

LANGUAGE AND EARNINGS OF LATINOS IN FLORIDA:
THE EFFECT OF LANGUAGE ENCLAVES

By

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To my parents, Marian and Lawrence

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TABLE OF CONTENTS

	<u>page</u>
ACKNOWLEDGMENTS	4
LIST OF TABLES	7
LIST OF FIGURES	8
LIST OF ABBREVIATIONS.....	9
ABSTRACT.....	10
CHAPTER	
1 INTRODUCTION	12
Overview.....	12
Background.....	13
Spanish-Speaking Population in the United States	13
Spanish-Speaking Population in Florida	14
Research Questions.....	15
2 LITERATURE REVIEW	17
Conceptual Framework.....	17
Economics of Language	17
Forms-of-Capital Model of Incorporation.....	18
Language and Earnings.....	22
Effect of Language Enclaves on Language and Earnings	24
Value of Bilingualism in the Labor Market.....	28
3 DATA AND METHODOLOGY	33
Research Design	33
Quantitative Analysis.....	34
US Census Data.....	34
Measuring the Language Enclave	35
Sample Description	36
Description of Variables.....	37
Dependent variable.....	37
Independent variable	38
Control variables	39
Statistical Model/Data Analysis	41
Qualitative Analysis.....	42
Methodological Caveats	43

4	RESULTS	49
	Summary Statistics	49
	Research Question One: The Effect of Language Enclaves on Returns to English	50
	Research Question Two: Returns to Bilingualism.....	55
5	DISCUSSION.....	62
	Theoretical Implications	62
	Language, Earnings, and Labor Market Characteristics	62
	Returns to English language proficiency	62
	Returns to bilingualism	65
	Immigrant/Minority Incorporation	66
	Policy Implications	67
	Suggestions for Future Research	68
6	CONCLUSION.....	70
	LIST OF REFERENCES.....	72
	BIOGRAPHICAL SKETCH	77

LIST OF TABLES

<u>Table</u>		<u>page</u>
3-1	Language spoken by concentration of Spanish-speakers, Florida 2000	47
4-1	Mean and standard deviation of variables used in Low Concentration model	58
4-2	Mean and standard deviation of variables used in High Concentration model	59
4-3	Returns to English-speaking ability	60
4-4	Returns to bilingualism	61

LIST OF FIGURES

<u>Figure</u>	<u>page</u>
3-1 Florida linguistic composition.....	48

LIST OF ABBREVIATIONS

HC	High concentration of Spanish-speakers
LC	Low concentration of Spanish-speakers
Super-PUMA	Super Public Use Microdata Area

Abstract of Thesis Presented to the Graduate School
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Language ability has assumed priority in current studies of the economic success of immigrants and minority language speakers. Past studies have shown that language ability, a key human and cultural capital trait, tends to be positively associated with earnings.

Building on this past research, the goal of this study is to examine how the effect of English language proficiency on earnings of Hispanic men in Florida varies by labor market context. Specifically, it aims to compare the difference in the effect of English language proficiency on earnings in areas densely populated by Spanish speakers to the effect of language on earnings in areas dominated by English speakers. I predict that English language proficiency will have a greater impact on earnings in areas where Spanish is not widely spoken. In areas where there are large enclaves of Spanish-speakers, English will likely be a less important determinant of earnings. The effect of bilingualism on earnings is also analyzed in this manner.

To test my hypotheses, my study consists of two parts: the first based on statistical analysis of US census data and the second based on qualitative interviews. Findings show that English language ability is indeed an important determinant of earnings both in areas with a high proportion of Spanish-speakers and in areas with a low proportion of Spanish-speakers. However, results from the statistical analysis show that English language ability has a greater

impact on earnings in areas with a high proportion of Spanish-speakers. While English language proficiency yields greater earnings in these areas, Spanish language proficiency also has a positive effect on earnings. Fully bilingual Hispanics earn more than their English only counterparts in these areas.

CHAPTER 1 INTRODUCTION

Overview

Language ability has assumed priority in current studies of the economic success of immigrants and minority language speakers. Language often serves as a key human capital and cultural capital trait that facilitates incorporation into the host country. Many scholars cite the ability of immigrants to effectively communicate with members of the receiving country as the most important alterable factor that affects their integration into their country of destination and their absorption into the labor market (Dustmann and van Soest 2001, 2002).

The goal of this study is to examine the effect of English language proficiency on earnings among Latinos¹ in Florida. Specifically, it aims to compare the difference in the effect of English language proficiency on earnings in areas densely populated by Spanish speakers to the effect of language on the earnings in areas dominated by English speakers. I predict that English language proficiency will have a greater impact on earnings in areas where Spanish is not widely spoken. In areas such as ethnic enclave economies, where Spanish is commonly spoken, English will likely be a less important determinant of earnings. Simply stated, the more Spanish that is spoken in a given area, the less important English is to earnings in that area. I also expect to find the inverse to be true of Spanish language skills; in a Spanish-language enclave, Spanish proficiency will be more important to earnings than it is outside the enclave. Results from this study offer valuable insight about the factors that affect the economic integration of immigrants and non-native speakers into the labor market. Findings also have important policy implications for English language and bilingual training programs in Florida.

¹ Following current US Census Bureau terminology, the terms “Latino” and “Hispanic” are used interchangeably throughout this paper.

Background

Spanish-Speaking Population in the United States

“The political and social controversies surrounding the position of English versus other languages in the United States has endured since the founding of the nation” (Stevens 1999). The recent growth of the Spanish-speaking population in the US has reignited the language issue and transformed it into a symbolic battleground in the current immigration debates. Spanish now ranks as the second most common language spoken in the US (Shin and Bruno 2003). In the Census 2000, over 60% of respondents who speak a non-English language at home reported speaking Spanish (Mora 2003). This represents a 10% increase in the number of Spanish-speakers reported from the 1990 Census (Mora 2003).

The rise of Spanish language use in the US stems from the rapid growth of the country’s Latino population. While not all Latinos speak Spanish, nearly all Spanish speakers in the US are Latinos (Santiestevan 1991). The latest updates of the 2000 Census estimate the total Latino population to be 41.3 million, or 14% of the total US population, making Latinos the country’s largest minority group (US Census Bureau 2005). According to US Census Bureau projections, these numbers show no signs of waning. On the contrary, estimates predict the Latino population to more than double to 102.6 million by 2050 (US Census Bureau 2005). Among the current Latino population, nearly 31 million people over age 5 report speaking Spanish at home, constituting a ratio of more than 1-in-10 ratio of household residents in the US (US Census Bureau 2005). Debate remains over whether Spanish language use in the US will continue to grow at a rate as fast as that of the Latino population. Some believe that Spanish-speakers will prove to be a unique group in US linguistic history by maintaining their native tongue for several generations. Others contend that as English language fluency increases across generations, Spanish-speakers will gradually abandon Spanish in favor of English, as have many other

immigrant and minority language groups before them. No matter what the fate of Spanish language in the US proves to be, the sheer number of Spanish-speakers in the US today has undeniably reshaped the country's current linguistic landscape.

Spanish-Speaking Population in Florida

Florida's Latino population is the third largest in the nation, behind California and Texas, respectively (Pew Hispanic Center 2006). Of the state's more than 18 million-plus residents, over 3.2 million—or more than 19% of the state's total population—are Latino (US Census Bureau 2008). Over 75% of these residents report speaking Spanish at home, making Florida the state with the fifth largest proportion of residents who speak Spanish at home (US Census Bureau 2007; Viglucci 2001). Even though a 1988 law designated English as the state's official language, these numbers show that Spanish-speakers in Florida continue to exert a powerful presence.

The uneven distribution of the Spanish-speaking population in Florida makes it an ideal setting for a comparative research design. Although recent research highlights growing pockets of Latinos in Central and North Florida, most of Florida's Spanish-speaking population is concentrated in South Florida, and in Miami-Dade County in particular (Duany and Matos-Rodríguez 2006). Miami-Dade is home to over 1.3 million people of Hispanic origin. With Hispanics representing 61.3% of the total population of the county, Miami-Dade has the distinction of being one of 50 counties nationwide in which Hispanics create the majority (US Census Bureau 2008). Wilson and Portes (1980) have well documented the growth of the Cuban enclave economy in the city of Miami and the ways in which it stimulated the development of the mainstream economy in Miami (Portes 1987). The latest US Census estimates that Hispanic-owned businesses account for 54.9% of all businesses in Miami-Dade County (US Census Bureau 2008). In addition, Miami has emerged as a hub for international business, particularly

for multinational corporations, financial institutions, and Spanish-language media conglomerates from Latin America and the Caribbean. Its large Spanish-speaking population and its status as a prominent international business center have prompted many to refer to the city as “the financial capital of Latin America.” Such characteristics make it likely that English language ability will have a lesser effect on earnings in Miami.

Research Questions

Having established the context and setting of this study, I turn now to the specific research hypotheses. This study is premised on the theoretical proposition that labor market context will dictate the value that the market places on certain forms of human and cultural capital, in this case language ability. Specifically, it asks: Does the presence of a large Spanish language enclave alter earnings returns to English language proficiency? The corresponding research hypotheses predict 1) that English will be a less important determinant of earnings in areas with a high concentration of Spanish speakers and 2) that bilingual English-Spanish skills will be more important in areas with a high concentration of Spanish-speakers. To test these hypotheses, my project consists of two parts: the first based on statistical analysis of census data and the second based on qualitative interviews.

Three features set this study apart from others. First, it is the first study of this nature to focus specifically on the Florida labor market; other studies on this topic have used data from either the Southwest US, the US in general, or Canada. Second, it provides empirical evidence of an unofficial, minority language—Spanish— as potential asset in the labor market (Pendakur and Pendakur 2002). Third, the qualitative component of this study gives a unique perspective on the issue of language and earnings, thereby going beyond previous research based exclusively on quantitative methodologies.

This study is nonetheless firmly rooted in traditional concepts in sociology and labor economics. Chapter 2 offers a literature review that details the established theoretical and empirical work that informs this study. Chapter 3 describes the design and methodology of the study. Chapter 4 presents results, and Chapter 5 discusses the theoretical and practical implications of the findings.

CHAPTER 2 LITERATURE REVIEW

The increased flows of immigration to the US over the past several decades spawned an abundance of studies exploring the role of English-language proficiency in the US labor market. Yet, despite the current influx of immigrants from Spanish-speaking Latin America, and the continued growth of linguistic pluralism in the United States, scholars have produced little recent research on the topic. Most of the published literature dates back to over a decade ago and, in many cases, relies on data that are even older (Mora 2003). Within these studies, only a small body of research addresses the relationship between language, earnings, and linguistic concentrations. These few empirical studies have, for the most part, produced opposing and inconsistent conclusions about the nuanced ways in which the linguistic profile of the labor market affects the economic value of language proficiency.

In this chapter, I review the existing literature on the topic, and highlight areas that merit additional research. The first section presents the conceptual framework for the study. It examines the economics of language and uses a “forms-of-capital” model to establish the importance of language in the economic incorporation of non-native speakers. The second section reviews the empirical studies that address the relationship between language and earnings. The third section summarizes the studies that specifically treat the relationship between language, earnings, and linguistic concentrations. The final section turns to the existing literature on the value of bilingualism in the workplace.

Conceptual Framework

Economics of Language

What role does language play in the economic incorporation of immigrants and minority language speakers? Although the answer to this question may seem transparent, a closer analysis

reveals that language functions as one of the most versatile and valuable traits in the labor market. As such, it plays a diverse and significant role in the economic incorporation of minority language speakers. For this reason, it is useful to outline the theories that hypothesize the ways in which language operates in the labor market.

