HEALTH CARE ACCESS OF HISPANIC IMMIGRANTS IN THE KANSAS CITY

METROPOLITAN AREA

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ABSTRACT

The purpose of this study is to discover what factors affect health care access for Hispanics in the Kansas City Metropolitan Area. The Hispanic population is the largest and fastest growing immigrant groups in the US and warrants special attention because Hispanics are less likely to complete high school and more likely to live in poverty, be unemployed, and have no health insurance than non-Hispanic whites. Traditional and segmented assimilation theory were used to inform health care access for Hispanics. The factors that affect access to health care derived from these theories included immigrant generation, income, education, language spoken, and residency in an ethnic enclave. Previous research has shown that residing in an ethnic enclave provided better access to health care for Hispanic immigrants. The demographics of age and gender were also included in this analysis because they affect any individual's likelihood to access health care in the United States.

Data for this project was taken from the 2012 Hispanic Needs Assessment Community Survey, conducted for the Kansas City Metropolitan Area in 2012. Three measures were used to define access to health care. These included access to a doctor in the previous 12 months when needed, access to a dentist in the previous 12 months when needed, and access to prescription medication in the previous 12 months when needed. Bivariate and multivariate statistical analysis were used.

Logistic regression analysis revealed that the main factor that affected the ability to access health care for Hispanic immigrants in Kansas City was income. For accessing a doctor and dentist in the past 12 months, residing in ethnic enclave was also statistically significant. For Hispanics in Kansas City, however, residing in an ethnic enclave led to worse access to health care. For accessing a dentist in the previous 12 months only, first generation immigrants had significantly less access to a dentist when needed.

The faculty listed below, appointed by the Dean of the College of Arts and Sciences, have examined a thesis titled "Health Care Access of Hispanic Immigrants in the Kansas City Metropolitan Area", presented by Jocelyn M. Betts, candidate for the Master of Arts degree, and certify in their opinion it is worthy of acceptance.

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CHAPTER 1

INTRODUCTION

According to the 2010 US Census, individuals that self-identified as having a

Hispanic ethnicity comprise 16.3% of the United States population (US Census Bureau,

2010).   With 50.5 million members, the Hispanic population is our nation's largest and

fastest growing ethnic minority with a 43% increase in numbers between the 2000 and 2010

Census (US Census Bureau, 2010). The Hispanic population in the United States has been

the subject of much research because of its size and unique characteristics; therefore, the US

Hispanic population is the focus of this thesis.

Mejia, Kaufman, Corbie-Smith, Rozier, Caplan, and Suchindran (2008) found that

when compared to non-Hispanics, Hispanics are less likely to complete high school and more

likely to live in poverty, be unemployed, and have no health insurance. Statistics from the

2010 Census revealed that the median household income of Hispanics in 2009 was $38,039

while the national median household income was higher at $49,445. This corresponded to a

poverty rate of 25.3% while the national rate was 15.1. Moreover, almost one in three

Hispanics did not have health insurance at this time compared to the national rate of 1 in 9.

In 2009, while 68% of Hispanics who were sixteen years of age or older belonged to the

civilian labor force, only 19% held professional or management positions (US Census

Bureau, 2010).

Based on these statistics alone, this growing ethnic group warrants further

sociological study to determine what factors, social characteristics, or structures are in place

that positions the Hispanic population at the lower-than-average end of the economic and

social spectrum in the United States.

Hispanics in Kansas City

The Hispanic population used in this research study currently resides in the Kansas City Metropolitan Area (KC Metro). To better understand this population, a brief history is provided here.

Hispanics first began to move to the Kansas City area in the late nineteenth/early twentieth century with the expansion of the railroad. Mexican workers were used by railroad companies because they were willing to do the hard labor that other American workers were unwilling to do. By 1914 the Kansas City Southern railroad is completed, linking Kansas City, Missouri to the Gulf of Mexico. Mexican immigrants came to the Kansas City area to work for the various railroad lines in maintaining the tracks. It was then that the first and oldest Hispanic neighborhoods were established. These neighborhoods included Argentine, Armourdale, and Rosedale on the Kansas side (all in Wyandotte County) and Westside and West Bottoms on the Missouri side (both in Jackson County).

The Mexican Revolution in 1910 fueled the migration of more Mexican immigrants to the Kansas City Metro Area so that by 1920 90% of all track laborers for the railroad companies were Mexican. Besides the rails, these immigrants also predominantly worked at meat packing plants and on sugar beet farms. In the late 1920's the Great Depression and new immigration laws ended the mass migration from Mexico. Even with these changes, Mexicans supplied a continuous source of labor to the railroad industry between 1900 and 1940 as well as for the salt mines and meat processing plants in Kansas. (History of Kansas, n.d.)

As the Missouri River overflowed in 1951, it completely flooded the Mexican communities in both Armourdale and West Bottoms. The displaced residents in these areas

moved into other existing communities. These neighborhoods were further replenished with residents in the 1990s with the influx of a new wave of Mexican immigrants seeking to escape the political and social unrest in Mexico.

The Hispanics living in the KC Metro Area today have several unique characteristics that separate them from the Hispanic population in the rest of United States. Based on information gathered in the 2010 census at 9% (164,080) of its total population, Hispanics are the largest and fasted growing ethnic group in the KC Metro. This Hispanic population increased by 78% between the 2000 and 2010 US Census. This ethnic group is comprised mainly of immigrants from Mexico (78%), but also includes immigrants from many other countries such as Puerto Rico (3%), Cuba (2%), Honduras (2%), Guatemala (2%), and El Salvador (2%). At 78% of the population, Mexicans make up a higher percentage of the Hispanic population in the KC Metro Area than they do in the rest of the United States (63%) (US Census Bureau, 2010).

The Kansas City Metro Hispanic population is also younger and comprised of more males than the national trend. Of the KC Metro Hispanic population, 50% is 24 years of age and younger, 38% is 25-49 years of age, and 12% is 50 and above. The national average for Hispanics 24 years of age and younger is 46% and for the total US population is 34%. The national average of males and females in the US and in the KC Metro Area is 51% female and 49% male. The Hispanic population shows a different trend both nationally and locally with 49% female and 51% males nationally and 48% female and 52% male in the Metro Area.

For the purposes of this study, the Hispanic population is defined as anyone 18 years or older that self-identifies as "Hispanic". As the Hispanic population in the United States

continues to grow, so does the body of research concerning them. This project seeks to add

to existing research by answering the question: "What factors influence health care access for

Hispanics in the Kansas City Metropolitan Area?"

CHAPTER 2

LITERATURE REVIEW

Health Care of US Hispanics

While health care is a topic of interest for all ethnic groups in the US, health care among Hispanic immigrants has become of particular interest for both health care professionals and researchers because of the disparities specific to Hispanics when compared to other racial groups in the US (Mejia et al., 2008). The Council on Scientific Affairs (1991) reported Hispanics are less likely to have private insurance than either blacks or whites. Hispanics that have a job are more likely to be underemployed, work only part-time, or work at a business that offer no health care benefits. A final issue mentioned by COSA is that even when Hispanics do have jobs that offer insurance, they cannot afford the copayments because of large family sizes.

