

How English Experience and Employment Sector Influence Immigrants' Socioeconomic

Assimilation

By

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Abstract:

An abundance of research suggests that an immigrant's English experience is a major determining factor in the success of their socioeconomic assimilation. Most scholars equate English experience with English fluency, or the ability to speak English. However, Social English Use, or the frequency and comfort with which a person uses English in social settings, is a form of English experience that is theoretically unique from English fluency. This research seeks to compare fluency and Social English Use to determine the distinct influence that each has on immigrants' socioeconomic and linguistic assimilation in the United States. Using the 2003 New Immigrant Survey (n = 2,348) and Ordinary Least Squares regression, I determine the effect that each form of English experience has on immigrant income both within and across occupational industries. I find that although English fluency has a stronger positive linear relationship with socioeconomic status (SES) than Social English Use ($\beta=0.523$ vs. 0.224 , $p \leq 0.01$), this differs across occupational industry. I also find that Social English Use moderates the relationship between immigrants working in professional occupations and SES ($\beta=0.338$, $p = 0.051$). My findings suggest that ensuring opportunities to use English in social settings may help immigrants to the U.S. obtain and succeed in professional occupations.

Table of Contents

Introduction.....	1
Literature Review.....	2
Data and Methodology.....	9
Discussion.....	20
Conclusion.....	22
References.....	26

Introduction

Research shows that there is both a disparity in earnings between immigrants and native-born Americans, and between different immigrant groups as well. There is empirical evidence, for example, that Latino immigrants have lower rates of wage growth than other immigrant groups, and that after ten years their wage growth stalls compared to native-born Americans (Lubotsky 2007). An immigrant's socioeconomic status (SES) is dependent upon several interlocking factors, including language ability and familiarity. Previous research suggests that immigrants' earnings in the United States are strongly correlated with their English Fluency. In a cross-sectional study of linguistic trends among immigrants to the U.S., Xi (2013) discovered that the average English Fluency of new immigrants is cyclical, and that when fluency is high, so are average wages. Immigrants work in a variety of occupations with different occupational language demands. While it has been established that occupational industry has a significant influence on socioeconomic mobility, both among native-born Americans and immigrants to the U.S., less is known about the relationship between language and immigrant earnings within occupational industries (Stolzenberg 1990). Further exploration in this area will highlight the ways in which English language experience can influence socioeconomic status.

A void exists in assimilation research at the intersection of language's and occupational industry's influence on immigrant earnings. As jobs within the segmented labor market vary drastically in the skills, education, social, and cultural capital that are needed for success, it stands to reason that an immigrant's experiences with the English

language might well have a varying influence on socioeconomic status depending on occupational industry (Restifo, et al. 2013; Portes and Rumbaut 2001). In this study I will use an assimilation framework and employ the New Immigrant Survey (NIS), a nationally-representative study of immigration, to examine how the relationship between occupational industry and two different measurements of immigrants' English language experience (English Fluency and Social English Use) influences immigrants' income among full-time employed, documented immigrants.

Literature Review

As of the 2016 American Community Survey, immigrants who had full-time, year-round employment earned about \$10,000 less per year on average than their American-born counterparts, suggesting the importance of key factors of assimilation such as language, location, and occupation (United States Census Bureau 2017). There is current debate about whether these differences reflect key points of assimilation. On one side, proponents of traditional theories of assimilation do not necessarily view the wage gap as a cause for concern, but rather as the first step toward upward mobility and eventual socioeconomic and cultural assimilation (Bean, et al. 2004; Mouw and Chavez 2012). Proponents of segmented assimilation theory, however, argue that immigrants lagging behind their American-born counterparts in SES is a problem and is indicative of the risk of limited opportunities and downward assimilation (Portes and Rumbaut 2006; Mouw and Chavez 2012).

Language and Assimilation

Research in the field of assimilation studies suggests that language is a crucial component of the holistic immigrant experience. While English proficiency remains a key indicator of occupational success, moving to the U.S. speaking a non-English language is not without some benefits. For lower-class immigrants, speaking a non-English language provides entry into enclave communities, which have been shown to help new arrivals to the U.S. cope with the cultural and financial difficulties of resettlement (Zhou and Xiong 2005). Passing non-English language skills on to the American-born offspring of immigrants is a major factor in the transmission of cultural identity across generations (Spence, et al. 2011).