Beginning with J. Marschak's pioneering 1965 study on economic approaches to language, the economics of language is a relatively recent area of specialization within the social sciences (Grin 1994). It refers to an interdisciplinary field of research that examines the relationship between linguistic and economic variables (Grin 1994). Prior to the publication of Marschak's work, mainstream economics largely overlooked this relationship, believing language and other "ethnic" characteristics to be of little overall importance in the labor market (Grin 1994). However, increased linguistic, ethnic, and cultural pluralism in contemporary society, and rising awareness of social problems resulting from such pluralism, stimulated the growth of studies in this field (Grin 1994).

Forms-of-Capital Model of Incorporation

The economic consequences of language proficiency are of particular importance to research on the incorporation of immigrants and minorities. The recognition of language as a key component in labor market outcomes contributed to the current shift in theories of immigrant incorporation. Traditional assimilation theories no longer suffice as an accurate model of incorporation of contemporary immigrants, as they fail to account for the diversity of incorporation experiences by different groups (Tienda 1983). Rather, the contemporary incorporation experience is better framed within the "forms-of-capital model," developed by Nee and Sanders (2001). This model privileges the factors that explain the diversity in the modes of incorporation of immigrants. It views incorporation mainly as a function of the human, social, and cultural capital that immigrants possess and accrue. The role of language in

immigrant/minority incorporation can be best understood through this model since language serves simultaneously as multiple forms of capital: human, cultural, social, and linguistic. While this study borrows the basic framework from Nee and Sanders' model, it modifies the model in three ways: first, it examines language as forms of capital at the individual, rather than household or family level; second, it expands the model to include the incorporation not only of immigrants, but also of minority language speakers in general; and third, it takes into consideration the ways in which certain labor market characteristics, specifically the linguistic composition of the labor market, affect the economic value of these forms of capital.

Nee and Sanders' model draws on the concepts of capital developed by Gary Becker (1993), James Coleman (1988), and Pierre Bourdieu (1986). Bourdieu (1986) theorizes that the general notion of capital provides a means for understanding most types of interaction in the social world. "It is what makes the games of society—not the least, the economic game—something other than simple games of chance offering at every moment the possibility of a miracle" (Bourdieu 1986: 46). The application of the forms-of-capital model to the study of language and incorporation is particularly useful if one views linguistic exchange as "an economic exchange...established within a symbolic relation of power between a producer, endowed with a certain linguistic capital, and a consumer" (Bourdieu 1991:66). According to Bourdieu, words represent far more than simple means of communication; they are signs of authority and wealth that reveal a particular social value. From this perspective, language takes on a prominent role in the incorporation of minority language speakers. The remaining parts of this section define the concepts of human, social, cultural, and linguistic capital, and the ways in which language functions as a form of each type of capital in the labor market.

Most studies of language and immigrant/minority incorporation view language proficiency primarily as a human capital trait (Park 1999). The concept of human capital offers a way to understand differences in earnings that are not fully explained by external factors (Becker 1993). Becker (1993) broadly defines human capital as knowledge, skills, and health. As such, human capital is different from physical or financial capital because, unlike these tangible forms of capital, it cannot be separated from an individual (Becker 1993). In this sense, language can be considered one of the most basic forms of human capital. Simply stated, language is essential to effective communication which, in turn, is essential to enhanced productivity. Indeed, many earnings analyses have shown that language has an effect on earnings that is comparable to that of some of the most common human capital characteristics, such as education and number of years in the host country (Park 1999; Chiswick 1991; McManus 1985; Grenier 1984). Chiswick (1978) was the first researcher to apply the concept of human capital to the economic achievement of immigrants (Portes 1995). He concluded that individual skills greatly impact the incorporation experience. Sociologists, however, take issue with this approach to incorporation, noting that group membership and other social contexts are also at work (Portes 1995). The notion of social capital has thus emerged as an important concept.

The concept of social capital offers a way to theorize the value of group membership in the incorporation experience. Broadly defined, social capital refers to benefits or resources created by and derived from social networks (Portes 1998; 2002). It is the “aggregate of the actual or potential resources which are linked to possession of a durable network or more or less institutionalized relationships of mutual acquaintance and recognition—or in other words, to membership in a group—which provides each of its members with the backing the collectivity-owned capital” (Bourdieu 1986:51). Language, as the primary means of social interaction,

fosters social capital. A common language cultivates a sense of shared identity. It functions as a criterion for membership into a given group, and thus, as a networking tool that can facilitate labor market success.

The social aspect of language relates directly to the third form of capital: cultural capital. Cultural capital refers to knowledge, skills, education, and values acquired through cultural transmission resulting from membership in a given class, region, nation, or ethnic group (Bourdieu 1986). Bourdieu developed the concept of cultural capital as a way to explain unequal scholastic achievement among students from different class backgrounds. It represented a departure from past theories that viewed academic success as the result of solely genetic and human endowments. He hypothesized that students who possess knowledge of the mainstream culture in which their education system is rooted generally achieve greater academic success. The same logic can be applied to economic achievement in the labor market. In order to successfully navigate the labor market, workers must possess knowledge of the cultural norms and codes that underpin the market. Language, which is culturally transmitted, serves as a vehicle that allows an individual to understand these norms and operate effectively within them. Thus, the cultural value of language makes it an essential trait for labor market success (Pendakur and Pendakur 2002). However, as cultural signifier, language can also be a detriment in the labor market when used as grounds for economic discrimination based on culture (Pendakur and Pendakur 2002).

Bourdieu identifies another form of capital specifically related to language skills—linguistic capital. Linguistic capital represents an embodied form of cultural capital in the sense that, once acquired, it cannot be separated from the individual. However, the value of linguistic capital, like the value cultural capital, is relative. The “market” determines its ultimate worth

(Bourdieu 1991). That is to say, knowledge of a minority language may highly valued or even essential for survival within a given language enclave, but useless in another context. The value of linguistic capital is therefore contingent on the context in which it is used.

These four forms of capital—human, social, cultural, and linguistic—are primarily symbolic. Unlike economic capital, the transmission and acquisition of these forms of capital is not easily recognized. As such, their value is often underestimated or unrecognized (Bourdieu 1986). However, these forms of capital, under certain circumstances, can be converted into economic capital (Bourdieu 1986), thus making language proficiency an asset in the labor market. Even so, language and other human, cultural, and social capital variables only partially explain wage differentials among immigrant/minority language groups. Tienda (1983) argues that such a model of incorporation needs to be further expanded to account for structural forces that also affect labor market outcomes. Structural conditions such as labor market characteristics and public opinion toward immigrants and foreign language use are particularly relevant to a comprehensive model of incorporation (Tienda 1983). While it is beyond the scope of this paper to include a comprehensive inventory of labor market characteristics in the empirical analysis, this study focuses on one defining macro-structural feature—the linguistic profile of the labor market—and its interplay with the relationship between language and earnings.

Language and Earnings

This section reviews the studies that empirically demonstrate the impact of English language proficiency on the labor market outcomes of non-native speakers, in particular Hispanic males. In the early 1990s, earnings analyses of Hispanic males began to devote more attention to the role of English language proficiency. The introduction of language as a key variable in the earnings functions offered insight into causes of wage differentials. “Despite different definitions of English proficiency and a variety of methodological approaches, nearly

all studies have found that workers experience an earnings “penalty” for the lack of the ability to speak English well” (Mora 2003).

McManus, Gould, and Welch’s (1983) seminal study of the role of English language proficiency on earnings uses data from the 1975 Survey of Income and Education (SIE) to explore the cost of language disparity among Hispanic males in the US. Regression estimates from this study suggest that, compared to their fluent Anglo counterparts, English-deficient Hispanic males experience earnings penalties between 17-30%, depending on the level of education being compared. Furthermore, their findings show that English language deficiency reduces earnings returns to education and work experience. Grenier’s (1984) study also uses the 1975 SIE to estimate the effect of language characteristics on earnings of Hispanic-American men with limited English proficiency. His regression analysis finds that 1) Hispanic males earn significantly less than their Anglo counterparts, and 2) language characteristics explain up to one third of these earnings differentials. Subsequent studies report similar findings. Chiswick and Miller’s (1992) statistical analysis shows that immigrants who speak English well or very well earn on average 17% more than those who are English-deficient. Using a different sample and reference group, Borjas (1994) concludes Hispanic immigrants who do not speak English earn 17% less than those who speak English. In keeping with these results, other studies have shown that the rate of immigrant wage assimilation is proportional to increase in English-speaking skills and time spent in the US (Funkhouser 1996; Carliner 1995; Gonzalez 2000).

Such research leads Chiswick and Miller (1992, 1995, 2002) to argue that English language proficiency ranks as one of the most important determinants of earnings of non-native speakers. They conclude that “the acquisition of English language skills clearly pays in the labor market” (2002: 42). Despite strong empirical evidence from Chiswick and Miller, literature on

the topic remains divided with regard to the extent to which language affects earnings (Park 1999). While language ability is positively associated with earnings, other research suggests that it is not a major determinant of earnings. Such research points to other factors, such as national origin, length of US residence, and education, as the primary predictors of earnings of non-native speakers (Borjas 1982; Tienda 1983).

Much of this previous research invokes a design that focuses attention almost exclusively on individual level characteristics. In doing so, this research overlooks the importance of context. Specifically, as I argue in this study, income returns to language are not uniform across different contexts. Instead, the relationship between proficiency and earnings is contingent upon the linguistic profile of the labor market in which people work. In this case, a high proportion of Spanish-speakers in a given area will lower income returns to English proficiency in that area. Thus, this study will show that the inclusion of a minority language enclave measure can provide important insights about the extent to which language explains variance in earnings.

Effect of Language Enclaves on Language and Earnings

While most prior research agrees that greater English language proficiency yields greater earnings, this consensus disappears when analyzing the effect of language on earnings in regions with strong minority language foundations, such as ethnic enclave economies (Dávila and Mora 2000). Theoretical formulations that treat the topic tend to agree that the presence of a large immigrant/minority population in a given area will alter returns to various determinants of earnings, such as language, ethnicity, and other variables. “The returns accruing to migrants who move to areas of high ethnic density should differ from those accruing to migrants who move to areas of low ethnic density, although it is not obvious whether these returns will be positive or negative” (Tienda 1992: 661). McManus (1990) theorizes that large ethnic enclaves lower earnings returns to English language proficiency. That is to say, the market in these areas places

less value on English language. Such thinking follows the forms-of-capital model, which would assume that the labor market value of a given language depends on its demand in the marketplace (Bourdieu 1986), and that structural forces, such as the existence of a minority language enclave, would indeed alter value of human and cultural capital in a given area. Such a model helps explain why a given language is important to earnings in one area, but less important in another.

