HEALTH INSURANCE COVERAGE AND WORKING LATINOS IN CALIFORNIA, 2001: A THREE PART ANALYSIS OF THE IMPACT OF ACCULTURATION, SELF-RATED HEALTH AND YEARS OF U.S. RESIDENCY ON LATINOS' TAKE-UP OF HEALTH INSURANCE

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CHAPTER I

INTRODUCTION

Latinos are the fastest growing ethnic minority population in the United States and have some of the greatest socio-economic and health-related challenges faced by any other segment of the U.S. population (Documét & Sharma, 2004; Fronstin et al., 1997; Mendoza, Ventura, Valdez, Castillo, Saldivar, Baisden, Martorell, 1991; Warner, 1991). Such challenges include significant barriers when attempting to access medical treatment. Due to the lack of health insurance coverage, Latinos will often forgo seeking treatment because they do not have the financial means or health insurance coverage needed to secure needed medical care (Fronstin et al., 1997). Other socio-economic challenges Latinos encounter include higher rates of poverty, lower levels of educational attainment and employment in jobs that are less likely to offer health insurance coverage and more likely to pose a threat to their overall health and well-being (Morales, Lara, Kington, Valdez, & Escarce, 2002; Robinson, 1989). When compared to non-Latino whites, Latinos are more likely to experience poverty, have lower levels of educational attainment, lack adequate access to health care, be unemployed and/or underemployed, and have little-to-no health insurance coverage (Council on Scientific Affairs, 1991; Ginzberg, 1991; Hajat, Lucas, & Kington, 2000).

Aside from the various socio-economic factors that impede Latinos from accessing the health care system in a routine manner, there are a number of cultural and language barriers that exist which prevent them from receiving culturally-appropriate and linguistically accurate health care services when needed (Fiscella, Franks, Doescher, &

Saver, 2002; Ortiz, Arizmendi, & Cornelius, 2004; Yoon, Grumbach and Bindman, 2004). Language and cultural barriers originate due to the Spanish-speaking Latino patient's inability to communicate with the healthcare provider in English, and the healthcare provider's inability to speak the language of the patient (Deyo, Diehl, Hazuda, & Stern, 1985). Cultural barriers take the form of the healthcare provider not understanding the significance of cultural practices Latinos engage in to address their medical needs and their healing customs (Institute of Medicine, 2003; National Council of La Raza [NCLR], 2004). For example, Latinos who are less acculturated often use home remedies and folkloric healers (curanderos) to attend to their medical and health-related needs as a less expensive option when access to physicians is not available; and, they tend to place a greater emphasis on these folkloric customs which may be in conflict with the advice offered by their healthcare provider (Applewhite, 1995; Fishman, Bobo, Kosub, & Womeodu, 1993; Knoerl, 2007). Some less acculturated Latinos often place a great emphasis on the spiritual aspects of healing and often believe that whatever God has sent them in the form of an illness and/or disease, they must deal with it regardless of the advice of their healthcare provider (Campesino & Schwartz, 2006).

According to the Institute of Medicine (2003), the lack of health insurance is the single most significant barrier to accessing health care than any other demographic or economic factor combined. While the U.S. Latino workforce has made significant contributions to the economic prosperity of this nation, Latinos are more likely than African Americans and non-Latino Anglos to lack adequate health insurance coverage (Berk, Albers, & Schur, 1996; Carrasquillo, Himmelstein, Woolhandler, & Bor, 1999;

Ojeda & Brown, 2005). Latinos often lack health insurance coverage as a result of the industries in which they work, the types of occupations they hold, and the type of employment status they are granted (i.e. full-time, half-time or part-time) (Blewett, Davern, Rodin, 2005; Perry, Kannel, & Castillo, 2000; Vitullo & Taylor, 2002). Some of the major industries that provide significant employment opportunities for U.S. Latino labor force include agricultural, manufacturing, construction, and service; however, these industries are often less likely to provide health insurance coverage and other employer-sponsored benefits for their employees (Alegria, Cao, McGuire, Ojeda, Sribney, Woo, & Takeuchi, 2006; Valdez, Morgenstern, Brown, Wyn, Wang, & Cumberland, 1993). These industries are also less likely to employ their employees on a full-time basis; and, instead, often offer their workers less than full-time employment status. Employers in these industries are also more likely to provide minimal wages, and some of these industries provide only seasonal employment and day-labor type of employment arrangements (Harrell & Carrasquillo, 2003). Although rates of participation in the U.S. workforce are comparable to non-Latino whites, research indicates that Latinos continue to have the greatest uninsurance rates compared to any other racial and/or ethnic group residing in the U.S. (Harrell & Carrasquillo, 2003; Institute of Medicine, 2003; Ku & Matani, 2001). Therefore, collectively, these types of employment arrangements impede the likelihood of Latinos obtaining health insurance coverage compared to non-Latino whites.

Despite research that indicates that Latinos enroll in managed health care plans at a higher rate than non-Latino whites, Latinos represented approximately one-third of the 41.2 million U.S. uninsured in 2001 even though they only represented about 14% of the overall U.S. population (Hargraves & Hadley, 2001; Harrell & Carrasquillo, 2003, p. 1167). This equates to about 33% of all Latinos in the U.S. and is also at least three-times the rate of the non-Latino white population (Harrell & Carrasquillo, 2003, p. 1167). Fronstin et al. (1997) also report that nonelderly adult Latinos residing in the U.S. were more likely to lack any form of health insurance coverage, public or private, compared to the overall nonelderly U.S. population. In the state of California alone, according to the Latino Coalition for a Healthy California (2005), there are approximately 6.3 million uninsured individuals. Latinos represent 54% of these uninsured individuals. This equates to at least one out of every four Latinos in the state between the ages of 1 and 64 that are uninsured (Latino Coalition for a Health California, 2005).

Literature Review

Because health insurance coverage is a significant factor in access to medical care in the U.S., lack of health insurance coverage among Latinos may also impact how Latinos perceive their need for healthcare services, access routine health care services, and obtain needed medical care for managing chronic illnesses (Furino & Muñoz, 1991; Harris, 1999; Hsia, Kemper, Sofaer, Bowen, Kiefe, Zapka, Mason, Lillington, & Limacher, 2000; Hsia, Kemper, Kiefe, Zapka, Sofaer, Pettinger, Bowen, Limacher, Lillington, & Mason, 2000; Treviño, Treviño, Medina, Ramirez & Ramirez, 1996). In a previous study, Treviño, Moyer, Valdez, Stroup-Benham (1991) reported that uninsured

Latinos were less likely to rate their health status as excellent or very good (self-rated health [SRH]) compared to non-Latinos. Health disparities are also more significant for Latinos who lack health insurance coverage since their health status tends to be complicated as a result of not having a regular means of financing medical service expenditures, and consequently not receiving treatment to prevent complications, and often because they work for employers who do not offer health insurance benefits (de la Torre, Friis, Hunter & Garcia, 1996; Hargraves & Hadley, 2003; Zuvekas & Taliaferro, 2003).

Another important factor in understanding the issues facing Latinos and their take-up of health insurance coverage concerns their level of acculturation as it relates to their understanding of the U.S. health care delivery system, U.S. models of health insurance, and their need for health insurance for accessing medical care. Acculturation is the process by which immigrants assume the attitudes, customs, values, beliefs, practices and behaviors of the dominant culture on a continuous basis while social and psychological exchanges between the cultural groups occur over time (Lara, Gamboa, Kahramanian, Morales, & Hayes Bautista, 2005). Because Latinos comprise a significant number of immigrants to the U.S., their level of acculturation into U.S. culture affects their ability to understand and navigate U.S.-based practices and customs as they relate to employment, healthcare, education, homeownership and other relevant socio-economic circumstances that are particular to the U.S. way of life (Lara et al., 2005). Many factors contribute to Latinos' acculturation into U.S. society; however, their rate of acculturation varies compared to other immigrants who have emigrated to U.S. soil (Pérez-Escamilla &

Putnik, 2007). Unlike any other immigrants, Latinos acculturation into U.S. traditions and practices and their familiarity with the U.S. healthcare delivery system and U.S. models of health insurance may be at a slower rate than other immigrants (Doty, 2003;Greenwald, O'Keefe, & DiCamiilo, 2005; Hargraves, Cunningham, & Hughes, 2001). This may be due to their proximity to their countries of origin and the significant influence the Latino culture already has in the U.S. The number of Latino immigrants in the U.S. and the fact that a significant geographic region of the U.S. was once a Latin American country are also factors that may contribute to the slow process of acculturation of Latinos in the U.S. Because a considerable region of the U.S. southwest was formerly Spain and Mexico, many of the inhabitants of Latino descent in this region of the U.S. have Latino cultural traditions, practices and rituals they observe and that have become a way of life for them. Many of these observances remain today even after hundreds of years and generations in this country. For these Latinos, their level of acculturation into U.S. mainstream culture may be considered different since much of the Spanish and Mexican culture that has dominated this region for centuries is intact today. Although the Spanish and Mexican empires in this region of the U.S. failed, the cultural practices, traditions, customs and architectural remnants still exist which allow individuals of Latin American descent in this region of the U.S. to stay easily connected to their heritage, and, to some extent, the way of life of their ancestors.

The various cultural practices and values Latinos possess such as those related to spirituality and fatalism, sense of control, attitudes towards prevention and other factors that may motivate them to purchase and use health insurance are relevant elements to

investigate in understanding the health insurance take-up of Latinos in the U.S. Therefore, the level of acculturation of Latinos in the U.S. and their ability to understand the U.S. healthcare system and the role of U.S. models of health insurance impacts their understanding for the need of health insurance coverage.

The immigration status of Latinos is another relevant issue impacting their ability to take-up and purchase health insurance coverage. According to a 2003 U.S. Census Bureau report, more than forty-five million individuals residing in the U.S. did not posses any form of health insurance coverage, public or private with immigrants comprising the majority of these uninsured individuals (Bass, 2006). Immigrants in the U.S. represent a large, fast growing number of individuals and collectively represent more than thirty-six million people in the U.S., or approximately 12 percent of the overall U.S. population (Derose, Escarce & Lurie, 2007; Goldman, Smith, & Sood, 2006). Since the 1970's, the number of immigrants arriving to the U.S. has more than doubled, and this rise in immigration to the U.S. will continue on an upward and steady path for years to come. More than half (53%) of all immigrants who have come to the U.S. are of Latin American ancestry (Carrasquillo, Carrasquillo, & Shea, 2000; Derose et al., 2007). Because Latino immigrants comprise a significant number of immigrants in the U.S., this group also plays an integral role in the economic well-being of the U.S. economy by providing for a viable, youthful labor force, especially in the manufacturing, construction and service industries, (Schur & Feldman, 2001). Unlike any other group of immigrants who arrived into the U.S., Latino immigrants are more likely to be uninsured and are more likely to face significant barriers when attempting to access medical and other health-related

services (Hubbell, Waitzkin, Mishra, Dombrink, and Chavez, 1991; Prentice, Pebley, & Sastry, 2005).

While policymakers, and the general public, are concerned with the reliance these immigrants have on government-subsidized health and welfare programs and the impact they are having on the U.S. healthcare delivery system, the fact remains that Latino immigrants are among the highest uninsured group of all immigrants and ethnic groups residing in the U.S. (Berk, Schur, Chavez, & Frankel, 2000; Goldman et al., 2006). Therefore, understanding the relevant factors surrounding Latinos' immigration status, years of U.S. residency and the related issues impacting their ability to take-up and purchase health insurance coverage is an important issue for investigation in understanding the health insurance predicament so many U.S. Latinos face on a daily basis.

Purpose of Study

The purpose of this study was to investigate the relationship between acculturation, self-rated health and years of U.S. residency and health insurance coverage among working Latinos in California and to investigate the impact each of these variables played in determining the take-up of health insurance coverage among working Latinos in California. The hypotheses that were tested are: (1) U.S. Latinos' level of acculturation will be associated with their take-up of health insurance coverage; (2) U.S. Latinos' who rate their health as excellent (SRH) are more likely to posses health insurance coverage than Latinos who rate their health as fair or poor; and, (3) the years of U.S. residency of U.S. Latinos will have an association with their take-up of health

insurance coverage type. Other important demographic variables that were investigated include: gender, age, educational attainment, marital status, Latino ancestry, and length of residency. Some of the social and economic factors that were analyzed include: household income, employment industry, union membership and English-language proficiency. Other relevant motivational and cultural variables that were examined include: "CANTPAY," a variable that represents a respondent's perception of their ability to pay for medical care, "HIRANK," a variable that represents the value survey respondents place on the purchase health insurance coverage, fatalism, sense of control, and attitudes towards prevention.

Definition of Terms

Acculturation: Acculturation is the process by which immigrants assume the attitudes, customs, values, beliefs, practices and behaviors of the dominant culture on a continuous basis while social and psychological exchanges between the cultural groups occur over time (Lara et al., 2005).

Cultural appropriateness (cultural competency): Cultural appropriateness is a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations. Culture refers to integrated patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups. Competence implies having the capacity to function effectively as an individual and an organization within the context of the cultural beliefs,

behaviors, and needs presented by consumers and their communities (United States Department of Health and Human Services, Office of Minority Health, 2008).

Fatalism: Fatalism is the belief that one's outlook and events are controlled by external or supernatural forces, and the individual is powerless to influence such external forces (Niederdeppe & Levy, 2007). As it relates to health, fatalism is the belief that one's health outcome is predetermined or purposed by a higher power, supernatural force or God that is not within the control of the individual with the fatalistic beliefs (Franklin, Schlundt, McClellan, Kinebrew, Sheats, Belue, Brown, Smikes, Patel & Hargreaves, 2007). Individuals with fatalistic tendencies often believe that God determines their health outcome and that diseases and illnesses are inevitable because they are sent by God (Franklin, Schlundt & Wallston, 2008).

Immigration status: Refers to the legal status of the Latino immigrant (i.e. student visa, work visa, legal resident, undocumented immigrant).

*Linguistic accuracy (linguistic competence):*The capacity of an organization and its personnel to effectively communicate with persons of limited English proficiency, those who have low literacy skills or are not literate, and individuals with disabilities. Health care services that are respectful of and responsive to cultural and linguistic needs of individual of diverse ethnic backgrounds (National Center for Cultural Competence, Georgetown University Center for Child and Human Development, University Center for Excellence in Developmental Disabilities, 2003).

*Self-rated health***:** Self-rated health (SRH) is recognized as a critical indicator of health status that is associated with well-being, health services utilization, and the overall mortality of a given population (Okosun, Choi, Matamoros, & Dever, 2001). SRH is considered by many to be a strong predicator of morbidity and mortality of the general population (Bailis, Segall, & Chipperfield, 2003; Idler & Angel, 1990; Idler & Benyamini, 1997), and SRH measures typically ask the question, "In general, how would you rate your overall health?," and provide the respondent with a scale of responses ranging from excellent to poor (Finch, Hummer, Reindl & Vega, 2002).

CHAPTER II

WORKING LATINOS, HEALTH INSURANCE COVERAGE AND ACCULTURATION

Introduction

Latinos are the fastest growing ethnic minority group in the United States and comprise approximately 15% (45.5 million) of the population as of July 1, 2007 (U. S. Census Bureau, 2008). When compared to non-Latinos, Latinos are more likely to experience poverty, have lower levels of educational attainment, be unemployed and/or underemployed, and have inadequate health insurance coverage (Centers for Disease Control and Prevention, 2004; Goldman et al., 2005; Schur & Feldman, 2001; Wagner & Guendelman, 2000). In fact, employed Latinos are more likely than any other group of working adults in the U.S. to be uninsured (Doty & Holmgren, 2006; Callahan, Hickson, & Cooper, 2006). This is despite the fact that rates of participation in the workforce are comparable to non-Latino whites (Schur & Feldman, 2001).

The association between inadequate access to health care and negative health outcomes is well known (Callahan et al., 2006; Doty & Holmgren, 2006). Latino uninsurance rates have been reported to be at least three times higher than that of non-Latino populations (Fronstin et al., 1997; Harrell & Carrasquillo, 2003). These rates are even higher in states like California and Texas where there are large populations of Latinos (Quinn, 2000). Possible reasons for Latinos' inadequate access to health care include socio-economic factors, cultural factors and language barriers (Casey, Blewett, & Call, 2004; Ortiz et al., 2004).

Two of the main sources of health insurance coverage in the U.S. are employer-sponsored and government-sponsored health insurance programs. For Latinos, legal residency status and type of employment disproportionately impede access to such health insurance programs (Carrillo, Treviño, Betancourt, & Coustasse, 2001; Quinn, 2000). The U.S. Latino population is comprised of a large proportion of immigrants. Recent federal and state legislation has prevented access to health insurance programs for undocumented Latinos (Alegria et al., 2006; Berk, Schur, Chavez, et al., 2000; Kim & Shin, 2006). Latinos are also disproportionately represented in low-wage occupations and work for small businesses and employers that are less likely to offer health insurance coverage (Greenwald, O'Keefe, & DiCamillo, 2005; Kullgren, 2003).

Literature Review

Acculturation is the process by which immigrants assume the attitudes, customs, values, beliefs, practices and behaviors of the dominant culture on a continuous basis while social and psychological exchanges between the cultural groups occur over time (Lara et al., 2005). Acculturation is frequently measured by proxy variables such as country of origin, length of residency in the U.S. and English language proficiency (Evenson, Sarmiento & Ayala, 2004). Level of acculturation has been associated with level of understanding of the health care system (Weinick, Jacobs, Stone, Ortega, & Burstin, 2004; Wells, Golding, Hough, Burnam, & Karno, 1989), health status (Arredondo, Elder, Ayala, Campbell and Baquero, 2005; Bzostek, Goldman, & Pebley, 2007; Finch & Vega, 2003) and health outcomes (Abraído-Lanza, Chao & Florez, 2005) of Latinos.

While health insurance coverage is an important predictor of access to health care, few studies have investigated the association between acculturation and Latinos' purchase of health insurance coverage. However, limited research has focused solely on the relationship between acculturation status and health insurance coverage.

Latino cultural values including spirituality and fatalism (Applewhite, 1995; Fishman et al., 1993; Knoerl, 2007), sense of control, their attitudes towards prevention and the factors that motivate them to purchase and use health insurance are also relevant variables to investigate in understanding the relationship between acculturation and health insurance coverage among Latinos. The theological literature concerning Latino religious experiences describes spirituality as a fundamental aspect of Latino culture intertwined in almost every aspect of their cultural values (Campesino & Schwartz, 2006). Examining Latinos' sense of control as it relates to their take-up of health insurance coverage will help to understand Latinos' perceived need for health insurance coverage and the value they place on it (Burns, Maniss, Young, & Gaubatz, 2005). Studying the significance of Latinos' attitudes towards proactive health prevention will also provide insight into their use of health insurance coverage as a means for accessing preventive care (Callahan et al., 2006). Investigating those circumstances that motivate Latinos toward the uptake of health insurance will help to further define strategies to provide coverage to them. All of these variables are integral to the Latino healthcare experience and are included in this investigation.

Purpose of Study

The purpose of this study was to investigate the relationship between acculturation and health insurance coverage among working Latinos in California. The hypothesis that was tested is that the level of acculturation is associated with health insurance coverage. Other important demographic variables that were investigated included: gender, age, educational attainment, marital status, Latino ancestry, and length of residency. Some of the social and economic factors that were analyzed included: household income, employment industry, union membership and English-language proficiency. Other relevant motivational and cultural variables that were examined included: "HIRANK," a variable that represents the value survey respondents place on the purchase health insurance coverage, fatalism, sense of control, and attitudes towards prevention.

