The Impact of State Licensing Regulations on Low-Skilled Immigrants: The Case of Vietnamese Manicurists

KATHY J. KRYNSKI
Kenyon College, krynski@kenyon.edu

DAVID E. HARRINGTON
Kenyon College, harrington@kenyon.edu

Follow this and additional works at: http://digital.kenyon.edu/economics_publications

Part of the Economics Commons

Recommended Citation

This Article is brought to you for free and open access by the Economics at Digital Kenyon: Research, Scholarship, and Creative Exchange. It has been accepted for inclusion in Faculty Publications by an authorized administrator of Digital Kenyon: Research, Scholarship, and Creative Exchange. For more information, please contact noltj@kenyon.edu.
The Impact of State Licensing Regulations on Low-Skilled Immigrants: The Case of Vietnamese Manicurists

By Maya N. Federman, David E. Harrington, and Kathy J. Krynski*

The number of people living in the United States who cannot speak English, or cannot speak it well, more than doubled from 1980 to 2000. This is a visible—actually, audible—effect of the recent surge in immigration, which increased the fraction of foreign born from 6 percent in 1980 to 11 percent in 2000. Less noticeable is that recent immigrants are less skilled than earlier waves of immigrants, with fewer high-school graduates relative to natives of the same age. Low-skilled immigrants are often drawn to jobs in the service sector and sometimes choose to migrate to areas with shortages of low-skilled labor. The dispersion of immigrants across occupations and geography may be impeded, however, by state licensing regulations, which specify the minimum qualifications for a range of low-skilled occupations, such as manicurists, beauticians, nurse’s aides, and taxicab drivers.

We estimate the effects of state regulations on the entry of Vietnamese into manicuring and their dispersion across the country. Vietnamese entered manicuring in large numbers in the 1990s beginning in areas with large enclaves, such as California, and spreading throughout much of the country. By 2000, 41 percent of manicurists were Vietnamese and 5 percent of all Vietnamese workers were manicurists, compared to only 0.04 percent of non-Vietnamese workers. Vietnamese immigrants share many of the characteristics that set immigrants apart from natives: 30 percent report speaking English poorly or not at all and 38 percent of adult Vietnamese immigrants have not graduated from high school. Also, almost all adult Vietnamese (94 percent) are immigrants.

While all states require manicurists to be licensed, the requirements vary widely, especially from the vantage point of low-skilled Vietnamese immigrants. Thirty-five states do not require manicurists to know much (if any) English: Florida has no exam; California, Texas, and Washington offer exams in Vietnamese; 15 states allow the use of interpreters or dictionaries; and in 16 states applicants can bypass the English-only exam by transferring their licenses from another state. In contrast, 16 states require some level of English proficiency, either indirectly by requiring manicurists transferring a license to pass a separate exam on state laws, or directly by requiring applicants to pass an English test or restricting reciprocity to only those who took licensing exams given in English.1 The required amount of training also varies considerably, ranging from 100 to 600 hours at state-approved cosmetology schools. Finally, many states require manicurists to be either high-school graduates or to have completed a minimum of seven to ten years of schooling.

Previous studies have estimated the impact of licensing laws on high-skilled immigrants (Adriana D. Kugler and Robert M. Sauer, 2005), minorities (Stuart Dorsey, 1980), barbers (Robert J. Thornton and Andrew R. Weintraub, 1979), and workers with different amounts of education (M. Morris Kleiner, 2000). Also, Madeline Zavodny (2000) examines whether declaring English to be the official state language affects the earnings of limited-English proficient workers. This is the first study,

* Federman: Department of Economics, Pitzer College, 1050 North Mills Avenue, Claremont, CA 91711 (e-mail: Maya_Federman@pitzer.edu); Harrington: Department of Economics, Kenyon College, Gambier, OH 43022 (e-mail: Harrington@kenyon.edu); Krynski: Department of Economics, Kenyon College, Gambier, OH 43022 (e-mail: Krynski@kenyon.edu). We thank Todd D. Kendall, Gerald Oettinger, Robert F. Tamura, and seminar participants at Claremont McKenna College, Clemson University, and the W.E. Upjohn Institute for Employment Research for helpful comments. We appreciate the financial support provided by Pitzer College and the J. and Paul G. Himmelright Chair in Economics at Kenyon College.

