1

IMMIGRANT CONCENTRATION AND VIOLENT CRIME:

A MULTILEVEL ANALYSIS

by
ARLANA KEZIA HENRY

ABSTRACT

Despite a decline in crime rates in the U.S. over the last few decades, the perception remains that immigration increases rates of violence and crime in neighborhoods, cities, and metropolitan areas. Utilizing data from the National Neighborhood Crime Study (NNCS) and multilevel modeling techniques this study contributes to research on immigration and crime by assessing the relationship across a large sample of neighborhoods and metropolitan areas. I examine whether contextual factors at the metropolitan level (e.g., segregation, labor market structure, income inequality) condition the relationship between an indicator of immigrant concentration and violent crime rates at the neighborhood (census tract) level. I find that controlling for structural factors immigrant concentration is not associated with violent crime at the neighborhood level, and negatively and significantly associated with violent crime at the metropolitan level. Results are consistent with the social disorganization framework and subsequently support research associated with the immigrant revitalization perspective. Implications of the findings for theory and research on the link between immigration and crime are discussed.

INDEX WORDS: Neighborhoods, Violent crime, Social disorganization theory, immigrant concentration

INTRODUCTION

Immigration rates in the U.S. have increased ten-fold in the last 75 years, following an influx of immigrants from non-European countries (e.g., Central and South America, the Caribbean, Africa, and the Middle East). This has, in turn, contributed to a massive change in the social demographics of American neighborhoods and cities. It has also intensified the perception among Americans that immigrants are disproportionately involved in criminal activities, despite a decline in U.S. crime rates (Hagan and Palloni 1998; Reid et al 2005), and despite the fact that recent empirical studies have demonstrated that immigrants do not contribute to higher crime rates (Neilsen, Lee, & Martinez 2005; Lee, Martinez, & Rosenfeld 2001). These negative perceptions are rooted in early empirical research, which established that immigrant groups from Europe were more involved in criminal activities than native citizens and that some immigrant groups were more inclined to settle in disadvantaged neighborhoods (Shaw and McKay, 1942). Current political rhetoric draws on this incomplete early research, thereby contributing to the anti-immigrant sentiment within American society (Sampson, 2008). Drawing on these entrenched stereotypes, many of the debates surrounding current immigration policies also add to the negative attitudes towards immigrants.

Although more researchers have begun examining this complex relationship in recent years (Morenoff and Sampson 1997; Martinez and Lee 2000; Sampson 2008; Atkins et al. 2009; Kubrin and Ousey 2009; Olson et al. 2009; Stowell and Martinez 2009; Wadsworth 2010) the correlation between immigration and crime is not clear and there have been conflicting findings regarding the influence of immigration and immigrant concentration on community violence and crime rates in U.S. cities.

Prior research that posits a positive relationship between immigration and crime has focused on a few factors, such as the changing demographic composition of the general population, specifically placing emphasis on the younger population (i.e. the children of immigrants) (Sutherland 1934; Portes and Rumbaut 2006; Morenoff and Astor 2006) and the illegal drug market, which has also been found to be an appealing avenue for young unemployed males in poor neighborhoods. Contextually, population instability as it relates to the breakdown of social organization has also been found to be a contributing factor. Conversely, studies that postulate a negative immigration-crime relationship emphasize the presence of social capital and positive family structures among immigrant populations, which may contribute to the decrease of crime rates in neighborhoods (Portes 1997; Martinez 2002).

Neighborhood dynamics are vital components in understanding some of the nuances that exist within the immigration and crime relationship, and yet most research in this area has yet to significantly examine such dynamics. Martinez and Lee (2000) note that local context serves to be influential in shaping the criminal involvement of both immigrant and native-born populations. In addition to their findings that immigrant concentration has a negative effect on overall homicides, Feldmeyer and Steffensmeier (2009: 222) also conclude that research which "includes a broader range of study units (e.g., census places, counties, neighborhoods) and data from both traditional immigrant destinations (e.g., Florida, California, New York) and non-traditional immigrant destinations (e.g. North Carolina, Tennessee)" is needed. More specifically, while some contemporary studies have demonstrated that the presence of immigrants in neighborhoods is associated with lower rates of violence and crime (Lee and Martinez 2002; Sampson 2008), other studies have found that recent immigrants only reduce homicide levels in disadvantaged contexts while elevating homicide levels in advantaged

neighborhoods (Vélez, 2009). Some studies have also reported null findings (Butcher and Piehl 1998; Martinez 2002; Reid et al 2005). These mixed findings are a result of not considering the structural context of crime and the social organization of communities when assessing the immigration and crime relationship, which is particularly important given that immigrants disproportionally settle in disadvantaged neighborhoods upon arriving in the United States (Peterson and Krivo, 2009).

In the present study, I extend the research in the field of immigration and crime by examining how contextual factors at the metropolitan level, such as labor market structure, inequality, residential instability, and residential segregation, influence the relationship between immigrant concentration and crime at the neighborhood level. More specifically, the aims of the current study are: 1) to examine whether neighborhoods and metropolitan areas with higher immigrant populations have higher crime rates in and across the U.S. and 2) to examine whether and how metropolitan contextual factors (e.g., segregation, economic inequality, labor market structure) condition the effects of immigrant concentration, neighborhood structural disadvantage, and socioeconomic inequality on neighborhood crime rates.

Furthermore, this study expands the criminological and sociological literature on the immigration- crime link by assessing the relationship between immigration and crime across a larger sample of U.S. neighborhoods and metropolitan areas than has been done previously. A number of studies to date have concentrated on a few specific geographic areas, rather than the country as a whole (e.g., Lee, Martinez, and Rosenfeld 2001; Lee 2003; Sampson 2008). For example, a large number of studies have focused on large urban areas such as New York, Miami, San Diego, Chicago, and El Paso, thus neglecting Mid-western and southern states where immigrant populations are also increasing. Studies of this nature are limited in their level of

generalizability, as their results may only be applicable to those specific geographic areas and they disregard emerging immigrant destination areas. In the current study I use a nationally representative sample of metropolitan areas and neighborhoods that vary in population and size. I also contribute to the existing research in this area by examining neighborhood violent crime. Previous research often only examines homicide rates, which are statistically rare events (e.g. Lee, Martinez, and Rosenfeld, 2001).

Existing research has also primarily been situated at the individual-level (Martinez and Lee 2000b; Sampson, Morenoff, and Raudenbush 2005; Stowell and Martinez 2009), emphasizing the influences of specific immigrant groups as well as the differences between immigrants and natives, rather than at the aggregate level. For example, some studies have examined crime rates among Latinos and found that they do not contribute to increased rates of violence (Stowell and Martinez 2009). While examining demographic differences is important, it is also beneficial to focus on the broader structural forces that may influence the relationship between immigration and crime, which is what my research aims to do. I examine these issues using neighborhood crime data from the National Neighborhood Crime Study (NNCS) (Krivo and Peterson, 2000), which combines crime and socio-demographic information for 9,593 neighborhoods (census tracts), 91 cities, and 64 metropolitan areas across the United States. After taking into account missing crime data, a total of 6,935 tracts and 53 metropolitan areas are included in the current study. All things considered, these data are more comprehensive than other data used in previous studies.

I draw upon both social disorganization theory (SDT) (Shaw McKay, 1942) and the immigrant revitalization perspective (Portes and Rumbaut 2001 Lee et al. 2001; Lee and Martinez 2002) in order to assess the immigration-crime relationship. Each of these theories is

important to understanding the immigration and crime nexus as they emphasize the influence of community context and the function of immigration and immigrant concentration with respect to crime. Contemporary social disorganization theory contends that the structural characteristics of the neighborhoods in which immigrants settle make them more susceptible to violence and crime due to the debilitating nature of these areas. Hence, the immigration-crime link is a function of the predisposition of immigrant groups to concentrate in disadvantaged neighborhoods. Conversely, the immigrant revitalization perspective asserts that immigration reduces crime in neighborhoods by fostering social cohesion among immigrant populations through various social institutions. Specifically, this theory emphasizes the important role of emerging or existing ethnic enclaves that provide economic stability among various immigrant populations. Consequently, I will argue that that immigrant concentration potentially stabilizes socially disorganized neighborhoods and that immigrant concentration will be negatively related to neighborhood violence and crime.

