

CAUSE OF HISPANIC HOMICIDES IN MAJOR METROPOLITAN AREAS

A Dissertation

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Michael Gregory Bisciglia
B.A., North Carolina Wesleyan College, 1996
M.A., Old Dominion University and Norfolk State University, 1999
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TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	ii
LIST OF TABLES	vi
ABSTRACT.....	viii
CHAPTER 1: INTRODUCTION.....	1
1.1: Introduction	1
1.2: Hispanics in the United States	1
1.2.1: Mexican Migration	3
1.2.2: Cuban Migration	8
1.2.3: Puerto Rican Migration	10
1.3: Poverty, Income Inequality and Segregation	12
1.4: Hispanics, Violent Crime and Victimization	14
1.5: Dissertation Outline	16
CHAPTER 2: REVIEW OF LITERATURE	18
2.1: Introduction	18
2.2: Theoretical Framework	18
2.3: Segregation and Crime	21
2.3.1: Segregation – An Introduction	21
2.3.2: Segregation and Crime	23
2.4: Segregation, Social Control and the Family.....	26
2.5: Social Class and Poverty – An Introduction	28
2.5.1: The Impact of Poverty and Income Inequality on Crime	29
2.5.2: Concentration Effects and Crime	33
2.6: Hispanic Populations in the United States and Research on Hispanic Homicide.....	34
2.6.1: Hispanics in the United States.....	35
2.6.1.1: Differences Across Hispanic Groups	36
2.6.1.2: Differences Between Hispanics and African Americans	38
2.6.1.3: Is There A Hispanic Underclass?.....	39
2.6.2: Research on Hispanic Homicide	42
2.7: Expectations	47
CHAPTER 3: METHODOLOGY.....	49
3.1: Data Sources	49
3.2: Unit of Analysis	49
3.3: Measurement	50
3.3.1: Operationalization of Race/Ethnic Categories	50
3.3.2: Dependent Variable (Hispanic Homicide)	51
3.3.3: Independent Variables	52
3.3.3.1: Segregation	52
3.3.3.2: Female Headed Households	55
3.3.4: Control Variables.....	55
3.4: Analysis	58
3.4.1: Descriptive Analysis	58

3.4.2: Multivariate Analysis	58
3.5: Detection of Analytical Issues	59
3.5.1: Multicollinearity	59
3.5.2: Heteroscedasticity	60
CHAPTER 4: DESCRIPTIVE STATISTICS	62
4.1: Introduction	62
4.2: Descriptive Statistics	62
4.2.1: Descriptive Statistics – Homicides	62
4.2.2: Descriptive Statistics – Segregation	64
4.2.3: Descriptive Statistics – Notable Control Measures	67
4.3: Summary	69
CHAPTER 5: NEGATIVE BINOMIAL REGRESSION	70
5.1: Introduction	70
5.2: Homicide and Segregation	70
5.2.1: Homicide and Segregation – Hispanics	70
5.2.2: Homicide and Segregation – African American	73
5.2.3: Homicide and Segregation – A Comparison	75
5.3: Disaggregated Hispanic Homicide by Ethnicity	76
5.3.1: Mexican Homicides	77
5.3.2: Puerto Rican Homicides	80
5.3.3: Other Hispanic Homicides	81
5.3.4: Summary of Hispanic Breakouts	83
5.4: Change in Segregation 1980 to 1990	83
5.4.1: Change in Segregation 1980 to 1990 Hispanics	84
5.4.2: Change in Segregation 1980 to 1990 African Americans	86
5.4.3: Change in Segregation 1980 to 1990 – A Comparison	87
5.5: Change in Segregation 1990 to 2000	88
5.5.1: Change in Segregation 1990 to 2000 Hispanics	88
5.5.2: Change in Segregation 1990 to 2000 African Americans	89
5.5.3: Change in Segregation 1990 to 2000 – A Comparison	91
5.6: Class and Segregation – Introduction	91
5.6.1: Class and Segregation Hispanics – Low to Middle/High Social Class Index ...	92
5.6.2: Class and Segregation Hispanics – Low to Middle Social Class	93
5.6.3: Class and Segregation Hispanics – Summary of Findings	94
5.6.4: Class and Segregation – African Americans	94
5.6.5: Class and Segregation African Americans – Low to Middle/High Social Class Index	95
5.6.6: Class and Segregation African Americans – Low to Middle Social Class	96
5.6.7: Class and Segregation African American – Summary of Findings	97
5.6.8: Class and Segregation- A Comparison between Hispanics and African Americans	98
5.7: Chapter Summary	99
CHAPTER 6: HOMICIDE – THE IMPACT OF FAMILY AND SEGREGATION	102
6.1: Introduction	102
6.2: Hispanic Female Headed Households and Homicide – Introduction	102

6.2.1: Hispanic Female Headed Households – Analysis	103
6.2.2: Hispanic Female Headed Households – Summary	105
6.3: Hispanic Female Headed Households and Homicide – An Exploration of Ethnic Group Differences	106
6.3.1: Mexican Female Headed Households and Homicide – Analysis	106
6.3.2: Mexican Female Headed Households and Homicide – Summary	109
6.4: African American Female Headed Households and Homicide	110
6.4.1: African American Female Headed Households and Homicide – Analysis	110
6.4.2: African American Female Headed Households and Homicide – Summary	112
6.5: Hispanic and African American Female Headed Households and Homicide – A Summary	113
 CHAPTER 7: DISCUSSION AND CONCLUSIONS	 115
7.1: Introduction	115
7.2: Summary of Findings	115
7.3: Theoretical Implications	121
7.4: Limitations and Direction for Future Research	123
7.5: Concluding Remarks	126
 REFERENCES	 128
 APPENDIX A: SAMPLE CITIES	 136
 APPENDIX B: CORRELATION MATRAXIES	 141
 APPENDIX C: OLS REGRESSION TABLES FOR PUERTO RICAN AND OTHER HISPANICS.....	 146
 VITA	 150

LIST OF TABLES

Table 1.1: Total Percentage of Hispanic Sub-Classifications from Hispanic Population in the United States and the Total U.S. Population	2
Table 4.1: Descriptive Statistics – Means and Standard Deviations for Hispanic and African American Samples	63
Table 4.2: Paired T-Test of Segregation (Dissimilarity) for Hispanics and African Americans	65
Table 4.3: Paired T-Test of Segregation (Exposure) for Hispanics and African Americans	66
Table 5.1: Negative Binomial Regression Models of Segregation Predicting Hispanic Homicide Victimization	72
Table 5.2: Negative Binomial Regression Models of Segregation Predicting African American Homicide Victimization	74
Table 5.3: Negative Binomial Regression Models of Segregation (Dissimilarity) Predicting Ethnic Specific Homicide Victimization	78
Table 5.4: Negative Binomial Regression Models of Segregation (Exposure) Predicting Ethnic Specific Homicide Victimization	79
Table 5.5: Negative Binomial Regression Models of Change in Hispanic Segregation 1980 to 1990 Predicting Hispanic Homicide Victimization	85
Table 5.6: Negative Binomial Regression Models of Change in African American Segregation 1980 to 1990 Predicting African American Homicide Victimization	87
Table 5.7: Negative Binomial Regression Models of Change in Hispanic Segregation 1990 to 2000 Predicting Hispanic Homicide Victimization	89
Table 5.8: Negative Binomial Regression Models of Change in African American Segregation 1990 to 2000 Predicting African American Homicide Victimization	90
Table 5.9: Negative Binomial Regression Models of Hispanic Class Specific Segregation Predicting Hispanic Homicide Victimization	93
Table 5.10: Negative Binomial Regression Models of African American Class Specific Segregation Predicting African American Homicide Victimization	96
Table 6.1: OLS Models of Segregation (Dissimilarity) Predicting Hispanic Homicide Victimization	104

Table 6.2: OLS Models of Segregation (Exposure) Predicting Hispanic Homicide Victimization	105
Table 6.3: OLS Models of Segregation (Dissimilarity) Predicting Mexican Homicide Victimization	107
Table 6.4: OLS Models of Segregation (Exposure) Predicting Mexican Homicide Victimization	108
Table 6.5: OLS Models of Segregation (Dissimilarity) Predicting African American Homicide Victimization	111
Table 6.6: OLS Models of Segregation (Exposure) Predicting African American Homicide Victimization	112
Table 7.1: Summary of Expectations and Findings: Negative Binomial Models	116
Table 7.2: Summary of Expectations and Findings: OLS Models	120

ABSTRACT

Research investigating the relationship between segregation and crime has been extensively examined in the literature. Although numerous studies have looked at segregation's influence on homicides, most have focused on African Americans. This study extends current research by focusing on Hispanic segregation and homicide victimization. Using a 236 city sample, homicides are shown to rise when Hispanics are segregated from Whites. In comparison, a 208 city sample finds that segregation also contributes to a rise in African American homicides. It was also expected that the more homogeneous Hispanic population would reduce homicides, but such an association was not present in the full Hispanic model, only in the individual Mexican analysis.

This study also goes beyond previous research by using ethnic specific measures to examine homicide. By analyzing homicides on the basis of a specific ethnic group, the findings illustrated that segregation measured as dissimilarity consistently affected homicides for all groups, while segregation measured as exposure shows inconsistent results.

This analysis also explores segregation disaggregated by social class. Among Hispanics and African Americans, although segregation increases with social class, its impact on homicide is only significant in the lower class. Changes in segregation from 1980-1990 and 1990-2000 were also expected to have a significant impact on homicides, but contrary to the expectations, only the change in exposure from 1980-1990 is significantly related to homicides for African Americans and Hispanics. Finally this study examines the direct and indirect effect of female-headed households on homicides. For all Hispanics, female-headed households are not associated with homicide, but it is significant for Mexicans specifically. It was also significant for African Americans.

CHAPTER 1: INTRODUCTION

1.1: Introduction

Compared to the volume of research on African Americans crime, there is a paucity of research examining the relationship between Hispanics and crime. (Blau and Blau 1982; Allen and Steffensmeier 1989; Harer and Steffensmeier 1992; Shihadeh and Steffensmeier 1994; Shihadeh and Flynn 1996; Shihadeh and Ousey 1998). This introductory chapter discusses the dynamics of the American Hispanic population, particularly its three largest ethnic groups (Mexicans, Puerto Ricans, and Cubans). Emphasis will be placed on descriptions of how the Hispanic population differs from other minorities, and how these dynamics affect income inequality, victimization, as well as other structural characteristics.

1.2: Hispanics in the United States: A History

This section will discuss the migration history of the three most prominent Hispanic groups in the United States, Mexicans, Puerto Ricans, and Cubans. This discussion will outline the political and economic motivations for their immigration into the U.S. including governmental policies that have aided or hindered this process.

The U.S. Hispanic population has more than doubled since 1980 increasing from an estimated 14.5 million to approximately 37.4 million in the year 2002 (Ramirez and de la Cruz 2002). The 2000 Census now reports that Hispanics have supplanted African Americans as the largest minority group in the United States (See Table 1.1). Today the makeup of the Hispanic population differs from that of other racial/ethnic groups. For example, among Hispanics some 34.4 percent of their population is under the age of 18, which is much larger than the 22.8 percent among non-Hispanic Whites (Ramirez and de la Cruz 2002).

Hispanics differ from African American Non-Hispanics, because their patterns of immigration have been largely voluntary and have primarily occurred during the twentieth century. Mexicans

are a voluntary immigrant group, Puerto Ricans, although originally a spoil of the Spanish American War, like Mexicans also voluntarily immigrate to the U.S. mainland. Likewise Cubans immigrated to the United States voluntarily, although they differ from other Hispanic groups since their relocation was to escape political repression rather than poverty (Marger 2003).

Table 1.1: Total Percentage of Hispanic Sub-Classifications from Hispanic Population in the United States and the Total U.S. Population^a

Ethnicity	Percent of Hispanic Population	Percent of Total U.S. Population
Mexican	62.6	8.0
Puerto Rican	10.1	1.3
Cuban	3.6	0.5
Other Hispanics	23.7	3.0
Total	100.0	12.6

^aSource: 2000 Census Supplementary Survey Profile of the United States

Internal migration among Hispanics is often based on nationality; Mexicans tend to migrate to the industrial Midwest and Southwest. Puerto Ricans typically immigrate to the Northeast (specifically New York City), while Cubans tend to relocate in Florida, the Northeast or Southern California (Ramirez and de la Cruz 2002; Marger 2003). This differs somewhat with the pattern of migration for Africans, which was first to the South and then during industrialization toward the Northeast (Wilson 1987).

Hispanics tend to reside in neighborhoods where they constitute less than half of the population, which is slightly less concentrated than African Americans (Suro and Tafoya 2004). Over the last decade the number of Hispanics living in majority Latino communities has increased faster than any other residential segment, with recent immigrants making up the largest number in these majority Hispanic neighborhoods. Overall, majority Hispanic neighborhoods tend to be concentrated in the lower classes (42 percent) or the upper classes (33 percent) (Suro and Tafoya 2004).

1.2.1: Mexican Migration

Mexican migration into the United States presents a unique situation. With the exception of Canada to the North, Mexico is the only other country which can provide a direct land entry into the United States. However, unlike Canada the difference in economic development between the U.S and Mexico is quite different. Further, the migration of Canadians into the United States is on par with U.S. migration into Canada, whereas Mexican immigration into the United States far outpaces American immigration into Mexico (Massey, Durand, and Malone 2002). Migration of Mexican males into the U.S. labor force has occurred for the better part of the last 100 years. The motivation for greater wages and an improved socioeconomic status is a driving force among many Mexicans (Kandel and Massey 2002).

Although the current U.S.-Mexican border was established under the Treaty of Guadalupe Hidalgo (1848) and a subsequent purchase in 1853 little control over the migration between these nations was originally enforced. Prior to the 20th century the migration that did exist primarily affected communities close to the border, and was often temporary in nature (Massey, et al 2002). Until the twentieth century there was little economic difference between the United States and Mexico and thus only a minimal draw for Mexican immigration. By 1910 ninety seven percent of rural families had been left landless and a seventh of Mexico's land was controlled by less than thirty individuals and companies (Massey, Alarcon, Durand and Gonzalez 1987). However during the early decades of the 1900's as political shifts took place in Mexico, the income gap between these two nations widened. The opportunity to generate a higher earning resulted in a wave of Mexican migration to the United States (Gann and Duignan 1986; Massey et al 2002).

As the United States moved into World War I, immigration from Europe declined. This coupled with the demand for American supplies and food stuffs resulted in a greater demand for

Mexican labor. As this demand grew, Mexican laborers began to branch outside of their traditional trade as agricultural laborers. By 1930 more than half of the Mexican population was now living in urban areas with only forty percent employed in the agricultural sector (Gann and Duignan 1986). Regardless of this shift, Mexicans still remained concentrated in occupations that were among the poorest, ones that had been vacated by previous immigrant groups (Cerrutti and Massey 2006).

Mexicans of the early twentieth century had little political power. However the changes in immigration laws during this period favored this group over other immigrant groups. The Immigrations Acts of 1921 and 1924 put into place a system of quotas regulating the number of immigrants who could enter the United States. Because it was easier to monitor immigration through the seaports than through land borders, these Acts worked to the benefit of Mexican laborers because both Canada and Mexico were exempt from these quotas (Gann and Duignan 1986).

The Great Depression had a profound impact on the lives of all Americans; however Mexicans (and Spanish speakers in general) were hit particularly hard. In part this was due to their historic occupational position. Although Mexicans had begun to exit the agricultural sector by the 1930s, most were still concentrated into occupational sectors which were characterized by low pay (Massey et al 2002). Also during the 1930's there was a movement in the United States to repatriate Mexicans back to their homeland, although the actual number of repatriated citizens is unknown (Gann and Duignan 1986; Massey et al 2002).

This practice shifted dramatically during World War II. With many Americans serving overseas during the war coupled with the increased demand for food as well as raw materials to aid the war effort, the U.S. government approached Mexico for the purpose of contracting labor. Even with women entering the labor force during this time, the demand for labor could not be

met. The Barcero Program began in 1942 (established under Public Law 45) following America's entrance into the War. This program produced a significant influx of Mexican migration as some 300,000 Mexicans moved their immigration status from temporary worker to permanent immigrant (Massey et al 2002; Cerrutti and Massey 2006). Under the Barcero Program workers were "guaranteed minimum wages, adequate living conditions, and the right to end their participation in the program and return to Mexico" (Garcia 2002:31). Further, under this program workers were restricted to employment in the agricultural sector, although this was not heavily enforced. From the start of the Bracero program until the end of the Second World War approximately 168,000 Mexicans were recruited into the U.S. labor force (Massey et al. 2002).

Public Law 45 stipulated that workers were to return to Mexico at the end of World War II, and due to pressure from the agricultural business sector the program was renewed until 1947 and then again until 1948. With the entrance of the United States into the Korean conflict in 1950, need for Mexican labor was once again renewed and remained a part of U.S. labor relations until 1964 when a variety of economic and political factors led to its end (Garcia 2002). During the twenty two year history of the Barcero Program it is estimated that some 4.8 million Mexican workers participated (Cerrutti and Massey 2006).

Historically there has been a need for immigrant labor in the United States. Regardless of this need public outcry and political pressure has balanced this need with the sentiments of the American public. One such example of this governmental response was the Hart-Cellar Immigration Act of 1965. With a rising number of illegal immigrants at the end of the Barcero program, this Act signified a shift in U.S. immigration policy as it eliminated the national origin quota system, replacing it with a preferential system that allowed for increased immigration from Asia and Africa (Garica 2002; Cerrutti and Massey 2006). These changes in immigration policy

coupled with an economic recession in Mexico resulted in Mexican's attaining the highest number of immigrants during this period of time (Cerrutti and Massey 2006).

Due to a declining economy, high inflation and dropping wages response within the U.S. government toward immigration shifted. Throughout the 70s Mexican immigration continued to gain political attention. In 1976 Congress passed new amendments to the Immigration and Nationality Act. Specifically the law was amended to only allow citizens over the age of twenty-one to petition for others to legally enter the country. In addition, a cap was placed on the number of legal entries who could enter the country to 20,000 for all Western nations. This cap on immigration was not originally extended to Western Hemisphere nations under the Hart-Cellar Immigration Act of 1965 (Massey et al 2002). Further changes in immigration policies in the late 70's resulted in a steady decline in the number of Mexicans legally immigrating to the United States. Between 1968 and 1980 the number of visas issued to Mexican citizens "dropped from an unlimited supply to just 20,000 per year (excluding immediate relatives of U.S. citizens)" (Massey et al 2002:43).

In 1986 the Immigration and Reform Control Act (IRCA) was passed in an effort to curb the still increasing number of illegal immigrants. Although the IRCA sought to change immigration policy and did not specifically single out any countries "there is little doubt that its primary purpose was to curb undocumented migration from Mexico" (Cerrutti and Massey 2006). This Act sought to address this issue in three major ways: 1) To sanction employers who continued to hire undocumented workers, 2) To provide amnesty provisions for undocumented workers who were residing in the United States, and 3) To increase federal funding for law enforcement programs, specifically between the U.S. and Mexican border. Even though the purpose of this Act was to slow the amount of immigration in reality it remained fairly constant. By 1990 the rate of immigration from Mexico had decreased only slightly.

To address some of the complications of the IRCA of 1986, in 1990 changes were made with the passage of the 1990 Immigration Act. Specifically as previously illegal immigrants transitioned to a legal status under the amnesty provision of the IRCA, the odds that they would sponsor family who were living abroad increased (Massey and Espinosa 1997; Massey et al 2002). Through the use of social networks established in the United States, the expenses associated with migration, and the information networks established has worked to increase the migration based of Mexicans rather than deter it (Fussell and Massey 2004). The 1990 Immigration Act placed emphasis on unifying families, seeking out immigrants with particular skills and professions, and increasing the underrepresented nations (Garica 2002). Finally, Congress attempted to control the rising number of immigrants by removing the flexible cap which was established under the IRCA (Cerrutti and Massey 2006).

The numbers of Mexican immigrants who have entered the United States since the passage of the 1965 Immigration Act have remained constant. Most Mexican nationals who took advantage of these immigration acts migrated to areas of the United States that have been historically concentrated with this immigrant group. Overall, Mexicans tend to be laborers in some of the lowest socioeconomic categories, with only six percent classified in the professional category; this is the lowest of all immigrant categories (Garica 2002). Among Mexicans migration is often dependent upon chain migration, where new immigrants are reliant on family networks to provide shelter, economic support, etc. when entering the United States.

Attempts to curb the flow of undocumented labor from the 1986 Immigration and Reform Act to intensified border patrol to stiffer penalties for immigration violation have caused a fundamental shift in the migratory flow of Mexicans into the United States today. Laws designed to control and curb immigration have actually produced a rise in the number of undocumented workers in the U.S. (Riosmena 2006). Amnesty provided under the 1986 IRCA

provided a social network which incoming migrants can tap into. In addition, increased security and stiffer penalties have resulted in a higher cost to undocumented workers when they take on a border crossing. As a result this added expense, coupled with a higher probability of an unsuccessful attempt makes many illegal immigrants less likely to take on multiple annual crossing for seasonal employment and to remain in the U.S. on a more permanent basis (Riosmena 2006).

1.2.2: Cuban Migration

Cubans are unique to Hispanic immigration as they tend to differ both economically and politically from other Hispanic immigrant groups. Although Cubans have immigrated to the United States for many decades, it is the post-Castro immigration that defines the Cuban immigration experience. Since they first began to flee in 1959, there has been a distinct link between them and their home country. As a result a large number of Cubans who reside in the United States see themselves not as immigrants but rather as political exiles (Gonzalez-Pando 1998). In a classic post revolutionary migration, some of the first to leave the country were the collaborators of the Batista dictatorship (in power from 1952 to 1959), who feared reprisal from the new Castro government (Gann and Duignan 1986). Following this group was an exodus of the business and professional class as well as defectors of the Castro regime. This initial wave of immigration from Cuba was that of the middle and upper classes. Regardless of their social class, often a lack of ability to speak English (even in the heavily Hispanic South Florida) coupled with unions that maintain barriers to newcomers resulted in many exiles taking the first job that they could (Gonzalez-Pando 1998). As many of these new immigrants believed that their exile to the United States would be temporary many did not move geographically beyond the Miami-Dade area of Florida. After the failed Bay of Pigs invasion (1962) members of the

exile community began to shift their attitude toward their exile in the United States, away from one of temporary to that of a permanent residency.

From the beginning, it had been the intent of the U.S. government to redistribute these exiles throughout the United States to reduce the financial burden placed on the South Florida communities; however such plans met with resistance from most Cubans, since they believed that their time in here would be short. Most of the individuals, who took advantage of the Cuban Resettlement Program, were those professionals who were seeking secure employment. Essentially they placed personal priorities over those of the liberation of Cuba from the Castro regime (Gonzalez-Pando 1998). At the same time that Cuban professional class was relocating from South Florida a new trend also began to emerge, the formation of a Cuban community known as Little Havana, where small business began to form and cater to this community.

In 1965 Castro announced to the exile community that all individuals who had family in the United States could leave Cuba. The probable intent of this action was to relieve internal pressure in the country by removing malcontents. In response President Johnson developed the 1966 Cuban Adjustment Act. Under this Act Cubans who were currently residing in the United States were given the opportunity to adjust their status to one of legal and put them on a path toward naturalization or permanent resident. Between 1966 and 1973, when Castro ended the freedom flights, some 300,000 Cubans fled the island (Gonzalez-Pando 1998).

The next major influx of Cuban exiles came in 1980 with the Mariel Boatlift, for a five month period in 1980 some 125,000 Cubans fled the island nation for the United States. Unlike the previous groups of exiles, this group was ideologically and demographically different than the previous refugee groups. Unlike the first two groups, the Mariel's were younger, less likely to be members of the Cuban upper and middle class, and tended to be multiracial rather than White (Gonzalez-Pando 1998). These differences resulted in a contrast between the new arrivals

and the immigrant community. It was later revealed that among the populist that Castro had also released criminals and the mentally ill (although it is doubtful that this constituted more than five percent). Within weeks of the Mariel boatlift, Florida experienced a number of problems; among them were housing shortages, unemployment and a crime wave. To resolve this problem, President Carter was forced to declare a state of emergency. In the end even the 10 million in funds that the Federal government released to the help the local governments did little to prevent a negative backlash to the Cuban community. The image that the Cuban community had worked to establish was now tarnished, an effect that remains today (Gonzalez-Pando 1998).

In 1994, the most recent surge of Cubans occurred. Throughout the early 1990s the number of Cubans leaving the island began to steadily increase as conditions began to worsen, following the collapse of the Soviet Union. In the spring of 1994 the Castro government ended its policy of arresting citizens for attempting to leave the island by sea, and as a result a fourth exodus to the United States began. By the end of the summer the U.S. government was forced to negotiate an agreement to end this latest influx of Cubans. This agreement also ended the preferential immigration that Cuban's had been given for the past 30 years. This policy stated that those who actually reached American soil would be sent back to Guantanamo bay until they chose to return to their homes. In a matter of months it was revised to allow for the possibility for these detainees to qualify for entrance into the U.S., nevertheless the point was clear, immigrants from Cuba now had to follow the same immigration procedures as everyone else (Gonzalez-Pando 1998).

1.2.3: Puerto Rican Migration

The Puerto Rican population on the U.S. mainland currently approaches that of the population of the island of Puerto Rico, and it is predicted that this number will surpass the island population by the year 2010 (Acosta-Belen and Santiago 2006:83). Historically the

United States has had a major influence on the migration of Puerto Ricans since the Spanish-American War of 1898, and is considered an associated free state. Historically a civil government with the right to elect their officials, replaced military control under the Foraker Act (1900). Under the Jones Act of 1916 the United States officially offered citizenship unless forfeited by the individual, giving them common rights to U.S. citizens yet it still did not give them full protection under the Constitution (Perez y Gonzalez 2000). In 1952 the status of Puerto Rico was change from one of a colony of the United States to that of a voluntary association when it was given Commonwealth status (Gann and Duignan 1986).

The migration of Puerto Ricans to the United States while present prior to the Spanish-American War has remained constant over the last one hundred years. Prior to World War II (The Pioneer Stage), movement to the United States was essentially limited to the New York City area, it is estimated that some eighty percent of Puerto Ricans who enter the United States are bound for this area (Acosta-Belen and Santiago 2006). In addition, many were also hired as seasonal contract labor in the agricultural areas of the United States (Perez y Gonzalez 2000). The early years of Puerto Rican immigration were primarily motivated for economic reasons, as a result of the U.S. occupation following the Spanish-American War (Acosta-Belen and Santiago 2006). The first immigrants who entered the United States were those who were from urban areas, employed and who had a higher education (Perez y Gonzalez 2000).

The second period of Puerto Rican migration occurred following World War II, known as the Great Migration (lasting from 1946 to 1964). Although the rate of immigration did increase during this period, it was more a matter of the general public becoming more aware of the increasing number of Puerto Ricans now living in the New York area, and other urban areas in the United States, than a true increase in the overall Puerto Rican population (Acosta-Belen and Santiago 2006).

The final stage of Puerto Rican migration (The Revolving Door Period) has extended from 1965 to present. What makes this stage unique is that many of the individuals who are now migrating to the United States maintain residency both within the U.S. and the home island. Because Puerto Rico is a U.S. territory, crossing into the United States and the subsequent return are not complicated by legal issues such as with Mexican and Cuban migrants. This back and forth migration pattern has resulted in a decrease in the net out migration from the island. Currently the largest concentration of Puerto Ricans live in the New York City area, although this only accounts for thirty three percent of this ethnic group (Perez y Gonzalez 2000).

1.3: Poverty, Income Inequality and Segregation

As a predictor of crime, research has indicated a link to income inequality (Blau and Blau 1982; Harer and Steffensmeier 1992; Shihadeh and Steffensmeier 1994; Martinez 1996). The 2000 Census reports that the earning power of Hispanics was lower than Whites, by 12,000 dollars but higher than Blacks by 3,000. Further, the Hispanic poverty rate (21.2 percent) was higher than those of Whites (9.8 percent), but again lower than those of African Americans (22.1 percent) but similar (DeNavas-Walt, et al. 2001). Within the Hispanic community, income varies depending on nationality. Puerto Ricans experience the lowest median income (30,000) while Mexican income is about 1,000 dollars higher. Further their rates of poverty and unemployment are lower compared to Puerto Ricans. Finally, Cubans have the highest level of income (38,000) as well as the lowest level of unemployment and poverty (Marger 2003). Such a large gap between these groups may have a significant impact on the relationship between income inequality and crime.

Industrial restructuring and the subsequent shift away from low skill-high paying jobs to information processing have caused a variety of negative outcomes. Included in this is an increase in income inequality not only between racial groups, but within them as well. With jobs

now removed, those who could follow the work did so, leaving those who remained socially isolated from the rest of society, creating an underclass. This compounded with an increase in the educational attainment resulted in greater income inequality for those who failed in their education (LaFree and Drass 1996). Among Hispanics, the rate of high school graduation is lower than that of non-Hispanic Whites, only some 57 percent of Hispanic attain a high school diploma, further 25 percent of Hispanics fail to attain a ninth grade education (Ramirez and de la Cruz 2002).

The out migration of the middle class from the inner city, to suburbia, not only resulted in the loss of traditional role models/informal social control, social institutions began to fail as well. Without the support of the middle class those left were faced with failing schools, lack of business structure, to socialize and control the community. This social isolation triggered a series of compounded negative structural shifts, primarily the loss of the middle class from that of lower class African Americans (Wilson 1987). Further, residential segregation and the social isolation it produces can have a detrimental effect on the minority population (Massey and Denton 1993; Shihadeh and Flynn 1996).

Blau and Blau (1982) have investigated the link between economic inequality and crime. They conclude, “socioeconomic inequalities between races and within them are positively related to high rates of violent crime” (126). They found that overall and inter-racial inequality was positively related to the occurrences of violent crime. Subsequent studies however have failed to demonstrate similar results for the between race comparisons (Harer and Steffensmeier 1992; Shihadeh and Steffensmeier 1994).

Harer and Steffensmeier (1992) tie together the concepts of segregation and income inequality. Their analysis considered not only Blau and Blau’s measures on income inequality, but an intraracial measure as well. The rationale was that highly segregated groups will use their

own race as an economic comparison opposed to individuals outside their race. This is because “people assess how well or badly they are faring economically not by comparing themselves with the population as a whole but with a particular reference group with whom they share some status attribute” (1992:1036). By disaggregating their data on the basis of race, the authors found that for Blacks no significant link was present although one did exist for the White-to-White measure. The author found that “the independent (direct) effects of income inequality on violence rates [were] trivial, but the indirect positive effect of high inequality, specifically Black to Black inequality on violence is quite substantial and is mediated by family disruption” (Shihadeh and Steffensmeier 1994:744).

The role of income inequality and measures of residential segregation are important when determining their effect on violent crime. Hispanics are similar to African Americans in their segregation and isolation from other groups, which may result in consistent findings with previous research. However, they also differ based on nationality, which could indicate that even a within ethnicity measure of inequality may not demonstrate an association. Instead, a within ethnic group measure of inequality may be necessary (See Shihadeh and Steffensmeier 1994).

1.4: Hispanics, Violent Crime and Victimization

As the preceding pages have discussed, there are both similarities as well as differences between Hispanics and African Americans. Among Hispanics we see a greater amount of ethnic diversity than we do among African Americans. Also the institution of the family differs than among African Americans and finally we see that their overall history, including their patterns of migration and their political and economic status within the United States are different as well. While these differences do exist at the same time we also observe similarities between these two groups. For example, among both Hispanics and African Americans we observe a higher than

normal rate of poverty as the negative affects that exist as a result, such as segregation from the majority community (especially among recent immigrants and the impoverished). Regardless of these similarities, official crime data points to a lower rate of victimization among Hispanics compared to African Americans. Therefore the question becomes why, if these two groups are structurally similar in regards to their social surroundings, do Hispanics experience a decreased rate of victimization.

