Educational Assortative Mating among Mexican Families: Are Migrants Different?

Abstract

This paper studies the pattern of educational assortative mating among Mexican families. We employ fixed effects models to analyze the relationship between men's education and the within-family gender difference in education. Generally, Mexican men with less than six years of education tend to marry women with relatively more education, and Mexican men with more than six years of education tend to marry women with relatively less education. While this general mating pattern is discussed, we put a special focus on families migrating to the U.S. We find that Mexican migrant families have a "numerically" different mating pattern: compared with non-migrant families staying in Mexico, the within-family gender difference in education is relatively larger in a migrant family in which the husband receives less than six years of education, but is relatively smaller in a migrant family in which the husband receives more than six years of education.

Keywords: Mexico, migration, assortative mating, education, family

1 Introduction

Why do people go to school? A simple answer to this question is that education makes people better. More specifically, numerous studies have shown that education is positively correlated with labor market outcomes, and all else being equal, a person with more education appears to be more attractive in the marriage market.

The quantitative relationship between education and marriage is an important topic in social sciences. Traditionally, a woman's academic degree is considered to be negatively correlated with the marriage chance (as summarized by Goldin, 2004), but there appears to be a reversal pattern among recent cohorts (Thornton et al., 1995) due to the change in women's earnings (Tzannatos, 1999; Blau and Kahn, 2006; Bredemeier and Juessen, 2013). The number of educated women also increases (Buschman and DiPrete, 2006; Becker et al., 2010). Moreover, women tend to invest in education for better marriage market outcomes (Neuman and Ziderman, 1992; Iyigun and Walsh, 2007; Ge, 2011; Lafortune, 2013). New empirical evidence is still valuable, especially when this topic is related to immigration: the relationship between education and marriage in the U.S. has been somewhat well studied (e.g., Qian and Preston, 1993; Oppenheimer et al., 1997; Choi and Mare, 2012), but is less clear for migrant families from other countries.

In this paper, we conduct a comparative analysis on the pattern of educational assortative mating among Mexican families in Mexico and the U.S. using the Mexico Migration Project (MMP) household data. While the general pattern is discussed, our main contributions to the existing literature are 1) we examine whether Mexican men with different educational levels have different mating patterns, and 2) we examine whether Mexican migrant families in the U.S. have a different pattern with those staying in Mexico.

In his seminal work, Becker (1974) establishes the theory of social interactions, and applies it to family research. As a result of the interaction within a relationship, a woman's education is possibly correlated with her husband's education (e.g., Musick et al., 2012). In contrast to the existing literature (e.g., Mare, 1991, and some others that will be discussed

later) that use the log-linear model to explore longitudinal data sets and study the trend of assortative mating across time, this paper conducts a cross-sectional comparative analysis on mating patterns in two types of Mexican families, namely, migrant families (living in the U.S.) and non-migrant families (living in Mexico). Dougherty (2006) uses a distributed fixed effects model to study the marriage earnings premium, which is methodologically similar with our paper.

To study assortative mating among Mexican families, we first present a descriptive table of the mating pattern by years of schooling. Assortative mating generally exists, but educational mismatches still seem not rare. We then conduct the regression analysis on the relationship between men's education and spousal choice: we employ educational level fixed effects models by regressing the within-family distance in education between the wife and the husband on a set of fixed effects of male educational attainment (indicating different years of schooling) and other covariates. The set of fixed effects also includes interaction terms between the country dummy and male educational level fixed effects. These help us understand how men with specific educational levels choose their spouses, and whether Mexican migrant families in the U.S. have a unique pattern.

The empirical findings of this paper can be summarized as follows. First, educational mismatches in Mexican marriage are not rare. For a Mexican man with less than six years of schooling, his wife receives more education than him on average; while for a Mexican man with more than six years of schooling, his wife receives relatively less education. Mexican migrant families have the similar qualitative mating pattern. This mating pattern, however, is somewhat "numerically" different: compared with non-migrant families staying in Mexico, the difference between husbands' and wives' educational attainment is smaller in an Mexican migrant family in which the husband receives more than six years of schooling, but is larger in an migrant family in which the husband receives less than six years of schooling. In other words, compared with non-migrant families remaining in Mexico, the pattern of educational assortative mating is more significant in migrant fam-

ilies with (relatively) highly educated husbands, but is less significant in migrant families with lowly educated husbands.