These conceptualizations find their roots in the ethnic enclave economy theories developed by Wilson and Portes (1980). They define the ethnic enclave economy as a concentrated area of businesses owned by employers of immigrant or minority ethnic backgrounds that employ co-ethnic workers. Groups in these areas tend to maintain their cultural customs and language to a greater extent than comparable groups outside the enclave. Wilson and Portes (1980) theorize that the ethnic enclave economy functions as a mode of immigrant incorporation by providing provides access to jobs, opportunities and resources that might not otherwise be as available for minorities outside the enclave. However, debate exists over the extent to which the ethnic enclave economy works as a successful incorporation technique. Wilson and Portes (1980) theorize that returns to human capital brought from the home country are higher in the enclave economy than in the mainstream economy. While this may create initial earnings advantages for immigrants and minorities in these areas, others contend that the ethnic enclave economy acts as a mobility trap in which earnings eventually plateau (Sanders and Nee 1987). (Such traps generally refer to employees, not employers, in the enclave economy). This study does not focus specifically on ethnic enclaves economies per se; that is to say, it does not use the number of immigrant-owned businesses in an area as measure of enclave. Rather, it focuses on a broader definition of enclave—the linguistic enclave—measured

by the number of Spanish-speakers in a given area. Nevertheless, it is important to highlight the concept of the ethnic enclave economy because its basic theoretical assumptions apply directly to this study.

Despite these concordant theoretical assumptions, empirical analyses have produced inconsistent results. These inconsistencies may in part be due to the fact that only a small number of studies consider the effects of language enclaves on earnings returns to language skills. Results from these studies can be roughly classified into four main categories: 1) those that find that the presence of a large minority language enclave lowers returns to English (McManus 1990; Chiswick and Miller 2002); 2) those that find that the English deficiency earnings penalty is greater inside the linguistic enclave (Bloom and Grenier 1992); 3) those that find mixed results (Dávila and Mora 2003; Hand 2006); and 4) those find no evidence that the existence of a linguistic enclave alters earnings returns to language skills (Fry and Lowell 2003).

In his analysis of earnings regressions for Hispanic males based on 1980 US Census data, McManus (1990) finds that the enclave reduces earnings penalties associated with English language deficiency. He invokes the Hispanic ethnicity variable to operationally define the enclave. He concludes that the greater the Hispanic population, the lower the returns to English. Chiswick and Miller's (2002) subsequent study utilizes 1990 US Census data to test similar hypotheses. They conclude that, all things being equal, average earnings tend to be lower for immigrants that live in an area with a large minority language concentration. They find that the English-deficient wage penalty is also smaller in these areas.

When Bloom and Grenier (1992) apply similar regression techniques to 1970 and 1980 US Census data, they find that the language-based earnings differentials between Hispanics and Whites are actually greater in areas with a large Spanish-speaking population. To determine

areas of high and low concentrations of Spanish-speakers, Bloom and Grenier, like McManus, use Hispanic origin as a proxy for Spanish language and White of non-Hispanic origin as a proxy for English.

Dávila and Mora's (2000) study, which uses 1990 US Census data, seems to support Bloom and Grenier's results to a large extent and contradict McManus's (1990) and Chiswick and Miller's (2002) findings. Employing the US-Mexico border as a minority language enclave, they compare the effect of English language proficiency on earnings of Mexican-Americans along the US-Mexico border relative to their non-border counterparts in the rest of the US. Their regression results suggest that the English deficiency earnings penalty is slightly greater for Mexican-American males in border cities than in non-border cities. However, in the case of Mexican immigrants, there is no significant difference in the English deficiency earnings penalty between border and non-border cities.

Critics cite Dávila and Mora's measure of minority language enclave as a possible source of error in their analysis. Hand (2006) believes that their use of border cities and non-border cities as proxies for enclaves and non-enclaves may have skewed results. He maintains that border cities cannot necessarily be described as enclaves solely on the basis of their status as traditional immigrant-receiving destinations. Furthermore, he notes that Dávila and Mora make no attempt to account for language enclaves or ethnic enclave economies that may exist in non-border metropolitan areas in the US (Hand 2006). Hand's own empirical study of the role of linguistic enclaves in wage determination of minority speakers in the Southwest US attempts to remedy this perceived error by using 2000 US Census data to measure the density of Spanish-speakers throughout defined areas in New Mexico and Arizona. However, his analysis also produces mixed results, though they run contrary to Dávila and Mora's findings. Like Dávila

and Mora, Hand runs separate regression models for Mexicans and Mexican-Americans. He finds that English-deficiency earnings penalties are indeed reduced in the linguistic enclave but only for foreign-born respondents. Results for native-born Spanish-speaking respondents do not prove statistically significant and are thus inconclusive.

Value of Bilingualism in the Labor Market

If earnings returns to English decrease as the size of the Spanish-speaking population increases, do earnings returns to Spanish then increase? Simple supply and demand theory would assume that areas with a large population of Spanish-speakers would have an increased demand for Spanish-speaking workers. As discussed in the previous section, past research has shown that, bilingualism is essential for non-native speakers to successfully integrate into and compete in the US labor market. However, for native speakers of English, monolingualism in English is not generally perceived as a disadvantage in the labor market. However, this study asks: do bilingual speakers earn more than their monolingual English counterparts in areas with a large proportion of Spanish-speakers? In other words, are there earnings penalties for not having Spanish language proficiency in those areas?

Examined from the forms-of-capital perspective, bilingual abilities theoretically represent a greater amount of human, cultural, and social capital than monolingual abilities. Bilingualism offers the distinct advantage of being able to access dual cultures, networks, and other such resources. Thus, knowledge of an additional language, even a minority language, should improve labor market outcomes (Pendakur and Pendakur 2002). Yet, despite this logic and the well-established body of research on the economics of language, a relatively small amount of research addresses the value of bilingualism in the labor market.

Educational research, on the other hand, has devoted much attention to the effect of bilingualism in the classroom. Prior to 1960, mainstream belief in the fields of education and

psychology argued that bilingualism caused academic failure, mental confusion, and psychological damage (Portes and Schauffler 1996). However, a crop of sound methodological studies, starting in the 1960s and continuing to the present, reversed this belief after showing that, all other factors being equal, bilingualism is associated with higher scholastic achievement, greater cognitive flexibility, and a better capacity to deal with abstract concepts (Portes and Schauffler 1996). These studies have shown that “instead of creating ‘confusion,’ having two symbols for each object enhanced understanding” (Portes and Schauffler 1996: 11).

Just as these enhanced abilities have been shown to increase academic achievement, so too should they reap positive outcomes in the labor market, or at least in areas with a large population of non-native English speakers. Yet, past research in the field of labor economics and sociology has produced inconsistent results on this topic. Qualitative findings from Portes and Stepick’s (1993) study on the transformation of Miami provide evidence of the perceived advantages of bilingualism, especially in labor markets in areas with a large Spanish-speaking population. A quote from one of their interviews with a Cuban civic activist and head of a multiethnic community organization in Miami illustrates this point. He observes:

Language has great importance because if an individual owns a store whose clients come from Latin America, he will need bilingual employees. During Christmastime, ninety percent of the stores advertise for bilingual employees. To a person who does not know the language, this situation represents an economic problem because he knows that, unless he knows Spanish, he would not compete successfully in the labor market (Portes and Stepick 1993: 12).

In other words, the large number of Spanish-speaking consumers in Miami gives bilingual workers an advantage over their English-only counterparts in the labor market.

However, such opinions have received little empirical backing from other studies. Other researchers contend that bilingual language skills present no additional earnings advantage in the labor market. Carliner (1981) theorizes that the earnings of bilinguals and monolingual are

likely to be roughly equivalent. He posits, “In multilingual societies, if labor demand for speakers of one language exceeds the supply of native speakers, bilingual workers will generally come from other language groups. There will be a wage premium for speaking the "excess demand" language but no additional premium for being bilingual” (Carliner 1981: 384). He finds evidence of this pattern in data from the 1970 Canadian Census.

Findings from Fry and Lowell’s (2003) analysis of the value of bilingualism in the U.S. labor market support this theory. In their regression of earnings on a variety of language variables from the 1992 National Adult Literacy Survey, they find that in the general US labor market, bilingual workers have a marginally significant earnings advantage over their monolingual English counterparts. However, these earnings returns disappear after they remove the effects of education, age, and other control variables. Even after inserting a measure for geographic linguistic concentrations, they find no evidence that language enclaves alter the returns to bilingualism. They conclude that higher returns to bilingualism are likely limited to specialized jobs that deal primarily in the international labor market.

Pendakur and Pendakur’s (2002) study of the economic impact of bilingualism in the Canadian labor market produces slightly different and more varied results. Using a language-as-human-capital perspective, they predicate their study on three main theoretical assumptions that follow a logic similar to that employed in this study: 1) “polyglots should earn more than unilinguals” 2) “different cities (with different populations of majority and minority language speakers) should have different patterns of returns to language knowledge” and 3) “these returns should be correlated with the size of the linguistic communities” (Pendakur and Pendakur 2002: 150). Applying regression techniques to data from Canadian census, they find that those respondents who are fluent in Canada’s two official languages—English and French—tend to

earn more than their monolingual (English or French) peers. However, when assessing returns to knowledge of unofficial languages, the story changes. Their analysis finds no earnings advantages for possessing knowledge of one official and one or more unofficial languages. In fact, those who speak one or more unofficial languages (in addition to one official language) actually earn *less* than those fluent in only one official language. While earnings returns to language skills do vary slightly according to the size of the corresponding linguistic community, in no instance do bilinguals fluent in an unofficial language earn more than monolinguals fluent in one of the official languages. They attribute these rather counterintuitive findings to discrimination caused by the ethnic and cultural dimensions of language.

In contrast to these findings, evidence from the 1990 US Census points to a possible shift in the economic value of English-Spanish bilingualism in the US labor market. In their study of income patterns of bilingual and English-only Hispanics in the US, Boswell and Fradd (1999) find that bilingual language skills have a greater economic value than monolingual English skills in select US cities with large Hispanic populations. Their simple cross-tabulations of mean earnings by language ability of Hispanics clearly show that bilinguals earn more than their monolingual English counterparts in certain areas of the US. These results hold true for Hispanics in three metropolitan areas in the US: Miami, El Paso, and, to a smaller extent, Chicago. While their findings leave little doubt of the positive association between bilingualism and earnings in these areas, there is a need to go beyond this general observation by controlling for the effects of education, citizenship status, years in the US, and other select variables in order to observe pure effect of bilingualism on earnings.

As this literature review illustrates, there is a large body of research dedicated to the study of the economic impact of language proficiency. However, inconsistencies within this

research about the effect of language enclaves on returns to English-proficiency and bilingualism make these topics ripe for further study. Data from the 2000 US Census provide a number of variables that permit detailed exploration of these topics. The methodology and variables used to achieve this analysis are described in detail in the next chapter.

CHAPTER 3 DATA AND METHODOLOGY

Research Design

Building on the theoretical foundations and substantive research highlighted in the previous chapters, my hypothesis predicts that English language ability will be a strong determinant of earnings in both areas with high concentrations and areas with low concentrations of Spanish-speakers, even after controlling for education and other variables that may influence earnings. However, adopting McManus's (1990) theoretical framework and reasoning, my primary hypothesis asserts that the labor market context will affect the relationship between language and earnings. That is to say, among Hispanics in Florida, English language ability will have a stronger impact on earnings in areas with a low percentage of Spanish-speakers. In areas with large minority language enclaves, where there are high percentages of Spanish-speakers, English language ability will be less relevant to earnings; the labor market in these areas will place less value on English language ability.

My corollary hypothesis follows this same line of reasoning to test the effect of bilingual English-Spanish language skills on earnings. It posits that the inverse holds true for bilingual language skills. In areas with large Spanish language enclaves, returns to bilingualism will be higher than returns to bilingualism in areas dominated by the majority language.

To test these hypotheses, my study consists of two parts: the first based on statistical analysis of census data and the second based on qualitative interviews. The following sections detail this methodology.

