

Contextualizing Mexican Migrants' Educational Attainment: Selectivity across Contexts in Mexico

Abstract

The debate on whether Mexican immigrants are positively or negatively selected on education has been limited by studying immigrants in data collected only from the sending or the destination country. Using nationally representative data from Mexico that tracked migrants to the United States prospectively, we examine the educational selectivity of Mexicans who immigrated permanently to the United States from 2002 to 2005. We find that studies relying reports of migration by remaining household members and proxy substitution of migration education under-estimate migrant selectivity. Migrant men are positively selected from households and municipalities but (slightly) negatively selected from the national educational distribution. Migrant women are positively selected at all levels. Differences in selectivity by size of place, as well as when considering the local or national context, suggest that the answer of whether immigrants are positively or negatively selected on education depends on the context considered.

Introduction

In the last century, Mexican immigration to the United States was the largest sustained immigration flow in the world (Massey et al. 1999). Although the net migration flow across the Mexico-U.S. border has subsided in the past ten years (Villarreal 2014), Mexican immigrants remain the largest immigrant group in the United States: one in twenty people (5%) in the United States is a Mexican immigrant or the child of Mexican immigrants (U.S. Census Bureau 2016). In addition to its size, this immigrant group is notable for its low average level of educational attainment, especially in comparison to other immigrant groups. More than half (55%) of Mexican immigrants have less than 12 years of schooling, compared to 12.9%, 15.2%, and 13.9% of Cuban, Vietnamese, and Haitian immigrants (Waters and Pineau 2015).

In part a result of their population size and educational distribution, Mexican immigrants tend to be the focus of public debates surrounding immigration to the United States, particularly regarding the ability of immigrants to integrate economically and socially into U.S. society (e.g.

Huntington 2009; see also Portes and Rivas 2011). However, because Mexican immigrants come from a context with fewer opportunities for educational attainment, absolute levels of education may misrepresent their ability, particularly when Mexican immigrants are compared to groups in the United States who were educated in different contexts (Feliciano and Lanuza 2017). Mexican immigrants may attain fewer years of education than other immigrant groups or U.S.-born people in the United States but still be positively selected on education from the pool of possible migrants from Mexico to the United States – that is, they may have greater educational attainment than Mexicans who do not migrate but were also educated in similar contexts in Mexico. If Mexican immigrants are positively selected on education, that may suggest that Mexican immigrants are also selected on other unmeasured abilities, such as motivation, ambition, risk-taking, and self-efficacy, which relate to both educational attainment within a certain context and to migration out of that context (Portes and Rumbaut 1996; Feliciano 2005). Furthermore, if Mexican immigrants are positively selected on education, then analyses that consider absolute educational attainment as an indicator of subsequent integration will be flawed (Feliciano and Lanuza 2017).

Yet there is a major scholarly debate over whether Mexican immigrants are selected on education, which arises from the challenge of using country-specific surveys to study migrants, who by definition move from one country to the next and thus in and out of country-specific data universes and sampling frames. In this instance, the conclusion about immigrant selection on education depends on whether a study uses data on Mexican immigrant educational attainment from the country of origin or destination. Studies that measure the educational attainment of Mexican immigrants in U.S. data conclude that they are positively selected on education (Feliciano 2005, 2008; Chiquiar and Hanson 2005), while studies that measure the educational

attainment of Mexican emigrants in Mexican data sources conclude that they are negatively selected (Ibarraran and Lubotsky 2007; Rendall and Parker 2014). The difference in conclusions arises from distinct limitations in U.S. and Mexican data sources. U.S. data sources likely under-represent less-educated Mexican immigrants, who are more mobile and possibly also less willing to participate in government surveys than their more-educated counterparts. The omission of less-educated Mexican immigrants in U.S. survey data would cause an over-estimate of migrant selectivity (Genoni et al. 2017; Ibarraran and Lubotsky 2007). By contrast, most Mexican data sources identify emigrants through reports by remaining household members, which presents two problems. First, emigrants who migrate with their whole household will be omitted; if there is (positive) selection of emigrants who migrate with their whole households, their omission will result in a mis-(under) estimate of migrant selectivity (Hamilton and Savinar 2015). Second, most Mexican data sources do not measure the educational attainment of absent migrants, so researchers use the education of a remaining household member in Mexico, either the household head or the highest-educated woman in the household, to proxy for migrant education (Ibarraran and Lubotsky 2007; Rendall and Parker 2014). If there is (positive) selection of migrants on education within households, using proxy education will result in a mis-(under) estimate of migrant selectivity.