Limitations

This study had several limitations. The survey was limited to working Latinos in the state of California. Because Latinos in California are predominately Mexican and/or Mexican-American, a more representative sample of Latinos from other states representing Latino subcultures, including Puerto Ricans, Cubans, Dominicans, South Americans, Central Americans, would be beneficial to future research on acculturation and health insurance coverage (Thamer, Richard, Casebeer & Ray, 1997). Due to the small sample size, some estimates have large confidence intervals. Additional research with a larger sample is needed. Further research is needed to investigate the practice of obtaining health care outside of the U.S. and its association with health insurance

coverage in the U.S. (Viruell-Fuentes, 2007). Despite these limitations, this study illuminates the important influence of acculturation on health insurance status of working Latinos in the U.S.

Methods

Data Sources. The data for the study were taken from the Health Insurance Coverage Among Working Latinos in California (Greenwald, 2001). The purpose of the study was to understand why Latinos in California frequently lack health insurance coverage. The survey asked about respondents' health status, access to health care, health insurance coverage and utilization of health care services. All responses to the survey were self-reported by the respondents. The survey measured insured respondents' satisfaction with current health insurer and collected data about plan type, length of coverage with the plan, and the health plan's co-pays and deductibles. Uninsured respondents were asked why they did not have health insurance, if they tried to secure health insurance coverage in the past year, the length of time since they last owned health insurance coverage, whether or not their employer offered health insurance coverage and what they anticipated paying for their health insurance coverage.

The study also assessed respondent attitudes concerning control of one's fate, adequacy of community-based and/or free care clinics as sources of health care services, the interest in obtaining routine health check-ups, and health insurance coverage as good versus poor value for the money invested to purchase such coverage.

The survey also gathered demographic and socioeconomic characteristics of the respondents including age, sex, household size, educational attainment, religious affiliation, county of birth, ancestry, citizenship, number of years residing in the United States, English language proficiency, income, number of jobs held, size of employer in terms of number of employees, length of time at the job, industry, occupation and labor union participation.

Sample and Data Collection

A telephone survey of 1,000 working California residents of Latino descent was conducted during the first quarter of 2001 by employing a random-digit dialing (RDD) method, screening each contacted household first for Latino adults and then for working Latinos (Greenwald, 2001). The interviews were conducted by the San Francisco-based Field institute, and they were conducted in English or Spanish based on the interviewee's preference. A total of eight attempts, an initial call plus seven callbacks, were made to each residential telephone number identified for the study. The callbacks were conducted at various times and on different days to increase the probability of locating qualified individuals to participate in the interview. Sampling by means of RDD circumvents the threat of systematically excluding that portion of the population with unlisted telephone number. The type of random sample employed in this study can be extrapolated to any identifiable subgroup aggregation in California within sampling error limits that are applicable to each subgroup. Additionally, the data were weighted to compensate for under-sampling of households that did not have telephone service.

Measures

Dependent Variable. The primary dependent variable was health insurance coverage dichotomized as yes or no.

Independent Variables. Acculturation was categorized as very Latino, mostly Latino, bicultural, mostly Americanized, and very Americanized (Cuellar, Harris & Jasso, 1980; Greenwald, 2001). For bivariate and multiple logistic regression analysis, acculturation was categorized as Latino (consisting of the very Latino and mostly Latino), Bicultural (remained the same) and Americanized (consisting of very Americanized and mostly Americanized). *Age* was categorized as 18 – 25 years, 26 – 45 years, and 45-plus years. Educational Attainment was categorized as high school or less, completed 12th grade or high school graduate, vocational school or some college, and college graduate or post graduate. Marital status was dichotomized as married and not married (including not married but living together, never married, widowed, divorced and separated). Household Income was categorized as less than $20,000, $20,000 to $40,000, $40,000 to $75,000, and greater than $75,000.

Statistical Analysis

Bivariate analyses were performed using the Mantel-Haenszel chi-square test. For most analyses, acculturation was categorized as Latino, Bicultural and Americanized because of small samples. Multiple logistic regression analysis was used to identify predictors of health insurance coverage. Sample weights were applied to the data for analysis. All analyses were performed using Version 9.1 of the *SAS* systems for Windows (SAS Institute, Inc.).

Results

Table 2.1 presents an overview of the sample by selected characteristics. The rate of insurance coverage in the sample is approximately 69.4%. The sample was mostly male (62.8%), between the ages of 26 and 45 (57%), and had no more than a high school education (60.5%). Approximately 65% had household incomes less than $40,000, and approximately 57% identified themselves Latino. Almost 70% of the respondents indicated that health insurance ranked high on their list of priorities for where they spent their money, and almost 50% of the respondents believed that getting ill is an act of God.

Table 2.1: Distribution of sample by selected characteristics (N = 1000)

Characteristics	Distribution	
	Number	(%)
Entire Sample	1000	100.00%
Health Insurance Coverage	694	69.4%
Gender		
Male	628	62.8%
Female	372	37.2%
Age		
18 – 25	226	22.6%
26 – 45	570	57.0%
45-plus years	190	19.0%
Education		
Some High School or Less	333	33.3%
Completed 12th Grade or High School Graduate	272	27.2%
Vocational School or Some College	236	23.6%
College Graduate or Post Graduate	149	14.9%
Marital Status		
Married	498	49.8%
Not Married	496	49.6%
Household Income		
Less than $20,000	304	30.4%
$20,000 to $40,000	294	29.4%
$40,000 to $75,000	200	20.0%
Greater than $75,000	120	12.0%

Table 2.1: Distribution of sample by selected characteristics (N = 1000)

Characteristics	Distribution	
	Number	(%)
Acculturation[a]		
Latino	550	55.0%
Bicultural	211	21.1%
Americanized	208	20.8%
Motivational Factors		
HIRANK[b]	692	69.2%
CHANGE[c]	749	74.9%
FATALISM[d]	480	48.0%
REGCKUP[e]	651	65.1%

a. The above table combines the acculturation categories Very Latino and Latino into one category "Latino." It also categorizes Americanized and Very Americanized into one category "Americanized."

b. Survey Question: Health insurance ranks very high on my list of priorities for where I spend my money.

c. Survey Question: I can change what might happen tomorrow by what I do today.

d. Survey Question: Getting ill is an act of God.

e: Survey Question: Getting regular check-ups is very important even when you are healthy.

Table 2.2 describes the sample stratified by health insurance status. For all variables, significant differences were detected across health insurance status. Higher rates of health insurance coverage were associated with older age, higher educational attainment, being married, higher household income, and greater acculturation. Insurance coverage was associated with a perceived need for health insurance, sense of control, a perceived need for preventive examinations, and was negatively associated with fatalistic beliefs.

Table 2.2: Distribution of sample by selected characteristics stratified by health insurance coverage (N = 1000)

Characteristics	Health Insurance Coverage "Yes"		P-Value
	Number	(%)	
Gender			0.0391
Male	422	67.07%	
Female	279	73.29%	
Age			0.0115
18 – 25	145	63.67%	
Age			
26 – 45	396	68.69%	
45-plus years	149	77.14%	
Education			<.0001
Some High School or Less	172	52.05%	
Completed 12th Grade or High School Graduate	192	69.86%	
Vocational School or Some College	188	79.44%	
College Graduate or Post Graduate	142	91.79%	
Marital Status			0.0013
Married	374	74.20%	
Not Married	324	64.83%	
Household Income			<.0001
Less than $20,000	138	45.98%	
$20,000 to $40,000	205	69.23%	
$40,000 to $75,000	189	93.33%	
Greater than $75,000	118	94.89%	
Acculturation[a]			<.0001
Latino	317	57.43%	
Bicultural	179	83.91%	
Americanized	184	85.95%	
Motivational Factors			
HIRANK[b]			0.0001
Yes	513	73.45%	
No	162	60.81%	
CHANGE[c]			0.0027
Yes	547	72.21%	
No	136	61.60%	

Table 2.2: Distribution of sample by selected characteristics stratified by health insurance coverage (N = 1000)

Characteristics	Health Insurance Coverage "Yes"		P-Value
	Number	(%)	
Motivational Factors			
FATALISM[d]			<.0001
Yes	297	61.74%	
No	393	77.37%	
REGCKUP[e]			0.0055
Yes	478	72.38%	
No	215	63.79%	

a. The above table combines the acculturation categories Very Latino and Latino into one category "Latino." It also categorizes Americanized and Very Americanized into one category "Americanized."
b. Survey Question: Health insurance ranks very high on my list of priorities for where I spend my money.
c. Survey Question: I can change what might happen tomorrow by what I do today.
d. Survey Question: Getting ill is an act of God.
e.: Survey Question: Getting regular check-ups is very important even when you are healthy.

Table 2.3 presents the distribution of respondents by selected characteristics stratified by acculturation status (Latino, Bicultural, and Americanized). Approximately 57% of Latino respondents, 84% of bicultural respondents and approximately 86% of Americanized respondents had some form of health insurance ($p < 0.001$). Important differences across the three-acculturation groups were observed for variables known to be associated with health insurance coverage and positive health outcomes (age, educational attainment, income level, fatalistic beliefs).

Table 2.3: Number and percent of respondents by selected characteristics stratified by acculturation status (N = 1000)

Characteristics	Latino N = 544 (56.71%)		Bicultural N = 213 (21.81%)		Americanized N = 213 (21.48%)	
	Number	(%)	Number	(%)	Number	(%)
Gender						
Male	363	66.94%	119	55.73%	120	56.86%
Female	181	33.06%	94	44.27%	93	43.14%
Age						
18 - 25	128	23.65%	48	22.98%	43	20.74%
26 - 45	331	61.46%	114	53.58%	115	54.45%
45-plus years	80	14.88%	49	23.44%	52	24.77%
Education						
Some High School or Less	266	50.47%	26	12.15%	24	11.42%
Completed 12th Grade or High School Graduate	148	27.31%	54	26.17%	63	29.94%
Education						
Vocational School or Some College	87	15.83%	70	33.03%	75	35.65%
College Graduate or Post Graduate	35	6.38%	62	28.64%	50	22.99%
Marital Status						
Married	264	48.46%	115	54.50%	107	50.17%
Not Married	277	51.54%	98	45.50%	105	49.83%
Household Income						
Less than $20,000	215	44.54%	40	19.82%	36	18.56%
$20,000 to $40,000	185	37.03%	57	28.22%	47	23.98%
$40,000 to $75,000	62	12.33%	68	33.20%	68	34.11%
Greater than $75,000	32	6.11%	39	18.75%	47	23.35%
Health Insurance Coverage						
Yes	317	57.43%	179	83.91%	184	85.95%
No	227	42.57%	34	16.09%	29	14.05%
Motivational Factors						
HIRANK						
Yes	359	64.62%	160	77.81%	159	76.61%
No	159	30.38%	46	22.19%	49	23.39%
CHANGE						
Yes	372	71.26%	176	84.27%	181	85.95%
No	150	28.74%	33	15.73%	30	14.05%

Table 2.3: Number and percent of respondents by selected characteristics stratified by acculturation status (N = 1000)

Characteristics	Latino N = 544 (56.71%)		Bicultural N = 213 (21.81%)		Americanized N = 213 (21.48%)	
	Number	(%)	Number	(%)	Number	(%)
Motivational Factors						
FATALISM						
Yes	331	62.08%	62	29.74%	71	34.15%
No	206	37.92%	149	70.26%	138	65.85%
REGCKUP						
Yes	315	58.07%	169	80.30%	152	72.25%
No	224	41.93%	41	19.70%	58	27.75%

a. The above table combines the acculturation categories Very Latino and Latino into one category "Latino." It also categorizes Americanized and Very Americanized into one category "Americanized."
b. Survey Question: Health insurance ranks very high on my list of priorities for where I spend my money.
c. Survey Question: I can change what might happen tomorrow by what I do today.
d. Survey Question: Getting ill is an act of God.
e: Survey Question: Getting regular check-ups is very important even when you are healthy.

Table 2.4 presents the results of four logistic regression models predicting health insurance coverage among working Latinos in California. The first model is for the entire sample, followed by three models – one for each acculturation category. In the first model, acculturation status in each category is significantly associated with health insurance coverage (OR 1.909, 95% CI 1.26 – 3.237) and (OR 1.847, 95% CI 1.117 – 3.052). Household income in each category (OR 2.528, 95% CI 1.731 – 3.693), (OR 11.275, 95%, CI 5.712 – 22.256), and (OR 13.487, 95% CI 5.131 – 35.447), and perceived need for health insurance (OR 1.963, 95% CI 1.346 – 2.862) are two other variables significantly associated with health insurance coverage in the full model.

To further explore acculturation status and predictors, a stratified approach was used to analyze the data. In the second model, for the Latinos, age in each category is significantly associated with health insurance coverage (OR 1.684, 95% CI 1.005 –

2.822) and (OR 2.149, 95% CI 1.018 – 4.537). Household income in each category (OR 2.213, 95% CI 1.422 – 3.443), (OR 7.229, 95% CI 3.102 – 16.848), and (OR 10.721, 95% CI 2.894 – 39.714) are also significantly associated with health insurance coverage. Perceived need for health insurance (OR 1.891, 95% CI 1.200 – 2.979) and sense of control (OR1.601, 95% CI 1.012 – 2.532) are also significantly associated with health insurance coverage.

Table 2.4: Logistic regression for health insurance coverage stratified by acculturation status

Characteristics	Full Model N = 1000 OR (95% CI)	Model 2: Latino N = 544 OR (95% CI)	Model 3: Bicultural N = 213 OR (95% CI)	Model 4: Americanized N = 213 OR (95% CI)
Acculturation[a]				
Americanized vs. Latino	1.909 (1.126 - 3.237)			
Bicultural vs. Latino	1.847 (1.117 - 3.052)			
Male vs. Female	0.728 (0.495 - 1.070)	0.974 (0.604 - 1.570)	0.340 (0.120 - 0.963)	0.315 (0.087 - 1.143)
Age				
26 - 45 yrs vs. 18 - 25 yrs	1.065 (0.699 - 1.625)	1.684 (1.005 - 2.822)	0.591 (0.184 - 1.895)	0.258 (0.060 - 1.114)
45-plus yrs vs. 18 - 25 yrs	1.422 (0.780 - 2.593)	2.149 (1.018 - 4.537)	0.510 (0.106 - 2.456)	0.690 (0.088 - 5.427)
Education				
College and beyond vs. some high school or less	1.226 (0.579 - 2.594)	1.419 (0.498 - 4.042)	1.015 (0.220 - 4.671)	9.484 (0.425 - 211.703)
Vocational school or some college vs. some high school or less	0.844 (0.509 - 1.401)	0.942 (0.478 - 1.858)	1.064 (0.347 - 3.265)	0.583 (0.153 - 2.225)
Grade 12 or high school equivalent vs. some high school or less	0.722 (0.501 - 1.190)	0.792 (0.479 - 1.308)	1.446 (0.348 - 6.008)	0.127 (0.022 - 0.720)

Table 2.4: Logistic regression for health insurance coverage stratified by acculturation status

Characteristics	Full Model N = 1000 OR (95% CI)	Model 2: Latino N = 544 OR (95% CI)	Model 3: Bicultural N = 213 OR (95% CI)	Model 4: Americanized N = 213 OR (95% CI)
Marital Status Married (vs. Not Married)	1.369 (0.945 - 1.982)	0.998 (0.642 - 1.552)	3.022 (1.042 - 8.762)	2.626 (0.667 - 10.339)
Household Income				
$20,000 - < $40,000 vs. <$20,000	2.528 (1.731 - 3.693)	2.213 (1.422 - 3.443)	2.764 (0.882 - 8.660)	10.360 (2.265 - 47.378)
$40,000 - < $75,000 vs. <$20,000	11.275 (5.712 - 22.256)	7.229 (3.102 - 16.848)	53.701 (5.666 - 508.956)	22.591 (3.682 - 138.598)
> $75,000 vs. <$20,000	13.487 (5.131 - 35.447)	10.721 (2.894 - 39.714)	22.485 (2.254 - 224.311)	43.359 (4.576 - 410.869)
Motivational Factors				
HIRANK (Yes vs. No)[b]	1.963 (1.346 - 2.862)	1.891 (1.200 - 2.979)	1.647 (0.477 - 5.685)	2.390 (0.701 - 8.141)
CHANGE (Yes vs. No)[c]	1.245 (0.835 - 1.856)	1.601 (1.012 - 2.532)	0.794 (0.225 - 2.797)	0.057 (0.006 - 0.586)
FATALISM (Yes vs. No)[d]	0.870 (0.599 - 1.265)	0.783 (0.497 - 1.234)	0.724 (0.264 - 1.986)	0.940 (0.286 - 3.092)
REGCKUP (Yes vs. No)[e]	0.949 (0.649 - 1.386)	0.875 (0.566 - 1.354)	0.915 (0.259 - 3.230)	2.926 (0.885 - 9.679)

a. The above table combines the acculturation categories Very Latino and Latino into one category "Latino." It also categorizes Americanized and Very Americanized into one category "Americanized."
b. Survey Question: Health insurance ranks very high on my list of priorities for where I spend my money.
c. Survey Question: I can change what might happen tomorrow by what I do today.
d. Survey Question: Getting ill is an act of God.
e. Survey Question: Getting regular check-ups is very important even when you are healthy.

In the third model, Bicultural, gender (OR 0.340, 95% CI 0.120 – 0.963) and marital status (OR 3.022, 95% CI 1.042 – 8.762) are significantly associated with health insurance coverage. Household income in the middle and highest categories (OR 53.701,

95% CI 5.666 – 508.956) and (OR 22.485, 95% CI 2.254 – 224.311) are also significantly associated with health insurance coverage.

In the fourth model, Americanized, education in the lowest category (OR 0.127, 95% CI 0.022 – 0.720) and household income in all categories (OR 10.360, 95% CI 2.265 – 47.378), (OR 22.591, 95% CI 3.682 – 138.598), and (OR 43.359, 95% CI 4.576 – 410.869) are significantly associated with health insurance coverage. Sense of control (OR 0.057, 95% CI 0.006 – 0.586) is another variable significantly associated with health insurance coverage for respondents in the Americanized acculturation group. Household income was the only variable consistently associated with health insurance coverage across all models.

Discussion

This study investigated the relationship between acculturation and health insurance coverage among working Latinos in California. Health insurance coverage varies by acculturation status. Additionally, acculturation status influences the importance of known correlates of health insurance coverage on the likelihood of having health insurance. Depending on level of acculturation, other significant correlates of health insurance coverage were age, marital status, household income, perceived need for health insurance, and sense of control.

These findings were consistent with other reports of rates of health insurance coverage among Latinos in California (Aguayo, Brown, Rodríguez, & Margolis, 2003; Schur & Feldman, 2001). California, Texas, Florida and New York account for 73% of

uninsured Latinos (Quinn, 2000). The proportion of uninsured Latinos is rising faster than other racial and ethnic groups in the U.S. (Blewett et al., 2005).

These findings were also similar to other studies examining the association of acculturation and access to the health care system (Angel & Angel, 1996; Lara et al., 2005). Highly acculturated Latinos have higher rates of insurance coverage and greater access to care (Lara et al., 2005) compared to less acculturated Latinos (Callahan et al., 2006; Thamer et al., 1997). Latinos who are more acculturated and more familiar with the U.S. health care system are less likely to encounter language and cultural barriers to care (Lara et al., 2005; Solis, Marks, Garcia, & Shelton, 1990). Highly acculturated Latinos possess a mastery of American culture and are more likely to be proficient in English, which facilitates their ability to maneuver the U.S. healthcare systems less eventfully (Fiscella et al., 2002). In contrast, less acculturated Latinos are more likely to have limited understanding of the complexities of the U.S. health care system and the importance of owning health insurance for accessing and financing medical care (Ku & Matani, 2001; Wells et al., 1989). The primary barrier most commonly cited by Latinos when attempting to access health care is the inability to communicate in English with their health care providers (NCLR, 2004; Yoon et al., 2004). Less acculturated, Spanish-speaking Latinos who have limited English proficiency are more likely to experience greater difficulty in accessing health care even when they are insured (Doty, 2003; Hargraves, Cunningham, et al., 2001).