Ginzberg's (1991) analysis of health care access has shown that the quality of health care available to different groups is determined by socioeconomic status: education, occupation, and income levels, all of which create barriers to the Hispanic population as a whole. The lack of health care access for Hispanics is also compounded by the fact that the populations with the lowest income levels usually have the highest need for health care because of high birth rate, several diseases that are more commonly seen in the lower class, and lower self-rated health.

Hispanics' use of the health care system in the US is affected by many factors. These include their definition of a perceived "need" for health care, access to insurance, income level, cultural influences, language barriers, and ability to find comprehensive care (Cruz, Galvis, Barrow, LeGeros, LeGeros, Xion, and Tavares, 2003). Other obstacles, which are

more prevalent among first generation immigrants, include unfamiliarity and fear or mistrust in the health care system (Mejia et al., 2008). According to Ginzberg (1991), Hispanics' experience with the health care system is highly influenced by the lack of representation of the Hispanic community in health care occupations, especially in highly skilled positions. Without culturally proficient health care providers, it is difficult for health needs specific to the Hispanic population to be addressed. The lack of Hispanics in the health care field can also create language barriers for immigrants who have not yet mastered English.

When looking specifically at dental care, Cruz et al. (2003) found that 70% of Mexican children between the ages of twelve to seventeen have one or more cavities. Only 63% of these children have had these cavities treated or filled in contrast to the 87% of non-Hispanic whites that have been treated. Hispanics are twice as likely as non-Hispanic whites to have untreated cavities. Hispanics are also more likely to get certain oral related problems such as gingivitis or attachment loss than both black and white adults. The authors believe that these statistics are affected and prolonged by an array of factors. These factors include not only financial barriers, but also educational barriers. Cruz et al. reiterates that "language, oral health literacy, culture, acculturation, dietary patterns, providers' cultural competency, and care-seeking behaviors must be addressed to improve the oral health of Hispanics" (p. 43).

With regard to access to prescription medication, Weinick, Jacobs, Stone, Ortega, and Burstin (2004) used the Medical Expenditure Panel Survey to look at the differences in access to prescription medication for different Hispanic nationalities. They found that, while controlling for health insurance, all Hispanics are less likely to have any prescription medications than non-Hispanic whites. Additionally, first-generation Hispanic immigrants

are less likely to have any prescription medications than later generation Hispanic immigrants.

In another study focusing on prescription medication, Frankenfeild, Wei, Anderson, Howell, Waldo, and Sekscenski (2010) utilized cross-sectional data from Medicare's Consumer Assessment of Health Care Providers and Systems Survey to look at cost-related non-adherence (CRN) for prescription medications (meaning obtaining a prescription from a health care provider, but not filling the prescription for cost-related reasons). They found that in the previous six months, Hispanics were statistically more likely than non-Hispanic whites to not have filled a prescription for financial reasons. Hispanic ethnicity was significantly associated with CRN.

In order to better understand health care access for Hispanics in Kansas City, I looked in depth at assimilation theory. Assimilation theory is necessary when examining the Hispanic population because the Hispanic population has such a large number of immigrants in the US.

Immigrant Assimilation

There are two main theories that define how immigrant groups assimilate into society. The first is traditional assimilation, which posits that all immigrant groups go through a process of discarding their prior nationality as they eventually become a member of the middle class of the United States. The second theory is segmented assimilation, which allows for three trajectories for immigrant groups, each with a different ending. Both theories are herein discussed.

Traditional Assimilation

As defined by Park and Burgess (1969), traditional assimilation is "a process of interpenetration and fusion in which persons and groups acquire the memories, sentiments, and attitudes of other persons and groups and, by sharing their experience and history, are incorporated with them in a common cultural life" (p. 735). It does not simply entail giving up one's original culture, but rather it is alignment of an immigrant with the American way of life. An additional definition of traditional assimilation by Park (1930) reads that social assimilation is "the name given to the process or processes by which peoples of diverse racial origins and different cultural heritages, occupying a common territory achieve a cultural solidarity sufficient at least to sustain a national existence" (p. 281). The above definitions follow what has in the past largely defined how sociologists have examined assimilation theory.

Social theorist Milton Gordon further explained traditional assimilation through his seven step assimilation process in his book called *Assimilation in American Life (1964).* These steps include acculturation, structural assimilation, marital assimilation, identificational assimilation, behavioral receptional assimilation, attitudinal receptional assimilation, and civic assimilation. Acculturation is the most simple, but also the most important part of the assimilation process, it is during this phase that the immigrants learn the host society's language and cultural norms. Assimilation continues from the first generation to the second generation as the family attempts to better their prospects in their new country.

An immigrant's generation can be defined by where they were born or where the immigrant's parents or grandparents were born. The Pew Research Center defines first generation immigrants as those immigrants who were born outside the United States, but now

reside in the US. Second generation immigrants are those immigrants who were born in the US, but one or both of their parents were born outside of the US. Third generation immigrants are those immigrants whose parents were both born in the United States (2013).

There is an ongoing discussion about the degree to which an immigrant group must or should leave behind their culture of origin in order to be considered "assimilated" (Alba, 1999). Much of the process of assimilation is accomplished slowly over generations and often times without a conscious effort. Learning the English language is one of the first and most important steps in the assimilation process (Alba, 1999). The degree to which second generation immigrants learn their parents' native tongue is often decided by the parents themselves. In order to further their economic possibilities, many immigrants leave their original settlement in ethnic enclaves, when it is financially possible, and move into more suburban, middle class neighborhoods. This breaks the immigrant's constant tie with their culture of origin and promotes the adoption of the suburban, "Anglo" way of life as well as gives better educational opportunities (Zhou, 1997).

This migration into suburbia is known as spatial assimilation and is an essential part of traditional assimilation. Massey (1984) imparts that spatial assimilation is the necessary link between acculturation and all the other types of assimilation. South, Crowder, and Pais (2008) define spatial assimilation as when "members of minority groups seek to convert financial and human capital into geographic proximity with the dominant ethnic majority" (p. 421). They also suggest that it is often hard for ethnic minorities to put their capital into more desirable neighborhoods because of housing discrimination (South, Crowder, & Pais, 2008).

Spatial assimilation assumes that all ethnic groups will eventually and equally assimilate into the rest of society. Living in close proximity with other ethnic groups affects the likelihood of occurrences such as friendship, likelihood of prejudice, and intermarriage, which are all related to factors in Gordon's seven step process of assimilation (Massey & Mullan, 1984).

As with all immigrant populations, Massy and Mullen's structural model of Hispanic assimilation shows that an increase in "education, occupational status, and income" will promote movement into more Anglo neighborhoods; and being able to assimilate spatially is directly related to the Hispanic immigrant's ability to improve their status economically (1984).

