# LEP Language Disability, Immigration Reform, and English Language Acquisition 

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# LEP Language Disability, Immigration Reform, and English Language Acquisition Alberto Dávila and Marie T. Mora* 

English-language acquisition has become an issue of growing debate in the U.S., particularly regarding the perceived lower tendency Hispanic immigrants have to acquire this skill. We note that as this debate develops, attention should be given to the differential economic incentives Hispanic migrant populations have to acquire the English language and on how these incentives might be shaped by federal policies. In particular, recent conceptual work (e.g., Dustmann and Gorlach 2015) suggests migrants allocate time between home and host areas by maximizing an objective function that includes spatial income, consumption and preferences, and that, via this process, destination-specific human capital acquisition becomes more economically attractive as the expected duration in the destination area increases. Policies that alter this spatial dynamic, including duration in the U.S. as well as other factors impacting workleisure tradeoffs, also change migrants' English-language investment decisions.

Consider two policies that, in this conceptual context, might differentially impact the English-language acquisition of Hispanic migrant populations: federal policies on Englishlanguage disability benefits and immigration reform. Since the 1979 Medical-Vocational Guidelines of the Social Security Act, the Social Security Administration (SSA) considers the inability to communicate in the English language to lower the employability of individuals; verbal communication becomes the education metric under the "vocational factors" for the purposes of assessing a disability. This language-disability policy, in theory, discourages limited

[^0]English proficient individuals with a strong preference for leisure to acquire (or self-report) English fluency. Arguably, island-born Puerto Ricans as U.S. citizens, and Cuban immigrants as political refugees, are the Hispanic migrants most impacted by this policy, as noted below.

Mexican immigrants, in contrast, are more likely affected by changes in immigration policy. In terms of early contemporary immigration reform, spanning from the Immigration Reform and Control Act of 1986 into the 1990s, this policy was characterized by relatively strong border enforcement and de facto lax interior enforcement strategies (see, e.g., Dávila, Pagán and Soydemir 2002). The incentives for undocumented immigrants to remain in the U.S. for extended periods of time thus increased (e.g., Angelucci 2012). Nevertheless, recent immigration reform spanning the 2000s to date (Amuedo-Dorantes and Pozo 2015) has a stronger interior emphasis by empowering local law officials in the enforcement of immigration reform. This enforcement strategy conceptually reduces the duration spell in the U.S., lessening the incentives to acquire English-language fluency, but it also increases incentives for immigrants to adopt measures to reduce the probability of detection (assuming that Englishlanguage fluency proxies for legal status). Early contemporary immigration reform, then, increased the benefits of English-language acquisition for immigrants, while more recent policies have an ambiguous impact on English-language acquisition among Hispanic groups, particularly for Mexican immigrants.

## I. English Language Proficiency and the Likelihood of Reporting a Disability

With regards to English-language acquisition and the foregoing language disability policy, consider evidence reported in Table 1, based on data from the 2013 American Community Survey (ACS) in the Integrated Public Use Microdata Series (IPUMS). Island-born Puerto Ricans on the U.S. mainland were more likely to report a cognitive disability (defined in
the notes to Table 1) than Cuban immigrants and especially Mexican immigrants, consistent with our conceptual-framework discussion. The gaps were particularly pronounced among the limited-English-proficient (LEP), conventionally defined here as those individuals who did not speak the English language well. Nearly 23 percent of LEP Puerto Ricans reported a cognitive disability, compared to 6.7 percent of Cuban immigrants and three percent of Mexican immigrants. While the gaps narrow when focusing on U.S. citizens, they remain significant. ${ }^{1}$ The three LEP groups were more likely to report a disability than their English-proficient counterparts. Incentives to acquire English may be lower among island-born Puerto Ricans than Mexican immigrants, and to a lesser extent, Cuban immigrants.

Table 1: Percentage of Mexican Immigrants, Cuban Immigrants, and Island-Born Puerto Ricans Ages 25-64 Who Reported a Cognitive Disability in 2013, by English-Language Fluency

|  | All*** |  |  | U.S. Citizens Only*** |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| English | Mex. | Cuban | Island- | Mex. | Cuban | Island- |
| Proficiency | Imm. | Imm. | Born P.R. | Imm. | Imm. | Born P.R. |
| All | 3.6 | 6.1 | 11.7 | 2.7 | 5.6 | 11.7 |
| LEP | 5.7 | 11.2 | 22.6 | 3.0 | 6.7 | 22.6 |
| English proficient | 3.0 | 5.0 | 9.4 | 2.4 | 4.9 | 9.4 |

*** The differences between each group per year are statistically significant at the one percent level. Source: Authors' estimates using the 2013 ACS in the IPUMS.
Notes: Individuals with a "cognitive disability" include those reporting having difficulty in learning, remembering, concentrating, or making decisions because of a physical, mental, or emotional condition, as well as individuals reporting whether they have any physical, mental, or emotional condition lasting six months or more that makes it difficult or impossible to perform basic activities outside the home alone.