Acculturation is also associated with educational attainment and better jobs (i.e. where employers provide health insurance), known correlates of health insurance coverage (Bass, 2006; Wiking, Johansson, & Sundquist 2004). Less acculturated Latinos tend to have limited educational attainment. As a result, this limits the occupations in which they work and the types of industries that will employ them (Bass, 2006; Byrd, Balcazar, & Hummer, 2001; Perry et al., 2000). Less acculturated Latinos often work on a part- or half-time basis or on a temporary or seasonal basis, which frequently precludes them from benefiting from employer-sponsored health insurance programs (Schur & Feldman, 2001; Shah & Carrasquillo, 2006).

The finding that household income is significantly associated with health insurance coverage for all three acculturation groups is not surprising. Considering this finding through the lens of acculturation status, however, is interesting. This finding is consistent with findings in other studies concerning Latinos and health insurance coverage (Aguayo et al., 2003; Bass, 2006; Documét & Sharma, 2004). Higher levels of educational attainment are often associated with more acculturated individuals (Alegria, 2006). More acculturated Latinos with higher levels of educational attainment often work in occupations and for employers that provide health insurance benefits commensurate with the general population, and in occupations that pay higher incomes (Alegria, 2006; Lara et al., 2005; Thamer et al., 1997).

Conclusion – Implications for Policy & Practice

In the U.S., health insurance coverage equates to access to health services. The study suggests that level of acculturation is associated with health insurance coverage among working Latinos in California. Efforts to increase access to health services for Latinos must consider their level of acculturation and their acumen with utilizing U.S. health insurance benefits, products and services (Wells et al., 1989; Lara et al., 2005; Hargraves, Cunningham, et al., 2001). The following implications for policy and practice are centered on achieving that end.

Health Policy Recommendations

Expansion of Employer-Sponsored Health Insurance Coverage. To reduce the number of working Latino immigrants and their families who are uninsured through employer-sponsored, policies are needed to expand their access to such programs by providing employers, especially those industries (construction, manufacturing, and retail trade) that are more likely to employ immigrant Latinos, incentives to offer health insurance benefits to their employees. These policies may include incentives for employers who participate in such a program to offer affordable health insurance coverage benefits to their employees. Such policies should also include mandates to employers which typically manifest themselves in the form of "play or pay" directives where employers would either have to create provisions for offering health insurance coverage to their employees or pay some form of a tax to a funding pool that would provide uninsured employees the opportunity to purchase health insurance coverage if it were not offered by their employers (Kaiser Family Foundation, 2009). Employer-

focused policies for offering health insurance benefits to their employees should also create incentives for employers to expand coverage to their less than full-time employees. Because Latino laborers often work multiple jobs to accomplish a full-time work week, they do not receive the benefit of a full-time employee who is offered a variety of employer-sponsored employee benefits and programs, including health insurance coverage. Therefore, labor policies that allow employers to aggregate the number of hours a given employee works between multiple employers in a given period to a full-time work equivalent position would alleviate the current practice of excluding Latino employees from coverage because they work less than full-time for a given employer.

Incentivize Employers to Provide Coverage for the Entire Family. These policies should also include provisions to incentivize employers to provide coverage for their employees' entire family and not just the employee and his/her immediate dependents. Because Latino culture is very family-oriented and includes a variety of extended family members often living in the same household, provisions that allow the employee to purchase affordable health insurance coverage for all their family members living within the same residence would be one means for increasing the number of uninsured Latinos in the U.S. In a study by Perry et al., 2000, the researches found that Latino employees would prefer employer-sponsored health insurance coverage options that allowed them to enroll their non-nuclear family relatives (i.e. grandparents and extended family members) who were living with them in their same residence.

Incentivize Small Business Employers to Offer Coverage. Small businesses (businesses that have less than 100-employees) collectively comprise one of the major groups of companies who employ a significant number of Latinos in the U.S and, Latino-owned businesses are the largest segment of minority-owned small businesses in the U.S.(United States Small Business Administration, 2007). Therefore, health policies targeting the small business sector should contain provisions that make it viable for small businesses to offer affordable health insurance coverage programs to their employees (Perry et al., 2000). Such policies should also provide subsidies to small employers in an effort to assist them with providing health insurance coverage for their lower wage earning employees, who typically go without coverage because of the costs associated with purchasing it (Kaiser Family Foundation, 2009). These provisions should also incentivize these small business employers to assume a considerable amount of the health insurance premiums employees are expected to pay in exchange for tax relief provisions, both state and federal, these businesses owners are expected to pay as part of the cost associated for operating their businesses.

Provide Incentives for Health Insurance Companies to Offer Lower-Cost Health Insurance Coverage Options. Latino employees often utilize a variety of public and community-based health care entities for their and their families' healthcare. Traditionally, these types of health centers and clinics offer healthcare services and programs at lower and/or reduced costs compared to medical offices and for-profit hospital centers. Additionally, many of these community-based clinics, such as federally qualified health centers (FQHCs), are often located in communities where low-to-

moderate income Latino laborers reside. Therefore, health policies that incentivize health insurance carriers to contract with these types of health facilities and entities in an effort to include them as part of their "in-network" providers may help to provider lower cost health insurance programs and alternatives for companies and industries that employ a significant number of Latino employees.

Enhanced Culturally-relevant and Linguistically-accurate Health Insurance Coverage Information, Programs and Services. Employer-centered health insurance coverage programs should also contain provisions that incentivize health insurance companies to offer in-language, culturally-relevant educational tools, programs, resources and services for employers who purchase a given insurance carrier's products and services (Perry et al., 2000). For example, a U.S.-based national insurance carrier provides a variety of tools and resources that are web-based, hard-copy and in an audio-visual format and include an array of information about the plan designs, physicians in the carrier's networks that provide Spanish-language services, bilingual health and wellness brochures, fotonovelas, and other educational resources on how to appropriately use health insurance benefits and how to access the appropriate level of care (i.e. primary care vs. urgent care vs. emergency room care) when needed.

Another aspect of this concept is for health insurance carriers to provide dedicated customer services that offer bilingual customer care professionals who are certified in the Spanish language and are trained in the given carriers health insurance products and services. For example, in some regions of the country where the Latino population is more highly concentrated (California, Texas and Florida), a national health insurance

carrier provides dedicated Spanish-language customer care centers to its clients and members who prefer in-language customer service. By providing these educational resources, employers can assist their employees with understanding how to properly use their health insurance benefits and how to properly access care (Derose et al., 2007).

Related Social Policy Recommendations

Develop Policies that Create College-bound and Academic Support Programs to Increase the Number of Latinos Pursuing Higher Education. Educational policies are needed to develop programs and college preparatory initiatives to help increase the number of Latinos pursuing college-level education and graduate-level degrees. The findings in this study demonstrated that Latinos who possessed higher levels of education were more likely than Latinos who held lower levels of educational attainment to possess some form of health insurance coverage. Latinos with higher levels of educational attainment are often employed in occupations and for firms that are more likely to provide them with employer-sponsored health insurance coverage and in occupations that pay higher incomes (Alegria, 2006; Lara et al., 2005; Thamer et al., 1997). Therefore, college-bound and academic support programs targeting the Latino community could provide an array of services that help Latino students prepare for college and white-collar professions. These programs could provide a series of educational seminars, job-related training sessions, college counseling services, mentorship programs, internships, practicum, and other similar types of educational experiences that teach Latino students about the importance of college, graduate and post-graduate education and that provide them with the opportunity to participate in learning experiences in white-collar and

professional working environments (Olive, 2008). This strategy may be one approach for alleviating the vast numbers of Latinos who are uninsured and who are employed in manual labor industries that are less likely to provide health insurance and work-related benefits (Schur et al., 2001).

These college-bound and academic support programs could also provide educational workshops and seminars for Latino families, especially those from disadvantaged backgrounds, in an effort to orient them about the importance of supporting their children in pursuing college-level education and exposing them to funding sources they may secure for financing their children's college-level education. For example, these services could include seminars that teach Latino families about low-interest college loans, scholarship programs, state grants and other financial aid programs and how to apply for such programs as well. These programs could also provide incentives to Latino families that would allow them to aggregate funds necessary to finance their children's college education. These programs could take the form of college preparatory seminars and field placement/internships that allow Latino students to be exposed to professional training environments while receiving funding that would be earmarked for their college education. Therefore, college-bound and academic support programs that target Latino communities, especially in underserved and economically-depressed regions of the U.S. where high concentrations of Latinos reside, may be one approach for increasing the number of Latinos pursuing higher education and securing professional careers and employment with businesses and firms that are more likely to offer them an array of employer-based coverage options and benefits.

Development of Labor Policies that Provide for Workforce Development and Occupational Mobility. Labor policies are needed to address the disparities that exist in the numbers of Latino immigrants who are employed in manual and/or blue collar jobs, where they are less likely to receive employer-sponsored health insurance benefits, and the numbers of Latino immigrants who are employed in white-collar and/or professional types of employment, where they are more likely to possess some form of employer-sponsored coverage. The study's findings demonstrate that Latinos who possessed lower levels of educational attainment, who were less acculturated, who had lower household income, who worked less than 40-hours per week, who had fewer years of U.S. residency, and worked in a blue collar industry, such as construction, were less likely to possess any form of employer-sponsored health insurance coverage. In a study by Kao, Park, Min and Myers (2008), the researchers found that immigrants who had longer years of U.S. residency and were of later generation (second generation or later) were more likely to be the primary health insurance subscriber. The researchers also found that occupational mobility may be a pertinent fundamental mechanism in understanding the relationship between a given immigrant's length of U.S. residency, generational status and their ability to obtain employer-sponsored health insurance coverage in the U.S., especially if the immigrants were of Latin American descent.

Therefore, labor policies that provide for programs that assist Latino immigrant laborers to obtain work-related skills training, encourage and support them with obtaining higher levels of education, such as baccalaureate degree or vocational or technical training certifications, may increase the number of Latino immigrants who have access to

higher levels of occupational status and employment in occupations that are more likely to offer them employer-sponsored health insurance benefits. These programs could provide career counseling and mentorship opportunities that would help Latino immigrant employees to secure professional, white-collar or technical positions by providing them with access to career opportunities that are more likely to lead them to employment with firms that are more likely to provide employer-sponsored health benefits. These programs could also provide fellowships, apprenticeships and other forms of employer-based on-the-job training and education that may help Latino immigrants to achieve higher levels of occupational attainment (i.e. employment in white-collar/professional and/or skilled labor types of occupations) which may lead to employment with firms that are more likely to offer them health insurance coverage and other employer-sponsored benefits and programs.

CHAPTER III

WORKING LATINOS, HEALTH INSURANCE COVERAGE AND SELF-RATED HEALTH

Introduction

A great deal of research on self-assessed health status confirms that it is considered by many to be a strong predicator of morbidity and mortality of the general population (Bailis et al, 2003; McCullough & Laurenceau, 2004; Shetterly, Baxter, Mason, Hamman, 1996). Self-rated health (SRH) measures typically ask the question, "In general, how would you rate your overall health?," and provide the respondent with a scale of responses ranging from excellent to poor (Finch, Hummer, et al., 2002). Self-rated health is also recognized as a critical indicator of health status that is associated with well-being, health services utilization, and the overall mortality of a given population (Okosun et al., 2001). The usefulness of SRH measures as reliable indicators of health status originates from their validity, as a result of their relationship to clinical conditions, morbidity, mortality, and their ability to predict outcomes above and beyond a physician's clinical assessment of health (Finch, Hummer, et al., 2002; Franks, Gold, & Fiscella, 2003; Idler & Benyamini, 1997). SRH is also an essential tool in the delivery of primary care because it is a useful indicator of the morbidity of a population and it appears to predict mortality even when the respondent's objective health status is accounted for by measurement of the number of diagnosed illnesses affirmed by both the individual and his/her attending physician (Vuorisalmi, Lintonen, & Jylhä, 2005; Wiking et al., 2004).

Literature Review

SRH status is a commonly employed outcome measure used in social epidemiological research to demonstrate how it is associated with socioeconomic status (SES), which includes educational attainment level, income, ethnicity and socio-economic affiliation (Burström & Fredlund, 2001; Martinez,-Sánchez & Regidor, 2002; Miilunpalo, Vuori, Oja, Pasanen, Arponen, 1997; Wiking et al., 2004). SES is also compelling predictor of premature morbidity and mortality (Laaksonen, Rahkonen, Martikainen, Lahelma, 2005). According to Regidor, Barrio, de la Fuente, Domingo, and Alonso (1999), the influence of educational attainment on self-reported health may also vary by gender. In a study by Kennedy, Kawachi, Glass and Prothrow-Stith (1998) on the impact of socioeconomic factors on SRH, the investigators confirmed that inequalities in distribution of income are associated with lower SRH assessments even when controlling for the respondent's income and other risk factors. The literature is also replete with studies that confirm that an inverse relationship exists between socioeconomic status (income and education) and poor health (Abraído-Lanza, Chao, et al., 2005; Phillips, Hammock, Blanton, 2005; Sangh-Manoux, Marmot, Adler, 2005). That is, the lower the educational level and/or educational attainment level, the more likely the respondent is to rate his/her health as fair or poor (Franzini & Fernández-Esquer, 2004). A study by Subramanian, Kim & Karachi (2005) confirmed that individuals with lower levels of education were at least 3.5-times more likely to report poor health compared to individuals with very high levels of educational attainment, who more likely to report favorable self-rated health status. Lasheras, Patterson, Casado and Fernandez (2001), also

found that individuals with lower educational attainment levels are more likely to rate their health less favorably and have higher mortality rates. These investigators also concluded that a lower educational level was significantly associated with unhappiness, poor social relationships and poor health.

Because Latinos have a tendency to present their health concerns in terms of matters that are indicative of personal and/or social problems, it is important to note that Latinos' perception of health status may be influenced more by the lack of health insurance coverage than non-Latino whites (Finch, Hummer, et al., 2002; Shetterly et al., 1996; Weinick, Jacobs, et al., 2004; Wiking et al., 2004). While Latinos tend to have higher rates of poverty, lower levels of educational attainment, and are less likely to have a usual form of health insurance coverage relative to non-Latino whites, they still tend to have lower all-cause mortality rates even though they tend to self-ascribe lower values to their health status (Abraído-Lanza, Chao, et al., 2005; Abraído-Lanza, Dohrenwend, Ng-Mak, & Turner, 1999). This advantaged health status that many Latinos seem to enjoy, regardless of the disadvantaged socioeconomic status that is common for many of them, stems from culturally protective factors such as strong family/social support systems that more positively foster their overall health and well-being (Finch & Vega, 2003).

Purpose of Study

Therefore, despite the numerous studies investigating Latino health, few have focused on the relationship between health insurance coverage and self-rated health. The purpose of this study was to investigate the relationship between self-rated health status and health insurance coverage. This report specifically addressed the following question:

Is there a relationship between self-rated health status and health insurance coverage among working Latinos in California? Other important demographic variables that were investigated included: gender, age, educational attainment, marital status, Latino ancestry, and length of residency. Some of the social and economic factors that were analyzed included: household income, employment industry, union membership and English-language proficiency. Other relevant motivational and cultural variables that were examined included: "HIRANK," a variable that represents the value survey respondents place on the purchase health insurance coverage, fatalism, sense of control, and attitudes towards prevention.

Limitations

This study had several limitations. First, the data was limited to working Latinos in the state of California. A sample of working Latinos from other states is needed. Second, because the types of Latinos in California are predominately Mexican and/or Mexican-American, a more representative sample of Latinos from the array of Latino subcultures, including Puerto Ricans, Cubans, Dominicans, South Americans, Central Americans, would prove beneficial to future research on the relationship between SRH and health insurance coverage. Third, health status was self-reported rather than determined by clinical diagnosis. While SRH is a widely accepted research measure in the U.S., it remains a proxy of actual health and could reflect an individual's general perception of quality of life, influenced by age, gender and social context. Nevertheless, this simplistic self-ascribed measure of health status may be prone to cultural distinctions and ethnic variations in an attempt to approximate what is considered to be good health

(Deeg & Kriegsman, 2003; Shetterly et al., 1996; Wiking et al., 2004). Fourth, the study did not account for the cultural healing traditions observed and practiced by Latinos. Further research on these aspects of Latino health is needed. Finally, additional research is needed to investigate the influence that the practice of obtaining health care outside of the U.S. has on self-rated health and the use of health insurance in the U.S. as described by Warner and Schnieder (2004).

Despite these limitations, this study contributes to the existing literature on self-rated health of Latinos in the U.S. and further defines the role that health insurance coverage plays on how Latinos perceive and rate their health status. More importantly, this research underscores the significant influence of educational attainment level on self-reported health status of working Latinos.

Methods

Data Sources. The data for the study were taken from the Health Insurance Coverage Among Working Latinos in California (Greenwald, 2001). The purpose of the study was to understand why Latinos in California frequently lack health insurance coverage. The survey asked about respondents' health status, access to health care, health insurance coverage and utilization of health care services. All responses to the survey were self-reported by the respondents. The survey measured insured respondents' satisfaction with current health insurer and collected data about plan type, length of coverage with the plan, and the health plan's co-pays and deductibles. Uninsured respondents were asked why they did not have health insurance, if they tried to secure health insurance coverage in the past year, the length of time since they last owned health

insurance coverage, whether or not their employer offered health insurance coverage and what they anticipated paying for their health insurance coverage.

The study also assessed respondent attitudes concerning control of one's fate, adequacy of community-based and/or free care clinics as sources of health care services, the interest in obtaining routine health check-ups, and health insurance coverage as good versus poor value for the money invested to purchase such coverage.

The survey also gathered demographic and socioeconomic characteristics of the respondents including age, sex, household size, educational attainment, religious affiliation, county of birth, ancestry, citizenship, number of years residing in the United States, English language proficiency, income, number of jobs held, size of employer in terms of number of employees, length of time at the job, industry, occupation and labor union participation.

Sample and Data Collection

A telephone survey of 1,000 working California residents of Latino descent was conducted during the first quarter of the year 2001 by employing a random-digit dialing (RDD), screening each contacted household first for Latino adults and then for working Latinos (Greenwald, 2001). The interviews were conducted by the San Francisco-based Field institute, and they were conducted in English or Spanish based on the interviewee's preference. A total of eight attempts, an initial call plus seven callbacks, were made to each residential telephone number identified for the study. The callbacks were conducted at various times and on different days to increase the probability of locating qualified individuals to participate in the interview. Sampling by means of RDD circumvents the

threat of systematically excluding that portion of the population with unlisted telephone number. The type of random sample employed in this study can be extrapolated to any identifiable subgroup aggregation of California within sampling error limits that are applicable to each subgroup. Additionally, the data were weighted to compensate for under sampling of households that did not have telephone service.

Measures

Dependent Variable. The primary dependent variable was Health insurance coverage was dichotomized as yes or no

Independent Variables. Information about this self-rated health (SRH) was elicited by asking the respondents: "Would you say that in general your health is excellent, very good, good, fair or poor." Although the researchers categorized SRH in the survey into excellent, very good, good, fair and poor, for the purpose of the present study, SRH was grouped into one of four categories: excellent, good, fair and poor. Because the study was of working Latinos, age was classified into three categories: 18 – 25, 26 – 45, and 45-plus. Gender was male or female. Acculturation was categorized as very Latino, mostly Latino, bicultural, mostly Americanized, and very Americanized (Cuellar et al., 1980; Greenwald, 2001). Educational attainment was categorized as high school or less, completed 12^{th} grade or high school graduate, vocational school or some college, and college graduate or post graduate. Marital status was dichotomized as married and not married (including not married but living together, never married, widowed, divorced and separated). Household Income was categorized as less than

$20,000, $20,000 to $40,000, $40,000 to $75,000, and greater than $75,000. Length of U.S. residency was included as a main independent variable of interest.