Quantitative Analysis

US Census Data

The US Census 2000 serves as the dataset for this study. Specifically, the study utilizes the 5% Public Use Microdata Sample (PUMS) for the state of Florida. This random sample contains nearly 796,500 cases, weighted to represent the entire population. The census collects information on both households and individuals on topics related to income, language ability, ethnicity, occupation, and other variables such as age, race, education, that provide a basis for testing variations in the relationship between language abilities and earnings.

Since 1890, every decennial US census (with the exception of the 1950 census) has included at least one question pertaining to respondents' language characteristics. Stevens (1999) categorizes the history of census language questions into three clusters: the earliest cluster, focusing on English proficiency; the middle cluster, focusing on mother tongue, and the current cluster, focusing again on English proficiency. The shifting focus of the questions reflects changing perceptions of the relationship between language and ethnicity (Stevens 1999). For example, the first two clusters of language questions were primarily designed to elicit information on the ethnic and racial characteristics of growing immigrant populations. For that reason, the language questions on the early and mid-century censuses pertain only to white foreign-born respondents and/or members of select immigrant groups (Stevens 1999). Only the most recent censuses (1980-2000) record both the native language characteristics and English proficiency levels of the entire population.

The Census 2000's questions on language are particularly useful for this study because they focus on both English language proficiency and language spoken at home, and they include the language characteristics of both native and foreign-born respondents. The Census 2000 uses a three-part series of questions to gather information on respondents' language abilities: 1) Does

this person speak a language other than English at home? 2) What is this language? 3) How well does this person speak English? (Very well, Well, Not well, Not at all). The Census Bureau included this series of questions specifically to identify geographic areas with a large population of people with limited English language abilities in order to better assess needs for bilingual education and other social services (Stevens 1999). The following section details how I use these language variables to construct the linguistic concentrations for this study.

Measuring the Language Enclave

Due to the comparative nature of this study, it was first necessary to identify areas with high and low proportions of Spanish-speakers. The Census 2000 offers several levels of geographic disaggregation, ranging in smallest to largest order from block, block groups, and census tracts to county, state, regional, and national divisions. However, in the 5% PUMS files, the Census Bureau collapses the smaller geographic units in order to maintain the anonymity of respondents. Thus, in the 5% sample, the Public Use Microdata Area (PUMA) is the smallest identifiable geographic unit, containing 100,000 or more respondents. The next level of aggregation is the Super-Public Use Microdata Area (Super-PUMA). The state of Florida contains 32 Super-PUMAs, each containing populations of 400,000 or more.

The Super-PUMAs serves as the primary geographic unit of interest for this study. While they do not offer analysis at the most disaggregate level, they serve the basic purpose of this study, and their larger size offers a distinct advantage over the PUMA. Since the Super-PUMAs typically cover an area that encompasses one to four PUMAs, and corresponds to one or more counties as shown in the map in Figure 3-1, the chances that a respondent's place of work lies within the Super-PUMA in which he lives are greater than the chances that a respondent's place of work lies within the smaller PUMA in which he lives. This reduces the need to construct a

variable that proxies place of work and partly circumvents potential bias that may arise from wage differentials due to location.

To determine areas with a high proportion of Spanish-language speakers, I selected broadly for both Spanish-speakers and monolingual English speakers and then cross-tabulated language by Super-PUMA. This tabulation allowed me to identify which Super-PUMAs contain large populations of Spanish-speakers and which contain populations that are primarily English-speaking. I then collapsed the Super-PUMAs into two categories: 1) high concentration of Spanish-speakers (HC) and 2) low concentration of Spanish-speakers (LC). I assigned Super-PUMAs with a Spanish-speaking population of 40% or less to the Low Concentration category and Super-PUMAs with a Spanish-speaking population of 60% or more to the High Concentration category. Table 3-1 shows a simple cross-tabulation of language spoken at home by proportion of Spanish-speakers (High or Low). In the LC area, less than 10% speak Spanish; the remaining 90% are English-speakers. In HC area, almost 63% speak Spanish, while only 37% speak English. To give a geographic representation of the linguistic concentrations, Figure 3-1 presents a map outlining the Florida Super-PUMAs, color-coded to show the linguistic concentrations used in this study. It is obvious from the map that the Spanish-language enclave, or HC area, corresponds exactly to the Super-PUMAs that compose Miami-Dade County. The remaining Super-PUMAs in Florida constitute the LC area. With the linguistic concentration measurement in place, I then invoked several criteria to select the cases to be included in the regression analysis.

Sample Description

The sample used in the regression analysis consists of 16,611 cases ($n=16,611$) of Hispanic males aged 18-65. The age restrictions account for those respondents in their prime working years, while the sex restriction eliminates the bias created by a gender-related wage gap. I further

limit the sample to respondents who report themselves as employees, due to the well-documented complications with measuring the wages of the self-employed (McManus 1990). In order to prevent potential bias caused by the inclusion of wages from part-time work or intermittent stints in the labor force, the sample includes only full-time employees, defined as those who reported working an average of 35 hours or more per week and 45 weeks or more in 1999. Finally, I select for employees who work within three broad categories of occupations: Management and Professional Positions; Sales; and Service, since occupations within these categories rely heavily on on-the-job language use. (The criteria for these occupational categories are detailed in a later section of this chapter).

To secure a sample of Spanish-speakers, I selected those respondents who reported speaking a language other than English at home, and specifically, those who reported speaking Spanish at home. For the second research question, which compares the earnings of bilingual Spanish-English speakers and monolingual English speakers, I expanded the above sample to include those respondents who reported speaking English only. I define bilinguals as those respondents who report 1) speaking Spanish at home and 2) speaking English “very well.”

Description of Variables

Dependent variable

The Census 2000 includes information on several different types of income, such as wage and salary, interest, dividend, and rental income as well as total personal income. I select only wage and salary income as the dependent variable for two reasons. First, wage and salary income refers specifically to income earned by working. Second, income from wages and salary tends to be less subject to underreporting than other forms of income (US Census Bureau 2005). Since wage and salary income tends to be documented and is generally received in consistent amounts

throughout the year, a respondent is more likely to accurately report this type of income as opposed to income earned through other sources.

Following standard practice, I use the *natural log of wage and salary income* as the dependent variable in the regression analysis. The log form of income is generally preferred in regression analyses for two reasons. First, the logged value, by bringing outlier values closer to the regression line, generates better estimates. Second, when using the natural log of income, the ‘b’ coefficients in the regression analysis can be interpreted as percentages of returns to earnings (Lovell 1989; Hardy 1993).

Independent variable

English proficiency is the primary independent variable. Respondents self-report their English-speaking ability by choosing from four possible responses: not at all; not well; well; and very well. In the regression model, rather than inserting the English-language variable as a single variable in the form of an index (0-3), I code those responses into three dummy variables: *Not well* (not well=1; otherwise=0); *Well* (well=1; otherwise=0), and *Very well* (very well=1; otherwise=0). Those who reported not speaking any English—the *Not at all* group—are used as the comparison group. Converting the English-language ability variable into multinomial dummy variables allows me to observe how the effect of English language ability on earnings varies by proficiency level. In the second regression analysis, which seeks to compare the earnings of bilinguals and monolinguals, I insert monolingual (English-only) Hispanics into the sample, and use them as the reference group. I then use the following four dummy variables for English speaking ability: *Not at all* (not at all=1; otherwise=0); *Not well* (not well=1; otherwise=0); *Well* (well=1; otherwise=0), and *Very well* (very well=1; otherwise=0).

Control variables

Selection of the control variables used in the analysis accounts for personal characteristics, human capital traits, migration circumstances, and labor characteristics that are likely to influence wage and salary income.

The first set of control variables represents common human capital traits, including *age*, *educational attainment*, *work experience*, and *work experience-squared*. *Age* refers to the respondent's age in years. *Educational attainment* represents the respondent's highest level education completed. An individual's labor market experience also tends to be a strong human capital trait that is positively correlated with earnings (Chiswick 1991). However, since the Census does not provide a variable that explicitly measures the number of years the respondent has been in the labor force, I construct the standard proxy measure for *work experience* by computing the respondent's age less his educational attainment less 6 years ($\text{age} - \text{educational attainment} - 6$) (Mincer 1974).

The next set of control variables corresponds to personal characteristics, and includes *race*, *nationality*, and *linguistic isolation*. The Census Bureau records seven mutually exclusive categories for race, including a *Two or more races* category introduced in the 2000 Census. For the purposes of this study, I have collapsed these categories into "White" and "Non-white" in order to use *race* as a binomial dummy variable ($\text{White}=1$ and $\text{Non-white}=0$).

Since previous research has shown that nationality can act as a social capital trait that strongly affects earnings (Borjas 1982, Tienda 1983), I incorporate the following multinomial dummy variables for national origin: *Puerto Rican* ($\text{Puerto Rican}=1$ and otherwise=0); *Mexican* ($\text{Mexican}=1$ and otherwise=0); and *Other Hispanic* ($\text{Other Hispanic}=1$ and otherwise=0). Since Cubans comprise the largest group of Hispanics in Florida, they are used as the reference group for comparison. Finally, I include *linguistic isolation*, a variable that indicates a respondent's

exposure to English in the home. The Census Bureau defines a linguistically isolated household as one in which no members aged 14 or older speak English only and no members aged 14 or older speak a non-English language and speak English “very well.” That is to say, all members aged 14 or older in linguistically isolated households experience some degree of difficulty with English. I code this as a binomial dummy variable (not linguistically isolated=1 and linguistically isolated=0).

The control variables for migration characteristics are *birthplace*, *citizenship status*, and *years in the US*. Prior research finds that US origin, US citizenship, and length of residence in the US are positively associated with earnings of non-native English speakers (Chiswick and Miller 1992; 2002). I thus insert dummy variables for *birthplace* (US=1 and abroad=0) and *citizenship status* (US citizen=1 and non-US citizen=0). *Years in the US* represents the total number of years that a respondent has lived in the US.

The final set of control variables accounts for variations in respondents’ labor characteristics. Since wage income often varies by number of hours and weeks worked, I include the usual number of *hours worked* per week and the total number of *weeks worked* in 1999. The third labor characteristic variable accounts for occupation-related wage differentials. The Census Bureau recorded 992 different types of occupations in the 2000 Census. In order to convert these into more manageable categories, I follow the Census Bureau’s classification scheme and collapse the occupations into the seven principal categories: Management and Professional; Service; Sales and Office; Farming, Fishing, and Forestry; Construction, Extraction, and Maintenance; Production and Transportation; and Military. However, as noted in the sample description, I select the three occupational categories that most use language on the job: management and professional positions; sales; and service. I then construct multinomial

dummy variables for these occupations by coding *sales* (sales=1 and otherwise=0) and *service* (service=1 and otherwise=0). *Professional and management positions*, which tend to be the highest-paid occupations of the three categories, are left out of the equation and used as the comparison group.

