration. Our homogamy models can be represented in the following manner:

$$\log(m_{ijcl}/t_{ijcl}) = \text{Baseline model} + \gamma_{ol}^{OL} + \gamma_{oc}^{OC}$$

where O=1 if husbands and wives have the same level of education, and 0 otherwise; γ_{ol}^{OL} computes the difference in the odds of homogamy among individuals living in communities with level of migration l and those living in communities with low levels of male and female migration; and γ_{oc}^{OC} computes the difference in the odds of homogamy between couples with migration status c and couples in which both spouses are nonmigrants.

Our crossing models can be represented as follows:

$$\log(m_{ijcl}/t_{ijcl}) = \text{Baseline model} + \gamma_{ijc}^{HWL} + \gamma_{ijc}^{HWC},$$

where

$$\gamma_{ijl}^{HWL} = \begin{bmatrix} \sum_{q=j}^{i-1} \gamma_{ql} & \text{ for } i > j \\ \sum_{q=i}^{j-1} \gamma_{ql} & \text{ for } i < j \\ 0 & \text{ for } i = j. \end{bmatrix}$$

 γ_{ql} computes the difference in the difficulty of crossing educational barrier q for individuals living in communities with migration level l and those living in communities with low levels of male and female migration. γ_{ijc}^{HWC} is defined analogously for couple migration status. The crossing parameters correspond to the log odds of intermarriage for couples in *adjacent* educational categories relative to the log odds of homogamy. For couples in heterogamous unions who are not in adjacent educational categories, we sum the log odds for all the educational barriers that the couple had to cross to marry.

Results

Table 1 displays the gender-specific marital status distributions by individual migration status for the 18- to 40-year-old populations in Mexico and the United States. In Mexico, recent return migrants (i.e., those living in the United States in 1995 and returning to Mexico between 1995 and 2000) are more likely than nonmigrants to be married or in a consensual union. Whereas 60% of the overall male population and 65% of the overall female population are in a marriage or consensual union, among recently returned migrants, these percentages are 66% and 73%, respectively. This is

	Migration S	tatus				
	All		Recent M	ligrants	Pre-1995 N	Migrants
Marital Status	Male	Female	Male	Female	Male	Female
Panel A. Mexico						
Never married	38	30	31	19	-	-
Married, present	44	46	47	43	-	-
Married, absent	2	4	3	12	-	-
Single/widowed/divorced	2	6	4	7	-	-
Consensual, present	13	13	15	14	_	_
Consensual, absent	1	2	1	4	_	_
Total	100	100	100	100	_	_
Ν	1,585,615	1,765,685	14,542	6,904	_	_
Panel B. United States						
Never married	46	37	56	33	35	23
Married, present	43	49	22	54	52	64
Married, absent	3	2	19	7	8	4
Single/widowed/divorced	8	12	3	6	5	9
Total	100	100	100	100	100	100
Ν	2,043,800	2,131,880	35,242	21,963	109,573	86,196

Table 1 Percentage distribution of marital status, by individual migration experiences

Notes: The sample is restricted to individuals aged 18 to 40. The percentages are weighted, but the *Ns* are not. For Mexico, the category "recent migrants" refers to recently returned migrants.

partly because the resources accumulated during migration increase the attractiveness of single return migrants in local marriage markets in sending communities (Parrado 2004). Although both male and female return migrants are more likely than non-migrants to be in a union, the migrant-nonmigrant difference in the percentage in a union is somewhat greater for women than for men. Because women are substantially less likely than men to move, female return migrants may be a more select group than male return migrants and thus may be more attractive in the marriage market.

In the United States, the marital status distributions of male and female Mexican migrants differ substantially by individual migration status. Whereas recent male migrants are substantially less likely than other men to be married, recent female migrants are more likely than nonmigrant women, but less likely than pre-1995 female migrants, to be married. This may occur because the motivations and processes governing men's and women's migration are different (Curran and Rivero-Fuentes 2003; Hondagneu-Sotelo 1994). The migration of young, single men may be encouraged as a rite of passage, but the migration of Mexican women is discouraged unless the primary motive is to reunite with husbands who are already living in the United States (Cerrutti and Massey 2001; Hondagneu-Sotelo 1994). Among married immigrants living in the United States, recent migrants are more likely than pre-1995 migrants and other married couples to live apart from their spouses, a pattern that occurs much more frequently for men. Whereas only 3% of the overall population of men and 2% of the overall population of women live apart from their spouses, 19% of recent male migrants and 7% of recent female migrants do so.

Table 2 presents the gender-specific marital distributions by community-level migration. In Mexico, the percentage of individuals who are currently in a union varies little by the level of migration in sending communities. The distribution of types of union, however, varies in accordance with the level of migration in their community. Compared with individuals living in other areas, those living in communities with high levels of female migration (LH and HH) are more likely to be married and less likely to be in a consensual union. For instance, 86% [$(53 + 2) / (53 + 2 + 8 + 1) \times 100$] of partnered men in LH are formally married, whereas 77% [$(44 + 2) / (44 + 2 + 13 + 1) \times 100$] of partnered men in LL are formally married. A similar pattern holds for women. In the United States, there are virtually no differences in marital distributions depending on the volume and pattern of male or female migration. This finding suggests that Mexican immigrants are relatively too small a population to have a large impact on the composition of marriage markets in receiving communities.