Clark and Mueller (1988) point out that there may be a misconception about the number of Hispanics that move out of their ethnic enclaves. Although it may appear that these Hispanic enclaves never change in size, this more likely reflects the large number of new Hispanic immigrants that are constantly entering the country rather than the lack of spatial assimilation (Clark & Mueller, 1988).

In 2005, South, Crowder, and Chavez reported on a study using longitudinal data from 700 Mexican, Puerto Rican, and Cuban immigrants between 1990 and 1995 to investigate if and how socioeconomic, social, cultural, segmented, and spatial assimilation are causally related. They discovered that the degree to which the immigrant and their family shared relationships such as friendships with the majority group affected the decision of which areas they would move into. Those individuals who had connections with non-Hispanic white people were more likely to move into areas with a higher population of

Anglos, while those individuals with connections and friendships mainly within their own ethnic group were more likely to move into ethnic enclaves (2005b).

In another study conducted by South, Crowder, & Chavez, these researchers found that the amount of contact with other Hispanics, English proficiency, citizenship attainment, and length of time in the United States greatly increased the likelihood that a Hispanic immigrant would move into an "Anglo" neighborhood. However, the strongest socioeconomic predictor of mobility for Hispanics is income. Living in a large Metropolitan Area with high concentration neighborhoods of Hispanics greatly decreased the likelihood of assimilation into white neighborhoods in the United States (2005a).

Segmented Assimilation

The more recent assimilation theory, called segmented assimilation, advocates that opportunities for immigrants are not constant across immigrant groups (Acevedo-Garcia, Bates, Osypuk, & McArdle, 2010).   Instead, segmented assimilation theory points out that our society is segregated into unequal segments and therefore immigrants, as they assimilate, will be found in one of these segments. This theory establishes three possible outcomes for immigrants. The first outcome follows the pattern of traditional assimilation, where immigrants go through the process of acculturation and economic assimilation as they move upward into the "normative structures" of the middle class. The second outcome is associated with downward assimilation; immigrants experience acculturation and economic assimilation into the lower class, instead of middle class America. The third outcome projects rapid advancement into the middle class, but with deliberate preservation of the immigrant's cultural values and solidarity (Zhou, 1997).

Both individual and structural factors influence which of these three outcomes an individual immigrant or entire immigrant group will fall under. Individual factors include "education and other factors associated with exposure to American society, such as aspiration, English language ability, place of birth, age upon arrival, and length of residence in the United States". Structural factors include "racial status, family socioeconomic backgrounds, and place of residence" (Zhou, 1997, p. 984).

The first outcome is influenced by doing well in school, having goals and staying motivated, being proficient in English, being born in the US or arriving at a young age, living in the United States for a longer period of time, having a lighter skin color, possessing a higher class status, and living outside an ethnic enclave (Zhou, 1997).

Portes and Zhou describe the United States' social context that contribute to the second outcome - downward assimilation, includes skin color, geographic location, and restricted ability to "move up" in society (1993). All three factors are linked; it is difficult for an immigrant group that is affected by one of these factors to not also be affected by the other two.

Pervasive prejudices in American society against darker skin makes it difficult for the most recent immigrant groups, "people of color", to immediately move into white, suburban neighborhoods unless they are already economically stable in this country (the US). More frequently, these immigrant groups have no other option but to settle near other native-born minorities because the new immigrant group is often automatically associated with the existing minority. Therefore skin color can directly lead to the second feature of downward assimilation, location (Portes & Zhou, 1993).

Once new immigrant groups settle near the existing "native-poor" minorities in ethnic enclaves, they often are incorporated into the same educational system, which then lowers the educational opportunities for advancement of the second-generation immigrants. Both extrinsic factors such as peer pressure and intrinsic factors such as willpower can affect the educational experience of the students that are members of these immigrant groups. The discrimination in race and class in the American society is mirrored in our educational system. Lower class, for the most part, leads to lower educational standards (Portes & Zhou, 1993).

Because of this "ghettoization", instead of being pushed to assimilate into the middle class standard associated with traditional assimilation, second-generation immigrants are faced with the decision of becoming socialized with their lower-class classmates or following their parents' dream of moving up in society (Zhou, 1997). Portes and Zhou's third feature of downward assimilation is brought into context here. They portray these immigrant groups' economic mobility through the depiction of an hour glass. The bottom sphere represents the lower class while the upper sphere represents the middle and upper classes. The transition between the two is very narrow and limited and requires higher education (1993). Portes and Zhou assert that striving for and focusing on higher education can frequently ostracize immigrant youth from their immediate peer group (1993).

The third outcome of segmented assimilation theory is when an immigrant or immigrant groups assimilates spatially and economically fairly quickly into middle class America (Portes & Zhou, 1993). These groups or individuals, however, show delayed acculturation. They purposefully hold onto their country of origin's values and solidarity.

This can include continuing to speak their language of origin, celebrating separate holidays, and dressing in traditional clothing of their mother country.

Overall, the Hispanic population is not assimilating into American society on the trajectory depicted in traditional assimilation, which is also the first outcome of segmented assimilation theory. Using this more recent theory, many researchers conclude the majority of the Hispanic community is experiencing the second outcome of downward assimilation into the lower class. This outcome is caused by an array of factors that play into downward assimilation, including low income, low educational level, low skill level, racial prejudices, segregation, and residency status (Hershberg, 1981).

Assimilation and Health of Hispanic Immigrants

Immigrants, in general, tend to have less access to health services than the U.S.-born population. After controlling for demographic and socioeconomic factors, first generation immigrants are still less likely to have a primary doctor and have fewer visits to medical professionals (Kao, 2009). Acevedo-Garcia et al. (2010) argues that this may be due to the fact that the new immigrants have a better immunity system than the native born population; however, this benefit appears to diminish as time spent in the United States increases (Kao, 2009).

In a study conducted in 2007, Akresh used the 2003 New Immigrant Survey data to determine how diet and health of Hispanics are affected during the assimilation process. In this study she found that those immigrants who spoke English at work after moving to the United States and reported having a larger dietary change were more likely to have reported worse health than directly before moving to the United States. In this study, a higher degree of acculturation was negatively correlated with worse self-rated health (Akresh, 2007).

Park, Myers, Kao, & Min (2009) had similar results to those of Akresh, finding negative impact on health through the assimilation process. These researchers used the National Health Interview data between 1995 and 2005 to investigate how assimilation affects obesity rates within the Hispanic population, finding that Hispanics are experiencing the second outcome, downward assimilation, into higher obesity rates; obesity rates increase with the second and third generation Hispanic immigrants over the first generation Hispanic immigrants (Park, Myers, Kao, & Min, 2009).