This paper builds on prior research on educational assortative mating. In his theory of marriage, Becker (1973) predicts assortative mating by traits, including income (e.g., Garfinkel et al., 2002), religion (e.g., Rosenfeld, 2008), and more related to this paper, education. Economists and sociologists have found plenty of evidence to support Becker's theory and summarized the trend of educational assortative mating in past decades (e.g., Lam, 1988; Pencavel, 1998; Qian, 1998; Lewis and Oppenheimer, 2000; Schwartz and Mare, 2005; Torche, 2010; Chiswick and Houseworth, 2011; Nottmeyer, 2014). Unlike some previous papers studying the change in the mating pattern in the U.S., this paper focuses on cross-sectional results of a single ethnic group (Mexican people) living in different regions (Mexico and the U.S.).

This paper is also related to the Mexican immigration literature. Borjas (2007) provides a good summary about the general topic of Mexican immigration. Compared with non-migrating workers in Mexico, Mexican people migrating to the U.S. are at the middle of the distribution of education (Kaestner and Malamud, 2014). Earnings in the U.S. are related to migration patterns (Massey et al., 2003), which further affect labor market outcomes of migrants (Reinhold and Thom, 2013). Mexican immigrants are also found to receive supports through social networks (e.g., Kandel and Massey, 2002; Munshi, 2003; McKenzie and Rapoport, 2007; Cox-Edwards and Rodríguez-Oreggia, 2009). The networks the above researchers study might be as big as ethnic enclaves and as small as families or households. We are especially interested in social network effects on Mexican women's migration (Donato, 1993; Curran and Rivero-Fuentes, 2003). Related to this paper, Cerrutti and Massey (2001) find that migration of Mexican women is usually driven by family reasons instead of employment, which is different from the pattern of Mexican men. However, even for Mexican men, post-marital migration is less attractive from the perspective of economic opportunities (Riosmena, 2009).

The remainder of the paper is organized as follows. Section 2 describes the background and the data. Section 3 introduces our empirical strategies. Section 4 discusses results, followed by concluding remarks in Section 5.

2 The Background and the Data

In this section, we briefly introduce the Mexico Migration Project (MMP) household data that will be used in this paper. In the MMP data, 143 communities in all of eight regions[1] of Mexico were surveyed over two decades. The number of surveyed communities and the number of surveyed households vary by region: in North-Central Mexico, the MMP surveys 41 communities and 6925 households in these communities, while in Northeastern Mexico there are only 2 communities and 351 households surveyed. The number of migrant households also varies by region: in North-Central and Western Mexico, there are relatively more households migrating to the U.S., while in Northeastern and South-Central Mexico no migrating household is surveyed.

[Insert Table 1 here]

We have some basic findings in Table 1. There are relatively more migrant households surveyed in northern Mexico, which is close to the border, except for the northeastern part of Mexico where no migrant household is surveyed. Also, there are many migrant households in Western Mexico, although Western Mexico is not close to the U.S. Note that Western Mexico has lower GDP per capita and lower Human Development Index (HDI). In sharp contrast to the economic condition in Western Mexico, Northeastern Mexico has almost the highest GDP per capita and the highest HDI in the country, which might be a reason that households in this region do not want or need to migrate. Although surveys in this project might not be randomly conducted in the country, this pattern is still roughly

[1]Regions are officially defined by the federal government of Mexico. These eight regions include Eastern Mexico (E), Northeastern Mexico (NE), North-Central Mexico (NC), Northwestern Mexico (NW), Southeastern Mexico (SE), South-Central Mexico (SC), Southwestern Mexico (SW), and Western Mexico (W).

consistent with evidence that Mexican immigrants are "negatively selected" on earnings (Moraga, 2011; Ambrosini and Peri, 2012; Kastner and Malamud, 2014).

We then look at the summary of the Mexican labor market based on the 1990 and 2000 survey data in Panel A and B of Table 1. Regional labor markets are fairly homogeneous within regions, but each region has its own pattern. For example, Panel A.1 shows that less than 9% of the total female population in Southeastern Mexico participate in labor force in 1990, which is much lower than that in Northeastern and Northwestern Mexico. The pattern generally holds in the 2000 data reported in Panel B, although labor force participation rates (especially female labor force participation rates) have substantially increased. In Panel A.2 and B.2 we have similar findings: the proportion of male labor force in agriculture is fairly low in Northeastern Mexico, which is the wealthiest part of the country, while there are much more male agricultural workers in southern regions of Mexico. Again, proportions of male labor force participation in agriculture have generally decreased in all regions from 1990 to 2000, but the comparative pattern of agriculture labor force across regions remains. Finally, the general macroeconomic pattern in Panel A.2 and B.2 is also consistent with individual labor market outcomes (measured by annual earnings): for instance, in regions in which there are relatively more male workers in the agriculture sector, the proportion of people living in poverty is higher and the proportion of wealthy people is lower, as reported in Panel A.3 and B.3.

