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English Language Proficiency and Wage Rates of Mexican Immigrants

Jeremy Sandford
Illinois Wesleyan University
Normal, Illinois

I. Introduction

Since 1965, the US has seen increasingly large numbers of immigrants crossing its borders. Indeed, more immigrants are arriving now than at any point in the past; the 1990's saw more immigrants enter the US than any previous decade (INS 1999). A disturbing corollary to the recent explosion in immigration is the corresponding decline of immigrant wages relative to the wages of natives. A cursory glance at the literature strongly suggests the changing national origin of immigrants as the main cause of this relative wage decline. As a prime example, Mexican immigrants now outnumber any other national group while having one of the biggest relative wage gaps, with Mexican immigrant males earning on average some 50% less than native males (Ruggles and Sobek, 1997).

That this wage differential is a problem is obvious. The reasons behind it are less obvious. Mexican immigrants tend to be segregated somewhat from the rest of US society; some 42% of Hispanics lived in predominantly Hispanic neighborhoods in 1990 (Chiswick and Miller, 1999). This is probably because of choice; immigrants feel most comfortable living with those who speak their language and share their culture. However, in choosing to live with other Mexican immigrants, they are choosing to live with people who have, on average, relatively little education, low English language skills, and scant earning power. Thus, employers will be less likely to open businesses and stores in Mexican neighborhoods, and simply by choosing to live among other Mexican immigrants they are choosing to live in economically depressed neighborhoods. Even the best and the brightest of the Mexican immigrants may be "pulled back" towards the "average" Mexican and may earn less than they might have had they not been Mexican.

In this paper, I propose that language deficiency is an important determinant of the wage gap between Mexican immigrants and US natives. English language deficiency prevents Mexican immigrants from overcoming their surroundings and assimilating into US society. It also prevents them from being rewarded for the human capital they do have. If this barrier is weakened or removed, so too may be much of the Mexican immigrant-US native wage gap.

This paper studies the effect of English language deficiency on the wage rates of Mexican immigrants. Using a sample of 81,059 labor market male Mexican Immigrants taken from Census PUMS data, I find that the direct effect of English language deficiency on earnings is virtually nonexistent for immigrants with low education and experience levels. The results show that only immigrants with at least a high school education or some US labor market experience will make less than their immigrant counterparts who speak English very well. The cost of language deficiency to those with some education or experience, however, is large. Indeed, the cost of English language deficiency to those with a college degree who speak no English is enough to completely offset the labor market gains associated with a college degree.

Continuing my analysis with a sample of 93,743 US male natives from the same data set, I find virtually no wage gap between natives and immigrants with little or no human capital. I then analyze the wage gap between natives and Mexican immigrants who do not speak English and find that English language proficiency can close between 2/3 and all of that gap.

II. Background

1990 US Census data shows that Mexican immigrants earn on average only about 53% of what US natives earn. However, within the Mexican immigrant group, there is considerable variation. Using self-reported information on English language proficiency, Mexican

immigrants who do not speak English at all earn only about half of what Mexican immigrants who speak English very well earn (Ruggles and Sobek, 1997). Table 1 presents statistics on average income of natives and 4 different groups of Mexican Immigrants. While descriptive statistics like this certainly pick up on other differences between the groups—in general, those with better English will be those who are better educated, for example—English language skills probably help explain earnings, even after controlling for these other factors.

Table 1:
Average Earnings for Natives and Mexican Immigrants by English Proficiency

Native	$27,702
Immigrants	
Very Well	$18,128
Well	$16,697
Not Well	$12,646
None	$9,717

It is clear that there is a significant earnings gap between Mexican immigrants and US natives. Hopefully, Mexican Immigrants earn less than US natives for some reason other than the fact that they are Mexican, and certainly human capital differences can explain some of the wage gap. For example, US natives had more than 5 extra years of education relative to Mexican immigrants in 1990 (Borjas, 1994). However, it certainly seems as if language may explain much of the gap too.