In this research note, we begin by examining the problems arising from using data from the origin country to measure Mexico-U.S. migrant selectivity. Studies using Mexican data have concluded that Mexican immigrants to the United States are negatively selected on education, but as just described, these studies do not observe whole-household migrants and, in the case of split-household migrants, use proxy substitution of remaining householders' education for migrant education. We examine the influence of these two errors on estimates of Mexico-U.S.

migrant educational selectivity using data from the Mexican Family Life Survey (MxFLS), a national sample of households in Mexico surveyed in 2002 and tracked across the U.S. border through 2005. Because migrants to the United States are tracked, education is measured prior to migration, and whole-household migrants are identified. We find that these errors result in a downward bias on selectivity indices for both men and women.

We also answer a distinct but related question, which is whether the selectivity of Mexican immigrants varies across spatial contexts within Mexico. Studies using Mexican data have found that the urbanization stratifies the selectivity of Mexican immigrants: in the national distribution, Mexican immigrants are negatively selected, but within areas defined by distinct levels of urbanization, they are positively selected (Ibarraran and Lubotsky 2007; Rendall and Parker 2014). Most Mexican immigrants to the United States originate from rural locations in Mexico (Durand et al. 2001; Riosmena and Massey 2012), and there are fewer opportunities for education in rural places in Mexico (SEP 2012). Thus, the selection of immigrants from rural origins produces negative selection on education by virtue of fewer educational opportunities in rural places in Mexico. However, understanding immigrant selectivity requires considering how immigrants compare on education to those educated within the same educational opportunity context. Thus, we estimate selectivity indices comparing Mexican immigrants to non-migrants within the same municipality (or county) of origin. We then show that municipal immigrant selectivity varies by level of urbanization: Mexican immigrants are positively selected from rural municipalities, but negatively selected from urban ones.

We estimate all analyses separately for men and women. There is a long history of scholarship establishing that gender structures Mexico-U.S. migration: women and men migrate at different rates, under different contexts, and for different reasons (Donato et al. 2006; Donato,

Enriquez, and Llewellyn 2017). More to the point, patterns of migrant educational selectivity differ for men and women, with women more positively selected than men, a result of the differential material and social costs that men and women face in migrating (Feliciano 2008; Kanaiapuni 2000; Rendall and Parker 2014).

Data and methods

To identify Mexico-U.S. migrants and measure their educational attainment, we use data from the Mexican Family Life Survey (MxFLS), the first national data source from Mexico to measure migration prospectively by tracking and re-interviewing migrants after they have moved. The baseline survey (MxFLS-1) was conducted in 2002 on a sample of 8,433 households (35,611 individuals) in 136 communities throughout Mexico. The second-wave survey (MxFLS-2) was conducted between 2005 and 2006 and achieved a re-interview rate of more than 90%, including 91% of U.S. migrants (Rubalcava and Teruel 2007). A third wave of MxFLS data (collected from 2007-2011) is publicly available, but the public release does not identify individuals who migrated to the United States between the second and third waves; therefore we only analyze data from the first two waves. While these data are now more than a decade old, and migration between Mexico and the United States has substantially changed in the past decade (Villarreal 2014), the MxFLS is the best data source with which to answer the question of educational selectivity of Mexican migrants to the United States for the aforementioned reasons. However, our results may be particular to the period captured in the survey, which was one of heightened migration from Mexico to the United States.

We focus on individuals ages 15 and older, which limits the analytic sample to 23,626 (hereafter “adults”). Migrants are adults in the MxFLS who moved to the United States

“permanently” between the first and second waves of data collection, i.e., between 2002 and 2005. We focus on “permanent” U.S. migrants, who are defined in the survey as individuals interviewed in Mexico in the MxFLS-1 (in 2002) who were in the United States by the time of the MxFLS-2 in 2005 and had been there for at least one year or intended to remain there for at least one year.¹ The survey includes 615 permanent U.S. migrants (385 men, 230 women).

