Social Disorganization and the Spatial Distribution of Homicides in El Paso

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SOCIAL DISORGANIZATION AND THE SPATIAL DISTRIBUTION OF HOMICIDE IN EL PASO

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SOCIAL DISORGANIZATION AND THE SPATIAL DISTRIBUTION OF HOMICIDE IN EL PASO

by

NICHOLAS ANDREW EMERICK, B.A.

THESIS

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Abstract

Recent research on social disorganization theory shows general support for economic and stability measures of disorganization, but spatial dispersions and the disaggregation of homicides of crime have not been fully examined. 1985-1995 homicide data from the El Paso Police Department’s detective logs and US Census data are combined to explore social disorganization in El Paso, the impact of ports of entry, and how motive interacts with social disorganization. Findings for total homicides in El Paso support existing social disorganization research. Motive specific homicides displayed distinct relationships to the disorganization measures. The concentrations of homicides near ports of entry can be explained using social disorganization characteristics.
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Section 1: Introduction

There is little doubt that crime is a spatial phenomenon. It takes place in space, it affects the environment it transpires in, and distributions throughout spaces vary. While crime’s distribution in space has been a staple of criminology research, very little research considers how space affects crime. The difference between studying how crime occurs in space and how space influences crime demonstrates divergent interests and implications. As we know, some areas of a city may have higher levels of crime, but little research goes beyond mere demographic characteristics. However, certain characteristics of space could fundamentally alter an area’s ability to deal with crime. For example, areas that handle high levels of traffic, like a port of entry, may be less able to control crime due to the increased population flowing through an area they feel generally unattached to, promoting feelings of anonymity or indifference, and diluting social control.

Similarly, research on Latino crime has lagged behind the recent and rapid growth of this population. Recently Latinos have become the focus of the media and politically fueled discussions. Often times these debates hinge on, and perpetuate, the stereotype of the “dangerous criminal immigrant” and surveys have shown that large percentages of white Americans hold negative stereotypes about Latinos (Geiger 2006). Both criminological theory and common sense are used to reason that the social phenomenon of immigration would promote criminal activity, but this has not been supported by empirical research (Stowell et al. 2009). The current interest in Latino ethnicity and immigration has produced a recent spate of research examining effects of unemployment (Martinez 2002), education (Jones-Webb and Wall 2008), relative deprivation (Lee, Martinez, and Rodriguez 2000), and economic disadvantage (Martinez, Stowell, and Cancino 2008); however, findings indicate that Latino crime rates are not as high as would be expected given their associated socio-demographic characteristics.

Despite the growing body of research, knowledge about immigration and Latino effects on crime is in its infancy. Unfortunately, spatial effects on crime have been largely neglected. Both of these areas require further research to overcome the limitations of current research. By studying communities in El Paso, Texas, a predominantly Latino immigration destination city, knowledge of both space and
Latino crime can be expanded. The following research seeks to answer three research questions: 1) What proxies of social disorganization are useful for understanding homicide in El Paso? 2) How do these proxies interact with motive? 3) What effects do ports of entry in El Paso have on homicide trends? This research will examine crime through the use of homicide data from detective logs from the El Paso Police Department, and employ census data as proxy measures of social disorganization variables. Distance from international port of entry, of which there are four in El Paso, will represent the innovative spatial component of this research. The first aspect of this research will explore the nature of social organization in El Paso and will illuminate what variables need to be controlled for when distance from ports of entry is introduced. The second research question is exploratory in nature as the theory does not address how motive is affected by social disorganization. The third research question is based on the idea that this border city creates trafficking bottlenecks that may increase social disorganization and, hence, violent crime. This research will outline the theoretical grounds for such an investigation, review of current social disorganization theory research (including a focus on the use of the Latino population as it is our population of interest), outline the data, define the methods that will be used, discuss the results, and conclude with a summary.
Section 2: Theoretical Background

This research uses social disorganization theory (SDT) as a theoretical base to support the hypothesis that high traffic through an area will result in more crime. This section will explain SDT; explore its use in prior research; and how the theory pertains to the proposed project. Following this, the theoretical roots will be explored to demonstrate the theory’s role in the development of sociological thought. Finally, informal social control will be defined as it is an important element to contemporary research of SDT.