Why do English language skills matter so much? After all, many Mexican immigrants have high levels of human capital and are perfectly capable of performing many jobs as well as native English speakers. Labor demand theory composes much of the relevant framework used here. Bloom and Grenier (1996) suggest a hypothetical society in which everyone speaks only one of two languages, English and Spanish. People living in this society will quickly group themselves with others who speak their language to make it easier to work, shop, and socialize. The supply of labor for both parts of the society depends on the number of people in that group and their productive ability, which is dependant on their skills. Labor demand depends on the firm's perceived use for labor; if they expect their sales to increase, for example, they will hire

more workers. Likewise, labor demand may be different for English-speaking and Spanish-speaking workers. Firms with English-speaking management will have little use for Spanish speakers who, at best, can be taught to do menial tasks through demonstration and will not be able to interact with coworkers. Thus even well-educated, highly-trained Mexican immigrants will be of little use to an English-speaking manager.

If the English speakers are the dominant group in terms of numbers, culture, education, and wealth, this makes it much less likely that a Spanish speaker will be able to work for a Spanish-speaking manager who can fully utilize his skills, as English-speaking firms will hold most jobs. Spanish speakers will be forced out of necessity to look for jobs in the English-speaking world, where whatever human capital they have cannot possibly be put to full use. This suggests that even after controlling for human capital variables such as education, Spanish monolinguals will be worse off than English speakers.

McManus (1985) continues this type of analysis by pointing out that technological innovations will inevitably emerge to make workers more productive. There are economies of scale in research and development; as the English speakers are both more in number and more able to interact with coworkers, it is probably the English speakers who will develop most technological innovations. Clearly, English speakers will be able to learn about and use this new technology more quickly than those who do not speak English.

English speaking firms may tend to be larger in general than Spanish speaking firms simply because there are more available English speaking workers and consumers. As scale economies emerge in the production process itself, it is again the dominant language group who becomes comparatively more productive, as they are the ones most able to learn new technologies and to work in teams with their coworkers. The larger, English-speaking firms will

become more capital intensive and use higher levels of technology, spurring management to look for more educated workers and workers who can be more easily trained. Again, the minority language group is relegated to menial tasks that can be taught without verbal communication. Even educated and well-trained members of the minority language group will be of comparatively little use to management as they will be unable to acquire job-specific training or to communicate with their coworkers.

The minority language group in this hypothetical society is pushed out of many jobs simply because employers have comparatively less use for them. Just as employers hire productive workers over unproductive workers because they are more useful to the employer, employers shy away from hiring workers who do not speak the dominant language because they are less useful to that firm, and become even less useful over time as new technologies develop and economies of scale emerge.

Clearly, the framework discussed above fits the US. In 1989, US natives composed 91.3% of the US labor force, while Mexican immigrants made up 1.8%. At the same time, Mexican Immigrants made only half of what natives made (Ruggles and Sobek, 1997). Some of this has to do with human capital differences between the two groups. But, based on the analysis presented here, I hypothesize that, *ceteris parabus*, differences in language skills between white natives and Mexican-Americans will explain a large part of the difference in wages between the two groups.

Moreover, because non-English speakers will face a lower demand curve for their labor than they would have were they to speak English, I hypothesize that the costs of English language deficiency will be greater for individuals with more education and experience; these are the workers who should be making more, but their ability to be rewarded for their human capital

investments is hindered by their inability to communicate in the dominant language. High-skill jobs require more communication, both written and oral, than low-skill jobs. Thus even educated Mexican immigrants will be unable to graduate into more advanced jobs because they lack those communication skills. English language deficiency is therefore an overriding variable in that it erases what effect other human capital variables would have had on earnings.

III. English Proficiency as a Determinant of Income

Empirical Model

This study estimates a standard human capital equation with language variables added in. All data are from the 1990 5% Public Use Microdata Series (PUMS) from the US Census Bureau and made available in the form of IPUMS from the University of Minnesota by Ruggles and Sobek (1997). My sample consists of men over 18 who were born in Mexico and counted by the 1990 US Census as residents of the US. I dropped all individuals who reported 0 income for 1989. While some unemployed were omitted as a result of this, it is necessary to weed out those who did not work because of school, family obligations, or retirement. The sample is restricted to men because men and women may see different returns to their human capital. Marriage, for example, affects men and women in opposite ways. Women who marry generally receive reduced earnings as employers shy away from the prospect of maternity leave and the increasing turnover resulting from family responsibilities. On the other hand, men who marry are seen as stable and happy, and are rewarded for these traits in the labor market. Excluding women simplifies the results greatly without creating any sample size issues.