One of the limitations to the study of Hispanics is a minimal amount of official data. Martinez and Lee (1999) indicate that official data such as the Uniform Crime Report (UCR) fails to accurately collect information on Hispanics. Another data limitation comes from victimization studies. Although sources such as the National Crime Victimization Survey (NCVS) collect data on the perceived characteristics of the offender, these data are suspect to the recollection on the respondent. Further the victim must be in the presence of the offender to provide this information. With the lack of official and victimization data at the national level, most research concerning Hispanics and Homicide has been limited to a region, state or city, rather than national analysis.

Between 1993 and 2000, the overall rate of victimization among Hispanics has dropped in a manner consistent with other racial groups. Further, their rate of victimization, although higher (27.9) than Whites, (26.5), is closer to that of African Americans (34.1) (Rennison, Fox and Zawitz 2002). Also, rates of homicide among Hispanics (12.6) fell between Blacks (29.2) and Whites (Rennison, et al. 2002).

Although Hispanics do report a lower rate of homicide compared to Blacks, there are a number of factors, which may affect their rates of homicide. As Cosier (1973) indicates, immigration to urban areas may produce anomic conditions. Immigration results in assimilation to a new culture, which can breakdown traditional social structures. This compounded with

effects of inner city decay (e.g., poor schools, under-funded social resources, lack of informal control, etc.) may result in an increased likelihood of negative outcomes (e.g., joblessness and violent crime).

Regardless, some studies have examined the relationship between crime and victimization among Hispanics. Martinez, (1997) examined the impact of the second wave of Cuban immigration to the Miami area in 1980, findings of his analysis indicate that unlike media accounts, the rate of offending among this group tended to be lower than that of pre-1980 Cuban immigration. Another study conducted by Martinez (1996), looked at how the unequal distribution of economic resources, education attainment and social/economic deprivation among Hispanics affected rates of homicide. He found that economic inequality, not poverty had a strong effect on homicide. City population also influenced this rate along with the region of the country and percent Hispanic in a given city (1996).

The general trend for research on Hispanics and Hispanic homicide has been to focus on a single city or a relatively few number of cities (see Cuciti and James 1990; Lee, Martinez and Rodriguez 2000; Martinez 1996; Martinez 1997 and Martinez 2002). Only a few of these studies have considered large samples (See Martinez 1996), focusing mainly on communities with high levels of Hispanic residence. In order to fully examine the dynamics that relate to Hispanic culture and how this impacts rates of homicide a complex analysis of the structural components throughout the largest cities of the United States will be necessary.

1.5: Dissertation Outline

This dissertation will be composed of seven chapters. In addition to the introductory chapter, a detailed discussion of the issues of relevance to this dissertation will follow in chapter two. This chapter will detail a variety information including discussions of poverty/income inequality, concentrations of poverty as it relates to homicide, segregation and crime, discussions

of Hispanics and the state of research on homicide specific to this ethnic group. Further I will discuss the within and between group differences among Hispanics as it relates to homicide. Finally chapter two will discuss the theoretical background for the forthcoming analysis and introduce my hypotheses. Chapter three will outline data sources, methodology and theoretical models that will be used to evaluate the expectations presented in chapter two.

Chapter four will present and discuss the descriptive statistics for this analysis. Chapter five will focus on testing the impact of segregation on Hispanic and African American Homicide by means of Exposure and the Index of Dissimilarity. Also chapter five will examine ethnic specific homicides among Mexicans, Puerto Ricans and Other Hispanics. Chapter six will focus on an examination of homicide measured directly and indirectly through female headed households. This analysis will be conducted for both Hispanics and African Americans to determine if these two minority groups differ on this dynamic. Finally chapter seven will summarize the findings for this study, discuss limitations of this analysis and directions for future research.

CHAPTER 2: REVIEW OF LITERATURE

2.1: Introduction

This literature review is divided into three sections. Section one presents the theoretical framework for the forthcoming analysis and my research expectations. The second focuses on research pertaining to the structural, social and economic determinants of urban homicide in the United States. Section three focuses on an examination of the research, and its shortcomings among Hispanics in the U.S. This section characterizes the similarities and differences between Hispanics and African Americans; it will also examine the state of research concerning Hispanics and segregation. Finally, it will discuss the correlation between these factors and rates of Hispanic homicide.

2.2: Theoretical Framework

The theoretical roots for this discussion are presented in the context of social disorganization theory. Theories of social disorganization can be traced back to Shaw and McKay (1942) and the work of early Chicago School. The key to understanding this theory is in the structure of cities and neighborhoods. Typically, Shaw and McKay describe a city layout as follows: At the very extreme outer ring is a commuter zone, then as you move inward you would next reach the homes of middle class blue collar workers, followed by lower class workers (but still home owners). Next as you get closer to the center of the city you would reach the relatively stable renters area, followed by the transition zone, characterized by high rates of population turnover, and finally you would reach the central business district. This illustrates that as you move closer to the center of a city, areas tend to become more socially disorganized.

To an individual taking the social disorganization approach, the unit of analysis is macro level, and typically will center on some measure of community such as the neighborhood. Therefore, researchers who follow this approach to understanding deviant behavior, reject

individual level explanations in favor of the processes by which a behavior will persist across subsequent generations and ethnic groups (Sampson and Wilson 1995). To these theorists the issue is not that a given community creates crime or deviance, rather it is the instability of the community's structure, which will produce crime. If the social structures of the community do not or cannot provide necessary resources/protection to its members then there is an increased likelihood for crime. Communities that are disorganized tend to have some common characteristics, such as higher and densely packed populations, a lack of community attachment, a higher than average rate of female headed households, unsupervised peer groups, "broken windows," abandoned housing and a transient population (See Shaw and McKay 1942).

Social disorganization as an explanation of crime focuses on two general models. The first is a systemic model, where social ties are viewed as a potential component to understanding how informal social controls form within a community (See Kornhauser 1978; Bursik and Grasmick 1993). Further, more recent works have focused on how social ties are important for access to and distribution of social support and social capital (Bursik 1999). A second approach to social disorganization centers on collective efficacy (Sampson, Raudenbush and Earls 1997; Sampson and Raudenbush 1999). From this perspective collective efficacy refers to informal social control and social cohesion. The primary difference is that one refers to the ability to intervene (Bursik and Grasmick 1993) while the other refers to the willingness to intervene (Sampson et al. 1997).

To test the concept of willingness versus ability to enact social control, Triplett, Sun and Gainey (2005) examined this question. Findings of their analysis indicated that there is a difference between willingness and ability to enact social control. The researchers also found "that when ability is controlled for, residents of disadvantaged neighborhoods are more willing to call the police than residents of more advantaged neighborhoods" (Triplett, et al 2005: 98). This

study suggest that if formal social controls (e.g. policing) are improved, the willingness on the part of the residents of these neighborhood to act as informal mechanisms of social control will be more forthcoming.

The concept of social disorganization occurs when there is an inability on the part of the community's social structure to realize common values that are held by the residents and to maintain the social control of individual behavior (Sampson and Groves 1989). The issue of social organization within a community is directly related to social networks, both formal and informal (Bursik and Grasmick 1993). Formal social networks can include organizational participation by members of the community whereas informal social controls are elements such as friends and family (Sampson and Wilson 1995). When mechanisms of social control are weakened or removed, the end result may be a higher rate of property and violent offenses within a community. Further, when there is an increased rate of social disorder in a given community the result can also be an increase in the fear of crime as well as the actual crime rate (see Skogan 1990).

One factor that is highlighted as preventing crime in the social disorganization model is the role of informal social control (Kasarda 1974). Researchers have continually indicated that when informal social control is no longer present, the rate of crime will increase. The social disorganization perspective holds that the presence of informal social controls in a community will provide the social structure necessary to minimize any persons' involvement in criminal activity.

Often poverty is seen as a structural condition that can serve to weaken social controls. The argument is that in areas with higher rates of poverty there is an increase in community disorder which will reduce the control the community has to regulate deviant behaviors, which in turn can lead to a higher crime rate (Bursik and Grasmick 1993). When areas experience high

concentrations of extreme poverty, social isolation as well as a variety of other negative effects, such as higher crime rates may result (Wilson 1987).

The topic of social disorganization (Shaw and McKay 1942; Wilson 1987; Massey and Denton 1993) focuses largely on African Americans populations in urban areas (See Peterson and Krivo 1993; Shihadeh and Flynn 1996; and Peterson and Krivo 2000). Regardless, is it not much of an assertion that the issues related to social disorganization, such as poverty, segregation, and concentrations of poverty may have similar impacts on other urban minority groups, such as Hispanics. It may therefore be expected that the rates of serious crimes, such as homicide, may be indirectly and positively associated as well. The possibility of that structural factors relate differently to rates of homicide for Hispanics is based on the concept that there are some differences between Hispanics and other urban populations. Therefore it can not be expected that disorganizing factors, such as concentrations of poverty and segregation will have similar effects on social organization within the Hispanic population, there by creating a different impact on their crime rates. Regardless, because there is only a small amount of empirical research on Hispanics and homicide it seems appropriate to assume that Hispanic homicide will be related to the social disorganization that exists within a given community.

2.3: Segregation and Crime

2.3.1 Segregation – An Introduction

Segregation on the basis of race is a topic of social and historical controversy. Although today most individuals would assert that segregation on the basis of races is unacceptable and creates a variety of negative outcomes, historically this has not been the case. Wilson (1987) asserts that the African American underclass has developed as a result of the historic relationship that has existed between African Americans and Whites in the United States. Through active periods of segregation, American society developed intentional policies to exclude, and later in

periods of desegregation to include African Americans. Although African Americans have politically attained the same standing as other Americans, the legacy of the historic relationship has resulted in several negative consequences.

As a result of variety economic factors, African Americans have become increasing isolated from other groups. One of these influences has been the shift in the American economic structure away from well paying low-skilled blue-collar jobs toward jobs requiring a higher degree of skill and education. This industrial restructuring has taken employment that had traditionally served to allow upward mobility for minorities and left them unable to move away from the inner city, leaving them trapped in the this social condition (Farley and Frey 1994). Although some jobs were mechanized, others were sent to the suburbs; those with the economic resources to follow this employment did so, leaving a higher state of poverty in the inner city. With no visible middle class a 'culture of poverty' began to develop in these areas. The result of this shifting economy resulted in two problems; a concentration of poverty and social isolation. To Wilson social isolation is the lack of meaningful sustained interaction with the larger community either in the form of its institutions or the representatives of them (1987). Because these individuals have little contact with stable families or steady employment, joblessness and unstable families become an acceptable fact of life. This coupled with a concentration of poverty, Wilson believes has led to an increased level of segregation between African Americans and other racial groups.

More closely related to the subject of segregation is the work of Massey and Denton (1988; 1993). Although Wilson sees segregation as an outcome of industrial restructuring and to some extent indirectly relating to poverty and crime, Massey and Denton directly related crime and poverty to segregation. Massey and Denton indicate that segregation on the basis of race is relatively new and that prior to industrialization, little segregation existed in American society.

However, with the onset, of industrialization African Americans migrated to areas of the country where these jobs were abundant, segregation became a way to minimize possible problems between racial groups. By the late 1970's residential segregation was a fact of American life, and it is only in recent years that we have begun to see an actual decline in the level of segregation (Farley and Frey 1994).

2.3.2: Segregation and Crime

One result of segregation is an effect on rates of crime. Massey and Denton discount Wilson's assertion that the loss of middle class African Americans and Whites from the inner city caused crime rates to increase, rather they propose that when accepting segregation as a social fact, any increase in levels of poverty will increase the concentration of poverty. Further they hypothesize that high crime rates in segregated inner city areas are the result of cultural adaptations to the structural constraints of these communities. Empirically, support is found for either position although there is a stronger effect for Massey and Denton's segregation hypothesis.

Massey and Denton (1988) also argue that to understand segregation different measures should be recognized (unevenness, exposure, centralization, concentration and clustering). Massey and Denton (1988) find that a high degree of correlation between all of these measures of segregation exists (except the clustering measure) with unevenness and exposure sharing the strongest effect. Further much of the research conducted on the subject of crime and segregation tends to use a measure of unevenness when addressing the issue of segregation.

Using an index of dissimilarity, Peterson and Krivo (1993) examine the impact of segregation on crime in the largest 125 cities in the United States. Findings of their study point to an increase in rates of homicide among strangers and acquaintances, but have no impact of the rate of family homicides. The authors hypothesize that this is because "social isolation and the

related lack of social control is the mechanism by which segregation leads to more homicides” (1993: 1020). They indicate that the influence of segregation and resource deprivation would have an effect on acquaintance and stranger homicides because these were likely to take place in public settings, conversely family homicides tend to occur in a private realm where the presence of these social controls will have little effect (1993).

Krivo and Petterson (1993) also find a positive association between segregation and crime with the index of dissimilarity. Further, it has been demonstrated that segregation affects homicide rates not only in the inner city, but in racially segregated suburbs as well. Krivo and Petterson (1993) have examined what they term “extremely disadvantaged neighborhoods” where rates and concentration of poverty are at the highest level. Modeling after the work of Wilson (1987), they again find a link between these areas of high impoverishment and rates of crime.

How poverty is concentrated in minority communities is where these individuals differ. While Wilson (1987) believes that it is the result of the out migration of Whites and the African American middle class, Massey and Denton (1993) contend that it has arisen as a result of a history of discrimination, which left African Americans residentially segregated. Although they differ on what they consider to be the cause of the segregation of African Americans and their concentration of poverty, both perspectives still retain several similarities. For example, both agree that there are several negative effects associated with the segregation and social isolation and to combat limited opportunities cultural adaptations have emerged as coping mechanisms.

In another study of segregation and homicide, Parker and Pruitt (2000), examine cities with a population over 100,000, using a measure based on unevenness (See Massey and Denton 1988). They find a significant association between residential segregation and homicide; however this finding is only significant for the southern region of the United States (Parker and

Pruitt 2000). They assert that this results from a combination of social and structural disadvantages, which lead to greater social isolation, and rates of homicide. These findings lend credence to Wilson's (1987) argument regarding the negative effects of social isolation among the African American community.

Several researchers have used unevenness to examine segregation, but Shihadeh and Flynn (1996) contend that a better measure is the level of exposure between members of the minority and the majority. In this work, the authors seek to further develop the link between segregation and crime through this measure of segregation. Interestingly enough while the authors profess that the exclusion of African Americans from White areas is important, they note that an isolation of African American from their own middle class may also impact crime rates. Shihadeh and Flynn (1996) find a positive association between a measure of unevenness and homicide, however when the authors control for spatial segregation they find the effect of unevenness to be minimal. This finding led them to conclude that although unevenness is an important, the use of a spatial measure of segregation worked as a stronger predictor of violent crime among African Americans (Shihadeh and Flynn 1996).

Shihadeh and Maume (1997) also examined alternatives to the use of unevenness as a measure of segregation. Their work examined the relationship between segregation measured via residential centralization and homicide. They justified this by indicating that "unevenness can take many forms, some of which may overlap with the other dimensions of segregation, and this makes it difficult to extract a discrete theoretical link between unevenness and crime" (Shihadeh and Maume 1997:257). The authors note that African Americans are typically centralized within core areas of cities which they find to be significantly related to rates of homicide. They conclude that rates of homicide are at their highest when the African American population is highly segregated within center city areas.

2.4: Segregation, Social Control and the Family

A community is not only place of residence, but also a mechanism for social control. When a community experiences high rate of family disruption bonds are weakened and deviant behaviors may develop. Kasarda and Janowitz's identify a community as "an essential aspect of mass society, the local community is a complex system of friendship and kinship networks and formal and informal associational ties" (1974:329). These ties, according to Sampson (1987) can work to promote a system of norms, which have made out-of-wedlock births acceptable behavior within the ghetto communities. Although researchers have examined the link between family disruption and crime at the individual level (Grove and Crutchfield 1982; McLanahan 1985; Matsueda and Heimer 1987; Wells and Rankin 1991; Jenkins 1995), most find that family factors explain only a small portion of the variation in delinquency. Therefore, it may be the concentrations of single parent homes that are more important than whether or not a person grows up in a broken home, when attempting to predict crime.

When lower class youth become segregated from middle class norms and values, the institution of the family may be compromised. Behaviors which middle class society would label as deviant may not be seen as such among some lower class individuals. Wilson (1987) asserts that the removal of the middle class has increased these negative outcomes with these communities. As individuals become concentrated in poverty social status is often determined by behaviors that are seen as counter productive for members of middle class society. This could include a willingness to be violent, or sexual promiscuity for males, while among females motherhood is often seen as a right of passage (Anderson 1999). Among teenage girls the formation of a baby club, where the pregnancy of one member of the social group and the positive reinforcement that it brings from the group creates a desire among other members to

enter motherhood (Anderson 1999). To this end when individuals are segregated from mainstream normative behavior, a rise in female headed households may ensue.

According to Wilson the increasing number of single parent households in the inner city is part of a growing trend affecting all racial and ethnic groups. Although this may be the case, African American households have been the most seriously impacted (57 percent) compared to Hispanics (32 percent) and Whites (21 percent) (1996). When one takes into account concentrations of single parent homes in the inner city, it is an additional factor, which may serve to weaken informal social controls. In 2002, over 25 percent of Hispanic households consisted of five or more people, with the largest family size among those of Mexican decent (Ramirez and de la Cruz 2002).

Sampson also argues that there is a link between rates of male unemployment and family disruption. He believes that this exists for several reasons. First, broken homes may weaken social controls and second, when communities have high rates of family disruption there is a decrease in the formal social control that the community can exert on its members (Sampson 1987). When communities have high levels of formal social control, they are better able to keep their members engaged in socially prescribed behaviors (Kornhauser 1978). Finally, when rates of female-headed households are high there will also be a decreased level of informal social control (Sampson 1987). When communities have, little informal control deviance is prevented through formal structures, such as the police and local government, institutions which are typically reactive to crime rather than pro-active.

In comparison to African Americans the number of Hispanic female-headed households is lower (6.5 percent versus 13.2 percent, respectively) (Dalaker 2001). This difference may be due to the over representation of Mexicans among the American Hispanic population. Bean, Berg and Van Hook (1996) contend that “Mexican Americans . . . [are] less divorce and

separation prone because the members of this group are thought to adhere more strongly to traditional familistic orientations involving strong proscriptions against divorce” (596), in comparison to other Hispanic ethnic groups. Further Bean and Tienda propose that this lower rate is due to the large immigrant base among the Hispanic community (1987). These groups also compare in the role of the extended family. There is a “greater prevalence of extended household structure among Hispanics and Blacks” in comparison to Whites (Tienda and Angel 1982:508).

2.5: Social Class and Poverty – An Introduction

In addition to race or ethnic based segregation there is also the issue of social class segregation to consider as well. This section will discuss the impact of poverty on minority groups, specifically how concentrations of poverty can isolate these groups from mainstream society and create a social milieu conducive to increased crime rates.

In relationship to other industrialized nations, the United States has one of the highest homicide rates. Even within the U.S. there are some geography areas that display a higher rate of homicide than other areas. Bailey (1984) notes that the rate of homicide is higher in urban areas compared to rural regions of the United States. Further, research has also established a link between race and homicide, among cities with populations in excess of 100,000 (Hawkins 1999; Ousey 1999). Although Hispanic homicide rates have not eclipsed that of African Americans, research has consistently shown a higher than average homicide rate for this group (Martinez 1996). Data on lethal violence from both the Uniform Crime Report (UCR) compiled by the Federal Bureau of Investigation (FBI) and Vital Statistics, compiled by the Centers for Disease Control (CDC) both indicate a homicide rate for Hispanics, which falls between the homicide rates for Caucasians and African Americans (Hawkins 1999; Rennison 2002).

Recent research has produced a number of macro level analyses that attempt to explain why high rates of victimization occur in urban areas, and why in fact they tend to vary with factors such as race/ethnicity, age, gender, etc. Macro-level analyses focus on the conditions which exist within a give space, be it a neighborhood, a city, or some other geographically defined region that effect crime (Sampson and Wilson 1995). These factors may be structural in nature, such as the presences of economic inequality between different social groups. It could also be cultural, where there are social characteristics within a given area, such as a community, which reinforce behaviors that are seen as undesirable by the general pubic (Blau and Blau 1982).

When examining poverty among Hispanics, one must note the differences that exist between this group and other groups in the United States. For example, the trends in poverty between 1972 and 1992 show a minimal increase in poverty for Whites (2.9 percent) and a stable, but high rate for African Americans (33 percent) whereas, during the same period of time the poverty rate for Hispanics decreased from 38 percent to 29 percent of the overall population (Tienda 1995). Such a staggering level of poverty among these groups may influence rates of crime among the Hispanic population.

2.5.1: The Impact of Poverty and Income Inequality on Crime

The link between poverty and crime can be viewed in terms of a strict measurement of poverty or it can be given relevance by looking at it from the perspective of the income inequality that exists within a given area. Economic deprivation arises from a variety of compounding factors all of which can affect a community. A traditional definition of poverty is typically based on an absolute value, such as the cost of living for a given area, family size, etc. Therefore, when an individual falls below a given economic marker he or she is considered to be in poverty (Messner 1982). This definition rests on the principle of an absolute standard, that

when a person meets this threshold they are considered to be in poverty. This measure may vary from year-to-year and will typically be defined by a federal agency, such as the Social Security Administration (SSA) (Messner 1982; Sampson 1985; Warner and Pierce 1993; Martinez 1996). Based on this measure, since 1970, there has been a consistent increase in the number of households considered to be in poverty (Massey 1996). Although this measure of absolute poverty is typically used, researchers are free to define their threshold based on other factors, or an artificial threshold of their own choosing.

The argument for the use of relative poverty as a predictor of criminal behavior can be traced to strain theory. Such a position asserts that when individuals are unable to meet the culturally defined goals of society (e.g. material wealth, financial security, etc), they will adapt to their situation in a number of ways. The greater the disjunction that exists between the goals of a society and the means at hand to meet these expectations, the greater the likelihood that strain will exist and that deviant behavior will result (Merton 1938). To meet the expectations of society, some individuals are therefore forced to adapt, one manner being to innovate or react to socially deviant behaviors to meet those expectations (Akers 1997; Vold and Bernard 1986). Therefore to measure poverty using a relative standard captures the visible inequality in a given area, allowing for the observation of human reactions, which may otherwise be missed (Messner and Tardiff 1986; Agnew 1992). While this serves as a valid justification for the use of such a measure, it fails as it blurs the association between the macro and micro levels of analysis. Shihadeh and Ousey (1998) assert that this justification relates the individual characteristics of the offender but fails to examine the overall social contexts that are associated with the crime (Sampson 1986; Shihadeh and Maume 1997).

Although there is a long-standing body of research, which uses an absolute measure of poverty, a second measure based on relative standards has been used as well. In this approach,

poverty is based on the inequality of income between those with the highest and the lowest income (Blau and Blau 1982; Sampson 1985; Petterson 1993). Relative poverty is measured by comparing the difference in median income between different racial groups for given areas (Tienda and Jensen 1988; Martinez 1996). From this perspective, people are poor when they are lagging behind others, not when their income fails to meet a prescribed standard (Messner 1982).

Several studies have sought to examine the association between poverty/income inequality and crime rates. Using data from the largest 125 cities in 1970, Blau and Blau (1982) find that the absolute measure of poverty was not correlated with rates of violent crime. However, they did show that income inequality between African Americans and Whites, as well as within race measures of income inequality are correlated with rates of violent crime. When income inequality is controlled for, the effect of poverty was negated (Blau and Blau 1982).

Refuting this position, Messner (1982) also examines poverty as well as income inequality, using a sample of 207 Standard Metropolitan Statistical Areas (SMSA's). To measure poverty, Messner uses two standards: (1) the proportion of the population who were living below the SSA deemed poverty level, and (2) the proportion of the families with an annual income of less than 1,000 dollars per month. In contrast to Blau and Blau (1982), Messner (1982) finds a significant association for both measures of poverty, and no significant association for the measure of income inequality on rates of violent crime.

Attempting to refute the contention of both Blau and Blau (1982) and Messner (1982), Williams (1984) examines the same data using a different statistical technique. The outcome of his analysis reported a positive association between the absolute measure of poverty (Note: This was based on SSA guidelines) and homicide rates. Further, his analysis of income inequality indicated no significant association between the Gini-coefficient and homicide.

Another researcher who analyzed this association was Sampson (1985). Using a smaller sample of the 55 largest cities, Sampson's findings also differ with the results of both Blau and Blau (1982) and Messner (1982). Using a measure of income inequality based on the median income of African Americans and Whites, and the SSA guidelines for poverty Sampson finds that for African Americans income inequality has a negative effect on homicide rates. He also finds that poverty is positively associated with rates of homicide. This effect is not mitigated based on the size of the city's African American population.

Bailey (1984) also looked at this association, using a longitudinal analysis of poverty and homicide, for the 1950's, 1960's and 1970's. Bailey argues that the use of city-level data is justified because "homicide rates are much higher in central cities within SMSAs than in surrounding areas" (1984:534). Bailey finds a positive association between homicide and poverty for all three time points, while finding no support for his measure of economic inequality (1984:554). In a similar study, Patterson (1991) findings are complementary to Bailey's (1984). Using a poverty measure of less than 5,000 dollars in income for 1977, he finds a positive association between crimes of violence and poverty. Also, like Bailey, Patterson finds no support for his measure of income inequality.

Studies investigating the relationship between crime and poverty, be it relative or absolute, have yielded inconsistent results (Land et al 1990, Messner and Golden 1992; Patterson 1991). Land et al. (1990) who has reviewed studies from both the 1970's and 1980's report that the effect of (absolute) poverty and/or income inequality (relative poverty) shows a consistent presence of a correlation. Some of these discrepancies can be traced to methodological issues, such as the selection of the sample size, and the statistical techniques used in the analysis. Another factor is the unit of analysis used, looking back across these studies, the authors note

that some used cities as the unit of analysis, while others used SMSA's or other geographically defined areas.

2.5.2: Concentration Effects and Crime

Wilson, in his work *The Truly Disadvantaged* (1987) advocates the use of a concentration of poverty measure within inner cities as a means to analyze the structural outcomes of poverty. Wilson asserts that an African American underclass has developed in America's inner cities as a result of the historic relationship that has existed between the races in the United States. Wilson (1987) has proposed that the social isolation of African Americans in American society has resulted in a concentration of African American poverty and the development of a Black underclass. This has led to a number of negative consequences such as higher rates of unemployment, single parent households and higher crime rates compared to the general public (Cuciti and James 1990). This, coupled with industrial restructuring, which moved high paying low-skilled jobs from the inner-city created an exodus of the African American middle class who could leave, removing this positive contact from those in the community who may have benefited from it (Wilson 1987). Research on this topic indicates that inner-city communities have segregated poor families from contact with other social/racial classes, leaving their only contact to be with other urban poor who are more likely to display non-conventional norms and values (Wilson 1987; Massey and Denton 1988, 1993; Lee 2000). The result is that poverty alone may not be the sole factor; rather it may be a concentration of poverty, which is responsible for increased rates of violent crimes.

Parker and Pruitt (2000) investigate the relationship between concentrations of poverty and homicide. Taking the largest 100 cities from the Urban Underclass Database in 1990, along with the UCR, Parker and Pruitt find an association between rates of homicide and concentrations of poverty for homicides among Whites, but not African Americans.

Another study conducted by Lee (2000) used UCR data to examine the same concentration effect in 121 central cities. Unlike Parker and Pruitt (2000), Lee does find a positive effect for concentration of poverty and homicide for both Whites and African Americans. He asserts that the concentration of poverty for the urban poor and the resulting spatial isolation that results acts as a strong determinant of homicide levels, thus there is no interactive effect present. That is, race does not interact with concentrated poverty to produce differential rates of homicide for Whites and Blacks” (Lee 2000:201).

2.6: Hispanic Populations in the United States and Research on Hispanic Homicide

Researchers such as Hawkins assert that there has been insufficient progress made when attempting to understand the impact of race, ethnicity and social class in homicide offenses and victimization (1999). This has become abundantly clear when one examines the limited amount of research concerning Hispanics and homicide. Furthermore, the bulk of current research on the subject of race and homicide tends to focus on African Americans, paying little to no attention on Hispanics (Martinez 1996; Martinez 1997). For this reason there is little research, which examines the unique social/structural characteristics that influence violent acts such as homicide (Martinez and Lee 1999). There are two major reasons why this social group goes unnoticed in the literature. First, the study of Hispanics is hampered by the limited amount of official data. Sources such as the Uniform Crime Report (UCR) fail to accurately report data for the Hispanic population (Martinez and Lee 1999). Second, excluding those of Mexican ethnicity prior to the 1970’s the Hispanic population was not recognized as an ethnic group in the United States. Until this point much of the official data on victimization, employment, etc. failed to capture the Hispanic population (Bean and Tienda 1987). Currently the recording of Hispanic ethnicity in the UCR is voluntary on the part of the policing agent, resulting in an uneven measure of Hispanic crime and victimization, particularly in cities where the Hispanic population is

minimal. Another data limitation comes from victims studies, which to accurately identify the ethnicity of the offender requires the presence of the victim as well as an accurate recollection of the offender.

In recent years a renewed focus on the Hispanic population has surfaced (See Martinez 1996; 1997), however compared to research focusing on other racial groups, it is still limited. Today, with the Hispanic population now the largest ethnic group in the United States there is a trend toward bringing this community into the field of homicide research. Most important to this perspective is a need to extend the research on homicide to determine if theories developed to explain homicides among African Americans adequately apply to Hispanics (Hawkins 1999:199-200). Researchers point to the idea that structural factors such as poverty and income inequality, employment, etc. may impact different groups to different degrees and in different ways (Sampson 1987). Simply put factors such as social isolation and segregation may not only exist in a different form for Hispanics compared to African Americans, but they may also differ in how they are affected. The purpose of this portion of the literature review is to first discuss the characteristics of the U.S. Hispanic population, and second to examine the state of research on Hispanic Homicide and the limitations that currently limit our understanding of this research.

2.6.1: Hispanics in the United States

According to Bean and Tienda the U.S. Hispanic population can be traced back to some 23 Hispanic nations (1987). Although there is a great deal of diversity surrounding these groups, the Census Bureau divides Hispanics into four primary categories. The first three consist of the largest ethnic groups in the United States (Mexicans, Puerto Ricans and Cubans) while the remaining group is comprised of all other ethnicities (See Table 1.1 for a demographic breakdown of these groups). The rate of population growth among Hispanics has been greater compared to Non-Hispanic groups (See Cuciti and James 1990). Further the age distribution of

the U.S. Hispanic population is younger (by 9.5 years) compared to the non-Hispanic population and their overall family is greater (3.8 compared to 2.6) (Moore and Pinderhughes 1993).

Poverty rates among Hispanics are higher than Whites and seem to be rising at a rate which is faster than the poverty rate of African Americans. From the late 1970s to the mid 1980s the overall rate of poverty for Hispanics climbed over 6 percent compared to a rise of only one half of a percent for African Americans (Cuciti and James 1990). Although the percentage of Hispanics currently living in poverty is not greater than those of African Americans, this rate is more closely associated to African Americans than Whites.

The increasing number of Hispanics currently living in poverty could be a result of a variety of different social and structural conditions. For example, Santiago and Wilder (1991) assert that families of Hispanic decent are more likely to be among the working poor and to receive a lower pay compared to Whites. In addition, Farley (1987) points to a difference in unemployment rates, due to a reduction in job opportunities as a result of the segregation of Hispanics from larger society. Bean and Tienda also find an increased level of unemployment among the Hispanic population, compared to Whites (1987). This in combination with an increase in single parent households results in a reduction of able personal to commit to the labor force outside of home (Cuciti and James 1990). Although the number of single parent households is lower for Hispanics compared to African Americans, the rate of households in poverty remaining similar (36.5 percent versus 38.7 percent) (Dalaker 2001).