THEORETICAL FRAMEWORK

Social Disorganization Theory and Crime

Criminologists and sociologists have long assessed the relationship between social structural factors and neighborhood violence and crime. The classical work of Chicago school theorists Clifford Shaw and Henry D. McKay (1942) has been linked to the development of the social disorganization theory, which focuses on the social forces that influence neighborhood dynamics, specifically violence and crime. Through their assessment of Chicago neighborhoods, Shaw and McKay found that delinquency is spatially distributed and that the highest rates of delinquency were located in transitional zones (previously identified by Park and Burgess

(1925)) where many lower class residents resided. Areas in close proximity to urban businesses and industrial centers were found to have a higher concentration of juvenile delinquency, higher poverty rates, and health deficiencies, among other things. These areas were also home to various racial and ethnic populations, specifically European immigrants and African Americans. However, despite the demographic changes in those areas over time, neighborhoods in the transition zone maintained the highest crime rates regardless of the composition of the ethnic groups residing within the area. Therefore, Shaw and McKay concluded that the structural characteristics of neighborhoods fostered social disorganization and thereby influenced the rates of delinquency and crime in these areas. Moreover, it has been concluded that *place* rather than nativity was the primary factor in determining delinquency and crime.

Shaw and McKay argued that three neighborhood characteristics—poverty (i.e. low socio-economic status), ethnic heterogeneity, and residential mobility—contribute to the social disorganization of neighborhoods and consequently contribute to the increase in crime rates. These factors indirectly influenced violence and crime by undermining social networks and disrupting informal measures of social control, such as the family and school, which would normally govern neighborhoods and protect against crime. Kornhauser (1978: 31) notes, "social disorganization produces weak institutional controls, which loosen the constraints on deviating from conventional values."

A refined model of social disorganization theory presented by Sampson and Groves (1989) supports the framework of Shaw and McKay's argument as well as the significance of social disorganization theory for understanding macro-level variations in crime. Utilizing data from the British Crime Survey (BCS) they found that rates of crime and delinquency are higher in communities with weak friendship networks, unsupervised teenage peer-groups, and where

organizational participation was low. Local networks intervened between structural characteristics and crime. Furthermore, they found that indicators of community social disorganization mediated the effects of community-SES, residential instability, family disruption, and heterogeneity on personal and property victimization as well as criminal offending (1989: 791).

Broadly, one of the primary assumptions of social disorganization theory is that "the disorganization of community-based institutions is often caused by rapid industrialization, urbanization, and immigration processes, which occur primarily in urban areas" (Shoemaker, 1984/2009). In other words, traditional social disorganization theory contends that (ethnic) heterogeneity may lead to violence and crime in neighborhoods as it disrupts the social dynamics of neighborhoods and communities by obstructing communication, weakening social ties, and decreasing shared values related to social control. For instance, heterogeneity may contribute to group tensions and decreases in friendship networks (Sampson and Groves 1989; Warner 1999; Lee and Martinez 2002).

According to Sampson, Raudenbush, and Earls (1997), immigration may hinder community residents' ability to recognize shared goals due to ethnic and linguistic heterogeneity, which may hinder social control mechanisms and increase the likelihood of violence. With regards to residential mobility, immigration produces changes in the demographic composition of neighborhoods and metropolitan areas, which may lower the levels of group cohesion between both immigrant and native-born groups. Conceptually then, the disproportionate concentration of immigrants in socially disorganized neighborhoods may stimulate violence and crime in these areas. However, contemporary studies that have since tested social disorganization theory with relation to urbanization and immigration have produced inconsistent findings. For example,

contemporary studies that examine neighborhood effects and crime have found that socially organized neighborhoods are characterized by strong networks, both among residents and with local political and economic officials, that facilitate the control of crime (Bursik and Grasmick 1993; Velez 2009).

In sum, social disorganization theory by its nature is a contextual theory that focuses on the structure of neighborhoods and communities. It assumes that the rates of crime and delinquency vary based upon local context. Specifically, disorganized neighborhoods maintain higher crime rates over time regardless of the racial and ethnic composition of those areas. Furthermore, violence and crime persist in socially disorganized areas even when residents move out. As numerous contemporary studies have shown, environmental factors, primarily concentrated disadvantage, impede the social organization of communities. In turn it has been concluded that the sources of crime are embedded in neighborhood structure, not in the personal characteristics of individuals within those areas.

Immigrant Vitalization Perspective

Based upon the assumptions of the aforementioned theory of social disorganization, immigration is a social process that weakens neighborhood social bonds as it contributes to increases in racial and ethnic heterogeneity and population turnover (mobility). However, contrary to these implications, recent studies suggest that immigration and immigrant concentration produce informal measures of social control and thus negatively influence violence and crime in neighborhoods.

Research of this nature is supportive of the recently developed immigrant revitalization perspective (Portes and Rumbaut 2001 Lee et al. 2001; Lee and Martinez 2002). The focal point

of this perspective is that immigration is a stabilizing force that does not contribute to crime, but may in fact suppress violence and crime in communities (Lee, Martinez and Rosenfeld, 2001). The immigrant revitalization perspective posits that immigrants, particularly Latinos, are responsible for contributing to the positive development of neighborhoods and communities as they maintain higher levels of employment and social integration (Lee 2003; Portes and Rumbaut 2006). Contrary to the theory of social disorganization, immigrant concentration is found to be associated with lower rates of violence and crime (Sampson 2008; Lee and Martinez 2009; Martinez, Stowell, and Lee 2010).

Factors associated with the immigrant revitalization perspective also include strong familial and neighborhood ties and ethnic enclaves, which presumably counterbalance those factors associated with social disorganization, particularly the effects of high structural disadvantage. For example, Velez (2006: 102) notes that enclaves provide social capital for their residents by creating job opportunities and higher wages that would otherwise not be available to immigrant and nonimmigrants. Similarly, Lee and Martinez (2002: 366) note that ethnically heterogeneous neighborhoods have contributed to the revitalization of familial, social, and economic institutions despite often being poor. In this capacity, enclave communities serve as a shield for immigrants within them who may be more susceptible to the existing debilitating structural forces surrounding them.

Again counter to social disorganization theory, when viewed contextually previous research has also shown that immigration is not associated with violent crime. For example, in their examination of Afro-Caribbean homicides in Miami from 1980-1990, Martinez and Lee (2000) found that as immigrant groups became more established and the population size increased and they became less dominated by young males (the most violence-prone group), the

homicide rate rapidly dissipates. Most importantly Martinez and Lee conclude, "rapid immigration might not create disorganized communities but instead stabilize neighborhoods through the creation of new social and economic institutions" (p. 810). Similarly, in their study of adolescent violence and crime using data from the National Longitudinal Study of Adolescent Health, Desmond and Kubrin (2009) find that immigrant concentration has a significantly negative effect on violence among foreign-born adolescents. Likewise, Sampson (2008) notes that second generation immigrants commit less violence than native-born youth after accounting for individual, family, and neighborhood factors.

Because immigration rates are vastly increasing and immigrants influence neighborhood development, the immigrant revitalization perspective plays an important role in uncovering some of the nuances related to this social process. Immigration is an aggregate level phenomenon (Kubrin, 2013); therefore, studies that assess various elements of this social process also need to occur at levels other than the individual level. Specifically, studies are needed that move beyond examining differences in crime rates between various immigrant groups (i.e. Japanese immigrants vs. Chinese immigrants, or Puerto Ricans vs. Cubans), but rather assessing the structural factors that influence this and other social processes in U.S neighborhoods and metropolitan areas.

In sum, social structural factors affect individual behavior, and thus merely assessing racial and ethnic differences in criminal involvement cannot account for the variations in rates of violence and crime within neighborhoods and metropolitan areas. The immigrant revitalization perspective allows researchers to examine the influence of larger concentrations of immigrants on neighborhood dynamics, specifically neighborhood violent crime, and also how structural factors may influence the relationship between immigrant concentration and crime.

PREVIOUS RESEARCH ON IMMIGRATION, IMMIGRANT CONCENTRATION AND CRIME

Early studies that examined the relationship between criminality and population change in the U.S. illustrated that foreign-born individuals were less likely to commit crime than their native-born counterparts. Studies conducted by the Industrial Commission of 1901, the Federal Immigration Commission (known as the Dillingham Commission) in 1911, the National Commission on Law Observance and Enforcement in 1931 (known as the Wickersham Commission) all reported relatively lower crime rates among foreign-born populations (Tonry, 1997). For example, the Industrial Commission of 1901 reported that "foreign-born whites were less criminal than native-born whites," and the report from the Wickersham Commission stated that no evidence existed that linked the foreign-born to more crime than the native-born, contrary to popular belief (Tonry, 1997).

Although research drew the conclusion that foreign-born populations did not positively contribute to crime, there were still public concerns about the "criminal immigrant" within American society in the early 1900's. In turn, immigration laws that both restricted and prohibited the entrance of various immigrant groups to the United States were enacted. These laws reduced the migration of immigrants and subsequently diminished concerns surrounding foreign-born populations, primarily surrounding European immigrants in and around the 1940's and 1950's, and, as a result, research related to immigration decreased significantly (Martinez 2000; Reid et al. 2005; Martinez and Valenzuela 2006). However, once some of these restricted laws and policies were dismantled, immigration rates began to increase and the focus then shifted towards examining the criminality of these new "second wave immigrants." This second wave was comprised mainly of immigrants from Mexico, Latin America, Asia, and the Caribbean. Scholars found that their arrival into the United States coincided with a rise in crime

rates in America during that time (Hagan and Palloni 1998; Martinez 2000), and similar to the first wave of immigrants, these new immigrant populations were also perceived to be criminogenic. Due to factors related to acculturation and assimilation, many Americans concluded that the children of immigrants were principally responsible for the increasing crime rates in America.