1 Directly: District of Columbia, Illinois, Mississippi, Nebraska, South Carolina, Tennessee, Utah, and West Virginia. Indirectly: Idaho, Iowa, Kansas, Minnesota, Missouri, North Dakota, Ohio, and Vermont.
However, that estimates the effects of licensing regulations on the entry of immigrants into low-skilled service occupations and their dispersion across the country.

To estimate the effect of these regulations, we collected individual-level records on 319,000 manicurists with active licenses in 2003 from the occupational licensing agencies of 35 states. These states include all of the important gateway states and omit mostly small states that have not yet computerized their records.\(^2\) We identified Vietnamese manicurists using an algorithm described in Federman et al. (2006) and then aggregated the records to construct county-level variables such as Vietnamese manicurists per capita. We also use the 5-percent public-use micro-data sample (PUMS) of the 2000 Census to obtain more detailed information for 2,782 individual manicurists.

I. The Effects of Licensing on the Quantity and Composition of Manicurists

If licensing regulations are enforced and binding, we should see differences in the characteristics of manicurists across states. Hence, we first test for whether these differences exist using the census sample of manicurists. We find that manicurists in states that require some level of English proficiency are 13.7 percentage points more likely to report speaking English well or very well than are manicurists in other states.\(^3\) On the other hand, minimum schooling requirements have no statistically discernable effect on educational attainment of manicurists.

Table 1 presents regressions that predict the number of Vietnamese, non-Vietnamese, and total manicurists per 1,000 residents using the county-level licensing data for 2003. Our measures of state regulations are an indicator variable for whether some level of English proficiency is required for a manicurist’s license and the required number of hours of training.

We do not include the minimum schooling requirements, as they do not appear to be enforced. We include the number of Vietnamese per 1,000 residents in 1990 and its interaction with the regulation variable for English proficiency. Other control variables are the county’s income per capita, the percent of its population living in an urban area, the number of Vietnamese per capita in the rest of the state in 1990, and regional fixed effects.

The quantity and composition of manicurists is related to the initial concentration of Vietnamese in states without an English proficiency requirement. A one-standard-deviation increase in the initial number of Vietnamese per 1,000 residents in 1990 is associated with 0.15 more Vietnamese manicurists per 1,000 residents in 2003, an increase of 70 percent of a standard deviation. Increases in the initial Vietnamese population are also associated with fewer non-Vietnamese manicurists and more manicurists overall per capita.\(^4\)

The interaction terms imply that the English proficiency requirement nearly eliminates the increase in the number of Vietnamese manicurists and the total number of manicurists associated with increases in enclave strength. Hence, the English proficiency requirement flattens the natural gradient between Vietnamese manicurists and initial Vietnamese concentration in states with an English proficiency requirement. English proficiency requirements are likely to have a larger impact in counties with greater initial concentrations of Vietnamese because these counties are likely to contain a disproportionate share of Vietnamese with poor English language abilities and to be more attractive destinations for migrating Vietnamese manicurists. Our estimates also imply that 100 hours of additional required training reduces the number of Vietnamese manicurists by 0.019 per 1,000 residents, a 17.6 percent decrease relative to the sample mean.

Our estimates could be biased if state licensing regulations are endogenous. For example, unobserved hostility toward immigrants could directly discourage their entry as well as promote passage of English proficiency requirements.

---

\(^2\) The omitted states are: Alabama, Alaska, Connecticut, Delaware, District of Columbia, Hawaii, Iowa, Louisiana, Montana, Nebraska, Nevada, North Dakota, Rhode Island, South Dakota, West Virginia, and Wyoming.

\(^3\) This decreases to 10.6 upon controlling for education, age of entry, and years since entry, suggesting some positive selection of those with better English skills into the occupation in these states.

\(^4\) The implied displacement rate is consistent with those estimated in Federman et al. (2006).
Table 1—Manicurists per 1,000 Population