2.6.1.1: Differences Across Hispanic Groups

Within the Hispanic population there are number of different ethnicities who manifest their own unique sub-cultural variations. Further, each group tends to settle in a specific geographic region within the United States (Bean and Tienda 1987). Among Hispanics, Mexicans typically migrate to the industrialized Midwest and Southwest, Puerto Ricans will

locate to the North Eastern regions of the United States, while Cubans typically migrate most heavily to Florida, but to the Northeast and California as well (Merger 2003).

The Hispanic population in the United States also differs greatly in relationship to segregation. Massey and Denton (1989) examine the level of residential segregation by means of the index of dissimilarity. Using the 10 largest cities for each respective Hispanic population they find that the amount of segregation that each group experiences differs (Massey and Denton 1989). For example, Puerto Ricans experience a high degree of segregation compared to Whites (.665) a value that increases when areas outside of the Northeast are excluded (1989). In comparison, the index of dissimilarity was slightly higher for African Americans (.666). Among Mexicans, Massey and Denton find an index of dissimilarity among Whites fell in the moderate range (.519) while it was high among African Americans (.601) (1989). Finally Massey and Denton reported that the segregation between Cubans and Whites is .577, while the level of segregation among Cubans and African Americans is very high (.798) (1989).

Furthermore, in regions of the United States with extremely high rates of Hispanics there is even greater ethnic diversification compared to areas of the U.S. with a lower Hispanic population. For example, Martinez reports that in the city of Miami Hispanics make up a large proportion of the population, but it is not homogeneous, rather it is a combination of Cubans, Dominicans, Puerto Ricans, Hondurans, Nicaraguans, etc. (2003a).

Another means to examine Hispanic groups is to look at the issue of poverty. Among Hispanics Puerto Ricans are among the most impoverished, in comparison, Cubans retain the lowest rate of poverty, while those of Mexican ethnicity have a earnings power in the middle, but closer to that of Puerto Ricans (Moore and Pinderhughes 1993; Merger 2003). Poverty rates among Hispanics were the lowest in the Southwest, 21 percent, versus the national average of 27 percent (Cuciti and James 1990).

2.6.1.2: Differences Between Hispanics and African Americans

When examining poverty among the various Hispanic ethnicities it remains lower than that of the second largest minority group in the United States, African Americans (21.2 percent versus 22.1 percent) (DeNavas-Walt, et al. 2001). Although it should be noted that the rate of poverty among Puerto Ricans surpasses that of African Americans.

Unlike African American communities, Hispanic communities are confronted with the issues and challenges of immigration (Sandefur and Tienda 1988). Further the Hispanic communities of the inner city are “continually taking in migrants, central city Black communities have experienced out-migration in recent years” (Cuciti and James 1990:57). This constant influx of new Hispanics to the inner city has created a turnover effect within these communities (Moore and Pinderhughes 1993). Those Hispanics, who do immigrate to these areas, while each may be unique in nature, tend to have three common characteristics: 1) The immigrants tend to be young in age; 2) There is a strong motivation to work and 3) These immigrants tend to locate in communities with a stable Hispanic population (Cuciti and James 1990).

Martinez and Lee draw a connection between immigration and economic deprivation (1999). They report that the economic conditions that current Hispanic immigrants experience in urban areas depart from the economic conditions which were experienced by previous groups of immigrants in the early twentieth century (1999). The industrial restructuring of the inner city has resulted in a set of economic conditions that make social mobility more difficult to achieve. The results are that many new immigrants must take up residence in communities that lack resources in comparison to the surrounding neighborhoods (Martinez and Lee 1999). Moore and Pinderhughes (1993) add to this point, contending that among immigrants many remain ineligible for most government benefits. This in combination with a need to take some of the lowest paying jobs puts them at a greater risk than other employees. This is because jobs that

lack stability and benefits make it difficult for this type employee to generate any savings that could stave off temporary unemployment.

Massey and Denton (1989) describe another manner by which Hispanics differ from African Americans. They assert that while segregation does exist among Hispanics, the degree and multiplying effects of segregation remains lower compared to the level of segregation among African Americans (1989). Further Hispanics are less likely to be segregated along multiple measures simultaneously compared to African Americans. In a study of 59 metropolitan areas they found that Hispanics had “far greater access to suburbs; they experienced moderate levels of residential segregation and limited spatial isolation in most central cities and low to moderate in the suburbs” (Massey and Denton 1988:622). In short their level of integration was higher than that of African Americans (Massey and Denton 1988).

Santiago and Wilder report that the segregation between Whites and Hispanics increased during the 1970s, while the level of segregation between Whites and African Americans decreased (1991). Cuciti and James (1990) find that although the level of segregation among Hispanics in the Southwest has been historically lower than the level of segregation between African Americans and Whites, on a whole they had made a slower progress toward community integration. They also found that the number of Hispanics who are concentrated in areas of high poverty is greater than the number of African Americans, and that the isolation between the poor and non-poor Hispanics is greater than that of African Americans (Cuciti and James 1990).

2.6.1.3: Is There A Hispanic Underclass?

Wilson (1987) contends that the concentration of poverty among the nation’s inner cities has a negative effect for both African Americans and Hispanics. In the largest five central cities in the United States for 1980, 32 percent of low income Hispanics and 39 percent of low income African Americans were concentrated in poverty, in comparison to only 7 percent of Whites.

Although the concentration of poverty is lower for Hispanics, compared to African Americans, given the fact that it still encompasses one-third of this population, the concept of an underclass remains relevant. Even though this idea of a Hispanic underclass exists, due to the differences between this group and African Americans, how they are affected and applied may be different.

A major factor contributing to the formation of an underclass among African Americans is the industrial restructuring that occurred in the central business districts of major metropolitan areas (Wilson 1987). As African Americans migrated to the Northeast and Midwest, they located in the transitional zones of cities (See Shaw and McKay 1942). The intention being that they would establish themselves as other minority and ethnic groups had but with the changes in the structure of the labor force during the late 60's toward a more information-based economy in the inner city, and by the early 80's the loss of low skill jobs all together (see Farley and Frey 1994) individuals who had relied on these occupations became trapped, unable to leave the social condition of the inner city. Although some jobs did transfer overseas, others simply moved to the suburbs. This further exacerbated the developing problems of the underclass since those with the social/economic capital to relocate to the suburbs to follow this employment did so, leaving a vacuum where conventional informal social control once existed. Those who were left were put at a further economic disadvantage since those remaining supportive sources of employment (e.g., restaurants, groceries, etc.) eventually lost economic viability further leading to the deterioration of the inner city. Those who lacked the resources to relocate or the transportation necessary to now seek employment outside of their neighborhood were left to become part of this underclass.

Extending on the work of Wilson (1987), Tienda (1989) suggests that the economic restructuring within large U.S. cities has had a negative effect on Puerto Ricans as well. Tienda asserts that the economic restructuring of Northeast cities during the mid-1970s is most likely

cause. While Tienda contends that the increased inequality among Puerto Rican Hispanics may be partly due to the downturns in the job market for minority workers, further research on the topic is necessary (1989). She also notes that while the concept of an underclass may apply to individuals of Puerto Rican ethnicity the economic well-being among “Mexicans experienced modest and Cubans substantial improvements to economic status” during the same period (1989: 106). This may in part be related to the internal migration patterns of Hispanics, specifically the economic restructuring which took place in the Northeast and Midwest (the rustbelt) did not impact the Sunbelt cities in the same manner (Moore and Pinderhughes 1993; Tienda 1989). Others assert that Hispanics should be excluded from the underclass because of differences which exist between the cities of the Northeast and those of the Southwest (Cuciti and James 1990). Supporting this argument is Velez-Ibanez who believes that the concept of an underclass should not apply in areas of the Southwest since the economic structures that exist in states along the boarder differ from cities in the Northeast (1993).

The debate therefore becomes to what extent do Hispanics, if they do at all, constitute an underclass? Although Wilson (1987) believes that concentration of poverty is the central concept of an underclass, Moore and Pinderhughes (1993) assert that while Mexicans did experience an increase in immigrants during the 1980s, they did not experience an increase concentration of poverty like Puerto Ricans did during the mid-1970s. Further, Rodriguez (1993) maintains that a concentration of poverty among some Hispanics may in fact be beneficial. In his work, Rodriguez asserts that the economic recession during the early to mid 1980s in Houston worked to produce areas of concentrated poverty that led to several beneficial outcomes. This recession served to move some of the Mexican residents from this area to other areas either in the United States or in Mexico, thereby freeing up room for a new Central American workforce. This along with a depressed housing market allowed new workers to enter

the city and eventually aid in the revitalization of Houston's economy (Rodriguez 1993:124-125). Further Rodriguez asserts that the issue of social isolation which Wilson (1987) contends is a contributing factor to the African American underclass was useful for Hispanics in the Houston area, causing them to strengthen and build new social institutions (1993:124).

Cuciti and James (1990) shows that the concept of an underclass fails to relate to the experience of Hispanics living in poverty. This is because of the norms and values emphasized in Hispanic culture. "Available evidence implies that Chicano families are influenced by three values: familism, male dominance and subordination of younger persons to elder ones" (Cuciti and James 1990:59). These values, they believe work to alleviate the discouraging effects of extreme poverty. While these values may not be absent of structural factors, they are indicative of a family structure, which puts the good of the family ahead of individual needs (Cuciti and James 1990).

While the concept of an underclass may or may not accurately apply to Hispanics as a whole, or among a specific ethnicity, how structural factors of a community, such as income inequality, poverty and segregation affect rates of homicide may differ based on racial or ethnic groups.

2.6.2: Research on Hispanic Homicide

Research examining the relationship between Hispanics and homicides has traditionally been limited in two ways: First they will often focus on a single Hispanic ethnicity and second they will typically examine a single or a relatively few cities. Rodriguez (1988) examines rates of homicide among Hispanics between 1980 and 1983 in New York City. This study demonstrates a higher than average rates of homicide, with Puerto Ricans showing a homicide rate higher than those of non-Puerto Rican ethnicity. In relation to this Rodriguez reports that the median income in this area was lowest for Hispanics (9,676) compared to 10,713 for African

Americans and 16,058 for Whites, however Hispanics displayed a lower homicide rate compared to African Americans. Further the rate of family related homicides is lower among Hispanics compared to African Americans (11.9 versus 16.7). In addition the structural social conditions under which these groups live in is important when considering rates of homicide. If the Hispanic “population were subjected to the same structural characteristics as the White population, the Latino homicide rate would actually be lower” (Phillips 2002:366).

Martinez (1997b) looks at homicides among Whites and Hispanics in Miami from 1990 to 1995. Results from this study demonstrate only a small difference in the homicide rate between the two groups (21.66 versus 19.83). This study reports that even with an increased rate of Cuban immigration during the 1980s, the rates of homicide still decreased (Martinez 1997b). One difference exhibited between this study and the findings of Rodriguez (1988) is that the number of family homicides is higher in Miami among Hispanics compared to African Americans. This seems to point to the idea that rates of family violence may differ between the different Hispanic ethnicities due to the possible differences in their cultural norms and values (Martinez 1997b).

In the same study, Martinez specifically examined the rates of homicide among the Mariel refugees, a group of 125,000 Cubans who immigrated to the South Florida region beginning in 1980. Results from his analysis concluded that the rates of victimization and offending were higher for the Mariel immigrants compared to those who arrived prior to the 1980s, however this association decreased later in the decade (1997b). Such a finding seems to support Shaw and MaKay’s (1942) argument that increases in center city immigration is associated with an increasing rate of juvenile crime. Further, most delinquents, are produced by the “newest large immigrant or migrant groups in the city” (1942:374).

Furthering the research on this topic, Lee, Martinez and Rodriguez (2000) examines the victim/offender relationship among Hispanics between 1985 and 1994 for the cities of Miami, Florida and El Paso, Texas. Although these cities are similar in regards to their rates of poverty, family structure and employment, they find that the rate of homicide for El Paso is a third the rate for Miami (Lee, et al. 2000). Although the victim/offender relationship is similar, homicides in Miami are higher across all age groups. Since the economic structure between these two cities is similar, the authors conclude that even prior to the arrival of the Marial refugees in 1980, Miami was in a region which was more violent compared to El Paso (Lee, et al. 2000). Another explanation they consider is the issue of economic inequality in this heavily Cuban ethnic community compared to that of El Paso, which is mainly comprised of individuals of Mexican ethnicity. However such an assertion seems flawed as Cubans maintain a higher level of median income, compared to Mexicans (Merger 2003; Bean and Tienda 1987).

In another study of two cities, Nielsen, Lee and Martinez (2005) explore the relationship between location (Miami, Florida and San Diego, California) and motive between 1985 and 1995. Their study finds that the race/ethnicity of the offender as well as motivation for the homicide has an impact on rates of homicide for Hispanics. For example, the researchers find that living in disadvantaged neighborhoods has a significant effect on rates of homicide for San Diego, but not Miami, when the motivation for the homicide is intimate (Nielsen, et al 2005). The authors also find that homicides motivated by robbery are not related to socially disorganizing factors for Hispanics in either city (Nielsen, et al. 2005).

In a reexamination of the influence of immigration on rates of homicide, Martinez (2003b), examines the influence of race/ethnicity, nativity and homicide motives. This analysis broke race and ethnicity into five categories, African Americans, Hispanics, Afro-Caribbean's, Mariel Cubans and Whites (Non-Hispanics). The author reported the highest rates of homicide

are among African Americans (33.1 percent) with Afro-Caribbean's having the lowest (6.6 percent), it is worth noting however that the second highest rate of homicide was among Hispanics (Martinez 2003b: 402). Results also demonstrate that Mariel refugees are not disproportionately involved, either as the offender or victim, regardless of motive. The author further finds that the motive for homicide is also reflective of ethnic status. For example Afro-Caribbean's have a higher rate of drug related homicides than African Americans, while at the same time African Americans have a higher rate of involvement in robbery-homicides than Whites. Martinez's findings suggest there is "little evidence to support claims that Mariels were over involved in murders that developed from related felonious activities" (2003b: 408). Rather the author notes that these rates of homicide are due, more likely to the social and economic influences rather than a cultural explanation.

Martinez (2003a) also analyzes the relationship among African Americans, Haitians and Hispanics for the city of Miami. Regardless of ethnicity, he finds poverty to be positively associated with homicides. Further the author notes that immigration may have an indirect influence on rates of homicide. Martinez found that "recent immigration does not increase community counts of Miami homicide, especially among groups likely to be influenced by the deleterious consequences of a massive influx of new comers" (Martinez 2003a: 40). The conclusion may in fact be that immigration serves as a form of community stabilization and a buffer to violent crime.

Zahn (1988) examines the rate of homicides among Whites, Hispanics and African Americans in nine U.S. cities. She finds that the rate of homicide for Hispanic males is less than that for African Americans (42.8 versus 72.7) but still four times higher than the homicide rate for Whites (10.5 per 100,000). In addition, Zahn finds that the rate of Homicide among Hispanic females was similar to that of White females (1988). Interestingly, the author finds that the

number of intra-family homicides is lower for Hispanics than either Whites or African Americans. The author suggested that this finding might be due to possible differences in spousal relationships or gender roles (Zahn 1988). For this reason, this study demonstrates a higher rate of male-to-male victim/offender relationships than both African Americans and Whites.

Although few studies have examined more than a handful of cities at the same time, Martinez (1996) analyzes some 111 cities with Hispanic populations greater than 5,000. Using data from the 1980 census and a supplemental homicide report, this study looks at poverty (measured using SSA guidelines), as well as income inequality, measured both within the group and between these groups.

Inter-group income inequality is measured using a Gini-coefficient, while income inequality between Whites and Hispanics was measured by taking the difference in median income between these two groups. Findings of this study reported an average homicide rate for Hispanics to be 18.41 per 100,000 across the 111 cities, with a range of 1.89 to 67.87. For 1980, the percent of Hispanic families living below the poverty line is just under 19 percent (Martinez 1996). The author finds that poverty has a negative association with the homicide rate. Further Martinez finds that when income inequality is measured between Whites and Hispanics, there is no effect on the rate of homicide, however when an intra-group measure is utilized, there is a strong positive correlation existed between income inequality and homicide (1996). Other factors that are also of importance included population size and low educational attainment. This finding supports the work of Shihadeh and Steffensmiemer (1994) who also find that economic deprivation has more of an impact when a within group comparison is used as opposed to a between group measure.

Martinez contends that this study is one of the first comprehensive investigations of Hispanic homicide using national data (1996). He maintains that such studies have been scarce for a variety of reasons. For example, U.S. data collection has consistently failed to classify Hispanics as an independent group (Martinez 1996). Another issue is the inconsistency that is often used to identify Hispanics (Zahn 1988). Also few agencies at either the local, state or federal level maintain information of Hispanic crime. Take for example the voluntary insertion of Hispanics as a classification in the 1980 UCR, which was dropped, in subsequent years (Martinez 1999). After 1980 information on Hispanic offending was compiled in a supplementary report that was voluntary to report, resulting in few police departments expending the cost or manpower to complete.

Even though there are relatively few studies that examine Hispanic homicide, for a variety of reasons, there is nevertheless a need to make use of the available data present to extend the field of research. This is paramount since these few studies, which do examine these differences, show inconsistencies between Hispanics and other urban populations. This points to the idea that the structural factors of major metropolitan areas impact Hispanics and their rates of offending in a different manner than other groups, and only research specifically focused on this group will provide insight on this issue.

2.7: Expectations

Based on the analysis of the literature concerning segregation and homicide the following results are expected:

1. Increased segregation among urban Hispanics will be associated with a rise in Hispanic homicides.
2. When Hispanics are segregated into a single ethnicity (more homogenous), homicides will be reduced.
3. Segregation among urban African Americans will be associated with African American Homicides.

4. Due to the uniqueness of Hispanic ethnic groups, each may experience segregation differently and could influence their homicide patterns.
5. Changes in segregation from 1980 to 1990 will significantly effect the homicides for Hispanics and African Americans.
6. Changes in segregation from 1990 to 2000 will significantly effect the homicides for Hispanics and African Americans.
7. When segregation is disaggregated by social class, the impact of segregation will be inconsistent between social classes.
8. Among Hispanics segregation is directly associated with homicides and is mediated by female headed households.
9. An examination of segregation within ethnic specific Hispanic groups will demonstrate a direct association to ethnic specific homicide, as well as a mediated effect through female headed households.
10. Among African American segregation is directly associated with homicides and is mediated by female headed households.

CHAPTER 3: METHODOLOGY

3.1: Data Sources

This study examines the expectation presented at the conclusion of chapter two, through the use of a national city-level analysis. Data used for this analysis will be taken from three primary sources. First, data for the independent variables will be drawn from the U.S. Census Bureau's Summary Tape File 3 (2000STF3) and Summary Tape File 4 (2000STF4). Further data regarding segregation (Index of Dissimilarity and Exposure) will be taken from data compiled and released by the Lewis Mumford Center for Comparative Urban and Regional Research. This will include both the aforementioned segregation indices as well as a change measure and a within race and social class measure of segregation. The dependent variable (Hispanic homicide) will be drawn from the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS) mortality files. These files are used primarily due to the inconsistency of reporting for Hispanics in the Uniform Crime Report (See Martinez 1996). In order to avoid the possibility of year-to-year fluctuations in homicide rates, a three-year average will be used bridging each of the census years (1999, 2000, 2001).

3.2: Unit of Analysis

The unit of analysis for this study will focus on cities in the United States, as this is the most probable location of poverty, crime and social disorganization. Using cities with large populations also allows access to ethnic enclaves that may not be present in smaller communities. For the purpose of this study, cities to be included should satisfy two criteria: (1) they must have a total population of 100,000 or greater, and (2) they must have a Hispanic population of greater than 2,000¹ (See Appendix A for a list of sample cities). Some 236 cities meet these criteria and are listed in Table 3.1 below. In order to determine if the experiences of

¹ As a sensitivity analysis, models were also created which used thresholds of 5,000 and 10,000 for the group under investigation. Findings of these analyses were consistent with the models reported in the forthcoming analysis.

Hispanics differ from those of African Americans comparisons will be made between these two groups. By meeting these criteria, our sample size has been reduced from 236 cities to 208 cities (See table 3.2 for a list of cities in this analysis).

3.3: Measurement

3.3.1: Operationalization of Race/Ethnic Categories

A recurring problem in the research of Hispanics has been the inconsistency of how this group is measured. This analysis proposes the use of two measures of Hispanic ethnicity. The first is the more traditional measure of Hispanic groups as a proportion of the population as a whole. This measure follows past studies which identifies as individuals whose national origin is of Mexican, Cuban, Puerto Rican or one of any other twenty Spanish speaking nationalities (Moore and Pinderhughes 1993: xi; Bean and Tienda 1987). This measure allows us to gauge the effects of specific nationalities against one another. Based on this measure, Hispanics will be placed into one of three categories: Mexican, Puerto Rican, and Other Hispanics. Although Cubans do account for a considerable number of the Hispanic population, due to the fact that they are relatively concentrated in specific urban areas, creating a meaningful breakout of cities with Cubans makes analysis difficult.

The second measure uses the index of qualitative variation (IQV). This measure tells us the degree of dispersion among all of the ethnic groups in question. For example, if the value of a given city's IQV were zero, it would indicate that all members of the Hispanic minority were of a common ethnicity (e.g. Puerto Rican). Conversely if a city's Hispanic IQV were one, then there would be an equal number of Hispanics in each ethnic classification. Although these measures seem similar, preliminary analyses have not shown a high degree of correlation between the individual percent measures and the Hispanic IQV. The use of these measures is unique to previous studies since most have relied only on a measure of total Hispanic population.

I argue that the use of such a measure is misleading since it fails to capture the possible lack of social interaction between different Hispanic nationalities. Further, the use of this measure will allow us to determine if heterogeneity in the Hispanic community acts to reinforce traditional roles and social structures compared to areas where these ethnic enclaves may not be as pronounced. To measure African Americans, the proportion of individuals responding as Black on the census will be used to measure this group.

3.3.2: Dependent Variable (Hispanic Homicide)

The dependent variable is the homicide for specific races/ethnicities within cities. To examine homicides there are two primary sources that one may turn to. The first is the Uniform Crime Report (UCR), and the second is taken from the vital statistics data collected by the National Center for Health Statistics (NCHS) under the CDC. While the methods of collection differ, research has shown a similar rate of homicide between the two sources (See Harris 1997). Data collected by the NCHS gains its information through the collection and coding of death certificates from throughout the United States. Like the UCR, these reports are reliant on the decisions of the individual imputing the original data, in this case a medical examiner or coroner. While this may be problematic, there is consistency between the two measures (Reidel 1999). A singular benefit for the use of the UCR over the mortality files rests on the fact that the UCR may provide information on the offender as well as the victim; however, since the majority of homicides are intra-racial, for the purpose of this study, such a distinction is unnecessary (Martinez 1996). Because the UCR has not required the collection of data on Hispanics since 1980 (Martinez and Lee 1999), this analysis will rely on the data taken from the NCHS vital statistics. In addition, since we are concerned with Hispanic homicide, data from victimization sources such as the National Crime Victimization Survey would not provide this information. Through the use of the NCHS data on race of victim, city of death and residence can be obtained.

Due to the rarity of a homicide event a three-year average will be used in order to account for possible year to year fluctuations.

An inherent problem with the use of victimization data centers on the fact that the examination of homicides is placed on the victim, rather than the offender. In the case of Hispanic homicide this analysis uses victimization data for several theoretically grounded reasons. First, as discussed before, official crime statistics such as the Uniform Crime Report (UCR) are not required to collect data on Hispanic arrests and is done so inconsistently (Martinez and Lee 1999; Martinez 1996). Second since most homicides are intra-racial/ethnic it is logical to assume that the offender is of a similar race/ethnicity (Hawkins 1999; Martinez 1996). In addition, smaller studies in the past that focus on a relatively small number of cities have shown that the victim-offender relationship among individual Hispanic ethnicities follows a similar pattern to that of other racial/ethnic groups (Nielsen, et al 2005; Phillips 2002; Lee, et al 2000; Martinez 1997b). Finally this analysis has taken measures to increase the probability of only capturing intra-racial/ethnic homicides by only including homicides in the sample which occurred in the same county where the victim resided, increasing the probability that offender is an acquaintance or family member, who are more likely to be of a similar race or ethnicity (Fox and Zawitz 2001).

3.3.3: Independent Variable

3.3.3.1: Segregation

For this analysis segregation will be measured through the use of the index of dissimilarity, which measures unevenness (See Massey and Denton 1988). The index of dissimilarity indicates the percentage of Hispanics who would have to change census tracts in order to have a uniform distribution of race/ethnicity in a given city. (Shryrock and Siegal 1976; Siegel and Swanson 2004). This measure ranges from 0 to 100 where 0 indicates no exchanges

are necessary and 100 indicates all must change (Shihadeh and Flynn 1996:1335). The index of dissimilarity is calculated by the following formula:

$$D = [(1/2) \sum | X_i - A_i |] * 100$$

X_i = Refers to the proportion of all Hispanics in a given census tract

A_i = Refers to the proportion of Whites in a given census tract

In addition to the measure of dissimilarity to examine segregation this analysis will also utilize gauge segregation by means of exposure to other groups. The interaction index examines the possible contact that may exist between group members (Massey and Denton 1988; Siegel and Swanson 2004). The index will range from 0 to 100, where lower values indicate a greater degree of isolation from other groups and higher values indicate that the group in question resides in areas with different races or ethnicities (Siegel and Swanson 2004). The use of this measure offers insight into the settlement patterns among a specific group. For example, if the exposure to other groups is relatively high, this indicates that the minority group under investigation tends to reside among the reference group. Conversely if this value is low, then members of the minority group tend to reside among their own enclaves.

Exposure by means of the interaction index is calculated by the following formula:

$$P^* = \sum [(X_i/X)(Y_i/t_i)]$$

X_i = Refers to number of Hispanics in area i (e.g. census tract)

Y_i = Refers to the number of members in the reference group in a given area (e.g. Whites in a given census tract)

X = Refers to the total number of Hispanics in the population (e.g. city)

t_i = Refers to the total population in a given area (e.g. census tract)

These data were calculated and compiled by the Lewis Mumford Center using the above described method. Data were provided for exposure and dissimilarity scores for 1980, 1990 and 2000 for Hispanics to Whites and African Americans to Whites Non-Hispanics. Also data was provided for social class specific segregation for the above groups. In addition this analysis also

created two measures of change in segregation. The first was calculated by taking the race/ethnic specific segregation score from 1990 and subtracting the score from 1980, and the second was done by subtracting the 1990 score from the 2000 segregation measure for both dissimilarity and exposure.

In the forthcoming analysis segregation both as dissimilarity and exposure will be utilized in two other specific manners. First using segregation measures from 1980 and 1990, two change in segregation measures will be calculated (one from 1980 to 1990 and one from 1990 to 2000). This is done by taking the most recent measure of segregation and subtracting it from the earlier measure (e.g. Segregation in 1990 minus segregation in 1980). The inclusion for this change in segregation is done so in order to gauge the structural changes in communities during the 1980s and 1990s that may have a direct influence on a change in the level of segregation. For example, the passage of the 1986 Immigration and Reform Control Act (IRCA) provided amnesty and a path to citizenship for illegal aliens in the United States. In addition this afforded those who were already here the opportunity to sponsor family members who were still living abroad, thereby bring in a higher number of immigrants into the U.S. compared to other periods of immigration (Fussell and Massey 2004; Massey et al 2002; Massey and Espinosa 1997). In addition during the 1990s the U.S. policy took a more active stance, making the risk of detection higher for those crossing into the United States illegally. As a result many workers who had historically entered the U.S. for seasonal work and then returned home now stayed as the cost and risk of crossing the boarder became greater. The end result was an increase in the number of Hispanics living in the United States on a permanent basis (Riosmena 2006; Fussell and Massey 2004; Massey et al 2002).

A final manner that segregation is utilized in this study is by disaggregating it on the basis of social class. Using data from the Mumford Center, segregation is broken down into

three social classes, poor, middle and affluent or high. For the purpose of this analysis, poor includes those who in the year 2000 made less than 175 percent of the poverty line, or under 30,000 dollars per year. Middle social class included those who made between 30,000 and 60,000 dollars (175 percent to 350 percent) in 2000. Finally the affluent were those who made above 350 percent of the poverty line (more than 60,000 dollars).

3.3.3.2: Female Headed Households

In the forthcoming analysis female headed households will be used as an independent measure (in chapter five) as well as a mediating variable (in chapter six). The use of female headed household as a variable is done in order to gauge family disruption as a socially disorganizing mechanism within a community. Not only do high concentrations of female headed households limit the economic potential of the family but concentrations of them can work to reduce informal social controls within a community (Kornhauser 1978; Sampson 1987). Measurement of female headed households is calculated by determining the percentage of race/ethnic specific households which are classified by the census as being headed by a woman with no male present and at least one child under the age of eighteen.

3.3.4: Control Variables

This analysis will utilize a number of control variables which previous research examining rates of homicide have used. To control for possible variations in welfare assistance since it may have an effect on family formation, (See Murray 1984 cited in Shihadeh and Steffensmeier 1994) the average level of assistance will be used. Also, included in this analysis is the average age of the male population (race/ethnic specific). This is done because areas with high concentrations of youths tend to have higher rates of criminal involvement due to the age curve of crime (Steffensmeier, Allan, Harer and Streifel 1989; Greenberg 1985). Age is calculated through the use of the 2000 Census, by using a weighted average of all males for a

specific race/ethnic group. By multiplying the total number of respondents by the median of each age category and dividing the sum by the total population of males we can determine a approximation of the average male age. Population size for a given city will also be calculated as the total number of residents. In addition race/ethnic specific population measures will be used. For the forthcoming analysis the use of the total Hispanic and African American population will be calculated as well as the total number of Hispanic ethnicities (Mexican, Puerto Rican and Other Hispanics).

For this analysis, poverty will be measured as a percentage of the race/ethnic specific population whose income falls below the poverty line. In addition to poverty, this study will also examine income inequality. This analysis will utilize a gini concentration ratio to determine the inequality of income for a given city. The gini concentration ratio is calculated by the following formula:

$$(\sum X_i Y_{i+1}) - (\sum X_{i+1} Y_i)$$

X_i = Refers to the proportion of the population in an area

Y_i = Refers to the proportion of localities in an area (e.g. census tracts)

Education will also be taken into consideration for this analysis. Education will be reported as the average level of education attained by the race/ethnic specific group under investigation. Similar to the case of age, this analysis will look at the weighted average of all race/ethnic specific respondents over the age of 25 and their highest educational attainment. In addition to education, this analysis will also examine Hispanic and African American unemployment. This analysis uses the percentage for the male population who are unemployed while controlling of the race/ethnicity of the group. Tied to this concept of unemployment is the race/ethnic specific measure of floaters. A floater refers to any male between the ages of 16 and

19 years, who is neither in school, the military nor the labor force. This variable is calculated by taking the total number of disengaged males divided by the total male population

This study will also control for region with a Southwest dummy variable. The southwest dummy is calculated by taking all cities considered to be in the southwest of the United States (Arizona, California, New Mexico, Colorado and Texas). The primary reason for this is due to the large concentration of Hispanics who reside in this area of the country. In order to maintain a theoretically sound regional measure for models using African Americans, a dummy variable for the South will be used. The use of a South based measure for African Americans have been used extensively in previous literature (see Shihadeh and Steffensmier 1994). The southern measure used in this analysis was any state considered to be in the South (Region Three) by the U.S. Census Bureau.

In order to gain an understanding of the residency structure of an area two measures housing structure were considered. The first looked at the percentage of homes within a city that were multi-family dwellings. This was calculated by taking the total number of structures with more than five units (e.g. apartments) and dividing them by the total number of housing structures within a community. The second measure used a calculation of population density. This was projected as the total number of individuals residing within a city's geographically defined limits divided by the total available landmass of the city. An examination of these measures reported a high level of colinearity between the two and the latter of the two variables was included in the upcoming analysis. The decision to use population density was primarily due to the increasing number of multi-family structures that are changing the urban landscape of many major cities (e.g. town homes and condominiums) which are not reflective of the traditional concept of low income apartment structures that this former measure was designed for.

