Topic

The relevance of migrant selectivity to the outcomes of both migrants and their children receives increasing attention in the demographic literature. It is broadly assumed that migrants are a positively selected group, surpassing non-migrants in sending communities on both observable and unobservable characteristics. Migrant selectivity may account for the better labour market and health outcomes of immigrants relative to native-born of similar socioeconomic statuses (Feliciano, 2020; Ichou, 2014). Researchers attribute the variation between immigrants and the native-born in destinations that remain unexplained after the inclusion of standard demographic and socioeconomic controls to this *selectivity effect* (Feliciano, 2020; Ichou, 2014; R. R. Luthra & Platt, 2023). Despite great policy and scholarly interest in this effect, insights into the extent of observed selection for many countries and the labour market consequences of immigrant selectivity remains rather limited. Moreover, while claims for migrant selection and its significance for socioeconomic success are widespread, existing work usually only infers selection for international migrants (Hamilton, 2014; Iceland, 2021) and does not examine potential regional sources of variation in specifically *where* selectivity might yield economic returns[1].

In this paper we combine data from the 2007-2021 American Community Survey (ACS) with internationally standardised data on educational distributions around the world (Barro & Lee, 2013) to answer the following three research questions:

- What is the actual degree of educational selection of immigrants from Latin America who arrived in the United States as adults from 1960 to 2021?
- Do those who are more positively selected in terms of education have better labour market outcomes after we control for standard socioeconomic and demographic controls?
- Does the association between educational selection and labour market outcomes vary in areas of high versus low Latino concentration?

Latinos in the United States provide an ideal case in which to explore the association between immigrant educational selection and labour market inequality. Latin America to US migration represents one of the largest and most longstanding migration corridors in the world. Migrants from Latin America to the United States are at the medium or even upper distribution of the educational distributions in their sending countries, but they have far lower absolute levels of education relative to native-born US populations (Grogger & Hanson, 2011). Reflecting their absolute educational profile, Latino immigrants have historically been heavily concentrated in the secondary labour markets of specific regions of the United States, but this has more recently evolved since the 1990s (Lichter & Johnson, 2009), yielding substantial proportions of more recently arrived immigrants with higher levels of education and residing in so-called "new destinations" outside metropolitan and traditional agricultural regions of the south and west. Existing research has highlighted the importance of ethnic enclaves in understanding Latino labour market outcomes in the US (Flippen & Farrell-Bryan, 2021): we explore whether differences in returns to immigrant selection may drive some of these local effects.

Theoretical focus: Educational Selection and Labour Market Success

Migration imposes costs: financial, physical and psychological (Massey et al., 1993). Migrants, therefore, tend to be selected – to a greater or lesser extent – on demographic and socioeconomic factors that enable them to migrate successfully. These factors, in turn, are positively associated with labour market performance. Specifically, studies comparing migrants (or those intending to migrate) to non-migrants in their origin countries find that they have higher levels of educational attainment, better social networks and better health than their non-migrant counterparts (E. R. Hamilton & Huang, 2020; McKenzie & Rapoport, 2010; Riosmena et al., 2017). Studies of the receiving country labour market usually consider this differential selection indirectly, often by controlling for age or education when comparing the outcomes of immigrants of different origins or assessing inequality between immigrants and the native born. However, there is now increasing theoretical recognition that it is not just the *absolute* level of educational attainment that matters for labour market performance, but that the *relative position* of the immigrant in the sending country's

[1] An important exception examining educational selection and labour market returns is the European cross-national study by Schmidt et al 2022, which finds positive selection with mixed effects on labour market outcomes.

educational distribution may also be relevant – that is, the degree of their positive or negative educational selectivity.

The reason for this is because, for most research on labour market inequality, educational attainment is used not only as a measure of raw human capital or cognitive skills, but also a positional good that proxies for a host of other labour market relevant characteristics including social networks, non-cognitive skills, health and family background (Hollis, 1987). A key insight of recent research on inequalities between immigrants and their descendants and native majority populations is that the meaning of absolute educational levels as a proxy of relevant labour market characteristics will vary depending on the immigrant's country of origin (R. Luthra & Soehl, 2015), and their relative position on that country's educational distribution.