Immigration has continued to increase up to today, and has led to controversial debates surrounding the legality of immigration/border security. The image of the criminal immigrant also resurfaced and prompted sociologists and criminologists alike to reexamine the relationship between immigration and crime. Proponents of anti-immigration legislation have asserted a positive immigration-crime relationship. Much of the research that supports this argument makes reference to the influence of varying cultural dynamics among immigrant groups in comparison to American cultural values and normative behaviors. These cultural arguments focus on individual motivations for crime, which is one of the limitations of a large number of the previous studies that have been conducted in this area.

Empirically, research that has examined the relationship between immigration and crime has primarily looked at the individual relationship between various racial and ethnic groups and homicide rates. For example, in a study conducted by Martinez et al. (2003), the authors examine the association between race/ethnicity, nativity, and several types of homicide (e.g. drug-related homicides, homicides committed in the course of a robbery, and escalation killings). Focusing their analysis on Mariel-Cubans and Afro-Caribbeans, specifically Haitians and Jamaicans in Miami, they do not find a significant relationship between immigration status and homicidal motive. Offender ethnicity and immigration did not play a role in the types of homicide involvement of victims or offenders (Martinez et al. 2003). In another study

conducted by Martinez et al. (2004), the authors assess the extent to which ethnic minority groups and immigrant neighborhoods in San Diego and Miami have an effect on drug related violence and crime. They test the notion that drug violence is concentrated in neighborhoods with large numbers of ethnic minorities and immigrants (2004:133) and find that the ethnic composition of Miami neighborhoods has no significant influence on its drug market. However, in San Diego they found that some ethnic and racial groups (African Americans and Southeast Asians) were predictors of drug homicides.

In the same vein, studies that have examined the crime rates among various immigrant groups and across developing immigrant communities have concluded that immigrants have lower rates of criminal involvement than non-immigrants. Using U.S. Census data from 1980, 1990, and 2000, Butcher and Piehl (1998a) find that immigrants have lower institutionalization rates than the native-born population. In other words, immigrants are less likely to be incarcerated than native-born U.S. residents who have similar demographic characteristics. Similarly, a more recent study finds that male immigrants have lower rates of incarceration compared to native-born males (Butcher and Piehl, 2007). There has also been evidence that immigrant concentration has a significantly negative effect on violence among adolescents (Desmond and Kubrin, 2009).

While individual-level studies such as the ones outlined above have traditionally dominated this field of research, aggregate level studies have recently increased. These studies have assessed the immigration-crime relationship at the neighborhood, city, and metropolitan levels utilizing a social disorganization framework. Specifically, a number of scholars have assessed whether structural conditions account for the variation in crime rates between both immigrant and native-born populations across each of these geographical contexts (Lee et al

2001; Martinez 2002; Reid et al 2005; Desmond and Kubrin 2009; Ousey and Kubrin 2009; Martinez et al. 2010; MacDonald et al 2012).

Peterson and Krivo (2010; pg. 66) note that whites and racial-ethnic minorities live in divergent socioeconomic worlds that are influenced by racialized social structures. They find that at the neighborhood level crime is associated with residential instability, fewer immigrants, and fewer investments in the community. In their examination of the spatial dimensions of racial and ethnic neighborhoods compared to white neighborhoods, they find that non-white neighborhoods that have low residentially stability and are highly disadvantaged and associated with higher rates of violence. They also find that white neighborhoods have less violent crime than neighborhoods of color even when equivalent neighborhood conditions are taken into account (2010: 103). They conclude that there is a racial-spatial divide with regards to neighborhood violence. Precisely, there are differences in rates of neighborhood violence across African American, Latino, and minority areas compared to white neighborhoods.

At the city level existing research has not been as straightforward as previous individual and community level studies because the findings have been fairly inconsistent. For example, in their analysis of 43 metropolitan cities across the United States in the 1980's, Butcher and Piehl (1998) found that cities with large populations of immigrants or high immigration rates generally had high crime rates. However, after controlling for demographic factors at the city-level, the relationship between immigration and crime is reduced or becomes nonexistent. In a more recent study, Ousey and Kubrin (2009) assessed the longitudinal relationship between immigration and violent crime between 1980 and 2000. They find that increases in immigration are associated with a reduction in violent crimes (per 100,000 persons), which supports the immigrant vitalization perspective. They report a significant, negative association between

within-city changes in immigration and within-city changes in violent crime from 1980 to 2000 (Ousey and Kubrin, 2009; pg. 466).

Furthermore, research that analyzes metropolitan level data has been scarce, but fairly consistent with earlier studies that examine crime rates between both first and second wave immigrants. A study by Reid and her colleagues (2005) examined whether metropolitan areas with higher levels of immigration maintained higher rates of violent or property crime, and whether differences existed based upon the country of origin and human capital of immigrants. In their examination of four different types of crime—murder, robbery, burglary, and theft –they conclude that recent immigration does not inflate crime rates across metropolitan areas for either violent or property crime. More recent studies have also drawn the same conclusions. For example, after controlling for structural predictors of homicide and for spatial autocorrelation, Atkins, Rumbaut, and Stansfield (2009) find that recent immigration is not associated with crime in the city of Austin, Texas.

Most relevant to the current study is the recent work of Kubrin and Ishizawa (2012). They examined tracts in Chicago and Los Angeles to assess the spatial distribution of violent crime across immigrant neighborhoods in these two cities. In examining the three-year average violent crime rate for these two cities, Kubrin and Ishizawa find that local context, specifically neighborhood disadvantage, accounts for the variation in violent crime rates. Immigrant communities in Los Angeles are found to be more disadvantaged than non-immigrant communities in that city, whereas in Chicago, immigrant communities are less disadvantaged. Consequently, they find that on average the violent crime rates in immigrant communities in Chicago are approximately half that of other neighborhoods in that city, and conversely in Los

Angeles, immigrant neighborhoods have greater violent crime rates (Kubrin and Ishizawa, 2012; p. 160).

In short, there is a convoluted relationship between immigration and crime, and the inconsistencies in extant research leave open a number of avenues that still need to be examined. In an effort to clarify this relationship, the current study examines whether and how metropolitan contextual factors condition the effects of immigrant concentration, neighborhood structural disadvantage, and socioeconomic inequality on neighborhood violent crime rates. The framework for the current study is derived from Kubrin and Ishizawa's (2012) divergent findings. I am interested in assessing whether or not their findings for Chicago or Los Angeles are consistent across a larger geographical context, specifically, U.S. neighborhoods and metropolitan areas.

THE CURRENT STUDY

The current study extends the existing research that assesses the immigration-crime relationship in a number of ways. First, as I note above, previous studies have primarily focused their analysis on neighborhoods, cities, and metropolitan areas that have been identified as immigrant destination areas. In other words, previous scholars have continuously explored the immigration-crime relationship in places such as New York, Chicago, Miami, and Los Angeles. However, through my use of data from the National Neighborhood Crime Study (NNCS), my study encompasses a larger geographical context. Second, these data lends itself to hierarchical linear modeling as it is clustered – census tracts are nested in cites and cities are nested in metropolitan areas. This technique is essential for examining the influence of covariates across

aggregate levels of analysis; however, it has seldom been used to analyze the immigration-crime relationship.

While many studies have examined the immigration-crime nexus at the individual level focusing on some of the demographic characteristics of various immigrant groups, the current study assesses the how and whether contextual factors explain the relationship between immigration and crime. It is my contention that structural factors will moderate the relationship between an indicator of immigrant concentration and violent crime. My basic premise is that social structural characteristics of metropolitan areas explain variations in violent crime rates across neighborhoods. Thus, I offer a set of hypotheses based upon existing research and theoretical frameworks.

First, consistent with the literature surrounding the immigrant revitalization perspective, I expect that immigrant concentration will have a negative effect on violent crime rates in neighborhoods and metropolitan areas controlling for other factors. That is, areas with higher levels of immigrant concentration will have higher (violent) crime rates due to existing contextual factors. Second, given that social disorganization posits that structural factors, specifically economic disadvantage and/or residential instability largely account for racial and ethnic patterns in community violence (Neilsen, Lee, and Martinez 2005; Kubrin 2003; Lee et al., 2001), I expect my findings to be consistent with previous research. Thus, I hypothesize that structural factors will mediate the relationship between immigrant concentration and violent crime at both the neighborhood and metropolitan levels. Specifically, concentrated disadvantage, segregation, and economic inequality should positively influence the violent crime rate. Once these mediating factors are taken into account, the predictor of immigrant concentration will be substantially reduced.