Statistical Model/Data Analysis

A simple Ordinary Least Squares (OLS) regression analysis allows me to observe the effect of English language ability on the natural log of income, net of the effects of education, age, sex, race, hours and weeks worked, occupation, work experience, national origin, citizenship status, years in the U.S., and linguistic isolation. The analysis of the relationship between earnings and the aforementioned wage-predictors is modeled in Equation 3-1.

$$Y = \alpha + \beta_1 \text{age} + \beta_2 \text{race}_i + \beta_3 \text{educ} + \beta_4 \text{exp} + \beta_5 \text{exp}^2 + \beta_6 \text{weeks} + \beta_7 \text{hours} + \beta_8 \text{occ}_i + \beta_9 \text{bpl} + \beta_{10} \text{citizen} + \beta_{11} \text{years} + \beta_{12} \text{lingisol} + \beta_{13} \text{hispan}_i + \beta_{14} \text{engabil}_i \quad (3-1)$$

In this equation, *Y* represents the natural log of wage and salary income; *age* is the respondent's age in years; *race_i's* refers to binary racial categories; *educ* represents highest level of education attained; *exp* is the proxy for work experience; *exp²* is work experience-squared; *occ_i's* refer to different occupational categories; *weeks* is the number of weeks worked in 1999; *hours* is the usual number of hours worked per week; *bpl* indicates a respondent's birthplace; *citizen* indicates a respondent's citizenship status; *years* represents the number of years a respondent has lived in the US; *lingisol* indicates whether or not the respondent lives in a linguistically isolated household; *hispan_i's* represent national origin categories; and *engabil_i's* represent different levels of English-speaking ability.

Regressions are conducted separately for the two categories of Super-PUMAs. A comparison of the regression models for the high and low concentrations will allow me to determine if the effect of English language ability on earnings varies according to the percentage

of Spanish-speakers in the area. Since I argue that English language ability will be a more important determinant of earnings in areas where there are fewer Hispanics, I expect the effect of English language ability on earnings to be greater in areas with a low concentration of Spanish-speakers than in areas with a high concentration of Spanish-speakers. Specifically, I predict that, net of the controls for occupation and human capital variables, the ‘b’ coefficient for English language ability will be significantly higher in the low concentration model than in the high concentration model. In the second regression analysis, which examines the effect of bilingualism, I expect the ‘b’ coefficient for to be higher for bilinguals in areas with a high concentration of Spanish-speakers than in areas with a low concentration of Spanish-speakers.

Qualitative Analysis

Valuable as the empirical analysis may be in terms of the magnitude of effects, and how the effects vary by labor market context, it is also useful to examine the behavioral and attitudinal models that underlie my hypothesis. Specifically, it is important to verify that employers give less importance to workers’ language abilities in enclave economies. In order to do this, I added a qualitative component to this study.

The qualitative analysis consisted of interviews with employers and managers who make hiring and promotion decisions and frontline workers from employment and staffing agencies familiar with the demands of the local labor markets. The sample consisted of informants associated with businesses in the service sector, since such businesses rely heavily on oral communication with the public. After establishing initial contacts, I used snowball sampling to identify subsequent key informants.

Through semi-structured interviews, I gained information about the behavioral and attitudinal patterns associated with language and earnings. Specifically, I strove to elicit information about how employees’ language proficiency influences employers’ decisions

regarding earnings and how and why criteria for such decisions vary by labor market context. The general interview guide consisted of questions related to employees' language ability and work performance; language-based delegation of positions and tasks; payment, raise, and bonus criteria; language proficiency vs. language use; linguistic composition of workforce and clientele; language-based discrimination in the workplace; and bilingualism in the workplace. The conversational nature of the semi-structured interviews facilitated the flow of ideas regarding these topics and allowed others to emerge. I conducted a total of ten interviews in Miami-Dade and Broward counties.

Although the qualitative analysis played a secondary role in this study, it nonetheless provided further insight into the relationship between language and earnings and was particularly helpful in identifying new variables to include in the quantitative analysis. Consequently, I do not discuss or analysis the interviews at length in the proceeding chapters, but instead include small excerpts as supporting material for the quantitative findings. To maintain anonymity, the names of the informants have been changed and their place of employment has been concealed.

Methodological Caveats

Despite the high quality of the Census 2000 (which is reportedly the most accurate US census in history) and the applicability of its questions to this study, it is nevertheless important to interpret findings with the following caveats in mind.

Wage and salary income, the dependent variable, is self-reported by respondents. Since answers to the income questions are generally based on memory, the Census Bureau (2005) cautions that respondents often forget precise amounts of income received. This is especially true in the case of undocumented and informal earnings, such as tips. As a result, wage and salary income tends to be underreported.

English speaking ability, the primary independent variable of interest, also suffers from three main limitations. First, like income, language ability is self-reported by the respondent. The census operationalizes English language ability as speaking ability, a definition that is broad and subject to interpretation. Since there are no explicit and uniform criteria for gauging language ability, a respondent may claim any level of proficiency he wishes. Thus, English language ability, unlike wage and salary income, tends to be overestimated by respondents (Siegel 2001). The over-reporting of English language ability is more pronounced in the *very well* and *well* categories (Stevens 1999).

The second limitation of the English-language ability variable is that it refers only to English speaking proficiency. As with most recent surveys and censuses, the 2000 Census does not ask about the ability to read English. The inclusion of a question on reading ability would offer a more precise analysis since most occupations typically require both reading and speaking skills (Chiswick 1991).

Third, the fact that the questionnaire is written in English presents an inherent problem for respondents with limited English abilities. Each household must have at least one member that has some English literacy in order to fill out the questionnaire or understand what alternate resources the Census Bureau provides to assist non-English language speakers with the questionnaire. The Census Bureau has implemented various procedural measures to reduce undercount resulting from such language issues. For example, the census questionnaires are now available in six languages, including Spanish. Language assistance guides are also available to provide assistance with the completion of the questionnaire in 49 languages. Nevertheless, for obvious reasons, this issue lingers as a potential source of undercount or misreporting.

The measurement of bilingualism also warrants a word of caution. Stevens (1999) notes that many people who report speaking English very well and report speaking another language at home, may not necessarily be completely fluent in the non-English language. This pertains especially to children of immigrants, who often experience first-language attrition, or loss of a second language. In addition, data from past censuses reveal that respondents have a tendency to overreport the use of a non-English language at home. Over-reporting of language ability tends to be more common among native-born Americans than among foreign-born residents (Stevens 1999). Problems with reporting the use of non-English languages may arise from ambiguities in the phrasing of the census question “Does this person speak a language other than English at home?” The question does not specify the extent and frequency with which the non-English language is used at home. Additionally, “at home” may also be a source of ambiguity, especially for immigrants who may interpret “home” as home country (Siegel 2001).

The issue of undercount again arises with the *Hispanic* variable. The census undercount of Hispanics is well-documented (Duany 1992; Evans 2001). However, the 2000 Census boasts the lowest reported levels of undercount of minority groups (Evans 2001). Indeed, the undercount estimates of Hispanics dropped from 4.99% on the 1990 Census to 2.58% on the 2000 Census (Evans 2001). Researchers have theorized about a variety of cultural and behavioral factors that may contribute to this undercount. Duany (1992) posits that undercount of Hispanics often stems from five main causes:

- (1) disbelief in the confidentiality of the census
- (2) distrust of government authorities
- (3) fear of losing public assistance
- (4) fear of deportation among undocumented immigrants
- (5) cultural differences in defining household structure (p.1)

Other research has shown that the placement of the census question on Hispanic origin also influences the count. The 2000 Census marked a change in the sequencing of questions on race and Hispanic origin. In 1990, the question on Hispanic origin directly preceded the question on race; the 2000 Census reversed the order of these questions (Grieco and Cassidy 2001). Analysis of this sequencing shows that the order of questions used in 2000 significantly reduced the non-response of Hispanics (US Census Bureau 1999; Grieco and Cassidy 2001).

Another minor limitation of this study stems from the measurement of linguistic concentration. While other studies have invoked the Hispanic variable (McManus 1990), the linguistic isolation variable (Chiswick and Miller 1992), and other methods to identify language enclaves, this study defines linguistic concentrations more broadly by using simply the percentage of Spanish-speakers who live in a certain area, regardless of their linguistic isolation status. While this may be a rather crude measurement of language enclaves, it nevertheless serves the basic purposes of this study.

Table 3-1. Language spoken by concentration of Spanish-speakers, Florida 2000

Concentration of Spanish-speakers	Language spoken		Total	
	Spanish	English		
Low	N	59,347	546,704	606,051
	%	9.8	90.2	100.0
High	N	59,149	35,272	94,421
	%	62.6	37.4	100.0

Source: US Census 2000 IPUMS 5% Sample

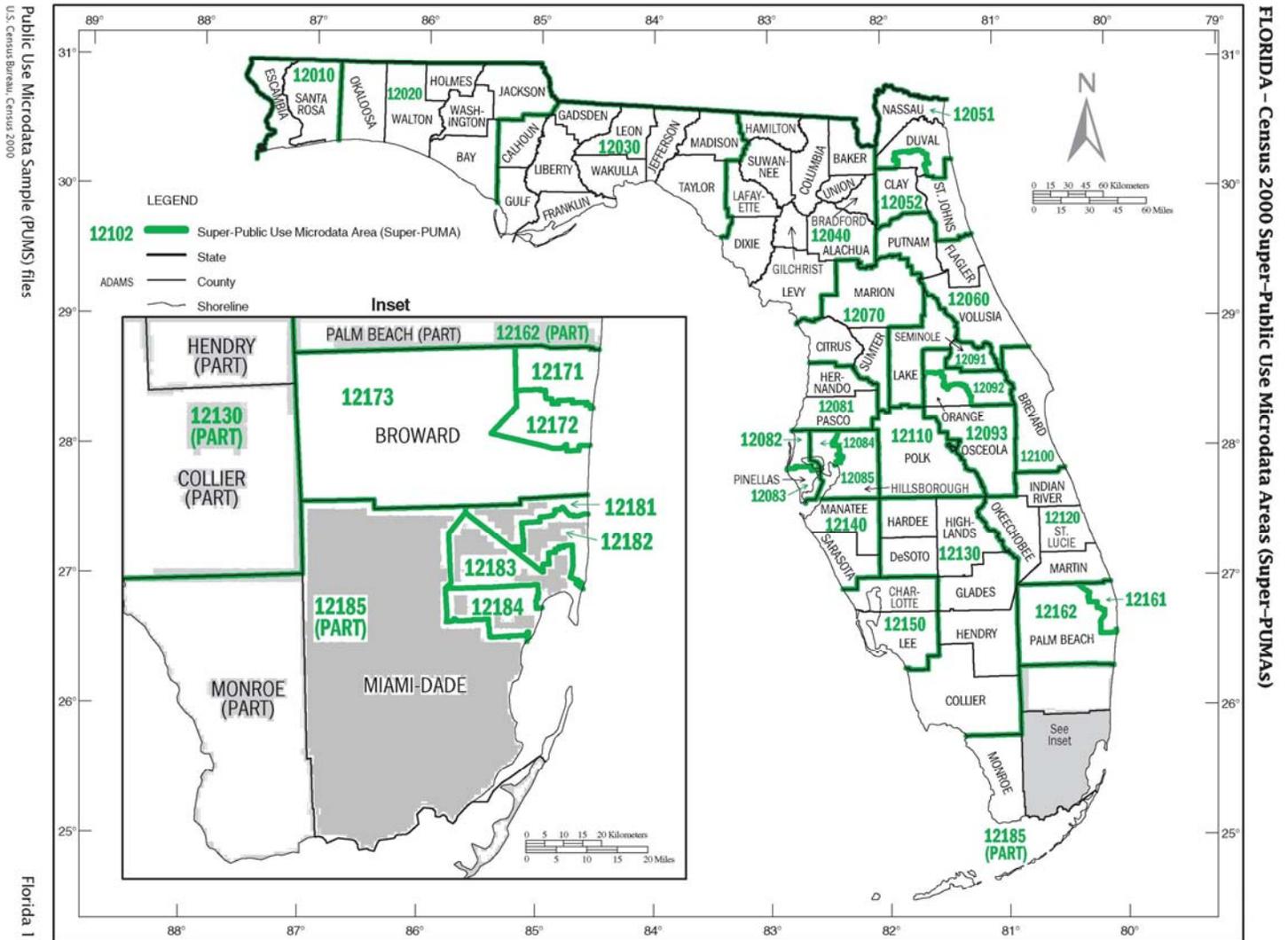


Figure 3-1. Florida linguistic composition. Public Use Microdata Sample (PUMS) files. US Census Bureau, Census 2000.