Different studies have used a variety of different measure of English proficiency. McManus (1985) was one of several to use the 1976 *Survey of Income and Education* (SIE) that

had numerous questions relating to English language proficiency. He used both personal language and self-reported English language proficiency to separate his sample into four groups, ranging from those who spoke English "not at all" to those who spoke it "very well". Richards (1998) used a dummy variable to indicate either speaking primarily English or little or no English. Chiswick (1991) used dichotomous dummy variables to measure both speaking and reading proficiency. One study, that of Bloom and Grenier (1996), simply uses Hispanic ethnicity as a proxy for English language deficiency.

This study follows McManus by measuring English language ability across a small range. PUMS data contain information on self-reported English language ability. Respondents rated themselves as speaking only English, speaking "very well", "well", "not well", or "not at all". I include 4 mutually exclusive dichotomous dummy variables measuring four of these categories, grouping together those speaking only English and those speaking "very well". This approach is both more precise than one dichotomous variable measuring language and will show the labor market return to intermediate changes in English language ability. Admittedly, using self-reported data on English language proficiency is somewhat subjective and unscientific. Unfortunately, a more precise measurement for such a large sample would carry a prohibitive cost, and is therefore impractical.

Table 2 shows the basic variables used and their expected signs. LNWAGE is the natural log of total earned income, which excludes income from welfare, social security, interest, and retirement. As this study is interested strictly in labor market response to greater English language ability, this is an appropriate variable. The regression uses a semilog model, as do many human capital studies (see McManus (1985), Trejo (1997), Chiswick (1991)). The coefficients are then interpreted as the percent change in earnings given some change in an

independent variable. The reason this works especially well with human capital models is that a variable like experience is then allowed to produce a certain percent change in earnings with each additional unit. So, if the coefficient to an experience variable was .01, that would mean that each additional year of experience produces a marginal increase of 1% on earnings.

Table 2:
Variables Included

Dependant Variable	
LNWAGE	Logged wages
Language Variables	
NONE (-)	1 if no English 0 otherwise
NOTWELL (-)	1 if speaks "not well" 0 otherwise
WELL (-)	1 if speaks "well" 0 otherwise
Control Variables	
HS (+)	1 if high school graduate and not college graduate, 0 otherwise
COLLEGE (+)	1 if college graduate 0 if not
LABOREXP (+)	Time in US since turning 18
REGION	4 discrete values indicating region of country
MARRIAGE (+)	1 if married 0 otherwise
AGE (+)	Continuous age variable
AGE^2 (-)	Squared AGE. Allows age to have quadratic effect

To measure English language ability, I include 4 different language variables. Those who speak only English or who speak "very well" form the omitted group. Each remaining variable then measures the labor market cost to that level of language deficiency. For example, if "not well" were to have a coefficient of -.10, that would mean that the labor market cost to speaking English only "not well" is 10% of earnings. These should all be negative, with "none" being the most negative and "very well" being close to 0.

HS and COLLEGE are mutually exclusive dichotomous dummy variables measuring whether or not that person is a high school graduate or whether or not he is a college graduate, respectively. More detailed educational information would be desirable, but this study is restricted by data availability. Separating education into two variables will, at least, allow a high school education and a college

education to have a different labor market value and will test the hypothesis that English language deficiency carries a greater cost at higher levels of education.

LABOREXP measures US labor market experience. It is defined as a person's time in the US since turning 18. For immigrants it will be either time since immigration or (age - 18), depending on whether or not they immigrated before they turned 18. This should be positive, as while workers gain more experience they acquire human capital through on-the-job training. Unfortunately, PUMS codes the data on year of arrival in the US in arbitrarily chosen, inconsistent ranges. I overcome this by assuming that each person immigrated at the midpoint of his range.

REGION is strictly a control to account for possible wage differentials in different parts of the US. NORTHEAST is omitted; the three included variables, SOUTH, MIDWEST, and WEST, will show the wage differential between the Northeast and that region.