Statistical Analysis

Descriptive statistics were calculated using Mantel-Haenszel Chi-Square. Binomial logistic regression was employed. Sample weights were applied to the data for analysis. All analyses were performed using Version 15 of the SPSS systems for Windows (SPSS, Inc.).

Results

Table 3.1 displays important characteristics of the sample from one-thousand (N = 1000) working Latinos who were residing in California in 2001 and who were either insured or uninsured. Approximately 70% of the sample possessed some form of health insurance coverage while only 30% lacked any form of coverage. Almost 78% of the samples considered their self-rated health status (SRH) to be “excellent” (43.9%) or “good” (33.5%) while less than 23% considered their SRH to be fair (20.5%) or poor (1.9%).

The sample was primarily male (62.8%) and was almost evenly distributed among the married (49.8%) and non-married (49.6%) groups. Approximately 58% of the sample was 26-to-45 years of age while 22.6% of the sample consisted of employees with the 18-to-25 year age range. The age group with the fewest number of sample respondents was the 45-plus years of age consisting of 19% of the entire sample. Table 3.1 also depicts the educational attainment distribution of the sample. Approximately 33% of the respondents held some level of high school education or less while 27% of the sample

had completed the 12th or was a high school graduate. Approximately 24% of the sample attended a vocational/technical school or some college; and, approximately 15% of the sample was college or post graduates. The household income of the sample consisted of approximately 60% of the respondents earning less than $40,000, and approximately 32% of them earning a household income of $40,000 or greater.

Approximately 55% of the respondents indicated he/she was "Latino." Almost 42% of the respondents classified his-/herself as "Bicultural" (21.1%) or "Americanized" (20.8%). Approximately 58% of the sample was U.S. citizens, and almost 77% of the sample was of Mexican ancestry. The second and third largest Hispanic ancestry groups were Spanish American (6.1%) and Salvadorian (5.1%) respectively. Approximately 41% of the sample had lived in the U.S. 11-years or more while approximately 10% had resided in the U.S. for less than 5-years. Greater than 60% of the sample indicated that they spoke English well or very well while only 26% of the sample indicated they spoke English not well. Approximately 11.4% of the sample stated they did not speak English.

Table 3.1 also describes some of the sample's psycho-social and cultural beliefs as they relate to health insurance coverage. Almost 80% of the respondents indicated they felt comfortable with going to medical professionals and health care facilities (COMFORT); and, approximately 41% of the sample indicated that they did not seek medical care because they could not afford to pay for it (CANTPAY). Approximately 70% stated that health insurance coverage ranked high on their list of priorities for where they invested their money (HIRANK); and, almost one-half (48%) of the respondents indicated that getting ill was an act of God (FATALISM).

Table 3.1 also displays the respondents' employment industries which include six (6) major groups: (1) agriculture/mining/architecture/landscaping (7.3%), (2) construction (11.1%), (3) education/day care provider (8.6%), manufacturing (15.1%), and other (36.4%). Of the number of hours the sample worked per week, approximately 73% of the sample indicated they worked 40-to-60 per week while less than 26% indicated they worked less than 39-hours per week. Approximately 14% of the sample indicated they possessed some form of union affiliation; and, the majority of the sample (87.2%) worked for an employer.

Table 3.1: Distribution of sample by selected characteristics (N = 1000)

Characteristics	Distribution of Sample	
	Number	(%)
Entire Sample	1000	100%
Health Insurance Coverage		
Yes	694	69.4%
No	306	30.6%
Self-Rated Health		
Excellent	439	43.9%
Good	335	33.5%
Fair	205	20.5%
Poor	19	1.9%
Gender		
Male	628	62.8%
Age		
18 – 25	226	22.6%
26 – 45	570	57.0%
45-Plus Years	190	19.0%
Education		
Some High School or Less	333	33.3%
Completed 12th Grade or High School Graduate	272	27.2%
Vocational/Technical School Or Some College	236	23.6%
College Graduate or Post Graduate	149	14.9%
Marital Status		
Married	498	49.8%
Household Income		
Less than $20,000	304	30.4%
$20,000 to less than $40,000	294	29.4%
$40,000 to less than $75,000	200	20.0%
Greater than $75,000	120	12.0%

Table 3.1: Distribution of sample by selected characteristics (N = 1000)

Characteristics	Distribution of Sample	
	Number	(%)
Acculturation		
Latino	550	55.0%
Bicultural	211	21.1%
Americanized	208	20.8%
Hispanic Ancestry		
Mexican	772	77.2%
Salvadoran	51	5.1%
Guatemalan	28	2.8%
Other Central American	32	3.2%
South American	35	3.5%
Spanish American	61	6.1%
Puerto Rican	18	1.8%
Cuban American	12	1.2%
Other	9	0.9%
U.S. Citizenship Status		
Yes	578	57.8%
Country of Origin		
United States of America	371	37.1%
Mexico	476	47.6%
West Indies/Puerto Rico	11	1.1%
Central American	103	10.3%
South American	29	2.9%
Other	6	0.6%
Length of U.S. Residency		
5 Years or Less	97	9.7%
6 – 10 Years	112	11.2%
11 – 15 Years	144	14.4%
16 – 20 Years	103	10.3%
21 Or More Years	163	16.3%
English Language Proficiency		
Very Well	420	42.0%
Well	204	20.4%
Not Well	259	25.9%
Not At All	114	11.4%
Motivational Factors		
COMFORT[a]	779	77.9%
CANTPAY[b]	414	41.4%
HIRANK[c]	692	69.2%
FATALISM[d]	480	48.0%

Table 3.1: Distribution of sample by selected characteristics (N = 1000)

Characteristics	Distribution of Sample	
	Number	(%)
Employment Industry		
Agriculture/Mining/Architecture/Landscaping	73	7.3%
Construction	111	11.1%
Education/Day Care Provider	86	8.6%
Manufacturing	151	15.%
Retail Trade	206	20.6%
Other	364	36.4%
Did Not Respond	9	0.9%
Employment Status		
Self-Employed	124	12.4%
Works For Someone Else	872	87.2%
Hours Worked per Week		
Less than 20-hours per week	63	6.3%
20 to 39 hours per week	190	19.9%
40 hours per week	517	51.7%
41 to 60 hours per week	216	21.6%
Union Membership		
Yes	139	13.9%

a. Survey Question (COMFORT): I am comfortable with going to doctors and hospitals.
b. Survey Question (CANT PAY): I don't get proper medical care because I can't afford to pay for it.
c. Survey Question (HIRANK): Health insurance ranks very high on my list of priorities for where I spend my money.
d. Survey Question (FATALISM): Getting ill is an act of God; you can't do much about it.

Table 3.2 presents the results of the binary regression analysis for heath insurance coverage. This regression analysis was conducted only on non-U.S. born Latinos. The table displays the correlations for health insurance coverage for working Latinos in California in 2001. While SRH was included in the regression model, there were no significant correlations with any of the independent variables included in this examination. However, the analysis revealed other significant correlations. It was found that household income has a significant correlation with being insured. If a respondent's household income was less than $20,000 the respondent was 9.4% as likely to be insured compared to a respondent whose household income was $75,000 or more. For

respondents in the study whose house hold income was greater than $20,000 but less than $40,000, these respondents were 18.2% as likely to be insured.

Table 3.2 also demonstrates that years of residency has a strong correlation with the likelihood of being insured for the respondents in the study. Compared to respondents who lived in the U.S. for more than 21 years, if the respondents resided in the U.S. between 6 – 10 years, these respondents were only 39% as likely to be insured. The analysis also revealed that if the respondents lived in the U.S. between 11 – 15 years, these respondents were only 44% as likely to possess some form of health insurance coverage compared to those who resided in the U.S. for 21 or more years.

Table 3.2: Binary regression model for health insurance coverage among immigrant Latinos

Characteristics	B	STD. ERR.	Z	P-Value	OR	95% Confidence Interval
Self-Rated Health						
Excellent	2.014	1.295	4.378	0.223	7.491	(.592 -94.811)
Good	1.972	1.303	2.288	0.130	7.181	(.558-92.414)
Fair	1.605	1.310	1.500	0.221	4.978	(.382-64.934)
Gender						
Male	-00.61	0.289	0.044	0.834	0.941	(.534-1.659)
Age						
18 – 25	-0.543	0.502	1.173	0.279	0.581	(0.217 - 1.553)
26 – 45	-0.205	0.378	0.294	0.588	0.815	(0.388 - 1.710)
Education						
Some high school or less	-0.377	0.575	0.430	0.512	0.686	(.222-2.118)
Completed 12th grade or high school graduate	-0.254	0.579	0.193	0.660	0.775	(.249-2.410)
Vocational/Technical school or some college	-0.382	0.588	0.423	0.515	0.682	(.215-2.160)
Marital Status						
Married	0.239	0.233	1.057	0.304	1.270	(.805-2.003)
Household Income						
Less than $20,000	-2.369	0.753	9.896	0.002	0.094	(.021-.409)
$20,000 to less than $40,000	-1.703	0.746	5.210	0.022	0.182	(.042-.786)
$40,000 to less than $75,000	-0.693	0.812	0.729	0.393	0.500	(.102-2.456)

Table 3.2: Binary regression model for health insurance coverage among immigrant Latinos

Characteristics	B	STD. ERR.	Z	P-Value	OR	95% Confidence Interval
Acculturation						
Latino	-0.537	0.548	0.958	0.328	0.585	(.200-1.713)
Bicultural	-0.077	0.599	0.017	0.898	0.926	(.286-2.993)
U.S. Citizenship						
Yes	0.366	0.297	1.521	0.217	1.422	(.806-2.581)
Country of Origin						
Mexico	-0.082	1.352	0.004	0.951	0.921	(.065-13.039)
West Indies/Puerto Rico	-0.474	1.677	0.080	0.777	0.623	(.023-16.664)
Central America	-0.380	1.373	0.077	0.782	0.684	(.046-10.086)
South America	0.119	1.466	0.007	0.935	1.127	(.064-19.943)
Length of U.S. Residency						
5 Years or less	-0.889	0.520	2.918	0.088	0.411	(.148-1.140)
6 - 10 Years	-0.931	0.428	4.738	0.029	0.394	(.170-.911)
11 - 15 Years	-0.839	0.379	4.908	0.027	0.432	(.206-.908)
16 - 20 Years	-0.264	0.422	0.391	0.532	0.768	(.335-1.757)
English Language Proficiency						
Very well	-0.072	0.519	0.019	0.889	0.930	(.337-2.571)
Well	-0.103	0.401	0.066	0.797	0.902	(.411-1.980)
Not well	0.101	0.338	0.090	0.764	1.107	(.571-2.146)
Motivational Factors						
COMFORT[a]	0.202	0.272	0.551	0.458	1.224	(.718-2.088)
CANTPAY[b]	-0.695	0.240	8.357	0.004	0.499	(.312-.799)
HIRANK[c]	0.542	0.253	4.593	0.032	1.720	(1.047-2.825)
FATALISM[d]	0.000	.248	0.000	0.999	1.000	(.616-1.626)
Employment Industry						
Agriculture/Mining/ Architecture /Landscaping	-0.470	0.442	1.133	0.287	0.625	(.263-1.485)
Construction	-0.957	0.391	5.985	0.014	0.384	(.178-.827)
Education/Day Care Provider	-0.609	0.621	0.963	0.326	0.544	(.161-1.836)
Retail Trade	-0.389	0.348	1.254	0.263	0.677	(.343-1.340)
Other	-0.036	0.366	0.010	0.922	0.965	(.471-1.978)
Employment Status						
Self-employed	-0.886	0.350	6.412	0.011	0.412	(.208-.819)
Hours Worked per Week						
Less than 20 hours per week	0.804	0.597	1.810	0.178	2.234	(.693-7.204)
20 - 39 hours per week	-0.378	0.399	0.899	0.343	0.685	(.314-1.497)
40 hours per week	0.296	0.332	0.800	0.371	1.345	(.702-2.576)

Table 3.2: Binary regression model for health insurance coverage among immigrant Latinos						
Characteristics	**B**	**STD. ERR.**	**Z**	**P-Value**	**OR**	**95% Confidence Interval**
Union Membership						
Yes	0.876	0.487	3.234	.072	2.401	(.924-6.238)
N = 492 -2 Log Likelihood: 500.963						
a. Survey Question (COMFORT): I am comfortable with going to doctors and hospitals. b. Survey Question (CANTPAY): I don't get proper medical care because I can't afford to pay for it. c. Survey Question (HIRANK): Health insurance ranks very high on my list of priorities for where I spend my money. d. Survey Question (FATALISM): Getting ill is an act of God; you can't do much about it.						

Two of the motivational (psycho-social and cultural factors) predictors of health insurance coverage that demonstrate significant correlations with possessing health insurance coverage are the variables, "CANTPAY" and "HIRANK." If the respondents indicated that they did not receive medical care because they could not afford to pay for it (CANTPAY), these respondents were almost 50% as likely to own some form of health insurance coverage. Similarly, if the respondents in the study stated that health insurance ranked high on their list of priorities for where they invested their money, these respondents were almost 2-times more likely (172%) to be insured.

The binary regression analysis also revealed significant correlations between employment industry, employment status, union membership and health insurance coverage. For respondents who were employed in the construction industry, they were approximately 39% as likely to possess some form of health insurance coverage compared to those respondents who were employed in the manufacturing industry. The study also found that employment status has a significant correlation with being insured. If a respondent was self-employed, he/she was 41% as likely to own some type of health

insurance coverage compared to those respondents who worked for an employer. Union membership is another significant predictor of health insurance coverage. If the respondents in the investigation indicated some level of union affiliation, these respondents were approximately 2.4-times (240.1%) more likely to possess health insurance benefits compared those respondents who were not members of a union.

In addition to SRH, gender, age, educational level, marital status, acculturation status, U.S. citizenship status, country of origin, English language proficiency, and hours worked per week were the variables that did not demonstrate any significant correlations with health insurance coverage. Seventy-four percent (74%) of the cases were correctly predicted by the regression equation.

Table 3.3 presents the results of a restricted binary regression analysis for health insurance coverage and limits the model to five key variables (household income, length of residency motivational factors, employment status and union membership) which all demonstrated significant correlations with health insurance coverage. This regression analysis was conducted only on non-U.S. born Latinos. Self-rated health was not included in this model since it was determined in the full model (Table 3.2) not to have any significant correlation with health insurance coverage. In this restricted model, the analysis revealed that household income continued to have a significant correlation with health insurance coverage. If a respondent's household income was less than $20,000 the respondent was almost 9% as likely to be insured compared to a respondent whose household income was $75,000 or more. For respondents in the study whose household

income was greater than $20,000 but less than $40,000, these respondents were approximately 20% as likely to be insured.

Table 3.3: Binary regression model (restricted) for health insurance coverage among immigrant Latinos

Characteristics	B	STD. ERR.	Z	P-VAULE	OR	95% Confidence Interval
Household Income						
Less than $20,000	-2.465	0.676	13.310	0.001	0.085	(.023-.320)
$20,000 to less than $40,000	-1.601	0.674	5.641	0.018	0.202	(.054-.756)
$40,000 to less than $75,000	-0.696	0.736	0.894	0.345	0.499	(.118-2.110)
Length of US Residency						
5 Years or less	-1.356	0.358	14.362	0.001	0.258	(.128-.520)
6 - 10 Years	-0.978	0.324	9.111	0.003	0.376	(.199-710)
11 - 15 Years	-0.974	0.306	10.149	0.001	0.378	(.207-.688)
16 - 20 Years	-0.237	0.347	0.443	0.506	0.794	(.402-1.567)
Motivational Factors						
CANTPAY[a]	-0.674	0.213	10.050	0.002	0.510	(.336-.773)
HIRANK[b]	0.576	0.229	6.333	0.012	1.778	(1.136-2.784)
Employment Status						
Self-employed	-0.888	0.308	8.306	0.004	0.411	(.940-5.210)
Union Membership						
Yes	0.794	0.437	3.308	0.069	2.213	(.940-5.210)

N = 525
-2 Log Likelihood: 567.583

a. Survey Question (CANTPAY): I don't get proper medical care because I can't afford to pay for it.
b. Survey Question (HIRANK): Health insurance ranks very high on my list of priorities for where I spend my money.

Table 3.3 also reveals that years of residency continues to demonstrate a strong correlation in this model with the likelihood of being insured for the respondents in the study. Although years of residency was not a significant predicator for only one subcategory within its grouping (16 – 20 years), it remained in the model because it was significant for 3 out of the 4 subcategories. Compared to respondents who lived in the U.S. for more than 21 years, if the respondents resided in the U.S. for 5-years or less, they were almost 26% as likely to possess some form of health insurance benefits. The

findings also show that if the respondents lived in the U.S. between 6 – 10 years, they were approximately 38% as likely to be insured compared to those who resided in the U.S. for 21 or more years. However, if the respondents lived in the U.S. for 11 – 15 years, they were almost 38% as likely to hold some form of health insurance coverage compared to those respondents who lived in the U.S. for 21 or more years.

The two of the motivational factors, CANTPAY and HIRANK remain significant predictors of health insurance coverage in regression model displayed in Table 3.3. Specifically, if the respondents indicated that they did not receive medical care because they could not afford to pay for it (CANTPAY), these respondents were almost 51% as likely to own some form of health insurance benefits. If the respondents stated that health insurance ranked high (HIRANK)on their list of priorities for where they invested their money, they were almost 2-times more likely (177.8%) to own some form of health insurance coverage.

Table 3.3 also demonstrates the significant correlations between employment status, union membership and health insurance coverage. The analysis revealed that if the respondents were self-employed, they were approximately 41% as likely to be insured compared to those respondents in the study who worked for an employer. Union membership, again, proved to be a significant predictor of health insurance coverage. If the respondents in the study stated that they possessed some form of union membership, they were approximately 2.2-times (221.3%) more likely to possess health insurance benefits compared those respondents who did not express any form of union affiliation.

Seventy-two point one percent (72.1%) of the cases were correctly predicted by the regression equation.

Discussion

This study examined the relationship between self-rated health and health insurance coverage among working Latinos in California, 2001. The examination of the relationship between the two main variables in this study – health insurance coverage and self-rated health – did not yield any significant findings. That is, it was determined by the analysis that no significant correlation exists between these two variables. This finding is contrary to a study by Treviño et al. (1991) which concluded that Latinos who did not possess any form of health insurance coverage were less likely to self-ascribe their health status as excellent or very good compared to non-Hispanics. Despite this finding, it was also determined that other significant correlations exist between health insurance coverage and other relevant variables that influence working Latino immigrants' take-up of health insurance coverage. The variables that demonstrated significant correlations with health insurance coverage include: household income, years of U.S. residency, the motivational factors CANTPAY and HIRANK, employment in the construction industry, employment status and union membership.

Because health insurance coverage is a major enabler of access to healthcare services and medical care, the lack of health insurance coverage is a barrier affecting Latinos' access to medical care in the US (Treviño et al., 1996). A variety of studies confirm that Latinos are the largest ethnic minority group in the U.S. with extensively impaired access to health care because of their underinsured and/or uninsured status

(Goldman et al., 2005; Institute of Medicine, 2003; Weinick, Jacobs, et al., 2004). The lack of health insurance coverage also signifies a serious barrier to medical care for Latinos and may influence their perceptions of their health and well-being (Treviño et al. 1991). Health disparities are also more pronounced for Latinos who lack health insurance coverage; and, as a result, their health status may be compromised due to having limited resources to finance the cost of medical care (Hargraves & Hadley, 2003; Ortiz et al., 2004; Ponce, Nordyke, Hirota, 2005; Zuvekas & Taliaferro, 2003).