2.1 Social Disorganization Theory

Originally proposed by Clifford Shaw and Henry D. McKay, SDT emerged from the Chicago school of sociological thought in the 1920s and 1930s (Akers and Sellers 2004). Originally proposed as a means to understand the high crime rates of inner city Chicago, SDT argued that crime was a normal result of a population living in substandard conditions (Akers and Sellers 2004). These areas were typically located in the central area of the city and characterized as being overcrowded with deteriorating housing (Kubrin, Stucky and Krohn 2009). Initial support for the theory was mixed at best and, by the 1950s, it was set aside in place of other promising criminological theories (Akers and Sellers 2004). The mixed initial results are attributed to inconsistent and tautological definitions and relationships (Kubrin, Stucky and Krohn 2009; Akers and Sellers 2004). Despite its initial shortcomings, SDT has made several resurgences throughout the past century, causing some (Brusik and Grasmick 1993 p. 30) to refer to SDT as, “the herpes of criminology.” Despite the pejorative connotation, since the 1990s SDT developed into a useful criminological theory that plays an important role in understanding macro relationships between crime and race, economic disparity, and immigration (Jones-Webb and Wall 2008; Martinez 2002; Mathews, Maume and Miller 2001).

Contemporary SDT researchers employ the general ideas of Shaw and McKay as they examine community characteristics but incorporate many new concepts that may be implicated in criminal activity including: informal social control, collective efficacy, sense of community, social capital, and participation in community organizations (Cantillon 2006). Despite the variety of concepts, theorists...
studying social disorganization argue that as a community becomes less organized it loses its ability to control the behavior of residents, identify and strive for communal goals, or address collective problems (Akers and Sellers 2004; Cantillon 2006). Increases in the disorganization of a community will have direct effects on both formal and informal social control, but SDT pays more attention to informal social control because personal relationships are ever-present and valued more than those with formal agents (Akers and Sellers 2004; Braithwaite 1989). Additionally, the informal organization of a community will directly affect the success of formal agents (Brusik and Grasmick 1993).

2.2 Theoretical Roots

SDT, like many criminological theories, tracks its theoretical roots to Emile Durkheim. Full elaboration of Durkheim’s ideas is beyond the scope of this research, but there is significant overlap in the ideas and a brief exploration may clarify SDT (for further explanations of Durkheim’s ideas see Appelrouth and Edles 2008; Allan 2007; Ritzer and Goodman 2004).

Durkheim starts from the position that society needs to maintain a level of integration and solidarity to effectively control the actions of the population whom, if left uncontrolled, will act upon their own desires and engage in crime (Allan 2007). As a functionalist, Durkheim proposes that the collective consciousness and structural features, such as the division of labor, will evolve to meet these needs (Allan 2007). This evolution takes time and rapid changes may lead to more deviance (Pridemore, Chamlin and Cochran 2007) as existing social relations weaken or disintegrate. However, better socially integrated populations are more able to handle such change and will experience stable amounts of crime as they are better able to respond to social problems.

The collective consciousness and social solidarity both must develop and change in response to social change, but these factors tend to weaken as society becomes more complex (Allan 2007, Pridemore; Chamlin and Cochran 2007). The collective consciousness will affect perceptions of problems as well as desired social goals. The collective consciousness is part of all social things including defining what actions are criminal and how to handle them. Social solidarity impinges on the effectiveness of social control as it will influence the relationships between people. The inherent
complexity and evolution of modernity would be a socially disorganizing force that requires time to stabilize.

2.3 Social Control

As a social control theory, SDT assumes that crime is an immediate means to satisfy desires and, rather than looking for a cause of crime, SDT examines what restricts crimes from occurring (Hay 2001). Social control as it relates to SDT can be demonstrated through an experiment in which cars were abandoned in two neighborhoods and observed (Zimbardo 2007). The car placed in an inner-city community was quickly stripped and then subjected to random acts of vandalism (Zimbardo 2007). Conversely, when left in an area described as a place, “where people care about the physical and social conditions of their lives and have the resources to work at improving both” the car was cared for and reported as stolen when the car was driven away at experiment’s conclusion (Zimbardo 2007, p. 25). Zimbardo (2007) concludes that the anonymity promoted by inner-city and disorganized settings leads to unrestricted actions by the population.