DATA AND METHODOLOGY

SAMPLE

To examine the relationship between immigrant concentration and crime, I utilize neighborhood crime data from the National Neighborhood Crime Study (NNCS) (Krivo and Peterson, 2000). Data were collected from the 2000 Census, 2000 United States Census Population and Housing Summary File 3 (SF3), the Metropolitan Statistical Area (MSA) or Primary Metropolitan Statistical Area (PMSA), and the Uniformed Crime Report (Krivo and Peterson, 2000). [1] The NNCS data permit the estimation of nested neighborhood and metropolitan–level effects as it combines important crime and sociodemographic information for U.S. census tracts (neighborhoods), cities, and metropolitan areas.

MEASURES

In an effort to focus on the broader macro-level factors that may influence the relationship between immigration and crime, I use census tracts as a proxy for neighborhoods, which is consistent with previous research studies that analyze urban crime rates (Krivo and Peterson 1996, Lee Martinez 2008, Neilson Lee Martinez 2005). I included all census tracts in my analysis for which data was available. Originally this included 9,695 tracts and 66 metropolitan areas, however, missing crime data reduced the number of available tracts to 6,935 and metropolitan areas to 53.[2] The specific variables and measures used in this study are described below.

---

1 Crime data were collected directly from police departments as the number of the specific offenses per tract, or were geocoded and aggregated to census tract counts from individual reported crime records by address and crime type (Krivo and Peterson, 2000). In cities where data were unavailable the police provided data for 2002 instead.

2 Rapes and aggravated assaults account for the large amount of missing crime data.

DEPENDENT VARIABLE

I examine the three year-average tract violent crime rate across the U.S. from 1999-2001, which includes the sum of the crime rates of murders and non-negligent manslaughters, forcible rapes, robberies, and aggravated assaults per 1, 000-tract population. I focus on the overall violent crime rate as opposed to only the homicide rate, which has been the primary focus and, in essence, a weakness of the majority of the previous studies. It is important to note that the crime data for the study represents index crimes known to the police for those years and not all crime counts were available for those specific years. In some cases where crime counts were unavailable information was substituted with counts from 2002, or in other cases crime data was provided from one or two years[3]. Also, census tracts with populations less than 300 were excluded from the data set.

INDEPENDENT VARIABLES

The primary independent variable measured in this analysis is immigrant concentration. This index was constructed using the summed z-scores for four measures: the percent of the population that is foreign born; the percent new immigrants, the percent linguistically isolated, and the percent of the total population that is Hispanic (NNCS, 2000). The alpha coefficient for the four standardized items was 0.947, which suggests that the items have relatively high internal consistency. Factor loadings for the four measures were also examined. They were all high with percent Hispanic at .874, percent foreign born at .961, percent new immigrant at .928, and percent linguistically isolated at .955. Approximately 86 percent of the variance in these four

---

3[3] In cases where one or two years of data were provided, the three-year count estimate was derived from the available data. When two years of crime counts were provided, the estimate was calculated by multiplying the two-year count by 1.5. When only a single year's crime count was available, the estimate was calculated by multiplying the single year count by 3. See Appendix C for a list of the number of years of actual data by place and crime type.

measures is accounted for by the first principle component, percent foreign-born (eigenvalue = 3.46). Based upon the high factor loadings this index proved to be a good proxy for immigrant concentration.

Additionally, indicators of social disorganization were included in the models at both the neighborhood and metropolitan levels. The tract- level (level-1) predictors consist of an index of residential instability, concentrated disadvantage, and tract racial heterogeneity. Residential instability was measured using the average standardized score of two variables: ,the percentage of renters in the population (i.e. the renter occupied housing units) and the percent movers (i.e. the percentage of the population who lived in a different house in 1995). Residential instability had an alpha of 0.69.

Because concentrated disadvantage has been used to explain the Black-White gap in crime, I choose to include this index in my study as it may also be useful in explaining how immigrant concentration is related to crime. Concentrated disadvantage represents the average of the standard scores for six variables: percent secondary low wage jobs, percent jobless rate for working age population, percent professionals and managers, percent female headed households, percent high school graduate, and finally the poverty rate. The alpha for the disadvantage index was 0.93. I also included measures of percent Black and percent young males (aged 15-34).

Because I am specifically interested in the larger contextual factors that may influence the relationship between immigration and crime, I control for a number of metropolitan level factors. The key factors include: the city socioeconomic inequality index, percent jobless working males in the population, the White-Black and White-Hispanic Index of Dissimilarity for the year 2000, a dummy variable for region, and a measure of immigrant concentration.[4] These factors have been found to be associated with high crime rates.

4 This measure of immigrant concentration is analogous with the tract-level measure of immigrant concentration.

Inequality: City socioeconomic inequality was included as a general model of inequality at the metropolitan level.[5] It is comprised of the standard scores of three variables: the ratio of White median household income to Black median household income, the ratio of White high school graduates to Black high school graduates, and lastly the ratio of White jobless rate for working age population to Black jobless rate for working age population. This index has an alpha of 0.77.

Dissimilarity Index: Residential segregation, which is a form of structural inequality, has been found to be a correlate of victimization, homicidal offending, and neighborhood violent crime (Krivo and Peterson, 1993; Smith 1992, Krivo, Peterson, and Kuhl 2009). I utilize measures for both White-Black and White-Hispanic segregation, which is operationalized as the Dissimilarity Index (D). This index measures the percentage of the group's population that would have to change residence for each of the neighborhoods to have the same percent of that group in the metropolitan area overall (Iceland, 2002). This measure is defined by the following formula

$$D_{bw} = \left[.5 * \sum_{j=1}^{n} \left| \left(\frac{b_j}{B} \right) - \left(\frac{w_j}{W} \right) \right| \right] * 100$$

where b_j and w_j are the numbers of Blacks and Whites, respectively, residing in tract j; n represents the number of tracts in the metropolitan area; and B and W are the total number of Blacks and Whites in the metropolitan area (Krivo and Peterson, 2000). If the Black and White populations are equal in all tracts, then *D* is equal to 0, meaning that Blacks and Whites are evenly distributed in the same percentages in the tracts, and residential segregation is low. Conversely, a *D* of 100 is reflective of complete segregation in tracts and would mean that 100

5 I estimated models using the Gini-index as a measure of inequality and the results were relatively similar.

percent of the Black population would have to move in order to achieve an even distribution across tracts.

South: A dummy variable was created in order to assess any regional differences in crime rates that may exist. *South* was coded as *1* for neighborhoods and metropolitan areas that are located in the south and all other regions were coded as *0*. Previous theory and research has found that crime rates are remotely higher in the south as individuals from that region are more likely to commit homicides (Hackney 1969; Nisbett and Cohen 1996). This remains important due to the structural and demographic changes that have been occurring across the south. More specifically, there have been mixed findings surrounding the southern culture of violence (SCOV) (Ousey and Lee, 2010).

ANALYTICAL STRATEGY

Using HLM version 7 I estimate multilevel models with tracts as level-1 units and metropolitan areas as level-2 units. All continuous variables at level-1 were group-mean centered and each of the models was estimated using a random intercept model. Metropolitan level (Level-2) variables were grand mean centered. Osgood (2000) suggests using a negative binominal regression, which essentially generalizes the basic Poisson regression model by including an additional parameter to allow for overdispersion. Thus, due to the fact that my dependent variable is the three year-average tract violent crime rate across the U.S. from 1999-2001 and is highly skewed, I use a Poisson distribution model allowing for overdispersion with the tract population as the exposure variable (as noted by Krivo and Peterson (2009)). This is the same as including tract population as an independent variable with its parameter fixed at 1 in a

nonhierarchical Poisson model (p. 100)[6]. This model is analogous to the negative binomial regression (NBR) as it combines the Poisson distribution of event counts with a gamma distribution of the unexplained variation in the underlying or true mean of even counts, Y_i.

MODELS

Analytically, I estimate a series of nested models at the both the neighborhood and metropolitan levels in order to assess the conditional effects of each of the individual variables in this study. I begin by estimating an unconditional or one-way ANOVA model (with no level-1 or level-2 predictors) in order to examine the variation in violent crime across metropolitan areas. Next, I use a multivariate analysis to estimate random coefficient regression models. I accomplish this by including each level-1 and level-2 covariate into the neighborhood and metropolitan level models, respectively. I pay particular attention to the standard errors of each of my estimates, and the residual error at each level.