One explanation for how English-language proficiency relates to the differences in reporting disabilities could be driven by occupational distributions as well as regional effects.

[^1]The usage of Social Security benefits also varies geographically. Consider the following model.

## (1) $\quad$ Disability $=f($ Hispanic Group, LEP, LEP Hispanic, $U$ ),

where binary variables identifying the specific Hispanic ethnicity are included in Hispanic Group, and LEP Hispanic interacts the Hispanic ethnic groups with a binary variable equal to one for LEP individuals (defined using the convention as those who do not speak the English language well). The vector $U$ contains variables conceivably related to the probability of reporting a disability, including standard demographic information, occupation, and regional variables (available from the authors).

The probit regression results from estimating Eq. (1) using the 2013 ACS indicate that island-born Puerto Ricans were more likely than Mexican immigrants and to a lesser extent, Cuban immigrants, to report a disability, other things the same; the coefficients on the Mexican and Cuban immigrant variables are: -0.477 (0.047) and -0.165 (0.056). Moreover, being LEP related to the likelihood of reporting a cognitive disability among island-born Puerto Ricans and to some extent Cuban immigrants, but this was not so for Mexican immigrants. The coefficients (robust standard errors) on being LEP, LEP Mexican immigrants, and LEP Cuban immigrants are: $0.285(0.061),-0.352(0.066)$, and $-0.146(0.094)$. These results support the view islandborn Puerto Ricans report higher frequencies of cognitive disabilities.

## II. Hispanic Immigrant Language Acquisition

We next investigate the English-language acquisition among these three Hispanic groups employing public-use microdata based on the 1990 and 2000 decennial censuses and the 2010 ACS in the IPUMS, made available by Ruggles et al (2015). We create a pseudo-longitudinal dataset by constructing two synthetic cohorts in time-consecutive datasets with these data: (1) the 1990s cohort, which contains individuals ages 25-34 in 1990, and 35-44 in 2000, excluding
immigrants migrating after 1990; and (2) the 2000s cohort, containing individuals ages 25-34 in 2000, and $35-44$ in 2010, excluding individuals who migrated after 2000. These cohorts are relatively early in their work lifecycles, such that they will have more time to reap Englishlanguage returns.

Table 2 provides information on the English-language fluency of the two cohorts for the three groups of interest: Mexican immigrants, Cuban immigrants, and island-born Puerto Ricans in each year. We collapse the English proficiency categories into a single metric to proxy for a continuous English fluency index; this index ranges from zero (no English is spoken) to one (English is spoken "very well" or is the only language spoken at home). We also report the percentage of the cohort who spoke the English language well.

Table 2: English-Language Fluency of Mexican Immigrants, Cuban Immigrants, and IslandBorn Puerto Ricans in the Synthetic Cohorts

| English Proficiency | 1990s Cohort |  |  | 2000s Cohort |  |  | English Acquisition Differed between Cohorts? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1990 | 2000 | Difference <br> Significant? | 2000 | 2010 | Difference Significant? |  |
| Mexican immigrants: |  |  |  |  |  |  |  |
| English index | 0.541 | 0.568 | Yes*** | 0.515 | 0.557 | Yes*** | Yes*** |
| Percent English prof. | 51.5 | 55.6 | Yes*** | 48.1 | 53.6 | Yes*** | Yes* |
| Cuban immigrants: |  |  |  |  |  |  |  |
| English index | 0.851 | 0.874 | Yes*** | 0.674 | 0.709 | Yes** | No |
| Percent English prof. | 88.2 | 89.7 | No | 67.2 | 72.5 | Yes*** | Yes* |
| Island-born Puerto Ricans: |  |  |  |  |  |  |  |
| English index | 0.779 | 0.783 | No | 0.814 | 0.822 | No | No |
| Percent English prof. | 81.5 | 81.7 | No | 85.0 | 85.3 | No | No |

*** Difference is significant at the 1 percent level.
** Difference is significant at the 1 percent level.

* Difference is significant at the 1 percent level.

Source: Authors' estimates using the 2013 ACS in the IPUMS.
Notes: The 1990s cohort includes individuals ages 25-34 in 1990, and 25-44 in 2000, excluding immigrants who migrated after 1990. The 2000s cohort includes individuals ages 25-34 in 2000, and 25-44 in 2010, excluding immigrants who migrated after 2000.