Hamilton, Cardoso, Hummer, & Padilla (2011) found evidence of downward assimilation with respect to health outcomes for Hispanic immigrants. This study used the data from the 2007 National Survey of Children's Health (NSCH) to discover how Hispanic immigrants are assimilating health-wise into the United States. They found that health outcomes worsened over time. First generation immigrants and their children who lived in areas of higher concentrations of immigrants benefited from social networks within their community. However, third-plus generations of immigrants have health outcomes closer to those of the native-born African-American communities. The researchers found an increase in the amount of time in the United States correlated with unhealthy diet changes, a decline in breastfeeding, and an increase in the use of smoking and alcohol.

Research by Acevedo-Garcia, et al. (2010) investigated immigrants' self-rated health in context with their generational status and ethnicity. With respect to Hispanic immigrants specifically, they found that first and second generation have a lower likelihood of having poor/fair self-rated health when compared to the third generation. Additionally, when focusing only on first generation Hispanic immigrants, the longer the immigrant has lived in the United States, the higher their likelihood to self-rate their health as poor/fair. This was

the first study to show that both immigrant generation as well as duration in the U.S. are negatively associated with self-rated health (Acevedo-Garcia, et al., 2010).

Ethnic Enclaves and Health Care of Hispanics

Ethnic enclaves describe an area with a high concentration of one ethnic group. According to Hershberg, Burstein, Ericksen, Greenberg, & Yancey (1979), the Hispanic population is experiencing prolonged if not permanent residency in ethnic enclaves. For Hispanics, what was once seen as temporary communities for new immigrants in traditional assimilation are now becoming long-lasting residencies for many Hispanics as described in the second outcome of segmented assimilation.

Where one lives has a large effect on not only assimilation processes but also on a large array of other life factors. Some of these factors include "the cost and quality of housing, health and sanitary conditions, exposure to crime and violence, quality of services (the most important of which is education), and access to economic opportunity, as well as a host of less tangible factors ranging from the character of one's children's playmates to the kinds of role models they emulate" (Massey & Mullen, 1984, p. 845). From this description alone, it would seem that living in an ethnic enclave is detrimental to development of progress in the lives of Hispanics. These negative effects, however, do not account for the positive outcome found in access to health care and better overall health for those immigrants who reside in these segregated areas.

Research has shown that there are some exceptions to Hispanics' limited access to health care. Gresenz, Derose, Ruder, and Escarce (2012) found, while controlling for socioeconomic status and availability of health care, that living in an area with a high concentration of Hispanic immigrants and/or Spanish speakers (ethnic enclave) is associated

with better access to health care among first-generation Mexican immigrants, regardless of whether or not they had insurance, but worse for second-generation Mexican immigrants who were uninsured.

Gresenz, Rogowski, and Escarce (2009) also found among both insured and uninsured Mexican immigrants, location significantly impacted the immigrant's access to health care. When Mexican immigrants live in areas with a higher percentage of other Hispanics and Spanish speaking individuals, their ability to access health care increases. The researchers propose that this occurrence is influenced by many factors such as the presence of local organizations geared specifically toward helping Hispanics. Another possible influence is social networks, living among immigrants that already know the health system and where Spanish-friendly services can be found can be helpful for new immigrants.

A third study on Hispanic health and assimilation revealed that health outcomes can have varying results depending on whether the immigrant lives within an ethnic enclave. This study by Lee and Ferraro (2007) collected its data from the Midlife Development in the United States (MIDUS): Survey of Minority Groups in Chicago and New York City, 1995-1996, and the 1990 summary tape file 3 from the U.S. Bureau of the Census. They found that segregation of ethnic groups may cut ethnic minorities off from other groups, but may also improve communication within their own groups. Living within an ethnic enclave did not provide as much benefit, with respect to health, for first-generation immigrants as it did for the second and third generation. Segregated areas such as ethnic enclaves may provide a network for access to formal health care services as well as informal methods of health care (Lee & Ferraro, 2007).

Neither traditional assimilation nor segmented assimilation fully explain access to health care for Hispanic immigrants. Ethnic enclaves create a health care paradox for Hispanics, because remaining in an ethnic enclave contributes to lack of assimilation in traditional assimilation theory and downward assimilation in segmented assimilation theory (Massey, 1984; Zhou, 1997). But, when considering access to health care for Hispanics, living in ethnic enclaves has been significantly associated with better access to health care (Portes & Zhou, 1993; Grensenz et al., 2012; Grensenz, Rogowski, & Escarce, 2009; Lee & Ferraro, 2007).

Demographics

When considering any research in access to health care, including research with Hispanic immigrants, there are two important demographics to consider, age and gender. In previous research, it has been found that women use health care systems more frequently than men (Kronenfeld, 2012). Additionally, data from the Agency for Health Care Research and Quality (2006) show that adults that are above the age of 65 use health care facilities more often than adults that are age 18 to 64. One in three hospital patients are 65 and older. In general women and the elderly are statistically more likely to use health care services than any other group. These two groups must be considered and controlled for when looking as health care access.

Conceptual Model

This review of the literature suggests three main factors that influence Hispanic access to health care: immigrant generation, assimilation factors, and demographics. Factors of immigrant assimilation include income, education, language spoken, and most importantly

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place of residence. The demographics that are linked to access of health care are age and gender.
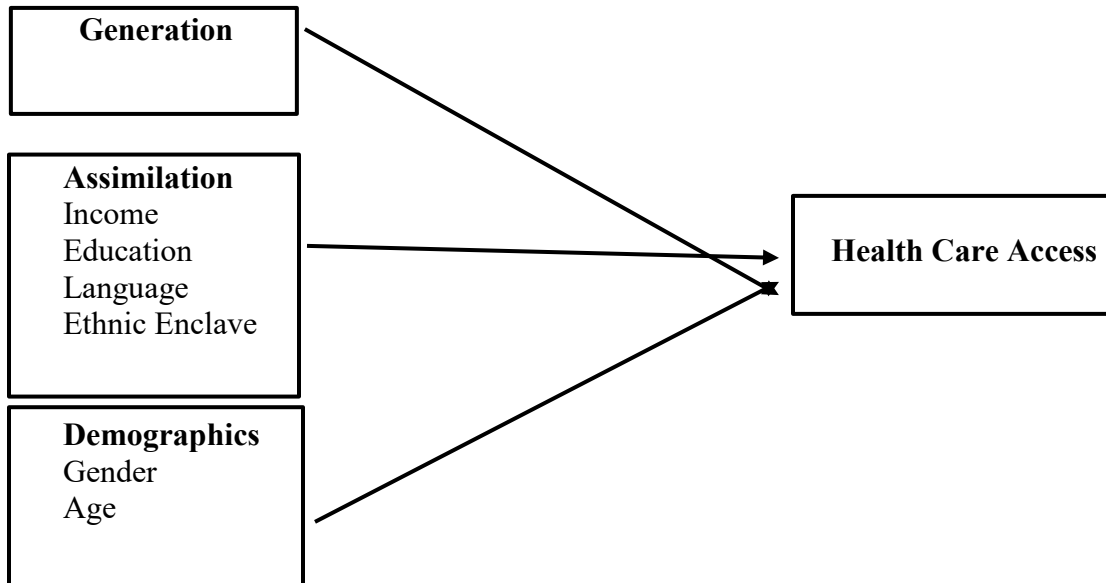

Figure 1: Conceptual Model

Null Hypotheses

N$_{H1}$: There is no difference in health care access between first generation Hispanic immigrants and second and third generation Hispanic immigrants in the Kansas City Metro Area.