RESULTS

DESCRIPTIVE STATISTICS

Table 1 presents the descriptive statistics and correlations for the both the level-1 and level-2 variables included in the analysis. At the neighborhood level (level-1), the descriptive statistics indicate that the mean tract violent crime rate from 1999 – 2001 was 11.30 per 1,000, across neighborhoods. As expected, the correlation is moderately high between neighborhood violent crime and concentrated disadvantage (*r=.560, p<.01*), residential instability (*r=0.233, p<.01*), and percentage of Blacks in the population (*r=0.460, p<.01*), which is consistent with

6 In my preliminary analysis, I fit both models - the basic Poisson model and the Poisson model with overdispersion (negative binomial regression) and the latter proved to be a better fit.

previous studies. The violent crime rate is also positively and significantly related to immigrant concentration (*r=0.056, p<.01*) and the percentage of young males aged 15-34 (*r=0.051, p<.01*), which means that violent crime may be more pronounced in tracts or neighborhoods with a higher concentration of immigrants and young males. Immigrant concentration is positively and significantly associated with concentrated disadvantage (r= .251, *p<.01),* tract racial heterogeneity (*r=.384, p<.01),* residential instability (r=.328*, p<.01),* and percent young males aged 15-34 (*r=.342, p<.01*). However, it is negatively associated with percent Black (*r= -.324, p<.01*).

Furthermore, at the metropolitan level (level-2), immigrant concentration is negatively associated with city socio-economic inequality (*r= -.448, p<.01*), which would mean that metropolitan areas with higher concentrations of immigrants have lower levels of inequality. This finding is fairly consistent with previous research, which finds that immigrant communities maintain stronger labor market structures and greater economic stability. It also lends support to the immigrant revitalization perspective. Immigrant concentration is found to be positively and significantly associated with the White-Hispanic index of dissimilarity (r= -.493, *p<.01*) and the jobless rate for the male working age population (*r=.440, p<.01).* That is, in metropolitan areas with higher levels of immigrant concentration, Hispanics (the fastest growing immigrant group) and Whites are likely to be segregated from each other and similarly these metropolitan areas may also have more unemployed males who are of working age.

6.2. LEVEL-1 MEASURES (*WITHIN NEIGHBORHOODS*)

To assess whether or not metropolitan level factors influence the relationship between an indicator of immigrant concentration and crime at the neighborhood level, I estimate a series of

random intercept models beginning with level-1 variables. Table 2 displays the results of each the level-1 Poisson models of neighborhood violent crime. I begin by estimating a baseline or null model that decomposes the total variance of the violent crime rate into significant level-1 (neighborhood level) and level-2 (metropolitan level) variances in order to confirm that there is variability in neighborhood violent crime. The results of the null model, which are not displayed in Table 2, show that there is statistically significant variation in violent crime rates between metropolitan areas. Specifically, the estimated variance in the intercepts is 0.310 ($\chi 2$ = 482.20, p <.001), which is reflective of the between-metropolitan area difference. The estimated value of the residual for the within neighborhood variation is 53.85 (p<.001). It is important to note that the variance between-neighborhoods is vastly larger than that of the variance between-metropolitan areas, which indicates that a substantial amount of variation is due to within-neighborhood differences. The intra-class correlation, which is an indication of the proportion of variance between level-2 units, is. 0.006 (ICC = 0.310/(0.310 + 53.849)). This means that approximately 0.6 % of the total variance in the violent crime rate is accounted for by metropolitan area differences.

Immigrant concentration is the first predictor introduced in Table 2 in order to assess its effects at the neighborhood level on the rates of neighborhood violent crime. Model 1 shows that immigrant concentration is positively and significantly associated with neighborhood violence (*b=0.040, p<.001*). These results do not support the hypothesis that immigrant concentration is negatively associated with neighborhood violent crime.

Drawing from social disorganization theory, Models 2 through 4 of Table 2 introduce neighborhood concentrated disadvantage, tract racial heterogeneity, and residential instability, respectively. As expected, the results of Model 2 show that concentrated disadvantage is

positively and significantly associated with neighborhood violence (*b=0.774, p<.001*). More importantly, I find that after controlling for neighborhood concentrated disadvantage, immigrant concentration has no effect on the neighborhood violent crime rate. Concentrated disadvantage explains approximately 23% of the level-1 variance in neighborhood violence. Similarly, I find that residential instability (Model 4) is positively and significantly associated with neighborhood violent crime (*b=.428, p<.001)* and renders immigrant concentration zero. Models 5 and 6 in Table 2 introduce percent Black and percent young males aged 15-34, respectively. Both of these variables are positively and significantly related to neighborhood violence, indicating that neighborhoods that have larger populations of Black residents and young males are likely to also experience higher rates of neighborhood violent crime, which is consistent with previous research. Lastly in model 7, I find that immigrant concentration is not associated with neighborhood violent crime, net of other factors. The full model explained approximately 35% of the level-1 variance in neighborhood violent crime.

In conclusion, the results from the level-1 analysis, as displayed in Table 2, assert that the positive effect of immigrant concentration on neighborhood violent crime is accounted for by both concentrated disadvantage and residential instability. By and large, the predictor's related to social disorganization theory (except for percent Black), explain the positive effect of immigrant concentration on violent crime. Neighborhood concentrated disadvantage, in and of itself, explains approximately 24% of the level-1 variance in neighborhood violent crime. This finding is consistent with previous research that finds that immigrants tend to settle in predominately-disadvantaged neighborhoods upon arriving to the U.S.

LEVEL-2 MEASURES (*BETWEEN METROPOLITAN AREAS*)

In order to assess the effects of metropolitan-level structural factors on neighborhood violent crime, I estimate a series of nested models at this level. The results are displayed in Table 3. Model 1 introduces city socioeconomic inequality in order to determine whether socioeconomic inequality is associated with neighborhood violent crime. As predicted, the results show that inequality is positively and significantly associated with neighborhood violence (*b=0.267, p<.01).* Of the two indices of dissimilarity that I include in the model, only White-Black segregation produces a significant effect on neighborhood violent crime (*b=0.028, p<.001)* as displayed in model 3 of Table 3. White-Black segregation, along with the neighborhood-level measures, explains approximately 30% of the level-2 variance in neighborhood violence. The results of model 4, which introduces the metropolitan level indicator of immigrant concentration, show that immigrant concentration is negatively and significantly associated with neighborhood violent crime. It is important to note that the findings from these level-2 models strongly support my level-1 models, as the findings are substantially robust across all of the level-1 variables that are included in the analysis.

The final model (Model 7) in Table 3 includes all the metropolitan-level predictor variables. From this full model I find that immigrant concentration, White-Black segregation, and jobless working males all have significant effects on neighborhood violence. More specifically, immigrant concentration at the metropolitan level significantly reduces neighborhood violent crime *(b*= -0.123, *p<.001)*. Conversely, net of other factors, increases in White-Black segregation and percentage of jobless working males, significantly increases neighborhood violence by 0.029 (*p=<.001)* and 0.46 (p<.01), respectively. Approximately 46% of the between-metropolitan area variance in neighborhood violence is explained in this full

model. It is also important to note that the neighborhood-level predictors remain robust across all of these models.

CROSS-LEVEL INTERACTIONS

Lastly, I examine cross-level interactions between my level-1 and level-2 predictors. I examine the significant variance of the slopes associated with immigrant concentration, White-Black segregation, and jobless working males since I find that these predictors are significantly associated with neighborhood violence at the metropolitan-level. Contrary to my hypothesis, inequality at the metropolitan-level does not condition the relationship between immigrant concentration and crime at the neighborhood level. Thus, no significant cross-level interactions were found between my level-1 and level-2 predictors.

DISCUSSION AND CONCLUSION

Stereotypes that conflate immigration and crime still permeate our society despite recent research showing that increases in immigration do not contribute to increasing crime rates. While there is a growing body of research examining the immigration-crime nexus as it relates to this latest wave of immigration, there have been mixed findings with regards to theory and contemporary research. Some theoretical perspectives as well as research posit a positive relationship between immigration and crime, while others posit a negative relationship. Inconsistencies are partially due to the nature of the data utilized and the context of the studies that are conducted. Given that immigration is an aggregate process, more research is required in order to substantially clarify the relationship between immigration and crime. The present study utilized both social disorganization theory and immigrant revitalization perspective in an effort to

extend research in this area and subsequently address some of the limitations of past research. More specifically, the current research contributes to existing research by examining the relationship between an indicator of immigrant concentration and neighborhood violent crime in a broader context by using a sample of neighborhoods and metropolitan areas.