Table 2 contains several noteworthy findings. First, Mexican immigrants in both cohorts had considerably lower English fluency than Cuban immigrants and Puerto Ricans. Second, the 2000s Cohort of both Mexican immigrants and Cuban immigrants had lower English proficiency than their counterparts in the 1990s Cohort. Third, island-born Puerto Ricans had lower English fluency rates than Cuban immigrants in the 1990s cohort, although not so for the 2000s cohort. Finally, among Mexican immigrants, and somewhat for Cuban immigrants, the average English proficiency index significantly increased in both cohorts during the following decade. The percentage of English-fluent individuals also increased among both groups between 2000 and 2010, as it did among Mexican immigrants between 1990 and 2000.

The observation that immigrants acquire English the longer they live in the U.S. is as expected. The seemingly greater acquisition among the 2000 cohort versus the 1990 cohort among Mexican immigrants suggests that the perceived returns from English acquisition were higher in the 2000s; perhaps the risk of detection and deportation induced some Mexican immigrants to acquire English-language, offsetting the potential disincentive of acquiring this skill from a reduction in potential duration in the U.S. It might also be that some Mexicans in the 1990s cohort migrated to the U.S. after 1990 (despite reporting an earlier migration period), thus reducing the observed acquisition of English in this cohort. Some supporting evidence can be found in this cohort's increased size (from 1.34 million to 1.44 million) between 1990 and 2000. In contrast, the size of the 2000 s cohort was relatively stable, at approximately 2.52 million in 2000 and 2010.

Table 2 also reveals that Cuban immigrants in the 2000s cohort did not acquire more English during the following decade than their 1990s counterparts. The English proficiency among island-born Puerto Ricans was stable in both decades. These findings underscore
differences in English-skill investments across Hispanic migrant groups.
To what extent do differences in other characteristics explain these differences? Consider the following model:

## (4) English proficiency $=f($ Hispanic Group, 10 Years, Hispanic Group x 10 Years, V)

where 10 Years represents a binary variable indicating the end of the cohort period (i.e., the year 2000 for the 1990s cohort and the year 2010 for the 2000s cohort). Other characteristics are included in vector $V$ (see the Notes to Table 3 for details). We estimate Eq. (4) first as an ordered probit model using the English proficiency index as the dependent variable, and then as a probit model using the binary English fluent measure. Table 3 contains the regression results for the key variables of interest; the remaining results can be obtained from the authors.

Table 3 - Selected Regression Results for the English-Language Proficiency of Mexican Immigrants, Cuban Immigrants, and Island-Born Puerto Ricans in the Synthetic Cohorts

|  | Ordered Probit Results <br> (Dependent Variable $=$ <br> English Proficiency Index) |  | Probit Results <br> (Dependent Variable $=1$ if <br> English Prof.; $=0$ Otherwise) |  |
| :--- | :---: | :---: | :---: | :---: |
| Characteristic | 1990s Cohort | 2000s Cohort | 1990s Cohort | 2000s Cohort |
| 10 years later | $0.679^{* * *}$ | $1.072^{* * *}$ | $0.756^{* * *}$ | $1.334^{* * *}$ |
|  | $(0.150)$ | $(0.204)$ | $(0.190)$ | $(0.279)$ |
| Mexican immigrant | $-0.291^{* * *}$ | $-0.550^{* * * *}$ | $-0.352^{* * *}$ | $-0.621^{* * *}$ |
|  | $(0.035)$ | $(0.016)$ | $(0.044)$ | $(0.020)$ |
| Mexican immigrant | 0.034 | $0.151^{* * *}$ | $0.104^{* *}$ | $0.203^{* * *}$ |
| 10 years later | $(0.038)$ | $(0.042)$ | $(0.048)$ | $(0.055)$ |
| Cuban immigrant | $0.357^{* * *}$ | $-0.275^{* * *}$ | $0.331^{* * *}$ | $-0.391 * * *$ |
|  | $(0.052)$ | $(0.025)$ | $(0.066)$ | $(0.029)$ |
| Cuban immigrant 10 | $0.099^{*}$ | $0.135^{* *}$ | 0.036 | $0.230^{* * *}$ |
| years later | $(0.057)$ | $(0.067)$ | $(0.072)$ | $(0.086)$ |
| Pseudo ${ }^{2}$ | 0.118 | 0.116 | 0.180 | 0.176 |
| N (unweighted) | 100,218 | 156,211 | 100,218 | 156,211 |
| N (weighted) | $3,501,738$ | $5,680,534$ | $3,501,738$ | $5,680,534$ |

*** Difference is significant at the 1 percent level.
** Difference is significant at the 1 percent level.

* Difference is significant at the 1 percent level.