<table>
<thead>
<tr>
<th>Variables</th>
<th>Vietnamese</th>
<th>Non-Vietnamese</th>
<th>Total</th>
<th>Means (s.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (s.d.) of dependent variable</td>
<td>0.108</td>
<td>0.543</td>
<td>0.651</td>
<td>—</td>
</tr>
<tr>
<td>English proficiency required</td>
<td>0.005</td>
<td>−0.097</td>
<td>−0.092</td>
<td>0.327</td>
</tr>
<tr>
<td>(0.222)</td>
<td>(0.817)</td>
<td>(0.863)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vietnamese per 1,000 population in 1990</td>
<td>0.086**</td>
<td>−0.032*</td>
<td>0.054**</td>
<td>0.537</td>
</tr>
<tr>
<td>(0.013)</td>
<td>(0.121)</td>
<td>(0.126)</td>
<td>(1.741)</td>
<td></td>
</tr>
<tr>
<td>Proficiency required × Vietnamese per 1,000</td>
<td>−0.068**</td>
<td>0.019</td>
<td>−0.049*</td>
<td>0.123</td>
</tr>
<tr>
<td>(0.008)</td>
<td>(0.013)</td>
<td>(0.010)</td>
<td>(0.773)</td>
<td></td>
</tr>
<tr>
<td>Hours of required training (100s)</td>
<td>−0.019*</td>
<td>0.060</td>
<td>0.041</td>
<td>4.10</td>
</tr>
<tr>
<td>(0.007)</td>
<td>(0.073)</td>
<td>(0.074)</td>
<td>(1.48)</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.62</td>
<td>0.17</td>
<td>0.21</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Robust standard errors corrected for clustering at the state level are reported. The regressions also control for income per capita, urbanization, Vietnamese per capita in the rest of the state in 1990, and census region fixed effects. Sample size is 2,469 counties.

* Denotes statistical significance at the 5-percent level.

** Denotes statistical significance at the 1-percent level.

However, English proficiency requirements often arose due to general rules about occupational licensing that are unrelated to a desire to require manicurists to know English, such as requiring separate exams on state laws. Our results are very similar when we rely only on variation in English proficiency requirements emanating from exams on state laws, and also when we control separately for states that offer licensing exams in Vietnamese, which is also potentially endogenous. Additionally, the estimated coefficients on the interaction terms are nearly identical when we control for unobserved state characteristics using state fixed effects.

Finally, we also examine the occupational choice of Vietnamese immigrants more directly using the sample of Vietnamese workers over the age of 25 from the 2000 Census. We estimate a probit model of being a manicurist that is a function of state licensing regulations and English language ability, measured using indicator variables for whether the worker reported being able to speak English very well, well, not well, or not at all. Since requiring manicurists to have some level of English proficiency is likely to be a greater barrier for individuals who speak English poorly, we also include interaction terms between the indicator variables for English language ability and the English proficiency requirement.

The estimates reported in Table 2 imply that manicuring is an attractive occupation for workers with more limited English skills. In states without an English proficiency requirement, Vietnamese who speak English “not well” or “well” are more likely to be manicurists than those who speak it “very well,” 2.1 and 1.6 percentage points, respectively. The few Vietnamese who do not speak English at all are no more likely to be manicurists than those who speak it very well, presumably because manicurists need some minimal ability to communicate in English.

The negative interaction term implies that the predicted increase in the likelihood of being a manicurist for those speaking English “not well” is nearly eliminated in states with the English proficiency requirement. Vietnamese who speak English “well” are just as likely to be manicurists in these states. Hence, English proficiency requirements impact primarily those with poor English skills. In contrast, these English proficiency requirements and interactions are not statistically significant when applied to assembly work, an occupation that is also attractive to those who do not speak English well.

Finally, the required number of hours of training is not a statistically significant determinant of the likelihood of Vietnamese workers being manicurists, contrasting with our earlier result that requiring more hours of training reduces the number of Vietnamese manicurists per capita.
TABLE 2—DECISION TO BE A MANICURIST AMONG VIETNAMESE WORKERS

<table>
<thead>
<tr>
<th>Variables</th>
<th>Probit derivatives</th>
<th>Means (s.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether a manicurist (1 = yes)</td>
<td>0.048</td>
<td></td>
</tr>
<tr>
<td>English proficiency requirement (EPR)</td>
<td>0.008 (0.14)</td>
<td>0.099 (0.299)</td>
</tr>
<tr>
<td>Speaks English: &quot;well&quot;</td>
<td>0.016** (0.003)</td>
<td>0.364 (0.481)</td>
</tr>
<tr>
<td>Speaks English: &quot;not well&quot;</td>
<td>0.021** (0.005)</td>
<td>0.283 (0.451)</td>
</tr>
<tr>
<td>Speaks English: &quot;not at all&quot;</td>
<td>-0.007 (0.006)</td>
<td>0.030 (0.170)</td>
</tr>
<tr>
<td>EPR × &quot;well&quot;</td>
<td>0.001 (0.011)</td>
<td>0.033 (0.179)</td>
</tr>
<tr>
<td>EPR × &quot;not well&quot;</td>
<td>-0.017** (0.006)</td>
<td>0.029 (0.167)</td>
</tr>
<tr>
<td>EPR × &quot;not at all&quot;</td>
<td>-0.014 (0.012)</td>
<td>0.004 (0.061)</td>
</tr>
<tr>
<td>Hours of required training (100s)</td>
<td>0.002 (0.002)</td>
<td>4.14 (1.63)</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>0.13</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Robust standard errors corrected for clustering at the state level are reported. The regressions also control for age, age squared, nativity, years in the United States, sex, education, urbanization, and census region fixed effects. The sample size is 21,021 individuals.