My analyses yield a number of key findings. First, although I find that immigrant concentration is a significant predictor of neighborhood violence (i.e. increases in immigrant concentration in U.S. neighborhoods are associated with increases in neighborhood violent crime), my results show that concentrated disadvantage, and to a lesser extent residential instability, account for the relationship between immigrant concentration and neighborhood violent crime. Specifically, this finding indicates that neighborhood disadvantage is influential in explaining the rates of violent crime in areas that have high levels of immigrant concentration. All things considered, predictors associated with social disorganization theory remain strong and significant. In turn, the results provide clear evidence that structural factors weaken the stability of neighborhoods, and potentially cities and metropolitan areas, and reproduce violence and crime. At the metropolitan level, my findings show that immigrant concentration is negatively and significantly associated with violent crime, net of other metropolitan factors. Controlling for other factors, White-Black segregation produces a significant effect on neighborhood violent crime, explaining approximately 30 percent of the level-2 variance in neighborhood violent crime.

Another key finding from the current study regards the primary independent variable: immigrant concentration. Findings show that immigrant concentration is not associated with neighborhood violent crime across this sample of neighborhoods and metropolitan areas, net of other factors. These results lend some support to the immigrant revitalization perspective as it

suggests that higher concentrations of immigrants in neighborhoods do not increase neighborhood violent crime. Immigration is not a debilitating social process. In fact, the concentration of immigrants in an area may buffer crime in neighborhoods and metropolitan areas. Moreover, the concentration of immigrants in a neighborhood may also provide a protective factor for both immigrant and native-born youth, African Americans included, as documented by previous research (Morenoff and Astor, 2006).

While the findings from the current study have several implications for both social disorganization theory and immigrant revitalization perspective, there are three primary limitations that should be noted. First, the data's cross-sectional design makes it difficult to determine the causal direction of the associations that are found. This design prevents the discussion of changes in neighborhood violent crime, which would be important for examining immigration given that it is a social process that has dramatically transformed neighborhoods, cities, and metropolitan areas in the last few decades. Thus, it would be important to utilize longitudinal data in order to examine the influence of immigration over an extended period of time, and furthermore to examine the effect that changes in immigration may have on the changes in rates of violent crime.

Second, the current study does not identify existing and developing ethnic enclaves in neighborhoods and metropolitan areas, which would be important for understanding the extent to which ethnic enclaves themselves provide a protective factor for immigrants who may reside in structurally disadvantaged areas. Lee and Martinez (2002) note that "ethnically heterogeneous immigrant communities, while often quite poor, have contributed to a revitalization of familial, social, and economic institutions that offer their residents significant advantages." Thus, future studies should examine how ethnic enclaves mediate the relationship between neighborhood

disadvantage and violence and crime. In the same vein, Peterson and Krivo (2010: 102) note, "proximity to structural privileges associated with the white race is core to understanding how neighborhoods gain access to social, political, and economic resources that distance communities from threats to safety and keep violence low." Thus, future studies should not only identity ethnic enclaves, but perhaps also examine their proximity to affluent neighborhoods in order to assess the structural conditions under which these racially and ethnically diverse neighborhoods thrive.

Lastly, the current study does not examine collective efficacy or other measures of formal and informal social control that may be present in neighborhoods and metropolitan areas. Sampson, Raudenbush, and Earls (1997) note that collective efficacy is embedded in structural contexts, which would be a significant factor in neighborhoods and metropolitan areas where immigrant concentration is greatest. Thus, since a fundamental part of the immigrant revitalization perspective posits that the presence of immigrants in aggregate areas reduces crime, it is important that future studies examine the level of collective efficacy in these areas.

Higher levels of collective efficacy in immigrant communities, or perhaps ethnic enclaves, may reduce violent crime in these areas and, likewise, disadvantage. Other dimensions of neighborhoods and metropolitan areas may also be important to understanding the relationship between immigrant concentration and neighborhood violent crime. For example, it would be important to take into account the percentage of recreation centers, privately owned businesses, and political officials in various immigrant communities. All things considered, socialization processes influence immigrant settlement patterns and the extent to which immigrants become socially integrated in the neighborhoods and metropolitan areas in which they settle. Perhaps if immigrants are socially embedded in distinct areas, crime rates may be lower in those areas due to higher levels of collective efficacy.

In conclusion, the current study significantly contributes to research that examines the relationship between immigration and crime in a number of ways. First, because I utilize a nationally representative sample of neighborhoods, cities, and metropolitan areas, my findings are generalizable to a broader social context, which is important given that previous research has been limited to traditional immigrant destination areas. In utilizing these data, my findings corroborate previous research, which suggests that local context, specifically neighborhood disadvantage, contributes to the variation in violent crime rates (Martinez and Lee 2000; Kubrin and Ishizawa 2012). My findings illustrate that the immigration-crime nexus is complex and that research is required that examines the structural differences between neighborhoods and metropolitan areas in a broader context. That is, research needs to extend beyond neighborhoods located in Chicago, New York, and Los Angeles and examine Mid-western areas where immigration rates are increasing. It is also imperative for future studies to examine the differences between racially and ethnically diverse neighborhoods in the United States. This is particularity important given the increasing racial and ethnic diversity of neighborhoods, cities, and metropolitan areas across the in the United States.

My study also contributes to existing research in this field because it extends research through its estimation of multilevel models. This method of analysis yielded results that show that the variation in violent crime rates is situated at the neighborhood level and that immigrant concentration has no effect on the neighborhood violent crime rate, net of other factors. By estimating multilevel models, I also find that at the metropolitan level, immigrant concentration is negatively and significantly related to neighborhood violent crime, net of other factors. This is important given that previous research has primarily been situated at the individual level,

focusing solely on distinctions between various immigrant groups rather than examining the contextual differences between various social communities.

In light of the current findings, I would argue that at the aggregate level policies and laws that limit immigration and target various racial and ethnic groups need to be re-evaluated. Peterson and Krivo (2010: 111) note, "… differential patterns of crime for ethno-racial groups and neighborhoods do not stem from individual proclivities or a preponderance of 'criminals' in an area. Rather, they are the products of structural relations of society." Thus, it is important that policy makers move towards enacting policies that focus on reducing the levels of structural disadvantage that exist within neighborhoods, cities, and metropolitan areas. Policies that evaluate the structure of existing and developing neighborhoods and seek to improve them would be extremely beneficial to both native and immigrant-born residents.

In future research I hope to use spatial analysis to identify ethnic or immigrant enclaves in U.S. neighborhoods and metropolitan areas. I intend on examining the proximity of enclaves to predominately Black and White areas in order to determine what factors protect against or reproduce crime in these areas relative to areas where immigrant enclaves do not exist. Additionally, I intend on assessing crime rates among various immigrant groups in both traditional and non-traditional gateway cities.

REFERENCES

Bursik, Robert J., Jr. and Harold G. Grasmick. 1993. *Neighborhoods and Crime: The Dimensions of Effective Community Control*. Lexington Press. New York, NY.

Butcher, K. F. and Piehl, A. M., "Cross-City Evidence on the Relationship between Immigration and Crime," *Journal of Policy Analysis and Management*, Vol. 17, No. 3 (Summer, 1998), pp.457-493.

Butcher, Kristin F., and Anne Morrison Piehl. 1998. ''Cross-City Evidence on the Relationship Between Immigration and Crime.'' Journal of Policy Analysis and Management 17(3):457–93.

———. 2006. Why Are Immigrants' Incarceration Rates So Low? Evidence on Selective Immigration, Deterrence, and Deportation.

Cloward, Richard, and Lloyd Ohlin. 1960. Delinquency and Opportunity: A Theory of Delinquent Gangs. New York: Free Press.

Crowley, Martha and Daniel T. Lichter. 2009. "Social Disorganization in New Latino Destinations?" *Rural Sociology* 74 (4): 573-604.

Desmond, S. C. and Kubrin, C.E., (2009) "The Power of Place: Immigrant Communities and Adolescent Violence," *The Sociological Quarterly,* 58: 581-607.

Feldmeyer, Ben. 2009. "Does Immigration Increase Violence? The Offsetting Effects of Immigration on Hispanic Violence." Social Science Research 38:717-731.

Feldmeyer, Ben and Darrell Steffensmeier. 2009. "Immigration and Homicide: A Comparison Across Race/Ethnicity." Homicide Studies 13:211-226.

Hackney, Sheldon. 1969. "Southern violence." The American Historical Review, 74(3): 906-925.

Hagan, J. and Palloni, A. (1999) "Sociological Criminology and the Mythology of Hispanic Immigration and Crime," *Social Problems*, Vol. 46, No. 4 (Nov., 1999), pp. 617-632.

Hox, J. J. (2010). *Multilevel Analysis. Techniques and applications* (Second Edition ed.). New York: Routledge.

Iceland, J., D.H. Weinberg, and E. Steinmetz. 2002. Racial and Ethnic Residential Segregation in the United States: 1980–2000: U.S. Census Bureau, Census Special Report, CENSR-3. Washington, DC: U.S. Government Printing Office.