Labour Market Success

There are multiple potential mechanisms through which educational selection can provide positive labour market returns for migrants over and above their achieved levels of qualifications. One is that those who are selected on education should also be selected on cognitive skills and on other unobservable characteristics such as drive, motivation etc. that have helped them reach higher levels of attainment (Farkas, 2003), and that should also serve a potential migrant in the labour market as well. Second, we might anticipate that not only are migrants selected in their health, but that those who are more educationally selected – who have demonstrated the ability to attain a level of education that is higher up the distribution than the majority of their co-nationals – should be more positively selected than those who have not (Ichou & Wallace, 2019). Finally, those who are more selected educationally are assumed to have a social status in line with their position in the educational hierarchy of their country of origin, and thus higher than their educational level would imply relative to the US (Feliciano, 2020). This privileged status in the sending country brings social and cultural capital that act as resources following migration, which may in turn positively influence their labour market position.

Our first hypotheses are therefore that Latino immigrants to the United States will be positively selected on education, on average [H1] and that those who are more positively selected will have better labour market outcomes than those who are less selected, even net of absolute levels of education [H2].

Ethnic Enclaves

For educational selection to bring returns in the US labour market, the relative position associated with selectivity needs to be recognised and rewarded in the local area where the immigrant resides. For each of the mechanisms outlined above, this relative position will be more readily visible for employers or clients and customers who share cultural similarities with the immigrant: speaking the same language, being socialised and educated in a similar context, and sharing similar cultural markers of social class (accents, dress, consumption patterns) will render visible the "unobserved" relative position associated with the immigrant's location on the sending country educational distribution. For instance, whereas a US native may perceive a Spanish-speaking Mexican immigrant with an upper secondary degree as middling-to-low in the social class hierarchy, a fellow immigrant from Latin America who shares language and understanding of the Mexican education system may better be able to recognise his relative position as in the top quartile of the distribution. We therefore expect that returns to relative education will be more positive in areas of high Latino concentration, relative to areas of lower Latino concentration [H3].

Data and Methods

We use two datasets for this paper. The first is the Barro-Lee (2013) dataset, which provides international data on educational attainment distributions from 1950 to 2010 in 146 countries. Compiling data from UNESCO, Eurostat, and censuses and population surveys from around the world, the Barro-Lee dataset contains the distribution of educational attainment in the adult population by sex and five-year age group in seven categories (no formal education, incomplete primary, complete primary, lower secondary, upper secondary, incomplete tertiary and completed tertiary education). The second is the pooled 1% samples of the Integrated Public Use Microdata (IPUMS) files of the 2007–2021 ACS. This dataset, which replaced the long-form census, includes a household roster with information about the social, economic, and demographic traits of members of roughly 3 million US households every year (Ruggles et al., 2025). A major advantage of the pooled ACS is its large size, which allows us to focus exclusively on immigrants from Latin America, which

reduces variation in race, language and migration experience while still offering the heterogeneity in both absolute and relative levels of education necessary to evaluate educational selection and its consequences.

Our sample is restricted to adults ages 18-64 who immigrated to the US at the age of at least 18. This includes those who arrived from 1960-2021 from countries with coverage in the Barro-Lee dataset, resulting in 1,095,912 individuals born in 18 Latin American countries.

Educational selection is measured following the procedure described in Ichou (2014) . We first use information on certification and school leaving age to code our sample of immigrants' educational attainment into the seven Barro-Lee categories. Next, we match each immigrant in the ACS with the distribution of educational attainment of individuals of the same sex, country of birth, and five-year age group. We then compute the percentage of people of the same country of origin, sex, and age group who have a lower level of educational attainment, plus half the percentage of people with the same level of education. This measure potentially runs from 0-100 and can be interpreted as immigrant's position in the sending country educational distribution, with higher scores indicating more positive selection.