Subsequently, we turn to Mexican households in Table 2. In Panel A and B we look at individual Mexican men and women. Generally, Mexican migrants to the U.S. are younger and have more years of schooling, compared with non-migrant Mexican people who stay behind in Mexico. This, however, does not lead to better labor market outcomes in the U.S.: there are relatively fewer Mexican migrants who have high-type occupations (e.g., teacher, administrator, technician). This is not surprising, as Mexico and the U.S. might have different standards for occupations, and a high-skilled worker in Mexico is not necessarily a high-skilled worker in the U.S.

[Insert Table 2 here]

In Panel C we proceed to household information. Mexican migrant households in the U.S. have generally fewer family members, as well as fewer non-workers and children. Mexican migrant households also have slightly lower proportion of households that have at least one child. The financial connection between Mexican migrants and non-migrants is weak: only about 7% of surveyed households living in Mexico receive remittances from friends or relatives who migrate to the U.S.

We conclude Table 2 with preliminary descriptive facts of educational assortative mating among Mexican families in Panel D. We first focus on families in which husbands have less than six years of schooling. For families remaining in Mexico, wives generally have low level of education, while wives in migrant families in the U.S. complete much higher level of education: the average years of schooling for these married Mexican women living in the U.S. is greater than six years, as presented in the first row in Panel D. For households where husbands have more than six years of schooling, however, the comparative pattern is different: in the remaining rows of Panel D, we observe that women's years of schooling in migrant and non-migrant families tend to be similar.

We then take a closer look at the pattern of educational assortative mating in Table 3. Following many previous papers (e.g., Pencavel, 1998), we create summary matrices for assortative mating by education in the first three panels. We separate Mexican men and women into five groups by educational attainment: people with zero to two years of schooling; with three to five years of schooling; with six years of schooling; with seven to nine years of schooling; and with at least ten years of schooling. In Table 3, we show the number of couples by their groups. For example, a family is in a diagonal element if the husband and the wife are in the same group of educational attainment. Not surprisingly, the diagonal elements are relatively greatest in Panel A, B and C alike. However, educational mismatches in Mexican families do exist, reflected by that non-diagonal elements are still numerically non-neglectable.

[Insert Table 3 here]

In Panel D and E we summary within-family gender differences in educational attainment in Mexican families. The first and second column focus on Mexican families in which husbands have relatively low education. Compared with non-migrant women in Mexico, migrant Mexican women receive approximately two more years of schooling. However, this pattern is not found among families in which husbands have relatively high educational attainment: there is no much difference in women's educational attainment in Mexican families living in either Mexico or the U.S. This is consistent with our previous observations reported in Panel D, Table 2.

In Panel E we take the difference form of years of schooling between couples in Mexican families. Lowly-educated Mexican men (who live either Mexico or the U.S.) generally tend to marry women with more years of schooling, but the within-family gender difference in education is significantly greater in Mexican migrant families in the U.S. On the contrary, highly-educated Mexican men generally tend to marry women with less years of schooling, but the within-family gender difference in education is smaller in Mexican migrant families in the U.S. This indicates the special pattern of Mexican migrant families. In Section 4 we will employ regression methods and reexamine these conclusions.

3 Empirical Strategies

In this section, we discuss the strategies for our empirical analysis on the pattern of educational assortative mating. Based on men's education groups classified in Section 2, we create five dummy variables, representing five educational levels: men with zero to two years of schooling; with three to five years of schooling; with six years of schooling; with seven to nine years of schooling; and with at least ten years of schooling. Men with six years of schooling constitute the reference group (i.e., the dummy variable for this group is not included in subsequent regressions). This is a natural reference group, in the sense

that the within-family gender difference in education is small and not significantly different from zero in Mexican families in which husbands have exactly six years of schooling, which is presented in Table 3. Employing the education fixed effects model we have the following OLS specification:

$$heduc_{icy} - weduc_{icy} = \sum_j \alpha_j H^j_{icy} + \delta_{US} \sum_j \beta_j H^j_{icy} + \gamma' \mathbf{X}_{icy} + \delta_{US} + \delta_c + \delta_y + \varepsilon_{icy} \quad (1)$$

where i indexes the family, c the community at the origin in Mexico, and y the survey year. $heduc_{icy}$ and $weduc_{icy}$ are years of schooling of the husband and the wife in family i, respectively, and thus $heduc_{icy} - weduc_{icy}$ is the distance of educational attainment between the wife and the husband. $\{H^j\}$ is the set of male education fixed effects. We also include interaction terms between the country dummy δ_{US} and educational level fixed effects (i.e., $\delta_{US} \sum_j \beta_j H^j_{icy}$) for separately examining the pattern of assortative mating among Mexican migrant families in the U.S. $\mathbf{X}_{icy}$ is a vector of characteristics related to the family and family members. We also include community and year fixed effects (δ_c and δ_y), but the community fixed effects δ_c can also be simplified and replaced by the region fixed effects δ_r. While the above regression equation helps us observe the general mating pattern, including interaction terms between δ_{US} and $\{H^j\}$ further allows us to understand whether migrant families have a different mating pattern.