MARRIAGE is a yes/no dummy variable for marriage. As my sample is composed entirely of men, I expect this to be positive.

Recall my second hypothesis that the costs of English language deficiency will be higher for those with more education and greater experience. I test this by including several interaction terms. The 3 included language variables will be interacted with the 2 education variables and the labor market experience variable, creating 9 interaction terms. If there is a significant coefficient to any one of the interaction terms, there is an interaction. For example, if the (COLLEGE * NOT WELL) interaction term has a significant negative coefficient, it means that speaking English "not well" cuts into the earnings gain associated with having a college diploma. I expect all 9 of these to be negative and significant.

Results

The results of the regression are summarized in Table 3. The Mexican immigrant sample consisted of 81,059 labor market men and had an adjusted R^2 of .185. Signs and magnitudes are, for the most part, as expected. Moreover, each of the coefficients is highly significant. The chosen functional form means that each coefficient is interpreted as the percent change in income given a one-unit change in the independent variable.

Marriage is predicted to increase earnings by 26.6%, other things equal. HS and COLLEGE are mutually exclusive variables; each coefficient therefore measures the increase in earnings over having less than a high school degree. Having a high school diploma increases earnings by 28.8%. Those with a college degree earn 72.6% more than those with less than a high school education, *ceteris parabus*.

The coefficient for LABOREXP is interpreted as the marginal percentage benefit for an additional year of US labor market experience, *ceteris parabus*, measured here as 2.6%. I pay more attention to the education and experience variables later on, when I relax the *ceteris parabus* assumption.

AGE and AGE^2 were included together to allow age to have a quadratic effect on earnings. Partially differentiating the regression equation with respect to age shows that an additional year of age increases earnings by (5.98 - .159 AGE)%. Age positively affects income through age 37, after which it negatively affects income. This is a somewhat lower age than might be reasonably expected. I attribute this to the relative youth of the Mexican-American cohort.

Table 3:
Regression Results for Mexican Immigrants:
Dependent Variable = LNWAGE

Constant	8.007
	(233.165)
Human Capital Variables	
MARRIAGE	.266
	(42.332)
HS	.288
	(25.415)
COLLEGE	.726
	(19.492)
LABOREXP	.02579
	(35.645)
AGE	.05980
	(41.584)
AGE^2	-.0007973
	(-47.108)
SOUTH	-.361
	(-16.419)
MIDWEST	-.03985
	(-1.699)
WEST	-.136
	(-6.323)
Language Variables	
NONE	-.150
	(-10.075)
NOT WELL	.04107
	(3.094)
WELL	.145
	(9.746)
Interaction Terms	
NONE * HS	-.151
	(-5.625)
NOT WELL * HS	-.210
	(-11.493)
WELL * HS	-.151
	(-8.812)
NONE * COLLEGE	-.565
	(-5.407)
NOT WELL * COLLEGE	-.669
	(-9.725)
WELL * COLLEGE	-.474
	(-7.524)
NONE * LABOREXP	-.01064
	(-9.717)
NOT WELL * LABOREXP	-.01071
	(-12.590)
WELL * LABOREXP	-.005579
	(-6.317)
R^2	.185
Sample Size	81,059

NOTES: t-values listed in parentheses. All variables are significant at the .99 level, except or MIDWEST, which is significant at the .9 level.

SOUTH, MIDWEST, and WEST are control variables of little interest to this study. The results reveal that the Northwest has the highest earnings, followed by the Midwest, the West, and then the South, *ceteris parabus*.

The language coefficients were all greater than was expected, predicting that for those with little education or experience, those with some language deficiency actually make more that those who speak fluently. For individuals with measured human capital, the relevant interaction terms must be summed to determine the total cost of English language deficiency. For example, for an immigrant with a college degree who speaks English only "well" and has 5 years of experience, the coefficients to the terms WELL and COLLEGE * WELL must be added together and the coefficient to LABOREXP * WELL must be multiplied by 5 and added in, yielding a 35.7% earnings cost to speaking only "well" to this individual.

Table 4 shows the total labor market effect of English language deficiency on individuals with various educational and linguistic levels, ignoring experience for the moment. The table is read by locating some individual's educational and linguistic intersection. The percentage given is the effect of that individual's English language deficiency on his earnings.