The analysis also revealed that household income has a significant correlation with being insured. Those respondents in the study whose household incomes were less than $40,000 had a smaller likelihood of possessing some form of health insurance coverage. Specifically, if a respondent's household income was less than $20,000 the respondent was only 8.5% as likely of being insured compared to those whose household income was $75,000 or more. A similar finding was also true for those respondents whose household income was greater than $20,000 but less than $40,000. They were only 20.2% as likely of possessing some form of health insurance coverage. Despite the fact that these working Latino immigrants in the study held jobs and possessed some level of income, the lack of adequate income to purchase health insurance coverage remained a significant barrier to owning health insurance coverage. This finding is consistent with other studies that have examined the impact income has on owing health insurance coverage and its use for accessing medical care (Ayanian, Weissman, Schnieder, Ginsburg, & Zaslavsky, 2000; Weinick, Bryon, & Bierman, 2005).

The findings also demonstrate that years of U.S. residency has a significant correlation with the likelihood of being insured for the working Latino immigrants in this study. The greater the number of years of residency a Latino immigrant employee in the study lived in the U.S. the greater the likelihood that employee would possess some form of health insurance coverage. For example, the working Latino immigrants who lived in the U.S. between 6 – 10 years were approximately 40% as likely to be insured; and, those who lived in the U.S. between 11 – 15 years were approximately 43% as likely to own some form health insurance benefits compared to those lived in the U.S. for 21 or more years. While those respondents in the study who lived in the U.S. for less than 5-years had only a .10 level of significance, they were only 41% as likely to own some form of health insurance coverage compared those respondents who lived in the U.S. greater than 21 or more years. These findings may provide some insight on the significance Latino immigrant employees, in this study, place on possessing health insurance coverage as articulated in their responses to the survey questions concerning their ability to pay for medical care (CANTPAY), and the value they placed on buying health insurance coverage (HIRANK).

The results of the study also demonstrate that approximately 41% of the Latino immigrant employees in the study indicated they did not receive medical care because they could not afford to pay for it (CANTPAY). Of these who indicated they could not afford to pay for medical care, these respondents were approximately 50% as likely to own some form of health insurance benefits. The study demonstrates that approximately 69% of these Latino immigrant employees believed that health insurance ranked high on

their list of financial priorities for where they invested their earnings. Of these Latino immigrant respondents who indicated that health insurance ranked high on their list of priorities for where they invested their money (HIRANK), they were almost 2-times more likely (172%) to possess some form of health insurance coverage.

The study also revealed that almost 50% of the respondents held the belief that getting ill was an act of God (FATALISM). Although FATALISM did not show a strong correlation with health insurance coverage, these findings collectively illuminate, to some extent, the motivation behind the Latino immigrant respondents' desire to take-up health insurance programs whether the programs are employer-sponsored, government sponsored or self-purchased. These findings also provide some insight into the value these Latino immigrant respondents' place on owning health insurance coverage and their understanding of its use as crucial for defraying the cost of medical care for themselves and their families. These results are also contrary to the argument that Latino employees, especially those who are less acculturated, are less likely to enroll in employer-sponsored coverage because they do not understand its use and they are reluctant to investing their wages into a health insurance program they are less likely to use. These findings are also consistent with a previous study that demonstrates that Latino employees desire affordable health insurance coverage and place a great emphasis on owning it, especially if there is a perceived or actual need for medical care and/or other health-related services (Perry et al., 2000). While these findings may not be definitive, they contribute to the dialogue concerning the motivations behind Latinos health seeking behaviors as it relates to their take-up of health insurance programs.

The employment industries Latino laborers work in often lag behind other industries in offering employer-sponsored health insurance coverage. Latino employees were more likely to be employed in jobs that did not offer health insurance benefits when compared to non-Latinos (Perry et al., 2000; Quinn, 2000; Schur & Feldman, 2001). The study found that there is a significant correlation between employment industry and health insurance coverage. The research demonstrates that within one of the major U.S. industries that customarily employs Latino immigrant laborers – the construction industry – Latino immigrant employees were approximately 39%, as likely to possess some form of health insurance coverage compared to those Latino immigrant laborers in the study who were employed in the manufacturing industry. This finding is consistent with other studies that demonstrated that Latino employees were more likely to be employed in large industries that are less likely to offer them health insurance benefits (Blewett et al., 2005; Buchmueller, Lo Sasso, Lurie & Dolfin, 2007). The study also revealed that employment status has a significant correlation with being insured. If a respondent was self-employed, he/she was 41% as likely to own some type of health insurance coverage compared to those respondents who worked for an employer. Perhaps, this finding in itself is significant because of the emphasis Latino immigrant employees place on the health and well-being of their families and themselves. This research is also consistent with other studies that indicated that Latino laborers who were insured gave a high priority to health insurance coverage and were more likely to take-up health insurance coverage at rates similar to other non-Latino employees when it was offered to the opportunity to do so (Perry et al, 2000; Quinn, 2000).

The study also investigated the assertion that union membership increases the likelihood of a Latino immigrant employee in the study possessing some form of health insurance coverage. The findings demonstrate that there is a significant correlation between union membership and health insurance coverage. The study's results support the argument that union membership does play a role in increasing the likelihood of possessing health insurance coverage. Latino immigrant employees who stated they were union members were approximately 2.4-times more likely to own some form of health insurance coverage (employer-sponsored, government-sponsored, or self-purchased). Approximately 139, or almost 14%, of the respondents in the survey specified they held some form of union affiliation. Therefore, educating Latino immigrant laborers, who are employed in industries that provide the opportunity to affiliate with a union, may be one approach towards increasing the number of Latino immigrant employees being enrolled in employer-sponsored health insurance coverage.

Conclusion – Implications for Policy & Practice

Health Policy Recommendations

Expansion of Employer-Sponsored Health Insurance Coverage. To reduce the number of working Latino immigrants and their families who are uninsured through employer-sponsored, policies are needed to expand their access to such programs by providing employers, especially those industries (construction, manufacturing, and retail trade) that are more likely to employ immigrant Latinos, incentives to offer health insurance benefits to their employees. These policies should include incentives for employers who participate in such a program to offer affordable health insurance

coverage benefits to their employees. Such policies should also include mandates to employers which typically manifest themselves in the form of "play or pay" directives where employers would either have to create provisions for offering health insurance coverage to their employees or pay some form of a tax to a funding pool that would provide uninsured employees the opportunity to purchase health insurance coverage if it were not offered by their employers (Kaiser Family Foundation, 2009). Employer-focused policies for offering health insurance benefits to their employees should also create incentives for employers to expand coverage to their less than full-time employees. Because Latino immigrant laborers often work multiple jobs to accomplish a full-time work week, they do not receive the benefit of a full-time employee who is offered a variety of employer-sponsored employee benefits and programs, including health insurance coverage. Therefore, labor policies that allow employers to aggregate the number of hours a given employee works between multiple employers in a given period to a full-time work equivalent position would alleviate the current practice of excluding Latino immigrant employees from coverage because they work less than full-time for a given employer.

Incentivize Employers to Provide Coverage for the Entire Family. These policies should also include provisions to incentivize employers to provide coverage for their employees' entire family and not just the employee and his/her immediate dependents. Because Latino culture is very family-oriented and includes a variety of extended family members often living in the same household, provisions that allow the employee to purchase affordable health insurance coverage for all their family members living within

the same residence would be one means for increasing the number of uninsured Latinos in the U.S. In a study by Perry et al., 2000, the researches found that Latino employees would prefer employer-sponsored health insurance coverage options that allowed them to enroll their non-nuclear family relatives (i.e. grandparents and extended family members) who were living with them in their same residence.

Incentivize Small Business Employers to Offer Coverage. Small businesses (businesses that have less than 100-employees) collectively comprise one of the major groups of companies who employ a significant number of Latino immigrants in the U.S; and, Latino-owned businesses are the largest segment of minority-owned small businesses in the U.S. (United States Small Business Administration, 2007). Therefore, health policies targeting the small business sector should contain provisions that make it viable for small businesses to offer affordable health insurance coverage programs to their employees (Perry et al., 2000). Such policies should also provide subsidies to small employers in an effort to assist them with providing health insurance coverage for their lower wage earning employees, who typically go without coverage because of the costs associated with purchasing it (Kaiser Family Foundation, 2009). These provisions should also incentivize these small business employers to assume a considerable amount of the health insurance premiums employees are expected to pay in exchange for tax relief provisions, both state and federal, these businesses owners are expected to pay as part of the cost associated for operating their businesses.

Strengthen Opportunities for Unionization. The study's findings demonstrate that Latino immigrant employees who possessed union membership were more likely to

possess employer-sponsored coverage compared to those who were not members of a union. Therefore, labor policies that encourage and support the unionization of employees in the industries (construction, manufacturing and retail trade) that are more highly populated with Latino immigrant laborers for the purpose of providing health insurance coverage may prove to be an effective means for reducing the number of working Latino immigrant laborers who are uninsured. Such policies should create incentives for both the employers and the unions to effectively negotiate the provision of health insurance coverage to employees who work less than full-time positions and who are employed for lower wages. These policies should also create programs that would help to educate Latino immigrant laborers on the appropriate use of their employer-sponsored health insurance benefits and how to properly access medical care when needed.

Provide Incentives for Health Insurance Companies to Offer Lower-Cost Health Insurance Coverage Options. Latino immigrant employees often utilize a variety of public and community-based health care entities for their and their families' healthcare. Traditionally, these types of health centers and clinics offer healthcare services and programs at lower and/or reduced costs compared to medical offices and for-profit hospital centers. Additionally, many of these community-based clinics, such as federally qualified health centers (FQHCs), are often located in communities where low-to-moderate income Latino immigrant laborers reside. Therefore, health policies that incentivize health insurance carriers to contract with these types of health facilities and entities in an effort to include them as part of their "in-network" providers may help to

provider lower cost health insurance programs and alternatives for companies and industries that employ a significant number of Latino immigrant employees.

Enhanced Culturally-relevant and Linguistically-accurate Health Insurance Coverage Information, Programs and Services. Employer-centered health insurance coverage programs should also contain provisions that incentivize health insurance companies to offer in-language, culturally-relevant educational tools, programs, resources and services for employers who purchase a given insurance carrier's products and services (Perry et al., 2000). For example, a U.S.-based national insurance carrier provides a variety of tools and resources that are web-based, hard-copy and in an audio-visual format and include an array of information about the plan designs, physicians in the carrier's networks that provide Spanish-language services, bilingual health and wellness brochures, fotonovelas, and other educational resources on how to appropriately use health insurance benefits and how to access the appropriate level of care (i.e. primary care vs. urgent care vs. emergency room care) when.

Another aspect of this concept is for health insurance carriers to provide dedicated customer services that offer bilingual customer care professionals who are certified in the Spanish language and are trained in the given carriers health insurance products and services. For example, in some regions of the country where the Latino population is more highly concentrated (California, Texas and Florida), a national insurance carrier provides dedicated Spanish-language customer care centers to its clients and members who prefer in-language customer service. By providing these educational resources,

employers can assist their employees with understanding how to properly use their health insurance benefits and how to properly access care (Derose et al., 2007).

Related Social Policy Recommendations

Develop Policies that Create College-bound and Academic Support Programs to Increase the Number of Latinos Pursuing Higher Education. Educational policies are needed to develop programs and college preparatory initiatives to help increase the number of Latinos pursuing college-level education and graduate-level degrees. The findings in this study demonstrated that Latino immigrants who possessed higher levels of education were more likely than Latino immigrants who held lower levels of educational attainment to possess some form of health insurance coverage. Latinos with higher levels of educational attainment are often employed in occupations and for firms that are more likely to provide them with employer-sponsored health insurance coverage and in occupations that pay higher incomes (Alegria, 2006; Lara et al., 2005; Thamer et al., 1997). Therefore, college-bound and academic support programs targeting the Latino community could provide an array of services that help Latino students prepare for college and white-collar professions. These programs could provide a series of educational seminars, job-related training sessions, college counseling services, mentorship programs, internships, practicum, and other similar types of educational experiences that teach Latino students about the importance of college, graduate and post-graduate education and that provide them with the opportunity to participate in learning experiences in white-collar and professional working environments (Olive, 2008). This strategy may be one approach for alleviating the vast numbers of Latinos

who are uninsured and who are employed in manual labor industries that are less likely to provide health insurance and work-related benefits (Schur et al., 2001).

These college-bound and academic support programs could also provide educational workshops and seminars for Latino families, especially those from disadvantaged backgrounds, in an effort to orient them about the importance of supporting their children in pursuing college-level education and exposing them to funding sources they may secure for financing their children's college-level education. For example, these services could include seminars that teach Latino families about low-interest college loans, scholarship programs, state grants and other financial aid programs and how to apply for such programs as well. These programs could also provide incentives to Latino families that would allow them to aggregate funds necessary to finance their children's college education. These programs could take the form of college preparatory seminars and field placement/internships that allow Latino students to be exposed to professional training environments while receiving funding that would be earmarked for their college education. Therefore, college-bound and academic support programs that target Latino communities, especially in underserved and economically-depressed regions of the U.S. where high concentrations of Latinos reside, may be one approach for increasing the number of Latinos pursuing higher education and securing professional careers and employment with businesses and firms that are more likely to offer them an array of employer-based coverage options and benefits.

Development of Labor Policies that Provide for Workforce Development and Occupational Mobility. Labor policies are needed to address the disparities that exist in

the numbers of Latino immigrants who are employed in manual and/or blue collar jobs, where they are less likely to receive employer-sponsored health insurance benefits, and the numbers of Latino immigrants who are employed in white-collar and/or professional types of employment, where they are more likely to possess some form of employer-sponsored coverage. The study's findings demonstrate that Latino immigrants who possessed lower levels of educational attainment, who were less acculturated, who had lower household income, who worked less than 40-hours per week, who had fewer years of U.S. residency, and worked in a blue collar industry, such as construction, were less likely to possess any form of employer-sponsored health insurance coverage. In a study by Kao, Park, Min and Myers (2008), the researchers found that immigrants who had longer years of U.S. residency and were of later generation (second generation or later) were more likely to be the primary health insurance subscriber. The researchers also found that occupational mobility may be a pertinent fundamental mechanism in understanding the relationship between a given immigrant's length of U.S. residency, generational status and their ability to obtain employer-sponsored health insurance coverage in the U.S., especially if the immigrants were of Latin American descent.

Therefore, labor policies that provide for programs that assist Latino immigrant laborers to obtain work-related skills training, encourage and support them with obtaining higher levels of education, such as baccalaureate degree or vocational or technical training certifications, may increase the number of Latino immigrants who have access to higher levels of occupational status and employment in occupations that are more likely to offer them employer-sponsored health insurance benefits. These programs could

provide career counseling and mentorship opportunities that would help Latino immigrant employees to secure professional, white-collar or technical positions by providing them with access to career opportunities that are more likely to lead them to employment with firms that are more likely to provide employer-sponsored health benefits. These programs could also provide fellowships, apprenticeships and other forms of employer-based on-the-job training and education that may help Latino immigrants to achieve higher levels of occupational attainment (i.e. employment in white-collar/professional and/or skilled labor types of occupations) which may lead to employment with firms that are more likely to offer them health insurance coverage and other employer-sponsored benefits and programs.

CHAPTER IV

WORKING LATINOS, HEALTH INSURANCE COVERAGE TYPE AND YEARS OF U.S. RESIDENCY

Introduction

While the debate over immigration reform continues at all levels of government in the U.S., the fact remains that many immigrants in the U.S. lack health insurance coverage and access to medical care services because of their immigration status and lack of citizenship in the U.S. (Ku & Matani, 2001). The findings from the 2005 Current Population Survey (CPS) demonstrated that in 2004, the most uninsured ethnic groups in the U.S. included Latinos (34.7%), African Americans (19.7%) and Asians (16.8) in comparison to non-Latino whites (11.3%) (DeNavas-Walt, Proctor, & Lee, 2005). While it is evident that U.S. immigrants represent a significant and rapidly growing segment of the U.S. population, collectively these immigrants equate to more than thirty-six million people in the U.S. or approximately 12 percent of the total U.S. population (Derose et al., 2007; Goldman et al., 2006). Since the 1970's, the number of immigrants arriving to the U.S., has more than doubled, and growth in the number of immigrants arriving to the U.S. will continue to rise at steady pace for years to come with more than half or 53% of all newly-arrived immigrants being of Latin American descent (Carrasquillo, Carrasquillo, et al., 2000; Derose et al., 2007).

Literature Review

It is not surprising that Latino non-citizens comprise a significant number of the immigrants in the U.S. since their proximity to their countries of origin are often closer to the U.S. than other immigrants from other parts of the world. Latino immigrants also play an integral role in the U.S. economy by contributing to the country's economic prosperity and by providing a viable, youthful labor force for numerous U.S. industries (Valdez et al., 1993). Despite the contributions Latino immigrants provide to the U.S. economy, they remain the largest of all immigrant groups to be uninsured (Shah & Carrasquillo, 2006). When compared to other groups of immigrants who have come to the U.S., Latino immigrants are more likely to be uninsured and are more likely to encounter considerable barriers when attempting to access health-related services (Hubbell et al., 1991). Consequently, when it comes to possessing health insurance coverage, disparities exist among the various immigrant populations in the U.S. with Latinos comprising the largest number of U.S. immigrants without any form of health insurance coverage, public or private (Guendelman, Schauffler, & Pearl, 2001).

Racial and ethnic minority groups in the U.S. that consist of a significant number of immigrants tend to encounter even greater challenges and obstacles when attempting to access health insurance coverage and medical care than those groups who comprise smaller numbers of immigrants (Alegría et al., 2006; Berdahl, Kirby, Torres, & Stone, 2007; Ku & Matani, 2001). Such challenges and barriers to health insurance coverage and medical care services take the form of their ineligibility for public sector or government-sponsored health insurance coverage programs and language and cultural

barriers that impede their ability to communicate with and relate to those health care professionals attempting to attend to their medical needs (Echeverria & Carrasquillo, 2006). Another barrier takes the form of fear they hold concerning being deported for not having the appropriate legal documentation to live and work in the U.S. This fear stems from their lack of understanding of U.S. immigration laws and their fear of being deported and/or having a member of their family deported. (Berk & Schur, 2001).

Employment status, level of employment, types of jobs and industry of employment collectively comprise another set of obstacles Latino immigrants encounter when attempting to secure health insurance coverage for themselves and their families. Because Latino immigrants often are employed in jobs and industries that are less likely to offer them health insurance benefits, securing such coverage becomes a challenge for them (Buchmueller et al., 2007). Latino immigrants are more likely than non-Latinos to be employed by small business employers and by employers and in industries that pay low wages and that do not offer employer-sponsored health insurance benefits (Quinn, 2000). When compared to U.S.-born Latinos, immigrant Latinos were more likely to be employed in jobs that did not offer health insurance coverage (Schur & Feldman, 2001). Many Latino immigrants are also employed in jobs and industries that only offer partial, less than full-time and/or seasonal employment. This level of employment bars them from participating in employer-sponsored health insurance benefit programs because employers are less likely to offer such benefits to less than full-time employees (Angel, Angel, & Markides, 2002; Perry et al., 2000). Even after 15-years of U.S. residency, one-third of immigrant Latinos remained uninsured compared to 14% of non-Latino

immigrants (Schur & Feldman, 2001). For non-citizen Latinos, the challenges of not having health insurance coverage are intensified since government-sponsored and employer-sponsored health insurance coverage depends heavily on the legal status of the individual. These requirements become more complicated for the non-citizen Latino who may or may not possess the legally-required documentation necessary to qualify for such health insurance coverage programs (Doty, 2003; Harrell & Carrasquillo, 2003).