4 Results: Educational Assortative Mating

In this section, we present empirical results of the pattern of educational assortative mating among Mexican families. In Table 4, we start with a basic regression without interaction terms between δ_{US} and $\{H^j\}$, i.e., in this basic regression we do not explore the mating pattern among migrant families. In Column 1 we see clearly that compared with the reference group, Mexican men with less than six years of schooling generally tend to marry women receiving relatively more education than them. On the contrary, Mexican men with

more than six years of education generally tend to marry women receiving relatively less education than them.

[Insert Table 4 here]

This basic regression, however, does not discuss whether migrant families have different pattern. To study this question, in Column 2 we include the interaction terms between education and country dummies in the regression, as well as the region fixed effects. We indeed observe the relationship between education and marriage among Mexican migrant families in the U.S. is somewhat different from that among non-migrant families staying behind: $\alpha_1, \alpha_2 < 0$ and $\beta_1, \beta_2 < 0$ imply that the within-family difference in education is relatively larger in Mexican migrant families in the U.S. To see this more clearly, we create an additional Table 5, which reports coefficients $\alpha + \beta$. The result of $\alpha_1 + \beta_1$ shows that Mexican migrant men with no more than two years of schooling tend to have wives receiving education for almost four more years than them. The within-family gender difference in education in migrant families has the same sign with that in non-migrant families in Mexico, but is numerically greater. The similar comparative pattern is found for Mexican migrant men with three to five years of schooling (based on the observation of $\alpha_2 + \beta_2$).

[Insert Table 5 here]

Still in Column 2, Table 4, we now turn to men with more than six years of schooling. Mexican men with more than six years of schooling appear to marry women receiving less education than them, since $\beta_3, \beta_4 < 0$. However, because $\alpha_3, \alpha_4 > 0$ we find that in families with husbands receiving more than six years of schooling, the within-family gender difference in education is smaller in migrant Mexican families in the U.S. than non-migrant families in Mexico. This pattern is further shown in Column 2, Table 5. In other words, compared with non-migrant families staying in Mexico, educational assortative mating is less significant among migrant families with husbands receiving lower education, but is more significant among migrant families with husbands receiving (relatively) higher education. In Column 3 of Table 4 and 5 we replace the regional fixed effects by the community

fixed effects and obtain similar results.

In Table 4 and 5 we partition the Mexican male population into two groups in a coarse manner: we create an indicator of *high education* for men receiving at least seven years of schooling, and an indicator of *low education* for men receiving no more than five years of schooling (still, men with six years of schooling constitute the reference group). We run similar regressions in Column 4 and 5. The qualitative pattern of educational assortative mating remains: in Mexican families, men with lower education generally marry women with relatively more years of schooling than them, but men with higher education tend to marry women with less education. This general pattern also holds among Mexican migrant families in the U.S. But again, compared with non-migrant families in Mexico, in migrant families the within-family difference in education is larger if husbands receive low education, and is smaller if husbands receive high education.

To check the robustness of our results, we continue to study the mating pattern in Table 6 and 7, but using different measures of assortative mating as dependent variables. In Column 1 and 2, Table 6 and 7, we first similarly partition Mexican women into five groups by education, and create a dummy variable which equals 1 if the husband and the wife in a family are in the same group of education, 0 otherwise. Using this dummy as the new dependent variable, coefficients of educational level fixed effects now explain the *likelihood* of assortative mating by education. Controlling for the region in Column 1, we find that at the lowest tail of the educational attainment distribution, men are more likely to marry women with similar education, while men with three to nine years of schooling are less likely to find similar spouses, although the magnitude of mismatches (around 10%) is moderate at best. Mexican migrant families in the U.S. have a different pattern: compared with non-migrant families in Mexico, it is less likely that two lowly educated migrants form the family, but it is more likely that migrants with more than ten years of schooling form the family. This is consistent with previous findings shown in Table 4 and 5.