Table 4:
***Ceteris Parabus* Costs to Interaction Groups**

Education \ English	**None**	**Not Well**	**Well**	**Very Well/ Onlv**	**Total number**
Less than High School	-15%	+4.1%	+14.5%	0%	60,011
Number	11,516	22,129	14,399	11,967	
High School	-30.1%	-16.9%	-.6%	0%	18,563
Number	1,193	3,675	5,325	8,370	
College	-71.5%	-62.9%	-32.9%	0%	2,543
Number	130	403	517	1,493	
Total number	12,839	26,207	20,241	21,830	81,117

The effects of English language deficiency presented in Table 4 apply to immigrants with no US labor market experience. To determine the complete predicted effect of English language deficiency to some individual, start with the relevant value in Table 4 and then multiply that individual's US labor market experience by the interaction term between LABOREXP and the relevant language variable. For example, Table 4 predicts that a college graduate who speaks "not well" will make 62.9% less than a college graduate who speaks "very well", *ceteris parabus*. If that individual also has 10 years of US labor market experience, then multiply 10 by the coefficient to NOT WELL * LABOREXP from Table 3, equaling -.1071. Converting this to a percentage and adding it to -62.9 yields a 73.61% total earnings cost to that individual's English language deficiency.

My principal hypothesis, that English language proficiency will be positively correlated with income, is only partially supported by these results. There clearly is some relation, but at low levels of experience and education, the data actually show that those speaking "not well" or "well" earn more than those who speak English fluently. These somewhat nonsensical gaps are quickly closed with education or experience. For example, an individual without a high school diploma, with no experience, and who speaks English "not well" is predicted to earn 4.1% more than someone who speaks very well, all else equal. The same individual with only 5 years of US labor market experience makes 1.2% less than an individual who speaks "very well" and with 10 years of experience he makes 6.5% less, *ceteris parabus*.

My second hypothesis that the costs to English language deficiency are greater with higher levels of education and experience is strongly supported by these results. Those with a college degree who spoke no English are predicted to earn 71.5% less than fluent college graduates, while those with only a high school degree have a predicted cost to their language

deficiency of only 30.1%. Moreover, the data suggest that wages for those who are not fluent do not grow as fast as wages for those who are, as evidenced by the negative coefficients to the experience-language interaction terms. Thus the costs of English language deficiency increase with more education and US labor market experience.

IV. English Language Proficiency and the Native-Immigrant Wage Gap

Clearly, immigrants receive different rewards to their human capital depending on their level of English language proficiency. Given this, a natural extension is a look at how immigrant wages compare to the wages of US natives for different levels of language proficiency. Recall my original hypotheses. If employers are more likely to hire natives than immigrants because natives are more likely to be able to communicate in English, then a natural new hypothesis is that the group of Mexican immigrants who rate themselves as speaking English very well will be rewarded for their human capital in similar magnitudes to natives while those who cannot speak well will lag behind, failing to increase their earnings even with considerable human capital acquisitions.

To examine how immigrants with different levels of English language proficiency perform relative to US natives, I took an additional sample of 93,742 natives and used regression analysis to compare US natives to each of the Mexican immigrant language groups. I assume US natives to be proficient in their native language and compare the language groups by looking at their returns to human capital. All human capital variables are as defined as in Table 2. A linear dependant variable is used here to simplify the results and to make comparisons easier. The results of the regression analysis are summarized in Table 5.

Table 5:
Regression Results for Natives and Immigrants by English Language Proficiency:
Dependent Variable = Earned Income

		Immigrants			
	Natives	**Very Well**	**Well**	**Not Well**	**None**
Basic Income	$5,282	$6,611	$9,074	$8,786	$7,681
Marriage	$10,884	$5,735	$4,508	$3,109	$2,036
High School	$8,107	$5,476	$2,440	$1,320	$1,550
College	$19,032	$15,225	$4,523	$833	$3,837
1 year experience	$214	$401	$312	$192	$125
R^2	.193	.207	.095	.068	.047
Sample Size	93,742	21,814	20,227	26,188	12,834

NOTES: Dependant variable is Earned Income. All variables are significant at the .999 level, except for College-Not Well, which is significant at the .9 level.