N$_{H2}$: Residing in an ethnic enclave does not impact access to health care for Hispanic immigrants in the Kansas City Metro Area.

CHAPTER 3

METHODOLOGY

Data

The data for this research project comes from the 2012 Hispanic Needs Assessment Community Survey, conducted for the Kansas City Metropolitan Area in 2012.   This survey is one part of a larger project commissioned by the Latino Civic Engagement Collaborative (LCEC) to assess the current economic, social, educational, health, and civic conditions and needs of the Kansas City Metropolitan Hispanic population.   The Latino Civic Engagement Collaborative is made up of leaders from key organizations that serve the Hispanic/Latino population in the Kansas City Metropolitan Area.

The Hispanic Needs Assessment is comprised of four phases that gathered both quantitative and qualitative data. Phase I was a quantitative study of the current demographic, economic, and health conditions of the Kansa City Hispanic population.   This information was obtained from existing data, including the census, and was compiled onto tables and graphs. Maps were also formed to show the main concentrations of the Hispanic population. Phase II was also a quantitative study. During this phase the Hispanic population was surveyed to discover what they see as potential needs as well as assets within their communities. The survey questions mainly focused on economic, health, and educational conditions. Phase III was a qualitative study involving in-depth interviews and focus groups with key stakeholders within the Hispanic community. These discussions focused on factors that contribute to issues within the communities and strategies for addressing these issues. Phase IV involved two parts and included both quantitative and qualitative analysis. The first part required the surveying of eleventh and twelfth graders to assess their civic

engagement, including service and volunteerism, social and informational interconnectedness, civic skills, and political action and expression. The second part of Phase IV involved holding focus groups with the youth discussing the information obtained from the surveys.

For this project, only quantitative data from Phase II was used. Phase II of this project involved the distribution of the Hispanic Needs Assessment Survey. The survey was distributed both online and in paper formats, in English as well as Spanish. The population surveyed included in the Hispanic Needs Assessment is all self-identified Hispanic/Latinos living within the Kansas City Metropolitan Area. The nine counties defined as the KC Metro Area are Johnson, Leavenworth, Miami, and Wyandotte in Kansas and Cass, Clay, Jackson, Platte, and Ray in Missouri. The survey had a total number of approximately 1400 participants and was distributed over a six month period, June 2012 through December 2012. Respondents in Phase II included individuals from various nationalities, income levels, education levels, and residency status. Respondents were eighteen years of age or older. Descriptive Statistics for the sample are displayed on Table 1.

Table: 1
Descriptive Statistics of All Measures Used in Analysis

	Measure	Categories	(N) Totals	(N) Percentage
Dependent Variables				
	Accessed doctor in the last 12 months	Not able/don't know	412	32.8
		Able to access	845	67.2
	Accessed dentist in the last 12 months	Not able/don't know	516	41.1
		Able to access	738	58.9
	Accessed presc. medication in the last 12 months	Not able/don't know	391	31.3
		Able to access	860	68.7
Independent Variables				
	Generation	First generation	782	69.9
		Second generation	176	15.7
		Third generation	160	14.3
	Income	0-$9,999	255	20.5
		$10,000-$14,999	210	16.9
		$15,000-$19,999	130	10.4
		$20,000-$24,999	124	10.0
		$25,000-$34,999	161	12.9
		$35,000-$49,999	153	12.3
		$50,000-$74,999	98	7.9
		$75,000 and up	115	9.2
	Education	Never attended school	14	1.1
		Kindergarten- grade 6	61	4.9
		Grades 7-9	160	12.8
		Grades 10-11	177	14.2
		High school graduate or GED	305	24.4
		Some college, technical school, or Associate's Degree	257	20.6
		Bachelor's Degree	169	13.5
		Graduate Degree	105	8.4
	Language spoken	Spanish only	313	25.9
		Bilingual-Spanish dominant	452	37.4
		Bilingual-neither Spanish nor English dominant	16	1.3
		Bilingual-English dominant	270	22.4
		English only	156	12.9
	Ethnic enclave	Residing in ethnic enclave	534	39.6
		Residing in all other areas of KC Metro	815	60.4
	Gender	Male	515	39.0
		Female	807	61.0
	Age	Range	76.0	
		Mean	37.7	
		Standard deviation	13.2	
		Minimum/maximum	15	91

Total sample sizes vary due to missing data

Measures

Three Measures of Dependent Variable

My dependent variable, access to health care, was operationalized using three

measures: (1) ability to access a doctor in the previous 12 months when needed, (2) ability to

access a dentist in the previous 12 months when needed, and (3) ability to access prescription

medication in the previous 12 months when needed. The exact questions taken from the

survey were as followed: "Was there a time in the past 12 months when you or your family

needed to see a doctor but could not?", "Was there a time in the past 12 months when you or

your family needed to see a dentist but could not?", and Was the a time in the past 12 months

when you or your family needed prescription medications but could not get them?".

Participants were given the option of "yes", "no", and "don't know".

In this survey, the answer "yes" meant that they were not able to access health care in

the previous 12 months when needed. The original answers from these questions were

recoded into a dichotomous variable. The answers "yes" and "don't know" were collapsed

and recoded into one category "no/don't know" (0), meaning that the participant was not able

to access health care in the previous 12 months when needed. The answer of "no" was

recoded into "yes" (1) meaning that the participant was able to access health care in the

previous 12 months when needed.

Independent Variables

Generation

Immigrant generation goes hand in hand with assimilation. As generation progresses,

an immigrant group goes through processes depicted in assimilation theory, whether it be

traditional assimilation theory or segmented assimilation theory (Alba, 1999; Zhou, 1997).

Generation is an even more important factor for Hispanic immigrants because of the negative effects immigrant generation has on this group's health outcomes. Previous research has found that as Hispanic immigrant generation increases, overall health is decreasing (Akresh, 2007; Hamilton, etal., 2011; Park, etal, 2009; Acevedo-Garcia, 2010). This may increase the immigrant's need for health care.

The variable of "generation" was created using several questions from the Hispanic Needs Assessment. If the participant answered "born outside of the United States" to the question "Where were you born?", they were coded first generation immigrant. If the participant was born in the United States but had a parent that was born outside of United States, they were coded second generation immigrant. If the participant and both of their parents were born in United States but one or both of their grandparents were born outside of the United States they were coded as third generation immigrant. Because only 15% of the respondents fell into either second (15.7%) or third generation (14.3)%, these two immigrant groups were collapsed into one category of a variable of generation with a first generation immigrant category (0) and second and third generation immigrant category (1).