Speaking a non-English language can be beneficial to immigrants in the U.S., but the drawbacks of not speaking English far outweigh the benefits of speaking a non-English language. Pierre Bourdieu (1991) describes speaking the dominant language in the host country as a form of social capital which is crucial to immigrants. Lacking this form of social capital can have a long-term impact on SES and cultural assimilation. Bourdieu discusses the importance of language in depth in *The Logic of Practice* (1990). He describes an individual's language experience as a major component of that individual's capital within the "field of power," a system by which economic, social, and governance decisions are made, in which an immigrant cannot fully take part without adequate experience in a given nation's language of use. Bourdieu also explains that a market for language exists, and that linguistic competence opens the door for socioeconomically relevant linguistic profits on that market (Bourdieu 1991). Huntington (2004) argues that

in the U.S., the weight of adhering to the linguistic market is placed almost solely on the shoulders of immigrants, leaving those who fail to adhere to American-born linguistic values to fall behind socioeconomically. This is because they are unable to exact the same influence within the field of power as an individual who does carry the social capital of strong English experience.

Smits and Gunduz-Hosgor (2003) applied Bourdieu's analysis in a study of language as a social resource among Kurdish and Arabic women in Turkey. They found that while speaking a non-dominant language may unify ethnic groups and provide individuals with access to resources within ethnic communities, individuals who did not speak Turkish found themselves lacking in a crucial form of social capital and limited in their ability to make use of social resources beyond those existing within their ethnic communities. This corroborates the findings of Huntington (2004) and suggests that immigrants living in the U.S. who do not speak English are similarly lacking an important source of social capital, which limits their socioeconomic resources both in the workplace and in the social structure at large.

International Assimilation

The influence of language experience on the SES of immigrants is regarded as crucial to assimilation around the world. However, national responses to the concept of mandating and funding compulsory or government endorsed language learning programs for immigrants are mixed. While there has not been a particularly strong push for the implementation of this type of program in the U.S., several countries have

government mandated language learning programs in place for immigrants to ease the difficulty of assimilation (Danzer and Yaman 2016). The purpose of these programs is twofold: first, they exist to reduce the fiscal costs of non-productive immigrants. Immigrants who are well integrated into their host societies are more likely to find and keep gainful employment, and are less likely to suffer mental health issues (Danzer and Yaman 2016; Arevalo, et al. 2015). Second, they make it easier for non-immigrants to adjust to immigrants in their communities. Immigrants are more likely to be accepted in their communities if they show proficiency in the local language and are less likely to move to so-called “ethnic ghettos” that hold negative connotations in the minds of locals (Danzer and Yaman 2016; Kim, et al. 2012; Von Grunigen, et al. 2012; Piwoni 2015).

In Sweden, immigrants who do not speak Swedish are expected to take Swedish language classes provided by the government. Rooth and Ekberg (2006) found that individuals who invested more time in these classes and gained better proficiency in Swedish had higher levels of occupational mobility in Sweden after eighteen months. In Germany, immigrants are strongly encouraged to take part in German integration programs, classes which teach the German language, German customs, and German culture and history to immigrants (Latcheva and Herzog-Punzenberger 2011). These classes have been both lauded and condemned in German political discourse, but individuals who take part in them do show more comfort with the German language and higher SES than individuals who do not (Piwoni 2015; Klopp 2002; Downs 2003).

It is a cause of some concern for the overall wellbeing of immigrants to the U.S. that programs like these in Germany and Sweden are not broadly accessible in the U.S., as they have shown positive results in Europe. For example, in the U.S., immigrants from the former Soviet Union are notable for their particular struggle adapting to the English language (Logan and Rivera Drew, 2011; Chiswick 1993). As a direct result of this difficulty, men from the former Soviet Union earn as much as 33 percent less in the U.S. than immigrant men from other European countries (Chiswick 1993). Making English language programs more accessible to immigrants who struggle with English might reduce the disparity in earnings between immigrants who pick up English with relative ease and those who do not.