Patterns of Marital Sorting: Homogamy

We examine how the educational resemblance of spouses varies by couple migration status and community-level migration. A simple measure of the variation in the educational resemblance of spouses is the percentage of couples who are in homogamous unions (i.e., share the same educational category). Table 3 shows variations in the percentage of homogamous unions by couple migration status. In Mexico, couples in which both spouses are nonmigrants are more likely to be homogamous (44%) than couples with at least one migrant spouse (ranging from 38% to 40%). The lower levels of homogamy among migrant couples suggest that migration disrupts

	Community-	Level Migratic)n ^a							
	Male					Female				
Marital Status	LL	LH	HL	HH	Total	ΓΓ	LH	HL	HH	Total
Panel A. Mexico										
Never married	38	35	38	38	38	30	32	28	33	30
Married, present	44	53	45	49	44	46	47	46	44	46
Married, absent	2	2	2	2	2	ŝ	6	9	8	4
Single/widowed/divorced	2	1	2	1	2	9	4	5	4	9
Consensual, present	13	8	13	10	13	13	9	13	8	13
Consensual, absent	1	1	1	1	1	1	2	2	2	2
Total	100	100	100	100	100	100	100	100	100	100
Ν	1,405,610	52,028	55,908	72,069	1,585,615	1,540,535	67,640	63,112	94,398	1,765,685
Panel B. United States										
Never married	46	Ι	46	47	46	37	Ι	37	38	37
Married, present	43	I	42	41	43	49	I	50	48	49
Married, absent	2	Ι	4	4	ŝ	2	I	2	33	2
Single/widowed/divorced	8	Ι	8	7	8	12	Ι	11	11	12
Total	100	Ι	100	100	100	100	Ι	100	100	100
Ν	1,775,873	Ι	30,448	237,479	2,043,800	1,865,562	Ι	29,905	236,413	2,131,880
<i>Notes</i> : The sample is restricte	d to individuals	aged 18 to 40	. The percent	ages are weigh	ted, but the <i>Ns</i> a	tre not.	doid bac close	ound of former	T moltone of	1. TT: do: 11.

Table 2 Percentage distribution of marital status, by community-level migration

of male and low level of female migration; and HH: High levels of male and female migration.

	Couple Mig	ration Status ^a									
Marital Sorting	MNHN	RHRW	MdHd	NHRW	RHNW	MHPW	MNHd	RHPW	PHRW	Total	Ν
Panel A. Mexico											
Homogamy	44	40	I	38	39	I	I	I	I	4	1,033,479
Given heterogamy											
Hypergamy	57	49	Ι	50	45	Ι	Ι	Ι	Ι	57	558,565
Panel B. United States											
Homogamy	53	55	50	40	35	41	38	46	51	53	1,054,175
Given heterogamy											
Hypergamy	46	53	48	60	28	63	29	49	49	46	500,770
Notes: The percentages	are weighted,	but the Ns are	tor. For Mex	tico, "recent m	ligrants" refers	s to recent retu	rn migrants.				
^a Categories for couple 1	migration statu	is are as follov	SV:								

NHNW: Both nonmigrants

NHRW: Nonmigrant husband, recent migrant wife

NHPW: Nonmigrant husband, pre-1995 migrant wife

PHNW: Pre-1995 migrant husband, nonmigrant wife PHPW: Both pre-1995 migrants

RHNW: Recent migrant husband, nonmigrant wife

RHRW: Both recent migrants

RHPW: Recent migrant husband, pre-1995 migrant wife

PHRW: Pre-1995 migrant husband, recent migrant wife

Table 3 Percentage distribution of patterns of marital sorting, by couple migration status

typical marriage preferences and opportunities. In the log-linear analyses reported below, we investigate whether this pattern persists when the marginal distributions of educational attainment are taken into account.

In the United States, couples in which husbands and wives have the same migration statuses are more likely than couples with differing migration statuses to marry homogamously with respect to educational attainment. Homogamy is greatest (over 50%) among couples in which spouses share the same migration status. In contrast, couples in which the wife is a nonmigrant but the husband is a migrant are least likely to be homogamous. For instance, 35% of couples in which the wife is a nonmigrant but the husband is a recent migrant and 38% of couples in which the wife is a nonmigrant but the husband is a pre-1995 migrant are in educationally homogamous unions. Among couples with different migration statuses, the migrant partner typically has a lower level of education than the nonmigrant partner.

Table 4 presents the percentage of homogamous unions by community-level migration. In Mexico, this percentage is lower among couples living in communities with low levels of male and female out-migration (LL) than in communities with high levels of male or female migration (LH, HL, or HH). Whereas only 44% of couples in LL communities are in homogamous unions, nearly 50% of couples in LH and HH communities are in such unions. In the United States, a clear pattern fails to emerge in the relationship between rates of homogamy in communities and levels of male and female migration.