These results strongly reinforce those from the previous section. English language proficiency does not seem to be a determinant of earnings for those individuals with little or no human capital. What is somewhat surprising is that neither does nativity. In fact, natives with no measured human capital are predicted to make less than all immigrant groups, even those who speak no English. I suggest that this seemingly counter-intuitive discrepancy can be explained by noting that while able immigrants may be prevented from, for example, finishing high school because of their language deficiency, the natives who fail to complete high school may have other problems pushing down their earnings.

Also of note is that immigrants who speak well or very well see better returns to US labor market experience than US natives. This suggests that those immigrants start out earning lower wages than natives but catch up somewhat over time.

More interesting and relevant than the actual regression results is a comparison between US natives and Mexican immigrants with varying levels of English language proficiency. Table 6 predicts how much natives and Mexican immigrants with increasing levels of human capital will earn, according to the regression presented in Table 5. The leftmost data column of the

Table 6:
Predicted Income by Nativity, English Proficiency, and Human Capital

	None	HS	College	College Married	College Married 20 years	College Married 50 years	College Married 55 years
Natives	$5,282	$13,388	$32,419	$43,303	$47,583	$54,003	$55,073
Immigrants							
Very Well	$6,611	$12,087	$27,312	$33,047	$41,067	$53,097	$55,102
Well	$9,074	$11,514	$16,037	$20,545	$26,785	$36,145	$37,705
Not Well	$8,786	$10,106	$10,939	$14,048	$17,888	$23,648	$24,608
None	$7,681	$9,231	$13,068	$15,104	$17,604	$21,354	$21,979

table shows predicted income for individuals with no measured human capital (for example someone who did not finish high school, is not married, and has no US labor market experience). The next column on the right predicts income for high school graduates; followed by college graduates; married college graduates; and married college graduates with 20, 50, and finally 55 years of US labor market experience. This is an arbitrary ordering designed only to suggest the trend in the relevant wage differentials as human capital levels increase.

A glance at Table 6 lends support to my hypothesis that Mexican immigrants who speak better English will perform more closely to US natives than those immigrants who speak poor or no English. It also reinforces my earlier conclusion that the returns to English language proficiency, here measured by reading upwards in a column, are much greater for individuals with higher levels of human capital. Table 6 is restated in Table 7, which shows the wage difference from natives for each language group at each human capital level.

Table 7:
Immigrant-Native Wage Differentials Based on English Proficiency

	None	HS	College	College Married	College Married 20 years	College Married 50 years	College Married 55 years
Very Well	-$1,329	$1,301	$5,107	$10,256	$6,516	$906	-$29
Well	-$3,729	$1,874	$16,382	$22,758	$20,798	$17,858	$17,368
Not Well	-$3,504	$3,282	$21,480	$29,255	$29,695	$30,355	$30,465
None	-$2,399	$4,157	$19,351	$28,199	$29,979	$32,649	$33,094

Although the wage differentials between natives and all immigrant groups increase as individuals gain education and get married, Mexican immigrants who speak English well or very well see higher returns to US labor market experience than natives do. This bridges the native-immigrant wage gap and, in fact, immigrants who speak very well and who have worked in the US for 55 years are predicted to earn $29 more than US natives.

Accepting that immigrant English language proficiency may be correlated with other human capital variables such as education or marriage, something can be said about how much of the immigrant-native wage gap can be explained by language proficiency. For example, Table 7 predicts Mexican immigrants who cannot speak any English and have only a HS diploma to make $4,157 less than natives, while those who can speak very well are predicted to make only $1,301 less than natives. Thus 68.7% of the gap between immigrants speaking no English and natives can be explained by language. Table 8 illustrates.

Table 8:
Percentage of Non-Native Wage Gap Explained by English Language Proficiency

	HS	**College**	**College Married**	**College Married 20 years**	**College Married 50 years**	**College Married 55 years**
Percentage	68.7%	73.6%	63.6%	78.3%	97.2%	100.1%

This type of analysis needs to be taken cautiously; the adjusted R^2 for the regressions Table 8 is based on range from .05 to .19. There is still considerable variation in wages not explained by anything in this paper. Those speaking better English may have come to the US with skills more adaptable to the US labor market. Moreover, anyone who has been in the US for 55 years and cannot speak English very well probably has some other deficiency driving down his earnings, suggesting that some of the gaps discussed here may be inflated to begin with.