In the U.S., providing health insurance coverage to Latino immigrants has been, and may remain, a controversial issue for years to come, especially as it relates to undocumented Latino immigrants (Kim & Shin, 2006). While federal and state policymakers grapple with the issue of making public sector health insurance coverage programs available to Latino immigrants, the relative disparity that exists in health insurance coverage among Latino immigrants raises concerns about the long-term health consequences such disparities will have on the health and well-being of this segment of our U.S. population (Goldman et al., 2005). Many policymakers, as well as the public, have argued that providing Latino immigrants access to government-sponsored health and welfare programs may act as an incentive for Latino immigrants to come to the U.S. to secure such services (Goldman et al., 2006). However, a study by Berk, Schur, Chavez, et al. (2000) found that providing these types of government-subsidized programs to Latino immigrants does not act as an incentive and does not slow down the flow of immigration from Latin America because such immigrants are coming to the U.S. seeking employment and not government-funded health and welfare programs.

Policymakers should address the high rates of uninsurance among the U.S. Latino immigrant population and the implications this health insurance coverage disparity will have on the U.S. labor force and the economic prosperity of out U.S. economy (Mohanty, Woolhandler, Himmelstein, Pati, Carrasquillo, & Bor, 2005). The long-term affects of not providing access to health insurance coverage and medical care services to this growing segment of the U.S. population may have significant public health consequences and health policy implications in the very near future (Blewett et al., 2005; Goldman et al., 2006; Thamer et al., 1997). Therefore, understanding the relevant factors surrounding Latinos' immigration status and the related issues impacting their ability to take-up and purchase health insurance coverage is another important issue to investigate in understanding the disparity in health insurance coverage among the Latinos in the U.S.

Purpose of Study

The purpose of the study was to investigate the relationship between years of U.S. residency and health insurance coverage among working Latinos in California and to investigate the impact the years of U.S. residency has in determining the take-up of public and private health insurance coverage among working Latinos in California. The hypothesis that was tested is that the years of U.S. residency of U.S. Latinos will have an association with their take-up of health insurance coverage type. Other important demographic variables that were investigated included: gender, age, educational attainment, marital status, Latino ancestry, and length of residency. Some of the social and economic factors that were analyzed included: household income, employment industry, union membership and English-language proficiency. Other relevant

motivational and cultural variables that were examined included: "CANTPAY," a variable that represents a respondent's perception of their ability to pay for medical care, "HIRANK," a variable that represents the value survey respondents place on the purchase health insurance coverage, and fatalism.

Limitations

This study had several limitations. First, the data was limited to working Latinos in the state of California. A sample of working Latinos from other states is needed. Second, because the types of Latinos in California are predominately Mexican and/or Mexican-American, a more representative sample of Latinos from the array of Latino subcultures, including Puerto Ricans, Cubans, Dominicans, South Americans, Central Americans, would prove beneficial to future research on years of U.S. residency and its affect on health insurance coverage among Latinos in the U.S. The study did not account for the cultural healing traditions observed and practiced by Latinos. Further research on these aspects of Latino health is needed.

Despite these limitations, this study contributes to the existing literature on years of U.S. residency and its affect on U.S. Latinos' take-up of health insurance in the United States.

Methods

Data Sources. The data for the study were taken from the Health Insurance Coverage Among Working Latinos in California (Greenwald, 2001). The purpose of the study was to understand why Latinos in California frequently lack health insurance coverage. The survey asked about respondents' health status, access to health care,

health insurance coverage and utilization of health care services. All responses to the survey were self-reported by the respondents. The survey measured insured respondents' satisfaction with current health insurer and collected data about plan type, length of coverage with the plan, and the health plan's co-pays and deductibles. Uninsured respondents were asked why they did not have health insurance, if they tried to secure health insurance coverage in the past year, the length of time since they last owned health insurance coverage, whether or not their employer offered health insurance coverage and what they anticipated paying for their health insurance coverage.

The study also assessed respondent attitudes concerning control of one's fate, adequacy of community-based and/or free care clinics as sources of health care services, the interest in obtaining routine health check-ups, and health insurance coverage as good versus poor value for the money invested to purchase such coverage.

The survey also gathered demographic and socioeconomic characteristics of the respondents including age, sex, household size, educational attainment, religious affiliation, county of birth, ancestry, citizenship, number of years residing in the United States, English language proficiency, income, number of jobs held, size of employer in terms of number of employees, length of time at the job, industry, occupation and labor union participation.

Sample and Data Collection

A telephone survey of 1,000 working California residents of Latino descent was conducted during the first quarter of the year 2001 by employing a random-digit dialing (RDD), screening each contacted household first for Latino adults and then for working

Latinos (Greenwald, 2001). The interviews were conducted by the San Francisco-based Field institute, and they were conducted in English or Spanish based on the interviewee's preference. A total of eight attempts, an initial call plus seven callbacks, were made to each residential telephone number identified for the study. The callbacks were conducted at various times and on different days to increase the probability of locating qualified individuals to participate in the interview. Sampling by means of RDD circumvents the threat of systematically excluding that portion of the population with unlisted telephone number. The type of random sample employed in this study can be extrapolated to any identifiable subgroup aggregation of California within sampling error limits that are applicable to each subgroup. Additionally, the data were weighted to compensate for under sampling of households that did not have telephone service.

Measures

Dependent Variable. The primary dependent variable was health insurance coverage type. Health insurance coverage type was categorized as employer-sponsored, self-purchased, government/military-sponsored, other source or no insurance (uninsured). The dependent variable, health insurance coverage type, was asked as multiple individual questions in the survey. However, for the purposes of the study, it was recoded it into a single variable.

Independent Variables. Length of residency in the U.S. was categorized into the following five categories: 5 years or less, 6 – 10 years, 11 – 15 years, 16 – 20 year, and 21-plus years. U.S. citizenship status was dichotomized as "yes" or "no." Because the study was of working Latinos, age was classified into three categories: 18 – 25, 26 – 45,

and 45-plus. Gender was male or female. Educational Attainment was categorized as high school or less, completed 12th grade or high school graduate, vocational school or some college, and college graduate or post graduate. Marital status was dichotomized as married and not married (including not married but living together, never married, widowed, divorced and separated). Household Income was categorized as less than $20,000, $20,000 to $40,000, $40,000 to $75,000, and greater than $75,000.

Statistical Analysis

Descriptive statistics were calculated using Mantel-Haenszel Chi-Square. Multinomial logistic regression was employed to analyze the relationships between the independent variables and the dependent variable across the categories of the dependent variable: employer-sponsored, self-purchased, government/military-sponsored, other source or no insurance (uninsured). Sample weights were applied to the data for analysis. All analyses are performed using Version 15 of the SPSS systems for Windows (SPSS, Inc.).

Results

Table 4.1 illustrates that the sample consists of one-thousand (N = 1000) working Latinos who were residing in California in 2001 and who were either insured or uninsured. The sample was distributed across a variety of health insurance coverage types: employer-sponsored, government-sponsored or self-purchased. Approximately 70% of the sample possessed some form of health insurance coverage while only 30% lacked any form of coverage. Of those who possessed some form of coverage, approximately 55.1% received it from their employer; and, 9.7% of the respondents were

enrolled in government-sponsored coverage. Those respondents purchased their own coverage or received it from another source other than an employer-sponsored program or government-subsidized program accounted for approximately 4% of the sample who held some form of coverage.

Table 4.1: Distribution of sample by selected characteristics (N = 1000)

Characteristics	Distribution of Sample	
	Number	(%)
Entire Sample	1000	100%
Health Insurance Coverage Type		
HIC-Employer/Business	551	55.1%
HIC-Self-Purchased	42	4.2%
HIC-Government/Military	97	9.7%
HIC-Other Source/Missing	4	0.4%
HIC-None	306	30.6
Gender		
Male	628	62.8%
Age		
18 – 25	226	22.6%
26 – 45	570	57.0%
45-Plus Years	190	19.0%
Education		
Some High School Or Less	333	33.3%
Completed 12th Grade Or High School Graduate	272	27.2%
Vocational/Technical School Or Some College	236	23.6%
College Graduate Or Post Graduate	149	14.9%
Marital Status		
Married	498	49.8%
Household Income		
Less Than $20,000	304	30.4%
$20,000 To Less Than $40,000	294	29.4%
$40,000 To Less Than $75,000	200	20.0%
Greater Than $75,000	120	12.0%

Table 4.1: Distribution of sample by selected characteristics (N = 1000)		
Characteristics	**Distribution of Sample**	
	Number	**(%)**
Employment Industry		
Agriculture/Mining/Architecture/Landscaping	73	7.3%
Construction	111	11.1%
Education/Day Care Provider	86	8.6%
Manufacturing	151	15.%
Retail Trade	206	20.6%
Other	364	36.4%
Did Not Respond	9	0.9%
Hours Worked Per Week		
Less Than 20-Hours Per Week	63	6.3%
20 To 39 Hours Per Week	190	19.9%
40 Hours Per Week	517	51.7%
41 To 60 Hours Per Week	216	21.6%
Union Membership		
Yes	139	13.9%
Employment Status		
Self-Employed	124	12.4%
Works For Someone Else	872	87.2%
Length of U.S. Residency		
5 Years Or Less	97	9.7%
6 – 10 Years	112	11.2%
11 – 15 Years	144	14.4%
16 – 20 Years	103	10.3%
21 Or More Years	163	16.3%
Hispanic Ancestry		
Mexican	772	77.2%
Salvadoran	51	5.1%
Guatemalan	28	2.8%
Other Central American	32	3.2%
South American	35	3.5%
Spanish American	61	6.1%
Puerto Rican	18	1.8%
Cuban American	12	1.2%
Other	9	0.9%
U.S. Citizenship Status		
Yes	578	57.8%
English Language Proficiency		
Very Well	420	42.0%
Well	204	20.4%
Not Well	259	25.9%
Not At All	114	11.4%

Table 4.1: Distribution of sample by selected characteristics (N = 1000)		
Characteristics	**Distribution of Sample**	
	Number	**(%)**
Motivational Factors		
CANTPAY[b]	414	41.4%
HIRANK[c]	692	69.2%
FATALISM[d]	480	48.0%

a. Survey Question (COMFORT): I am comfortable with going to doctors and hospitals.
b. Survey Question (CANTPAY): I don't get proper medical care because I can't afford to pay for it.
c. Survey Question (HIRANK): Health insurance ranks very high on my list of priorities for where I spend my money.
d. Survey Question (FATALISM): Getting ill is an act of God; you can't do much about it.

The sample was primarily male (62.8%) and was almost evenly distributed among the married (49.8%) and non-married (49.6%) groups. Approximately 57% of the respondents comprised the 26-to-45 years of age grouping while 22.6% of the sample consisted of employees within the 18-to-25 year age range. The age group with the fewest number of sample respondents was the 45-plus years of age consisting of 19% of the entire sample.

Table 4.1 also depicts the educational attainment distribution of the sample. Approximately 33.6% of the respondents held some level of high school education or less while 27.2% of the sample had completed12th or was a high school graduate. Approximately 23.6% of the sample attended a vocational/technical school or some college; and, approximately 14.9% of the respondents were college or post graduates. The household income of the sample consisted of approximately 59.4% of the respondents earning less than $40,000, and approximately 32% of them earning a household income of $40,000 or greater.

The respondents' employment industries included six (6) major groups: (1) agriculture/mining/architecture/landscaping (7.3%), (2) construction (11.1%), (3) education/day care provider (8.6%), manufacturing (15.1%), and other (36.4%). Of the number of hours the sample worked per week, approximately 73.3% of the sample indicated they worked 40-to-60 per week while less than 26% indicated they worked less than 39-hours per week. Approximately 14% of the sample indicated they possessed some form of union affiliation; and, the majority of the sample (87.2%) worked for an employer.

Approximately 58% of the respondents were U.S. citizens, and 77.2% of the sample was of Mexican ancestry. The second and third largest Hispanic ancestry groups were Spanish American (6.1%) and Salvadorian (5.1%) respectively. Approximately 41% of the sample had lived in the U.S. 11-years or more while approximately 10% had resided in the U.S. less than 5-years. Greater than 60% of the sample indicated that they spoke English well or very well while only 25.3% of the sample indicated they did not speak English well. Approximately 11% of the respondents stated they did not speak English.

Table 4.1 also describes some of the sample's psycho-social and cultural beliefs as they relate to health insurance coverage. Approximately 41% of the sample indicated that they did not seek medical care because they could not afford to pay for it. Approximately 70% stated that health insurance coverage ranked high on their list of priorities. Almost one-half (48%) of the respondents indicated that getting ill was an act of God (fatalism).

Table 4.2 demonstrates the strong and significant associations between employment industry, hours worked, and union membership and health insurance coverage type. Employment industry has a significant association ($\chi^2 = 78.786$, df 15, $p<0.001$) with type of health insurance coverage an employee in the study possessed in 2001. Among Latino employees who participated in the survey, approximately 46.8% of those who worked in the construction industry lacked any form of health insurance coverage while approximately 39% possessed employer-sponsored health insurance coverage. Of the Latino laborers within the retail trade industry, approximately 46% held employer-sponsored health insurance coverage. However, approximately 39% were without any form of health insurance coverage. Approximately 59% of the Latino laborers in the manufacturing industry held some form of employer-sponsored health insurance coverage while approximately 31% were uninsured and did not have any form of coverage. Within "other" employment industry approximately 67% of respondents possessed employer-sponsored health insurance coverage.

The results in Table 4.2 also revealed that manufacturing, education/day care provider and retail trade industries, respectively, had more employees receiving employer-sponsored health insurance coverage compared to construction and agriculture/mining/architecture/landscaping industries. The findings also indicate that within the agriculture/mining/architecture/landscaping, construction, education/day care provider employment industries, respectively, each had at least 10% or more of its employees enrolled in government-subsidized health insurance programs.

Table 4.2: Distribution of health insurance coverage by employment type, hours worked per week, and union membership

		Health Insurance Type					χ^2	P-Value
		EMP-SP	S-P	G/M-SP	NO INS	TOTAL		
		No. (%)	No. (%)	No. (%)	No. (%)	No. (%)		
Employment Industry	**Agriculture, Mining, Architecture, Landscaping**	26 (36.1%)	1 (1.4%)	10 (13.9%)	33 (45.6%)	72 (100%)	**78.786 (df 15)**	**<.001**
	Construction	43 (38.7%)	4 (3.6%)	12 (10.8%)	52 (46.8%)	111 (100%)		
	Education, Day Care Provider	48 (55.8%)	2 (2.3%)	16 (18.6%)	20 (23.3%)	86 (100%)		
	Manufacturing	89 (59.3%)	3 (2.0%)	11 (7.3%)	47 (31.3%)	150 (100%)		
	Retail Trade	93 (45.8%)	9 (4.4%)	21 (10.3%)	80 (39.4%)	203 (100%)		
	Other	243 (66.6%)	22 (6.0%)	29 (8.0%)	70 (19.2%)	364 (100%)		
Hours Worked per Week	**Less than 20 Hours**	18 (29.0%)	6 (9.7%)	11 (17.7%)	27 (43.5%)	62 (100%)	**55.846 (df 9)**	**<.001**
	20 - 39 Hours	86 (45.3%)	8 (4.2%)	33 (17.4%)	63 (33.2%)	190 (100%)		
	40 Hours	299 (57.9%)	18 (3.5%)	39 (7.6%)	160 (31.0%)	516 (100%)		
	41 - 60 Hours	146 (68.2%)	10 (4.7%)	10 (4.7%)	48 (22.4%)	214 (100%)		
Union Membership	**Yes**	110 (79.7%)	5 (3.6%)	7 (5.1%)	16 (11.6%)	138 (100%)	**40.086 (df 3)**	**<.001**
	No	440 (51.4%)	36 (4.2%)	90 (10.5%)	290 (33.9%)	856 (100%)		

a. Employer-sponsored
b. Self-purchased
c. Government/Military-sponsored
d. No insurance

The results in Table 4.2 demonstrate that hours worked per week has a strong association ($\chi^2 = 55.846$, df 9, $p<0.001$) with health insurance coverage type for those respondents in the study. Among those employees who worked 40-hours per week, approximately 58% were insured by their employer while approximately 31% did not possess any form of coverage. The results of this research also demonstrate that those Latino laborers who worked between 41 – 60 hours per week, approximately 68% received employer-sponsored coverage while approximately 22% did not possess any form of health insurance benefits. Those Latino employees who worked 20 – 39 hours per week, approximately 45% held employer-sponsored coverage. A significant percentage (17.4%) of the respondents within this group were also enrolled in government-sponsored health insurance programs. However, those employees who worked 20-hours per week or less had the largest percentage (43.5%) of individuals who were uninsured compared to the other groups of employees in the study. Approximately 29% of these employees possessed employer-sponsored health insurance coverage while almost 18% were provided coverage through a government-funded program.

As demonstrated in Table 4.2, the findings also revealed that union membership has a significant association ($\chi^2= 40.086$, df 3, $p<0.001$) with health insurance coverage type. Of those respondents who indicated they were members of a union, approximately 80% held some form of employer-sponsored health insurance coverage while less than 12% were without any form of coverage. Approximately 5% of these respondents were enrolled in government-subsidized health insurance programs. Among those respondents who indicated they were not a member of a union, approximately 51% held some form of

employer-sponsored health insurance coverage. However, a significant percentage (34%) of these employees did not have any form of coverage, public, private or self-purchased; and, approximately 10.5% of them were enrolled in some form of a government-sponsored health insurance program.

Tables 4.3. 4.4 and 4.5 present the results of the multinomial regression analysis. This regression analysis for these three tables was conducted only on non-U.S. born Latinos. Table 4.3 shows the correlations for employer-sponsored health insurance coverage compared to uninsured Latino immigrants in California in 2001. In Table 4.3, the analysis revealed a significant correlation between educational attainment and employer-sponsored health insurance coverage ($\chi^2 = 25.792$, df 9, $p<.05$). The findings demonstrate that compared to uninsured Latino immigrant employees in California in 2001, those with some high school or less were 16.3% as likely to have employer-sponsored health insurance coverage compared to an employee who was a college graduate or post graduate. Those survey respondents who completed some high school or were a high school graduate were approximately 30.3% as likely to have employer-sponsored health insurance coverage while those employees who completed a vocational/technical school or some college were 32.1% as likely to have employer-sponsored health insurance coverage compared to an employee who held a college or post graduate degree.

The results of this research also show a significant correlation between employment industry and employer-sponsored health insurance coverage ($\chi^2= 23.428$, df 15, $p<.10$). Compared to uninsured Latino immigrant employees in California in 2001,

those Latino immigrant laborers employed in the construction industry were 42.2% as likely to have employer-sponsored health insurance coverage compared to those laborers who were employed in the manufacturing industry. Latino immigrant employees who worked in the retail trades were approximately 53% as likely to have employer-sponsored health insurance coverage while those who worked in the education and/or day care industry were 30.4% as likely to have employer-sponsored health insurance coverage compared to a Latino immigrant employee who worked in manufacturing.

Table 4.3: Multinomial regression for health insurance type among immigrant Latinos: Employer-sponsored[a]

Characteristics	B	STD. ERR.	Z	P-Value	OR	95% Confidence Interval
Education						
Some high school or less	-1.815	0.482	14.204	0.001	0.163	(.063-.418)
Completed 12th grade or high school graduate	-1.195	0.493	5.883	0.015	0.303	(.115-.795)
Vocational/Technical school or some college	-1.137	0.519	4.807	0.028	0.321	(.116-.886)
College graduate or post graduate	0[b]	.	.	.	.	.
Marital Status						
Married	0.429	0.211	4.133	0.042	1.535	(1.016-2.321)
Not Married	0[b]	.	.	.	.	.
Employment Industry						
Agriculture/Mining/Architecture/Land-scaping	-0.575	0.413	1.940	0.164	0.563	(.251-1.264)
Construction	-0.816	0.356	5.261	0.022	0.422	(.220-.888)
Education/Day Care Provider	-1.191	0.577	4.256	0.039	0.304	(.098-.942)
Retail Trade	-0.641	0.317	4.074	0.044	0.527	(.283-.982)
Other	-0.092	0.315	0.086	0.769	0.912	(.492-1.689)
Manufacturing	0[b]	.	.	.	.	.
Hours Worked per Week						
Less than 20 hours per week	-0.796	0.569	1.956	0.162	0.451	(.148-1.376)
20 - 39 hours per week	-0.913	0.360	6.435	0.011	0.401	(.198-.813)
40 hours per week	-0.124	0.280	0.196	0.658	0.883	(.510-1.530)
41 - 60 hours per week	0[b]	.	.	.	.	