Patterns of Marital Sorting: Hypergamy

In Mexico, among heterogamous unions (i.e., husbands and wives are not in the same educational category), hypergamy (i.e., husband's education > wife's education)

	Commu	inity-Level N	ligration ^a			
Marital Sorting	LL	LH	HL	HH	Total	Ν
Panel A. Mexico						
Homogamy	44	48	45	47	44	1,033,479
Given heterogamy						
Hypergamy	58	52	52	49	57	558,565
Panel B. United States						
Homogamy	53	-	55	52	53	1,054,175
Given heterogamy						
Hypergamy	45	-	49	51	46	500,770

Table 4 Percentage distribution of patterns of marital sorting, by community-level migration

Notes: The sample is restricted to couples in which wives are aged 18 to 40. The percentages are weighted, but the *Ns* are not.

^aCategories for community-level migration are as follows: LL: Low levels of male and female migration; LH: Low level of male and high level of female migration; HL: High level of male and low level of female migration; and HH: High levels of male and female migration. outnumbers hypogamy (i.e., husband's education < wife's education) by a ratio of approximately 3:2, reflecting a general tendency in Mexico for women to "marry up" educationally and for men to average more schooling (see Table 8 in the appendix; also see Esteve 2005). Conversely, in the United States, hypogamous unions outnumber hypergamous unions by a ratio of approximately 5:4, reflecting a tendency for women to "marry down" and for women to average more schooling (see Table 8).

Table 3 shows how the hypergamy rates vary by couple migration status. In Mexico, the tendency for women to "marry up" educationally is highest among couples in which both spouses are nonmigrants and lowest among couples in which only the husband is a recently returned migrant. Given heterogamy, 57% of couples in which neither spouse is a migrant are in hypergamous unions, whereas 45% of couples with a migrant husband and a nonmigrant wife are in hypergamous unions. In the United States, the tendency for women to "marry up" educationally is lowest among couples with a migrant husband and a nonmigrant wife. Given heterogamy, 46% of couples in which neither spouse is a migrant are in hypergamous unions, whereas less than 30% of couples with a migrant husband and a nonmigrant wife are in hypergamous unions, whereas less than 30% of couples with a migrant husband and a nonmigrant are in hypergamous unions, whereas less than 30% of couples with a migrant husband and a nonmigrant wife are in hypergamous unions. Among heterogamous couples with similar migration statuses, couples in which both spouses are recent migrants are most likely to be hypergamous, suggesting that migrants retain the preferences for hypergamy that prevail in Mexico.

Table 4 shows that the rates of hypergamy vary by community-level migration in Mexico but not in the United States. In Mexico, given heterogamy, women living in communities with low levels of male and female migration are considerably more likely to "marry up" educationally than women in communities with high levels of male or female migration.

Combined, these findings suggest that circular migration disrupts standard patterns of marriage between education groups. Migration may change individual preferences for mates, shift the balance of men and women at different education levels, or alter the social and economic value of educational attainment for migrants and nonmigrants.

Log-Linear Models: Goodness of Fit

In Table 5, we present model specifications and the fit statistics of our loglinear models. We present both log-likelihood ratios and Bayesian information criterion (BIC) statistics for model fit; however, we rely mainly on BIC statistics to choose our preferred model given our large sample size (Raftery 1995). More-negative BIC statistics indicate a more preferred model in terms of data fit. Homogamy and crossings models are summarized in Panels A and B, respectively. Because the patterns of fit for the homogamy and crossings models yield the same qualitative results, we limit our detailed discussion of fit to the homogamy models alone.

The baseline model (Model 1), which assumes that the educational resemblance between spouses does not vary by couple migration status or the level of migration in the community, fits the data poorly relative to models that allow for such variation. Models 2 through 5 allow for variation in the likelihood of marrying a spouse with the

	Mexi	co		Unite	d States	
	df	Log-Likelihood	BIC	df	Log-Likelihood	BIC
Panel A. Homogamy						
$1 \text{ HW} + \text{HLC}^{H}\text{C}^{W} + \text{WLC}^{H}\text{C}^{W}$	375	-2,106	-3,558	416	-4,591	-49
2 Model 1+OL	372	-2,026	-3,676	414	-4,566	-71
3 Model 1+OC	374	-2,071	-3,615	414	-4,113	-977
4 Model 2+OC	371	-1,999	-3,716	412	-4,112	-950
5 Model 4+OCL	368	-1,994	-3,685	408	-4,107	-905
6 Model 1+OC ₁	372	-2,061	-3,606	408	-4,066	-987
7 Model 2+OC ₁	369	-1,992	-3,703	406	-4,066	-961
8 Model 2+OC1L	360	-1,981	-3,600	390	-4,039	-791
Panel B. Crossing						
$1 \text{ HW} + \text{HLC}^{H}\text{C}^{W} + \text{WLC}^{H}\text{C}^{W}$	375	-2,106	-3,558	416	-4,591	-49
2 Model 1+XL	360	-1,836	-3,890	408	-4,364	-392
3 Model 1+XC	370	-2,037	-3,626	408	-2,896	-3,328
4 Model 2+XC	355	-1,783	-3,926	400	-2,873	-3,263
5 Model 4+XCL	340	-1,761	-3,764	384	-2,829	-3,129
6 Model 1+XC ₁	360	-2,009	-3,543	384	-2,634	-3,518
7 Model 2+XC ₁	345	-1,758	-3,839	376	-2,615	-3,445
8 Model 2+XC ₁ L	300	-1,704	-3,323	312	-2,510	-2,768

Table 5 Log-linear models of association between partners' educational attainment^a

Notes: Preferred models are in bold.