3.4: Analysis

This analysis will concentrate on several elements. The first part will focus on an examination of Hispanic homicide, specifically on how segregation from other groups and concentrations of poverty influence rates of homicide. Further this early analysis will make comparisons between the different Hispanic ethnicities. The second part of this analysis will examine the differences between Hispanic communities and African American communities. To qualify for this portion of the analysis it is required that the cities under investigation must have a Hispanic and African American population each of which is greater than 2,000.

3.4.1: Descriptive Analysis

Chapter four will present a descriptive analysis of these data. This will include the means and standard deviations for race/ethnic specific homicides. In addition, this section will also present the means and standard deviations for the independent variables. Finally this chapter will present a bivariate correlation between the variables in question. The purpose of performing this bivariate analysis between the independent and dependent variables is to determine the individual effect of each independent variable on the dependent, isolated from other influences. In addition, by examining the correlation between the independent variables we can detect the presence of multicollinearity.

3.4.2: Multivariate Analysis

Chapter five of this analysis presents the multivariate analysis using negative binomial regression. Due to the nature of homicide research and the relatively few cases of homicide that are likely to occur relative to the size of the population, the distribution of homicides across a given city may not present itself as a normal distribution. This being the case there are two options available to correct the skewness of this distribution. The first would be to use the natural log of homicide rates to induce a normal distribution and to avoid heteroskedasticity,

thereby presenting the analysis by means of an Ordinary Least Squares (OLS) Regression (Shihadeh and Flynn 1996:1334). If the natural log transformation of the dependent variable does not produce the desired effect then a negative binomial approach will be used. “Negative binomial regression combines the Poisson distribution of event counts with a gamma distribution of the unexplained variation in the underlying or true mean event counts” (Osgood 2000). In this case, the Poisson distribution may be too restrictive since it assumes that the mean and variance are equal (Lee and Bartkowski 2004; Osgood 2000). Conversely the use of a negative binomial regression model assumes that the variance is larger than the mean, making it a better fit for this analysis (Osgood 2000). Since there are a large number of zero count observations for these data the decision to use negative binomial regression is justified as it allows for the overdispersion in these data.

In order to examine both the direct and mediating impact of family disruption on homicide the analysis conducted in chapter six will use OLS regression, with proper adjustments used to induce normality into the distribution. (Martinez 1996; Shidadeh and Flynn 1996). The use of this method in chapter six is done so that the influence of segregation on homicide can be directly measured. At the same time, an additional model can be produced which will look at the role of female headed households and how segregation, as well as other contributing factors, interrelate to Hispanic and African American homicides.

3.5: Detection of Analytical Problems

3.5.1: Multicollinearity

When conducting multivariate analyses there is often an issue of multicollinearity, or a high degree of correlation that may exist among independent variables (Hoffman 2004; Kleinbaum, Kupper, Muller and Nizam 1998; Neter, Kutner, Nachtsheim and Wasserman 1996). Essentially when multi colinearity exists it makes “it difficult if not impossible to determine [the

separate] effects on the dependent variable” (Vogt 2005). When multicollinearity occurs several problems can arise, including an inflation of standard errors, a wide variance for parameter estimates, and a confounding of the results of the analysis. “If a factor is being tested and it is correlated with another factor that may truly be exerting a cause-effect influence, the effect may erroneously be attributed to the factor being tested” (Lamb and Siegel 2004:346 in Siegel and Swanson).

An option available to a research to detect the problem of multicollinearity would be the examination of the variance inflation factors (VIFs). In cases where the VIF is greater than 5.0, one has a cause for concern regarding the presences of multicollinearity (Hoffam 2004; Neter, et al 1996). If the variance inflation factors indicate the presence of multicollinearity, there are a variety of adjustments that can be made to correct the issue. These include increasing the size of the data set as the presence of more cases will lead a decreased level of collinearity between other variables. In addition to this variables which demonstrate a high degree of correlation, may be combined to create a new variable, or one of the variables in causing the multicollinearity can be removed from the analysis (Hoffman 2004). Analysis of these data did indicate that there was a high degree of colinearity between several of the economic based control measures (e.g. female headed households and percentage of the population under the poverty line). In order to protect the integrity of the analysis measures which produced a variance inflation factor greater than four were either excluded from the multivariate analysis or were combined to create an index.

3.5.2: Heteroscedasticity

Another problem that can arise in when conducting a multivariate analysis is heteroskedasticity. Heteroskedasticity is an unequal variance in the regression error terms; this means that the error variance is not constant for all levels of the independent variable (Vogt 2005; Neter, et al 1996). To test for heteroskedasticity an examination of residuals in a scatterplot

can be used to detect abnormalities in error variance. The residual refers to “the difference between the value observed and the value predicted by the model” (Vogt 2005:277).

CHAPTER 4: DESCRIPTIVE STATISTICS

4.1: Introduction

Chapter four provides an introduction to the data which will be analyzed using multivariate techniques in chapters five and six. Specifically, there will be a discussion of the descriptive statistics as they related to the Hispanic population under investigation. This chapter will also make comparisons between the Hispanic population and the African American population by focusing on their similarities and differences.

4.2: Descriptive Statistics

4.2.1: Descriptive Statistics – Homicides

Table 4.1 presents the means and standard deviations for the measures that will be in this study. Based on an analysis of 236 cities, between the years of 1999 and 2001 among Hispanics, the average number of homicides was 7.42 per year with a standard deviation of 26.38. In comparison the average number of African American homicides was 19.76 with a standard deviation of 54.04. By looking at these two racial/ethnic groups we can see that not only do African Americans experience a higher number of homicides on average, but there is a greater amount of dispersion in their scores as well. Although the average number of homicides for African Americans is more than two and half times that of Hispanics, the number of homicides which occurred across this period of time was more consistent than among all Hispanics from city to city. As a point of reference, when looking at the number of homicide victims among the White population (not present in Table 4.1) the average number of homicides was 6.92 with a standard deviation of 22.69. This result confirms previous studies which have shown that Hispanics homicides fall more closely to that of Whites, rather than African Americans (Lee 1999; Kirvo and Peterson 2000; Rennison, Fox and Zawitz 2002).

Table 4.1: Descriptive Statistics – Means and Standard Deviations for Hispanic and African American Samples

Dependent Variable	Mean	S.D.
Homicide	7.42(19.76) ^a	26.38(54.04)
Homicide Mexican	4.82(-----)	17.21(-----)
Homicide Puerto Rican	0.89(-----)	6.10(-----)
Homicide Other Hispanics	1.78(-----)	9.40(-----)
Independent Variables		
Dissimilarity (White to Hispanic)	34.82(-----)	11.91(-----)
Dissimilarity (African American to White)	----- 51.11	----- 18.05
Exposure (Hispanic to White)	47.30(-----)	20.11(-----)
Exposure (African American to White)	----- 42.30	----- 21.68
Dissimilarity Low Income (Hispanic/White)	36.67(-----)	11.35(-----)
Dissimilarity Middle Income (Hispanic/White)	38.37(-----)	10.55(-----)
Dissimilarity High Income (Hispanic/White)	40.09(-----)	12.57(-----)
Dissimilarity Low Income (African American/White)	----- 56.46	----- 14.16
Dissimilarity Middle Income (African American/White)	----- 57.82	----- 15.05
Dissimilarity High Income (African American/White)	----- 59.82	----- 16.51
Income Inequality (Gini)	45.18 ^b	4.69
Male Unemployment	7.98(11.62)	3.56 (4.78)
Education	11.59(12.68)	0.87 (0.67)
Hispanic IQV	0.61(-----)	0.17(-----)
Population Density (Per Square Mile)	4386.36	3549.94
Female Headed Households	20.42(38.07)	9.36(13.97)
Age of Male Population	26.42(29.80)	2.43(2.53)
Floaters	15.76(12.90)	6.20(6.96)
Median Income	35496.69(33512.49)	9306.77(11612.31)

^a Values in parenthesis indicate means and standard deviations for African Americans

^b Values are the same for both Hispanics and African Americans

One departure that this study takes from previous analyses is the belief that within Hispanic ethnicities there will be cultural influences that affect violent crime. By subdividing the Hispanic ethnicity into three classifications, one can see that the average number of homicides is highest among Mexican populations (4.82 with a standard deviation of 17.21), and

lowest among Puerto Ricans (0.89 with a standard deviation of 6.10). Falling closer to Puerto Ricans than Mexicans, are all other Hispanics who experience on average 1.78 homicides annually with a standard deviation of 9.40. (See Table 1.1 for a population breakdown of Hispanics).

4.2.2: Descriptive Statistics – Segregation

Previous research documents the influence of African American segregation on a number of social problems (Sampson 1987; Shihadeh and Steffensmier 1994). This study will examine the impact of segregation between Hispanics and Whites to determine if a similar effect exists. To measure segregation this study will use variety of segregation measures.

The first measure of segregation analyzed was the index of dissimilarity. This measure examines segregation by looking at the unevenness in a community, by way of how many respondents (in this case Hispanics) would have to relocate in order to have an even distribution of the two groups among the available areas (Massey and Denton 1988; Siegel and Swanson 2004). Among Hispanics 34.82 percent of this population would have to relocate within an average city in order to have an even distribution between Whites and Hispanics. These values ranged from a minimum of 12.45 percent (Gilbert, Arizona) to 67.30 percent (Providence, Rhode Island) with a standard deviation of 11.91 percent. In comparison, African Americans experience a higher level of segregation than Hispanics. On average African Americans exhibit a dissimilarity score of 51.11 percent, over 15 percent higher than that of Hispanics. Furthermore, there is a larger range of dissimilarity for African Americans (17.4 percent in Hayward, California to 97.7 percent in El Monte, California, with a standard deviation of 18.05 percent).

Overall these data demonstrate that Hispanics experience a lesser degree of segregation than African Americans, confirmed by the paired t-test presented in Table 4.2 showing that the

difference in the average dissimilarity score between Hispanics and African Americans is statistically significant.

Table 4.2: Paired T-Test of Segregation (Dissimilarity) for Hispanics and African Americans

Race/Ethnicity	N	Mean	S.D.	S.E. of Mean
Hispanic	231	34.95	11.96	0.79
African American	231	51.11	18.05	1.19
t-score ^a	-13.378*			

^at-test (d.f. =235)

*p<.05

To further explore the issue of segregation a measure based on isolation will also be utilized. Isolation or exposure to other groups is based on the potential that a randomly chosen individual in the group under investigation (e.g. Hispanics) will come into contact with a random individual of the reference group (e.g. Whites)(Siegel and Swanson 2004). Like dissimilarity, exposure will vary from 0 to 100 percent where lower values indicate that the group under investigation is isolated or lacks exposure to the reference group. Among Hispanics in large cities the average exposure was 47.30 percent with a standard deviation of 20.11 percent. This was slightly higher than the average exposure of African Americans which was 42.30 percent with a standard deviation of 21.68 percent. These findings indicate that the level of exposure between Hispanics and Whites is slightly higher in comparison to African Americans. When examining segregation on the basis of exposure the range for both African Americans and Hispanics was almost identical (1.8 to 89.3 percent for Hispanics and 1.9 to 90.6 percent for African Americans).

Whether segregation is based on dissimilarity or exposure these results point to a similar conclusion, namely that African Americans experience a greater level of segregation compared to Hispanics. Although these values are relatively close on average for the measure of exposure, a paired t-test (See Table 4.3) confirmed that this difference was statistically significant. The

findings for both of these measures highlight the importance that segregation may have on both populations. Although Hispanics do experience a lesser amount of segregation, it may in part explain why their rates of homicide, although not as high as African Americans, remain higher than that of Whites.

Table 4.3: Paired T-Test of Segregation (Exposure) for Hispanics and African Americans

Race/Ethnicity	N	Mean	S.D.	S.E. of Mean
Hispanic	236	47.30	21.68	1.41
African American	236	42.30	20.11	1.31
t-score ^a	5.191*			

^at-test (d.f. =235)

*p<.05

Finally, the segregation measures are disaggregated by social class to determine if then negative effects of segregation are consistent across income groups. Among Hispanics the average level of segregation varies across the social classes. Those in the lowest social class exhibited a lower level of segregation (36.67 percent) compared to their middle class (38.37 percent) and upper class counterparts (40.09). Although there is a trend toward more segregation as one's social class increases, the difference between the lowest and highest social class is relatively small, less than 3.5 percentage points.

The pattern of segregation observed among Hispanics with regard to social class held for African Americans, although at much higher levels. Among African Americans, the segregation between African Americans and Whites was highest within the upper class (59.82 percent) compared to the middle (57.82 percent) and lower class (56.46) African Americans. Again, the range of these values is relatively small between these social classes (3.36 percent). Following the same trend as the non-class based dissimilarity, the level of segregation experienced by African Americans to that of Hispanics is approximately twenty percentage points higher on all three social classes.

The final measure by which this analysis examines segregation among Hispanics is through the index of qualitative variation (IQV). This measure uses the population totals among the different Hispanic ethnicities to determine if areas which experience more ethnic integration negatively impacts incidents of homicide. In this analysis a lower IQV indicates a homogenous population of Hispanics whereas a high score would indicate more diversity among Hispanic ethnicities. The average Hispanic IQV was 0.61 with a standard deviation of .17 points. These values ranged from a low of .247 to a high of .958. On average Hispanics are moderately diversified among the cities selected for this analysis, although there is a great deal of dispersion from city to city.

4.2.3: Descriptive Statistics – Notable Control Measures

A variety of controls are included in the forthcoming analyses, but some are of particular interest for violent crime. One such measure is the percentage of female headed households. When areas experience increased numbers of female headed households, the lack of informal social control could cause a lack of supervision that could contribute to higher rates of victimization (Kornhauser 1978; Sampson 1987; Shihadeh and Steffensmeier 1994). Among Hispanics, female headed households averaged 20.42 percent of the population with a standard deviation of 9.36. Although this average is higher than that of Whites (15.12 percent) it is almost half of what is experienced among African Americans (38.07 percent with a standard deviation of 13.97). Such a finding may suggest that among Hispanics, who typically have stronger social prescriptions against divorce (Bean 1987). The presence of concentrations of single parent households may not influence violent crime in the same manner as among the African American population (Shihadeh and Steffensmeier 1994).

In addition to female headed households there are a variety of demographic factors such as unemployment, age and education which may prove useful when analyzing homicides within

the Hispanic and African American community. When large portions of a population have become disengaged from the labor force, the effect may be an increase in criminal activity. An examination of unemployment among the Hispanic community reports that almost eight percent of the male population is unemployed. In comparison within the African American community the average male unemployment is 11.56 percent. In the case of Hispanics their unemployment is one and a half times that of the White population (5.47 percent). Although there are a fewer number of Hispanics who are unemployed compared to African Americans the effect on violent crime may still remain high due since it does depart for the national average.

Given the link between age and crime, the average age of male Hispanics and African Americans was also taken into account for this analysis. We find that in this sample Hispanic males are slightly younger 26.42 on average (versus 29.80) than African Americans, but with a similar dispersion. In addition this analysis also indicated that Hispanics tended to be less educated than African Americans. In this case the average Hispanic has less than a high school education (11.59 years) and African Americans have slightly more than a high school education (12.68 years). Finally we note that the percentage of institutionally disengaged males (16 to 19 year olds who are not employed, not in school, not in the military) are higher among the Hispanic population (15.76 percent) compared to the African American population (12.90 percent).

Finally this analysis will examine the role of income inequality. The Gini Ratio will indicate the level of income inequality that exists within a given geographic area (Siegel and Swanson 2004). The use of the Gini index as a predictor of crime has been used extensively in research of crime (Blau and Blau 1982; Messner 1982; Sampson 1985; Land, et al 1990). Based on this analysis the average Gini ratio was 45.18 percent with a standard deviation of 4.69

percent. This finding ranged from 33.10 to 59.82 which on a whole represent a moderate level of income inequality in the cities which were investigated.

4.3: Summary

As seen by the previous discussion the characteristics which impact the day to day life of Hispanics are to some extent similar to those of African Americans. These data indicate that as a minority, African Americans experience them to a greater degree. In terms of homicide, segregation, female headed households, etc. these data point to African Americans being at a greater disadvantage. This notwithstanding, an examination of Hispanics compared to Whites demonstrates that while they do not exhibit these negatives to the extent of African Americans, they are experiencing them to a greater degree than Whites within most communities.

CHAPTER 5: NEGATIVE BINOMIAL REGRESSION

5.1: Introduction

Chapter five focuses on the multivariate analysis of Hispanic homicides in major metropolitan areas. This analysis will use negative binomial regression due to homicides occurring at such a low level in comparison to the size of the population. Also this study will run a similar analysis among African Americans to determine if these minority groups differ in the causal factors of homicide. This analysis will extend the examination of Hispanic homicide by further separating this group into three sub classification (Mexican, Puerto Rican, and Other Hispanics). Chapter five will also examine if and how changes in segregation from 1980 to 1990 and between 1990 and 2000 have effected homicides among the Hispanic and African American communities. Lastly, this analysis will look at the effect of social class and segregation. By looking at the level of segregation which exists within different social classes, these findings should show if homicides are more than a simple matter of segregation but the interrelationship of class dependent segregation.

5.2: Homicide and Segregation

One question that has surrounded the literature concerning homicides has been the influence of negative disadvantages (e.g. segregation, poverty, lack of education, etc.) on minority groups as it relates to homicide. This section will examine the disadvantage of segregation on two separate dimensions. The first looks at segregation based on the index of dissimilarity (unevenness) while the second measures segregation on the basis of exposure (potential contact).

5.2.1: Homicide and Segregation – Hispanics

The first model of Table 5.1 examines the influence of segregation through the use of the index of dissimilarity. These findings show a strong positive association between segregation

among Hispanics and Whites and the number of Hispanic homicides. Based on these results we find that for every one standard deviation increase in Hispanic/White Segregation, there is a 144.31 percent increase in the number of homicides². This finding highlights the negative impact of segregation on Hispanics. Although the level of segregation among this group is significantly smaller than among African Americans, segregation between Whites³ and Hispanics can have a large impact in the likelihood of being a victim of homicide.

This analysis also looks at the effect of ethnic isolation to see if it affects the number of homicides. Based on the findings of this analysis the index of qualitative variation (IQV), used to measure the dispersion of Hispanic ethnicities, and indicates no significant association exists. Based on these findings a concentration of a single Hispanic ethnicity did not significantly increase or decrease the number of Hispanic homicides.

Table 5.1 also presents the results of the analysis for Hispanics. This full model examines the influence of the entire Hispanic population as it affects the number of Hispanic homicides. These findings demonstrate that a variety of control measures significantly impact the number of homicides which occur among Hispanics. Within this community housing costs show a negative association with homicides. As the median rent for Hispanics decreases by a single standard deviation, there is a 35.47 percent increase in the number of homicides. Interestingly, among Hispanics income inequality does not significantly impact the number of homicides. Among Hispanics regionalism is also associated with homicides, where individuals residing in the southwest experienced a higher number of homicides compared to those in non-Southwestern regions of the United States. Finally, factors such as education and age are

² To interpret a negative binomial coefficient the following formula is used $\{[(\exp(\beta*s))-1]*100\}$. By taking the exponent of the product of the coefficient and the standard deviation of the independent variable, subtracted from 1 and multiplied by 100 the output allows for a interpretation of a percent change in the dependent variable for a one unit change in the independent variable (See Lee and Bartkowski 2004).

³ The term Whites used throughout this chapter refers White Non-Hispanics.

significant in this model. Educational attainment was found to lower homicides among Hispanics (3.76 percent for each standard deviation increase in education). Also, as the average age of the male population decreases homicides increase.

Table 5.1: Negative Binomial Regression Models of Segregation Predicting Hispanic Homicide Victimization

Variable	Dissimilarity		Exposure	
	Coef.	S.E	Coef.	S.E
Dissimilarity Hispanic to White	.075***	.011		
Exposure Hispanic to White			-.016*	.008
Percent Population Hispanic	.010	.007	-.002	.009
Median Hispanic Rent	-.003***	.001	-.004***	.001
Hispanic IQV	-.285	.762	-.547	.836
Gini Index	.030	.025	.100***	.025
Southwest Dummy	1.338***	.237	1.506***	.270
Population Density	.000*	.000	.000***	.000
Average Hispanic Education	-.440*	.186	-.889***	.206
Hispanic Male Unemployment	-.069*	.033	-.131***	.035
Female Headed Households	.024	.012	.054***	.014
Average Hispanic Male Age	.112*	.048	.081	.055
Floaters	.024	.019	.059**	.021
Constant	-.360	2.18	5.880	2.39
Pseudo R ²		.2265		.1953
N		236		236

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

The second model in Table 5.1 analyses the impact of segregation on homicide using the measure of exposure, or potential contact with the White population. Exposure, like dissimilarity, is significantly associated with Hispanic homicide. In this case the association was negative, meaning that as exposure to the majority group decreased the incidents of homicide increased. For each standard deviation decrease in the exposure of Hispanics to Whites, the number of homicides increased by 27.51 percent. Regardless of which measure is used, the impact of segregation is clear, namely that segregation from the majority group has a negative outcome on the minority group.

The findings of the second model were generally consistent with the first model, with a few exceptions. First, in this model income inequality does show a statistically significant association to the number of homicides that occur. Second, unlike in the previous model Hispanic female headed households were significantly associated with Hispanic homicide. Finally, in the exposure model Hispanic males who are unattached to social institutions (floaters) are also positively associated to homicide.

5.2.2: Homicide and Segregation – African American

This analysis of segregation will turn to an examination of African Americans to use as a point of reference for Hispanics. Such a comparison is necessary, since many of the negative structural disadvantages experienced by Hispanics are similar to those experienced by African Americans. Table 5.2 reports the negative binominal regression models for African Americans. Model 1 reports the influence of segregation in the form of dissimilarity while exposure is represented in Model 2. The models used in these analyses are consistent with that of the Hispanic models presented in Table 5.1 with a few exceptions. First, the measure of Hispanic IQV is not included in this model and there is no true measure of interethnic dispersion to substitute in its place. Second, the African American model utilizes a South dummy variable for region rather than a Southwest dummy variable. This is done primarily to account for population concentrations of the respective minority groups and how such concentrations may result in an increase in the number of homicides. Finally this model excludes the percentage of unemployed males in the African American population. This measure was excluded due to the high level of colinearity that existed between this measure and African American female headed households.

Segregation on the basis of dissimilarity presents a positive association to the total number of homicides in a given city. In the case of African Americans⁴, we see that for every

⁴ The term African American refers to respondents who are Black Non-Hispanic.

one standard deviation increase in the dissimilarity between African Americans and Whites, there was a corresponding 129.40 percent increase in the number of homicides. As the unevenness of segregation increases among African Americans there is an increase in the number of homicides among members of this minority group.

Table 5.2: Negative Binomial Regression Models of Segregation Predicting African American Homicide Victimization

Variable	Dissimilarity		Exposure	
	Coef.	S.E	Coef.	S.E
Dissimilarity African American to White	.046***	.009		
Exposure African American to White			-.014*	.007
Percent Population African American	.025***	.006	.023***	.007
Median African American Rent	-.004***	.001	-.006***	.001
Gini Index	-.026	.032	.033	.031
South Dummy	-.096	.215	-.222	.235
Population Density	.000	.000	.000**	.000
Average African American Education	.932***	.244	.935***	.264
Female Headed Households	.064***	.012	.066***	.014
Average African American Male Age	.047	.051	.058	.056
Floater	.018	.021	.011	.022
Constant	-13.540	3.292	-12.161	3.494
Pseudo R ²	.1564		.1434	
N	208		208	

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

An examination of the dissimilarity model for African Americans also indicates several other important outcomes. In this model as the percentage of the African American population increases by a single standard deviation, the number of homicides increased by 55.04 percent. Interestingly, this analysis did not indicate that region was significantly related to homicides among the African American population. Conversely the Hispanic models show that region was related to homicides. This analysis also indicated that African American female headed households were significantly associated with homicides. As the average number of female headed households increased by a single standard deviation, homicides jumped by 144.5 percent.

Referring back to Table 5.2, the second model looked at segregation based on the amount of exposure between African Americans and Whites and the resulting homicides. Holding the other variables constant between these two models results in similar findings to that of the dissimilarity model. The only exception was in the measure of population density, where in the exposure model, it was shown to have a significant positive effect on the number of African American homicides.

Similar to segregation measured by dissimilarity, exposure between African Americans and Whites is also significantly associated with an increase in homicides. In this case for each standard deviation decrease in the exposure between African Americans and Whites homicides increases by 26.18 percent. This finding also shows that when African Americans are segregated from Whites the likelihood of negative outcomes will increase.

5.2.3: Homicide and Segregation – A Comparison

African Americans comprise the largest racial minority, while as a group Hispanics makes up the largest ethnic minority. A comparison of how each group is affected by segregation is noteworthy. In general, there is a great deal of consistency in the findings of African Americans as well as Hispanics. For both groups, factors such as housing cost and average education have a similar impact on the number of homicides. Further we see that segregation in either form produces an increase in the number of homicides for both minority groups. This is of particular interest due to the fact that the level of dissimilarity is significantly higher (See Table 4.2) and exposure is significantly lower for African Americans (See Table 4.3). One might expect that due to the differences in exposure and dissimilarity that the effect of segregation would not be as strong for Hispanics as it is for African Americans. In fact even though African Americans experience more segregation from the White population, the findings of this analysis show that it will have less of an impact on the homicides. Based on this analysis

Hispanics experience less segregation; however, on the basis of dissimilarity homicides are 11.91 percent higher than among African Americans. Based on exposure segregation from the White population will cause Hispanic homicides to increase by 1.33 percent more than African Americans. Even though these two groups do significantly differ in the amount of segregation they experience the impact is still felt among both groups as it relates to homicide. Among both groups this contact to the White population seems to be an important factor in controlling the number of homicides.

As an exploratory analysis, a model was run that considered both Hispanic (and African American) to White segregation as well as segregation between Hispanics and African Americans. The findings of both analyses indicated no significant association between Hispanic to African American segregation and homicide. Therefore, in terms of controlling homicide among these groups, minority to minority contact is not as important as minority to majority group contact.

5.3: Disaggregated Hispanic Homicide by Ethnicity

Research in the past that has explored causal factors of Hispanic homicide has typically been limited to Hispanics as a monolithic category (Zahn 1988; Martinez 1996) or focused on only a handful of subjects (Martinez 1997b; Lee et al 2000; Nielson et al; 2005). In an attempt to reconcile this issue the forthcoming analysis will break down Hispanics into three sub-classifications: Mexican, Puerto Rican, and Other Hispanics. This analysis will include cities with a minimum of 2000 of the Hispanic sub-category under investigation. Based on the criteria established above, an analysis of Cubans was not possible due to the small number of cities that were eligible for this study. Instead this analysis includes Cubans within the other Hispanic classification. The purpose of examining Hispanic ethnicities independently is to explore the possible differences than could exist between these groups. Table 5.3 shows the negative

binomial regression coefficient and standard error for each of the Hispanic breakout groups (Mexican, Puerto Rican and Other Hispanics) for models corresponding segregation based on the index of dissimilarity. Table 5.4 presents findings for the aforementioned groups focusing on exposure between Hispanics and Whites.

5.3.1: Mexican Homicides

The majority of Hispanics residing in the United States are of a Mexican ethnic background (See Table 1.1). The first model in Table 5.3 examines several structural characteristics along with segregation, measured in dissimilarity, and the effect it has on Mexican homicides. By only including cities with a minimum of 2000 Mexicans the original sample was reduced from 206 to 188. A comparison of this model to the full Hispanic model (See Table 5.1) shows that several of the variables which impacted all Hispanic homicides similarly influence Mexican homicides. As expected segregation measured on the dimension of dissimilarity showed a strong positive association between segregation and Mexican homicide. For every one standard deviation increase in the index of dissimilarity between Hispanics and Whites, Mexican homicides increased by 143.30 percent. In comparison to the full model there is almost no change (about 1 percent) in the impact of segregation between Mexicans and all Hispanics.

Beyond the measure of segregation, these findings also show that the percentage of the population that was Mexican, population density and the southwest regional measure are all positively associated with the number of homicides. Furthermore, measures of education, unemployment, and median Hispanic rent were shown to have a statistically significant negative impact on Mexican homicides.

Table 5.3: Negative Binomial Regression Models of Segregation (Dissimilarity) Predicting Ethnic Specific Homicide Victimization^a

Variables	Mexicans		Puerto Ricans		Other Hispanics	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Dissimilarity White-Hispanic	.073***	.014	.072***	.016	.066***	.015
Percent of Population ^b	.072***	.012	.051***	.011	.019	.010
Median Rent	-.002*	.001	-.003	.002	-.005***	.001
Hispanic IQV	3.580**	1.400	.376	1.320	1.180	1.040
Gini Index	.040	.031	.056	.052	.026	.034
Southwest Dummy	1.270***	.268	-1.200	.640	1.380***	.275
Population Density	.000	.000	.000***	.000	.000***	.000
Average Hispanic Education	-.606**	.237	-.637*	.325	-.393	.239
Hispanic Unemployment	-.056	.042	-.167*	.074	-.212***	.066
Female Headed Households	.083***	.025	-.052*	.025	.035	.020
Average Male Age	.121	.071	-.006	.057	.140*	.068
Hispanic Floaters	.017	.026	.055	.038	.089**	.030
Constant	-8.250	3.170	2.121	4.530	-3.411	3.350
Pseudo R ²	.2221		.3940		.3069	
N	188		69		198	

^a: Homicides are ethnic specific

^b: Indicates variables which are ethnic specific

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

In this examination of Mexicans, this analysis also sought to understand if the dispersion of the Hispanic population (IQV) had an impact on homicides. Based on this analysis the Hispanic IQV measure was positively associated with Mexican homicides. Among Mexicans, homicides show an increase of 71.52 percent when the standard deviation of the Hispanic IQV increased by one unit. Among the Mexican population, the more heterogeneous the population becomes the greater the likelihood homicides may occur. In other words, when there is greater diversity in a city between the Hispanics residing there, the outcome will be a higher number of Mexican homicides.

Table 5.4 presents findings for Mexican segregation based on the exposure between Whites and Hispanics. The results indicate a significant association to homicide. Based on this

output, for every one standard deviation decrease in the exposure between Hispanics and Whites, there was a 30.70 percent increase in the number of homicides among Mexicans. As was the case with dissimilarity there is a slight difference between the segregation of Mexicans and all Hispanics. This model shows that when exposure decreases by one standard deviation, Mexicans experience an increase in homicide that is 3.19 percent more than the full Hispanic model.

Table 5.4: Negative Binomial Regression Models of Segregation (Exposure) Predicting Ethnic Specific Homicide Victimization^a

Variables	Mexicans		Puerto Ricans		Other Hispanics	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Exposure Hispanic-White	-.018*	.009	-.009	.018	-.018	.011
Percent of Population ^b	.078***	.013	.041**	.013	.014	.011
Median Rent	-.002*	.001	-.004	.002	-.006***	.001
Hispanic IQV	4.326**	1.499	.792	1.692	1.745	1.148
Gini Index	.099***	.030	.126*	.057	.105***	.028
Southwest Dummy	1.122***	.302	-.942	.696	1.371***	.307
Population Density	.000*	.000	.000***	.000	.000***	.000
Average Hispanic Educ.	-.970***	.275	-.727	.401	-.624*	.263
Hispanic Unemployment	-.131**	.042	-.141	.085	-.266***	.068
Female Headed Households	.134***	.027	-.032	.027	.059**	.021
Average Male Age	.085	.086	-.063	.348	.071	.073
Hispanic Floaters	.066**	.026	.083	.064	.124***	.031
Constant	-3.884	3.388	4.578	4.945	.426	3.382
Pseudo R ²	.2016		.3320		.2830	
N	188		69		198	

^a: Homicides are ethnic specific

^b: Indicates variables which are ethnic specific

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

As was the case with the previous model, this model also demonstrated a positive association between the Hispanic IQV and Mexican homicide meaning that for every one unit standard deviation increase in the Hispanic IQV (as it becomes less concentrated in one ethnicity) there is a 91.92 percent increase in Mexican homicide. Such a finding is of interest as

it lends support to the conclusion that when there is a high level of ethnic homogeneity among Hispanic ethnicities the number of homicides declines. This highlights the idea that when there is a concentration of a single Hispanic ethnicity (lower IQV scores), there may be a strong community bond, leading to less social disorganization and a strengthening of informal social controls.