Table 4.3: Multinomial regression for health insurance type among immigrant Latinos: Employer-sponsored[a]

Characteristics	B	STD. ERR.	Z	P-Value	OR	95% Confidence Interval
Union Membership						
Yes	1.015	0.427	5.642	0.018	2.759	(1.194-6.373)
No	0[b]	.	.	.	.	.
Employment Status						
Self-employed	-0.917	0.348	6.963	0.008	0.400	(.202-.790)
Works for someone else	0[b]	.	.	.	.	.
Length of U.S. Residency						
5 Years or less	-2.213	0.393	31.633	0.001	0.109	(.051-.237)
6 - 10 Years	-1.380	0.332	17.269	0.001	0.252	(.131-.482)
11 - 15 Years	-1.085	0.310	12.234	0.001	0.338	(.184-.620)
16 - 20 Years	-0.618	0.348	3.154	0.076	0.539	(.273-1.066)
21-plus Years	0[b]	.	.	.	.	.
Motivational Factors						
CANTPAY[c]						
Yes	-0.692	0.213	10.509	0.001	0.501	(.329-.761)
No	0[b]	.	.	.	.	.
N = 575.29						
-2 Log Likelihood: 849.945						

a. Reference type is uninsured
b. Reference category
c. Survey Question: I don't get proper medical care because I can't afford to pay for it.

In Table 4.3, the findings also revealed that hours worked (χ^2 = 27.309 df 9, p <.001), union memberships (χ^2 = 10.554, df 3, p <.05), and employment status (χ^2= 17.764, df 3, p <.001) each had a significant correlation with employer-sponsored health insurance coverage. Compared to uninsured Latino immigrant employees, those Latino immigrant laborers who indicated they worked 20 – 39 hours per week were approximately 40% as likely to have employer-sponsored health insurance coverage compared to those who worked 41 – 60 hours per week. Those Latino immigrant

respondents who indicated they were members of a union member were almost 3-times (275.9%) more likely to have employer-sponsored health insurance coverage compared to those who indicated they no form of union affiliation. The Latino immigrant laborers in the study who indicated they were self-employed were approximately 40% as likely to have employer-sponsored health insurance coverage compared to those who were worked for an employer.

The study demonstrated that years of residency has a strong correlation with employer-sponsored health insurance coverage (χ^2= 52.486, df 12, p<.001). Compared to uninsured Latino immigrant employees in California, those who lived in the U.S. 5 years or less were approximately 11% as likely to have employer-sponsored health insurance coverage while those employees who lived in the U.S. between 6 - 10 years were approximately 25% as likely to have employer-sponsored health insurance coverage compared to those who have lived in the U.S. for 21 or more years. However, Latino immigrant employees who resided in the U.S. between 11 – 15 years were approximately 34% as likely to have employer-sponsored health insurance coverage compared to those who have lived in the U.S. for 21 or more years.

Another significant predictor of employer-sponsored health insurance coverage revealed through the analysis is the correlation between the variable, "CANTPAY" (a respondent's perception of their ability to pay for medical care) and employer-sponsored health insurance coverage (χ^2 = 12.396, df 3. p <.01). Those Latino immigrant employees who responded "Yes" to the question, "I did not receive medical care because I could not

afford to pay for it," were approximately 50% as likely to possess employer-sponsored health insurance coverage compared to those who responded "No" to the same statement.

Marital status is the only variable that did not demonstrate a significant correlation with employer-sponsored health insurance coverage.

Table 4.4 shows the correlations for self-purchased health insurance coverage compared to uninsured Latino immigrant employees. The study demonstrated that a significant correlation between years of residency (χ^2= 52.486, df 12, p<.001) and self-purchased health insurance coverage. Compared to uninsured Latino immigrant employees, those Latino immigrant employees who resided in the U.S. 5 years or less were 10% as likely to have self-purchased health insurance coverage compared to those who lived in the U.S. for 21 or more years. The Latino immigrant respondents who lived in the U.S. for 6 – 10 years were approximately 29% as likely to own self-purchased health insurance coverage compared to those respondents who resided in the U.S. 21-plus years. The study's respondents who resided in the U.S. between 11 – 15 years were approximately 16% as likely to have self-purchased health insurance benefits while those who lived in the U.S. between 16 - 20 years were approximately 22% as likely to have self-purchased coverage compared to those who lived in the U.S. for 21 or more years.

The findings also indicate a strong correlation between employment status (χ^2 = 17.764, df 3, p <.001) and self-purchased health insurance. Those Latino immigrant employees who indicated they were self-employed were 4.6-times more likely to have self-purchased health insurance coverage compared to those who worked for an employer. The study's analysis also revealed that marital status has a significant

correlation with self-purchased health insurance coverage ($\chi^2 = 10.593$, df 3, $p<.05$). Employees who were married were 4.3-times more likely to possess self-purchased coverage compared to those who were not married.

Educational attainment, employment industry, hours worked per week, union membership and "CANTPAY" were the variables did not demonstrate significant correlations with self-purchased health insurance coverage.

Table 4.4: Multinomial regression for health insurance type among immigrant Latinos: Self-purchased[a]

Characteristics	B	STD. ERR.	Z	P-Value	OR	95% Confidence Interval
Education						
Some high school or less	-1.449	1.019	2.019	0.155	0.235	(.032-1.732)
Completed 12th grade or high school graduate	-0.566	1.050	0.291	0.590	0.568	(.073-4.444)
Vocational/Technical school or some college	-0.278	1.064	0.068	0.794	0.757	(.094-6.096)
College graduate or post graduate	0[b]	.	.	.	.	.
Marital Status						
Married	1.461	0.613	5.682	0.017	4.310	(1.297-14.325)
Not Married	0[b]	.	.	.	.	.
Employment Industry						
Agriculture/Mining/Architecture/Land-scaping	-0.908	1.343	0.457	0.499	0.403	(.029-5.612)
Construction	-0.274	1.011	0.073	0.786	0.760	(.105-5.511)
Education/Day Care Provider	-0.302	1.251	0.058	0.810	0.740	(.064-8.595)
Retail Trade	0.313	0.874	0.129	0.720	1.368	(.247-7.593)
Other	0.016	0.894	0.000	0.986	1.016	(.176-5.855)
Manufacturing	0[b]	.	.	.	.	.
Hours Worked per Week						
Less than 20 hours per week	0.663	1.102	0.362	0.548	1.940	(.224-16.814)
20 – 39 hours per week	-0.232	0.999	0.054	0.816	0.793	(.112-5.616)
40 hours per week	1.269	0.823	2.380	0.123	3.558	(.709-17.842)
41 – 60 hours per week	0[b]	.	.	.	.	

Table 4.4: Multinomial regression for health insurance type among immigrant Latinos: Self-purchased[a]						
Characteristics	**B**	**STD. ERR.**	**Z**	**P-Value**	**OR**	**95% Confidence Interval**
Union Membership						
Yes	1.147	0.872	1.729	0.189	3.149	(.570-17.404)
No	0[b]	.	.	.	.	
Employment Status						
Self-employed	1.535	0.627	5.995	0.014	4.640	(1.358-15.852)
Works for someone else	0[b]	.	.	.	.	
Length of U.S. Residency						
5 Years or less	-2.305	1.013	5.176	0.023	0.100	(.014-.727)
6 – 10 Years	-1.234	0.710	3.021	0.082	0.291	(.072-1.171)
11 – 15 Years	-1.808	0.830	4.749	0.029	0.164	(.032-.834)
16 – 20 Years	-1.518	0.904	2.819	0.093	0.219	(.037-1.289)
21-plus Years	0[b]	.	.	.	.	
Motivational Factors						
CANTPAY[c]						
Yes	0.043	0.560	0.006	0.939	1.044	(.348-3.130)
No	0[b]	.	.	.	.	
N = 575.29						
-2 Log Likelihood: 849.945						
a. Reference type is uninsured						
b. Reference category						
c. Survey Question: I don't get proper medical care because I can't afford to pay for it.						

Table 4.5 shows the correlations for government-sponsored health insurance coverage compared to uninsured Latino immigrant employees in California in 2001. The results indicate that years of residency ($\chi^2 = 52.486$, df 12, $p<.001$) and number of hours worked per week ($\chi^2 = 27.309$ df 9, $p <.001$) each have a significant correlation with government-sponsored health insurance coverage. Compared to uninsured Latino

immigrant employees, those who resided in the U.S. 5 years or less were approximately 30% as likely to have government-sponsored coverage while those Latino immigrant employees who lived in the U.S. between 6 – 10 years were 20% as likely to have government-sponsored coverage compared to those who lived in the U.S. for 21 or more years. Among the study's respondents who lived in the U.S. between 11 – 15 years, they were 22% as likely to have government-sponsored health insurance benefits compared to those who lived in the U.S. for 21 or more years. Of the Latino immigrant employees who indicated they worked 20 hours per week or less, they were 6.3-times more likely to have government-sponsored health insurance coverage while those who worked 20 – 39 hours per week or less were 2.8-times more likely to have government-sponsored health insurance coverage compared to those who worked 41 – 60 hours per week.

Educational attainment, marital status, employment industry, union membership and "CANTPAY" did not demonstrate significant correlations with government-sponsored health insurance coverage. Sixty-four point four percent (64.4%) of the cases were correctly predicted by the regression equation.

Table 4.5: Multinomial regression for health insurance type among immigrant Latinos: Government-sponsored[a]

Characteristics	B	STD. ERR.	Z	P-Value	OR	95% Confidence Interval
Education						
Some high school or less	0.149	0.933	0.026	0.873	1.161	(.187-7.225)
Completed 12th grade or high school graduate	-0.086	0.977	0.008	0.930	0.918	(.135-6.228)
Vocational/Technical school or some college	0.460	0.977	0.222	0.638	1.583	(.234-10.736)
College graduate or post graduate	0[b]	.	.	.	.	

Table 4.5: Multinomial regression for health insurance type among immigrant Latinos: Government-sponsored[a]

Characteristics	B	STD. ERR.	Z	P-Value	OR	95% Confidence Interval
Marital Status						
Married	-0.171	0.343	0.250	0.617	0.843	.(431-1.649)
Not Married	0[b]	.	.	.	.	
Employment Industry						
Agriculture/Mining/Architecture/Land-scaping	0.601	0.624	0.928	0.335	1.824	(.534-6.196)
Construction	0.039	0.632	0.004	0.951	1.040	(.301-3.587)
Education/Day Care Provider	0.681	0.709	0.921	0.337	1.975	(.492-7.931)
Retail Trade	0.102	0.543	0.035	0.851	1.107	(.382-3.213)
Other	-0.427	0.600	0.506	0.477	0.653	(.201-2.116)
Manufacturing	0[b]	.	.	.	.	
Hours Worked per Week						
Less than 20 hours per week	1.843	0.734	6.297	0.012	6.314	(1.497-26.630)
20 – 39 hours per week	1.037	0.626	2.742	0.098	2.821	(.827-9.628)
40 hours per week	0.664	0.590	1.265	0.261	1.942	(.611-6.175)
41 – 60 hours per week	0[b]	.	.	.	.	
Union Membership						
Yes	-0.755	0.863	0.766	0.382	0.470	(.087-2.551)
No	0[b]	.	.	.	.	
Employment Status						
Self-employed	-0.326	0.474	0.472	0.492	0.722	(.285-1.829)
Works for someone else	0[b]	.	.	.	.	
Length of U.S. Residency						
5 Years or less	-1.201	0.515	5.448	0.020	0.301	(.110-.825)
6 - 10 Years	-1.611	0.581	7.675	0.006	0.200	(.064-.624)
11 – 15 Years	-1.513	0.549	7.598	0.006	0.220	(.075-.646)
16 – 20 Years	-0.176	0.503	0.122	0.727	0.839	(.313-2.249)
21-plus Years	0[b]	.	.	.	.	

Table 4.5: Multinomial regression for health insurance type among immigrant Latinos: Government-sponsored[a]

Characteristics	B	STD. ERR.	Z	P-Value	OR	95% Confidence Interval
Motivational Factors						
CANTPAY[c]						
Yes	-0.649	0.343	3.583	0.058	0.522	(.267-1.023)
No	0[b]	.	.	.	.	
N = 575.29 Log Likelihood: 849.945						

a. Reference type is uninsured
b. Reference category
c. Survey Question: I don't get proper medical care because I can't afford to pay for it.

Discussion

The study's findings demonstrate the Latino immigrants in California who lived in the U.S. fewer than 5-years are less likely to be enrolled in government-sponsored heath insurance coverage compared to Latino immigrants who have lived in the U.S. for more than 5-years. This result is consistent with previous studies that report similar findings concerning immigrants' take-up and use of government-funded healthcare programs and social services (Berk, Schur, Chavez, et al., 2000; Derose et al., 2007). The findings support the argument that Latino immigrants who have fewer years of U.S. residency are less likely to be insured and less likely to be enrolled in publicly-funded health insurance coverage programs compared to those who are more acculturated and have resided in the U.S. for more than 5-years (Goldman et al., 2006). Latino immigrants are also less likely to be eligible for government-sponsored programs because they are undocumented and/or lack the appropriate legal residency status. The findings are consistent with other research

that demonstrates that as immigrants acculturate into U.S. culture their consumption of government-subsidized health and welfare programs approximates mainstream U.S. practices regarding the take-up and use of such programs (Ku and Matani, 2001). Therefore, the claim that Latino immigrants migrate to U.S. to consume government health and welfare programs and entitlements is unfounded by the results of the study and less likely to be the case for those Latino immigrants who have resided in the U.S. for less than 5-years.

The results demonstrate that approximately 41% of the Latino immigrant respondents in the study indicated the did not receive medical care because they could not afford to pay for it; however, of those who possessed employer-sponsored coverage, they were approximately 50% as likely to enroll in such employer-offered health benefits compared to those who answered "No" to the same question. The study revealed that approximately 69% of these Latino immigrant employees believed that health insurance ranked high on their list of financial priorities. The study also revealed that almost 50% of the respondents held the belief that getting ill was an act of God. These findings collectively illuminate, to some degree, the motivation behind the Latino immigrant respondents' desire to enroll in such employer-offered health insurance programs. These findings also moderately demonstrate their valuing of health insurance coverage as an essential financial resource necessary to finance medical expenditures for themselves and their families. These results are also contrary to the assertion that Latino immigrant employees do not often enroll in employer-sponsored coverage because they do not understand their use and they are reluctant to investing their wages into a health insurance program they

are less likely to use. While these findings may not be definitive, they, at least, begin to delve into the motivations behind Latino immigrants' health seeking behaviors as it relates to their take-up of health insurance programs.

The employment industries Latino immigrant laborers work in often fall behind in offering them employer-sponsored health insurance coverage. Immigrant Latinos were more likely to be employed in jobs that did not offer health insurance coverage when compared to U.S.-born Latinos (Schur & Feldman, 2001). The analysis demonstrates that there are significant associations between employment industry and health insurance coverage type. The study demonstrated that within two of the major industries that traditionally employ Latino laborers – construction and retail trades – Latino immigrant employees were approximately 42% and 53%, respectively, as likely to possess employer-sponsored health insurance coverage compared to those Latino immigrant laborers who were employed in the manufacturing industry. The study also revealed that one of the largest industries that employs Latino immigrant laborers – manufacturing – had the highest rates of employer-sponsored health insurance compared to the other employment industries in this study. However, still approximately one-third of employees in this industry remained uninsured. This finding is consistent with other studies that found that Latino immigrants more likely to be employed in large industries that are less likely to offer them health insurance benefits (Blewett et al., 2005; Buchmueller et al., 2007).

The study explored the argument that union membership increases the likelihood of possessing employer-sponsored health insurance coverage; and, the study's results demonstrate that there is a significant association between union membership and health insurance coverage. Latino immigrant employees who did possess such affiliation were 2.75-times more likely to hold employer-sponsored coverage. Approximately 14% of the respondents in the survey indicated they held some form of union affiliation. Therefore, educating Latino immigrant laborers who are employed in industries that provide the opportunity to participate in a union may be one means of increasing the number of these employees being enrolled in employer-sponsored health insurance coverage.

Because Latino immigrants are often employed in industries that only offer less than full-time employment, the study investigated the impact of hours worked per week on the likelihood of a Latino immigrant employee possessing some form of health insurance coverage. The results indicate that there is a significant association between hours worked per week and health insurance coverage type. The proportion of Latino immigrant laborers who received employer-sponsored coverage and who worked 40-hours or more per week was larger than the proportion of respondents in the study that worked less than 40-hours per week. This finding is consistent with other research that demonstrates that the fewer hours per week a Latino employee works actually precludes them from participating in employer-sponsored health insurance programs because of their less full-time employment status (Angel, Angel & Markides, 2002; Perry et al., 2000). Therefore, increasing the number of hours worked per week and/or offering full-time employment to Latino immigrant employees that provides at minimum of a 40-hour

per week work schedule will help to alleviate the rate of uninsured working Latino immigrants in the U.S. This is at least one relevant approach for addressing the issue because often Latino employees maintain numerous part-time and/or less than half-time employment positions with numerous employers that collectively equate to more than a 40-hour per week work schedule (Schur & Feldman, 2001).

The study also examined Latino immigrant employees' take-up of self-purchased health insurance coverage. The analysis revealed a significant correlation between years of residency and self-purchased health insurance coverage. The greater the years of residency a Latino immigrant employee lived in the U.S. the greater the likelihood he/she possessed self-purchased health insurance coverage. Perhaps this occurrence is significant because the Latino immigrant employees in this study placed a greater emphasis on possessing health insurance coverage as articulated in their responses to the survey questions regarding their ability to pay for medical care (CANTPAY), and the value they place on buying health insurance coverage (HIRANK). The study also demonstrates that marital status has a strong correlation with self-purchased health insurance coverage. The Latino immigrant employees in the study who were married were 4.3-times more likely to own self-purchased health insurance benefits compared to those who were not married. Because Latino culture tends to be highly family-oriented and a great emphasis is placed on the health and well-being of women and children, Latino immigrant employees who do not receive health insurance coverage from their employers may view the need to provide some level of coverage for their families and themselves. These findings also demonstrate the value Latino immigrant employees

place on self-purchased health insurance benefits; and, to some extent, aids in dispelling the argument that Latino immigrants come to the U.S. to enroll in government-sponsored health and welfare programs.

Conclusion – Implications for Policy & Practice

Health Policy Recommendations

Expansion of Employer-Sponsored Health Insurance Coverage. To reduce the number of working Latino immigrants and their families who are uninsured through employer-sponsored, policies are needed to expand their access to such programs by providing employers, especially those industries (construction, manufacturing, and retail trade) that are more likely to employ immigrant Latinos, incentives to offer health insurance benefits to their employees. These policies should include incentives for employers who participate in such a program to offer affordable health insurance coverage benefits to their employees. Such policies should also include mandates to employers which typically manifest themselves in the form of "play or pay" directives where employers would either have to create provisions for offering health insurance coverage to their employees or pay some form of a tax to a funding pool that would provide uninsured employees the opportunity to purchase health insurance coverage if it were not offered by their employers (Kaiser Family Foundation, 2009). Employer-focused policies for offering health insurance benefits to their employees should also create incentives for employers to expand coverage to their less than full-time employees. Because Latino immigrant laborers often work multiple jobs to accomplish a full-time work week, they do not receive the benefit of a full-time employee who is offered a

variety of employer-sponsored employee benefits and programs, including health insurance coverage. Therefore, labor policies that allow employers to aggregate the number of hours a given employee works between multiple employers in a given period to a full-time work equivalent position would alleviate the current practice of excluding Latino immigrant employees from coverage because they work less than full-time for a given employer.