Assimilation

All measures that represent the set of independent variables related to the concept of "assimilation" were included in this project because they are key indicators of whether or not an immigrant is assimilating into their host society. In fitting with previous research, income, education, English proficiency, and residency are all associated with assimilation (Massey and Mullen, 1984; Zhou, 1997).

Income

Income is a major factor in an immigrant's ability to assimilate into the US (South, Crowder, & Chavez, 2005, Massey & Mullen, 1984); it is the largest factor that affects an immigrant's ability to move into non-segregated neighborhoods. Ginzberg (1991) also found it to be a significant factor in health care access of Hispanics. The variable of income was obtained from the original survey data. The eight income categories are listed in Table 1. Income categories progress from lower income to higher income.

Education

Education is a major factor in assimilation theory (Massey & Mullen, 1984; Alba, 1999; Portes & Zhou, 1993) as it has been found to significantly affect an immigrant's mobility (Massy & Mullen, 1984). Ginzberg (1991) found that education is a significant predictor of health care access. The measure for education was taken from an original question "What is the highest grade or year of school you completed?" included in the Hispanic Needs Assessment. Its nine categories can be viewed on Table 1.

Language

Inability to speak English has been significantly related to inability to access health care in the United States (Ginzberg, 1991). The variable of language was also taken from an original question from the Hispanic Needs Assessment: "When speaking, are you bilingual (Spanish or English dominant), English only, or Spanish only?". This variable progresses along a gradient from a category of Spanish speaking only to English speaking only. See Table 1 for all categories.

Ethnic enclaves

In traditional assimilation theory, ethnic enclaves represent a temporary location for new immigrants while they obtain the means to move into the assimilated population (Massey, 1984), while in segmented assimilation theory, they can represent a permanent residence for those immigrants that experience downward assimilation (Portes & Zhou, 1993). But in support of the Hispanic health care paradox, Grensenz, Derose, Ruder, and Escarce (2012); Grensenz, Rogowski, and Escarce (2009); and Lee and Ferraro (2007) all found that Hispanic immigrants living within an ethnic enclave had better access to health care than those Hispanics living outside ethnic enclaves which does not align with the second outcome of segmented assimilation theory. Therefore, a major objective of this project's analysis is to determine the influence of ethnic enclave residency on health care access.

To define ethnic enclaves, I looked at all zip codes included in the Kansas City Metropolitan Area and their Hispanic populations. Participants were asked to list the zip codes within which they lived. I considered both Hispanic population totals and percent of Hispanics of the entire population. Ten zip codes were selected with the highest total population and percent Hispanics to be considered an "ethnic enclave" for this analysis.

There is external corroborating data for designating these ten zip codes as ethnic enclaves. I found a large gap within my chosen measures of Hispanic population between these ten zip codes and the remaining zip codes. Additionally all ten of the selected zip codes are located within officially designated Historic Hispanic communities. These zip codes were combined to create a dichotomous variable. Residency in the ten zip codes were categorized as "residing in an ethnic enclave" (0) while the remaining zip codes are considered "residing in all other areas of Kansas City Metropolitan Area" (1).

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Demographics

Because gender and age affect any individual's likelihood to access health care in the US (Kronenfeld, 2012; Department of Health and Human Services, 2006), these demographic measures are included in this analysis. Gender is a dichotomous variable coded male (0) or female (1). The variable of age is a continuous variable with an average age of 37.7.

Data Analysis

To test my hypotheses, both bivariate and multivariate analytical techniques were used. First I created a correlation matrix to determine what, if any, relationship exists between variables.

Second, I used bivariate logistic regression analysis to explain variation in ability to access health care when needed in the previous 12 months. Because this project investigates the viability of my theoretically-derived conceptual model for accessing health care, all three measures of my dependent variable--doctor, dentist, and prescription medication--are tested using the same partial and full models.

There are three partial models and one full model. Each partial model represents one of the independent variables in the conceptual model. Model 1 contains generation only, Model 2 contains assimilation factors only, and Model 3 contains demographics only. The fourth model (Full Model) contains the complete complement of the three independent variables: generation, assimilation, and demographics.

CHAPTER 4

RESULTS

Correlation Matrix

The correlation matrix shows that all three measures of my dependent variable are significantly related (p<.01) and have high positive correlations (doctor and dentist, r =.597, doctor and prescription medication, r =.590, dentist and prescription medication, r =.572) indicating they are related, but distinct, operationalizations of health care access.

The correlation matrix also shows the majority of the measures for generation and assimilation variables are correlated at a statistically significant level (p<.05) with all three of the measures of health care access indicating that statistically they are appropriate measures for investigating health care access.

However, the correlation matrix reveals age and gender are not related to each of the three measures of the dependent variable. Because age and gender are critically important theoretically when modeling any health care access in the US, they are retained for the multivariate analyses.

Additionally, in order to make sure each measure of the independent variables are capturing a unique concept and to avoid issues of multicollinearity, I also used the correlation matrix to determine how highly correlated the independent variables are with each other. One measure suggested there may be multicollinearity concerns; the language measure of immigration was very highly correlated with two other measures (r >.50), generation (r=.707) and education (r=.532). Therefore, it was removed from the logistic regression model.

Table 2
*Correlation
Matrix*

	1	2	3	4	5	6	7	8	9	10
1 Accessed doctor	1									
2 Accessed dentist	.597**	1								
3 Accessed meds	.590**	.572**	1							
4 Generation	.129**	.177**	.064*	1						
5 Income	.161**	.272**	.159**	.386**	1					
6 Education	.083**	.124**	.093**	.404**	.483**	1				
7 Language	.112**	.169**	.095**	.707**	.419**	.532**	1			
8 Ethnic enclave	.088**	.092**	.023	.202**	.165**	.189**	.213**	1		
9 Age	.027	.025	-.015	.063*	.156**	-.044	-.001	.031	1	
10 Gender	.027	-.015	.012	.072*	-.076**	.042	.075**	-.060*	.056*	1

*p<.05 **p<.01

Logistic Regression

Recall the three measures of the dependent variable health care access are tested using the same configuration of independent variables through three partial models and one full model. Model 1 contains generation only, Model 2 contains assimilation factors only, and Model 3 contains demographics only. The Full Model contains all three: generation, assimilation, and demographics. The results of the partial and full models for each measure of the dependent variable—access when needed to doctor, dentist, and prescription medications—are discussed in turn.

Access to Doctor in the Previous 12 Months

In Model 1 the logistic regression revealed a chi-square value of 19.05 (*df 1,* p<.001). Generation is a significant predictor of access to doctor when needed (p<.001). Individuals who are second or third generation immigrants are almost twice as likely to be able to access a doctor in the last 12 months when needed as first generation immigrants.