The results presented in Table 8 do strongly suggest that those Mexican immigrants speaking very well perform reasonably similarly to natives, after controlling for human capital. Although their rewards to human capital acquisitions are slightly lower than those for natives, their wages grow more quickly over time and can eventually catch up to native wages. It is reasonable to say, with qualification, that English language deficiency is almost wholly responsible for the immigrant-native wage gap after controlling for human capital.

V. Conclusions

The labor market cost of English language deficiency is negligible or even negative at low levels of experience and education. This would seem to say that English is not required in entry-level, low-paying jobs that do not demand many skills. Indeed, it makes sense to think that employers may be indifferent between those who can and cannot speak English in such jobs, as there is little use for training or teamwork that would require more than a few words of communication. The fact that unskilled natives earn less than unskilled immigrants supports this possibility.

The cost to English language deficiency escalates steeply, however, increasing at more than one percent per year of US experience for those who speak little or no English. Although a high school diploma increases one's earnings by 28.8%, *ceteris parabus*, this gain is completely wiped away for those who cannot speak English at all. Likewise, having a college degree confers an earnings advantage of 72.6% over those who don't have a high school degree but this gain also dissolves entirely for those who speak no English. The labor market cost to speaking English only "well" is still sizeable, but is less than half the cost of speaking no English.

It is clear that language deficiency prevents Mexican immigrants from being rewarded for their human capital investments. Moreover, it seems that English language proficiency is negatively correlated with earnings not because employers strictly prefer greater English language ability, but because English language deficiency prevents immigrants from making use of their acquired human capital in the US labor market. This could be because poor English skills force Mexican immigrants into ethnic neighborhoods where labor demand might be low or it could be simply because a college degree means little to an employer if the potential employee cannot speak English.

Proficient immigrants perform similarly to natives, and therefore, as Table 8 indicates, the earnings gap between natives and proficient immigrants is only a small fraction of the earnings gap between natives and deficient immigrants. Indeed, Table 7 predicts immigrants with high levels of human capital to make more than natives. While attempting to decompose the earnings gap between natives and immigrants is an imprecise procedure, The results discussed here nonetheless strongly suggests that English language deficiency is the most important factor pressing down immigrant wages after controlling for human capital.

My results are consistent with the literature, particularly with Richards (1998) who used PUMS data and came up with similar results. Kwainoe (2002) performed a similar study using NLSY data and also found that unskilled immigrants made more than unskilled natives. By demonstrating so strongly that the costs of English language deficiency increase monotonically with experience and education, my study is somewhat unique from those that merely measure one set cost to some level of English language deficiency. Indeed, my study would suggest that there is little value to simply stating that there is a cost of some percent to not speaking English, as that cost varies widely across education and experience levels.

One avenue available for future research is a similar study with a more precise measurement of English language proficiency. Panel data sets such as the NLSY may include standardized test scores that can be used as a proxy for English language proficiency and even other types of human capital (see O'Neil, 1990). Ideally, future social science data sets will recognize the importance of language proficiency and incorporate it in a more meaningful way.

My results suggest that if the US were to institute some sort of immigrant quota program, it would be better served to use English language proficiency as the principal criterion instead of education or some other variable. Moreover, the US would be wise to fund and promote English language adult education programs that could indirectly raise immigrant earnings by increasing their returns to their human capital.

So, it may be because those who speak little or no English are likely to live in a Hispanic neighborhood, which are more likely to be economically depressed and thus may lack high-paying jobs. Or it may be that US employers simply do not want Spanish monolinguals for anything other than menial tasks that are easily taught through demonstration. Clearly, though, the cost of English language deficiency to Mexican immigrants is greater at higher levels of education and experience. The results of Section IV suggest that after controlling for education and marriage, English language is an important enough determinant of income to explain a very large portion of the immigrant-native wage gap, even explaining all of it for Mexican immigrants with significant US labor market experience.

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