Incentivize Employers to Provide Coverage for the Entire Family. These policies should also include provisions to incentivize employers to provide coverage for their employees' entire family and not just the employee and his/her immediate dependents. Because Latino culture is very family-oriented and includes a variety of extended family members often living in the same household, provisions that allow the employee to purchase affordable health insurance coverage for all their family members living within the same residence would be one means for increasing the number of uninsured Latinos in the U.S. In a study by Perry et al., 2000, the researches found that Latino employees would prefer employer-sponsored health insurance coverage options that allowed them to enroll their non-nuclear family relatives (i.e. grandparents and extended family members) who were living with them in their same residence.

Incentivize Small Business Employers to Offer Coverage. Small businesses (businesses that have less than 100-employees) collectively comprise one of the major groups of companies who employ a significant number of Latino immigrants in the U.S; and, Latino-owned businesses are the largest segment of minority-owned small businesses in the U.S. (United States Small Business Administration, 2007). Therefore,

health policies targeting the small business sector should contain provisions that make it viable for small businesses to offer affordable health insurance coverage programs to their employees (Perry et al., 2000). Such policies should also provide subsidies to small employers in an effort to assist them with providing health insurance coverage for their lower wage earning employees, who typically go without coverage because of the costs associated with purchasing it (Kaiser Family Foundation, 2009). These provisions should also incentivize these small business employers to assume a considerable amount of the health insurance premiums employees are expected to pay in exchange for tax relief provisions, both state and federal, these businesses owners are expected to pay as part of the cost associated for operating their businesses.

Strengthen Opportunities for Unionization. The study's findings demonstrate that Latino immigrant employees who possessed union membership were more likely to possess employer-sponsored coverage compared to those who were not members of a union. Therefore, labor policies that encourage and support the unionization of employees in the industries (construction, manufacturing and retail trade) that are more highly populated with Latino immigrant laborers for the purpose of providing health insurance coverage may prove to be an effective means for reducing the number of working Latino immigrant laborers who are uninsured. Such policies should create incentives for both the employers and the unions to effectively negotiate the provision of health insurance coverage to employees who work less than full-time positions and who are employed for lower wages. These policies should also create programs that would help to educate Latino immigrant laborers on the appropriate use of their employer-

sponsored health insurance benefits and how to properly access medical care when needed.

Government Programs. Policies that expand government-funded health insurance programs and provide greater access to community-based clinics and other health-related venues for undocumented Latino employees would also help to alleviate the high rates of uninsured Latinos in the U.S. (Scott & Ni, 2004). Such policies should establish provisions that incentivize state and local health departments, employers and health insurance companies to work collaboratively to provide access to health insurance programs, preventive biometric screening and wellness programs to Latino immigrant employees and their families. These programs should be combined with existing employer-sponsored healthcare coverage programs and would include community-based clinics in the network of providers employees would have access to through their employer-provided coverage. By offering Latino immigrant employees access to local community-based clinics through an employer-sponsored health insurance program this approach may provide a cost-effective means for providing access to affordable and less costly healthcare services and programs.

Provide Incentives for Health Insurance Companies to Offer Lower-Cost Health Insurance Coverage Options. Latino immigrant employees often utilize a variety of public and community-based health care entities for their and their families' healthcare. Traditionally, these types of health centers and clinics offer healthcare services and programs at lower and/or reduced costs compared to medical offices and for-profit hospital centers. Additionally, many of these community-based clinics, such as federally

qualified health centers (FQHCs), are often located in communities where low-to-moderate income Latino immigrant laborers reside. Therefore, health policies that incentivize health insurance carriers to contract with these types of health facilities and entities in an effort to include them as part of their "in-network" providers may help to provider lower cost health insurance programs and alternatives for companies and industries that employ a significant number of Latino immigrant employees.

Enhanced Culturally-relevant and Linguistically-accurate Health Insurance Coverage Information, Programs and Services. Employer-centered health insurance coverage programs should also contain provisions that incentivize health insurance companies to offer in-language, culturally-relevant educational tools, programs, resources and services for employers who purchase a given insurance carrier's products and services (Perry et al., 2000). For example, a U.S.-based national insurance carrier provides a variety of tools and resources that are web-based, hard-copy and in an audio-visual format and include an array of information about the plan designs, physicians in the carrier's networks that provide Spanish-language services, bilingual health and wellness brochures, fotonovelas, and other educational resources on how to appropriately use health insurance benefits and how to access the appropriate level of care (i.e. primary care vs. urgent care vs. emergency room care) when.

Another aspect of this concept is for health insurance carriers to provide dedicated customer services that offer bilingual customer care professionals who are certified in the Spanish language and are trained in the given carriers health insurance products and services. For example, in some regions of the country where the Latino population is

more highly concentrated (California, Texas and Florida), a national insurance carrier provides dedicated Spanish-language customer care centers to its clients and members who prefer in-language customer service. By providing these educational resources, employers can assist their employees with understanding how to properly use their health insurance benefits and how to properly access care (Derose et al., 2007).

Related Social Policy Recommendations

Develop Policies that Create College-bound and Academic Support Programs to Increase the Number of Latinos Pursuing Higher Education. Educational policies are needed to develop programs and college preparatory initiatives to help increase the number of Latinos pursuing college-level education and graduate-level degrees. The findings in this study demonstrated that Latino immigrants who possessed higher levels of education were more likely than Latino immigrants who held lower levels of educational attainment to possess some form of health insurance coverage. Latinos with higher levels of educational attainment are often employed in occupations and for firms that are more likely to provide them with employer-sponsored health insurance coverage and in occupations that pay higher incomes (Alegria, 2006; Lara et al., 2005; Thamer et al., 1997). Therefore, college-bound and academic support programs targeting the Latino community could provide an array of services that help Latino students prepare for college and white-collar professions. These programs could provide a series of educational seminars, job-related training sessions, college counseling services, mentorship programs, internships, practicum, and other similar types of educational experiences that teach Latino students about the importance of college, graduate and

post-graduate education and that provide them with the opportunity to participate in learning experiences in white-collar and professional working environments (Olive, 2008). This strategy may be one approach for alleviating the vast numbers of Latinos who are uninsured and who are employed in manual labor industries that are less likely to provide health insurance and work-related benefits (Schur et al., 2001).

These college-bound and academic support programs could also provide educational workshops and seminars for Latino families, especially those from disadvantaged backgrounds, in an effort to orient them about the importance of supporting their children in pursuing college-level education and exposing them to funding sources they may secure for financing their children's college-level education. For example, these services could include seminars that teach Latino families about low-interest college loans, scholarship programs, state grants and other financial aid programs and how to apply for such programs as well. These programs could also provide incentives to Latino families that would allow them to aggregate funds necessary to finance their children's college education. These programs could take the form of college preparatory seminars and field placement/internships that allow Latino students to be exposed to professional training environments while receiving funding that would be earmarked for their college education. Therefore, college-bound and academic support programs that target Latino communities, especially in underserved and economically-depressed regions of the U.S. where high concentrations of Latinos reside, may be one approach for increasing the number of Latinos pursuing higher education and securing

professional careers and employment with businesses and firms that are more likely to offer them an array of employer-based coverage options and benefits.

Development of Labor Policies that Provide for Workforce Development and Occupational Mobility. Labor policies are needed to address the disparities that exist in the numbers of Latino immigrants who are employed in manual and/or blue collar jobs, where they are less likely to receive employer-sponsored health insurance benefits, and the numbers of Latino immigrants who are employed in white-collar and/or professional types of employment, where they are more likely to possess some form of employer-sponsored coverage. The study's findings demonstrate that Latino immigrants who possessed lower levels of educational attainment, who were less acculturated, who had lower household income, who worked less than 40-hours per week, who had fewer years of U.S. residency, and worked in a blue collar industry, such as construction, were less likely to possess any form of employer-sponsored health insurance coverage. In a study by Kao, Park, Min and Myers (2008), the researchers found that immigrants who had longer years of U.S. residency and were of later generation (second generation or later) were more likely to be the primary health insurance subscriber. The researchers also found that occupational mobility may be a pertinent fundamental mechanism in understanding the relationship between a given immigrant's length of U.S. residency, generational status and their ability to obtain employer-sponsored health insurance coverage in the U.S., especially if the immigrants were of Latin American descent.

Therefore, labor policies that provide for programs that assist Latino immigrant laborers to obtain work-related skills training, encourage and support them with obtaining higher levels of education, such as baccalaureate degree or vocational or technical training certifications, may increase the number of Latino immigrants who have access to higher levels of occupational status and employment in occupations that are more likely to offer them employer-sponsored health insurance benefits. These programs could provide career counseling and mentorship opportunities that would help Latino immigrant employees to secure professional, white-collar or technical positions by providing them with access to career opportunities that are more likely to lead them to employment with firms that are more likely to provide employer-sponsored health benefits. These programs could also provide fellowships, apprenticeships and other forms of employer-based on-the-job training and education that may help Latino immigrants to achieve higher levels of occupational attainment (i.e. employment in white-collar/professional and/or skilled labor types of occupations) which may lead to employment with firms that are more likely to offer them health insurance coverage and other employer-sponsored benefits and programs.

CHAPTER V

CONCLUSION

In the U.S., health insurance coverage equates to access to health services and medical care. While many individuals in the U.S. are underinsured and/or uninsured, the U.S. Latino population is the largest ethnic minority group with the greatest proportion of its members who are uninsured. Approximately one out of seven people (15%) in the U.S. today are of Latino ancestry; and, unlike any other major ethnic minority group in the U.S., one out of three Latinos is uninsured (United States Census Bureau, 2008). Considering the growth of the U.S. Latino population and the projections by the U.S. Census Bureau that Latinos will become approximately one-third of the U.S. population by the year 2050, healthcare, economic and labor policies are needed to comprehensively address the lack of adequate health insurance coverage for this vast and growing segment of the U.S. Society (United States Census Bureau, 2008). In an age when health care reform is on the forefront of the new Obama administration's agenda, federal and state policymakers must take action today to not only address this problematic issue – the lack of adequate health insurance coverage for the U.S. Latino population; but, they must also develop and institute appropriate policies and regulations that strategically target the reasons why thousands of U.S. Latinos continue to be uninsured. Failure to enact healthcare, economic and labor policies and reform that adequately address these reasons, could have devastating affects to, not only the U.S. Latino populace but to the overall health and well-being of the U.S. population and the economic prosperity of our American Society.

While there are numerous reasons why Latinos are uninsured, the research focused on examining some of the factors that may contribute to the high rate of uninsurance and their take-up of health insurance coverage. Therefore, the purpose of this study was to investigate the relationship between acculturation, self-rated health and years of U.S. residency and health insurance coverage among working Latinos in California in 2001 and to investigate the impact each of these variables assumed in determining the take-up of health insurance coverage among employed Latinos in California. The hypotheses tested included the following: (1) U.S. Latinos' level of acculturation will be associated with their take-up of health insurance coverage; (2) U.S. Latinos' who rate their health as excellent (SRH) are more likely to posses health insurance coverage than Latinos who rate their health as fair or poor; and, (3) the years of U.S. residency of U.S. Latinos will have an association with their take-up of health insurance coverage type.

It may not be surprising to most healthcare professionals that access to medical care is impaired if an individual does not have adequate health insurance coverage to finance the cost of medical and/or health-related expenditures. This lack of access may lead to a variety of other health-related complications and to the individual's inability to access primary care when it is most needed. Latinos face a number of challenges when attempting to access care not only because they are uninsured; but, also because of socio-cultural barriers that preclude them from engaging in a healthcare system that is often foreign to them, appears to be convoluted, and difficult to understand. Health literacy – understanding how to access and navigate the U.S. healthcare and health insurance

systems – is often a major barrier for U.S. Latino in their quest to access health care services in the U.S.

Other barriers also encompass socio-cultural issues and manifest themselves in the form of not being able to communicate with providers who do not speak Spanish, health-related financing processes, such as how to use health insurance benefits, and lack of cultural competency on the part of health care professionals who may not understand Latinos' health seeking behaviors, cultural healing practices, and views and understanding of the U.S. healthcare and health insurance systems. Less acculturated Latinos may also engage in the use home remedies and the use if folkloric practices, such as the use of curanderos (healers), as less expensive alternatives to satisfy the medical care needs for themselves and their families. They may often place a greater emphasis on these folkloric healing traditions rather than using the customary U.S. medical care practices and approaches for care. As a result, some in the healthcare community may view these practices as contrary or inappropriate to routine medical care delivered by a credentialed healthcare professional. The study found that respondents who were older, married, had higher educational attainment, higher household income, and more acculturated were more likely to have health insurance coverage compared to those who were less acculturated. Stratified analyses demonstrates that predictors of having health insurance coverage differed by acculturation status. The study's results also demonstrate that years of residency and level of acculturation have similar significant correlations with health insurance coverage. That is, the greater the number of years a Latino immigrant has lived in the U.S., the more likely this immigrant is to be enrolled in some

form of health insurance coverage. Some Latinos, especially those who are less acculturated into U.S. healthcare way of life, value their spiritual beliefs, rituals and customs for healing over the traditional views held by non-Latinos in the U.S. Because of these practices, a Latino patient may often believe or feel that the illness they encounter and the diseases they have are sent to them by God; and, therefore, they must bear these ailments regardless of their outcome and regardless of the advice of their physicians and/or healthcare providers. The findings of this research demonstrate that almost 50% of the Latinos in the study believed that getting ill was an act of God.

Latinos also encounter a number of socio-economic, work-related, and legal challenges that compromise their ability to enroll and/or possess employer-sponsored, government-funded or self-purchased health insurance coverage. Latinos often experience higher rates of poverty, lower levels of educational attainment and employment in industries that are more likely to be hazardous to their health and well-being and that are less likely to provide them with adequate health insurance coverage. The study's findings demonstrate that acculturation is associated with educational attainment, a known correlate of health insurance coverage. It is well-known that Latinos are one of the largest ethnic minority groups with one of the highest high school drop-out rates in the U.S. As result of lower levels educational attainment, Latinos are more likely to be employed in industries that provide fewer wages and benefits. Latino immigrants are also more likely than non-Latinos to work for small businesses and industries that pay minimal wages and that do not offer any form of employer-sponsored health insurance coverage options. The research also shows that employment status, level of employment,

types of jobs and industry of employment combined are significant impediments Latinos, especially immigrant Latinos, encounter when attempting to secure adequate health insurance benefits for themselves and their families. Because Latinos often work for employers and industries that are less likely to offer them health insurance coverage because of the nature of the industry (i.e. construction, manufacturing, agricultural, service, retail trades) and the structure of the number of hours worked per week (i.e. part-time status, half-time status, seasonal employment, and/or contractual-related arrangements), securing such coverage becomes a problematic barrier for them in accessing medical care for themselves and their families. The research shows that of those Latino immigrant laborers who did not possess any form of coverage, more than 50% worked over 40 hours per week.

The unionization of employees is also another relevant issue to consider in understanding how to increase the number of uninsured Latinos in the U.S. The study examined the impact of union membership as it relates to the working Latino immigrants' take-up of health insurance coverage. Because unions in the U.S. have become a great source of bargaining power for employees who are more likely to work in industries that are less likely to offer them adequate employee benefits (i.e. health insurance coverage, wages, etc.), educating Latino immigrant laborers, especially those who are less acculturated, about the role unions play in aiding employees with negotiating with their employer their rights, benefits and workplace safety may be an one means of increasing the number of Latino employees who are enrolled in employer-sponsored health insurance coverage. The study demonstrated that union membership increases the

likelihood of possessing employer-sponsored health insurance coverage; and, the study's findings show that there is a significant association between union membership and health insurance coverage. The Latino immigrant employees in the study who were members of a union were almost 2.75-times more likely to have employer-sponsored coverage. The study's results also demonstrate that of those Latino employees who stated they held union affiliation approximately 80% of them had some form of employer-sponsored health insurance benefits while less than 12% were without any form of coverage. Although some may take issue with encouraging Latino employees to participate in unions, unionization remains a viable option for alleviating the great number of uninsured working Latinos in the U.S.

For undocumented Latinos, the challenges of not having health insurance coverage are intensified since government-sponsored and employer-sponsored health insurance coverage depends heavily on the legal status of the individual. These requirements become more complicated for the non-citizen Latinos who may not possess the legally-required documentation necessary to qualify for such health insurance coverage programs. Therefore, for some Latinos, their non-U.S. citizenship status, preclude them from enrolling in government-sponsored health insurance coverage and welfare programs despite the fact that many of them pay the appropriate employment-related taxes for such programs. Consequently, U.S. immigrant Latino laborers are at risk of not possessing any form coverage. This disparity is noteworthy in the study's sample especially among the construction, manufacturing and agricultural/mining/landscaping industries respectively.

In the U.S., the provision of health insurance benefits to uninsured Latinos, especially those who are immigrants, continues to be a contentious issue legislators will grapple with for years to come. While the various constituency groups are organizing themselves to voice their respective agendas and propaganda for today's healthcare reform debate, the provision of healthcare services and health insurance coverage, both public and private, for U.S. Latinos, both immigrant and non-immigrant, must be actively addressed by state and federal legislatures. In light of the disparity that exists in the number of Latinos who are uninsured, this issue, alone, raises concerns about the long-term health consequences this disparity will have on the health and well-being of the U.S. Latino population. The study's principal findings provide policymakers with some alternatives to consider in crafting healthcare reform policies that comprehensively address the high rates of uninsurance among the U.S. Latino population. The study's findings emphasize the need for healthcare reform that addresses the coverage disparities that exist among the U.S. Latino labor force and the economic impact the lack of such access to coverage will have on the overall U.S. labor force and the economy.

Healthcare reform policies aimed at increasing access to healthcare for Latino immigrants should consider the number of hours worked per week, industry of employment, and role unions play in reducing the number of uninsured working Latinos in the U.S. Policymakers must also revisit eligibility requirements for government-sponsored coverage in an effort to increase access for undocumented immigrants and their families to government-subsidized health and welfare programs. Lawmakers should enact policies that provide incentives that take the form of subsidies and/or tax credits to

employers who provide health insurance coverage programs to their lower wage earning employees and to employees that work less than full-time. Policymakers should also design policies that would incentivize employers to offer coverage for their employees' entire family, including extended family members who live in the same residence. Legislators should also consider crafting policies that target the small business sector and that contain provisions that make it viable for small businesses to offer affordable coverage to their employees.

Labor policies that foster the unionization of employees, especially in those industries that employ the greatest number of Latino laborers, would be another effective approach policymakers can implement for reducing the number of working Latino laborers who are uninsured. Health policies that incentivize health insurance companies to offer lower cost health insurance coverage options to industries that employ a large number of the U.S. Latino labor force is another policy alternative legislators should consider in reducing the number of uninsured Latinos. Policies that concern employer-sponsored health insurance coverage should also contain provisions that encourage health insurance carriers to offer culturally-relevant and Spanish-language programs and resources to businesses that employ a significant number of Spanish-dominant, Latino employees.

Social policies should focus on creating college-bound and academic support programs and services that help to increase the numbers of Latinos pursuing higher education and that provide them with opportunities for professional development and enhanced occupational mobility. While these policy recommendations may be ambitious,

the consequences and health-related costs for not addressing the high uninsurance rates among the U.S. Latino population may have devastating health and economic affects to our American Society for generations to come.

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