[Insert Table 6 here]

In Column 3 and 4 we redefine the dependent variable by setting it as 1 if the absolute value of the difference between husband's and wife's years of schooling (i.e., $|heduc_{icy} - weduc_{icy}|$) is no more than 2 years, and 0 otherwise. We control for regions in Column 3 and communities in Column 4. The main difference between results in Column 1 (and 2) and Column 3 (and 4) is that Mexican men with at least ten years of schooling are now found less likely to marry women with similar level of education. The mating pattern among Mexican migrant families with highly educated husbands is also not significant, as shown in Column 3 and 4, Table 7. However, the comparative pattern remains, reflected by that μ_4 are significantly positive in Column 3 and 4, Table 6. More specifically, Mexican migrant men with at least ten years of schooling are about 18% more likely to marry women with similar level of education than highly educated Mexican men staying in Mexico.

[Insert Table 7 here]

In Column 5, Table 6 and 7, we reintroduce the coarse partition of education as done in Table 4 and 5, and use the dummy variable indicating whether the couples are in the same education level as the dependent variable. We again find that Mexican men with lower level of education are generally more likely to marry women with similar level of education, and men with higher level of education are less likely to marry women with similar level of education. In Table 7, however, the estimates of $\theta_L + \mu_L$ and $\theta_H + \mu_H$ indicate that educational assortative mating is somewhat unclear among Mexican migrant families with highly educated husbands. Nevertheless, the comparative pattern is significant: Mexican male migrants with lower level of education are about 12% less likely to marry women with similar level of education than Mexican men staying in the home country, but male migrants with higher level of education are about 11% more likely to marry women with similar level of education than non-migrants staying in Mexico. These are all consistent with our findings in Table 3, 4, and 5.

5 Concluding Remarks

This paper attempts to provide empirical evidence of the pattern of educational assortative mating among Mexican migrant families in the U.S., and compare it with the pattern among Mexican non-migrant families staying in their home country.

Employing the fixed effects model, we find that educational mismatches in marriage are not rare. Generally, Mexican men with lower level of education (receiving education less than six years) tend to marry women with relatively more education than them, and Mexican men with higher level of education (receiving education more than six years) tend to marry women with less education than them. While this general pattern is also observed among Mexican migrant families in the U.S., we do find that the mating pattern among migrant families is numerically different: compared with families staying in Mexico, the within-family gender difference in education is larger in migrant families in which husbands receive less than six years of schooling, and is smaller in migrant families in which husbands receive more than six years of schooling.

Our empirical analysis also finds that compared with male non-migrants staying in Mexico, lowly educated male migrants in the U.S. are less likely to have spouses with similar level of education, but highly educated male migrants are more likely to have spouses with similar level of education. All results imply that *cross border* matters: while Mexican families living in two countries share the qualitatively similar mating pattern, educational assortative mating appears to be more significant among Mexican migrant families with highly educated husbands. This sheds light on the structure of Hispanic immigrant families from Mexico. Whether these conclusions in this paper can be extrapolated to Latin American countries other than Mexico, however, requires further empirical investigations.

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Table 1: The Mexican Labor Market