5.3.2: Puerto Rican Homicides

The second analysis focused on an examination of how segregation between Hispanics and Whites affected Puerto Rican homicides. Similar to the Mexican analysis, cities were selected based on the criteria that there were a minimum of 2000 members of the population who classified themselves as Puerto Rican. As a result of these criteria a total of 69 cities were included in this analysis. The first model (See Table 5.3) looked at segregation on the dimension of dissimilarity. The findings of this analysis were similar to those of the previous model. Among Puerto Ricans segregation was found to be statistically significant, indicating that for each standard deviation increase in the index of dissimilarity there was a 160.17 percent increase in the number of homicides. Compared to the original Hispanic model, the effect of segregation is larger for Puerto Ricans. When segregated from Whites, Puerto Rican homicides increased by 15.86 percent more than the homicides among all Hispanics.

Within the Puerto Ricans sample there is also a positive association between the percentage of the population who were Puerto Rican and homicides. In addition as the population density increases Puerto Rican homicides also rose. Also, there was a negative association between unemployment, education and female headed households to the number of homicides. Similar to the Mexican model, female headed households were also statistically significant, but the association was negative for Puerto Ricans. Among this group, for one unit standard deviation increase in the number of female headed households there was a 47.69

percent decrease in the number of homicides. This finding seems to show that an extended social network, more powerful than the nuclear family, may step in to act as a social control mechanism within these disrupted households.

The second model (See Table 5.4) examines the association between segregation based on exposure and Puerto Rican homicides. The findings of this analysis were not as robust as the previous model. Here only the control measures of population density and the percentage of the population who attested to Puerto Rican heritage significantly impacted the number of homicides that occurred. Unlike Mexicans, where exposure to the White population significantly lowered the number of homicides, among Puerto Ricans exposure to this group had no effect. A result such as this leads one to believe that exposure to the majority population is not of consequence for Puerto Ricans. Also, it may imply that within populations where Puerto Ricans are of some size, their ethnic enclaves act as an insulator to the structural disadvantages which may surround them.

5.3.3: Other Hispanic Homicide

The final model examined in this analysis compared all Hispanics who reported being of non-Mexican or non-Puerto Rican ethnicity. When choosing cities with 2000 or more Other Hispanics the sample size was reduced from 236 to 198. Like the previous analyses this one used two models of segregation, one of dissimilarity and one of exposure.

Table 5.3 presents the dissimilarity model for Other Hispanics (Model 3). Like the previous two ethnic groups among Other Hispanic there was a positive association between homicide and segregation (dissimilarity). Based on this analysis, for every one standard deviation increase in the segregation between Hispanics and Whites, there was a corresponding 121.22 percent increase in the number of homicides. In comparison to Mexicans and Puerto

Ricans, segregation had the smallest effect on the number of Other Hispanic homicides. In fact this was 23.09 percent lower than the full Hispanic model.

In some respects the outcome of this analysis differed from the previous two. For example homicides among Other Hispanics were not shown to be significantly associated with the proportion of the Other Hispanic population. It is reasonable to assume that this result was due to the fact that this final category captures all Hispanics, not just a single ethnic group as was the case in the previous models. Consistent with the Mexican model the measure of regionalism was positively associated with Other Hispanic homicides. This association can be attributed to the migration patterns among Other Hispanics, who tend to be from other Central and South American nations and will typically follow the same migration pattern into the United States as Mexicans (Moore and Pinderhughes 1993). In addition, among Other Hispanics there was a significant association between homicides and male Hispanics with non-institutionalized attachments (floaters). This differs from Mexicans and Puerto Ricans where an increase of one standard deviation in the percentage of floaters resulted in a 73.64 percent increase in homicides among Other Hispanics.

Finally the Other Hispanic group is analyzed using exposure as the measure of segregation to predict homicides. Findings of this analysis indicated a positive association between many of the control variables and homicides, including income inequality, region of country (Southwest), population density, female headed households, and Hispanic floaters. Furthermore, there were also significant negative associations between the median Hispanic rent, average education and unemployment. Generally speaking these findings were consistent with the Mexican Hispanics model with two exceptions. First, in the Mexican model the measure of Hispanic IQV and population density did not attain statistical significance. Second, exposure

between Whites and Hispanics did not produce statistically significant results. The exposure of Hispanics to Whites showed no observable impact on the number.

5.3.4 Summary

This examination of ethnicities among Hispanics clearly shows that the impact of segregation is not uniform. Although all three models demonstrated a significant association between segregation measured as dissimilarity and homicides, it had a varying impact on the increase in homicide for each group. Not only did these values differ from each other, but they also differed from the full model of Hispanics as well. Beyond the dissimilarity measure, when segregation was measured as exposure a different picture emerged. When using exposure only the Mexican model was significantly associated with homicides. Therefore, the influence of isolation between Hispanics and Whites is detrimental to Mexicans but it does not seem to severely impact Puerto Ricans or Other Hispanics. It was also only among the Mexican population that the Hispanic IQV attained significance. This finding asserts that only among the Mexican population does greater heterogeneity result in an increased number of homicides. Overall what influences homicide among these different Hispanic ethnicities varies in both intensity and in some cases direction.

5.4: Change in Segregation 1980 to 1990

The next section of this study examines how the change in segregation between 1980 and 1990 effected homicides. The purpose of this analysis was based on the rational that a substantial shift in segregation over a relatively short period of time could result in pronounced and quick changes to the underlying structure of a community that could buffer or hasten the population toward criminal outcomes. Between 1980 and 1990 there were several legal and political changes surrounding immigration in the United States. These changes had an impact on the influx of immigrants and there underlying social structure. For example, in the early 1980's

there was the Mariel boat lift, which increased and changed the composition of the Cuban population in the United States (Gann and Duignan 1986; Gonzalez-Pando 1998; Martinez 1997b). Another event which altered the Hispanic subculture was the 1986 Immigration and Reform Control Act (IRCA). This provided amnesty to individuals illegally living in the United States (Garica 2002; Massey, Durand and Malone 2002). As a result, how these individuals interacted with mainstream society was fundamentally altered. Both of these events changed the landscape of Hispanic residency in the United States, and such a change may have influenced patterns of violent crime. Similar to the previous discussion of segregation, this analysis will examine Hispanic homicide, followed by African American homicide, and lastly a summary comparing the two.

5.4.1: Change in Segregation 1980 to 1990 Hispanics

Table 5.5 presents the negative binomial regression for changes in segregation among Hispanics between 1980 and 1990. Model 1 shows the change in dissimilarity, while Model 2 examines the change in exposure. Between 1980 and 1990 there was an average decrease of 0.23 percent in the dissimilarity index between Hispanics and Whites. Although these two groups become less segregated during this period of time, its impact on homicides was non-significant. This result indicates that while there was a decrease in Hispanic to White segregation this difference was not large enough to significantly impact the number of homicides.

In the dissimilarity segregation model, several control measures are also associated with Hispanic homicide. Among these region (Southwest) as well as Hispanic female headed households are both positively associated with Hispanic homicide. For Hispanics, there was a 59.68 percent increase in homicides when female headed households increased by one standard deviation. Aside from these measures, median housing cost, average educational attainment,

floaters and male Hispanic unemployment were all negatively associated with the number of homicides. This first model also indicated that income inequality was positively associated with homicides. Among Hispanics, for each standard deviation increase in the Gini Index, the number of homicides increased by 73.11 percent.

Table 5.5: Negative Binomial Regression Model of Change in Hispanic Segregation 1980 to 1990 Predicting Hispanic Homicide Victimization

Variable	Dissimilarity		Exposure	
	Coef.	S.E	Coef.	S.E
Dissimilarity Hispanic/White Change	-.038	.020		
Exposure Hispanic/White Change			.043*	.018
Percent Population Hispanic	.004	.008	.007	.008
Median Hispanic Rent	-.004***	.000	-.003***	.001
Hispanic IQV	-.784	.851	-.840	.841
Gini Index	.117***	.024	.109***	.024
Southwest Dummy	1.582***	.273	1.570***	.270
Population Density	.000***	.000	.000***	.000
Average Hispanic Education	-1.041***	.209	-1.125***	.213
Hispanic Male Unemployment	-.119***	.035	-.115***	.035
Female Headed Households	.050***	.014	.055***	.014
Average Hispanic Male Age	.090	.055	.085	.054
Floaters	.055*	.022	.047*	.022
Constant	5.560	2.470	6.992	2.579
Pseudo R ²	.1901		.1921	
N	230		230	

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

The second model presented in Table 5.5 summarizes the findings of the change in exposure between Hispanics and Whites from 1980 to 1990. This analysis demonstrated results which were almost identical to the previous analysis. As was the case with the dissimilarity model the measures under investigation move in the same direction and remain significant. Unlike dissimilarity the change in exposure was significant. Between 1980 and 1990, there was on average a 5.83 percent decrease in the exposure that the Hispanic population had to the White population. As the change in exposure increased by one standard deviation, the corresponding number of homicides increased by a total of 35.18 percent.

5.4.2: Change in Segregation 1980 to 1990 African Americans

To fully understand how this change in segregation has effected the population, an analysis of African Americans was also incorporated into this study. Table 5.6 presents the coefficients and standard errors for both segregation models. Between 1980 and 1990 the level of segregation (measured as dissimilarity) between African Americans and Whites decreased by an average of 6.45 percent, an amount which is much larger than among Hispanics. Similar to the Hispanic model, there was not a significant association between segregation and homicide. Even though the level of segregation decreased this change did not effect the homicide patterns of African Americans.

The first analysis does show that homicides are positively associated with the percentage of African Americans, educational attainment and female headed households. There is also a significant negative association for median rent, indicating that as the cost of rent decreases homicides will go up. Finally African Americans who reside in the South are more likely to be the victim of a homicide compared to non southern African Americans.

The second model focused on the African American change in exposure between 1980 and 1990. When comparing these models the control measures used to predict homicide remained consistent in significance and direction. Between 1980 and 1990 the average exposure of African Americans to Whites increased by 2.03 percent indicating that the potential contact with the White population decreased. Compared to Hispanics this change was much smaller. Unlike the previous model, when the change in exposure is incorporated into the model, its effect on homicide is statistically significant. When the change in exposure between 1980 and 1990 increased by one standard deviation, there was a 17.83 percent increase in homicides.

Table 5.6: Negative Binomial Regression Model of Change in African American Segregation 1980 to 1990 Predicting African American Homicide Victimization

Variable	Dissimilarity		Exposure	
	Coef.	S.E	Coef.	S.E
Diss. African American/White Change	.015	.017		
Exposure African American/White Change			.085***	.019
Percent Population African American	.027***	.007	.038***	.006
Median African American Rent	-.005***	.001	-.004**	.001
South Dummy	-.042	.251	-.360	.223
Gini Index	.040	.033	.054	.029
Population Density	.000**	.000	.000***	.000
Average African American Education	.717**	.279	.895***	.250
Female Headed Households	.073***	.014	.053***	.013
Average African American Male Age	.088	.056	.016	.053
Floater	.012	.023	.032	.021
Constant	-12.238	3.695	-13.585	3.363
Pseudo R ²	.1372		.1504	
N	202		202	

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

5.4.3: Change in Segregation 1980 to 1990 – A Comparison

There is a great deal of similarity between Hispanics and African Americans with regard to homicide. Between 1980 and 1990 the increased exposure to the White population has a significant positive impact on homicides in both groups. For both groups this translated into an increase in homicides, all be it larger for Hispanics (35.18 versus 17.83 percent). The models for both Hispanics and Africans Americans show a similar outcome involving the changes in segregation between 1980 and 1990. The significance in the change was noted in the exposure measure, but not in the dissimilarity model. This could indicate a shift in the population size but not necessarily in residential mobility. Specifically these minority groups are increasing in size faster than the White population, thereby increasing their potential contact. At the same time an increase in population would also explain the relatively small change in dissimilarity if these growing groups settle into established minority communities. In sum one may conclude that during this period of time, the reduction in segregation may be due to an increase in the minority

population (e.g. immigration or minority births increasing at a faster rate than the majority) rather than decreased residential segregation.

5.5: Change in Segregation 1990 to 2000

In a further exploration of this issue, the following analyses examine how changes in segregation from 1990 to 2000 have influenced homicide among Hispanics and African Americans. Beginning in the 1990s the United States entered a period of economic prosperity along with an increase in the standard of living and a lower crime rate. In addition Hispanics in the United States experienced an increase in their population, primarily due to immigration brought on by employment opportunities from this thriving economy (Garica 2002; Massey et al 2002). By looking at the change in segregation between 1990 and 2000 its impact on homicides for both Hispanics and African Americans can be assessed.

5.5.1: Change in Segregation 1990 to 2000 Hispanics

Table 5.7 displays the Hispanic change in segregation between 1990 and 2000. From 1990 to 2000 there was a 1.92 percent increase in the index of dissimilarity between Hispanics and Whites, meaning that segregation between these two groups increased. In part this increase may be due to more immigration and the likelihood that new immigrants would settle within established ethnic enclaves (Moore and Pinderhughes 1993).

The results for the dissimilarity model illustrate several associations to Hispanic homicide. Among this group income inequality, population density, female headed households and floaters were positively related to homicide. Also, median rent for Hispanics, educational attainment and male unemployment were negatively associated with the dependent variable of homicide. These findings were consistent with the 1980 to 1990 model. Even though the level of segregation increased more during the 1990 to 2000 period, homicides are not significantly affected by this net change in segregation.

Table 5.7: Negative Binomial Regression Model of Change in Hispanic Segregation 1990 to 2000 Predicting Hispanic Homicide Victimization

Variable	Dissimilarity		Exposure	
	Coef.	S.E	Coef.	S.E
Dissimilarity Hispanic/White Change	.006	.016		
Exposure Hispanic/White Change			.006	.012
Percent Population Hispanic	.007	.008	.006	.008
Median Hispanic Rent	-.004***	.001	-.004***	.001
Hispanic IQV	-.548	.860	-.452	.839
Gini Index	.120***	.025	.117***	.025
Southwest Dummy	1.569***	.274	1.556***	.272
Population Density	.000***	.000	.000***	.000
Average Hispanic Education	-.968***	.215	-.996***	.210
Hispanic Male Unemployment	-.124***	.036	-.128***	.035
Female Headed Households	.055***	.014	.052***	.014
Average Hispanic Male Age	.087	.056	.085	.056
Floaters	.061**	.022	.063**	.022
Constant	4.513	2.579	5.150	2.598
Pseudo R ²	.1907		.1907	
N	234		234	

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

Model 2 of Table 5.7 examines the relationship between exposure and homicide. Over this ten year period the exposure of Hispanics to Whites increased by 12.41 percent. The findings of the exposure model paralleled that of the dissimilarity mode. Comparing these results to the change in exposure between 1980 and 1990 the outcome is different. Here, exposure to Whites was not significantly associated with Hispanic homicide. Even though the change in segregation from 1990 to 2000 was higher for Hispanics, the anomic conditions that segregation may produce are not massive enough to effect Hispanic homicides. Again with an increasing Hispanic population, the formation of strong community bonds may supplant the need for contact to the majority population.

5.5.2: Change in Segregation 1990 to 2000 African Americans

Table 5.8 provides a summary of the coefficients and standard errors for the segregation among African Americans between 1990 and 2000. As was the case with the Hispanic models,

the goal here was to determine if changes in segregation patterns resulted in a significant impact on homicide. Using a multivariate analysis based on the change in dissimilarity between 1990 and 2000, segregation from African Americans to Whites decreased by an average of .05 percent. This change in dissimilarity was much smaller than what African Americans experienced from 1980 to 1990 (6.45 percent). Analysis of this model yielded several variables of significance, including the percentage of the population who were African American, median rent, and female headed households. Central to this analysis was whether this small change in dissimilarity would impact homicides. Although there was a change, it was not large enough to significantly impact African American homicides.

Table 5.8: Negative Binomial Regression Model of Change in African American Segregation 1990 to 2000 Predicting African American Homicide Victimization

Variable	Dissimilarity		Exposure	
	Coef.	S.E	Coef.	S.E
Diss. African American/White Change	-.013	.014		
Exposure African American/White Change			.015	.016
Percent Population African American	.029***	.007	.029***	.007
Median African American Rent	-.005***	.001	-.005***	.001
South Dummy	-.141	.231	-.097	.231
Gini Index	.052	.032	.045	.031
Population Density	.000**	.000	.000**	.000
Average African American Education	.806**	.269	.817**	.270
Female Headed Households	.064***	.015	.067***	.014
Average African American Male Age	.073	.056	.061	.059
Floater	.017	.022	.020	.023
Constant	-13.164	3.569	-12.913	3.573
Pseudo R ²	.1416		.1417	
N	206		206	

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

As before, the next analysis focused on the change in exposure from 1990 and 2000. During this period of time there was a 5.92 percent increase in the exposure of African Americans to Whites. Unlike the dissimilarity measure, in the case of exposure there was quite a large increase when compared to the 1980 to 1990 change (5.92 verses 1.68 percent). The

negative binomial regression of this model produced results that are almost identical to the dissimilarity model. As with the previous the model a variety of control measures were significantly associated to homicides however, the change in segregation measure, although larger than exposure in the previous analysis did not present a significant finding.

5.5.3: Change in Segregation 1990 to 2000 – A Comparison

When looking at the overall results of both the Hispanic and African American models, the findings were quite similar. Most importantly none of the models showed that the change in the amount of segregation between 1990 and 2000 would successfully predict homicides with any level of statistical significance. While the concept of a change in segregation seems logical, in the case of both the change from 1980 to 1990 and from 1990 to 2000 the effect was minimal. In fact, with the exception of the change in exposure between 1980 to 1990 among Hispanic and African Americans, none of these other measures produced the expected results. Even though both African Americans and Hispanics experienced changes in their segregation to the White population, most were too small to produce a significant association.

5.6: Class and Segregation – Introduction

Earlier analyses have shown a link between homicide and segregation for both Hispanics and African Americans. However, this association may not simply be a matter of segregation. Perhaps the negative effects of segregation in connection with underlying social pathologies such as poverty is the explanatory factor to homicide. Segregation within the middle and upper classes should carry fewer negative consequences compared to those who are of a lower social class. The following analysis examines and demonstrates that the negative effect of segregation on homicides is class dependent, something that previous literature on the subject of segregation has insufficiently examined.

This analysis examines segregation measured by the index of dissimilarity disaggregated for specific socioeconomic classes based on income. Income classifications were established using three thresholds: Poor are identified as an income under 175 percent of the poverty line based on a family of four. In the year 2000 this constituted any household with an income under 30,000 dollars. Middle is represented by an income which was between 175 and 350 percent of the poverty line (30,000 to 60,000 dollars). Finally affluent or high social class comprised all other households where the income was 350 percent of the poverty line (greater than 60,000 dollars). In both the African American and Hispanic model the same pattern concerning segregation emerges. For both, as social class increases, these groups become more segregated from one another.

Prior to generating the model presented here, these data were subjected to an analysis in order to detect the presence of any issues of multicollinearity. Based on this analysis it was determined that the dissimilarity measures for high incomes and middle incomes were too highly correlated to examine simultaneously. Instead an index was created of the two measures, so that a comparison could be made.

5.6.1: Class and Segregation Hispanics – Low to Middle/High Social Class Index

Table 5.9 presents the negative binomial regression models for segregation among low class Hispanics compared to the middle/high social class index. The results of this model and results from the original dissimilarity model which did not control for social class are similar (See Table 5.1). The only notable difference between this analysis and the original was income inequality. In this model it was shown to have a positive effect on homicide. Each time the standard deviation of the Gini Index increased by one unit, homicides rose by 31.88 percent. This model also demonstrated a statistically significant association to female headed households, when they increased by a standard deviation homicides went up by 42.72 percent.

Table 5.9: Negative Binomial Regression Model of Hispanics Class Specific Segregation Predicting Hispanic Homicide Victimization

Variable	Middle/High Index		Middle Class	
	Coef.	S.E	Coef.	S.E
Dissimilarity White/Hispanic Poor Class	.057***	.014	.065***	.017
Dissimilarity White/Hispanic Middle/High Index	.012	.016		
Dissimilarity White/Hispanic Middle Class			-.002	.018
Percent Population Hispanic	.010	.007	.010	.007
Median Hispanic Rent	-.003***	.001	-.003***	.001
Hispanic IQV	-.635	.784	-.592	.788
Gini Index	.059*	.025	.064**	.025
Southwest Dummy	1.480***	.246	1.455***	.242
Population Density	.000**	.000	.000**	.000
Average Hispanic Education	-.725***	.187	-.763***	.185
Hispanic Male Unemployment	-.099**	.033	-.103**	.033
Female Headed Households	.038**	.013	.039**	.013
Average Hispanic Male Age	.117*	.049	.115*	.049
Floaters	.037	.019	.039*	.020
Constant	1.319	2.271	1.822	2.206
Pseudo R ²	.2217		.2213	
N	233		233	

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

The primary element which this analysis sought to understand was the impact of class specific segregation to homicide. This analysis shows that when segregation is examined based on social class, there is an inconsistent effect on homicide. Although middle and high social class Hispanics when compared to lower class Hispanics and their counterparts experience a higher level of segregation to middle and high social class Whites. The results show that only segregation in the lowest social class significantly effects homicide. Every standard deviation increase in the dissimilarity between Hispanics and Whites in the lower social class will result in a 90.97 percent increase in Hispanic homicides.

5.6.2: Class and Segregation Hispanics – Low to Middle Social Class

A sensitivity analysis is presented next in an attempt to determine if the findings of this analysis may also fall into the middle class but not the affluent class. A model was generated

with the lower class and middle class segregation measures. Based on the output, the findings are almost identical to the index model. Although the coefficients do change slightly between the models the only difference in significance was among floaters. In the non-index model, the Hispanic male population classified as floaters had a positive impact on homicides. Also, this analysis shows that the effect of segregation on homicide does not extend beyond the lowest social class. What is observed among lower class Hispanics, is that when they are segregated from lower class Whites homicides will increase. As lower class segregation increases by one standard deviation homicides rose by 109.12 percent.

5.6.3: Class and Segregation Hispanics – Summary of Findings

Segregation is often thought to bring about negative outcomes for members of a minority group. This analysis however, shows that segregation in and of itself, while isolating, does not necessarily lead to higher incidents of homicide among the Hispanic population. Even though middle and affluent social classes experience segregation, their social status seems to act as an insulator to its negative effects. These findings for Hispanics show that unlike the middle class when the lower class is segregated they are more likely to be involved in a homicide.

5.6.4: Class and Segregation – African Americans

Previous analyses show that patterns which influence homicide among Hispanics are similar to those of African Americans. While they may differ somewhat, how segregation has affected homicide trends among African Americans has been generally consistent with Hispanics. To further understand the dynamics of social class and segregation, models were developed in order to look at the impact of African American social class and homicides. These findings correspond to the Hispanic analysis by showing that homicides are more than just a matter of segregation. They are also a matter of social class.

The pattern of segregation among African Americans was similar to what was observed previously observed. As was the case with Hispanics, an increase in social class corresponded to a higher level of segregation between the Whites and African Americans (See Table 4.1). When examining the original models of race/ethnicity and dissimilarity, there is a large difference in the class specific segregation between Hispanics and African Americans. In all classes, the dissimilarity score for African Americans was above fifty–five percent and was almost twenty percentage points higher than Hispanic to White segregation. Because segregation from the White population is much more pronounced among African Americans, it is possible that the effects of social class segregation extends beyond the lower social class into the middle and affluent classes for African Americans.

5.6.5: Class and Segregation African Americans – Low to Middle/High Social Class Index

The first model in Table 5.10 presents the findings of the negative binomial regression for lower class to middle/high index among African Americans. In a comparison to the original dissimilarity model (See Table 5.1) there is much of consistency between the causes of homicide and various control measures. For both models, percentage of the population who were African American, average education and female headed households were all shown to have a positive association to homicide. Also median housing cost was negatively associated in both models. In addition to these measures, in the middle/high social class index model population density did have a positive effect on the number of homicides, a difference from findings in the original analysis. In the case of population density for every standard deviation increase African American homicides increased by 19.97 percent.

Table 5.10: Negative Binomial Regression Model of African American Class Specific Segregation Predicting African American Homicide Victimization

Variable	Middle/High Index		Middle Class	
Dissimilarity White/African American Poor Class	.026*	.013	.035**	.013
Dissimilarity Index Middle and High Class	.020	.014		
Dissimilarity White/African American Mid. Class			.006	.015
Percent Population African American	.027***	.006	.027***	.006
Median African American Rent	-.004***	.001	-.005***	.001
South Dummy	.019	.224	-.035	.230
Gini Index	-.012	.032	-.002	.032
Population Density ^{a b}	.000*	.000	.000*	.000
Average African American Education	.932***	.247	.903***	.249
Female Headed Households	.077***	.013	.074***	.012
Average African American Male Age	.056	.052	.044	.051
Floater	.022	.021	.023	.021
Constant	-14.956	3.427	-14.063	3.416
Pseudo R ²	.1569		.1556	
N	207		207	

^a: Full Coefficient for middle/high index social class population density is .0000513

^b: Full Coefficient for poor and middle social class population density is .0000537

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

When looking at social class and segregation the findings of this analysis were similar to the Hispanic model. Similar to Hispanics, only the lower class measure of segregation between African Americans and Whites is significantly associated with homicides. When lower class African Americans experience segregation from lower class Whites homicides increased. As lower class segregation increases by a standard deviation, homicides rose by 44.51 percent. Similar to Hispanics the middle/high social class index did not attain statistical significance for African Americans.

5.6.6: Class and Segregation African Americans – Low to Middle Social Class

Previously a model was constructed with Hispanics to determine if the segregation/social class effect extends into the middle class. Now a second model is presented which looks at the poor and middle social class alone. The second model of Table 5.10 presents the results of the dissimilarity model for the lower class compared with middle class African Americans. Results

of this analysis were generally consistent with the previous model as well as with regard to disaggregated segregation. Like the middle/high class index model, variables which were significant in this model remained significant and moved in the same direction as the original analysis (See Table 5.2). Also this model reported a significant association to the population density. When looking at population density there was a 19.97 percent increase in the number of African American homicides per standard deviation increase in the population density. This finding is almost identical to the previous analysis.

In the case of African Americans in the low/middle social class model produces the same outcome from the previous model is produced. Once again lower class homicides do go up by 48.77 percent per standard deviation increase in lower class segregation. While this does show a significant outcome for the lower class, similar to the Hispanic analysis segregation in the middle class alone does not influence homicides.

5.6.7: Class and Segregation African American – Summary of Findings

An examination of these models highlights the importance of segregation among African Americans as it pertains to homicides. The result of the Middle/High Index model indicates that the effect of segregation does significantly impact African American homicide among those who are in the lower class. Furthermore, this analysis shows that this finding does not extend into the higher social classes.

Such an outcome could be the result of several factors. Most likely this indicates that the negative effect of segregation on homicide does not extend fully into middle and upper classes of African American culture. One might also conclude that this segregation among the middle and upper social classes does not influence homicide, mainly because the negative effects of poverty are not present for these individuals. Also, one may argue that middle and upper class culture

insulates its members from the negative cultural and social influences that permeate lower class culture and provoke acceptable violent behavior.

5.6.8: Class and Segregation – A Comparison between Hispanics and African Americans

An examination of class specific homicides among Hispanics and African Americans has presented some interesting findings. When looking at segregation among Hispanics and African Americans, African Americans experience a greater level of segregation compared to Hispanics. Regardless of this difference in segregation, this analysis shows that it will not produce different results between Hispanics and African Americans. In both cases the effect of segregation is not consistent across all social classes. Such a finding points to the idea that the negative effects of segregation are more detrimental when minorities are segregated in an environment where structural disadvantages such as poverty, crime, and a lack of informal social control exist, regardless of how much segregation exists. A further look at segregation among these two minority groups indicates that segregation may be less of a factor when compared to social class, since with both groups as social class improves they will be more segregated from Whites. It is for this reason that one must call into question the idea that segregation remains constant for all social classes.

Segregation among the lower class affects homicides for both the Hispanics and African Americans and not be for members of the middle and upper social classes. Such an outcome leads to the conclusion that community social control mechanisms within these segregated communities must act as a buffer to homicide, while among the lower class they are insufficient or non-existent. The outcome remains the same regardless of segregation; social class appears to have a selective effect on homicides among both of these minority groups.

5.7: Chapter Summary

Chapter five has presented a lengthy analysis detailing the impact of segregation on homicide for both Hispanics, a variety of Hispanic ethnicities and African Americans. At the center of this discussion is whether or not segregation in its many forms affected homicides among Hispanics in a manner similar to that of African Americans. Such an outcome is not guaranteed since every measure reported that African Americans are more segregated from the White population when compared to Hispanics.

This chapter explored segregation in four major analyses. First is a simple examination of the association between segregation and homicide. Second Hispanic ethnicities are independently analyzed to determine if the effect of segregation differed for each group. Third, the change in segregation over time is tested to see if it had a significant impact on homicides. Finally, chapter five looks at the congruence of social class and segregation to determine if the effect of segregation on homicides is consistent.

The first analysis conducted in this chapter looked only at segregation and homicide among Hispanics and African Americans. This analysis used both the index of dissimilarity and exposure to measure segregation. Findings of the Hispanic models indicated that both measures of segregation had a significant impact on homicide. In addition the Hispanic models used an internal segregation measure (Hispanic IQV) which was used to determine if greater heterogeneity influenced homicides. Both models showed that this measure did not influence homicides. A further exploration of segregation and homicide was conducted to determine if the findings for Hispanics held for African Americans. Overall the findings of this analysis were consistent with the Hispanic analysis. As an exploration a second model was run (not presented) which looked at segregation between African Americans and Hispanics and its corresponding outcome on their respective homicide counts. In both the case of African American and

Hispanic homicides, segregation to the respective minority group did not impact homicides significantly. Such a result indicates that it is segregation to the White population that impacts homicides, not segregation to other minorities.

The second analysis conducted in this chapter deepened the exploration of segregation and homicide among Hispanics by looking at the impact of segregation within specific Hispanic ethnic groups. Here Hispanics were disaggregated into three groups, Mexicans, Puerto Ricans and Other Hispanics. Like the previous analysis this one also used segregation on the basis of dissimilarity and exposure. Findings for the model of segregation based on dissimilarity showed consistent results within the ethnic specific models when compared to the original Hispanic model. There was a departure concerning the measure of segregation based on exposure. In this case potential exposure to the White population differed from the original model on this dynamic. Finally among Mexicans, these analyses also indicated that the Hispanic measure of segregation (Hispanic IQV) was associated with Mexican homicides. As the Hispanic population became more diversified, the number of Mexican homicides increased. This finding for Mexicans was not significant in the original model nor was it in the other ethnic specific models.

After the discussion of Hispanic ethnic groups, the focus was redirected toward a full model of Hispanics and African Americans that specifically examined how changes in the level of segregation affected the race/ethnic homicides. Between 1980 and 1990 the change in dissimilarity did not impact the number of homicides for African Americans or Hispanics. However, the change in exposure for this same time period did demonstrate a statistically significant result for both groups. A second analysis looked at the change in segregation between 1990 and 2000 also based on dissimilarity and exposure. This analysis of change did not result in any statistically significant findings for either Hispanics or African Americans.

The final section of this chapter looked at social class based segregation. In the models which were examined, segregation was disaggregated by social class and then compared to determine if class specific segregation had a similar influence on homicides among Hispanics and African Americans. The findings for this analysis indicated segregation among the lower classes had a significant impact on homicides for both racial/ethnic groups. In an attempt to determine if social class' influence on homicide extended into the middle class, a model was generated comparing low and middle class segregation. In both the case of African Americans and Hispanics, class specific segregation was only significant for the lower class.