At the community level, social control is comprised of three categories: private, parochial, and public. Private social control refers to the relationship between individuals at a personal level, which may include, for example, shame or ridicule (Brusik and Grasmick 1993). Studies have found mixed results on the value of private social control on community crime rates, demonstrating a complex operation that varies in effectiveness when it comes to severity of behavior and age (Bursik, and Grasmick 1993). Parochial control emanates from institutions and organizations like churches or neighborhood watch groups, and is composed of loose social ties based on mutual interests rather than personal relations (Bursik, and Grasmick 1993). Through the mechanism of parochial social control, organizations and institutions provide social organization, consolidate social resources, and promote social activism through acts of ministry, service, support, and sponsorship (Rose 2000). Finally, public social control deals with the community’s ability to acquire resources from outside agencies, such as city government and private organizations that may aid local organizations or individuals in their ability to engage in effective private or parochial social control (Bursik, and Grasmick 1993).
Section 3: Literature Review

SDT has become a useful tool in explaining variation in both inter- and intra-city crime trends. For example it has been used to explore the effects of immigration (Stowell et al 2009), changes in the labor market (Mathew, Maume, and Miller 2001), and the ethnic/racial composition of crime (Neilsen, Lee, and Martinez 2005). However, difficulties in operationalizing some of the concepts in SDT resulted in mixed findings. Contemporary researchers have found more supportive and consistent relationships with the use of more standard and consistent measures. This section will review the strengths and weaknesses of research done using SDT by first looking at current measures of SDT, second by examining how it has been used to explore the Latino population, immigration, and spatial aspects of cities, and third by concluding how this research can aid in the development the field of study.

3.1: Established Measures of SDT

Contemporary research supports SDT using a variety of measures of economic disparity as independent variables serving as proxies for disorganization. Many researchers (Wilson 2009; Martinez, Stowell, Cancino 2008; Jones-Webb and Wall 2008; Lester and Krysinska 2004; Lee 2003; Martinez 2003; Martinez 2002; Mathews, Maume, and Miller 2001) have found that employment was a critical factor when examining a population’s violent crime rates. When examining homicide rates by race, Martinez (2002) found that while both Latinos and blacks suffered from many similar conditions resulting from their poor minority status (dealing with poverty, decaying living environments, and discrimination), Latino’s homicide victimization rates were much lower than Blacks. This leads Martinez (2002 p 137) to conclude, “Latinos have lower homicide rates than African Americans because they exhibit higher levels of social integration, especially as measured by labor market involvement.” The higher level of employment of Latinos implies a higher level of economic resources, social capital, integration and mechanisms for social control and socialization (Martinez 2002). Although others (Kapuscinski, Braithwaite, and Chapman 1998) have observed that unemployment is useful in a cross-sectional analysis, time series studies have trouble supporting the unemployment/crime relationship and levels of female unemployment must be taken into account to help explain the paradox. Pridemore, Chamlin and Cochran (2007) also note that disruption of the labor force and distribution of resources are
associated with increases in homicide, suicide, and alcohol related deaths. This is a major factor in Mathews, Maume, and Miller’s (2001) study in which deindustrialization—as measured with growing unemployment, falling property values, and decreasing population—is positively associated with homicide rates. In this study, deindustrialization must be considered as it characterizes the labor market during the proposed era of investigation.

Variables that measure economic levels have become standard in SDT research, particularly indices of concentrated disadvantage. Income and poverty levels are often included as they measure the level of resources for social control and socialization, residential stability, and community organizational support (Wilson 2009; Martinez, Stowell, and Cancino 2008; Cantillon 2006; Lee 2003; Martinez 2003; Rose 2000; Sampson, Raudenbush, and Earls 1997; Taylor 1996). Low income neighborhoods are not inherently disorganized, but poverty may lead to social disorganization because of the limited resources available to deal with social problems (Sampson 2004). Additionally, if a community’s economic deprivation is perceived as unjust (e.g. racially distributed resources) and the community is exposed to more affluent areas, a connection to disorganization may be strengthened (Agnew 2006). This is likely due to the disintegrating nature of perceived injustice which will undermine efforts to perform public or parochial social control. The percent of female headed households are also often included in concentrated disadvantage indices as these families would be expected to have fewer resources and less time or energy to engage in social control than traditional two parent households (Jones-Webb and Wall 2008; Martinez, Stowell, and Cancino 2008; Lee 2003). Residential stability allows time for social networks to develop, gives residents a stake in the community, and is related to economic resources; so a measure of stability is often included in SDT research (Cantillon 2006; Lee 2003; Rose 2000; Sampson, Raudenbush, and Earls 1997; Bursik & Grasmick 1993). Also, these variables may affect the levels of parochial social control in a community. Communities with few resources are seen as needing aid, but if the community itself cannot support organizations aid will be limited (Rose 2000). As a result, parochial social control is most present in communities that are subjected to relative rather than absolute poverty (Rose 2000).
Race holds no direct connections with the causes of crime, but there are social trends that would make ignoring the variable result in incomplete criminological work (Sampson and Bean 2006). Both Blacks and Latinos are victimized at higher levels of violent crimes than white populations (Sampson and Bean 2006; Martinez 2002). Concentrations of racially segregated populations are often an indicator of inequality that may weaken the likelihood of developing neighborhood organization and social control (Sampson and Bean 2006).