Occupational Industry

Occupational industry has an influence on the linguistic assimilation of immigrants. Chiswick and Miller (2005) assert that immigrants who work alongside other immigrants of the same ethnicity or national origin gain competence in the host language more slowly than immigrants who do not. This suggests that immigrants working in occupational industries with a high percentage of immigrant workers are, in general, less likely to gain proficiency in the host language as quickly as immigrants who work in occupational industries with fewer immigrant workers (Mouw and Chavez 2012). Furthermore, Chiswick and Miller (2010) find that in the U.S., occupational industries that require more proficiency in the English language offer higher average wages.

Immigrants face unique difficulties when they enter the job market in their host nations. Prejudice and discrimination, for example, often bar even highly skilled immigrants from finding adequate employment (Mace, et al. 2005; Carr 2004). Several scholars have found that most skilled workers who migrate to another country do not find work in the field in which they are skilled (Horverak, et al. 2013; Mahroum 2000; Aykan and Berry 1996; Oliver 2000; Chan 2001). In particular, immigrants are frequently denied jobs following interviews, especially when they apply for jobs in industries or offices with low immigrant representation (Horverak, et al. 2013; Regmi, et al. 2009; Agerstrom and Rooth 2008; Cotton et al. 2007). This discrimination forces immigrants to seek employment in occupational industries where their immigrant status will not be a signifier of “poor fit” (Kristof-Brown 2000; Cable and Judge 1997).

The segregation of immigrants into occupational industries with high percentages of immigrant workers, so called “brown-collar industries,” has been well documented (Catanzarite 2000). Catanzarite (2000; 2003) shows that when occupations gain a reputation for being “immigrant jobs,” they become less desirable, less prestigious, and pay lower wages. Furthermore, immigrants who are clustered into these occupations have little control over any aspect of the labor process, including occupational growth (Waldinger and Lichter 2003). The satisfaction and wage-gap between brown collar work and blue and white-collar work is of particular concern because the percentage of immigrants working in brown-collar occupations is increasing over time as American reliance on technology increases. Immigrants have less access to information technology than native-born Americans, and as online employment seeking becomes more

common, immigrants are placed at a further disadvantage when seeking work outside of the brown-collar sector (Ono and Zavodny 2008).

Measurement

Most literature relevant to the influence of language on the SES of immigrants to the U.S. uses English Fluency (i.e., a person's ability to speak, read, and write using English) as the primary measurement of an immigrant's English language experience. Although English Fluency is an important measurement of assimilation, many immigrants come to the U.S. with some degree of English Fluency, which is highly correlated with other factors that influence SES such as education level and parents' SES (Xi 2013). Less frequently used is the measurement of English use. This differs from English Fluency in that it is not necessarily a measurement of linguistic competence, but of linguistic assimilation (Espenshade and Fu 1997; Stevens 1992). Although English Fluency and English use are highly correlated, they do not overlap entirely (Espenshade and Fu 1997). Because different jobs require different levels of English Fluency, the success or lack thereof an immigrant has in gaining English Fluency is largely influenced by the occupational industry of the immigrant. However, using English socially requires more effort to assimilate on the part of immigrants, many of whom could continue to interact with their ethnic communities without using English (Miller 2014).

Data and Methodology

Data

My study is conducted using the New Immigrant Survey (NIS), a nationally representative multi-cohort retrospective survey conducted by Princeton University and designed specifically for documented immigrants to the U.S. (NIS 2006). The most recent full cohort was surveyed in 2003, with a follow-up survey completed between 2007 and 2008. The 2003 survey, which drew 8,573 adult respondents, contains a wealth of social, demographic, health, family, and work information regarding the pre-immigration and post-immigration lives of respondents and their families. Respondents included in this study include adults who are employed full time, responded to queries regarding English language fluency and English language use, were able to categorize their employment into a specific industry, reported their previous year's income, and reported their age and sex. This ensured that children, individuals without full time employment, and missing data did not interfere with the results of the regression. Of the 8,573 surveyed adults, 5,617 either were not employed, were not employed full time, or did not report their previous year's income. An additional 48 respondents did not respond to queries regarding English language Fluency or English language use. An additional forty respondents did not report their age. Of the remaining respondents, 520 did not categorize their employment into a specific industry. These criteria eliminated 72.4% of the respondents, leaving a sample of 2,348 respondents in my analysis ranging in age from 18 to 82.

This study is conducted using multiple linear regression. The dependent variable (DV) is the log-transformed annual income of the respondents. Income is a composite variable created using the sum of the following variables: total annual income from self-employment, total annual income from wages and salaries, total annual income from professional services, and total annual income from tips. I log-transformed this variable to reduce the skew of the total annual income distribution.