Krivo, Lauren J. and Robert L. Kaufman. 1999. "How Low Can it Go? Declining Black-White Segregation in a multiethnic Context." Demography, 36(1): 93-109.

Krivo, L.J. and et al. 1998. "Race, segregation, and the concentration of disadvantage: 1980-1990." Soc. Probs. 45:61.

Krivo, L.J. and R.D. Peterson. 2000. "The structural context of homicide: Accounting for racial differences in process." American Sociological Review: 547-559.

Kubrin, Charis E. and Hiromi Ishizawa. 2012. " Why Some Immigrant Neighborhoods are Safer than Others: Divergent Findings from Los Angeles and Chicago." The Annals of the American Academy of Political and Social Science 641:148-173.

Kubrin, C. E., & Ousey, G. C. (2009). Immigration and homicide in urban America: What's the connection? Sociology of Crime, Law and Deviance, 13, 17-31.

Kubrin, Charis E. and Thomas D. Stucky. 2013. Introduction to Criminal Justice: A Sociological Perspective. Stanford: Stanford University Press.

Kubrin, Charis E., Marjorie S. Zatz, and Ramiro Martinez, Jr., Eds. 2012. Punishing Immigrants: Policy, Politics, and Injustice. New York: NYU Press.

Lee, Jennifer, and Frank D. Bean. 2010. *The Diversity Paradox: Immigration and the Color Line in Twenty-First Century America*. New York: Russell Sage. (Pp. 157-79, "Ethnoracial Diversity, Minority-Group Threat, and Boundary Dissolution: Clarifying the Diversity Paradox")

Lee et al. (2008) Beyond the Census Tract: Patterns and Determinants of Racial Segregation at Multiple Geographic Scales.

Lee, Matthew T. and Ramiro Martinez. 2002. "Social Disorganization Revisited: Mapping the Recent Immigration and Black Homicide Relationship in Northern Miami." *Sociological Focus* 35:363–80.

Lee, M. T., R. Martinez Jr. and R. Rosenfeld, (2001). "Does Immigration Increase Homicide? Negative Evidence from Three Border Cities," *The Sociological Quarterly*, 42:559- 580.

Logan, J.R., Alba, R.D., McNulty, T.L., 1994. Ethnic economies in metropolitan regions: Miami and beyond. Social Forces 72, 691–724.

Martinez Jr., R., 1997. Homicide among Miami's ethnic groups: Anglos, blacks and latinos in the 1990s. Homicide Studies 1, 17–34.

Martinez Jr., R., 2000. Immigration and urban violence: the link between immigrant latinos and types of homicide. Social Science Quarterly 81, 363–374.

Martinez Jr., R., 2002. Latino Homicide: Immigration, Violence and Community. Routledge, New York.

Martinez Jr., R., Lee, M.T., 1999. Latinos and homicide. In: Smith, D., Zhan, M. (Eds.), Studying and Preventing Homicide: Issues and Challenges. Russell Sage, Thousand Oaks, pp. 143–158.

Martinez, Ramiro and Matthew T. Lee. 2000a. "On Immigration and Crime." Pp. 485–524 in *Criminal Justice 2000: The Nature of Crime: Continuity and Change*, vol. 1, edited by Gary LaFree, Robert J. Bursik, Sr., James Short, and Ralph B. Taylor. Washington, DC: U.S. Department of Justice.

Martinez Jr., R., Lee, M.T., 2000b. Comparing the context of immigrant homicides in Miami: Haitians, Jamaicans and Mariels. International Migration Review 34, 794–812

Martinez, Jr., R., Lee, M. T., Nielsen, A. L., (2003) "Segmented Assimilation, Local Context and Determinants of Drug Violence in Miami and San Diego: Does Ethnicity and Immigration Matter?," *International Migration Review*, 38:131–57

Martinez, Jr., R., Nielsen, A. L., Lee, M. T., (2003), "Reconsidering the Marielito Legacy: Race/Ethnicity, Nativity, and Homicide Motives". *Social Science Quarterly*, Volume 84, Number 2, June 2003

Massey, D.S. and N.A. Denton. 1988a. "The Dimensions of Residential Segregation." Social Forces 67:281–315.
———. 1988b. "Suburbanization and Segregation in U.S. Metropolitan Areas." American Journal of Sociology 94:592–626.
———. 1989. "Hypersegregation in U.S. Metropolitan Areas: Black and Hispanic Segregation Along Five Dimensions." Demography 26:373–93.

Mears, D.P., 2001. The immigration-crime nexus: toward an analytical framework for assessing and guiding theory, research and policy. Sociological Perspectives 44, 1–19.

Messner, S.F., Rosenfeld, R., 2000. Crime and the American Dream. Wadsworth, Belmont.

Morenoff, Jeffrey D. and Avraham Astor. "Immigrant Assimilation and Crime: Generational Differences In Youth Violence in Chicago." Pp. 36-63 in Ramiro Martinez and Abel Valenzuela (editors), *Immigration and Crime: Race, Ethnicity and Violence*. New York University Press.

Morenoff, Jeffrey D. "Racial and Ethnic Disparities in Crime and Delinquency in the United States." Pp. 139-173 in Marta Tienda and Michael Rutter (editors), *Ethnicity and Causal Mechanisms*. New York: Cambridge University Press.

Nielsen, Amie L., Matthew T. Lee, and Ramiro Martinez. 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* 43:837–72.

Nisbett, Richard E. and Dov Cohen. 1996. Culture of Honor: The Psychology of Violence in the

South. Westview Press.

Ousey, Graham C., Kubrin, Charis E., 2009. Exploring the connection between immigration and violent crime rates in US cities, 1980–2000. Social Problems 56, 447–473.

Peterson, R.D (2009). Race, Crime, and Justice: Contexts and Complexities; Special Editors: Lauren J. Krivo, Ruth D. Peterson: Section Two: Processes: Segregated Spatial Locations, Race-Ethnic Composition, and Neighborhood Violent Crime. *Social Science, The Annals Of The American Academy Of Political And, Social Science*, *623*93.

Peterson, Ruth D., and Lauren J. Krivo. 2010. *Divergent Social Worlds: Neighborhood Crime and the Racial-Spatial Divide.* Sage Press. New York, NY.

Portes, A., Rumbaut, R., 2001. Legacies: The Story of the Immigrant Second Generation. University of California Press, Berkeley.

Portes, A., Zhou, M., 1993. The new second generation: segmented assimilation and its variants. The annual of the american academy of political and social sciences 530, 74–96.

Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models*. Newbury Park, CA: Sage.

Rumbaut, Rubén G. et al., (2006). *Debunking the Myth of Immigrant Criminality: Imprisonment Among First- and Second-Generation Young Men*, MIGRATION INFORMATION SOURCE http://www.migrationinformation.org/Feature/ display.cfm?id=403.

Sampson, R.J., 1991. Linking the micro- and macro-level dimensions of community social organization. Social Forces 70, 43–64.

Sampson, R. J., & Groves, W. B. (1989). Community structure and crime: Testing social disorganization theory. American Journal of Sociology, 94, 775-802.

Sampson, Robert J, and William Julius Wilson. 1995. Toward a Theory of Race, Crime, and Urban Inequality. In Crime and Inequality, John Hagan and Peterson, Ruth D, 37-56. Stanford, CA: Stanford University Press.

Sampson, Robert J., Stephen Raudenbush, and Felton Earls. 1997. “Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy.” Science 277: 918-24

Sampson, Robert J. and Jeffrey D. Morenoff. “Spatial (Dis)advantage and Homicide in Chicago Neighborhoods.” Pp. 145-170 in Michael F. Goodchild and Donald G. Janelle (editors), Spatially Integrated Social Science. New York: Oxford University Press.

Sampson, Robert J., Jeffrey Morenoff, and Stephen Raudenbush. 2005. “Social Anatomy of Racial and Ethnic Disparities in Violence.” *American Journal of Public Health 95: 224-232*.

Sampson, Robert J. 2008. Rethinking immigration and crime. *Contexts: Understanding People*

in Their Social Worlds 7:28 -33.

Sampson, Robert J. and Jeffrey D. Morenoff. "Durable Inequality: Spatial Dynamics, Social Processes, and the Persistence of Poverty in Chicago Neighborhoods." Pp. 176- 203 in Samuel Bowles, Steven N. Durlauf and Karla Hoff (editors), *Poverty Traps*. Russell Sage Foundation.

Sellin, T., 1938. Culture and ConXict. Social Science Research Council, New York.

Shaw, Clifford R. and Henry D. McKay. 1942. *Juvenile Delinquency and Urban Areas: A Study of Rates of Delinquents in Relation to Differential Characteristics of Local Communities in American Cities.* Chicago: University of Chicago Press.