Race and economics only serve as proxies for social disorganization. Perhaps the purest attempt to measure social disorganization comes from work on collective efficacy. Collective efficacy is the idea that neighborhoods function with a certain level of expectations shared among the residents that they will respond to undesired situations (Sampson 2004). This loose sense of trust and willingness is generally shared by the people that inhabit the neighborhood and when confronted with possible problems this sense of community urges the population into action (Strycker et al 2008). This data is collected using a survey designed to measure social control and social cohesion and has been found reliable when given to either residents or workers (Strycker et al 2008). The nature of survey work makes this form of data collection much more expensive and time consuming than using the proxies mentioned above.

For its dependent variables, SDT research has been criticized as it often relies on official crime reports which may underreport actual occurrences (Kubrin, Stucky, and Krohn 2009). Homicide is a useful and common measure for SDT research due to its more accurate reporting (Martinez, Stowell, and Cancino 2008; Jones-Webb and Wall 2008; Pridemore, Chamlin, and Cochran 2007; Nielsen, Lee, and Martinez 2005; Lester and Krysinska 2004; Lee 2003; Martinez 2002; Lee, Martinez, and Rodriguez 2000; Mathews, Maume, and Miller 2001; Kapunscinski, Braithwaite, Chapman 1998). Martinez (2002) found homicide victimization rates of Latinos three to four times higher than Anglos and blacks twice that still. Nielsen, Lee, and Martinez (2005) disaggregated homicides into types of expressive (e.g. escalation or intimate) and instrumental (e.g. robbery or drug related) to explore if social disorganization affected homicide types differently. The results of this exploratory study were largely mixed with residential stability positively related to escalation homicides for Latinos and blacks in San
Diego and Blacks, but not Hispanics, in Miami (Nielsen, Lee, and Martinez 2005). The disadvantage index was positively correlated with intimate, robbery, and drug homicides among blacks in both cities, but these findings were not replicated for Latinos (Nielsen, Lee, and Martinez 2005). A primary difficulty obstructing the research desegregating types of homicide is limitations of data (Lee 2003). Expressive homicide, or what Katz (1988) terms ‘righteous slaughter’, can be seen as an action by a person who has been driven to the point of humiliation and anger by another. Instrumental homicide, on the other hand, is a result of operating outside the bounds of legitimate employment like engaging in the drug trade or other illegal activities for economic gain (Nielsen, Lee, and Martinez 2005). The violence associated with these illegitimate markets raises the mortality rates much higher than the most deadly legal occupations (Levitt and Dubner 2005).

Conceptually, SDT can be applied to geographic areas as large as nations, but in diverse nations such as the US this would miss many local nuances. More commonly the unit of analysis has become cities or sections within cities. Examining cities (see Stowell, Messner, McGeever and Raffalovich 2009; Jones-Webb and Wall 2008; Mathews, Maume, Miller 2001) allows a researcher to compare many population demographics, but does not help the researcher examine the spatial distributions of homicides. Research that looks at homicides within cities (see Martinez, Stowell, Cancino 2008; Nielson, Lee, and Martinez 2005; Lee 2003) can allow investigation into how the city structure and relative demographics affect the organization of neighborhoods; a concept that is immediately troublesome as a neighborhood is not clearly defined (Brusik and Grasmick 1993). In response to this, the most common unit of analysis for city analysis is the census tract as a representation of a neighborhood (Nielson, Lee, and Martinez 2005; Lee 2003).