The results of this chapter have demonstrated that the impact of segregation on homicide shows some similarities between Hispanics and African Americans. But there are some dynamics where these two groups differ, such as the level of segregation experienced. Also, while variables do remain statistically significant between some models, there is often a great deal of variation in the influence the measure may have on homicide.

CHAPTER 6: HOMICIDE – THE IMPACT OF FAMILY AND SEGREGATION

6.1: Introduction

Chapter six presents a different perspective in the analysis of race and segregation. The forthcoming analysis will examine both Hispanics and African Americans and will look at the influence of segregation as it directly relates to homicide as well as its indirect effect, mediated by female headed households. The primary purpose of this analysis is to examine the possibility that differences between Hispanics and African Americans households may effect if and in what manner homicides occur. Previous research has indicated that family social structure among Hispanics differs from that of African Americans (Tienda and Angel 1982; Bean and Tienda 1987). In addition, research has also shown that female headed households among Hispanics are lower than African Americans (Dalaker 2001). As in chapter five, in order to avoid colinearity between, models segregation will be placed into two separate models (Dissimilarity and Exposure) when analyzing the homicides and female headed households. Finally, to gain a full understanding of the impact of female headed households on homicide, different Hispanic ethnicities are examined independent of one another. To gauge both the direct and indirect association this analysis will employ the use of an ordinary least squares regression (OLS) model, with proper adjustments to induce normality where necessary.

6.2: Hispanic Female Headed Households and Homicide – Introduction

Among cities with a population of greater than 100,000 and a Hispanic population of 2,000 or more, 20.42 percent of the Hispanic population is headed by a female. This analysis examines how female headed households mediate segregation's impact on homicides. For this analysis two models were created for each dimension of segregation. The full model includes race/ethnic specific female headed households, while the second model leaves this measure out

to determine its mediating effect. Aside from this shift to an OLS model, there were no other differences between this model and the one presented in the previous chapter.

6.2.1: Hispanic Female Headed Households – Analysis

Table 6.1 presents the findings for the entire Hispanic population regarding homicide and family structure using dissimilarity as the measure of segregation. An analysis of these data showed that a variety of different variables had an impact on Hispanic homicide. This analysis indicated that the size of the Hispanic population, region of country (Southwest) and floaters (unemployed, out of school, not in military male population 16 to 19) were positively associated with Hispanic homicides. The influence of segregation was also of interest in this analysis. When using the index of dissimilarity to predict homicides, this analysis has shown that an increase in segregation will cause homicides to go up. This result is similar to the findings of chapter five.

Also of interest is the influence of female headed householders on homicide. The findings of this model do not show a statistically significant association between the percentage of single mothers and homicide. This implies that the proportion of female headed households within a community is not large enough to have an impact on the number of Hispanic homicides.

The second model presented in Table 6.1 looks at how several structural components influence homicide. As is the case in the first model this analysis reports that segregation measured as dissimilarity was positively associated with an increase in homicide although the indirect effect of segregation must be discounted since female headed households were not significant in the primary model. Also this model indicated that population density, the southwest measure and the percentage of males disengaged from conventional social institutions are all associated with an increase in homicides.

Table 6.1: OLS Models of Segregation (Dissimilarity) Predicting Hispanic Homicide Victimization

Variable	Homicide with Female Headed Households		Homicide without Female Headed Households	
	B	S.E.	B	S.E.
Female Headed Households	-.016	.011		
Dissimilarity Hispanic/White	.066***	.010	.063***	.009
Percent Population Hispanic	.020***	.006	.019***	.005
Median Hispanic Rent	-.002**	.001	-.002*	.001
Hispanic IQV	.607	.628	.566	.630
Gini Index	-.018	.022	-.015	.022
Southwest Dummy	1.095***	.208	1.144***	.206
Population Density	.000**	.000	.000*	.000
Average Hispanic Education	.006	.178	-.072	.170
Hispanic Male Unemployment	.007	.027	-.015	.023
Average Hispanic Male Age	.057	.036	.065	.036
Floaters	.039*	.016	.041**	.016
Constant	-2.987	1.993	-2.503	1.974
R ²	.679		.674	
N	163		163	

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

The second analysis of Hispanic homicide and the mediating effect of female headed households (See Table 6.2) uses exposure between Hispanics and Whites as its measure of segregation. When using the exposure model to examine homicides, there are both consistencies and inconsistencies when compared to the dissimilarity model. For example, median rent, region (Southwest), and floaters remain significant when predicting homicides in both models. However, in the exposure model, segregation was not significantly related to homicides. Also the exposure model reported that income inequality and educational attainment did impact homicides however, they did not in the first model. The one dynamic where there is consistency is among female headed households. As was the case before, here female headed households also do not significantly influence homicide.

Table 6.2: OLS Models of Segregation (Exposure) Predicting Hispanic Homicide Victimization

Variable	Homicide with Female Headed Households		Homicide without Female Headed Households	
	B	S.E.	B	S.E.
Female Headed Households	.004	.012		
Exposure Hispanic/White	-.008	.006	-.008	.006
Percent Population Hispanic	.013	.007	.013	.007
Median Hispanic Rent	-.002**	.001	-.002**	.001
Hispanic IQV	.588	.718	.599	.715
Gini Index	.052*	.022	.053*	.022
Southwest Dummy	1.179***	.238	1.167***	.234
Population Density	.000**	.000	.000***	.000
Average Hispanic Education	-.491**	.185	-.478**	.181
Hispanic Male Unemployment	-.020	.031	-.015	.026
Average Hispanic Male Age	.030	.041	.027	.041
Floaters	.063**	.018	.052**	.018
Constant	3.026	2.141	2.983	2.131
R ²	.580		.580	
N	163		163	

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

Although it was originally expected that female headed households would produce some mediating effect between segregation and homicide, again we find that this is not the case. Furthermore, a comparison of these two models indicates that there are only minor changes in the coefficients between these two models.

6.2.2: Hispanic Female Headed Households – Summary

This analysis examined whether segregation is associated with homicides directly as well as indirectly when mediated by female headed household. Based on the models generated, female headed households did not attain statistical significance when predicting homicides. Previous research has indicated that the role of the traditional family is much stronger within the Hispanic community, resulting is a more patriarchal household and a strong proscription against divorce (See Bean and Tienda 1987). This is evident by the fact that the average number of female head households is half that of the African American population. The influence of

segregation also varied. In this analysis segregation on the basis of dissimilarity is shown to be significant for homicides; however segregation measured as exposure has no significant influence when predicting homicides. Finally because female headed households are not statistically significant when predicting homicides, segregation did not indirectly influence homicides when mediated by female headed households.

6.3: Hispanic Female Headed Households and Homicides – An Exploration of Ethnic Group Differences

Extending the previous work, I next explore if the effect of female headed households on violence varies by Hispanic ethnic group. The analysis conducted is for the same ethnic groups analyzed in chapter five. Based on the analysis of Puerto Ricans and Other Hispanics, the results remained generally consistent with the full Hispanic model discussed in the previous section where female headed households were not directly association to homicides, therefore indirect effect of segregation, mediated by female headed households could not be assessed. For this reason a discussion of Puerto Ricans and Other Hispanics is not included in this next section (The models produced for this analysis are presented in Appendix C). In comparison the model of Mexican Hispanics did produce results which were inconsistent with the full Hispanic model and will be discussed in the following section.

6.3.1: Mexican Female Headed Households and Homicides – Analysis

Table 6.3 shows that unlike the full Hispanic model, where female headed households have no effect on homicides, among the Mexican population female headed households have a negative effect. In the case of Mexican Hispanics, as the number of female headed households increases, the number of homicides decreased. Also among Mexicans the results indicate that segregation from the White population resulted in more homicides. The role of segregation, measured as dissimilarity is both directly and indirectly (mediated through female headed households) positively associated with homicides. Directly, homicides (as the natural log)

increase by .074 for each one percent increase in the index of dissimilarity. Indirectly, when mediated by female headed households there is a .059 increase in the natural log of homicides for each percent increase of the index of dissimilarity. To further analyze the impact of this change in segregation, a test of significance was calculated to determine if this change in the slope of segregation was larger enough to be considered statistically significant⁵. Based on this analysis the while some of the effect of segregation is mediated by female headed households, the difference is not larger enough to be considered statistically significant.

Table 6.3: OLS Models of Segregation (Dissimilarity) Predicting Mexican Homicide Victimization

Variable	Homicide with Female Headed Households		Homicide without Female Headed Households	
	B	S.E.	B	S.E.
Female Headed Households	-.056*	.023		
Dissimilarity Hispanic/White	.074***	.015	.059***	.015
Percent Population Mexican	.023*	.009	.026**	.009
Median Hispanic Rent	-.002***	.001	-.002*	.001
Hispanic IQV	.072	1.012	.127	1.036
Gini Index	-.027	.030	-.012	.030
Southwest Dummy	1.139***	.278	1.109***	.285
Population Density	.000	.000	.000	.000
Average Hispanic Education	.086	.258	-.085	.254
Hispanic Male Unemployment	.040	.040	-.007	.036
Average Hispanic Male Age	.094	.074	.050	.074
Floater	.011	.024	.029	.024
Constant	-3.169	2.803	-1.506	2.785
R ²	.602		.578	
N	116		116	

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

This analysis of Mexican homicides indicates that in addition to segregation, the percentage of the population who were of Mexican ethnicity and the median cost of rent among Hispanics are also mediated by female headed households. The fact that increased concentrations of female headed households resulted in a lower number of homicides may lead

⁵ To test for significance between the following formula is used: $z = \frac{b_1 - b_2}{\sqrt{SE_1^2 + SE_2^2}}$ If the calculated value is greater than 1.96 than statistical significance is achieved with an alpha level of .05.

to the conclusion that when there are concentrations of Mexican households community norms may act as reinforcement to cultural mandates which assert the preservation of the traditional family structure (Bean, Berg and Van Hook 1996). Also, the second model reports that population density, Hispanic male unemployment and floaters affected female headed households while indirectly affecting Hispanic homicide.

Table 6.4: OLS Models of Segregation (Exposure) Predicting Mexican Homicide Victimization

Variable	Homicide with Female Headed Households		Homicide without Female Headed Households	
	B	S.E.	B	S.E.
Female Headed Households	-.015	.024		
Exposure Hispanic/White	-.002	.010	-.001	.010
Percent Population Mexican	.020	.012	.021	.011
Median Hispanic Rent	-.003**	.001	-.003**	.001
Hispanic IQV	.265	1.124	.277	1.121
Gini Index	.041	.030	.042	.029
Southwest Dummy	1.212***	.308	1.199***	.306
Population Density	.000*	.000	.000*	.000
Average Hispanic Education	-.477	.278	-.503	.274
Hispanic Male Unemployment	-.005	.043	-.017	.039
Average Hispanic Male Age	.076	.086	.065	.084
Floaters	.049	.026	.053*	.025
Constant	2.602	2.828	2.752	2.812
R ²		.514		.512
N		116		116

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

Table 6.4 shows the models for segregation based on exposure and homicide. Unlike the previous analysis, these results were not as robust. When using exposure as a measure of segregation, only the median cost of rent, region (Southwest) and population density are statistically significant when predicting Mexican homicides. Similar to the last analysis residing in the Southwest increased the likelihood of homicide victimization. Also population density, all be it a small effect is positively associated with Mexican homicide as well. Unlike the previous analysis using segregation based on dissimilarity, in this model female headed households did

not have a significant impact on homicide. Most importantly a change in potential contact to the White population did not influence Mexican homicides in either direction.

Model 2 looks at segregation and homicide mediated by female headed households. In this model there was no indirect association which can be linked to segregation when mediated by female headed households. The change between these models is very little, between this analysis and the full model the overall variation in homicides decreases by .2 percent. Similar to the first model, segregation based on exposure is not significantly associated with homicides. This is unlike the previous analysis which does show that segregation was connected to an increase in female headed households. Also differing from the previous analysis, is the influence of income inequality. In the exposure analysis, increased income inequality does produce a higher concentration of female headed households.

6.3.2: Mexican Female Headed Households and Homicides – Summary

The findings of this analysis are both interesting and yet puzzling. Among Mexican Hispanics segregation, when measured by dissimilarity shows a direct and indirect (mediated by female headed households) association and Mexican homicides. However a deeper examination of this association by means of the exposure shows no association to homicide. Also surprising was that among Mexicans, homicides actually decreased with an increased number of female headed households. While such a finding is confusing it may be simply a result of the underlying social structure of the Mexican community. Perhaps due to the family structure among Hispanics which includes a large extended family (Tienda and Angel 1982; Bean et al 1996). Furthermore, the average number of Hispanic female headed households is about one half that of African Americans. In the end, this reduced concentration, could allow for other members of the community to more effectively act as a informal social control network.

6.4: African American Female Headed Households and Homicide

To fully understand the dynamics of family structure and homicide, an analysis was conducted among African Americans to determine if the family as a social institution has a similar impact when compared to Hispanics. Unlike Hispanics, research has shown that the presence of female headed households does have a positive effect on violent crime (Shihadeh and Steffensmier 1994). Further, an examination of these data shows that the number of female headed households among the African American population is almost twice that of Hispanics (39.99 percent versus 20.44 percent). This alone may be the factor which leads to different findings among the Hispanic models.

6.4.1: African American Female Headed Households – Analysis

In order to explore the mediating effect of single parent households between segregation and homicide, an analysis similar to the Hispanic models is produced. The model used for this analysis includes the same variables used in the African American models in chapter five. Table 6.5 displays the results for African Americans in conjunction with segregation measured as dissimilarity. The first model examines homicide with the inclusion of female headed households. Similar to the Hispanic model, among African Americans education, population density and median rent were all associated with increases in homicides. Also, these findings show a positive association to the population size.

Segregation between Whites and African Americans is positively associated to African American homicide. Therefore, increased segregation between African Americans and Whites does cause an increase in homicides. Finally, when predicting homicides this analysis shows that an increase in female headed households is associated with African American homicide.

Table 6.5: OLS Models of Segregation (Dissimilarity) Predicting African American Homicide Victimization

Variable	Homicide with Female Headed Households		Homicide without Female Headed Households	
	B	S.E.	B	S.E.
Female Headed Households	.036*	.015		
Dissimilarity African American to White	.048***	.008	.049***	.009
Percent Population African American	.038***	.006	.043***	.006
Median African American Rent	-.002*	.001	-.002*	.001
South Dummy	.069	.228	.040	.232
Gini Index	-.051	.028	-.035	.028
Population Density	.000*	.000	.000*	.000
Average African American Education	.586*	.229	.521*	.231
African American Male Unemployment	.006	.031	.026	.031
Average African American Male Age	.024	.048	-.018	.045
Floaters	.018	.018	.023	.018
Constant	-8.040	3.175	-5.379	3.035
R ²	.684		.671	
N	161		161	

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

With the direct association between female headed households and homicides established, the analysis next turns to determining the mediating effect of female headed households. Similar to the previous analysis of Mexicans segregation is mediated by female headed households. In this case the difference between the slope of the full model and the reduce model was only .001, a difference too small to attain statistical significance between the two. In essence as a mediating measure, there is little influence of segregation on homicides when mediated by female headed households.

The second analysis examines the relationship between African Americans, homicide and segregation based on exposure both directly and when mediated by female headed households. Table 6.6 reports that the homicide findings are consistent to the previous model. Here both segregation and female headed households both resulted in a significant increase in the number of homicides. An analysis of this full model does show that as exposure to the White population

decreases by a single percent, there is a corresponding increase of .023 in the natural log in the number of African American homicides. This effect, like the previous analysis shows very little change between the full and reduced models. Similar to the previous analysis a test of significance was conducted that indicated that change in the slopes between these two models is not statistically significant. Also of interest is that when female headed households are excluded from the analysis, African American education no longer significantly impacts homicides for this group. Finally the removal of female headed households from the analysis has resulted in a net loss of the variation in homicides of 3.5 percent, compared to the full model where this measure is included.

Table 6.6: OLS Models of Segregation (Exposure) Predicting African American Homicide Victimization

Variable	Homicide with Female Headed Households		Homicide without Female Headed Households	
	B	S.E.	B	S.E.
Female Headed Households	.033*	.016		
Exposure African American to White	-.023***	.006	-.024***	.006
Percent Population African American	.034***	.007	.038***	.007
Median African American Rent	-.005***	.001	-.005***	.001
South Dummy	-.221	.253	-.265	.255
Gini Index	.017	.027	.032	.027
Population Density	.000*	.000	.000*	.000
Average African American Education	.486*	.242	.436	.243
African American Male Unemployment	-.026	.034	-.009	.033
Average African American Male Age	.017	.051	-.023	.048
Floaters	.018	.019	.023	.019
Constant	-4.209	3.351	-1.686	3.165
R ²	.646		.611	
N	161		161	

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

6.4.2: African American Female Headed Households – Summary

Generally speaking the African American models remain consistent, showing that female headed households have a direct effect on homicide and that a variety of measures are mediated

by them as well. When looking at dissimilarity as the measure of segregation, the African American population, median rent and population density all directly and indirectly affected homicides. Also, income inequality and the age of the male population indirectly affected homicides via female headed households.

The second model, which examines homicide and segregation based on exposure, did not produce results as robust as the first. Although numerous variables did attain statistical significance, most of these differences were not larger enough to indicate that the change in this effect is statistically significant.

6.5: Hispanic and African American Female Headed Households and Homicide – A Summary

The findings between the Hispanic and African American models differed with regard to the impact of family structure on incidents of homicide. In the full Hispanic model, family structure (female headed households) does not significantly effect Hispanic homicides, regardless of the measure of segregation used. As an extension, the Hispanic analysis is expanded to focus solely on specific Hispanic ethnicities. This exploratory analysis produced results which are consistent for only Puerto Ricans and Other Hispanics. When the analysis is conducted for Mexicans a different pattern emerges. Unlike the full model, Mexican homicides are influenced by the presence of female headed households within a community. Among Mexicans however, the findings are not consistent for both segregation measures, only for segregation based on the index of dissimilarity.

In order to fully understand how these measures are associated, the analysis is next extended to look at homicide, family structure and segregation beyond Hispanics to African Americans. I find that in both models of segregation, that African American homicides are influenced directly by segregation as well as indirectly when mediated by concentrations of female headed households. One possible explanation for this result may be due to a level of

female headed households in the African American community. With almost twice the number of homes with single mothers, this socially disorganizing influence may be too large to overcome compared to Hispanic communities. Another difference observed was that the effect of female headed households is inconsistent between African Americans and Mexicans. Among African Americans increases in female headed households caused an increase in the number of homicides, whereas among Mexicans it actually lowered them. Again this perplexing finding may be due to a large extended social structure. It is possible that this structure can step in and control violent crime, such as homicide in the community, even in the presence of high numbers of female headed households.

CHAPTER 7: DISCUSSION AND CONCLUSIONS

7.1: Introduction

Chapter seven summarizes the main findings of this study. This section will also discuss the theoretical implications as well as directions for future research. Chapter seven is broken down into three sections. Section one summarizes the findings of chapters five and six and how their findings correspond to the original expectations of the analysis. Second, this analysis ties the findings of this study to the larger theoretical framework of social disorganization theory. The third section discusses the limitations to this study and possible direction for future research.

7.2: Summary of Findings

This study has presented an analysis into the causes of homicide among Hispanics. Dependent on the specific analysis a sample of 69 to 236 cities were used. This study has focused on structural factors such as segregation and concentrations of single parent households to determine if these social conditions significantly impacted homicides. This study broadens the understanding of Hispanic homicides by looking at not only Hispanics as a whole but also as independent ethnic groups (Mexican, Puerto Rican and Other Hispanics). Finally this analysis sought to determine if the causes of Hispanic homicide were unique through a comparative analysis of African Americans. Table 7.1 reports the research expectations discussed in chapter five.

The first expectation of this analysis was that increased segregation between Hispanics and Whites would result in higher instances of homicide. Segregation measured both as exposure and dissimilarity were significantly associated with homicide. Furthermore, a single standard deviation increase in the index of dissimilarity resulted in a 144.31 percent increase in homicides. This analysis also found that a similar decrease in exposure caused homicides to go

up by 27.51 percent. Both measures of segregation confirm the original expectations of this analysis.

Table 7.1: Summary of Expectations and Findings: Negative Binomial Models

Expectations	Findings
1. Increased segregation among urban Hispanics will be associated with a rise in Hispanic homicides.	Supported: Residential segregation was found to have a significant positive association to homicides when using the index of dissimilarity. Segregation based on exposure was negatively associated. As the exposure between Hispanics and Whites decreased, the number of homicides increased.
2. When Hispanics are segregated into a single ethnicity (more homogenous), homicides will be reduced.	Not Supported: The measure of internal segregation used to determine the dispersion of a Hispanic ethnicity (Hispanic IQV) did not report a significant association to either model of segregation when predicting Hispanic homicides.
3. Segregation among urban African Americans will be associated with African American Homicides.	Supported: African American residential segregation was found to have a positive association to homicide when using the index of dissimilarity. When examined on the basis of exposure, a decrease in exposure resulted in an increase in homicides. These findings show the same pattern between segregation and homicide as Hispanics.
4. Due to the uniqueness of Hispanic ethnic groups, each may experience segregation differently and could influence their homicide patterns.	Partially Supported: Findings of this analysis showed that segregation based on dissimilarity is consistently related to homicides for each group, at varying levels. However, segregation measured as exposure was inconsistent in predicting ethnic based homicides. Finally the ethnic dispersion of Hispanics in a community (IQV) showed a positive effect for Mexican homicide, a negative effect for Puerto Rican homicide and no association for Other Hispanics. These findings do support the expectation that the influence of segregation differs among these ethnic groups.
5. Changes in segregation from 1980 to 1990 will significantly effect the homicides for Hispanics and African Americans.	Partially Supported: In the case of Hispanics and African Americans the change in segregation based on dissimilarity did not significantly relate to homicides. However the change in exposure between 1980 and 1990 did cause homicides to increase for both groups.
6. Changes in segregation from 1990 to 2000 will significantly effect the homicides for Hispanics and African Americans.	Not Supported: The findings of this analysis fail to confirm the original expectations. Both measures of the change in segregation between 1990 and 2000 failed to attain statistical significance for Hispanics and African Americans.
7. When segregation is disaggregated by social class, the impact of segregation will be inconsistent between social classes.	Supported: When the index of dissimilarity measures were disaggregated by social class (low, middle and affluent) this analysis supported this expectation. Even though the segregation increased with social class for both Hispanics and African Americans, segregation's impact on homicide was only significant in the lowest social class. This finding held when comparing lower social class to an index of the middle and high social class as well as when comparing the lower social class with the middle class alone.

One component of this first analysis was to also examine how the dispersion of Hispanic ethnicity effected patterns of homicide, specifically it was expected that concentrations of a single Hispanic ethnicity would result in a lower number of homicides. The index of qualitative variation (IQV) was used to test for the effect of within Hispanic dispersion. Unlike the previous analysis, segregation between Hispanics and Whites was statistically significant. In both the index of dissimilarity and exposure analyses, the dispersion of the Hispanic population had no association with homicide. For this reason, the expectation of this analysis was not met.

As a comparison, the analysis next looked at African American segregation and homicide. Segregation among African Americans was found to have the same impact on homicides among Hispanics. Segregation resulted in a 129.40 percent increase in homicides, per standard deviation increase in the index of dissimilarity for African Americans. This finding was interesting considering that African Americans experienced a greater amount of segregation compared to Hispanics, yet their homicides increased at a lower percentage. The expectations of this analysis were also confirmed by segregation measured as exposure. In this case as exposure to the White population decreased, African American homicides went up by 26.18 percent, a finding which was much smaller among Hispanics.

To determine if the effects of segregation were consistent among all Hispanic groups the fourth analysis in chapter five separated Hispanics into three ethnic classifications: Mexicans, Puerto Ricans and Other Hispanics. When the index of dissimilarity was used to measure segregation, all three ethnic classifications demonstrated a positive association to homicides, confirmed the original expectation of this analysis. However, when segregation was based on exposure the findings did not follow the original expectation. Here, only among Mexicans did the exposure of Hispanics to Whites have a significant impact on incidents of homicides. Finally this analysis confirmed that the impact of dispersion (IQV) among Hispanic ethnicities did have

an influence on ethnic specific homicides; however, this finding was only consistent among Mexicans and Puerto Ricans.

The third section of this analysis looked at the impact of the change in segregation on homicide. The first analysis looked at the change in exposure and dissimilarity between 1980 and 1990. Here the findings partially confirmed the original expectations. For Hispanics and African Americans the change in the index of dissimilarity for this period of time did not significantly influence homicides but the change in exposure did. The findings of this analysis showed that among African Americans the standard deviation increase on this change resulted in a 78.10 percent increase in homicides. Findings also show a 35.18 percent increase for Hispanics under the same conditions.

In addition this analysis also looked at the change in segregation from 1990 to 2000. Unlike the previous analysis where the findings were confirmed through the change in exposure, this analysis showed that for both African Americans and Hispanics, the change in exposure for this period of time was not statistically significant. Between 1990 and 2000 this change failed to produce significant results for either minority group, regardless of the measure of segregation used.

Finally this analysis explored the relationship between segregation and homicide by disaggregating segregation by social class to determine if its influence on homicide was consistent across all social classes. It was expected that segregation alone was not the primary catalyst for both Hispanic and African American homicides. It was also hypothesized that examining homicides in the context of social class would result in an inconsistent effect. Two separate analyses were conducted to examine this effect. The first model used an index of middle and high social class while the second model used only the middle class. Analysis of both racial/ethnic groups reported that segregation's effect on homicide was class dependent.

Only among the lower class did a significant association emerge between segregation and homicide. Regardless of the model used, segregation in the lower class led to an increase in homicide. These findings were more pronounced for Hispanics, whose homicides increased by twice the amount of African Americans.

The final portion of this study employed ordinary least squares (OLS) regression to examine the direct effect of segregation on homicide, as well as its indirect effect via the measure of female headed households. Female headed households were selected primarily to determine if the effect of concentration of single parent households among Hispanics was consistent with previous research regarding African Americans (Shihadeh and Steffensmier 1994). The models used for this analysis incorporated the same variables as the previous analyses, with proper adjustments to induce normality where necessary. Table 7.2 highlights the expectations and findings for the three primary OLS regression analyses presented in chapter six.

The first model presented in chapter six first looked at segregation (based on dissimilarity) and homicide for all Hispanics. This was followed by an analysis of segregation and homicide to mediated by female headed households. The findings of the first analysis countered the original expectation of a mediating effect between concentrations of female headed households and homicide. Although the original model did indicate an association between segregation and homicide, it did not attain statistical significance between female headed households and homicide. A second analysis looked at Hispanics and segregation in the context of exposure. Here the findings were even starker than the dissimilarity model. When looking at concentrations of female headed households and segregation, neither significantly influence a change in homicides. Overall both models of segregation failed to support the expectations of this analysis.

Table 7.2: Summary of Expectations and Findings: OLS Models

Expectations	Findings
<p>1. Among Hispanics segregation is directly associated with homicides and is mediated by female headed households.</p>	<p>Not Supported: Regardless of the measure of segregation used, neither model showed that the concentration of Hispanic female headed households significantly influenced the number of homicides.</p>
<p>2. An examination of segregation within ethnic specific Hispanic groups will demonstrate a direct association to ethnic specific homicide, as well as a mediated effect through female headed households.</p>	<p>Partially Supported: For Puerto Ricans and Other Hispanics, the findings of this analysis generated no significant association for female headed households, making these findings consistent with the full Hispanic model. However in the case of Mexicans, the findings partially support this expectation. Among Hispanics the influence of female headed households is significant but only in the dissimilarity segregation model. When looking at this model the analysis shows that female headed households directly influence the number of Mexican homicides directly. In addition its mediating effect although small and insignificant is present when looking at the impact of segregation on homicides.</p>
<p>3. Among African American segregation is directly associated with homicides and is mediated by female headed households.</p>	<p>Supported: The findings of the African American Model fully support the original expectation. Both models of segregation showed a direct and indirect association between segregation and homicide. Similar to the findings of the Mexican model however is the fact that while there is a statistically significant association between segregation and homicide in both models, the mediating effect of female headed households is not large enough to attain statistical significance.</p>

The next analysis sought to broaden the understanding of family dynamics, segregation and homicide by looking at specific Hispanic ethnicities as well as corresponding homicide counts. The findings of this analysis served to partially confirm the original expectation. Among the separate Hispanic ethnicities only Mexican homicides were significantly associated directly to homicides and indirectly via female headed households. Although this finding did show that female headed households influenced Mexican homicides and that segregation, as well as other control measures indirectly effected homicides, there was only significance when segregation was based on the index of dissimilarity, measures of exposure did not significantly impact insistences of homicide.

The final analysis in chapter six examined the direct and indirect influence of segregation on African American homicides. This model was used to determine if the findings of this

analysis are consistent with previous research (See Shihadeh and Steffensmeier 1994). If the findings of this analysis support previous findings among African Americans, then the lack of an association among Hispanics would support the idea that there is a structural difference in these communities. The findings of the African American models show that segregation in these communities did directly and indirectly relate to homicides when mediated by female headed households. Results show that both measures of segregation were directly linked to homicides among African Americans. Furthermore, in the exposure and dissimilarity models the effect remained when mediated by female headed households, although the difference between the two was not statistically significant. It is only among African Americans that the exposure model indicates an association between segregation and homicide.

In addition to confirming or partially confirming seven of the ten discussed expectations, this study has made a valuable contribution to the study of Hispanic homicide in the United States. Overall, through this comparison of segregation and race/ethnicity, this analysis shows that the factors which effect Hispanic homicide may differ from the causes of homicides among African Americans. Furthermore, this analysis shows that segregation, while it may create negative structural disadvantages for both groups, translates into negative outcomes such as homicide and can differ in intensity. The factors which contribute to an increase in homicide for one group may have a minimal or no effect in the other group. Finally this study has shown that an examination of Hispanics in totality can produce misleading results. These analyses demonstrate that factors which influence homicides not only vary between racial/ethnic groups, they also vary in significance and intensity between the various Hispanic ethnicities.

7.3: Theoretical Implications

The theoretical basis for this study was grounded in social disorganization theory. This study started with the work of Shaw and McKay (1942) and then later was extended by

individuals such as Wilson (1987) and others (Kornhauser 1978; Bursik and Grasmick 1993; Bursik 1999; Sampson and Raudenbush 1999). According to social disorganization theory, when structural mechanisms are weakened or removed, there is often a loss of social control which can translate into increased instances of crime (Wilson 1987). Factors such as concentrations of poverty, residential segregation and social isolation have been thought to be associated with higher rates of crime since such factors tend to weaken community bonds.

Previous research on the concept of social disorganization has often seen concentrations of poverty as the structural condition that will weaken social controls (Bursik and Grasmick 1993). However, the bulk of this research has been conducted on African Americans communities (See Peterson and Krivo 1993; Shihadeh and Flynn 1996; Petterson and Kirvo 2000), neglecting other groups like Hispanics who have risen to demographic peominence. Though the results of such analyses have been mixed, it does seem that concentrated negative disadvantages are associated with increased homicide rates. The possibility that structural factors are associated with an increased number of homicides among Hispanics would be expected on the basis of social disorganization theory. For example when there is a great deal of segregation between the more privileged segments of society and its minority components, in conjunction with high levels of poverty, etc., results indicate little ability to create and maintain community cohesion.

There has been a paucity of larger scale multi-city analyses conducted on the Hispanic population. Because of their status as an ethnic minority, one could assume that the social disorganization approach as a theoretical framework would be appropriate. Increased segregation along with concentrations of negative disadvantages (e.g. poverty, single parent households, etc) should produce similar negative outcomes for Hispanics as they do with African Americans.