Shoemaker, D. J., Theories of Delinquency: An Examination of Explanations of Delinquent Behavior (New York: Oxford University Press, 1984), pp. 281. Second edition, 1990, pp. 329. Third edition, 1996, pp. 284. Fourth edition, 2000, pp.294. Fifth edition, 2005, pp. 310. Sixth edition , 2010, pp. 398.

Shihadeh, E., Ousey, G.C., 1996. Metropolitan expansion and black social dislocation: the link between suburbanization and center-city crime. Social Forces 75, 649–666.

Stowell, Jacob I., Messner, Steven F., McGeever, Kelly F., and Lawrence E. Raffalovich. 2009."Immigration and the Recent Violent Crime Drop in the United States: A Pooled, Cross-Sectional Time-Series Analysis of Metropolitan Areas." *Criminology* 47:889-928.

Stumpf, Juliet P., The Crimmigration Crisis: Immigrants, Crime, and Sovereign Power (2006). American University Law Review, Vol. 56, p. 367, 2006; Lewis & Clark Law School Legal Studies Research Paper No. 2007-2. Available at SSRN: http://ssrn.com/abstract=935547

Sutherland, Edwin H. 1934. *Principles of Criminology.* Chicago: Lippincott.

Tonry, M., 1997. Ethnicity, crime and immigration. Overcrowded Times 8, 3–5.

Vélez, María B. 2006. "Toward an Understanding of the Lower Rates of Homicide in Latino Versus Black Neighborhoods: A Look at Chicago" in *The Many Colors of Crime: Inequalities of Race, Ethnicity and Crime in America*, edited by Ruth D. Peterson, Lauren J. Krivo, and John Hagan, New York, N.Y.: New York Press.

Vélez, María B. 2009. "Contextualizing the Immigration and Crime Effect." *Homicide Studies 13:325-335.*

Vélez, María B. and Christopher J. Lyons. 2012. "Situating the Immigration and Crime Relationship across Multiple Neighborhoods and Cities." Pgs. 159-177 in *Punishing Immigrants: Policy, Politics and Injustice*, edited by M. Zatz, C. Kubrin, and R. Martinez. New York: New York University Press.

Vessey, B.M., Messner, S.F., 1999. Further testing of social disorganization theory: an elaboration of Sampson and Grove's community structure and crime. Journal of Research in Crime and Delinquency 36, 156–174.

White, Michael J. and Jennifer E. Glick. 1999. "The Impact of Immigration on Residential Segregation." Pp. 345-372 in F. D. Bean and Stephanie Bell-Rose (eds.) Immigration and Opportunity: Race, Ethnicity, and Employment in the United States. New York: Russell Sage Foundation.

Zhou, M., 1992. Chinatown: The Socioeconomic Potential of an Urban Enclave. Temple University Press, Philadelphia.

Zhou, M., 2001. Contemporary immigration and the dynamics of race and ethnicity. In: Smelser, N., Wilson, W., Mitchell, F. (Eds.), America Becoming: Racial Trends and Their Consequences. National Academy Press, Washington, pp. 200–242.

Zhou, Min and Carl L. Bankston III. 2006. "Delinquency and Acculturation in the Twenty-First Century: A Decade's Change in a Vietnamese American Community." Pp. 117–39 in

Immigration and Crime: Race, Ethnicity, and Violence edited by Ramiro Martinez and Abel

Table 1. Descriptive Statistics and Correlation Matrix for Level-1 Variables (N=6,935) and Level-2 Variables (N=53)

Level-1 Variables	**Mean**	**SD**	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
(1) Three-year average tract violent crime rate	11.30	13.23	1.000						
(2) Immigrant Concentration	0.00	3.72	.056**	1.000					
(3) Concentrated disadvantage index	-0.03	0.87	.560**	.251**	1.000				
(4) Tract racial heterogeneity	0.39	0.19	-.006	.384**	-.036**	1.000			
(5) Residential instability index	0.03	0.87	.233**	.328**	.242**	.348**	1.000		
(6) Percent Black	24.71	31.60	.460**	-.324**	.629**	-.237**	-.034	1.000	
(7) Percent young males aged 15-34	15.77	5.68	.051**	.342**	.005**	.305**	.664**	-.232	1.000
Level-2 Variables			(9)	(10)	(12)	(13)	(14)	(15)	
(9) Immigrant Concentration (*at the Metro level*)	-1.21	3.06	1.000						
(10) City socioeconomic inequality index	-0.02	0.78	-.448**	1.000					
(11) White-Hispanic Index of Dissimilarity, 2000	44.57	11.20	.493**	.155	1.000				
(12) White-Black Index of Dissimilarity, 2000	58.21	12.86	-.298	.684**	.232	1.000			
(13) Jobless rate for male working age population	22.92	3.69	.440**	-.406**	.126	-.052	1.000		
(14) South	0.30	0.46	.111	-.105	-.101	.011	0.129	1.000	

Note: * Correlation is significant at the 0.05 level (2-tailed), ** Correlation is significant at the 0.01 level (2-tailed).
Source: 2000 National Neighborhood Crime Study (NNCS)

Table 2. Neighborhood Level Poisson Models of Neighborhood Violent Crime

Independent Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Constant	-6.007***	-6.142***	-6.025***	-6.087***	-6.106***	-6.029***	-6.211***
	(0.088)	(0.088)	(0.089)	0.091	0.086	0.090	0.088
Immigrant Concentration	0.040**	-0.022	0.028	-0.021	0.096***	0.024	-0.025
	(0.017)	(0.008)	(0.017)	(0.024)	(0.011)	(0.017)	(0.016)
Concentrated disadvantage		0.776***					0.614***
			-	-	-	-	
index		(0.033)					(0.061)
			0.276				0.439***
Tract racial heterogeneity				-	-	-	
			(0.229)				(0.182)
				0.428***			0.230***
Residential instability index					-	-	
				(0.066)			(0.053)
					0.020***		0.006***
Percent Black						-	
					(0.001)		(0.002)
Percent young males aged						0.014**	0.010
15-34						(0.007)	(0.009)
Random Effects				**Variance Component**			
Level -2, τ_{00}	0.343***	0.321***	0.347***	0.405***	0.286***	0.352***	0.360***
Level -1, σ^2	52.780	41.038	51.85286	40.359	47.847	50.165	34.775
Variance Explained Level-1	0.020	0.238	0.037	0.251	0.111	0.068	0.354

Note: $^{**}p < 0.01$. $^{***}p < .001$. Standard errors are in parentheses. Source: National Neighborhood Crime Study, 2000

Table 3. Metropolitan Level Random Intercept Poisson Models of Neighborhood Violent Crime

Independent Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Constant	-6.212***	-6.210***	-6.211***	-6.207***	-6.210***	-6.209***	-6.206***
	(0.082)	(0.088)	(0.070)	(0.084)	(0.087)	(0.088)	(0.063)
Metropolitan Level (Level 2)							
City socioeconomic inequality index	0.267**	-	-	-	-	-	-0.262
	(0.100)						(0.141)
White-Hispanic Index of Dissimilarity, 2000		0.000187	-	-	-	-	0.010
		(0.008)					(0.008)
White-Black Index of Dissimilarity, 2000			0.028***	-	-	-	0.029***
			(0.005)				(0.007)
Immigrant Concentration (*at the Metro level*)				-0.091**	-	-	-0.123***
				(0.029)			(0.035)
Jobless rate for male working age population					0.022	-	0.046**
					(0.026)		(0.022)
South						-0.107	-0.062
						0.194	(0.139)
Neighborhood Level (Level 1)							
Immigrant Concentration	-0.022	-0.022	-0.023	-0.022	-0.022	-0.022	-0.022
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
Concentrated disadvantage index	0.615***	0.615***	0.616***	0.614***	0.615***	0.615***	0.614***
	(0.061)	(0.061)	(0.061)	(0.061)	(0.061)	(0.061)	(0.060)
Tract racial heterogeneity	0.401**	0.405**	0.399**	0.397**	0.408**	0.405**	0.400**
	(0.169)	(0.170)	(0.169)	(0.167)	(0.171)	(0.171)	(0.167)
Residential instability index	0.228***	0.228***	0.227***	0.227***	0.228***	0.228***	0.226***
	(0.054)	(0.054)	(0.054)	(0.054)	(0.054)	(0.054)	(0.054)
Percent Black	0.007***	0.007***	0.007***	0.007***	0.007***	0.007***	0.007***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Percent young males aged 15-34	0.010	0.010	0.010	0.010	0.010	0.010	0.011
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.008)
Random Effects			**Variance Component**				
Level-2, u	0.316***	0.361***	0.217***	0.291***	0.354***	0.358***	0.172***
Level-1, e	35.388	35.23743	35.484559	35.137	35.208	35.236	35.00

Note: **$p < 0.01$. ***$p < .001$. Standard errors are in parentheses. Source: National Neighborhood Crime Study 2000