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Region	E	NE	NC	NW	SE	SC	SW	W
# of communities	20	2	41	19	8	9	8	36
# of households	3052	351	6925	3064	1318	1441	1194	6506
# of migrant households	53	0	343	108	20	0	42	391
A: 1990								
A.1: LFP Rate								
Male LFP rate	0.684	0.687	0.669	0.697	0.734	0.681	0.640	0.692
	(0.047)	(0.074)	(0.046)	(0.061)	(0.071)	(0.058)	(0.056)	(0.049)
Female LFP rate	0.131	0.202	0.141	0.206	0.095	0.132	0.154	0.165
	(0.075)	(0.057)	(0.063)	(0.103)	(0.017)	(0.050)	(0.096)	(0.064)
A.2: Male LF by sector								
Agriculture	0.514	0.228	0.442	0.328	0.629	0.590	0.458	0.403
	(0.267)	(0.303)	(0.228)	(0.323)	(0.153)	(0.185)	(0.331)	(0.230)
Manufacturing	0.249	0.456	0.293	0.310	0.160	0.174	0.202	0.308
	(0.148)	(0.253)	(0.139)	(0.153)	(0.085)	(0.069)	(0.097)	(0.133)
Services	0.236	0.316	0.264	0.362	0.210	0.236	0.339	0.289
	(0.171)	(0.050)	(0.130)	(0.180)	(0.073)	(0.134)	(0.256)	(0.155)
A.3: Wage								
% wage $<$ min. wage	0.400	0.256	0.391	0.230	0.514	0.332	0.446	0.281
	(0.152)	(0.139)	(0.156)	(0.183)	(0.115)	(0.081)	(0.260)	(0.111)
% wage $>$ 2$\times$min. wage	0.216	0.262	0.251	0.412	0.205	0.204	0.229	0.341
	(0.102)	(0.090)	(0.108)	(0.168)	(0.109)	(0.086)	(0.132)	(0.091)
B: 2000								
B.1: LFP Rate								
Male LFP rate	0.709	0.695	0.629	0.700	0.721	0.692	0.631	0.713
	(0.046)	(0.095)	(0.090)	(0.088)	(0.056)	(0.037)	(0.085)	(0.050)
Female LFP rate	0.265	0.289	0.227	0.297	0.199	0.243	0.310	0.286
	(0.139)	(0.074)	(0.085)	(0.105)	(0.074)	(0.052)	(0.094)	(0.065)
B.2: Male LF by sector								
Agriculture	0.460	0.160	0.326	0.204	0.560	0.473	0.356	0.320
	(0.253)	(0.216)	(0.194)	(0.238)	(0.196)	(0.170)	(0.308)	(0.184)
Manufacturing	0.272	0.459	0.342	0.371	0.171	0.230	0.246	0.337
	(0.127)	(0.153)	(0.117)	(0.156)	(0.086)	(0.049)	(0.112)	(0.099)
Services	0.262	0.381	0.332	0.425	0.269	0.296	0.396	0.343
	(0.170)	(0.063)	(0.124)	(0.209)	(0.117)	(0.126)	(0.241)	(0.150)
B.3: Wage								
% wage $<$ min. wage	0.367	0.121	0.298	0.154	0.597	0.330	0.422	0.248
	(0.165)	(0.113)	(0.151)	(0.148)	(0.178)	(0.093)	(0.273)	(0.115)
% wage $>$ 2$\times$min. wage	0.258	0.534	0.350	0.545	0.190	0.276	0.308	0.414
	(0.152)	(0.233)	(0.136)	(0.182)	(0.134)	(0.091)	(0.159)	(0.130)

"LF" stands for "labor force" and "LFP" stands for "labor force participation".

Standard deviations (if applicable) are in parentheses.

Table 2: Mexican Households

	(1) Full Sample	(2) Mexico	(3) US
A: Man in the household			
Age	46.12 (14.61)	46.45 (14.66)	38.24 (10.99)
Years of education	6.27 (4.57)	6.23 (4.59)	7.21 (3.89)
% of high-type occupations	0.297	0.302	0.183
B: Woman in the household			
Age	42.48 (13.90)	42.79 (13.93)	35.10 (10.52)
Years of education	6.02 (4.14)	5.95 (4.14)	7.66 (3.70)
% of high-type occupations	0.133	0.134	0.110
C: Household			
# of members	4.91 (2.21)	4.93 (2.22)	4.37 (1.96)
# of non-workers	3.11 (1.87)	3.13 (1.87)	2.59 (1.71)
# of children	2.65 (2.00)	2.66 (2.02)	2.18 (1.55)
Parental status	0.968	0.969	0.926
Remittance status	0.069	0.070	0.050
Observations	19693	18912	781
D: Education and Marriage			
Women's education, if men's Edu. ≤ 6	4.24 (3.13)	4.18 (3.11)	6.14 (3.22)
Observations	12766	12348	418
Women's education, if $6 <$ men's Edu. ≤ 12	8.53 (3.27)	8.51 (3.27)	8.85 (3.20)
Observations	5198	4901	297
Women's education, if men's Edu. > 12	11.59 (4.13)	11.58 (4.16)	11.98 (3.30)
Observations	1729	1663	66

Standard deviations are in parentheses.

Table 3: The Pattern of Educational Assortative Mating

Education group	(1)	(2)	(3)	(4)	(5)
A: Full Sample					
(1)	2656	872	500	146	62
(2)	1083	1442	765	272	122
(3)	574	834	2452	1021	552
(4)	133	262	804	1372	932
(5)	54	94	290	635	1854
B: Mexico					
(1)	2623	863	488	142	58
(2)	1069	1406	734	254	114
(3)	556	782	2361	985	521
(4)	117	242	761	1301	899
(5)	47	74	267	585	1739
C: The U.S.					
(1)	33	9	12	4	5
(2)	14	36	31	18	8
(3)	18	52	91	36	31
(4)	16	20	43	71	33
(5)	7	20	23	50	115
D: Wives' Education					
Full Sample	2.434	4.140	6.011	7.952	10.611
	(2.558)	(2.791)	(2.855)	(3.102)	(3.853)
Mexico	2.393	4.044	5.986	7.927	10.624
	(2.517)	(2.730)	(2.854)	(3.103)	(3.870)
The U.S.	4.585	6.493	6.602	8.044	10.366
	(3.587)	(3.227)	(2.822)	(3.035)	(3.529)
E: Differences					
Full Sample	−1.618	−0.541	−0.011	0.794	3.247
	(2.502)	(2.763)	(2.855)	(3.054)	(3.929)
Mexico	−1.581	−0.454	0.014	0.831	3.307
	(2.461)	(2.704)	(2.854)	(3.050)	(3.942)
The U.S.	−3.465	−2.691	−0.602	0.124	2.172
	(3.635)	(3.292)	(2.822)	(3.855)	(3.537)

Standard deviations (if applicable) are in parentheses.