^aVariable definitions are as follows:

H: Male partner's education

L: Community-level migration

C^H: Male partner's migration status

O: Homogamy

 $OC: O \times (C^H + C^W)$

 $OC_1: O \times C_1$

W: Female partner's education

C1: Couple migration status

CW: Female partner's migration status

X: Crossing

 $XC: X \times (C^H + C^W)$

same levels of education depending on the couple migration and/or community-level migration. Model 2 adds the interaction between homogamy and levels of community migration. This interaction improves the fit of the model relative to the baseline model, which suggests that the likelihood of marrying a spouse with the same level of education varies by the level of migration in the communities for Mexico and the United States. Model 3 allows homogamy to vary with couple migration status. This interaction improves the fit of the model relative to the baseline model for both

Mexico and the United States, indicating that the odds of homogamy vary significantly depending on couple migration status. For the United States, the odds of homogamy may also vary by the type of migrant (i.e., nonmigrant, recent migrant, pre-1995 migrant). Model 4 adds the interactions between (1) homogamy and level of migration in the community and (2) homogamy and couple migration status. For Mexico, this model is an improvement over Model 2, which only takes into account variation in homogamy by levels of migration in communities, and over Model 3, which considers only variation in homogamy by couple migration status. For the United States, in contrast, Model 4 is a substantial improvement over Model 2; however, it is not an improvement over Model 3. In Model 5, we examine the joint association of homogamy, couple migration status, and community migration level. We do not find evidence for these higher-way interactions for either Mexico or the United States. We find the same qualitative patterns of association for crossings models. Based on the BIC, the effect of Mexican migration to the United States on educational assortative mating is best described by Model 4 for Mexico and Model 3 for the United States.

In Models 6 through 8, we use alternative measures of couple migration status. Unlike the measure of couple migration status in Models 3 through 5, this measure takes into account the gender-specific migration status of each spouse. For Mexico, we find that the odds of educational homogamy and of marrying across education barriers vary across the migration status of each spouse (three-way interactions) but, net of these variations, not with the combined migration statuses of spouses (four-way interaction). For the United States, considering the combined migration statuses of spouses (four-way interaction) improves the fit of our models on homogamy and crossing.

In sum, our results suggest that individual migration experiences affect patterns of educational assortative mating in both Mexico and the United States. Only in Mexico, however, does educational assortative mating vary across communities with different levels of international migration.

Migration and Educational Homogamy

Panel A in Table 6 demonstrates how the odds¹⁰ of being in a homogamous union differ by couple migration status. These estimates represent associations between husbands' and wives' educational characteristics, net of variations in the marginal distributions of men's and women's educational attainment and

¹⁰ Our models do not produce coefficients for the odds of homogamy/crossing for the reference categories (i.e., couples in which both spouses are nonmigrants or communities with low levels of male and female migration). This is because we include interaction terms between husbands' and wives' education that control for the association in the educational characteristics of spouses that do not differ by individual and community-level migration. Therefore, we first estimate homogamy and crossings models in which we leave out the interaction terms between husbands' and wives' education. The parameter estimates obtained in these models provide the odds of homogamy/crossing for the reference category as well as the main effects for the other categories of community-level migration or couple migration status. We then estimate interaction terms between husbands' and migration experiences using models that include the interaction between husbands' and wives' education. These interaction terms are then combined with the main effect terms to obtain the odds of homogamy/crossing for the other categories.

Measures of Co	ouple Migration Status		
$\overline{OC = O \times (C^{H} + $	C ^W)	OC ₁	
Mexico	United States	Mexico	United States
ration Status ^a			
3.10	2.98	3.10	2.98
2.77	2.80	2.82	2.15
2.77	2.80	2.55	2.18
_	2.50	_	2.29
_	2.50	_	2.27
_	2.35	_	2.15
_	2.35	_	2.19
2.48	2.63	2.70	2.87
_	2.10	_	2.18
-Level Migration	1 ^b		
3.10	2.98	3.10	2.98
2.88	_	2.88	_
2.85	2.98	2.85	2.98
2.88	2.98	2.88	2.98
	Measures of Co $OC = O \times (C^{H} + Mexico)$ Tration Status ^a 3.10 2.77 2.77 2.48 Level Migration 3.10 2.88 2.85 2.88	Measures of Couple Migration Status $OC = O \times (C^H + C^W)$ Mexico United States ration Status ^a 3.10 2.98 2.77 2.80 2.77 2.77 2.80 - - 2.50 - - 2.50 - - 2.50 - - 2.50 - - 2.50 - - 2.50 - - 2.50 - - 2.50 - - 2.50 - - 2.50 - - 2.35 - 2.48 2.63 - - 2.10 - -Level Migration ^b 3.10 2.98 2.88 - 2.85 2.98 2.85 2.98 2.88 2.98	Measures of Couple Migration Status $OC = O \times (C^H + C^W)$ OC_1 Mexico United States Mexico ration Status ^a 3.10 2.98 3.10 2.77 2.80 2.82 2.77 2.80 2.55 - 2.50 - - 2.50 - - 2.50 - - 2.35 - - 2.35 - 2.48 2.63 2.70 - 2.10 - -Level Migration ^b 3.10 2.98 3.10 2.98 3.10 2.85 2.98 2.85 2.86 2.98 2.85