Model 2 produced a chi-square value of 39.18 (*df 3*, p<.001). With respect to the variables within this model only income (p<.001) and ethnic enclaves (p<.01) were significant predictors of ability to access a doctor when needed in the previous 12 months. In both cases the variable was positively related to access to a doctor. Having a higher income is associated with an immigrant's ability to access a doctor when needed, and immigrants that live outside of an ethnic enclave are approximately 1.5 times more like to be able to access a doctor when needed than those immigrants that reside within an ethnic enclave.

For Model 3 the chi-square value of 2.56 did not reach statistical significance (*df 2*, n.s.). It does not appear that demographics, including age and gender, are a significant predictor of Hispanic immigrant's access to a doctor when needed in the last 12 months.

The Full Model has a chi-square value of 43.33 (*df 6*, p<.001). The individual covariates of income and ethnic enclave are significantly related to access to a doctor in the last 12 months when needed. Higher income is related to higher likelihood of access to doctor (p<.001), and residing outside of an ethnic enclave is positively related to access to a doctor (p<.01).

Table 3
Logistic Regression Analysis for Access to a Doctor in the Previous12 Months

Variable	Log-Odd Ratios			
	Model 1	Model 2	Model 3	Full Model
Immigrant Generation				
Generation	1.89***			1.18
(1ˢᵗ= 0)	(.64)			(.17)
Assimilation factors				
Income		1.16***		1.13***
(low income=0)		(.15)		(.13)
Education		.98		1.01
(little education=0)		(-.02)		(.01)
Ethnic enclave		1.43**		1.59**
(within=0)		(.36)		(.46)
Demographics				
Age			1.01	1.00
(ranges 15-91)			(.01)	(.00)
Gender			1.15	1.26
(male=0)			(.14)	(.23)
Constant	1.72***	1.07	1.59*	.74
	(.54)	(.07)	(.64)	(-.30)
-2 log-likelihood	1373.29	1404.18	1527.08	1207.38
Model X^2	19.05***	39.18***	2.56	43.33***
Pseudo R²				4.2-5.9%
df	1	3	2	6
n	1100	1154	1217	1000

Note: *n* differs due to missing cases.
Beta-coefficients in parenthesis
*$p < .05$. **$p < .01$. ***$p < .001$.

Access to a Dentist in the Previous 12 Months

Model 1 revealed a chi-square value of 35.45 (df 1, p<.001) indicating the variable generation is a significant predictor of ability to access a dentist when needed in the previous 12 months. Immigrants who are second and third generation are more than twice as likely (odds ratio= 2.28) to be able to access a dentist when needed as those immigrants who are first generation.

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Model 2 shows an overall chi-square value of 89.14 (df 3, p<.001) with the specific measure of income significantly and positively related to access of a dentist when needed in the previous 12 months (p<.001). The relationship between ethnic enclaves and accessing a dentist trends toward a significant relationship (p<.10) with education not a significant predictor of access to a dentist. Model 3 (X^2 =1.31, *df* 1, n.s.) indicates age and gender do not explain an immigrant's ability to access a dentist when needed.

The overall Full Model chi-square value is 91.02 (*df* 6, p<.001). The independent measures of generation (p<.05), income (p<.001), and ethnic enclaves (p<.10) retain their same levels of significance from the partial models when controlling for all other measures in this model. See Table 4.

Table 4

Logistic Regression Analysis for Access to a Dentist in the Previous 12 Months

Variable	Log-Odds Ratio			
	Model 1	Model 2	Model 3	Full Model
Immigrant Generation				
Generation	2.28***			1.45*
(1st =0)	(.83)			(.37)
Assimilation factors				
Income		1.29***		1.28***
(low income=0)		(.25)		(.24)
Education		.966		.96
(little education=0)		(-.04)		(-.04)
Ethnic enclave		1.27†		1.3†
(within=0)		(.24)		(.27)
Demographics				
Age			1.01	.99
(ranges 15-91)			(.01)	(-.01)
Gender			.95	1.13
(male=0)			(-.05)	(.12)
Constant	1.15†	.588*	1.28	.66
	(.14)	(-.53)	(.24)	(-.42)
-2 log-likelihood	1452.16	1462.22	1636.27	1249.84
Model X^2	35.45***	89.14***	1.31	91.02***
Pseudo R²				8.7-11.8%
df	1	3	2	6
n	1100	1151	1214	999

Note: *n* differs due to missing cases.
Beta-coefficients in parenthesis
†*p* < .10. **p* < .05. ***p* < .01. ****p* < .001.

Access to Prescription Medication in the Previous 12 Months

The chi-square value of Model 1 was 4.52 (*df* 1, p<.05) and found that an immigrant

who is second or third generation is significantly more likely to repot access to prescription

medication in the previous 12 months when needed (p<.05) than a first generation immigrant.

Model 2 had a chi-square value of 29.92 (*df* 3, p<.001) and income is a significant

predictor of the access to prescription medication in the previous 12 months when needed

(p<.001). Having a higher income is positively related to being able to access prescription

medication when needed, even after controlling for education and ethnic enclave residency.

Model 3 shows that age and gender are not significantly related to the accessing prescription

medication when needed ($X^2 = .27, df\ 2$, n.s.).

The Full Model has a chi-square value of 29.19 ($df\ 6$, p<.001). Although the model

has explanatory power for access to prescription medication in the last 12 months when

needed, only the variable of income is a significant predictor of access of prescription

medication when needed (p<.001). See Table 5

Table 5

Logistic Regression Analysis for Access to a Prescription Medication in the Previous 12 Months

Variable	Log-Odds	Ratio		
	Model 1	Model 2	Model 3	Full Model
Immigrant Generation				
Generation	1.36*			.86
(1st=0)	(.31)			(-.15)
Assimilation factors				
Income		1.15***		1.15***
(low income=0)		(.14)		(.14)
Education		1.04		1.06
(little education=0)		(.04)		(.06)
Ethnic enclave		1.00		1.09
(within=0)		(.00)		(.09)
Demographics				
Age			.99	.99
(ranges 15-91)			(-.00)	(-.01)
Gender			1.05	1.14
(male=0)			(.05)	(.13)
Constant	2.07***	1.11	2.32***	1.23
	(.73)	(.10)	(.84)	(.20)
-2 log-likelihood	1346.47	1384.89	1497.67	1186.71
Model X^2	4.52*	29.92***	.27	29.19***
Pseudo R^2				2.9-4.1%
df	1	3	2	6
n	1096	1152	1212	999

Note: *n* differs due to missing cases.

 Beta-coefficients in parenthesis

*p < .05. **p < .01. ***p < .001.

CHAPTER 5

DISCUSSION AND CONCLUSIONS

Discussion

This project investigated factors that influenced health care access for Hispanics in the Kansas City Metropolitan Area. This project is a contribution to the literature of health care access for the US Hispanic community because it operationalized health care access using three different measures to fully investigate this topic. By using the same theoretically-derived model to test access to a doctor in the previous 12 months when needed, access to a dentist in the last previous 12 months when needed, and access to prescription medication in the precious 12 months when needed, I am more able to fully capture the complexity of health care access the Kansas City Hispanic community encounters on a daily basis.