** Denotes statistical significance at the 1-percent level.

II. Do Licensing Regulations Affect the Dispersion of Vietnamese Manicurists?

Anecdotal evidence suggests that Vietnamese manicurists are geographical “pioneers,” spreading out as they establish new nail salons across the country. Using the 2000 Census, we find that Vietnamese manicurists are more than twice as likely as other Vietnamese workers with similar characteristics to have moved between states in the past five years. This is true for both males and females, although the difference is slightly larger for males. Not surprisingly, we also find that Vietnamese manicurists are more dispersed across the country than other Vietnamese. Over the 1990s, the Vietnamese became more dispersed, largely due to the increasing dispersion of Vietnamese manicurists.

To test whether state licensing requirements impede the migration of Vietnamese manicurists into new markets, we focus on the 30 percent of counties that had no Vietnamese residents in 1990. By 2003, 19 percent of these 757 counties had a Vietnamese manicurist. We find that counties in states requiring some level of English proficiency were 5.7 percentage points less likely to have a Vietnamese manicurist by 2003, controlling for county income per capita, urbanization, the initial Vietnamese residents per capita in the rest of the state, and regional fixed effects. Similarly, requiring an additional 100 hours of training reduces the likelihood of having a Vietnamese manicurist by 4.5 percentage points. Although these pioneers are a small percentage of Vietnamese manicurists and the Vietnamese population overall, they are likely to be the leading edges of the dispersion of Vietnamese.

III. Conclusion

States began licensing manicurists long before the arrival of large numbers of Vietnamese immigrants under the rationale that manicurists must be trained in the proper use of chemicals and sanitation practices to prevent injuries and the spread of infectious diseases. For example, the director of the cosmetology board in Arizona argues that the elimination of licensing would be “disastrous,” citing its contribution to controlling Mycobacterium fortuitum, a “leprosy-like bacterium.” While licensing manicurists may produce health and safety benefits, it appears to create barriers to entry, imposing costs on potential entrants and consumers.

We present evidence that the natural gradient between Vietnamese manicurists and Vietnamese residents is suppressed in states with English proficiency requirements. Vietnamese who speak English poorly are especially likely to stumble over these regulatory hurdles, making them less likely to be manicurists in these states. English proficiency requirements may actually impede assimilation by restricting entry into an occupation in which immigrants arguably face lower costs of learning English and receive benefits from doing so via higher earnings. They also affect the movement of Vietnamese manicurists into counties with no initial Vietnamese population. This occupation appears to promote dis-

---

5 Examination of earnings using census data suggests that there are returns to better communication skills for Vietnamese manicurists.
persion as geographical pioneers seek new markets. Finally, these regulations result in fewer manicurists overall, which is likely to raise the price of manicures and reduce consumer options, especially since the Vietnamese have pioneered the ubiquitous, stand-alone nail salon.

We also present evidence that increasing the required amount of training reduces the number of Vietnamese manicurists per capita and dissuades Vietnamese pioneers from entering new markets, although it is statistically insignificant in regressions explaining the choice to enter manicuring. The number of hours required appears excessive in most states if the goal is to ensure health and safety. The Colorado Sunset Commission, for example, found that only 90 hours of the required 350 hours of training for manicurists in Colorado focused on health and safety issues.

More research is needed on the effect of state licensing regulations, especially ones that differentially affect immigrants who speak English poorly. We need to test whether the alleged benefits of regulations exist and think about ways of reforming them to better balance benefits and costs. Our research suggests that doing so would benefit low-skilled immigrants and potentially consumers, while helping to foster the assimilation of immigrants.

REFERENCES