Table 6Odds of homogamy by couple migration status and level of community migration (wives aged 18 to 40), Mexico and the United States

Notes: For the left column, odds are computed using Model 4 for Mexico and Model 3 for the United States. For the right column, odds are computed using Model 7 for Mexico and Model 6 for the United States (see Table 5). For Mexico, the category "recent migrants" refers to recently returned migrants.

^aCategories of couple migration status are as follows:

NHNW: Both nonmigrants

NHRW: Nonmigrant husband, recent migrant wife

RHNW: Recent migrant husband, nonmigrant wife

NHPW: Nonmigrant husband, pre-1995 migrant wife

PHNW: Pre-1995 migrant husband, nonmigrant wife

PHRW: Pre-1995 migrant husband, recent migrant wife

RHPW: Recent migrant husband, pre-1995 migrant wife

RHRW: Both recent migrants

PHPW: Both pre-1995 migrants

^bCategories for community-level migration are as follows: LL: Low levels of male and female migration; LH: Low level of male and high level of female migration; HL: High level of male and low level of female migration; and HH: High levels of male and female migration.

migration status. In these analyses, we use two measures of couple migration status. We first present the results obtained using the measures of couple migration status considering only the additive effects of the migration status of spouses (three-way interactions). In Mexico, the odds of homogamy are lower for couples with at least one migrant spouse than for couples in which neither partner is a migrant. The relative odds of homogamy for couples in which both spouses are recently returned migrants is $20\% [(1 - 2.48 / 3.10) \times 100]$ lower than for couples in which neither partner is a migrant.

In the United States, the odds of homogamy are lower among migrant couples than among couples in which neither spouse is a migrant. The relative odds of homogamy for couples in which both spouses are pre-1995 migrants is 30% [(1 - 2.10 / 2.98) × 100] lower than for couples in which both spouses are nonmigrants. Comparing the two migrant groups, the odds of educational homogamy are lower for couples with at least one pre-1995 spouse compared with those with at least one recent migrant spouse. The odds of homogamy for couples in which both spouses are pre-1995 migrants are approximately 22% [(1 - 2.10 / 2.68) × 100] lower than the odds of homogamy for couples in which both spouses are pre-1995 migrants. This is likely due to the greater educational heterogeneity among pre-1995 migrants than recent migrants. Although most recent migrants complete their schooling in Mexico, the educational experience of pre-1995 migrants is varied, with some completing all their schooling in the United States, some completing their schooling exclusively in Mexico, and others enrolled in school in both Mexico and the United States.

Next, we present results from analyses using the measure of couple migration status that considers the gender-specific migration status of each spouse (four-way interaction). Results from these models confirm our earlier findings that the odds of homogamy are greater for migrant couples than for couples in which neither spouse is a migrant. In both Mexico and the United States, the odds of homogamy vary little depending on the gender-specific migration status of each spouse. Two notable differences exist, however, between the results obtained using the two distinct measures of couple migration status. Results considering the gender-specific migration status of homogamy are greater for couples with two migrant spouses than for those with only one migrant spouse. Furthermore, among U.S. couples in which one spouse is a nonmigrant and the other is a migrant, the odds of homogamy are lower for couples with a recent migrant spouse than for those with a pre-1995 migrant spouse.

Panel B in Table 6 displays how the odds of homogamy differ by community-level migration. In Mexico, the odds of homogamy among individuals living in communities with low levels of male and female migration are substantially higher than among those living in communities with high levels of male or female migration. This pattern probably results because migration disproportionately removes single men from local marriage markets and alters their educational composition. Equally possible is that, in communities with high levels of migration, education may serve as less of a proxy for future economic security, and instead, migration status and/or the resources accumulated during migration may fulfill this role. In contrast, in the United States, the odds of homogamy do not vary across communities with different levels of Mexican migration. In the United States, the odds of homogamy do not vary across communities with different levels of Mexican migration, reinforcing the view that the Mexican immigrant population is too small to have a large impact on the educational composition of marriage markets in receiving communities.