- Areas with low concentration of Spanish-speakers (LC)
- Areas with high concentration of Spanish speakers (HC)

CHAPTER 4 RESULTS

This chapter presents the findings from the quantitative analysis and qualitative interviews. I first outline descriptive statistics for the variables used in the analysis and then report the results from the OLS regression analyses for both research questions. Wherever relevant, I include excerpts from the interviews as supporting evidence of the empirical results.

Summary Statistics

Tables 4-1 and 4-2 provide the sample means and standard deviations for the dependent and independent variables used in the regression analysis for the Low Concentration (LC) and High Concentration (HC) models, respectively. With the exception of certain variables discussed in further detail below, the statistics show little variation between the two contexts.

The annual wage and salary income in the LC areas averages \$30,717 (natural log 10.101). The mean wage and salary income in the HC area is slightly higher at \$35,507 (natural log 10.221) per year. The distribution of English-speaking abilities, however, is fairly similar across the two concentrations. In both areas, just over half of the respondents report speaking “very well.” Approximately 20% of respondents in each concentration report speaking “well,” 17% report speaking “not well,” and about 9% report speaking no English at all.

The mean and standard deviations for the human capital, labor characteristics, and migration variables are fairly uniform across the concentrations. The Hispanic origin composition does, however, vary by concentration. Cubans compose the majority (52.3%) of the sample in HC area, while Mexicans, Puerto Ricans, and other Hispanics rank as the most populous Hispanic origin groups in the LC areas. The percentage of foreign-born respondents also is greater in the HC areas.

Research Question One: The Effect of Language Enclaves on Returns to English

The first models regress the log of wage and salary earnings on English-speaking ability of non-native speakers. Table 4-3 displays the results from the regression models, sorted by linguistic concentration. The b coefficients, reported in the first and third columns, show the effect of English language ability in the two linguistic contexts. Since the dependent variable is logged, the b coefficient is interpreted as percent of change in the dependent variable (Y) for each unit change in the independent variable (X), when X is a continuous measure such as age or years of school. In the case of dummy variables, such as those used for English-speaking ability, the b coefficient is interpreted differently since the dummy variables have discrete values of 0 and 1 (Hardy 1993). In this instance, the antilog of the regression coefficient is used to measure the percent of change associated with belonging to the category of interest, relative to the omitted reference category.

As expected, results from these models point to a positive relationship between English-speaking ability and earnings in both English-dominant and Spanish-dominant areas in Florida, as indicated by the positive regression coefficients in both models. An initial observation confirms the importance of treating English language proficiency as a set of discrete dummy variables, rather than an ordinal variable with values ranging from 0-3. Had I done the latter, and thereby generated a single ‘ b ’ coefficient for language proficiency, it would not be evident that the returns to language ability differ by proficiency level. For example, the findings show that there are no significant differences in the earnings returns to language proficiency for respondents in the “not well” and “not at all” categories. However, when compared to the “not at all” category, the earnings returns to language proficiency are greater for those in the “well” category and greater still for those in the “very well” category. In short, the findings clearly

show that the effect of language ability on earnings is nonlinear, a pattern that is evident in both labor market contexts.

When examined comparatively, the two models show unexpected results. The b coefficients for English-speaking ability variables in the HC model are higher than the b coefficients in the LC model. For example, in the LC model, the b coefficient (column 1) for those respondents who speak English “well” is .052. Those who speak English “well” earn roughly 5.2% more than the reference group, who speaks no English at all. In the HC model, the b coefficient (column 3) for those respondents who speak English “well” is .076. This means that those who speak English “well” earn approximately 8% more than those who speak no English at all. The comparison of these two regression coefficients indicates that, net of the effects of the selected control variables, the impact of intermediate English proficiency on earnings is greater in the HC areas.

The difference in the magnitude of the effect of English ability on earnings is even more pronounced for those who have a higher level of English-speaking proficiency. In the LC areas, respondents who speak “very well” earn approximately 14.3% more than the reference group, as indicated by the b coefficient of .134. However, in the HC model, those who speak “very well” earn nearly 25% more than their English-deficient counterparts, as indicated by the b coefficient of .219. Only the *Not well* group is discounted from the analysis since its relationship with earnings does not prove statistically significant. These findings suggest that, in the case of the “well” and “very well” proficiency levels, English has a *greater* effect on earnings in the HC areas. In other words, in the labor market in Florida, English is actually *more* important in areas with a high concentration of Spanish-speakers. Such findings run contrary to my research hypothesis and contradict McManus’s (1990) study that found that larger enclave size lowers

returns to earnings and Chiswick and Miller's (2002) study that concluded that non-native English speakers have greater earnings opportunities in areas with a high concentration of Spanish-speakers.

Many comments from interviews in Miami-Dade support these findings. For example, Dan, a recruiter at a staffing agency in North Miami, notes that, although most of his job applicants are bilingual:

English is still very important in Miami. A lot of the clients that we deal with are not in the Latin or Spanish-speaking areas; they're mostly English-speaking, so they need to be able to communicate with these guys and let them know what needs to get done. If they can't communicate with them, they are going to send them off the job.

Victoria, a recruiter for a hotel and food service employment agency that staffs companies in several counties in South Florida, seconds this opinion. "English is a must," she says. She explains that although all of the companies she staffs require English-speaking workers, her job applicants are mostly Spanish or Creole-speakers. She adds:

Sometimes they don't even know a little bit of English; they cannot answer me. They have a companion with them to talk with me. I tell them, how can I communicate with them, when I will be calling them personally to send them on a job? Usually what I give them are dishwashing jobs... if they're insistent. And sometimes jobs in the hotels, if the hotel manager or supervisor speaks Spanish. But if not, they will tell me, 'Please don't send this person, because we can't communicate'... Those jobs are usually the lowest paid, minimum wage.

Steve, a recruiter at a staffing agency in Miami, likewise emphasizes the importance of English in the workplace. In addition to job experience, references, work ethic, and presentability, he cites English as one of the top qualifications that he seeks in applicants. "They absolutely have to have some proficiency in English." He explains further that language proficiency indirectly influences pay because communication affects job performance, and job performance is what ultimately determines raises and bonuses.

Indeed, relative to the other independent variables in the model, English language proficiency ranks among the most important determinants of earnings. To demonstrate this, I call attention to the standardized Beta coefficients, which offer a means of comparing the effect English ability to the effect of the other independent variables on earnings. Since these variables serve primarily as controls, I do not discuss their impact at length. Rather, I mention briefly the magnitude of their effects in order to give a general idea of the relative impact of English proficiency on earnings.

Similar to findings from past studies (eg. Chiswick and Miller 2001, Tienda 1983, Borjas 1982), both models in Table 4-3 confirm the positive correlations between earnings and the standard human capital variables: age, education, and work experience-squared¹. However, in the HC model, the ability to speak English very well actually exerts a greater influence on earnings than educational attainment. In fact, with a Beta coefficient of .165, the ability to speak English very well functions as the fourth most important determinant of earnings, behind age (Beta=.731); work experience-squared (Beta= -.655); and hours worked (Beta=.177). Though its relative impact is lesser in the LC model, the ability to speak English very well still ranks as an important determinant of earnings.

When compared to English-speaking ability, the other control variables exert a less powerful, but nonetheless significant, influence on earnings. For example, US nativity, US citizenship, and length of residence in the US are all positively associated with earnings. Type of occupation also acts as a significant predictor of earnings. Workers in sales and in the service industry tend to earn less than those in professional positions. Such findings resonate with the aforementioned excerpt from the interview with Victoria, in which she indicates that workers

¹ Collinearity exists between the age and work experience variables.

with low levels of English proficiency are largely relegated to the lowest-paying jobs in the service industry.

The models also show evidence of wage discrimination along racial and ethnic lines. In both the HC and LC areas, White Hispanics tend to earn about 4.7% more than Black or other Hispanics. However, in relative terms, race is one of the least important determinants of earnings, as indicated by the Beta values of .037 and .023 in the second and fourth columns, respectively. Ethnic networks, however, do appear to have a strong impact on earnings. Indeed, the perceived effect of ethnic networks emerged as a recurrent theme in several interviews. The following quote from Raul, an administrative personnel manager for a local university, illustrates one possible rationale for the relationship between immigrant and/or ethnic networks and earnings and how language proficiency factors into that relationship. When asked about his willingness to hire workers with limited English proficiency, his rationale recalls his own immigrant past:

I look at myself: when I came to this country, someone gave me a chance and I was able to move up through the system, and I like to do the same for people that are out there in the same position that I was thirty-some years ago.

National origin—which serves as an operational definition of ethnic networks—in particular stands out as a significant determinant of earnings. The results from both regression models suggest that, among Hispanics, being Cuban is an added advantage in the labor market in Florida. The negative regression coefficients for the Hispanic origin variables indicate that, all other things being equal, Cubans earn more than other Hispanics in Florida. Compared to Puerto Ricans, Florida's second most populous Hispanic group, Cubans earn about 10% more in the HC areas and 14% more in the LC areas. Anna, a former career counselor and a current immigration lawyer at a legal services organization in Downtown Miami, observes:

Sometimes I see Cubans come in; they hardly speak any English and they have only been here for a short time, but they already have great jobs, working at FIU, at hospitals, offices...

Her comments hint at the ways in which national solidarity can function as a social capital trait that yields positive labor market outcomes.

Together with the English-speaking ability variables, these additional independent variables form a statistical model that explains almost 36% of the variance in earnings in the LC areas ($R^2=.356$) and 33% of the variance in earnings in the HC areas ($R^2=.331$). Both the empirical evidence from these models and qualitative support from the interviews underscore the importance of English proficiency in the labor market, regardless of linguistic concentration. However, many interviewees, both in HC and LC areas, also highlighted the simultaneous importance of Spanish in the labor force. The next section presents the findings that from the models comparing the effects of bilingualism on earnings in each linguistic concentration.

Research Question Two: Returns to Bilingualism

The second set of regression analyses incorporates monolingual English-speaking Hispanics in the sample in order to examine how the effect of bilingualism on earnings varies by linguistic concentration. This analysis uses the same regression equation used to test the first research hypothesis, but uses monolinguals as the reference group. The *Very Well* category in both tables refers to bilingual speakers, since bilingual respondents are defined as those respondents who 1) speak Spanish at home and 2) speak English “very well.” Table 4-4 presents the results, sorted by linguistic concentration. In this analysis, the *b* coefficient again serves as the main tool for comparison between the two concentrations. The LC model suggests that monolingual English speakers earn more than their bilingual counterparts, as indicated by the *b* coefficient of -.03 for the *Very Well* category in Column 1. Yet, findings in this case are

not statistically significant, and thus cannot offer valid suggestions about the effect of bilingualism on earnings in LC areas in Florida.