We measure educational attainment by years of completed schooling, which ranges from 0 to 18.² We use data from the 2000 Mexican Census to measure the educational distribution of “non-migrants” because the MxFLS sample is not representative at the municipal level. The 2000 Mexican Census provides a 10% sample of the Mexican population representative at the municipal, state, regional, and national levels. Although we cannot identify U.S. migrants between 2002-2005 in the Mexican Census, and thus some migrants will be incorrectly included in the “non-migrant” comparison group, the bias arising from this error should be small, as only 2.1 percent of Mexican adults migrated in that period.

We use a selectivity index equal to the average difference in years of schooling between migrants and non-migrants, with negative values indicating negative selectivity, 0 indicating no selectivity, and positive values indicating positive selectivity. Because migrants are younger, on

¹ Standard definitions of international migration attempt to differentiate between people who make a permanent change of residence and those who are visiting. In practice, “permanent” does not mean lifelong, but rather a change of residence involving changing social commitments and involvement in the destination, such as work, school, social ties, and new place of residence. In the case of Mexico-U.S. migration, many migrants are “permanently” in the U.S. for a year or longer, but still maintain a residence in Mexico, and so most working definitions of migration do not depend on a change of residence, even though this is a definitional standard. With this in mind, the MxFLS uses one year duration to capture “permanent” migrants in order to differentiate them from migrants who are visiting, vacationing, or working for a very short spell with intent to return to Mexico. Selectivity likely varies between permanent and circular or returned migrants, and the MxFLS does not capture sufficient circular and returned migrants to analyze them separately.

² The highest education category on the MxFLS survey is “graduate,” which we treat as 18 years of schooling. In our sample, 0.34% of non-migrants and 0 migrants had 18+ of schooling.

average, than non-migrants, and younger cohorts in Mexico are better educated than older cohorts, we estimate the index for 5-year age groups and average the age-specific indices. The index is equal to

$$Select_i = Y_i - \bar{Y}_{j,k} \quad \text{Equation 1}$$

where Y_i represents the years of schooling for each individual permanent US migrant, $\bar{Y}_{j,k}$ represents the average years of schooling among adults within age group j and in municipality k from the 2000 Mexican Census data. And we calculate $Select_i$ separately for permanent US migrant males and females.

Our first goal is to understand how two problems with the use of Mexican survey data affect estimates of immigrant educational selectivity. First, to understand how the omission of whole-household migrants affects estimates of immigrant selectivity, we construct the difference index separately for split-household migrants and whole-household migrants. Second, to understand how the proxy substitution of migrant education with other household members' education affects estimates of immigrant selectivity, we focus only on split-household migrants and construct the difference index for that group, substituting migrants' education first with the household head's education and subsequently with the highest-educated woman in the household's education.

Our second goal is to understand how immigrant selectivity varies by context. Using the educational attainment of all permanent migrants, we construct the difference index at the municipal level (i.e., comparing all migrants to similarly aged non-migrants within their municipalities and taking the average) and compare it to index constructed using the national educational distribution. We then estimate the municipal and national difference indices

separately by level of urbanization, to compare the municipal index across localities with fewer than 2,500 people, between 2,500 and 15,000 people, between 15,000 and 100,000 people, and with more than 100,000 people, and to examine how the national index for migrants from each of these place sizes varies when they are compared to the national educational distribution.

Results

Table 1 shows the national difference index for men and women under different measurement scenarios. In Panel A, the education of all permanent U.S. migrants between 2002-2005 in the MxFLS is compared to their same-aged non-migrant peers in the 2000 Census, which is the preferred specification because all migrants are included and their education is directly measured. The results show very slight negative selection for men: male migrants obtain .02 fewer years of education, on average, than their same-aged non-migrant peers. Women are positively selected: female migrants obtain .83 more years of education, on average, than their same-aged non-migrant peers.

[Table 1 about here]

We would arrive at slightly different conclusions if we examined only split-household migrants, that is, permanent U.S. migrants who leave behind at least one household member in Mexico, the population captured in Mexican survey data sources that measure migration retrospectively by the reports of remaining household members. The difference index is more negative for men but more positive for women when only split-household migrants are considered. This difference arises because male whole-household migrants are more positively selected than male spit-household migrants but female whole-household migrants are less positively selected than female split-household migrants. Among men, whole-household

migrants have a difference index of 1.45, meaning that men who migrated permanently to the United States with their whole households obtain an average of 1.45 more years of schooling than their similarly-aged non-migrant peers, compared to an index of -0.15 among split-household migrants (compare panels C and D in Table 1). Among women, the reverse is true. Female whole-household migrants have a smaller difference index (0.06) suggesting very slight positive selectivity for this group, compared to a larger, positive difference index among female split-household migrants (1.05).