Migration and Crossing Education Barriers

We turn to the crossing parameters to investigate how patterns of marital sorting vary by couple migration status and community-level migration. Table 7 presents the odds of crossing educational barriers by couple migration status. We also use two distinct measures of couple migration status for these analyses. We first present the results obtained using the measure that does not consider the gender-specific migration status of each. In Mexico, spouses with less than 6 years of schooling and those with 9 to 11 years of schooling face the most rigid educational barriers. In contrast, the "12/13–15 years of schooling" barrier is the most permeable. For instance, the odds of intermarriage between individuals with 12 and 13–15 years of schooling is 27% [(0.57 - 0.45) / 0.45×100] higher than the odds of intermarriage between individuals with less than 6 and 6–8 years of schooling.

In Mexico, migrants have a better chance of finding a spouse with higher levels of education compared with their nonmigrant counterparts. The odds of crossing among couples in which neither spouse is a migrant tend to be lower than among migrant couples. The magnitude of the increase in the odds of crossing following the presence of a migrant spouse is largest in the lowest education barrier (i.e., between less than 6 and 6-8 years of schooling). The odds of intermarriage between individuals with less than 6 and 6–8 years of schooling increase by approximately $15\% \left[(0.52 - 0.45) \right]$ 0.45×100 in the presence of a migrant spouse. This compares with 5% [(0.60 - 0.57)/ 0.57×100 for the odds of intermarriage between those with 12 and 13–15 years of schooling. An exception to this pattern, however, can be observed among those with 16 or more years of education. Although not statistically significant, the odds of intermarriage between individuals with 13-15 and 16 or more years of education are lower among couples with at least one migrant spouse than among those with only nonmigrant spouses. Their odds of intermarriage decrease by $7\% [(0.51 - 0.55) / 0.55 \times 100]$ in the presence of a migrant spouse. This may be because migrants with 16 or more years of education are extremely unlikely to marry individuals with lower levels of education (see Table 8). Their combination of a high level of education and migration experience makes them extremely attractive candidates in marriage markets in Mexico. As a consequence, these individuals have a good chance of finding potential spouses in the highest education category (16 or more years of schooling).

In the United States, the lowest and highest education barriers prove to be the least permeable. For instance, the odds of intermarriage among those who completed less than 9 and 9–11 years of education are $25\% [(0.48 - 0.36) / 0.48 \times 100]$ lower than the odds of intermarriage among those with 12 and 13–15 years of education. As in Mexico, migrants in the United States have a better chance of finding spouses with

Table 7 Odds of crossing an educational barrier relative to the odds of homogany, by couple migration status (wives aged 18 to 40), Mexico and the United States

	Measure.	s of Couple	Migration St.	atus ^a											
	XC=X×	$(C^{H}+C^{W})$					XC1								
Educational Barriers	NN	NR	NP	RP	RR	Ы	MNHN	NHRW	RHNW	MNHd	MdHN	RHPW	PHRW	RHRW	MdHd
Panel A. Mexico															
≪6/6—8	0.45	0.52	I	I	0.59	I	0.45	0.51	0.54	I	I	I	I	0.56	I
6-8/9-11	0.47	0.52	I	I	0.57	I	0.47	0.54	0.52	I	I	I	I	0.57	I
9-11/12	0.45	0.49	I	I	0.52	I	0.45	0.51	0.54	I	I	I	I	0.48	I
12/13-15	0.57	0.60	I	I	0.63	I	0.57	0.42	0.84	I	I	I	I	0.56	I
13-15/16+	0.55	0.51	I	I	0.47	I	0.55	0.67	0.49	I	I	I	I	0.45	I
Panel B. United States															
<9/9-11	0.36	0.45	0.48	0.61	0.57	0.64	0.35	0.52	0.59	0.68	0.66	0.64	0.62	0.57	0.62
9-11/12	0.44	0.45	0.50	0.50	0.45	0.56	0.44	0.53	0.73	0.60	0.52	0.57	0.48	0.43	0.54
12/13-15	0.48	0.51	0.53	0.56	0.53	0.59	0.48	0.55	0.43	0.49	0.52	0.54	0.71	0.50	0.60
13-15/16+	0.36	0.37	0.43	0.44	0.38	0.52	0.36	0.51	0.21	0.42	0.46	0.88	0.47	0.35	0.51
Notes: For the left colum	n, the odds a	re computed	based on Mo	del 4 for Mex	tico and Mot	lel 3 for the U	Inited States; fc	or the right colur	mn, the odds are	computed base	d on Model 7 fc	or Mexico and M	fodel 6 for the l	Jnited States (see	e Table 5).