The present study has been designed to determine if structural features of Hispanic communities are associated with Hispanic homicide. Findings of this study have indicated that a variety of structural components are associated with such an increase. For example, segregation measured both as exposure and as dissimilarity has consistently been shown to increase homicides. Also within some Hispanic ethnicities, the dispersion of ethnic groups within a given area has been shown to also affect homicides.

Even though residential segregation was found to be associated with Hispanic (as well as African American) homicides, the question of social disorganization still persisted. To explore this, a social class specific analysis was conducted which showed that segregation within the lowest social class was associated with race/ethnic specific homicides but not middle and upper class Hispanics and African Americans. This finding supports this theoretical framework, specifically the work of Wilson (1987) who asserted that concentrations of poverty would lead to negative outcomes that can hasten the breakdown of social controls and increase violent crime. Based on these findings, the consequences of segregation only contributed to an increase in homicides among lower class Hispanics and African Americans. These data seem to refute the idea that the cultural constraints among Hispanics insulate them from violent crime (Cuciti and James 1990). Although these findings were more consistent for African Americans, among Hispanics the influence of underclass culture (e.g. female headed households, floaters, etc) was present and statistically significant.

7.4: Limitations and Direction for Future Research

The use of multi-city analyses has been quite extensive for African Americans however, with the exception of Martinez's (1996) analysis of 111 cities most research on Hispanic homicide has been limited to a handful of cities with high concentrations of Hispanics. This

study adds to the body of literature utilizing one of the largest samples of Hispanic communities to study homicide to date. This study however is not without its limitations.

One limitation to this analysis is its reliance on mortality data from the Vital Statistics. Although a reliable and valuable data source as it identifies not only Hispanics but specific ethnicities as well, one piece of information which it does not provide is data on the offender, specifically the victim-offender relationship. Although research has shown an association between poverty and familial homicide, the association does not hold for acquaintance homicides (Loftin and Parker 1985). Even though this is a limitation of this analysis previous research on fewer cities show that there is a great deal of commonality between the victim and offender making reliance on victimization data logical in this case (Nielsen, et al 2005; Lee, et al 2000; Martinez 1997b). Being able to fully understand the victim offender characteristics, nevertheless, would allow further research to understand how these relationships effect homicide beyond this analysis. Although it may be too difficult to do with such a large complement of cities, other official data sources could be mined to determine how homicides vary based on the victim-offender relationship for Hispanics.

This study also examined the interrelationship of segregation, social class and homicide. Even though this analysis did show that segregation did not consistently affect homicides for all social classes the measurement was limited and could be improved upon in future analyses. By recalculating social class into a dichotomy rather than a three tier measure, a better assessment of this association could be realized. Another manner by which this measure could be improved would be by using a race specific measure of segregation. For example, by looking at the segregation of lower class Hispanics to middle and upper class Hispanics segregation an analysis could be conducted to determine if separation from an equal social standing majority group

member of segregation from middle and upper class members of an individuals own ethnicity had a more severe impact on violent crime.

Another limitation of this study was its cross-sectional approach. By looking at the Hispanic population based on the 2000 census and a three year average of homicides from 1999 to 2001, this analysis is not capable of capturing the changing dynamics of the Hispanic population. Due to the rapidly changing landscape of the Hispanic population a longitudinal analysis would be of benefit. Between 1980 and 1990 the population of Hispanics increased by more than fifty percent (Moore and Pinderhughes 1993). Furthermore, by the mid-2000s Hispanics had become the largest minority group in the United States. Changing dynamics such as these can contribute to shifts in the Hispanic social structure, which in turn could lead to higher rates of violent crime. Also, as the United States has begun to once again tighten its grip on illegal immigration a longitudinal analysis this population would add insight into how a shift in residency patterns from migrant/seasonal to a more permanent status would influence victimization among this group.

It is importation to understand that there are some social processes which are unique to Hispanic communities that any future analysis should consider; primarily the impact of immigration. A sizable number of Hispanics residing in densely populated cities are first and second generation immigrants (Bean 1987). This status as a newer immigrant population differs from most urban African Americans who have a longer history in the United States. Another structural factor which future research may want to consider would be linguistic isolation. A large number of Hispanics are not only socially segregated from the population; they may experience linguistic isolation within their own communities. Isolation such as this not only cuts off contact from the majority group, but will isolate them within the cultural mores of their community, making assimilation to mainstream culture difficult.

One innovation of this study was the analysis of several specific Hispanic ethnic groups in order to determine if independent ethnicities reacted differently than the group as a whole. While this approach did demonstrate that the causes and patterns of homicide differed there are two manners by which this could have been improved. First, this study used analyzed three groups of Hispanics: Mexicans, Puerto Ricans and Other Hispanics. While this analysis did use ethnic specific measures of homicide and some independent variables, the inclusion of more ethnic specific measures may have been more beneficial than originally thought. Second, the Other Hispanic measure appeared to be too inclusive. While an analysis of every Hispanic ethnicity would be preclusive, a restructuring of the Other Hispanic category into two or three sub classifications (e.g. South American, Latin American and Other Hispanics), may account for some of the variability within this group. A clearer understanding of this dynamic needs to be produced.

7.5 Concluding Remarks

This analysis has provided an extensive look at the role of segregation among Hispanics and African Americans. The findings of this study have confirmed some previous work regarding segregation and violent crime (Martinez 1996; Shihadeh and Flynn 1996), while at the same time has shown that the causes of homicide among these two groups can and do differ. For this reason explanations of violent crime that are applied to African Americans may not be explicable to Hispanics. With a rapidly growing Hispanic population understanding these causes is paramount in order to develop effect crime control policies and community based programs to address this issue. Based on this study, segregation of the lower class is causally related to an increase in homicide but not in the middle and upper class. Such a finding highlights a need for greater interaction between lower class Whites and minorities. This analysis has shown that at some level violent crime such as homicide is an artifact of lower class culture and the

segregation which its members experience. To this end increased focus on the removal of the structural disadvantages associated with living in poverty may serve to minimize future victimization. It is important to note that how informal social institutions (e.g. the family, the larger community, etc) react to violence among Hispanics is different than among African American communities. For this reason any formal approach to minimizing violent crime in this community must be tailored to work in conjunction with the effective social contact among the group in question.

REFERENCES

- Acosta-Belen, Edna and Carlos E. Santiago. 2006. *Puerto Ricans in the United States: A Contemporary Portrait*. Boulder: Lynne Rienner Publishers.
- Agnew, Robert. 1992. "Foundations for a General Strain Theory of Crime and Delinquency." *Criminology*. 30:47-87.
- Akers, Ronald L. 1997. *Criminological Theories*. Los Angeles: Roxbury Publishing Company. (2nd ed.)
- Allan, Emile Andersen and Darrell J. Steffensmeier. 1989. "Youth, Underemployment, and Property Crime: Differential Effects of Job Availability and Job Quality on Juvenile and Young Adult Arrest Rates." *American Sociological Review*. 54:107-123.
- Anderson, Elijah. 1999. *Code of the Street: Decency, Violence and the Moral Life of the Inner City*. New York: W.W. Norton & Company.
- Bailey, William C. 1984. "Poverty, Inequality and City Homicide Rates: Some Not So Unexpected Findings." *Criminology* 22(2):531-550.
- Bean, Frank D., Ruth R. Berg and Jennifer V.W. VanHook. 1996. "Socioeconomic and Cultural Incorporation and Marital Disruption among Mexican Americans." *Social Forces*. 75(2):593-617.
- Bean, Frank D. And Marta Tienda. 1987. *The Hispanic Population of the United States*. Russell:Sage.
- Blau, Judith R., and Peter M. Blau. 1982. "The Cost of Inequality: Metropolitan Structure and Violent Crime." *American Sociological Review*. 47(2):114-129.
- Bursik, Robert J. and Harold G. Grasmick. 1993. *Neighborhoods and Crime: The Dimensions of Effective Community Control*. New York: Lexington Books Chap 1-3
- Cerrutti, Marcela and Douglas S. Massey. 2006. "Trends in Mexican Migration to the United States 1965 to 1995." Pgs 17-44. in *Crossing the Border: Research from the Mexican Migration Project*. Ed by Jorge Durand and Douglas S. Massey. New York, NY: Russell Sage Foundation.
- Cuciti, Peggy and Franklin James. 1990. "A Comparison of Black and Hispanic Poverty in Large Cities of the Southwest." *Hispanic Journal of Behavioral Sciences*. 12:50-75.
- Dalaker, Joseph. 2001. *Poverty in the United States: 2000*. U.S. Census Bureau. U.S. Government Printing Office.
- DeNavas-Walt, Carmen, Robert W. Cleveland and Marc I. Roemer. 2001. *Money Income in the United States: 2000*. U.S. Government Printing Office.

- Farley, Reynolds and William H. Frey. 1994. "Changes in the Segregation of Whites from Blacks During the 1980s: Small Steps Toward a More Integrated Society." *American Sociological Review*. 59:23-45.
- Fox, James Alan and Marianne W. Zawitz. 2001. *Homicide Trends in the United States*. Bureau of Justice Statistics.
- Fussell, Elizabeth and Douglas S. Massey. 2004. "The Limits to Cumulative Causation: International Migration from Mexican Urban Areas." *Demography*. 41:151-171.
- Gann L.H. and Peter J. Duignan. 1986. *The Hispanics in the United States*. Boulder: Westview Press.
- Garcia, Alma M. 2002. *The Mexican Americans*. Westport: Greenwood Press.
- Gonzalez-Pando, Miguel. 1998. *The Cuban Americans*. Westport: Greenwood Press.
- Greenberg, Daniel F. 1985. "Age, Crime and Social Explanation." *American Journal of Sociology*. 91(1):1-21.
- Grove, Walter and Rober Cruchfield. 1982. "The Family and Juvenile Delinquency." *Sociology Quarterly*. 23:301-319.
- Harer, Miles D. and Darrel Steffensmeier. 1992. "The Differing Effects of Economic Inequality on Black and White Rates of Violence." *Social Forces*. 70(4)1035-1054.
Harris 1997
- Hawkins, Darnell F. 1999. "What Can We Learn from Data Disaggregation? The Case of Homicide and African Americans." Pgs. 195-210 in *Homicide: A Sourcebook of Social Research*. Ed by M. Dwayne Smith and Margaret A Zahn. Thousand Oaks: Sage Publications.
- Hoffman, John P. 2004: A. *Generalized Linear Models: An Applied Approach*. Boston: Allen and Bacon.
- Jenkins, Patricia H. 1995. "School Delinquency and School Commitment." *Sociology of Education*. 68(3):221-239.
- Kandel, William and Douglas S. Massey, 2002. "The Culture of Mexican Migration: A Theoretical and Empirical Analysis." *Social Forces*. 80:981-1004.
- Kasarda John D. and Morris Janowitz. 1974. "Community Attachment in Mass Society." *American Sociological Review*. 39(3):328-339.
- Kleinbaum, David, Lawrence Kupper, Keith Muller, and Azhar Nizam. 1998. *Applied Regression Analysis and Other Multivariable Methods*. Pacific Grove: Duxbury Press.
- Kornhauser, Ruth R. 1978. *Social Sources of Delinquency*. University of Chicago Press.

- LaFree, Gary and Kriss A Drass. 1996. "The Effect of Changes in Intra-racial Income Inequality and Educational Attainment on Changes in Arrest Rates for African Americans and Whites, 1957 to 1990." *American Sociological Review* 61:614-634.
- Lamb, Vicki L. and Jacob S. Siegel. 2004. "Health Demography." pgs. 341-370 in *The Methods and Materials of Demography*. Eds. Jacob S. Siegel and David A. Swanson. Amsterdam: Elsevier Academic Press.
- Land, Kenneth, C Patricia L. McCall and Lawrence E Cohen. 1990. "Structural Covariates of Homicide Rates: Are There Any Invariances Across Time and Social Space?" *American Journal of Sociology* 94(4):922-963.
- Lee, Matthew R. 2000. "Concentrated Poverty, Race and Homicide." *Sociological Quarterly*. 41:189-206.
- Lee, Matthew R. and John P. Barkowski. 2004. "Love Thy Neighbor? Moral Communities Civic Engagement, and Juvenile Homicide in Non-Metro Communities." *Social Forces*. 82:1001-1035
- Lee, Matthew T., Ramiro Martinez, Jr., and S. Fernando Rodriguez. 2000. "Contrasting Latinos in Homicide Research: The Victim Offender Relationship in El Paso and Miami." *Social Science Quarterly*. 81:375-.
- Long, J. Scott. 1997. *Regression Models for Categorical and Limited Dependent Variables*. Thousand Oaks: Sage Publications.
- Marger, Martin N. 2003. *Race and Ethnic Relations: American and Global Perspectives*. Australia: Thomson Wadsworth.
- Martinez, Ramiro. 1996. "Latinos and Lethal Violence: The Impact of Poverty and Inequality" *Social Problems*. 43:131-144.
- Martinez, Ramiro. 1997a. "Homicide Among Miami's Ethnic Groups: Anglos, Blacks, and Latinos in the 1990s." *Homicide Studies*. 1:17-34.
- Martinez, Ramiro. 1997b. "Homicide Among the 1980 Mariel Refugees in Miami: Victims and Offenders." *Hispanic Journal of Behavioral Sciences*. 19:107-122.
- Martinez, Ramiro. 2002. *Latino Homicide: Immigration, Violence and Community*. New York: Routledge.
- Martinez, Ramiro. 2003. "Moving Beyond Black and White Violence: African American, Haitian and Latino Homicides in Miami." Pgs. 22 – 40. In *Interpersonal Violence: The Ethnicity, Race and Class Nexus*. Ed. Darnell F. Hawkins. New York: Cambridge University Press.

- Martinez, Ramiro and Matthew T. Lee. 1999. "Extending Ethnicity in Homicide Research: The Case of Latinos." Pgs. 211-220 in *Homicide: A Sourcebook of Social Research*, eds. M Dwayne Smith and Margaret A. Zahn. Thousand Oaks: Sage Publications.
- Martinez, Ramiro and Mathew T. Lee. 1999. "Latinos and Homicide." *In Issues in the Study and Prevention of Homicide*. Eds. M Dwayne Smith and Magaret Zahn. Thousand Oaks: Sage Publications.
- Martinez, Ramiro, Amie L. Nielson and Matthew T. Lee. 2003. "Reconsidering the Marielito Legacy: Race/Ethnicity, Nativity, and Homicide Motives." *Social Science Quarterly*. 4(2): 397-411.
- Massey, Douglas S. 1996. "The Age of Extreme: Concentrated Affluence and Poverty in the Twenty-First Century." *Demography*. 33(4): 395-412.
- Massey, Douglas S., Rafael Alarcón, Jorge Durand and Humberto Gonzalez. 1987. *Return to Aztlan: The Social Process of International Migration from Western Mexico*. Berkeley: CA. University of California Press.
- Massey, Douglas S and Nancy A. Denton. 1988. "The Dimensions of Residential Segregation." *Social Forces* 67:281-315.
- Massey, Douglas S. and Nancy A. Denton 1989a. "Residential Segregation of Mexicans, Puerto Ricans, and Cubans in Selected U.S. Metropolitan Areas." *Social Science Research*. 73(2):73-83.
- Massey, Douglas S. and Nancy A. Denton 1989b. "Hypersegregation in U.S. Metropolitan Areas: Black and Hispanic Segregation Along Five Dimensions." *Demography*. 26(3): 373-391.
- Massey, Douglas S and Nancy A. Denton. 1993. *American Apartheid: Segregation and the Making of the Underclass*. Cambridge, MA: Harvard University Press.
- Massey, Douglas S., Jorge Durand and Nolan J. Malone. 2002. *Beyond Smoke and Mirrors: Mexican Migration in an Era of Economic Integration*. New York, NY: Russell Sage Foundation.
- Massey, Douglas S. and Kristin E. Espinosa. 1997. "What's Driving Mexico-U.S. Migration?: A Theoretical, Empirical and policy Analysis." *American Journal of Sociology*. 102:939-999.
- Matsueda, Ross L and Keren Heimenr. "Race, Ramily Structue and Delinquency: A Test of Differential Association and Social Control Theories." *American Sociological Review*. 52(6)826-840.
- McLanahan, Sara. 1985. "Family Structure and The Reproduction of Poverty." *American Journal of Sociology*. 90(4):873-901.

- Merton, Robert K. 1938. "Social Structure and Anomie." *American Sociological Review* 3:672-682.
- Messner, Steven. 1982. "Poverty, Inequality and the Urban Homicide Rate: Some Unexpected Findings." *Criminology* 20(1):103-114.
- Messner, Stever F. and Kenneth Tardiff. 1986. "Homicide: An Analysis of Urban Neighborhoods." *Criminology* 24(2):297-315.
- Moore, Joan, and Raquel Pinderhughes. 1993. *In the Barrios: Latinos and the Underclass Debate*. New York: Russell Sage Foundation.
- Murray, Charles. 1984. *Losing Ground: American Social Policy, 1950-1980*. Basic Books.
- Neter, John, Michael H. Kutner, Christopher J. Nachtsheim and William Wasserman. 1996. *Applied Linear Regression Models*. Chicago: Irwin.
- Nielsen, Amie L., Matthew T. Lee and Ramiro Martinez Jr. 2005. "Integrating Race, Place and Motive in Social Disorganization Theory: Lessons From A Comparison of Black and Latino Homicide Types in Two Immigrant Destination Cities." *Criminology*. 43(3):837-872.
- Osgood, D. Wayne. 2000. "Poisson-Based Regression Analysis of Aggregate Crime Rates." *Journal of Quantitative Criminology*. 16(1): 21-43.
- Ousey, Graham C. 1999. "Homicide, Structural Factors, and the Racial Invariance Assumption." *Criminology*. 37:506-425.
- Parker, Karen F and Matthew V. Pruitt. 2000. "Poverty, Poverty Concentration and Homicide." *Social Science Quarterly*. 81:555-570.
- Patterson, Britt E. 1991. "Poverty, Income Inequality and Community Crime Rates." *Criminology*. 29:755-776.
- Petterson, Ruth D., and Lauren J. Kirvo. 1993. "Racial Segregation and Black Urban Homicide." *Social Forces*. 71:1001-1026.
- Petterson, Ruth D., and Lauren J. Kirvo. 2000. "Racial Segregation, the Concentration Disadvantage, and Black and White Homicide Victimization." *Sociological Forum*. 14:465-494.
- Perez y Gonzalez, Maria E. 2000. *Puerto Ricans in the United States*. Westport: Greenwood Press.
- Phillips, Julie A. 2002. "White, Black and Latino Homicide Rates: Why The Difference?" *Social Problems*. 49:349-373.

- Ramirez, Roberto R and G. Patricia de la Cruz. 2002. *The Hispanic Population in the United States: March 2002*. United States Census Bureau. Washington D.C.
- Rennison, Callie Marie. 2002. *Bureau of Justice Statistics Special Report: Hispanic Victims of Violent Crime, 1993-2000*.
- Riosmena, Fernando. 2006. "Return Versus Settlement Among Undocumented Mexican Migrants, 1980 to 1996." in *Crossing the Border: Research from the Mexican Migration Project*. Ed by Jorge Durand and Douglas S. Massey. New York, NY: Russell Sage Foundation.
- Rodriguez, Nestor P. 1993. "Sources of Homicide Data: A Review and Comparison." Pgs. 75-95 *In the Barrios: Latinos and the Underclass Debate*. Eds. Joan Moore and Raquel Pinderhughes. New York: Russell Sage Foundation.
- Rodriguez, Orlando. 1988. "Hispanics and Homicide in New York City." Pgs. 67-84 in *Research Conference on Violence and Homicide in Hispanic Communities*. Eds. Jess Kraus, Susan Sorenson, and Paul Juarez. Washington D.C.: Department of Health and Human Services.
- Sampson, Robert J. 1985. "Race and Criminal Violence: A Demographically Disaggregated Analysis of Urban Homicide." *Crime and Delinquency* 31(1):47-82.
- Sampson, Robert J. 1986. "Cities and Crime: The Effects of Formal and Informal Social Control." Pgs. 271-312 in *Communities and Crime*, eds. Albert J. Reiss, Jr. and Michael Tonry.
- Sampson, Robert J. 1987. "Urban Black Violence: The Effect of Male Joblessness and Family Disruption." *American Journal of Sociology*. 93(2):348-382.
- Sampson, Robert J., and Steve Raudenbush. 1999. "Systematic Social Observation of Public Spaces: A New Look at Disorder in Urban Neighborhoods." *American Journal of Sociology*. 105:603-651.
- Sampson, Robert J., Steve Raudenbush and Felton Earls. 1997. "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy." *Science*. 277:918-924.
- Sampson, Robert J and William Julius Wilson. 1995. "Toward a Theory of Race, Crime and Urban Inequality." In *Crime and Inequality* ed by Hagan and Petersen.
- Sandefur, Gary D., and Marta Tienda. 1988. "Introduction: Social Policy and the Minority Experience." Pgs 1-19 in *Divided Opportunities: Minorities, Poverty and Social Policy* eds. Gray D. Sandefur and Marta Tienda. New York: Plenum Press.
- Santiago, Anne M., and Margaret G. Wilder. 1997. "Residential Segregation and Links to Minority Poverty: The Case of Latinos in the United States." *Social Problems*. 38:492-515.

- Shaw, Clifford R. and Henry D. McKay. 1969. *Juvenile Delinquency and Urban Areas: A Study of Rates of Delinquency in Relation to Differential Characteristics of Local Communities*. (Revised Edition) Chicago: University of Chicago Press.
- Siegel, Jacob S., and David A. Swanson. 2004. *The Methods and Materials of Demography*. Amsterdam: Elsevier Academic Press.
- Shihadeh, Edward S., and Nicole Flynn. 1996. "Segregation and Black Urban Homicide." *Social Forces* 74(4):1325-1352.
- Shihadeh, Edward S., and Michael Maume. 1997. "Segregation and Crime: The Relationship Between Black Centralization and Urban Black Violence." *Homicide Studies*. 1:254-280.
- Shihadeh, Edward S. and Graham Ousey. 1998. "Industrial Restructuring and Violence: The Link between Entry-Level Jobs, Economic Deprivation and Black and White Homicide." *Social Forces* 77(1):185-206.
- Shihadeh, Edward S. and Darrell J. Steffensmeier. 1994. "Economic Inequality, Family Disruption, and Urban Black Violence: Cities as Units of Stratification and Social Control." *Social Forces*. 72(2)729-751.
- Shryrock, Henry S., and Jacob S. Siegal. 1976. *The Methods and Materials of Demography*. New York: Academic Press, Inc.
- Steffensmeier, Darrell J., Emilie Andersen Allan, Miles D. Harer and Cathy Streifel. 1989. "Age and the Distribution of Crime." *American Journal of Sociology*. 94(4):801-31.
- Skogan, Wesley G. 1990. *Disorder and Decline: Crime and the Spiral of Decay in American Neighborhoods*. New York: The Free Press.
- Suro, Roberto and Sonya Tafoya. 2004. *Dispersal and Concentration: Patterns of Latino Residential Settlement*. Pew Hispanic Center.
- Tienda, Marta. 1989. "Puerto Ricans and the Underclass Debate." *The Annals of the American Academy of Political and Social Science*. 501:105-119.
- Tienda, Marta. 1995. "Latinos and the American Pie: Can Latinos Achieve Economic Parity?" *Hispanic Journal of Behavioral Sciences*. 17(4):403-429.
- Tienda, Marta and Angel 1982. Tienda, Marta and Ronald Angel. 1982. "Headship and Household Composition among Blacks, Hispanics and other Whites." *Social Forces*. 61(2):508-531.
- Tienda, Marta and Leif Jensen. 1988. "Poverty and Minorities: A Quarter Century Profile of Color and Socioeconomic Disadvantage." Pgs 23-61 in *Divided Opportunities: Minorities, Poverty and Social Policy* eds. Gray D. Sandefur and Marta Tienda. New York: Plenum Press.

- Tripplet, Ruth A, Ivan Y. Sun and Randy R. Gainey. 2005. "Social Disorganization and the Ability and Willingness to Enact Control: A Preliminary Test." *Western Criminology Review*. 6(1):89-103.
- Velex-Ibanez, Carlos. 1993. "U.S. Mexicans in the Borderlands: Being Poor without the Underclass." Pgs. 195-220 in *In the Barrios: Latinos and the Underclass Debate*. Eds. Joan Moore and Raquel Pinderhughes. New York: Russell Sage Foundation.
- Vogt, W. Paul. 2005. *Dictionary of Statistics and Methodology: A Nontechnical Guide for the Social Sciences*. Thousand Oaks: Sage Publications.
- Vold, George B., and Thomas J. Bernard. 1986. *Theoretical Criminology*. New York: Oxford University Press.
- Warner, Barbara D., and Glenn L. Pierce. 1993. "Reexamining Social Disorganization Theory Using Calls to the Police as a Measure of Crime." *Criminology*. 31:493-517.
- Wells, Edward L. and Joseph H. Rankin. 1991. "Families and Delinquency: A Meta-Analysis of the Impact of Broken Homes." *Social Problems*. 38(1):71-93.
- Williams, Kirk R. 1984. "Economic Sources of Homicide: Reestimating the Effects of Poverty and Inequality." *American Sociological Review*. 49:203-89.
- Wilson, William Julius. 1987. *The Truly Disadvantaged: The Inner City, The Underclass and Public Policy*. University of Chicago Press.
- Zahn, Margaret A. 1988. "Homicide in Nine American Cities: The Hispanic Case." Pgs 13-30 in *Research Conference on Violence and Homicide in Hispanic Communities*, Eds by Jess Kraus, Susan Sorenson and Paul Juarez. Washing D.C.: Department of Health and Human Services.

APPENDIX A: SAMPLE CITIES

Table A.1: Cities with Population of 100,000 or more and a Hispanic Population of 2,000 or more Used in Analysis

Birmingham, Alabama	San Francisco, California	Overland Park, Kansas	Tulsa, Oklahoma
Huntsville, Alabama	San Jose, California	Topeka, Kansas	Eugene, Oregon
Mobile, Alabama	Santa Ann, California	Wichita, Kansas	Portland, Oregon
Montgomery, Alabama	Santa Clara, California	Lexington-Fayette, Kentucky	Salem, Oregon
Anchorage, Alaska	Santa Clarita, California	Louisville, Kentucky	Allenton, Pennsylvania
Little Rock, Arkansas	Santa Rosa, California	Baton Rouge, Louisiana	Erie, Pennsylvania
Chandler, Arizona	Simi Valley, California	Lafayette, Louisiana	Philadelphia, Pennsylvania
Gilbert, Arizona	Stockton, California	New Orleans, Louisiana	Pittsburg, Pennsylvania
Glendale, Arizona	Sunnyvale, California	Shreveport, Louisiana	Providence, Rhode Island
Mesa, Arizona	Thousand Oaks, California	Boston, Massachusetts	Columbia, South Carolina
Peoria, Arizona	Torrance, California	Cambridge, Massachusetts	Sioux Falls, South Dakota
Phoenix, Arizona	Vallejo, California	Lowell, Massachusetts	Chattanooga, Tennessee
Scottsdale, Arizona	Arvada, Colorado	Springfield, Massachusetts	Clarksville, Tennessee
Tempe, Arizona	Aurora, Colorado	Worcester, Massachusetts	Knoxville, Tennessee
Tucson, Arizona	Colorado Springs, Colorado	Baltimore, Maryland	Memphis, Tennessee
Anaheim, California	Denver, Colorado	Ann Arbor, Michigan	Nashville-Davidson, Tennessee
Bakersfield, California	Fort Collins, Colorado	Detroit, Michigan	Abilene, Texas
Berkeley, California	Lakewood, Colorado	Flint, Michigan	Amarillo, Texas
Burbank, California	Pueblo, Colorado	Grand Rapids, Michigan	Arlington, Texas
Chula Vista, California	Westminster, Colorado	Lansing, Michigan	Austin, Texas
Concord, California	Bridgeport, Connecticut	Minneapolis, Minnesota	Beaumont, Texas
Corona, California	Hartford, Connecticut	St. Paul, Minnesota	Brownsville, Texas
Costa Mesa, California	New Haven, Connecticut	Independence, Missouri	Carrollton, Texas
Daly City, California	Stamford, Connecticut	Kansas City, Missouri	Corpus Christi, Texas
Downey, California	Waterbury, Connecticut	Springfield, Missouri	Dallas, Texas
East Los Angeles, California	Washington, DC	St. Louis, Missouri	El Paso, Texas
El Monte, California	Cape Coral, Florida	Charlotte, North Carolina	Fort Worth, Texas
Escondido, California	Clearwater, Florida	Durham, North Carolina	Garland, Texas
Fontana, California	Coral Springs, Florida	Fayetteville, North Carolina	Grand Prairie, Texas
Fremont, California	Fort Lauderdale, Florida	Greensboro, North Carolina	Houston, Texas
Fresno, California	Hialeah, Florida	Raleigh, North Carolina	Irving, Texas
Fullerton, California	Hollywood, Florida	Winston-Salem, North Carolina	Laredo, Texas
Garden Grove, California	Jacksonville, Florida	Lincoln, Nebraska	Lubbock, Texas
Glendale, California	Miami, Florida	Omaha, Nebraska	McAllen, Texas
Hayward, California	Orlando, Florida	Manchester, New Hampshire	Mesquite, Texas
Hunting Beach, California	Pembroke Pines, Florida	Elizabeth, New Jersey	Pasadena, Texas
Inglewood, California	St. Petersburg, Florida	Jersey City, New Jersey	Plano, Texas
Irvine, California	Tallahassee, Florida	Newark, New Jersey	San Antonio, Texas
Lancaster, California	Tampa, Florida	Paterson, New Jersey	Waco, Texas
Long Beach, California	Athens-Clarke, Georgia	Albuquerque, New Mexico	Wichita Falls, Texas
Los Angeles, California	Atlanta, Georgia	Henderson, Nevada	Provo, Utah
Modesto, California	Augusta-Richmond, Georgia	Las Vegas, Nevada	Salt Lake City, Utah
Moreno Valley, California	Columbus, Georgia	North Las Vegas, Nevada	West Valley, Utah
Norwalk, California	Savannah, Georgia	Paradise, Nevada	Alexandria, Virginia
Oakland, California	Honolulu, Hawaii	Reno, Nevada	Arlington, Virginia
Oceanside, California	Cedar Rapids, Iowa	Spring Valley, Nevada	Chesapeake, Virginia
Ontario, California	Des Moines, Iowa	Sunrise Manor, Nevada	Hampton, Virginia
Orange, California	Boise, Idaho	Buffalo, New York	Newport News, Virginia
Oxnard, California	Aurora, Illinois	New York, New York	Norfolk, Virginia
Palmdale, California	Chicago, Illinois	Rochester, New York	Richmond, Virginia
Pasadena, California	Joliet, Illinois	Syracuse, New York	Virginia Beach, Virginia
Pomona, California	Naperville, Illinois	Yonkers, New York	Bellevue, Washington
Rancho Cucamonga, California	Peoria, Illinois	Akron, Ohio	Seattle, Washington
Riverside, California	Rockford, Illinois	Cincinnati, Ohio	Spokane, Washington
Sacramento, California	Fort Wayne, Indiana	Cleveland, Ohio	Tacoma, Washington
Salinas, California	Gary, Indiana	Columbus, Ohio	Vancouver, Washington
San Bernardino, California	Indianapolis, Indiana	Dayton, Ohio	Green Bay, Wisconsin
San Buenaventura, California	South Bend, Indiana	Toledo, Ohio	Madison Wisconsin
San Diego, California	Kansas City, Kansas	Oklahoma City, Oklahoma	Milwaukee, Wisconsin

Table A.2: Cities with Population of 100,000 or more and a Hispanic and African American Population of 2,000 or more Used in Analysis