The independent variables (IVs) are as follows: English Fluency, English Use, and Occupational Industry. Additionally, I include age, age², and sex as control variables. I include age as a control variable because a person's age impacts their earning power in the workforce. However, the relationship between age and income is not linear, as earnings typically peak in middle age and then decline. Age² is therefore included as a control to adjust for nonlinearity. I control for sex because women typically earn less money than men and often have different occupations. Without controlling for sex, much of the income disparity in my findings would be resultant of the gender wage gap. The NIS measures English Fluency using three variables: English speaking ability, English reading ability, and English writing ability. Less than 3% of otherwise eligible respondents responded to all three queries, but each individual included in my analysis responded to the English speaking ability query. I used the English speaking ability variable as my measurement of English Fluency. English speaking ability is an ordinal variable. A score of one indicates a high level of English speaking ability, a score of two indicates a moderate level of English speaking ability, a score of three indicates a low level of English speaking ability, and a score of four indicates no English speaking ability.

I reverse coded the variable for ease of interpretability, so that a score of one indicates no English speaking ability and a score of four indicates a high level of English speaking ability.

The NIS does not specifically measure English use. However, it does measure the frequency with which respondents speak English socially. This is an adequate measure of English use, because cultural and social assimilation are connected more with English use than they are with English Fluency (Miller 2014; Leighly 2001 Espenshade and Fu 1997). I recoded the variable into a dummy variable, in which a value of one indicates that a respondent always or frequently speaks English socially, while a value of zero indicates that a respondent rarely or never speaks English socially. I was concerned that despite the theoretical differences between English fluency and social English use, these two variables would be problematically collinear. As such, I conducted a Variance Inflation Factor (VIF) test alongside each of my models to ensure that they were sufficiently distinct.

The NIS uses occupational industry codes from the U.S. Census Bureau to designate the occupational industry of its respondents. These are categorized into over 500 distinct occupations arranged within 26 industries (IPUMS 2018). I designated four distinct occupational industries based on similarities in skill set, physicality, and required education: agriculture and construction, manufacturing, retail and service, and professional. These distinct occupational industries are similar to those used by the United States Bureau of Labor Statistics (BLS) but are not identical due to a lack of

respondents in some categories and differences between the BLS and Census Bureau categorization systems (BLS 2018).

Results

Respondents in my sample vary by age, sex, income, English language experience, and occupational industry. *Table 1* and *Table 2* show the descriptive statistics of the respondents, as a whole and by occupational industry respectively. Mean income is highest among immigrants working in professional jobs, and lowest among immigrants working in retail. The mean income for individuals who frequently use English socially is higher than the mean income for individuals who do not frequently use English socially across occupational industries. The same trend is true for English Fluency, with the notable exception that a lack of English Fluency does not appear to bar individuals working in agriculture and construction from higher incomes. It is also worth noting that across occupational industries, individuals with higher levels of English Fluency and Social English Use are younger on average than individuals with lower levels of English Fluency and Social English Use.

Table 1: Descriptive Statistics of Full-Time Employed Documented Immigrant Adults in the United States (N= 2,348)

English Speaking Ability	Mean Age	English Experience %	Median Income (US\$)
High	34 (9.302)	33.4	41,000 (65,561)
Moderate	35 (9.371)	30.2	25,000 (73,563)
Low	37 (9.750)	26.5	14,000 (52,378)
None	42 (11.504)	10.1	10,000 (88,681)
Social English Use			
Always or Frequently	34 (9.254)	35.2	38,000 (70,337)
Never or Infrequently	37 (10.205)	64.8	18,000 (67,255)
Total	36 (9.983)	100.0	22,000 (69,234)

(Standard Deviation); Data derived from 2003 New Immigrant Survey

Table 2: Descriptive Statistics of Full-Time Employed Documented Immigrant Adults by Occupational Industry (N = 2,348)