Using two proxy substitutions of migrant education among split-household migrants results in negative bias for both men and women (compare panels D and E to B). Observing only split-household migrants and substituting their education with the household head's changes the difference index from -0.15 to -3.23; for women, the bias is greater, with the index changing from 1.05 to -3.24. Using the highest-educated woman in the household for the proxy education produces a smaller but still negative bias. For men, the difference index changes from -0.15 to -1.33 and for women it changes from 1.05 to -0.57. In other words, if we used Mexican survey data where migrants were reported by remaining householders, and the education of remaining householders were used to substitute for migrants' education, we would conclude incorrectly that migrants are more negatively selected on education than they actually are. The results also imply that split-household migrants are positively selected on education from within their households (at least as compared to the head and the highest-educated remaining woman).

[Table 2 about here]

We now turn to an examination of how migrant selectivity varies by context, presented in Table 2 and Figure 1. Table 2 shows the difference index constructed at the municipal and national levels for permanent U.S. migrant men and women by level of urbanization. Panel A in

Table 2 shows the municipal and national difference index (which is equivalent to that presented in Panel A of Table 1) for all permanent U.S. migrants in all levels of urbanization. At all levels of urbanization, men are positively selected from their municipalities but slightly negatively selected from the national distribution. The municipal difference index for men means that male permanent U.S. migrants attain 0.29 greater years of schooling than similarly-aged non-migrants in their municipalities of origin on average; compared to similarly-aged non-migrants in the nation, they attain 0.02 fewer years of education. This implies that permanent U.S. migrant men originate in municipalities with lower average levels of education than non-migrants. The opposite is true for women, who are more positively selected from the national distribution than they are from their municipalities of origin (0.83 versus 0.68).

The results in Panels B-E show how the municipal and national difference indices vary by level of urbanization. Focusing first on men, we see that the municipal index is positive for rural areas, where permanent U.S. migrant men attain 1.5 greater years of schooling on average than similarly-aged non-migrant men in their (rural) municipalities of origin. The index becomes less positive with increasing place size. The index is 1.15 in rural places but shrinks to 0.13 in small towns, 0.98 in mid-sized places, and is negative (-0.38) in urban places. In other words, if we consider how men who migrated permanently to the United States are selected from municipalities, we reach a different conclusion when we examine rural and urban places: they are positively selected from rural municipalities but negatively from urban municipalities. Due to the relative educational distributions of rural and urban places, the opposite pattern is observed when migrants from rural and urban origins are compared to the national distribution: rural U.S. migrant men are negatively selected from the national distribution, earning on average 1.19 fewer years of education than similarly-aged non-migrant men in the nation, whereas when urban

U.S. migrant men are compared to the national distribution, they earn on average .67 greater years of schooling.

A similar pattern is observed for women across levels of urbanization: U.S. migrant women are positively selected on education from within rural municipalities, but they are negatively selected on education from within urban municipalities. By contrast, when rural and urban U.S. migrant women are compared to the national distribution, rural U.S. migrant women are negatively selected, but urban U.S. migrant women are positively selected.

[Figure 1 about here]

These patterns are illustrated in Figure 1, which shows a generally declining level of municipal selectivity for men and women from rural places to urban areas (solid lines), with the exception of mid-sized cities, where U.S. migrant men and women are positively selected on a similar scale to rural places. By contrast, when U.S. migrant men and women are compared to the national distribution of education (dashed lines), the index increases with increasing place size. In other words, conclusions about immigrant selectivity depend on from what social context selection is considered. If we consider selection occurring from within municipalities, U.S. permanent migrants are positively selected. If we consider selection occurring from within the entire nation of Mexico, male U.S. permanent migrants are slightly negatively selected but female U.S. permanent migrants are positively selected. Male and female U.S. permanent migrants from rural origins are positively selected from within their municipalities but negatively selected from the nation. By contrast, male and female U.S. permanent migrants from urban origins are negatively selected from within their municipalities but positively selected from within the nation.