Column: men's education group.

Row: women's education group.

Education group (1): $0 <$ years of schooling ≤ 2.

Education group (2): $3 \leq$ years of schooling ≤ 5.

Education group (3): years of schooling $= 6$.

Education group (4): $7 \leq$ years of schooling ≤ 9.

Education group (5): years of schooling ≥ 10.

Table 4: Assortative Mating: Within-Family Difference in Educational Attainment

	Coef.	(1)	(2)	(3)	(4)	(5)
Education Fixed Effects						
Edu. $0-2$ years	α_1	-2.880***	-2.614**	-2.846***		
		(0.063)	(0.417)	(0.063)		
Edu. $3-5$ years	α_2	-1.180***	-0.974***	-1.124***		
		(0.062)	(0.061)	(0.062)		
Edu. $7-9$ years	α_3	1.507***	1.391***	1.518***		
		(0.065)	(0.067)	(0.067)		
Edu. ≥ 10 years	α_4	4.061***	3.851***	4.100***		
		(0.078)	(0.080)	(0.081)		
Edu. $0-5$ years	α_L				-1.834***	-1.989***
					(0.055)	(0.057)
Edu. ≥ 7 years	α_H				2.566***	2.713***
					(0.063)	(0.064)
(Edu. $0-2$ years) * δ_{US}	β_1		-1.144**	-0.963*		
			(0.417)	(0.417)		
(Edu. $3-5$ years) * δ_{US}	β_2		-1.486***	-1.384***		
			(0.357)	(0.352)		
(Edu. $7-9$ years) * δ_{US}	β_3		-0.452	-0.376		
			(0.310)	(0.305)		
(Edu. ≥ 10 years) * δ_{US}	β_4		-0.785*	-0.887**		
			(0.328)	(0.334)		
(Edu. $0-5$ years) * δ_{US}	β_L				-1.061**	-0.949**
					(0.306)	(0.305)
(Edu. ≥ 7 years) * δ_{US}	β_H				-0.565*	-0.563*
					(0.272)	(0.276)
Family Characteristics						
Husband's age		0.041***	0.039***	0.041***	0.035***	0.037***
		(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Wife's age		0.026***	0.023***	0.026***	0.020***	0.022***
		(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Parental status		-0.053	-0.050	-0.055	0.047	-0.046
		(0.126)	(0.127)	(0.126)	(0.131)	(0.132)
# of non-workers		0.185***	0.195***	0.186***	0.176***	0.167***
		(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Remittance status		0.128	0.173*	0.126	0.134	0.085
		(0.084)	(0.083)	(0.085)	(0.087)	(0.089)
Year Fixed Effects		Yes	Yes	Yes	Yes	Yes
Region Fixed Effects		No	Yes	No	Yes	No
Community Fixed Effects		Yes	No	Yes	No	Yes
R^2		0.320	0.298	0.321	0.232	0.250
Observations		19693	19693	19693	19693	19693

Standard errors are in parentheses. † : $p < .10$; *: $p < .05$; **: $p < .01$; ***: $p < .001$.

Table 5: Coefficients for Mexican Migrant Families

	(1)	(2)	(3)	(4)	(5)
$\alpha_1 + \beta_1$		-3.758***	-3.809***		
		(0.442)	(0.261)		
$\alpha_2 + \beta_2$		-2.461***	-2.508***		
		(0.359)	(0.472)		
$\alpha_3 + \beta_3$		0.939***	1.142***		
		(0.267)	(0.247)		
$\alpha_4 + \beta_4$		3.067***	3.213***		
		(0.327)	(0.350)		
$\alpha_L + \beta_L$				-2.895***	-2.938***
				(0.243)	(0.262)
$\alpha_H + \beta_H$				2.001***	2.150***
				(0.231)	(0.256)
δ_{US}	-0.310	-0.300	-0.334	-0.364	0.281
	(0.214)	(0.202)	(0.281)	(0.201)	(0.288)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Region Fixed Effects	No	Yes	No	Yes	No
Community Fixed Effects	Yes	No	Yes	No	Yes
Observations	19693	19693	19693	19693	19693

Standard errors are in parentheses.