I used assimilation theory in this study to explain access to health care for Hispanic immigrants in Kansas City. All of my independent variables, generation, income, education, and residency in an ethnic enclave, were derived through assimilation theory. They are all essential parts of the assimilation process. Since Hispanics are the largest and fastest growing immigrant group in the US it is essential to use assimilation theory when assessing this population. The relationship between these independent variables and access to healthcare in the last 12 months is confirmed by statistical analysis. The model chi-square suggests these constellations of independent variables can contribute to our understanding of health care access in the Hispanic community. Similarity and differences of the finding for my three measures of health care access will be discussed.

Income as a Defining Factor for Health Care Access

When reviewing the results for health care access when needed, across all three measures of the dependent variable (doctor, dentist, or prescription medication), the one factor that remained a significant predictor throughout was income. Income was significantly and positively related to the ability of a Hispanic immigrant to access health care when needed. For every model that included income as a variable, the model chi-square for the model and the log-odds ratio for the individual variable of income remained statistically significant. Beyond income, access to a doctor and dentist appear to be affected by different factors than access to prescription medication.

Access to a Doctor and Dentist

In the partial models, generation and residency in an ethnic enclave (as well as income) were also significantly (or trending toward significance) and positively related to accessing a doctor or dentist when needed. For each of these partial models, being a second or third generation immigrant made the respondent approximately two times more likely to be able to access a doctor or dentist when needed. In addition living outside of an ethnic enclave corresponded with the likelihood of the Hispanic immigrant being able to access a doctor or dentist.

In the full models, however, whereas higher income and living outside an ethnic enclave remain significant predictors of accessing a doctor or dentist when needed, generation only remains a significant predictor for accessing a dentist. My own assumption in this case is that going to a dentist may be seen as more of a need or necessity for later generation Hispanic immigrants than for first generation immigrants, while accessing a doctor when needed remains a necessity for all generations. With regards to my hypotheses,

I can partially reject my N_{H1} that there is no difference in health care access between first generation Hispanic immigrants and second and third generation Hispanic immigrants in the Kansas City Metro Area for access to a dentist in the previous 12 months.

Ethnic enclaves have created an anomaly in this research study. In previous research, living in an ethnic enclave has been significantly related to greater access to health care services. However, my analysis of the Hispanic population in the KC Metro Areas comes to the exact opposite conclusion. Living inside of an ethnic enclave is significantly related to worse access to a doctor and dentist. I can reject my N_{H2} that residing in an ethnic enclave is not related to access to health care for Hispanic immigrants in the Kansas City Metro Area.

Accessing Prescription Medication

Accessing prescription medication appears to be somehow qualitatively different from accessing a dentist and doctor. Although generation is positively significant in the partial model, only income is a significant predictor of accessing prescription medication in the full model. This may be due in part to accessibility factors such as the large amount of pharmacies like CVS or Walgreens that are prevalent throughout the city. The person would have had to already been able access a doctor to obtain a prescription. Once they have a prescription it would seem that having the money to pay for the prescription is the main predictor of being able to fill it.

Another explanation for the difference in results for ability to access prescription medication in the last 12 months when compared to access to a doctor or dentist can be found in the research of Coffman (2008). She found that Hispanics that were uninsured and undocumented were more likely to use self-prescription. Self-prescription refers to taking

prescription medication without having it prescribed to you by a health-care provider. These self-prescribed drugs were mainly obtained from Mexico where they were manufactured. Quantitative differences in the results for access to prescription medication when compared to the results for access to a doctor or dentist may be due in part to the fact that medication can be readily brought over from Mexico, while doctors and dentists cannot.

Limitations

In order to draw more accurate conclusions from this study there would need to be a more equal representation of all aspects of the research population. This study's population had a much greater amount of first generation immigrants than both second and third generation immigrants. Having a low percentage in these two groups may have affected the statistical analysis.

In addition, the survey data used for this research study contained a considerable amount of missing data, which may have affected the results. The research data was gathered in informal settings such as churches, grocery stores, and public events. Privacy and having adequate time to answer all questions was not always ensured.

Future Research

The fact that Kansas City Hispanics do not display the health care paradox for any of my health care access measures, makes this research important for organizations that seek to help Hispanics in the KC Metro Area. Future research should look at what, if anything, ethnic enclaves in other states are doing or providing that is different from ethnic enclaves in the Kansas City Metro Area that makes health care more accessible in ethnic enclaves.

Additionally, future research should look at what specifically makes accessing prescription medication statistically different from accessing a dentist or doctor when needed.

Factors such as availability of over the counter medication or self-prescription may play into these results, but have not been confirmed by this study.

Another factor to consider in future research is the impact of the Affordable Care Act (aka Obamacare). The survey used for the data in this research study was distributed in 2012, before Obamacare was put into place. For this study, I did not filter out those participants who were illegal residents. In the future residency status will become a major factor when looking at health care access because all legal residents are required to carry health insurance. This may or may not affect health care access for Hispanics in the future.

It would also be beneficial to look at how the Kansas City Hispanics' access to health care compares to other immigrant groups here in Kansas City as well as in other cities across the United States. This would allow a clearer picture as to whether the factors that affect the Kansas City Hispanics' ability to access health care when needed is specific to their ethnic group and location only, or if it is a shared struggle with many other or all immigrant groups in Kansas City and Hispanic populations across the United States.

Conclusions

Health care is complex. The more perspective we can use to understand the intricate relationship between health care, residency, immigration, ethnicity, gender, age, and other important factors, the better able our society will be at helping everyone access it. This project sought to better this understanding for one specific group, Hispanic immigrants living within the Kansas City Metropolitan Area. After statistical analysis, it can be concluded that for Hispanic immigrants, ability to access health care when needed, as with any other race or ethnicity in the US, is most affected by income. Having affordable health care will increase the chances of Hispanic immigrants' ability to access health care when needed.

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VITA

Jocelyn Marie Betts was born December 11, 1987 in Vicksburg, Mississippi to Marlin and Debbie Betts. Jocelyn attended grade school in Louisiana and graduated from West Monroe High School in 2006. She was valedictorian of her class. Jocelyn attended MidAmerica Nazarene University for her Bachelor of Arts Degree in Psychology and Sociology. She graduated in the top ten percent of her class in 2010. She did an internship with both the Johnson County Juvenile Detention Center and Renew Eating Disorder Recovery while at MNU.

Jocelyn will receive her Masters of Arts in Sociology from the University of Missouri at Kansas City Summer of 2016. While attending UMKC, she had the opportunity of participating in an internship at the Institute for Human Development. During her internship, Jocelyn help with the 2012 Hispanic Needs Assessment. She not only help gather data for the Needs Assessment, but also made an online version of an additional survey.

Jocelyn has been employed at Kohl's since 2008. She currently works at the Lenexa location as the Apparel Area Supervisor. She was recently recognized as E3 leader of the month for her district.