Discussion

Evidence to date on Mexican educational selectivity has been hampered by problems specific to immigrants in country-specific survey data: immigrants migrate out of the sampling universe in the sending country, and immigrants—especially undocumented immigrants—may refuse to participate or migrate out of the sampling universe (through return migration) in the destination country. In the case of research on the educational selectivity of Mexican immigrants to the United States, studies using U.S. data conclude that Mexican immigrants are positively selected (Feliciano 2005; Chiquiar and Hanson 2005; Orrenius and Zavodny 2005; Cuecuecha 2003), while studies using Mexican data conclude that Mexican immigrants are negatively selected (Ibarraran and Lubotsky 2007; Rendall and Parker 2014). In this research note, we used nationally representative data from Mexico that are unique because the survey tracked migrants who moved between Mexico and the United States. As a result, we directly observe the education of migrants prior to migration, and the sample of migrants includes individuals who might be missing in data sources that study migration exclusively from the perspective of the origin or the sending country.

Prior studies finding negative selectivity have used data where migrants are reported by remaining householders, excluding migrants who leave with their entire households and using a remaining household member's educational attainment to proxy for the absent migrant's. We found that Mexico-U.S. permanent migrants between 2002-2005 were positively selected from within their households, male whole-household migrants were positively selected compared to split-household migrants, and substituting a remaining household member's education for the migrant's produces a negative bias on conclusions of migrant educational selectivity. In the case of men, each of these errors leads to the conclusion that permanent U.S. migrant men are

negatively selected on education. Correcting for these errors, we find only a very slight negative selection: Mexican men who migrated permanently to the United States between 2002-2005 earned .02 years (i.e., less than one month) less schooling, on average, than similarly aged non-migrant men.

By contrast, Mexican women who migrated permanently to the United States between 2002-2005 were positively selected on education, as compared to similarly-aged non-migrants, and this is true of both women who migrated with their whole households and women who migrated leaving some household members behind (split-household migrants). Like men, women who migrate and leave some household members behind are positively selected from within their households, and substituting either the household head's or the highest-educated (remaining) woman's education for the migrant's produces a negative bias on the estimate of women's educational selectivity. However, contrary to men, women who were split-household migrants were more positively selected than women who migrated with their whole households. This finding suggests that gender interacts with family structure to create different migration processes for men and women. If we assume that the degree of selectivity reflects the relative cost of migration, we can conclude that it is more costly for men to migrate with their whole households than it is to leave some members behind; for women, it is more costly to migrate and leave some household members behind than it is to migrate with the whole household.

Our analysis of contextual variation in selectivity confirms what others have found before, namely, that level of urbanization stratifies migrant educational selectivity: specifically, Mexico-U.S. migrants from rural origins in Mexico are positively selected from within the rural educational distribution (Ibarraran and Lubotsky 2007; Rendall and Parker 2014). Because educational levels are lower--and educational opportunities fewer--in rural Mexico than in urban

Mexico, the fact that the majority of Mexican migrants originate in rural places means that (male) Mexican immigrants are negatively selected when compared to the national distribution. However, this is not true if we consider selectivity from within municipalities, another form of local context, and if we allow the municipal and the national selectivity indices to vary across place size. On average, Mexican migrant men and women are positively selected from within their municipalities (which are largely rural). They are positively selected from within rural municipalities only. However, they are negatively selected from urban municipalities, where the average, non-migrant level of education is higher.

What does contextual variation in selectivity mean, and why does it matter? Mexican immigration shows strong geographical continuities over time, with most Mexican immigrants originating in rural places and from the center-west region of Mexico (Riosmena and Massey 2012), a pattern reflecting the history of migrant recruitment, the location of transportation lines (especially railroads), and the structuring role of place-based migrant networks (Durand 2007). The historic, geographic contours of Mexican immigration contrast with accounts that view immigration as arising from the putative individual economic calculus that potential migrants make when deciding whether or not to migrate to the United States (Borjas 1988, 1991). By this neoclassical economic account, immigrants from Mexico may be negatively selected on education because high levels of economic inequality in Mexico discourage those who gain from the system (i.e., more highly educated individuals) from emigrating (Massey et al. 1998). However, individual economic-decision making cannot explain the geography of Mexican emigration; the contingency of history and physical landscape can be seen as an exogenous structure within which decisions about migration are made. The implication for studies of educational selectivity is that if Mexican immigrants are compared to all non-migrants in