The HC model, however, shows strikingly different results. As predicted, bilingual language skills are positively associated with earnings in the HC area, as indicated by the *b* coefficient of .066 in the *Very Well* category in Column 3. All other factors being equal, bilingual Hispanics earn more than their monolingual English counterparts in the enclave. However, the positive relationship between bilingualism and earnings only holds true for the fully bilingual speakers. Spanish-speakers who have intermediate English proficiency earn less than monolingual English Hispanics, as shown by the negative *b* coefficient for the *Well* category in column 3.

Comments from the qualitative interviews echo these empirical findings. For example, Kevin, a manager of an administrative and technical staffing agency in Hialeah, FL, notes that “more often than not” clients (employers) in the South Florida area specifically request bilingual English-Spanish speakers for positions. The applicant pool at his agency consists of monolingual English speakers, monolingual Spanish-speakers, and bilingual English/Spanish-speakers. He explains that for jobs that require little interaction with the public, monolingual language skills, Spanish-only or English-only, suffice. However, for most positions, bilingual skills are preferred since the businesses he staffs deal not only with bilingual clients in South Florida, but also with monolingual Spanish-speakers in Latin America and the Caribbean. He adds:

In Miami, bilingualism is pervasive. A good command of the English and Spanish languages is necessary. Generally, bilingual positions pay higher because there is more responsibility involved. Sometimes it creates issues with our recruiting efforts... we end up ignoring a lot of folks who do not speak Spanish. There are those people that are English-only who would not qualify. I had to learn Spanish myself when I came to Miami... I use it everyday and it allows me to perform my job better. Yet, when you are limited to the

minority language, (which I don't know if Spanish is anymore in Miami), but, in my experience, Spanish-only would generally pay lower than English-only. So, it goes both ways, and may be something that is unique to this area [Miami-Hialeah].

This excerpt highlights the labor market advantages bilingualism and disadvantages of monolingualism in the language enclave.

Anecdotal evidence from a recent *Miami Herald* also points directly to the advantage that bilinguals have in the Miami-Dade labor market. The article quotes a Miami business executive about the language abilities one of his former Cuban-American employees “Professionally, she was very good. But, she was almost incapable of writing Spanish.” He eventually replaced her with a fully bilingual Puerto Rican secretary (Fernandez 2008). His experience shows the need for employees with high proficiency levels of both English *and* Spanish.

Even Victoria, whose quote in the previous section stressed the importance of English in the labor market, and who later expressed her belief that non-native speakers “should speak English because they are in America,” acknowledges the growing importance of Spanish in the labor market in South Florida. She says, “I know a little bit of Spanish. You have to at least learn the basics, because they [Spanish-speakers] are everywhere.”

Thus, in this case, findings partially support the research hypothesis that predicted that bilinguals would earn more than monolinguals in the enclave. Such findings run contrary to past studies (Pendakur and Pendakur 2002) that conclude that knowledge of an unofficial, minority language, garners no additional earnings advantage in the labor market. However, because findings from the LC model were not significant, I cannot compare the effects of bilingualism on earnings in the two linguistic concentrations. Nevertheless, these findings, as well as those from the first research question, have important implications that I discuss further in the next chapter.

Table 4-1. Mean and standard deviation of variables used in Low Concentration model. Hispanic males, age 18-65.

Variable	Description	Mean	SD
Wage & salary Income	Total annual wage & salary income in dollars	30717.2	30770.02
Log of wage & salary income	Natural log of wage & salary income	10.101	0.631
Age	Age of respondent	36.2	10.828
Race	Dummy variable (ref=Black/Other)	0.63	0.484
Educational attainment	Years of school	9.42	3.454
Work experience	Age-education-6	32.784	10.864
Work experience squared	(Age-education-6) ²	1360.255	898.73
Occupation	Dummy variables (ref=Management)		
Management		0.1831	0.387
Sales		0.1494	0.357
Service		0.1777	0.382
Weeks worked	Total annual weeks worked	51.18	1.84
Hours worked	Typical hours worked per week	45.12	8.507
Birthplace	Dummy variable (ref=Abroad)	0.22	0.417
Citizenship status	Dummy variable (ref=Non-US citizen)	0.6	0.489
Years in the US	Total years lived in the US	12.32	12.545
Linguistic isolation	Dummy variable (ref=Linguistically isolated)	.72	0.447
Hispanic origin	Dummy variables (ref=Cuban)		
Cuban		.134	0.34
Mexican		.299	0.458
Puerto Rican		.267	0.442
Other Hispanic		.301	0.458
Speaks English	Dummy variables (ref=None)		
None		.08	0.271
Not well		.177	0.382
Well		.212	0.409
Very well		.531	0.499

Source: 2000 US Census IPUMS 5% Sample: Florida

N=8848; Ref=Reference category; coded as 0

Table 4-2. Mean and standard deviation of variables used in High Concentration model. Hispanic males, age 18-65.

Variable	Description	Mean	SD
Wage & salary Income	Total annual wage & salary income in dollars	35507.16	37176.76
Log of wage & salary income	Natural log of wage & salary income	10.221	0.662
Age	Age of respondent	39.42	11.437
Race	Dummy variable (ref=Black/Other)	0.87	0.34
Educational attainment	Years of school	10.49	3.072
Work experience	Age-education-6	34.934	11.825
Work experience squared	(Age-education-6) ²	1360.255	898.73
Occupation	Dummy variables		
Management	(ref=Management)	0.253	0.434
Sales		0.2361	0.425
Service		0.1261	0.33198
Weeks worked	Total annual weeks worked	51.14	1.875
Hours worked	Typical hours worked per week	44.68	8.143
Birthplace	Dummy variable (ref=Abroad)	0.13	0.332
Citizenship status	Dummy variable (ref=Non-US citizen)	0.55	0.497
Years in the US	Total years lived in the US	15.80	12.624
Linguistic isolation	Dummy variable (ref=Linguistically isolated)	.73	0.446
Hispanic origin	Dummy variables		
Cuban	(ref=Cuban)	.5228	0.5
Mexican		.033	0.179
Puerto Rican		.0652	0.247
Other Hispanic		.38	0.485
Speaks English	Dummy variables		
None	(ref=None)	.0920	0.289
Not Well		.1735	0.379
Well		.223	0.416
Very Well		.511	0.499

Source: 2000 US Census IPUMS 5% Sample: Florida, N=7763; Ref=reference category; coded as 0

Table 4-3. Returns to English-speaking ability. Log of income regressed on English ability and other selected variables.

Independent variables	Low concentration of Spanish-speakers		High concentration of Spanish-speakers	
	b	Beta	b	Beta
Constant	6.904		6.957	
Age	.044*	0.762	.042*	0.731
Race (ref=Black/other)	.048*	0.037	0.044**	0.023
Educational Attainment	.021*	0.117	0.018*	0.082
Work Experience				
Work Experience Squared	0*	-0.64	0*	-0.656
Occupation				
Service	-.158**	-0.096	-.241*	-0.121
Sales	-.038*	-0.022	-.098*	-0.063
Weeks Worked	.026*	0.077	0.022*	0.062
Hours Worked per Week	.011*	0.153	.014*	0.178
Citizenship Status	.060*	0.047	.091*	0.068
Birthplace (ref=Abroad)	.100*	0.066	.135*	0.067
Years in the US	.005*	0.108	.007*	0.14
Linguistic Isolation (ref=Not Isolated)	0.028*	0.02	0.042**	0.028
Hispanic Origin (ref=Cuban)				
Mexican	-.133*	-0.096	0.024	0.006
Puerto Rican	-.153*	-0.107	-.106*	-.039
Other Hispanic	-.60*	-0.044	-.038*	-0.028
English Ability (ref=Not at all)				
Not Well	0.012	0.007	-.039	-0.022
Well	.052**	0.034	.076*	0.048
Very Well	0.134*	0.106	.219*	0.165
R ²		0.356		0.331
N		8847		7763

Source: 2000 Census 5% IPUMS Sample: Florida; *Significant at .001 or less; **Significant at .05 or less. Sample includes Hispanic males, age 18-65, who reported speaking Spanish at home

Table 4-4. Returns to bilingualism. Log of income regressed on language ability and other selected variables.

Independent variables	Low concentration of Spanish-speakers		High concentration of Spanish-speakers	
	b	Beta	b	Beta
Constant	7.056		7.053	
Age	0.036*	.611	.031*	0.539
Race (ref=Black/other)	.050*	0.038	0.042**	0.021
Educational Attainment	0.020*	0.108	0.030*	0.14
Work Experience				
Work Experience Squared	0*	-0.588	0*	-0.466
Occupation				
Service	-.158*	-0.094	-.240*	-0.12
Sales	-.03**	-0.017	-.102*	-0.065
Weeks Worked	.028*	0.081	0.022*	0.063
Hours Worked per Week	.011*	0.152	.015*	0.179
Citizenship Status	.063*	0.047	.099*	0.074
Birthplace (ref=Abroad)	.104*	0.075	.144*	0.075
Years in the US	.005*	0.101	.007*	0.143
Linguistic Isolation (ref=Not Isolated)	0.028	0.019	0.041**	0.027
Hispanic Origin (ref=Cuban)				
Mexican	-.118*	-0.084	0.024	0.007
Puerto Rican	-.160*	-0.111	-.097*	-.037
Other Hispanic	-.063*	-0.046	-.033*	-0.024
English Ability (ref=English only)				
Not at all	-.121*	-0.048	-.138*	-0.059
Not Well	-.113*	-0.63	-.181*	-0.102
Well	-.079*	-0.048	-.072*	-0.044
Very Well	-.03	-.002	.066*	0.05
R ²		0.36		0.332
N		10404		8084

Source: 2000 Census 5% IPUMS Sample: Florida; *Significant at .001 or less; ** Significant at .05 or less Sample includes Hispanic males, age 18-65, who reported speaking Spanish at home or speaking English only.

CHAPTER 5 DISCUSSION

Chapter 4 presented regression estimates that suggest: first, that English is more important to earnings in the minority language enclave; and second, that bilinguals earn more than their monolingual English counterparts in the minority language enclave. The opinions expressed in the qualitative interviews also largely support the empirical evidence. Together, these findings offer valuable insight into the relationship between language, labor markets, and immigrant/minority incorporation. Consequently, they pose important theoretical and policy implications for these topics. This chapter discusses those implications in the following order: implications for labor markets and incorporation theories; application of findings to current policy issues; and suggestions for further research.

Theoretical Implications

Language, Earnings, and Labor Market Characteristics

Returns to English language proficiency

This study identifies the Super-PUMAS in Miami-Dade County as a Spanish language enclave. The remaining Super-PUMAS in Florida qualify as areas with a low concentration of Spanish speakers. Given that the majority (62%) of inhabitants in Miami-Dade County speaks Spanish at home, intuitive reasoning would suggest that English is less important in the labor market in this area. However, results reveal otherwise. The regression estimates indicate that English proficiency has a *greater* impact on earnings in this area. Such findings contradict McManus's (1990) and Chiswick and Miller's (2002) observed reduction in returns to English language proficiency in areas with a high minority language concentration, but support Dávila and Mora's (2003) findings that English is more important to earnings in the labor market in minority language concentrations. Although these results run contrary to my research hypothesis

and are seemingly counterintuitive, they are nevertheless statistically significant, and thus provide insight into the relationship between language, earnings, and labor market characteristics. They suggest that the relationship between language proficiency and earnings does indeed vary by context, but not always in the predicted ways. The main question raised by such findings then becomes: why does English language proficiency have a greater effect on earnings in areas with a large Spanish language enclave?