†: $p < .10$; *: $p < .05$; **: $p < .01$; ***: $p < .001$.

Standard errors are calculated by bootstrap, with 20 times of resampling.

Table 6: Assortative Mating: Additional Tests

	Coef.	(1)	(2)	(3)	(4)	(5)
Education Fixed Effects						
Edu. $0-2$ years	θ_1	0.066***	0.062***	0.056***	0.050***	
		(0.011)	(0.012)	(0.011)	(0.011)	
Edu. $3-5$ years	θ_2	-0.100***	-0.102***	0.010	0.004	
		(0.011)	(0.012)	(0.011)	(0.011)	
Edu. $7-9$ years	θ_3	-0.104***	-0.107***	-0.120***	-0.120***	
		(0.012)	(0.012)	(0.012)	(0.012)	
Edu. ≥ 10 years	θ_4	0.019	0.015	-0.226***	-0.225***	
		(0.012)	(0.012)	(0.011)	(0.012)	
Edu. $0-5$ years	θ_L					0.027**
						(0.010)
Edu. ≥ 7 years	θ_H					-0.169***
						(0.010)
(Edu. $0-2$ years) * δ_{US}	μ_1	-0.164*	-0.160*	-0.192**	-0.173**	
		(0.063)	(0.063)	(0.064)	(0.066)	
(Edu. $3-5$ years) * δ_{US}	μ_2	-0.111*	-0.101†	-0.089	-0.072	
		(0.052)	(0.052)	(0.057)	(0.045)	
(Edu. $7-9$ years) * δ_{US}	μ_3	0.037	0.044	0.046	0.035	
		(0.052)	(0.053)	(0.053)	(0.053)	
(Edu. ≥ 10 years) * δ_{US}	μ_4	0.138**	0.150**	0.179**	0.183**	
		(0.052)	(0.053)	(0.057)	(0.053)	
(Edu. $0-5$ years) * δ_{US}	μ_L					-0.118*
						(0.049)
(Edu. ≥ 7 years) * δ_{US}	μ_H					0.108*
						(0.045)
Family Characteristics						
Husband's age		-0.001	-0.001	-0.002**	-0.002**	-0.002**
		(0.000)	(0.000)	(0.001)	(0.001)	(0.001)
Wife's age		0.004***	0.004***	0.004***	0.004***	0.004***
		(0.000)	(0.000)	(0.001)	(0.001)	(0.001)
Parental status		0.009	0.011	0.005	0.007	0.007
		(0.020)	(0.020)	(0.021)	(0.021)	(0.021)
# of non-workers		-0.007**	-0.007***	-0.004*	-0.004*	-0.004†
		(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Remittance status		-0.001	0.007	-0.005	-0.001	0.000
		(0.015)	(0.015)	(0.014)	(0.015)	(0.015)
Year Fixed Effects		Yes	Yes	Yes	Yes	Yes
Region Fixed Effects		Yes	No	Yes	No	No
Community Fixed Effects		No	Yes	No	Yes	Yes
R^2		0.033	0.041	0.053	0.061	0.057
Observations		19693	19693	19693	19693	19693

Standard errors are in parentheses. † : $p < .10$; *: $p < .05$; **: $p < .01$; ***: $p < .001$.

Table 7: Coefficients for Mexican Migrant Families

	(1)	(2)	(3)	(4)	(5)
$\theta_1 + \mu_1$	-0.099	-0.098	-0.136*	-0.122*	
	(0.062)	(0.066)	(0.066)	(0.053)	
$\theta_2 + \mu_2$	-0.210***	-0.203***	-0.079†	-0.068	
	(0.055)	(0.053)	(0.046)	(0.054)	
$\theta_3 + \mu_3$	-0.067	-0.064	-0.074	-0.084*	
	(0.059)	(0.067)	(0.062)	(0.041)	
$\theta_4 + \mu_4$	0.157***	0.165**	-0.047	-0.042	
	(0.043)	(0.051)	(0.067)	(0.051)	
$\theta_L + \mu_L$					-0.090*
					(0.041)
$\theta_H + \mu_H$					-0.061
					(0.040)
δ_{US}	-0.024	-0.016	-0.023	0.003	0.008
	(0.036)	(0.048)	(0.036)	(0.047)	(0.047)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	No	Yes	No	No
Community Fixed Effects	No	Yes	No	Yes	Yes
Observations	19693	19693	19693	19693	19693

Standard errors are in parentheses.

† : $p < .10$; *: $p < .05$; **: $p < .01$; ***: $p < .001$.

Standard errors are calculated by bootstrap, with 20 times of resampling.