Mexico, the economic and social forces that give rise to immigration and a particular pattern of selectivity will be confounded with geography and history. This is especially important when considering educational attainment because educational opportunities are also strongly structured by geography in Mexico, with fewer opportunities in rural places (SEP 2002). If Mexican immigrants are selected on particular geographic contexts as a result of historical processes, and those contexts have fewer opportunities for educational attainment, comparing Mexican immigrants to non-migrants in the entire country will produce incorrect conclusions about patterns of immigrant educational selectivity and the causes underlying those patterns.

Because the debate over immigrant educational selectivity is related to public debates about immigrant incorporation, and immigration more generally, addressing errors in common data sources used to estimate immigrant educational selectivity is essential. Although the MxFLS represents an improvement over other survey data sources from Mexico by virtue of its tracking migrants over time and space, the publicly available MxFLS files on migrants are now over ten years old. Since 2005, Mexican immigration to the United States has declined substantially in response to changing economic conditions on both sides of the border and demographic change in Mexico (Villarreal 2014; Massey, Durand, and Pren 2016). A massive return migration of Mexican immigrants to Mexico has occurred, alongside the migration of unprecedented numbers of immigrants' U.S.-born children (Giorguli Saucedo, Garcia-Guerrero and Masferrer 2016). It is not clear how the selectivity of current Mexican immigrants to the United States—or of returnees to Mexico—has changed in this new era, but it is likely that the evidence presented in this paper is unique to the period that preceded it, in which Mexico-U.S. migration reached historic levels. Surveys that track migrants across borders, and better methods for indirectly estimating the

education and other characteristics of migrants that are unobserved in survey data sources, are needed to understand the selectivity of immigration today and into the future.

Table 1. Selectivity of Permanent Mexico-U.S. Migrants, 2002-2005, by Gender, Using Different Constructions of Difference Index

	Difference Index	Sample of migrants
<i>A. All migrants</i>		
Men	-0.02	385
Women	0.83	230
<i>B. Split-household migrants</i>		
Men	-0.15	345
Women	1.05	176
<i>C. Whole-household migrants</i>		
Men	1.45	40
Women	0.06	54
<i>D. Split-household migrants, migrant education proxied by household head</i>		
Men	-3.23	330
Women	-3.24	157
<i>E. Split-household migrants, migrant education proxied by highest educated woman in household</i>		
Men	-1.33	328
Women	-0.57	156

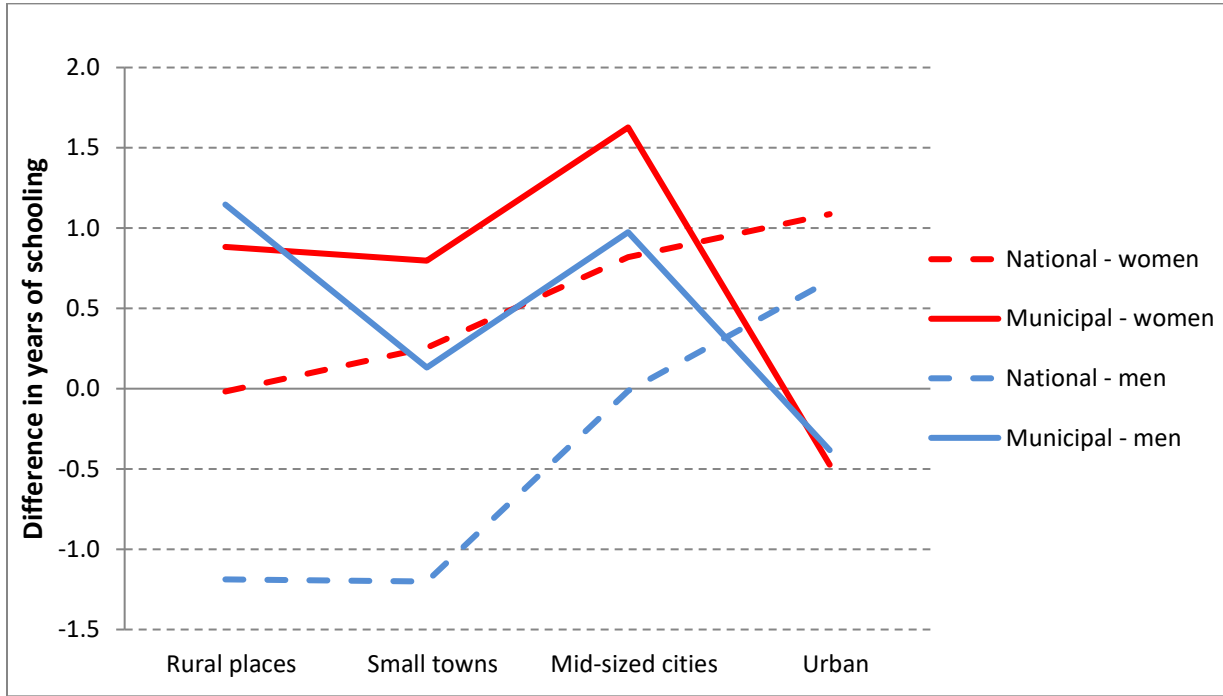
Source: 2002-2005 Mexican Family Life Survey and 2000 Mexican Census