Ethnic enclaves: To assess whether the impact of educational selection varies in ethnic enclaves, we define these as residence in a Public Use Microdata Area (PUMA, areas of approximately 100,000 residents) where the proportion Latino is 125% or more of the national average of Latinos in the USA in each year. For multivariate analysis, we opted for the standardized percent of Latino in the PUMA of residence.

Labour market variables: We use four measures of labour market success:

Employed: a dichotomous variable of whether the individual was in work the previous week, as opposed to being out of the labour market or unemployed.

[Standard] Full-time, Full Year Work: we use the US Census definition of workers employed 40 or more weeks per year, for at least 35 hours per week in the past 12 months.

Logged Yearly Wage/Salary Income: this measure is restricted only to those with positive yearly income (N=747,735), logged to better approximate a normal distribution.

Occupation: this measure is restricted only to those who report having an occupation (N=895,033). Drawing on the work of Ganzeboom (2010), we translate 2010 US Census occupational codes into the 13 International Socio-economic Classes 2008 (ISEC-08), further reducing to four categories: white-collar work (Professionals, Managers, (ISEC 1-4), Clerical Routine (5)), blue collar work (sales and service routine (6) and managerial and skilled manual work (ISEC 10, 11) low skilled and agricultural work (ISEC 12, 13).

Controls: To adjust for potential confounders in the associations between educational selection labour market outcomes, and ethnic enclaves, we include both individual and regional (PUMA) level controls. Individual*:* we control for absolute levels of education (less than high school, HS graduate, some college, and college graduate), age, fluent English language ability, marital status (never married, married, divorce/widowed/separated), race (Black White, Other), number of children in household, year of migration, disability status, and year of observation.

Regional: following Lichter and Johnston (Lichter & Johnson, 2021), we control for whether the PUMA is designated as a metropolitan area, US region (NE, Midwest, South and West), percent recent Hispanic, status inequality, percent foreign born, percent in poverty, ethnic diversity, percent in poverty, percent employed in professional occupations.

Methods

We first present a description of the extent of educational selection across our sample and demonstrate sufficient variation in relative education within absolute education levels for Latino immigrants to the USA. Next, we regress employment (logistic), full-time/full-year work, standard employment, income (OLS), and occupation on relative education alongside absolute levels of education, residence in ethnic enclave as well as individual and regional controls. We next include interactions between relative education and residence in an ethnic enclave, to assess whether the impact of educational selectivity varies within and without areas of high Latino concentration. All analyses are weighted for representativeness with standard errors clustered at the PUMA level.

Initial Findings

Educational selection in the sample

Latino immigrants arriving as adults from 1960-2021 to the United States are moderately positively selected in terms of education. Male immigrants are, on average, more educated than 54% of non-migrant men of the same birth cohort in their sending country; women are more educated than 58% of their sending country peers. There is substantial variation around this mean, with a standard deviation for both men and women of 31 percentage points.

The association between educational selection, ethnic enclaves and labour market outcomes

Employment: Holding all controls constant, for both men and women, the association between relative education and employment is statistically significant and positive: each standard deviation of relative education increases the odds of employment by 29% for men and 19% for women. Residing in an ethnic enclave does not moderate this relationship: the interaction term for relative education and percent Latino is statistically insignificant for both sexes.

Standard employment: Relative education likewise increases the odds of full-time, full year employment: for men, each standard deviation increase in relative education is associated with 14% higher odds of standard employment; for women 13% higher odds. This positive relationship is strengthened in ethnic enclaves, with a positive interaction effect of 1.01 for men and 1.03 for women.

Logged Wage and Salary Income: For men, each standard deviation increase in relative education is associated with a 2% increase in wage and salary income; for women with a 1% increase. Here, the interaction effect with ethnic enclave is negative for men (0.99) but positive for women (1.01)

Occupation: Relative education is associated with higher odds of blue collar (1.13) and white collar (1.06) work for men, relative to an unskilled or agricultural occupation. This positive association is intensified in ethnic enclaves for blue collar work, with an interaction effect of 1.03. For women, relative education is not associated with increased odds in either blue collar or white collar work, and there is little interaction effect between relative education and residence in an ethnic enclave.

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