	Agriculture and Construction (N = 238)					Manufacturing (N = 395)					Retail (N = 694)					Professional (N = 1,021)				
	Mean Age (years)	English Experience %	Median Income (US\$)	Mean Age (years)	English Experience %	Median Income (US\$)	Mean Age (years)	English Experience %	Median Income (US\$)	Mean Age (years)	English Experience %	Median Income (US\$)	Mean Age (years)	English Experience %	Median Income (US\$)	Mean Age (years)	English Experience %	Median Income (US\$)		
English Speaking Ability																				
High	33 (9.604)	15.1	33,500 (36,421)	36 (8.671)	23.0	55,000 (56,419)	33 (11.056)	24.9	17,300 (64,654)	34 (8.672)	47.3	55,000 (67,056)								
Moderate	34 (8.594)	27.7	30,000 (31,429)	37 (8.617)	27.3	32,000 (142,930)	33 (10.470)	31.3	13,200 (68,297)	35 (8.738)	31.0	35,000 (38,294)								
Low	36 (9.572)	38.2	15,000 (25,795)	37 (9.400)	33.4	18,000 (29,485)	36 (9.811)	33.9	12,000 (62,029)	39 (9.843)	16.0	14,000 (62,060)								
None	42 (11.624)	18.9	15,000 (148,713)	42 (10.458)	16.2	10,600 (22,377)	40 (10.256)	9.9	8,400 (108,284)	45 (13.565)	5.7	8,750 (18,763)								
Social English Use																				
Always or Frequently	34 (11.026)	15.5	28,000 (42,456)	37 (8.403)	27.3	57,000 (112,559)	32 (10.086)	29.8	15,000 (52,090)	34 (8.390)	46.5	55,000 (62,965)								
Never or Infrequently	36 (10.053)	84.5	21,000 (73,842)	38 (9.728)	72.7	19,000 (68,096)	36 (10.370)	70.2	13,000 (76,993)	38 (10.298)	53.5	22,000 (53,286)								
Total	36 (10.216)	100.0	21,000 (69,967)	38 (9.387)	100.0	24,000 (84,528)	35 (10.622)	100.0	13,100 (70,455)	36 (9.621)	100.0	35,000 (59,460)								

(Standard Deviation); Data derived from 2003 New Immigrant Survey

For immigrants to the U.S., both English language experience and occupational opportunity are determining factors of socioeconomic status (Espenshade and Fu 1997; Stolzenberg 1990). The key question in this analysis is to what degree Social English Use and English Fluency interact with particular occupational industries in determining expected income, but it is worthwhile to first examine how Social English Use, English Fluency, and occupational industry influence income individually. The first four regression models in my analysis, (displayed in *Table 3*, examine the relationships between income and my independent variables without including interaction effects. Model 1 measures the relationship between income and English Fluency. This model shows that an increase in a respondent's level of English Fluency corresponds with an expected 63.9% increase in income. Model 2 measures the relationship between income and Social English Use. Model 2 shows that respondents who frequently or always use English socially can expect to earn 87.3% more than respondents who infrequently or never use English socially. Model 3 measures the relationship between income and both English Fluency and Social English Use. Interestingly, when both English Fluency and Social English Use are included in the model and as such control for each other, the strength of the relationship between income and Social English Use lowers drastically while the strength of the relationship between income and English Fluency lowers only slightly. Model 4, which measures the relationship between income and English Fluency, Social English Use, and each occupational industry is the model of best-fit based upon measures of AIC and BIC, which estimate the information that is lost in a model. Retail is

used as the reference group because respondents working in retail occupations had the lowest mean annual income. Model 4, like Model 3, shows that much of the variation in income shown across distinct levels of Social English Use is explained by English Fluency. It is important to note that while occupational industry has a statistically significant relationship with income, it does not explain much of the variation in income across distinct levels of Social English Use or English Fluency.

Table 3: OLS Regression Models of Log-Transformed Income Regressed on English Experience and Occupational Industry

		Model 1	Model 2	Model 3	Model 4
Control	Female	-0.478*** (0.063)	-0.501*** (0.066)	-0.471*** (0.063)	-0.552*** (0.064)
	Age	0.250*** (0.018)	0.249*** (0.018)	0.252*** (0.017)	0.237*** (0.017)
	Age ²	-0.003*** (0.000)	-0.003*** (0.000)	-0.003*** (0.000)	-0.003*** (0.000)
English Experience	English Fluency	0.639*** (0.031)	_____	0.573*** (0.037)	0.523*** (0.037)
	Social English Use		0.873*** (0.067)	0.253*** (0.075)	0.224*** (0.074)
Occupational Industry	Retail (ref)				omitted
	Agriculture and Construction				0.425*** (0.110)
	Manufacturing				0.361*** (0.091)
	Professional				0.618*** (0.073)
Constant		2.876*** (0.357)	4.587*** (0.358)	2.930*** (0.356)	3.050*** (0.354)
R-Squared		0.231	0.154	0.235	0.258
AIC		8421.799	8644.867	8412.304	8346.222
BIC		8450.606	8644.867	8446.872	8398.074