For Mexico, the category "recent migrants" refers to recently returned migrants. Odds of crossing are computed based on Models 4 and 7 in Mexico and Models 3 and 6 in the United States. ^aCategories of couple migration status are as follows:

NN: Both nonmigrants

NR: Nonmigrant, recent migrant

NP: Nonmigrant, pre-1995 migrant

RP: Recent migrant, pre-1995 spouse

PP: Both pre-1995 migrants RR: Both recent migrants

NHNW: Both nonmigrants

PHNW: Pre-1995 migrant husband, nonmigrant wife RHNW: Recent migrant husband, nonmigrant wife NHRW: Nonmigrant husband, recent migrant wife

NHPW: Nonmigrant husband, pre-1995 migrant wife

RHPW: Recent migrant husband, pre-1995 migrant wife

PHRW: Pre-1995 migrant husband, recent migrant wife RHRW: Both recent migrants

PHPW: Both pre-1995 migrant

higher levels of education compared with their nonmigrant counterparts. This is especially true among migrants who complete fewer than 9 years of schooling. Among couples with only migrant spouses, this pattern emerges because of the heavy concentration of Mexican immigrants in the lowest education category. If they wish to marry another migrant, migrants with 9–11 years of schooling may be forced to expand their pool of potential spouses to include those with less than 9 years of schooling because of the small number of potential spouses with higher levels of education. Among couples with a migrant and a nonmigrant spouse, this pattern emerges because of the educational differences between Mexico and the United States. Nonmigrant women with 9–11 years of schooling may be more willing to overlook the lower levels of education of migrants as migrants with fewer than 9 years of education are a less adversely selected group compared with nonmigrants with the same level of education. We also conducted our analyses using a measure that considers the gender-specific migration status of each spouse (four-way interaction). Our general results stay the same.

Figure 1 presents differences in the odds of crossing by the level of migration in communities in Mexico.¹¹ The odds of intermarriage among individuals in adjacent educational categories increase with the rise in volume of out-migration. The odds of crossing are highest in communities with high levels of male and female migration (HH) and lowest in communities with low levels of male and female migration (LL). The variation in the odds of crossing by community-level migration is smallest at the lowest level of education (less than 9 years) and largest in highest level of education (16 or more years). Because the number of potential spouses with 16 or more years of education is so small, the out-migration of even a limited number of potential spouses at this educational level may generate a substantial "marriage squeeze" among those in the highest education category, forcing them to seek spouses among those with 13 to 15 years of education.

Migration, Educational Assortative Mating, and Age

A potential confounding factor in the analysis of assortative mating and international migration is the age composition of married and unmarried persons and of migrants and nonmigrants. Therefore, we conducted supplementary analyses to investigate whether our conclusions about variations in marital status and assortative mating patterns are sustained once we control for age.¹² Our results indicate that the higher rates of union formation among migrants are not merely the artifact of age differences between migrants and nonmigrants. They also reveal that variations in marital sorting patterns by couple migration status and community-level migration continue to hold even after we introduce age as a dimension of our log-linear models. The findings from these analyses suggest that although marriage and migration are both age-dependent

¹¹ To ensure that variation in assortative mating patterns is not the artifact of socioeconomic differentials in communities with distinct levels of migration, we conducted supplementary analyses in which rural/urban status of the community is a dimension of the log-linear models. The net association between community-level migration and educational assortative mating is at least as strong as when rural/urban status is not controlled.

¹² Tables and figures that summarize these results are available from the authors on request.



Fig. 1 Odds of crossing an educational barrier relative to the odds of homogamy, by community-level of migration (wives aged 18–40), Mexico. Odds are computed based on Model 4 for Mexico (see Table 5). Categories for community-level migration are as follows: LL: low levels of male and female migration; LH: low level of male and high level of female migration; HL: high level of male and low level of female migration; and HH: high levels of male and female migration

phenomena, age controls do not fully account for the way migration affects educational assortative mating.

Summary and Conclusion

This paper examines variation in marriage and assortative mating by individual migration status as well as by the levels of migration in communities in Mexico and the United States. Individuals' migration experiences affect whether, when, and with whom they form unions. Not only are migrants more likely to be in a union, but they are also more likely than nonmigrants to unite with partners whose levels of educational attainment differ from their own. In most instances, migrants are more likely to marry up educationally than comparable nonmigrants. In sending communities in Mexico, single return migrants typically enjoy an improved economic standing relative to local nonmigrants, which improves their prospects in the marriage market and increases the likelihood that migrants with lower levels of education "marry up" educationally. These increases may also be due to normative changes in the desirability of potential spouses following a migration trip. However, among those with the highest level of education, migration reduces the likelihood that migrants marry individuals outside of their educational group. In the United States, Mexican migrants are exposed to potential partners who have more education than they do because of the large difference in average educational attainment between the two countries. This is especially true among migrants with the lowest level of education.

In sending communities, the volume and pattern of Mexican migration shape whether, when, and with whom individuals marry; however, they do not influence patterns of marriage or marital sorting in receiving communities. Individuals living in communities with high levels of migration are more likely to marry outside of their educational group than are individuals living in sending communities with low levels of migration. This is likely due to the gender-selective nature of Mexican migration resulting in a shortage of marriageable men in local marriage markets, generating demographic pressures for individuals to marry outside of their educational groups. Equally possible is that education may serve as less of a signal for future economic potential in these communities where migration is an alternative venue for the accumulation of wealth. The odds of marrying outside the group are especially high among those with the highest level of education. In Mexico, this is because the number of potential spouses with 16 or more years of education is so small. Therefore, even the smallest removal of potential spouses from the local marriage market resulting from migration may generate substantial pressure among those with the highest level of education to expand their pool of potential spouses. The absence of the effect of community-level migration on patterns of marriage and marital sorting in receiving communities in the United States reflects that the relative number of Mexican migrants is usually not large enough to affect local marriage markets.