Source: Authors' estimates using PUMS data from the 1990 and 2000 decennial censuses and the 2010 ACS.

Notes: The parentheses contain robust standard errors. Only civilians are included. Other control variables include the percentage of Spanish speakers in the public-use microdata area; education; residing in potential experience; experience ${ }^{2}$; gender; recent immigrant (arrived to U.S. 1985-1990 in the 1990s cohort, and 1995-2000 in the 2000s cohort); and a set of occupational binary variables (professional, executive, and managerial; health care and technical support; official and administrative support; sales and services; agriculture; blue collar (base); and no reported occupation). The "cut points" for the ordered probits are: $-1.432,-0.382$, and 0.371 for the 1990s cohort; and $-1.652,-0.563$, and 0.183 for the 2000 s cohort.

As expected, differences in English acquisition across the three Hispanic groups in the 2000s cohort exist when accounting for other characteristics affecting English acquisition. Mexican immigrants had a higher rate of English acquisition than island-born Puerto Ricans, especially in the 2000s cohort, ceteris paribus. Mexican immigrants in the 2000s cohort also appeared to acquire more English than Cuban immigrants, consistent with expectations. These findings suggest that Mexican immigrants in the U.S. have greater incentives to learn English than other Hispanic migrants, a finding predicted by the conceptual framework above.

Moreover, among Mexican immigrants, the English acquisition was significantly higher in the 2000s cohort than for the 1990s cohort as per our previous discussion. Other findings (not shown to conserve space) are consistent with the literature. For example, higher levels of education related to greater levels of English proficiency.

## III. Discussion

Given the foregoing results, two issues come to mind. First, do changes in Englishlanguage acquisition reflect actual changes in English fluency or do they indicate changes in the tendencies to self-report English fluency? From our policy discussion earlier, it was noted that Hispanic immigrants might be influenced by policy to invest in English fluency, but the same can be said about the influence of policy on self-reporting English-language proficiency. That is, in the case of Mexican immigrants seeking to reduce their detection odds (and potential deportation), they might report higher English-language skills. Also, in the case of island-born Puerto Ricans seeking language disability benefits, this logic suggests that they would have an
incentive to under-report English fluency. Self-reporting characteristics in most national datasets is legally non-tractable information, but as Antman and Duncan (2015) note in their study of changes in self-reported race/ethnicity resulting from Affirmative Action policies, identity selfreporting via these data might represent lower-bound tendencies in tractable decisions.

Second, to the extent that some of the English-language acquisition of Mexican immigrants exists as the result of immigration policy, this acquisition occurs because some of these immigrants want to avoid detection and deportation and the potential monopsonistic penalties they incur (as suggested by Viscusi (1978) for workers with relatively inelastic labor supplies) and because of the human capital incentives that such skill provides in the labor market. Clearly, our empirical framework and data do not allow us to test for these selfreporting and English returns possibilities. Future research with more specific data and methodologies might be able to test for these interesting possibilities.

## IV. Concluding Remarks

We show that the English-language acquisition (or self-reporting of English fluency) tendencies differ across Mexican immigrants, Cuban immigrants, and island-born Puerto Ricans. These analyses serve as an application to the temporary migration theory developed by Dustmann and Gorlach (2015), and provide insights to how policy can impact the Englishlanguage investments (or self-reporting tendencies) of Hispanic groups.

Recent developments in both language-disability and immigration reform policies that might further impact the English-language acquisition of Hispanic populations. For example, because of recent fraudulent reporting of disability benefits in Puerto Rico and because hundreds of Puerto Ricans received LEP-disability benefits despite the fact that Puerto Rico is a predominantly Spanish-speaking territory, there have been some policymakers asking for
changes in this program. Recently, Senator Jeff Sessions (R., Ala.) raised concerns that the Obama administration was broadly applying the education rule under the Social Security Act to allow individuals to receive disability payments solely because they cannot speak English. Also, more invasive immigration enforcement strategies have been phased in through Secure Communities, which allow municipal law enforcement authorities to report undocumented immigrants to federal law enforcement officials increasing undocumented-worker detection odds. It will be of interest for future research to investigate how these changes will impact the skill acquisition, including languages, of Hispanic populations in the future.

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[^1]:    ${ }^{1}$ We use the 2013 ACS because it is the most recent ACS currently available. However, the results qualitatively hold in other ACS years as well as in the 2000 census. It should also be noted that the results also hold when restricting the sample to non-veterans; veterans are disproportionately represented among island-born Puerto Ricans, but veteran status does not appear to be an explanatory factor into the relatively high rates of reporting disabilities.