Table 2. Difference Index Measuring the Educational Selectivity of Permanent Mexico-U.S. Migrants, 2002-2005 at the Municipal and National Levels, by Gender and Level of Urbanization

	Municipal Difference Index	National Difference Index	Sample of migrants
<i>A. All levels of urbanization</i>			
Men	0.29	-0.02	385
Women	0.68	0.83	230
<i>B. Rural (<2,500)</i>			
Men	1.15	-1.19	23
Women	0.88	-0.02	10
<i>C. Small town (2,500-14,999)</i>			
Men	0.13	-1.20	105
Women	0.80	0.25	57
<i>D. Mid-sized town (15,000-99,999)</i>			
Men	0.98	-0.01	151
Women	1.63	0.82	109
<i>E. Urban (>=100,000)</i>			
Men	-0.38	0.67	106
Women	-0.47	1.09	54

Source: 2002-2005 Mexican Family Life Survey and 2000 Mexican Census

Figure 1. Municipal and National Difference Indices of Immigrant Educational Selectivity among Permanent U.S. Migrants by Size of Place and Gender



Sources: 2002-2005 Mexican Family Life Survey and 2000 Mexican Census

References

- Borjas, George J. 1988. *International Differences in the Labor Market Performance of Immigrants*. WE Upjohn Institute for Employment Research, 300 South Westnedge Avenue, Kalamazoo, MI 49007.
- Borjas, George J. 1991. "Immigration and self-selection." In *Immigration, trade, and the labor market*, pp. 29-76. University of Chicago Press.
- Chiquiar, Daniel, and Gordon H. Hanson. 2005. "International migration, self-selection, and the distribution of wages: Evidence from Mexico and the United States." *Journal of political Economy* 113, no. 2: 239-281.
- Cuecuecha, Alfredo. 2003. "The Educational Characteristics of the Immigrants from Mexico to the US." *Instituto Tecnológico Autónomo de México-Centro de Investigación Económica, Working Paper*.
- Donato, Katharine M., Donna Gabaccia, Jennifer Holdaway, Martin Manalansan IV, and Patricia R. Pessar. 2006. "A Glass Half Full? Gender in Migration Studies 1." *International migration review* 40, no. 1: 3-26.
- Donato, Katharine M., Laura E. Enriquez, and Cheryl Llewellyn. 2017. "Frozen and Stalled? Gender and Migration Scholarship in the 21st Century.": 1079-1085.
- Durand, Jorge, Douglas S. Massey, and Rene M. Zenteno. 2001. "Mexican immigration to the United States: Continuities and changes." *Latin American research review*: 107-127.
- Durand, Jorge. 2007. "Origen y destino de una migración centenaria." *El país transnacional, migración mexicana y cambio social a través de la frontera*: 55-82, edited by Marina Ariza and Alejandro Portés. Mexico City: The Institute for Social Studies of the National Autonomous University of Mexico (UNAM).
- Feliciano, Cynthia. 2005. "Educational selectivity in US immigration: How do immigrants compare to those left behind?." *Demography* 42, no. 1: 131-152.
- Feliciano, Cynthia. 2008 "Gendered selectivity: US Mexican immigrants and Mexican nonmigrants, 1960-2000." *Latin American Research Review*: 139-160.
- Feliciano, Cynthia, and Yader R. Lanuza. 2017. "An immigrant paradox? Contextual attainment and intergenerational educational mobility." *American sociological review* 82, no. 1: 211-241.
- Genoni, María, Luis Rubalcava, Graciela Teruel, and Duncan Thomas. 2012. "Mexicans in America." In *Annual Meeting of the Population Association of America, San Francisco, CA*.