(Standard Error); $P \leq 0.05^*$; $P \leq 0.01^{**}$; $P \leq 0.001^{***}$

Having determined the model of best-fit and examined the relationship between income and each independent variable, I next examined the relationship between income and English Fluency and Social English Use across occupational industries. These models are shown in *Table 4*. The purpose of examining each occupational industry separately was to discern whether the relationships between income and English Fluency and Social English Use vary between occupational industries. These models do suggest that there are differences in the relationship between income and English Fluency across occupational industries. More interesting, however, is the fact that the relationship between income and Social English Use is only statistically significant among respondents working in professional jobs.

Table 4: OLS Regression Models of Log-Transformed Income Regressed on English Experience by Occupational Industry

		Model 1: Agriculture and Construction	Model 2: Manufacturing	Model 3: Retail	Model 4: Professional
Control	Female	-0.179 (0.368)	-0.593*** (0.178)	-0.222 (0.123)	-0.676*** (0.082)
	Age	0.172** (0.054)	0.304*** (0.057)	0.251*** (0.033)	0.215*** (0.024)
	Age ²	-0.002** (0.001)	-0.003*** (0.001)	-0.003*** (0.000)	-0.002*** (0.000)
English Experience	English Fluency	0.374*** (0.109)	0.588*** (0.096)	0.427*** (0.073)	0.616*** (0.053)
	Social English Use	0.201 (0.278)	0.241 (0.212)	-0.002 (0.150)	0.314*** (0.095)
Constant		5.454*** (1.177)	2.643* (1.160)	3.270*** (0.682)	4.383*** (0.534)

(Standard Error); $P \leq 0.05^*$; $P \leq 0.01^{**}$; $P \leq 0.001^{***}$

My final set of models includes interaction effects between each occupational industry and both English use and English Fluency. These models are shown in *Table 5*. These models help to clarify the different relationships with immigrant income that English Fluency and Social English Use have depending upon the occupational industry

in which immigrants are employed. The first interaction model includes my control variables as well as English Fluency, Social English Use, each occupational industry and interaction variables for English Fluency and each of the occupational industries except for retail, which is my reference category. This model suggests that compared to respondents who work in retail, the income of immigrants who work in manufacturing is 25.3% more influenced by English Fluency and the income of immigrants who work in professional jobs is 28.0% more influenced by English fluency.

Table 5: OLS Regression Models of Log-Transformed Income Regressed on English Experience, Occupational Industry, and Interaction Variables of English Experience and Occupational Industry

		Model 1	Model 2	Model 3
Control	Female	-0.510*** (0.064)	-0.509*** (0.064)	-0.505*** (0.064)
	Age	0.230*** (0.017)	0.232*** (0.017)	0.229*** (0.017)
	Age ²	-0.003*** (0.000)	-0.003*** (0.000)	-0.003*** (0.000)
English Experience	English Fluency	0.360*** (0.060)	0.528*** (0.037)	0.419*** (0.067)
	Social English Use	0.213** (0.074)	-0.130 (0.281)	-0.011 (0.138)
Occupational Industry	Retail	omitted	omitted	omitted
	Agriculture and Construction	0.265 (0.298)	0.352** (0.121)	0.349 (0.313)
	Manufacturing	-0.308 (0.255)	0.227* (0.106)	-0.210 (0.268)
	Professional	-0.198 (0.233)	0.428*** (0.091)	-0.065 (0.243)
Interaction Variables	English Fluency x Retail	omitted		omitted
	English Fluency x Agriculture and Construction	0.047 (0.112)		-0.008 (0.129)
	English Fluency x Manufacturing	0.253** (0.091)		0.188 (0.107)
	English Fluency x Professional	0.280*** (0.076)		0.193* (0.028)
	Social English Use x Retail		omitted	omitted
	Social English Use x Agriculture and Construction		0.186 (0.281)	0.217 (0.322)
	Social English Use x Manufacturing		0.227* (0.106)	0.264 (0.237)
	Social English Use x Professional		0.532*** (0.149)	0.388† (0.173)
Constant		3.616*** (0.388)	3.239*** (0.358)	3.551*** (0.389)
R-Squared		0.264	0.263	0.265
AIC		8333.437	8356.412	8334.481
BIC		8385.289	8408.264	8403.617