One possible explanation could be rooted in labor economics theory. As the supply of Spanish-speaking workers increases, the demand for their labor, and consequently, the value of their labor, decreases (Bloom and Grenier 1992). Similarly, as the population of Spanish-speakers increases in a given area, so does the competition among them in the labor market. In an applicant pool filled with Spanish-speaking candidates with similar education and experience qualifications, high English literacy may be the most important distinguishing factor among them. English language proficiency would then assert itself as a more marketable trait in areas with a high concentration of Spanish-speakers, and would thus be worth more within the enclave. In areas with a low concentration of Spanish-speakers, where there is a smaller pool of Spanish-speaker workers, the labor market cannot be as discriminating with regard to language skills. Bloom and Grenier (1992) find a similar effect in their study of earnings of Hispanic males in the US in 1970 and 1980.

A second, related explanation could point to effects of the Cuban ethnic enclave economy in Miami. As previously mentioned, this study does not utilize the ethnic enclave economy as a unit of analysis; rather, it focuses more broadly on linguistic enclaves. However, given the prominence of the Cuban ethnic enclave economy in Miami, its presence may affect findings. Some research suggests that while the ethnic enclave economy may have an insulating effect for

new immigrants, it may eventually serve as a mobility trap for immigrant employees (Sanders and Nee 1987; Booth 1998). Assuming that the ethnic enclave economy acts as a mobility trap and that it exists as a smaller unit within a larger linguistic or ethnic enclave, one could argue that English is a more valuable asset in the areas with a high minority language concentration because it serves as way to access better paying jobs outside the ethnic enclave economy. An alternate strategy for future analyses may be to control for the presence of the ethnic enclave economy within a larger ethnic or linguistic enclave. This measurement would require the simultaneous inclusion of language and place of work variables to determine the chances that the respondent works in the ethnic enclave economy (Zhou and Logan 1989).

A third possible explanation could be related to an element that, for lack of a corresponding variable, is not considered by this study—public opinion of immigrants/foreign language speakers. Past analyses have shown that public opinion toward immigrants affects the incorporation process (Tienda 1983). Public sentiment toward immigrants/foreign language speakers often varies according to the percentage of the population that is foreign-born in a given area (Stolzenberg 1990). De Jong and Tran (2001) find Miami residents to be largely receptive towards immigrants. Other studies, however, contend that the large foreign-born population in Miami is a source of contempt among many city residents. For example, Portes and Stepick (1993), through their use of competing discourses from the city's main ethnic groups, provide ample evidence of the deep-rooted tensions between Hispanics (particularly Cubans), Blacks, and Whites that have existed in Miami, at least in past decades. Given the high symbolic value attached to English in the US, prejudiced employers may use lack of English language skills as a basis for culture-based wage discrimination (Pendakur and Pendakur 2002). Given the large foreign born population in Miami-Dade, it is possible that this type of discrimination occurs

more frequently in this area than in areas with a smaller percentage of immigrants. Further research is needed to validate this line of reasoning.

Finally, methodological decisions may also explain results. First, the decision to include foreign and native-born Hispanic males in my sample may impact results. Other similar studies (Dávila and Mora 2000; Hand 2006) run separate regression models for immigrants and natives and find that the earnings returns to English language proficiency differ for the two groups. I defend my decision to include both groups simultaneously since my primary focus is language, not birthplace. Additionally, OLS regression analysis allows me to control for the effects of birthplace. Nevertheless, I acknowledge that separate regressions for immigrants and native may alter results. Second, results may also be sensitive to the linguistic concentration measurement. As detailed in the literature review, past analyses have invoked other methods to measure the linguistic enclave, such as Hispanic origin variable (McManus 1990). Again, since language is the focal point of this study, I choose to define the enclave by the language spoken at home variable. It is possible that different definitions of the enclave will produce different results.

Returns to bilingualism

Findings from second set of regression models support the hypothesis that bilinguals earn more than their monolingual counterparts in the enclave. The importance of bilingualism in Miami-Dade County also arose as a consistent theme in the qualitative interviews. Since findings from the LC bilingualism model were not statistically significant, I cannot draw a comparison between the two models regarding the effects of bilingualism on earnings in each area. Nevertheless, the significant findings from the HC model on their own are unique and important for two main reasons. First, most prior research has not shown that knowledge of an unofficial, minority language to be positively associated with earnings (Pendakur and Pendakur 2002).

Second, they show that dual forms of linguistic capital are needed to maximize labor market outcomes in the minority language enclave.

Immigrant/Minority Incorporation

This study finds that English is positively associated with earnings of Hispanics both inside and outside the Spanish language enclave in Florida. It makes clear that throughout the state of Florida there are economic incentives to learning English. This reinforces theories of majority language proficiency as a valuable human, social, and cultural capital trait in the labor market; for non-native speakers, an investment in learning English will clearly reap monetary rewards. Additionally, as an aside, these findings may also serve to quell any nativist fears that English is losing its importance in areas with a large minority language population, such as Miami (Portes and Rumbault 1996).

The second set of findings does not fit as easily into traditional incorporation theories. They show that although English matters in the enclave, Spanish does, too. In other words, there are also economic incentives to maintaining or acquiring Spanish language skills. Since these results contradict most previous studies of the economic value of bilingualism (Fry and Lowell 2003), they may indicate a shift in the value of bilingualism in the US labor market. In addition, they highlight one way in which minority language speakers have at once adapted to and transformed the linguistic landscape in Miami. These findings directly echo Portes and Stepick's (1993) discovery of the impact that immigrants had on Miami. They note:

As sociologists, our principal focus was the adaptation of foreign-born minorities to their new environment. As time passed, however, it became clear that the environment itself was changing in ways that we could not have anticipated. The immigrants were transforming not only themselves, but also the city around them (Portes and Stepick 1993: xi).

Policy Implications

Two primary policy implications stem from this research. First, findings offer helpful information about where English language training programs would be most valuable for non-native speakers of English. Adding to the urgency of this issue, a recent *New York Times* article underscored the growing need for government-funded English language training programs, particularly in areas with large immigrant populations. As the foreign-born population increases in many states, the waitlists for admission into free or low-cost government funded English classes range from several months to two years (Santos 2007). In some cases, frustrated business owners have taken matters into their own hands, teaching English to immigrant employees. As Tara Colton, author of the Center for an Urban Future report, notes, “The issue of English proficiency has become an issue of economic development” (Santos 2007: 4).

Secondly, there are important implications for bilingual education initiatives in Miami. Findings from this study show that Spanish language skills are important resources in the labor market in Miami. However, educational research links recent English-only initiatives and federal legislation such as the No Child Left Behind to a decline in bilingual language skills and a de-emphasis on bilingual education in Florida (SSTESOL 2005). A recent *Miami Herald* article also laments the perceived decline of bilingualism in Miami. The article views the decline of Spanish language skills among Hispanics in Miami as the “loss of an asset.” A telling quote from the article further highlights the importance of bilingualism in Miami. University of Miami linguist Andrew Lynch observes, “Miami grew as a city along with the Spanish and bilingualism. Bilingualism was the foundation of Miami as a global city” (Fernandez 2008). This study provides additional evidence of the need to place greater emphasis on bilingual and Spanish language education in Miami.

Suggestions for Future Research

The currency of the language and immigration debates in the US and the inconsistencies in the research make this topic ripe for further exploration. This particular study could be further expanded to explore a variety of angles. For example, the inclusion of non-Hispanic monolingual English speakers into the sample would allow for deeper comparative analysis of the economic value of bilingualism. Bilingual Hispanics may earn more than their monolingual English Hispanic counterparts, but does the same pattern hold when comparing bilinguals to non-Hispanics monolinguals?

Larger scale modifications of this study could also prove interesting. For example, the application of these methods to a nationwide analysis would help draw conclusions about the relationship between language, earnings, and enclaves in the general US labor market. While language and the labor market may interact in one way in Florida, their relationship may be different in other areas in the US. This is particularly important since Miami is often viewed as a unique case in urban sociology; it should not be considered “a microcosm of the American city” (Portes and Stepick 1993). Thus, a nationwide analysis would allow to see if such findings are unique to Florida or if the pattern repeats itself in other states in the US and on a national scale.

In addition, longitudinal studies on the topic will offer further insight into the ways in which the linguistic composition of the population affects the relationship between language and earnings. Since census language questions have not been uniform throughout the last century, there are certain complications involved conducting such a study (Stevens 1999). However, since 1980, the language questions have remained the same and would thus be suitable for an analysis of how the effect of English on earnings has changed in accordance with changes in the immigrant population over the last several decades.

Longitudinal studies should also be used monitor the future effect of bilingualism on earnings. The aforementioned *Miami Herald* article already cites anecdotal evidence of a decline in bilingualism in Miami (Fernandez 2008). Language attrition has indeed revealed itself to be a common pattern among children of immigrants in the US. As Portes and Rumbault (1996:11) note, “The United States is unique in the rate at which other languages have been abandoned in favor of English...in no other country have foreign languages been extinguished with such speed.” Thus, it is possible that Spanish language will lose prominence as second and third-generation speakers become more acculturated and abandon Spanish in favor of English. If this proves to be the case, the shift in linguistic preference will likely alter the effect of bilingualism on earnings in the future.

CHAPTER 6 CONCLUSION

English language proficiency functions as a valuable form of human, cultural, and social capital in the US labor market. Past research has shown English language proficiency to be a uniformly positive determinant of earnings in the US. While individual human, cultural, and social capital characteristics largely influence earnings, context also plays an integral role in labor market outcomes. The primary theoretical proposition of this study assumed that labor market context— specifically the linguistic profile of the labor market—determines the value of language proficiency in the labor market. Despite the linguistic diversity in the US and the rich data available from the decennial Census and other surveys, few recent studies address this topic.

Using data from the 2000 US Census, this study provided empirical evidence of the ways in the effect of language proficiency on earnings varies according to the linguistic profile of the labor market. The central research hypothesis posited that, among Latinos in Florida, English language proficiency would be less important to earnings in areas with a large percentage of Spanish-speakers than in areas with a small percentage of Spanish-speakers. The corollary hypothesis argued that Spanish language skills would have a positive effect on earnings in areas with a large Spanish language enclave, such as Miami-Dade County. However, results from the regression models suggest that English language proficiency has a *greater* impact on earnings of Latinos in areas with a large proportion of Spanish-speakers. The second set of results show that while English language proficiency still plays a significant role in areas with a large Spanish language enclave, Spanish language proficiency also has a positive effect on earnings in these areas. Although lack of significance in the low concentration model did not permit a comparison of the effects of bilingualism on earnings between the two linguistic contexts, the high

concentration model shows that, all other factors being equal, bilingual Hispanics earn more than monolingual English counterparts in these areas.

These findings offer valuable insight into processes of labor market incorporation of immigrants and non-native speakers. Like past studies, my study reinforces the economic incentives for learning English. However, it differs from past studies in that it also offers evidence of the economic value of learning or maintaining Spanish language skills in certain contexts. Consequently, these findings have important policy implications for English language training and bilingual education programs.

English remains the most widely spoken language in the US and as such, clearly reaps the most monetary rewards in the labor market. However, as the Spanish-speaking population in the US continues to grow, it is likely that, as this study has shown, Spanish will also assert itself as a prominent force in the labor market. While the value of language proficiency clearly varies by labor market context, there is no consensus within the literature regarding the ways in which it varies. Thus, as the linguistic composition of the US continues to evolve, the study of the relationship between language, earnings, and labor market context remains fertile ground for additional research.

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BIOGRAPHICAL SKETCH

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