- Giorguli-Saucedo, Silvia E., Víctor M. García-Guerrero, and Claudia Masferrer. 2016. "A Migration System in the Making: Demographic Dynamics and Migration Policies in North America and the Northern Triangle of Central-America." *Mexico City: El Colegio de México, Center for Demographic, Urban and Environmental Studies*.
- Hamilton, Erin R., and Robin Savinar. 2015. "Two sources of error in data on migration from Mexico to the United States in Mexican household-based surveys." *Demography* 52, no. 4: 1345-1355.
- Huntington, Samuel P. 2009. "The Hispanic Challenge." *Foreign Policy*, October 28, 2009. <https://foreignpolicy.com/2009/10/28/the-hispanic-challenge/>
- Ibarraran, Pablo, and Darren Lubotsky. 2007. "Mexican immigration and self-selection: New evidence from the 2000 Mexican census." In *Mexican immigration to the United States*, pp. 159-192. University of Chicago Press.
- Kanaiaupuni, Shawn Malia. 2000. "Reframing the migration question: An analysis of men, women, and gender in Mexico." *Social forces* 78, no. 4: 1311-1347.
- Massey, Douglas S., Joaquin Arango, Graeme Hugo, Ali Kouaouci, and Adela Pellegrino. 1999. *Worlds in Motion: Understanding International Migration at the End of the Millennium: Understanding International Migration at the End of the Millennium*. Clarendon Press.
- Massey, Douglas S., Karen A. Pren, and Jorge Durand. 2016. "Why border enforcement backfired." *American Journal of Sociology* 121, no. 5: 1557-1600.
- Orrenius, Pia M., and Madeline Zavodny. 2005. "Self-selection among undocumented immigrants from Mexico." *Journal of Development Economics* 78, no. 1: 215-240.
- Portes, Alejandro, and Rubén G. Rumbaut. 2006. *Immigrant America: a portrait*. Univ of California Press.
- Portes, Alejandro, and Alejandro Rivas. 2011. "The adaptation of migrant children." *The future of children* (2011): 219-246.
- Rendall, Michael S., and Susan W. Parker. 2014. "Two decades of negative educational selectivity of Mexican migrants to the United States." *Population and development review* 40, no. 3: 421-446.
- Riosmena, Fernando, and Douglas S. Massey. 2012. "Pathways to El Norte: Origins, Destinations, and Characteristics of Mexican Migrants to the United States 1." *International Migration Review* 46, no. 1: 3-36.
- Rubalcava, Luis, and Graciela Teruel. 2007. "User's Guide: National Survey on Household Living Standards 2005."

- Secretaría de Educación Pública (SEP). 2012. *Sistema Educativo de los Estados Unidos Mexicanos, Principales Cifras, Ciclo Escolar 2011-2012*. [The Education System of Mexico, Main Statistics, School Year 2011-2012.] DF, Mexico: SEP. Available online at http://www.sep.gob.mx/es/sep1/sep1_Estadisticas. Accessed 1-23-2019
- U.S. Census Bureau. 2016. *Place of birth for the foreign-born population in the United States, 20016 American Community Survey 1-year estimates*. Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_1YR_B05006&prodType=table.
- Villarreal, Andrés. 2014. "Explaining the decline in Mexico-US migration: The effect of the Great Recession." *Demography* 51, no. 6: 2203-2228.
- Waters, Mary C., and Marisa Gerstein Pineau. 2015. "The integration of immigrants into American society. Panel on the Integration of Immigrants into American Society, Committee on Population. Division of Behavioral and Social Sciences and Education." In *National Academy of Science*.