(Standard Error); P ≤ 0.05*; P ≤ 0.01**; P ≤ 0.001***; P = 0.051†

The second interaction model includes my control variables as well as English Fluency, Social English Use, each occupational industry, and interaction variables for Social English Use and each of the occupational industries except for retail, which is once again my reference category. This model shows that compared to respondents who work in retail, the income of immigrants who work manufacturing and professional jobs is 22.7% and 53.2% more influenced by Social English Use respectively, which suggests that success in those industries relies more on Social English Use. It is interesting to note that in both Model 2 and Model 3, Social English Use has a negative linear relationship with income, albeit not a statistically significant one. Also of interest is the relationship between income and Social English Use x Professional, which is much stronger than the relationship between income and English Fluency x Professional is in any of the models. I suspect that these differences are caused by the binary nature of the Social English Use variable and the fact that there does not appear to be any correlation between Social English Use and income among immigrants working in retail (see *Table 4*).

The third and final interaction model includes my control variables, English Fluency, Social English Use, each occupational industry, interaction variables for English Fluency and each of the occupational industries, and interaction variables for Social English Use and each of the occupational industries. In this model, the relationship between income and Social English Use is not statistically significant, nor are any of the

interaction variables with the exception of English Fluency x Professional ($P \leq 0.05$) and Social English Use x Professional ($P = 0.051$).

Discussion

Several results of my analysis are worth considering more deeply. First, it is worth considering the variation in the results between English Fluency and Social English Use. In general, my results show that in the models of best-fit, there is a stronger linear correlation between English Fluency and income than there is between Social English Use and income (see *Table 3*, *Table 4*, and *Table 5*). The strength of the relationship between English Fluency and income across my models corroborates Bourdieu's (1990; 1991; 1993) theory that for immigrants, fluency in the host language is a form of capital that extends to earning power. Social English Use meanwhile, while not unrelated to immigrant income, is less important. This makes sense in the context of Miller's (2014) argument that while English Fluency in immigrants is connected directly with success in the workplace, Social English Use is more connected to cultural feelings of belongingness.

While Social English Use does not appear to be a particularly useful variable for explaining income across industries, it is useful for explaining income for immigrants working in professional occupations (see *Table 3*). My model shows that immigrants who work in professional occupations and frequently or always use English socially can expect an annual income 31.4% higher than immigrants who work in professional

occupations and infrequently or never use English socially. It is well documented that informal social networks in the workplace can have a broad influence on work life (Venkataramani, et al. 2013; Brass 1984; Seibert, et al. 2001). I suggest that one potential explanation of my findings may be that the social ties that immigrants create in the workplace by speaking English have a greater influence on income in professional workplaces than they do in other workplaces. This would help to explain the results of Model 3 in *Table 5*, in which the strongest and only statistically significant interaction between Social English Use and occupational industry is the interaction between Social English Use and Professional work. The results of my models suggest that Social English Use has a 33.8% stronger positive correlation with income among immigrants working in professional industries than among immigrants working in retail. This corroborates the findings of Hodson (2004), who argues that individuals working in professional occupations are more likely to tie positive work outcomes such as income and job satisfaction to positive social interactions in the workplace, and of Dahlin, et al. (2008), who found that professional workers are more likely to have stronger social ties to their coworkers. As such, I posit that immigrants in higher-status professional occupations are more likely than immigrants in other occupational industries to cultivate their social ties with coworkers by means of using English socially, with the expectation that this will result in higher wages.