A comprehensive understanding of the relationship between Mexican migration to the United States and union formation patterns requires that marriage markets be considered in a binational context. The large volume of recent Mexican migration to the United States alters the ethnic and socioeconomic makeup of populations in communities on both sides of the border. Because the flow of Mexican migration to the United States predominantly comprises young men in their typical ages of marriage, it alters the sex ratios and educational composition of unmarried men and women in sending communities. More generally, migration may change both the preferences of single individuals for the type of partner whom they would like to marry as well as the opportunities for marrying partners with different kinds of characteristics. We have shown that, both for couples and for communities as a whole, migration weakens the generally strong tendency for individuals to form unions with persons of similar educational status. This suggests that the children and grandchildren of immigrants tend to marry more homogamously than immigrants themselves. In an era of high migration between the two countries, more unions may form between partners who differ in their educational status. At the aggregate level, this may portend somewhat more socioeconomic mixing and intergenerational mobility than would be implied by the marriage patterns of nonmigrants.

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Table 8

	Wife's	Educatio	n											
Community-Level	Mexic	, o						United	1 States					
Migration and Husband's Education	Ŷ	68	9–11	12	13–15	16+	Total	9>	68	9–11	12	13–15	16+	Total
Low-Low														
9>	11	9	2	0	0	0	19	I	I	I	I	I	I	Ι
6-8	9	11	9	1	0	0	26	I	2	1	1	0	0	4
9–11	ю	8	13	4	1	1	29	I	1	2	3	1	0	7
12	0	2	4	4	1	1	12	I	1	2	16	10	ю	32
13-15	0	0	1	1	1	1	4	I	0	1	7	15	9	30
16+	0	1	2	б	1	5	11	Ι	0	0	7	7	18	28
Total	20	27	28	13	4	7	100	Ι	б	9	30	33	28	100
Number							911,556							925,136
Low-High														
9>	23	11	б	0	0	0	38	I	I	I	Ι	I	Ι	
6-8	10	15	9	1	0	0	32	Ι	Ι	Ι	Ι	Ι	Ι	Ι
9–11	б	7	7	2	0	0	19	I	I	I	I	I	I	Ι
12	1	1	2	1	0	0	5	I	I	Ι	I	I	I	I
13-15	0	0	1	0	0	0	2	I	I	Ι	I	Ι	I	Ι
16+	0	1	1	1	0	1	4	I	I	I	I	I	I	Ι
Total	36	36	19	9	2	2	100	I	I	I	I	I	I	Ι
Number							36,013							Ι

	Wife's	s Educatio	u											
Community-Level	Mexic	0						United	States					
Migration and Husband's Education	%	6-8	9–11	12	13–15	16+	Total	9	6-8	9–11	12	13–15	16+	Total
High-Low														
9>	19	10	ю	0	0	0	33	I	I	I	I	I	I	I
6-8	8	14	9	1	0	0	30	I	4	1	1	1	0	7
9–11	ю	7	8	2	0	1	21	I	1	2	7	1	0	9
12	1	1	3	2	0	0	7	I	1	2	11	7	2	23
13-15	0	0	1	0	0	0	2	I	0	1	9	13	Ζ	28
16+	0	1	2	1	1	2	9	I	0	0	ю	8	25	35
Total	30	33	23	8	2	Э	100	I	9	9	24	30	34	100
Number							37,233							15,136
High-High														
9>	22	12	3	0	0	0	38	I	I	I	I	I	I	I
6-8	6	17	9	1	0	0	33	I	8	2	2	1	0	14
9–11	2	7	9	2	0	0	18	I	2	ю	3	1	0	10
12	0	1	2	1	0	0	5	I	2	б	12	9	2	24
13-15	0	0	1	0	0	0	2	I	1	1	9	13	5	27
16+	0	1	1	1	1	1	4	I	0	0	2	7	16	25
Total	33	37	19	9	2	2	100	Ι	13	10	25	28	23	100
Number							48,677							113,903

able 8 (continued)	
able	8	
	able	

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	Wife's	Educatio	u											
Community-Level	Mexico	C						United	States					
Migration and Husband's Education	\$	6-8	9–11	12	13–15	16+	Total	9>	6-8	9–11	12	13–15	16+	Total
All Sampled Individuals														
9>	12	9	2	0	0	0	20	I						
6-8	9	12	9	1	0	0	26	I	2	1	1	0	0	5
9–11	з	8	12	4	1	1	28	I	1	2	з	1	0	7
12	0	7	4	4	1	1	11	I	1	2	16	6	ю	31
13-15	0	0	1	1	1	1	4	I	0	1	7	15	9	29
16+	0	1	2	3	1	4	11	I	0	0	2	7	18	28
Total	21	28	28	12	3	7	100	I	4	9	29	33	28	100
Number							1,033,479							1,054,175
Note: Percentages are we	ighted, b	ut Ns are	not.											

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