Birmingham, Alabama	Santa Ann, California	Louisville, Kentucky	Dayton, Ohio
Huntsville, Alabama	Santa Clara, California	Baton Rouge, Louisiana	Toledo, Ohio
Mobile, Alabama	Santa Clarita, California	Lafayette, Louisiana	Oklahoma City, Oklahoma
Montgomery, Alabama	Santa Rosa, California	New Orleans, Louisiana	Tulsa, Oklahoma
Anchorage, Alaska	Stockton, California	Shreveport, Louisiana	Portland, Oregon
Little Rock, Arkansas	Sunnyvale, California	Boston, Massachusetts	Allenton, Pennsylvania
Chandler, Arizona	Torrance, California	Cambridge, Massachusetts	Erie, Pennsylvania
Gilbert, Arizona	Vallejo, California	Lowell, Massachusetts	Philadelphia, Pennsylvania
Glendale, Arizona	Aurora, Colorado	Springfield, Massachusetts	Pittsburg, Pennsylvania
Mesa, Arizona	Colorado Springs, Colorado	Worcester, Massachusetts	Providence, Rhode Island
Peoria, Arizona	Denver, Colorado	Baltimore, Maryland	Columbia, South Carolina
Phoenix, Arizona	Pueblo, Colorado	Ann Arbor, Michigan	Sioux Falls, South Dakota
Scottsdale, Arizona	Bridgeport, Connecticut	Detroit, Michigan	Chattanooga, Tennessee
Tempe, Arizona	Hartford, Connecticut	Flint, Michigan	Clarksville, Tennessee
Tucson, Arizona	New Haven, Connecticut	Grand Rapids, Michigan	Knoxville, Tennessee
Anaheim, California	Stamford, Connecticut	Lansing, Michigan	Memphis, Tennessee
Bakersfield, California	Waterbury, Connecticut	Minneapolis, Minnesota	Nashville-Davidson, Tennessee
Berkeley, California	Washington, DC	St. Paul, Minnesota	Abilene, Texas
Chula Vista, California	Clearwater, Florida	Independence, Missouri	Amarillo, Texas
Concord, California	Coral Springs, Florida	Kansas City, Missouri	Arlington, Texas
Corona, California	Fort Lauderdale, Florida	Springfield, Missouri	Austin, Texas
Daly City, California	Hollywood, Florida	St. Louis, Missouri	Beaumont, Texas
Downey, California	Jacksonville, Florida	Charlotte, North Carolina	Carrollton, Texas
Escondido, California	Miami, Florida	Durham, North Carolina	Corpus Christi, Texas
Fontana, California	Orlando, Florida	Fayetteville, North Carolina	Dallas, Texas
Fremont, California	Pembroke Pines, Florida	Greensboro, North Carolina	El Paso, Texas
Fresno, California	St. Petersburg, Florida	Raleigh, North Carolina	Fort Worth, Texas
Fullerton, California	Tallahassee, Florida	Winston-Salem, North Carolina	Garland, Texas
Glendale, California	Tampa, Florida	Lincoln, Nebraska	Grand Prairie, Texas
Hayward, California	Athens-Clarke, Georgia	Omaha, Nebraska	Houston, Texas
Inglewood, California	Atlanta, Georgia	Manchester, New Hampshire	Irving, Texas
Lancaster, California	Augusta-Richmond, Georgia	Elizabeth, New Jersey	Lubbock, Texas
Long Beach, California	Columbus, Georgia	Jersey City, New Jersey	Mesquite, Texas
Los Angeles, California	Savannah, Georgia	Newark, New Jersey	Plano, Texas
Modesto, California	Honolulu, Hawaii	Paterson, New Jersey	San Antonio, Texas
Moreno Valley, California	Cedar Rapids, Iowa	Albuquerque, New Mexico	Waco, Texas
Norwalk, California	Des Moines, Iowa	Henderson, Nevada	Wichita Falls, Texas
Oakland, California	Aurora, Illinois	Las Vegas, Nevada	Salt Lake City, Utah
Oceanside, California	Chicago, Illinois	North Las Vegas, Nevada	Alexandria, Virginia
Ontario, California	Joliet, Illinois	Paradise, Nevada	Arlington, Virginia
Oxnard, California	Naperville, Illinois	Reno, Nevada	Chesapeake, Virginia
Palmdale, California	Peoria, Illinois	Spring Valley, Nevada	Hampton, Virginia
Pasadena, California	Rockford, Illinois	Sunrise Manor, Nevada	Newport News, Virginia
Pomona, California	Fort Wayne, Indiana	Buffalo, New York	Norfolk, Virginia
Rancho Cucamonga, California	Gary, Indiana	New York, New York	Richmond, Virginia
Riverside, California	Indianapolis, Indiana	Rochester, New York	Virginia Beach, Virginia
Sacramento, California	South Bend, Indiana	Syracuse, New York	Seattle, Washington
Salinas, California	Kansas City, Kansas	Yonkers, New York	Spokane, Washington
San Bernardino, California	Overland Park, Kansas	Akron, Ohio	Tacoma, Washington
San Diego, California	Topeka, Kansas	Cincinnati, Ohio	Vancouver, Washington
San Francisco, California	Wichita, Kansas	Cleveland, Ohio	Madison Wisconsin
San Jose, California	Lexington-Fayette, Kentucky	Columbus, Ohio	Milwaukee, Wisconsin

Table A.3: Cities with Population of 100,000 or more and a Mexican Population of 2,000 or more Used in Analysis

Birmingham, Alabama	Pasadena, California	Rockford, Illinois	Tulsa, Oklahoma
Anchorage, Alaska	Pomona, California	Fort Wayne, Indiana	Eugene, Oregon
Little Rock, Arkansas	Rancho Cucamonga, California	Gary, Indiana	Portland, Oregon
Chandler, Arizona	Riverside, California	Indianapolis, Indiana	Salem, Oregon
Gilbert, Arizona	Sacramento, California	South Bend, Indiana	Philadelphia, Pennsylvania
Glendale, Arizona	Salinas, California	Kansas City, Kansas	Providence, Rhode Island
Mesa, Arizona	San Bernardino, California	Overland Park, Kansas	Clarksville, Tennessee
Peoria, Arizona	San Buenaventura, California	Topeka, Kansas	Memphis, Tennessee
Phoenix, Arizona	San Diego, California	Wichita, Kansas	Nashville-Davidson, Tennessee
Scottsdale, Arizona	San Francisco, California	Lexington-Fayette, Kentucky	Abilene, Texas
Tempe, Arizona	San Jose, California	New Orleans, Louisiana	Amarillo, Texas
Tucson, Arizona	Santa Ann, California	Boston, Massachusetts	Arlington, Texas
Anaheim, California	Santa Clara, California	Baltimore, Maryland	Austin, Texas
Bakersfield, California	Santa Clarita, California	Detroit, Michigan	Beaumont, Texas
Berkeley, California	Santa Rosa, California	Flint, Michigan	Brownsville, Texas
Burbank, California	Simi Valley, California	Grand Rapids, Michigan	Carrollton, Texas
Chula Vista, California	Stockton, California	Lansing, Michigan	Corpus Christi, Texas
Concord, California	Sunnyvale, California	Minneapolis, Minnesota	Dallas, Texas
Corona, California	Thousand Oaks, California	St. Paul, Minnesota	El Paso, Texas
Costa Mesa, California	Torrance, California	Independence, Missouri	Fort Worth, Texas
Daly City, California	Vallejo, California	Kansas City, Missouri	Garland, Texas
Downey, California	Arvada, Colorado	Springfield, Missouri	Grand Prairie, Texas
East Los Angeles, California	Aurora, Colorado	St. Louis, Missouri	Houston, Texas
El Monte, California	Colorado Springs, Colorado	Charlotte, North Carolina	Irving, Texas
Escondido, California	Denver, Colorado	Durham, North Carolina	Laredo, Texas
Fontana, California	Fort Collins, Colorado	Fayetteville, North Carolina	Lubbock, Texas
Fremont, California	Lakewood, Colorado	Greensboro, North Carolina	McAllen, Texas
Fresno, California	Pueblo, Colorado	Raleigh, North Carolina	Mesquite, Texas
Fullerton, California	Westminster, Colorado	Winston-Salem, North Carolina	Pasadena, Texas
Garden Grove, California	Bridgeport, Connecticut	Lincoln, Nebraska	Plano, Texas
Glendale, California	New Haven, Connecticut	Omaha, Nebraska	San Antonio, Texas
Hayward, California	Washington, DC	Jersey City, New Jersey	Waco, Texas
Hunting Beach, California	Clearwater, Florida	Newark, New Jersey	Wichita Falls, Texas
Inglewood, California	Jacksonville, Florida	Paterson, New Jersey	Provo, Utah
Irvine, California	Miami, Florida	Albuquerque, New Mexico	Salt Lake City, Utah
Lancaster, California	Orlando, Florida	Henderson, Nevada	West Valley, Utah
Long Beach, California	Tampa, Florida	Las Vegas, Nevada	Arlington, Virginia
Los Angeles, California	Athens-Clarke, Georgia	North Las Vegas, Nevada	Norfolk, Virginia
Modesto, California	Atlanta, Georgia	Paradise, Nevada	Virginia Beach, Virginia
Moreno Valley, California	Columbus, Georgia	Reno, Nevada	Bellevue, Washington
Norwalk, California	Honolulu, Hawaii	Sunrise Manor, Nevada	Seattle, Washington
Oakland, California	Des Moines, Iowa	New York, New York	Spokane, Washington
Oceanside, California	Boise, Idaho	Yonkers, New York	Tacoma, Washington
Ontario, California	Aurora, Illinois	Cleveland, Ohio	Vancouver, Washington
Orange, California	Chicago, Illinois	Columbus, Ohio	Green Bay, Wisconsin
Oxnard, California	Joliet, Illinois	Toledo, Ohio	Madison Wisconsin
Palmdale, California	Naperville, Illinois	Oklahoma City, Oklahoma	Milwaukee, Wisconsin

Table A.4: Cities with Population of 100,000 or more and a Puerto Rican Population of 2,000 or more Used in Analysis

Phoenix, Arizona	Miami, Florida	Las Vegas, Nevada
Tucson, Arizona	Orlando, Florida	Buffalo, New York
Hayward, California	Pembroke Pines, Florida	New York, New York
Long Beach, California	St. Petersburg, Florida	Rochester, New York
Los Angeles, California	Tampa, Florida	Syracuse, New York
Oakland, California	Augusta-Richmond, Georgia	Yonkers, New York
Sacramento, California	Columbus, Georgia	Cleveland, Ohio
San Diego, California	Honolulu, Hawaii	Columbus, Ohio
San Francisco, California	Aurora, Illinois	Allenton, Pennsylvania
San Jose, California	Chicago, Illinois	Erie, Pennsylvania
Colorado Springs, Colorado	Boston, Massachusetts	Philadelphia, Pennsylvania
Bridgeport, Connecticut	Lowell, Massachusetts	Providence, Rhode Island
Hartford, Connecticut	Springfield, Massachusetts	Clarksville, Tennessee
New Haven, Connecticut	Worcester, Massachusetts	Arlington, Texas
Stamford, Connecticut	Baltimore, Maryland	Austin, Texas
Waterbury, Connecticut	Detroit, Michigan	Dallas, Texas
Washington, DC	Grand Rapids, Michigan	El Paso, Texas
Cape Coral, Florida	Charlotte, North Carolina	Houston, Texas
Coral Springs, Florida	Fayetteville, North Carolina	San Antonio, Texas
Fort Lauderdale, Florida	Elizabeth, New Jersey	Newport News, Virginia
Hialeah, Florida	Jersey City, New Jersey	Norfolk, Virginia
Hollywood, Florida	Newark, New Jersey	Virginia Beach, Virginia
Jacksonville, Florida	Paterson, New Jersey	Milwaukee, Wisconsin

Table A.5: Cities with Population of 100,000 or more and a Other Hispanic Population of 2,000 or more Used in Analysis

Anchorage, Alaska	Salinas, California	Joliet, Illinois	Toledo, Ohio
Chandler, Arizona	San Bernardino, California	Rockford, Illinois	Oklahoma City, Oklahoma
Gilbert, Arizona	San Buenaventura, California	Fort Wayne, Indiana	Tulsa, Oklahoma
Glendale, Arizona	San Diego, California	Indianapolis, Indiana	Portland, Oregon
Mesa, Arizona	San Francisco, California	Kansas City, Kansas	Salem, Oregon
Peoria, Arizona	San Jose, California	Wichita, Kansas	Allenton, Pennsylvania
Phoenix, Arizona	Santa Ann, California	Lexington-Fayette, Kentucky	Philadelphia, Pennsylvania
Scottsdale, Arizona	Santa Clara, California	Louisville, Kentucky	Pittsburg, Pennsylvania
Tempe, Arizona	Santa Clarita, California	Baton Rouge, Louisiana	Providence, Rhode Island
Tucson, Arizona	Santa Rosa, California	New Orleans, Louisiana	Memphis, Tennessee
Anaheim, California	Simi Valley, California	Boston, Massachusetts	Nashville-Davidson, Tennessee
Bakersfield, California	Stockton, California	Cambridge, Massachusetts	Abilene, Texas
Berkeley, California	Sunnyvale, California	Lowell, Massachusetts	Amarillo, Texas
Burbank, California	Thousand Oaks, California	Springfield, Massachusetts	Arlington, Texas
Chula Vista, California	Torrance, California	Worcester, Massachusetts	Austin, Texas
Concord, California	Vallejo, California	Baltimore, Maryland	Brownsville, Texas
Corona, California	Arvada, Colorado	Detroit, Michigan	Carrollton, Texas
Costa Mesa, California	Aurora, Colorado	Grand Rapids, Michigan	Corpus Christi, Texas
Daly City, California	Colorado Springs, Colorado	Lansing, Michigan	Dallas, Texas
Downey, California	Denver, Colorado	Minneapolis, Minnesota	El Paso, Texas
East Los Angeles, California	Fort Collins, Colorado	St. Paul, Minnesota	Fort Worth, Texas
El Monte, California	Lakewood, Colorado	Kansas City, Missouri	Garland, Texas
Escondido, California	Pueblo, Colorado	St. Louis, Missouri	Grand Prairie, Texas
Fontana, California	Westminster, Colorado	Charlotte, North Carolina	Houston, Texas
Fremont, California	Bridgeport, Connecticut	Durham, North Carolina	Irving, Texas
Fresno, California	Hartford, Connecticut	Fayetteville, North Carolina	Laredo, Texas
Fullerton, California	New Haven, Connecticut	Greensboro, North Carolina	Lubbock, Texas
Garden Grove, California	Stamford, Connecticut	Raleigh, North Carolina	McAllen, Texas
Glendale, California	Waterbury, Connecticut	Winston-Salem, North Carolina	Mesquite, Texas
Hayward, California	Washington, DC	Lincoln, Nebraska	Pasadena, Texas
Hunting Beach, California	Cape Coral, Florida	Omaha, Nebraska	Plano, Texas
Inglewood, California	Clearwater, Florida	Elizabeth, New Jersey	San Antonio, Texas
Irvine, California	Coral Springs, Florida	Jersey City, New Jersey	Waco, Texas
Lancaster, California	Fort Lauderdale, Florida	Newark, New Jersey	Wichita Falls, Texas
Long Beach, California	Hialeah, Florida	Paterson, New Jersey	Provo, Utah
Los Angeles, California	Hollywood, Florida	Albuquerque, New Mexico	Salt Lake City, Utah
Modesto, California	Jacksonville, Florida	Henderson, Nevada	West Valley, Utah
Moreno Valley, California	Miami, Florida	Las Vegas, Nevada	Alexandria, Virginia
Norwalk, California	Orlando, Florida	North Las Vegas, Nevada	Arlington, Virginia
Oakland, California	Pembroke Pines, Florida	Paradise, Nevada	Newport News, Virginia
Oceanside, California	St. Petersburg, Florida	Reno, Nevada	Norfolk, Virginia
Ontario, California	Tallahassee, Florida	Sunrise Manor, Nevada	Richmond, Virginia
Orange, California	Tampa, Florida	Buffalo, New York	Virginia Beach, Virginia
Oxnard, California	Atlanta, Georgia	New York, New York	Seattle, Washington
Palmdale, California	Columbus, Georgia	Rochester, New York	Tacoma, Washington
Pasadena, California	Honolulu, Hawaii	Syracuse, New York	Vancouver, Washington
Pomona, California	Des Moines, Iowa	Yonkers, New York	Madison Wisconsin
Rancho Cucamonga, California	Boise, Idaho	Cincinnati, Ohio	Milwaukee, Wisconsin
Riverside, California	Aurora, Illinois	Cleveland, Ohio	
Sacramento, California	Chicago, Illinois	Columbus, Ohio	

APPENDIX B: CORRELATION MATRIXES

Table B.1: Correlation Matrix for Mexican Models

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14
X1	1													
X2	.373**	1												
X3	-.281**	-.419**	1											
X4	.127	-.142	-.002	1										
X5	-.123	-.318**	-.024	-.034	1									
X6	-.135	-.139	.305**	-.681**	.045	1								
X7	.217**	.501**	-.236**	-.360**	-.201**	.229**	1							
X8	.183*	-.142	-.290**	.437**	.324**	-.456**	-.229**	1						
X9	.096	.250**	-.444**	-.380**	.240**	.025	.244**	.012	1					
X10	-.247**	-.455**	.462**	-.295**	.170*	.502**	.065	-.151*	-.169*	1				
X11	.059	.245**	-.202**	-.075	-.405**	-.135	.243**	-.169*	.226**	-.215**	1			
X12	.083	.360**	-.160*	-.497**	-.216**	.153*	.426**	-.201**	.394**	.011	.485**	1		
X13	-.024	.055	-.232**	-.464**	.124	.334**	.437**	.013	.258**	.281**	.000	.291**	1	
X14	.070	.404**	.002	.127	-.415**	-.101	.171*	-.347**	-.140	-.262**	.292**	-.018	-.243**	1

X1: Mexican Homicide, X2: Dissimilarity Index, X3: Exposure, X4: Mexican Population, X5: Median Rent, X6: Hispanic IQV, X7: Gini Index, X8: Southwest, X9: Population Density, X10: Average Education, X11: Unemployment, X12: Hispanic Female Headed Households, X13: Average Age of Hispanic Males, X14: Floaters

Table B.2: Correlation Matrix for Puerto Rican Models

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14
X1	1													
X2	.321**	1												
X3	-.187	-.575**	1											
X4	.133	-.043	.294*	1										
X5	-.028	-.250*	-.054	-.294*	1									
X6	.035	-.552**	.527**	.125	.108	1								
X7	.238*	.489**	-.431**	-.071	-.013	-.097	1							
X8	-.136	.229	-.348**	-.600**	.095	-.521**	.000	1						
X9	.617**	.329**	-.460**	.099	.113	-.035	.434**	-.157	1					
X10	-.117	-.603**	.549**	.029	.237*	.579**	-.271*	-.268*	-.273*	1				
X11	.204	.474**	-.243*	.615**	-.149**	-.363**	.238*	-.186	.361**	-.468**	1			
X12	.215	.382**	-.157	.729**	-.341**	-.288*	.231	-.238*	.370**	-.275*	.819**	1		
X13	.049	-.271*	-.155	-.282*	.275*	.275*	.283*	-.095	.247*	.214	-.303*	-.284*	1	
X14	.112	.536**	-.261*	.205	-.360**	-.498**	.126	.018	.186	-.592**	.536**	.414**	-.294*	1

X1: Puerto Rican Homicide, X2: Dissimilarity Index, X3: Exposure, X4: Mexican Population, X5: Median Rent, X6: Hispanic IQV, X7: Gini Index, X8: Southwest, X9: Population Density, X10: Average Education, X11: Unemployment, X12: Hispanic Female Headed Households, X13: Average Age of Hispanic Males, X14: Floaters

Table B.3: Correlation Matrix for Puerto Rican Models

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14
X1	1													
X2	.321**	1												
X3	-.187	-.575**	1											
X4	.133	-.043	.294*	1										
X5	-.028	-.250*	-.054	-.294*	1									
X6	.035	-.552**	.527**	.125	.108	1								
X7	.238*	.489**	-.431**	-.071	-.013	-.097	1							
X8	-.136	.229	-.348**	-.600**	.095	-.521**	.000	1						
X9	.617**	.329**	-.460**	.099	.113	-.035	.434**	-.157	1					
X10	-.117	-.603**	.549**	.029	.237*	.579**	-.271*	-.268*	-.273*	1				
X11	.204	.474**	-.243*	.615**	-.149**	-.363**	.238*	-.186	.361**	-.468**	1			
X12	.215	.382**	-.157	.729**	-.341**	-.288*	.231	-.238*	.370**	-.275*	.819**	1		
X13	.049	-.271*	-.155	-.282*	.275*	.275*	.283*	-.095	.247*	.214	-.303*	-.284*	1	
X14	.112	.536**	-.261*	.205	-.360**	-.498**	.126	.018	.186	-.592**	.536**	.414**	-.294*	1

X1: Puerto Rican Homicide, X2: Dissimilarity Index, X3: Exposure, X4: Mexican Population, X5: Median Rent, X6: Hispanic IQV, X7: Gini Index, X8: Southwest, X9: Population Density, X10: Average Education, X11: Unemployment, X12: Hispanic Female Headed Households, X13: Average Age of Hispanic Males, X14: Floaters

Table B.4: Correlation Matrix for Hispanic Models

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20	X21	
X1	1																					
X2	.406	1																				
X3	-.287**	-.441**	1																			
X4	-.079	.067	.222	1																		
X5	.016	.100	-.038	-.018	1																	
X6	.121	.127	.143*	-.435**	-.034	1																
X7	-.057	-.054	.384**	.201**	-.588	.130*	1															
X8	.376**	.784**	-.335	-.105	-.019	.087	.152*	1														
X9	.338**	.797**	-.332**	-.070	-.022	.170**	.155*	.802**	1													
X10	.300**	.761**	-.224**	-.020	-.054	.189**	.240**	.721**	.944**	1												
X11	.216**	.134*	-.678**	-.247**	.154*	.128	-.465**	-.044	-.072	-.155*	1											
X12	-.078	-.278**	-.057	.023	.249**	-.190**	-.359**	-.213**	-.367**	-.476**	.064	1										
X13	-.074	-.254**	.371**	.154*	-.328**	.043	.458**	-.082	-.009	.041	-.545**	-.043	1									
X14	.226**	.416**	-.190**	-.078	-.168*	.235**	.233*	.343**	.465**	.479**	-.137*	-.183**	.252**	1								
X15	.124	-.057	-.321**	-.228**	.259**	.000	-.406**	-.162*	-.246**	-.359**	.548**	.315**	-.505**	-.266**	1							
X16	.325	.243	-.446**	-.227**	.118	.173**	-.345**	.173**	.202**	.127	.335**	.249**	-.067	.208**	.026	1						
X17	-.212**	-.475**	.456**	-.096	-.219**	.135*	.396**	-.248**	-.045**	-.224**	-.434**	.110	.611**	.165*	-.261**	-.178**	1					
X18	.091	.273**	-.184**	-.274**	-.028	.211**	-.118	.181**	.330**	.315**	.133*	-.385**	-.168**	.214**	-.139*	.224**	-.198**	1				
X19	.128*	.368**	-.133*	-.317**	-.172**	.310**	-.053	.289**	.365**	.355**	-.008	-.279**	.051	.321**	-.247**	.332**	-.056	.577**	1			
X20	.044	-.080	-.176**	-.036	-.148*	.211**	.110	-.091	-.069	-.108	.058*	.139*	.314**	.372**	-.052	.221**	.284**	-.135*	.021	1		
X21	.081	.415**	-.080	.166*	-.050	-.058	.098	.333**	.407**	.429**	-.039	-.359**	-.261**	.080	-.179**	-.075	-.379**	.253**	.104	-.248**	1	

X1: Hispanic Homicide, X2: Dissimilarity Index, X3: Exposure, X4: Change in Dissimilarity 1990 to 2000, X5: Change in Dissimilarity 1980 to 1990, X6: Change in Exposure 1990 to 2000, X7: Change in Exposure 1980 to 1990, X8: Dissimilarity Index Poor, X9: Dissimilarity Index Middle, X10: Dissimilarity Index Middle/High, X11: Hispanic Population, X12: Median Rent, X13: Hispanic IQ, X14: Gini Index, X15: Southwest, X16: Population Density, X17: Average Education, X18: Hispanic Unemployment, X19: Female Headed Households, X20: Average Male Age, X21: Floaters

Table B.5: Correlation Matrix for African American Models

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19
X1	1																		
X2	.466**	1																	
X3	-.407**	-.459**	1																
X4	-.119	-.016	.256**	1															
X5	.149*	.213**	.004	.142*	1														
X6	.190**	.489**	.039	-.426**	.074	1													
X7	.109	.380**	-.009	-.370**	.517**	.517**	1												
X8	.432**	.781**	-.324**	.159*	.335**	.279**	.279**	1											
X9	.394**	.806**	-.297**	.097	.199**	.388**	.295**	.779**	1										
X10	.383**	.844**	-.275**	.164*	.189**	.383**	.299**	.769**	.955**	1									
X11	.471**	.499**	-.570**	-.379**	.127	.375**	.263**	.272**	.244**	.239**	1								
X12	-.210**	-.515**	.136*	.447**	-.001	-.503**	-.518**	-.150*	-.322**	-.365**	-.509**	1							
X13	.339**	.673**	-.370**	-.162*	.166*	.426**	.282**	.450**	.487*	.504**	.451**	-.403**	1						
X14	.031	.171*	-.204**	-.213**	-.251**	.093	.390**	.051	-.078	-.043	.385**	-.315**	.273**	1					
X15	.389**	.197**	-.329**	-.018	.166*	.083	-.288**	.233**	.221**	.193**	.010	.214**	.240**	-.326**	1				
X16	-.242**	-.565**	.407**	.478**	-.032	-.482**	-.347**	-.249**	-.412**	-.431**	-.522**	.717**	-.410**	-.170*	-.089	1			
X17	.333**	.571**	-.412**	-.472**	.060	.436**	.292**	.287**	.400**	.390**	.544**	-.558**	.532**	.066	.204**	-.586**	1		
X18	.160*	.244**	-.209**	.161*	.111	.178*	.095	.298**	.245**	.242**	.048	.213**	.335**	-.043	.258**	.098	-.085	1	
X19	.186**	.327**	-.250**	-.221**	.178*	.215**	-.001	.211**	.272**	.278**	.231**	-.340**	.250**	-.095	.157*	-.467**	.398**	.012	1

X1: African American Homicide, X2: Dissimilarity Index, X3: Exposure, X4: Change in Dissimilarity 1990 to 2000, X5: Change in Dissimilarity 1980 to 1990, X6: Change in Exposure 1990 to 2000, X7: Change in Exposure 1980 to 1990, X8: Dissimilarity Index Poor, X9: Dissimilarity Index Middle, X10: Dissimilarity Index Middle/High, X11: African American Population, X12: Median Rent, X13: Gini Index, X14: South, X15: Population Density, X16: Average Education, X17: Female Headed Households, X18: Average Male Age, X21: Floaters

APPENDIX C: OLS REGRESSION TABLES FOR PUERTO RICAN AND OTHER HISPANICS

Table C.1: OLS Regression Puerto Rican – Dissimilarity

Variable	Direct		Indirect	
	B	S.E.	B	S.E.
Female Headed Households	-.030	.031		
Dissimilarity Hispanic/White	.068**	.020	.065**	.019
Percent Population Hispanic	.111**	.036	.090**	.029
Median Hispanic Rent	-.005*	.002	-.005	.002
Hispanic IQV	-.164	1.866	.398	1.771
Gini Index	-.018	.057	-.023	.057
Southwest Dummy	-.603	.704	-.471	.690
Population Density	.000**	.000	.000**	.000
Average Hispanic Education	.662	.436	.486	.397
Hispanic Male Unemployment	-.046	.073	-.086	.060
Average Hispanic Male Age	-.022	.064	.002	.059
Floater	-.001	.047	.016	.046
Constant	-5.842	5.360	-5.576	5.348
R ²	.640		.793	
N	43		43	

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

Table C.2: OLS Regression Puerto Rican – Exposure

Variable	Direct		Indirect	
	B	S.E.	B	S.E.
Female Headed Households	-.018	.037		
Exposure Hispanic/White	.010	.020	.009	.019
Percent Population Hispanic	.073	.040	.062	.032
Median Hispanic Rent	-.005	.003	-.005	.003
Hispanic IQV	-.502	2.239	-.140	2.084
Gini Index	.082	.059	.076	.057
Southwest Dummy	-.747	.823	-.670	.798
Population Density	.000**	.000	.000**	.000
Average Hispanic Education	-.164	.532	-.232	.507
Hispanic Male Unemployment	-.049	.086	-.073	.069
Average Hispanic Male Age	-.094	.071	-.079	.063
Floaters	-.011	.058	.000	.056
Constant	3.436	5.971	3.265	5.889
R ²		.507		.504
N		43		43

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

Table C.3: OLS Regression Other Hispanics– Dissimilarity

Variable	Direct		Indirect	
	B	S.E.	B	S.E.
Female Headed Households	-.012	.020		
Dissimilarity Hispanic/White	.053***	.012	.051***	.011
Percent Population Hispanic	.009	.029	-.002	.020
Median Hispanic Rent	-.003**	.001	-.003**	.001
Hispanic IQV	.670	.768	.758	.750
Gini Index	-.006	.028	.051***	.011
Southwest Dummy	.720**	.240	-.004	.028
Population Density	.000***	.000	.719**	.239
Average Hispanic Education	.125	.258	.000***	.000
Hispanic Male Unemployment	-.075	.043	.050	.221
Average Hispanic Male Age	.114**	.041	-.086*	.038
Floaters	.039	.024	.119	.040
Constant	-5.870	2.742	-5.467	2.640
R ²	.548		.546	
N	107		107	

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

Table C.4: OLS Regression Other Hispanics – Exposure

Variable	Direct		Indirect	
	B	S.E.	B	S.E.
Female Headed Households	.025	.021		
Exposure Hispanic/White	.001	.008	.000	.008
Percent Population Hispanic	-.029	.030	-.004	.023
Median Hispanic Rent	-.003*	.001	-.003**	.001
Hispanic IQV	.949	.850	.771	.839
Gini Index.	.062*	.027	.067**	.026
Southwest Dummy	.814**	.280	.820**	.281
Population Density	.000***	.000	.000***	.000
Average Hispanic Education	-.374	.267	-.240	.244
Hispanic Male Unemployment	-.104*	.047	-.080	.043
Average Hispanic Male Age	.098*	.047	.082	.045
Floaters	.066*	.026	.061	.026
Constant	-2.174	2.877	-2.707	2.851
R ²	.453		.444	
N	107		107	

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

VITA

Michael G. Bisciglia was born in South Weymouth, Massachusetts, to Michael F. and Shirley Bisciglia of Seattle, Washington. Michael has one sister, Natalie who currently resides in Tampa, Florida. His father's Navel career brought them to Norfolk, Virginia, in 1976 where his parents still reside. Michael moved to North Carolina in 1992 to pursue undergraduate studies. He received his bachelors' degrees in history, sociology and anthropology from North Carolina Wesleyan College in 1996 and relocated to Virginia to pursue a master's degree from Old Dominion University and Norfolk State University in applied sociology. Upon completion of his master's degree, he was appointed to an instructors position at Old Dominion University and taught Introduction to Sociology, criminology and drugs in society. In the fall of 2000 Michael relocated again to Louisiana to pursue his doctorate degree.

While at Louisiana State University Michael has taught courses in Introductory Sociology, statistics, deviance, the criminal justice system and criminology. While at Louisiana State University Michael served as the president as the Sociology Graduate Student Association. He was also recognized by the Office of Disability services as being "The Most Accommodating Faculty Member" toward disabled students. Also while LSU, Michael served as the Data Manager for Dr. J. Jill Suitor's grant examining parental favoritism in adult children. In addition to his current research on the influence of Hispanic segregation on instances of homicide, he has also focused research on student satisfaction in the distance education environment, and network analysis of closed network hiring structures. Finally Michael became and currently serves as the Affiliate Director of Future Problem Solving International for the state of Louisiana.