Finally, it is important to consider the impact that the interactions between English Fluency and occupational industries have on immigrant income (see *Table 5*). My results show that compared to retail, incomes earned in the other occupational

industries are more strongly influenced by the English Fluency of the individual, particularly incomes earned in professional jobs. It is likely that in each of these occupational industries, particularly the professional occupational industry, interaction with English speaking coworkers or clients would be more frequent and specialized, and therefore come at a higher premium, than it would in retail occupations. Portes (1981) discusses the importance of businesses that cater to ethnic cultures within ethnic enclaves. Such businesses, shops and restaurants for example, need not necessarily hire individuals with host-language fluency (Xie and Gough 2011). From this perspective, it makes sense that English Fluency may be less important in retail occupations than it is in other occupational industries, depending on the type of retail establishment they are employed in

Conclusion

Limitations

This research does face several practical limitations. First, I am somewhat concerned with the collinearity of my two main independent variables: English Fluency and Social English Use. Using a VIF test, I determined that within my models the tolerance score of my English Experience variables fell in the range between 0.703 and 0.211. While these scores suggest a healthy amount of differentiation between variables, 0.211 is beginning to approach the threshold at which collinearity becomes a concern. Although my results show that the two variables are not problematically collinear, and the literature corroborates this, it must be understood that to some

degree English Fluency is a prerequisite for Social English Use (Espenshade and Fu 1997). Second, it is important to note that this research uses cross-sectional data, and although it is accepted that English Fluency and, to a lesser extent, Social English Use do influence socioeconomic status, I am unable to establish time-order with this dataset. Third, the respondents included in this analysis account for only 23.6% of the respondents in the data set. By excluding respondents as I did, it is likely that I have encountered some form of selection bias. Without examining the work and personal histories of respondents, for example, it is difficult to claim that immigrants with higher levels of English experience do not simply choose professions where they perceive English experience to be more valuable. Additionally, while I am comfortable extrapolating my results toward legal adult immigrants to the U.S. who work full-time, my results might be different if I included respondents who did not work full-time or were not employed at the time of the survey.

Finally, there are several changes that I can make to my models that will make them more practical in the future. First, I can remove the direct effects of English fluency and social English use from models that include their respective interaction variables. Including them in these models reduced the clarity of the effects that their interactions with particular occupational industries have on immigrant income. Additionally, I can recode English fluency as a categorical variable so that interaction between English fluency and occupational industry is more clear. I will also include standardized coefficients, which will help to display the degree to which income will change when my independent variables are introduced.

Final Thoughts

This research clearly shows that while English Fluency is a determining factor in the income of immigrants, it is more pertinent in some industries than in others. It also shows that Social English Use is a determining factor in the income of immigrants who have professional occupations. These findings are of particular interest in the context of examining the relationship between segmented assimilation and white- and brown-collar labor. Using a segmented assimilation perspective, professional work is typically associated with upward assimilation while the jobs that are typically associated with brown-collar labor are associated with downward assimilation. As Social English Use is of particular importance in professional occupations and is of less importance in occupations typically associated with brown-collar work, it stands to reason that using English socially, whether on an individual basis or in the context of entire communities, can be a tool for avoiding downward assimilation. This difference by occupation is unique to the established influence that English fluency has on socioeconomic assimilation.

Although my research has several limitations, my results generally corroborate research previously conducted in the area of assimilation studies. It is my hope that this research will contribute to a body of knowledge that helps employers, communities, and governments understand the difficulties that immigrant workers face and help to overcome them. I also hope that by raising the importance of English language accessibility, this research will help governments, communities, and private

organizations institute programs and policies that encourage accessible English language classes in the U.S. while acknowledging the importance of maintaining ties to ethnic culture through native language use. As the results of this research suggest that being comfortable using English in a social setting may help immigrants to the U.S. both attain and succeed in professional work, it is worthwhile to ensure that immigrants have ample access to classes and events that will afford them the opportunity to use English in a social context. Additionally, as several scholars conclude that native-born residents are more comfortable with immigrants when there is not a language barrier between them, making sure that these opportunities are accessible is likely to help relieve ethnic tension in communities where it exists (Danzer and Yaman 2016; Kim, et al. 2012; Von Grunigen, et al. 2012; Piwoni 2015). If these programs can indeed help relieve ethnic tension, they may play an important role in combating systematic prejudice and downward mobility. Finally, this research considers English as a tool to be used differently in social and work-related contexts within the workplace. Rather than adhering to a simple dichotomy in which English Fluency corresponds with success and a lack of English Fluency corresponds with failure, my research shows that immigrants' English Fluency is more important to earnings in some occupational industries than in others, and the use of English in a social context is more important in some occupational industries than in others as well.

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