3.2: Research Gaps Regarding Latinos, Immigration, and Space

Despite the fact that SDT has recently come back into focus, there are many areas of research that remain underdeveloped. Limited attention has been given to the Latino population, immigration, and how space affects crime in a community in spite of growing importance. This section will explore these issues and how they are particularly critical to the proposed research. SDT has become a useful approach to exploring racial disparities in crime rates, but research on Latinos and violent crime using
SDT is still in its infancy, despite Latinos being the largest minority population in the US (Martinez 2002). Research involving Latinos has been hindered by the lack of the ethnicity’s inclusion in many formal crime data sources such as The Uniform Crime Report (Lee 2003). The Latino population is considered vulnerable due to the fact that poverty rates are as high as for blacks, more than a third of Latinos are under the age of eighteen, and Latinos have high rates for dropping out of high school (Martinez 2002). Additionally, Latino populations have been residentially segregated to areas of cities that are seen as undesirable, overcrowded, and underserved by state and market institutions (Vigil 2002). Latinos have been maligned by the popular media as violent criminals, resulting in widely shared negative perceptions of Latinos in American society (Martinez 2002). Recent surveys have found that large sections of white Americans believe that Latinos are unintelligent (29% of respondents), lazy (33%), welfare dependent (42%), and violence prone (38%) (Geiger 2006). Despite the image and challenging living conditions that mirror blacks in the US, Latino violent crime rates are not at the level of blacks in America, which Martinez (2002) attributes to higher levels of employment. This may be due to the fact that employers tend to stereotype Latinos as hardworking, but blacks as unmanageable (Waldinger and Lichter 2009; Brown 2006). The lack of violent crime is particularly noticeable in the counties on the US/Mexican border where Latino homicide rates are half those of more northern counties (Martinez 2002).

Much of the Latino population in the US is composed of migrants, making immigration a centrally important part of any research concerning the Latino population (Martinez 2002; Vigil 2002). The earliest wave of Latino immigration occurred in the 1920s when the incoming two million Mexicans doubled the existing population (Vigil 2002). This was followed by subsequent waves from the 1940s through the mid 1960s and in the 1970s (Vigil 2002). Today 11% of US residents are (largely Latino) immigrants with recent estimates reaching 1.2 million immigrants entering the US annually (Brown 2006). Immigrants, like the Latino population, have been characterized as criminal, leading to widespread negative perceptions by white Americans (Stowell et al 2009; Geiger 2006; Lee 2003). Immigrants typically have bi-modally distributed educational levels; either having already obtained a university degree or not having completed high school (Brown 2006). Similarly, immigrants are also
likely to lack English proficiency skills that are an important form of cultural capital (Grineski 2009; Brown 2006). Without this capital people are less likely to engage formal social institutions in the US, a critical step for the production of public social control (Grineski 2009; Brown 2006).

Immigration was similarly important to the development of SDT (Kubrin, Stucky, and Krohn 2009). Initially it was theorized that immigrants would have higher rates of crime because of reduced means of social control (Martinez, Stowell, Cancino 2008). However, the theorized relation between crime and immigration has not been supported (Stowell et al 2009; Martinez, Stowell, Cancino 2008; Lee 2003; Martinez 2002). Rather, immigration tends to have no effect or suppress crimes leading to the idea that immigrants may use innovative means of social control (Stowell et al 2009; Martinez, Stowell, Cancino 2008; Lee 2003; Martinez 2002). Vigil (2002) points out that cultural marginalization of the second generation (choloization) is more likely to produce gangs and the corresponding criminal activities.

While immigration is a central concern for many criminological theories, geography is not. Most criminological theories are aspatial, but SDT is inherently conducive to spatial analysis. Despite this, SDT has generally neglected spatial analysis beyond the concentric zone model, hot spot analysis, and attempts to define neighborhoods (Kubrin, Stucky, and Krohn 2009). This seems to neglect possibilities for research using SDT. Park and Burgess’ use the concentric zone; a model where a city is layered with the central business district at the center and then extends into housing that starts in poor conditions but improves as it gets further from the central district (Kubrin, Stucky, and Krohn 2009). Other spatial analysis has involved geocodeing the criminal variables to produce new data that combines cases with existing census data (see Martinez, Stowell, Cancino 2008). This has proven an extremely useful manner to produce spatially related data. However, upon completion of analyses SDT researchers have typically interpreted results in reference to demographic characteristics rather than the spatial factors that influence social disorganization and crime (Martinez, Stowell, Cancino 2008; Lee 2003; Martinez 2003, 2002).
3.3 Possible Further Research

Having reviewed the existing literature on SDT, three areas have emerged as distinctly underdeveloped:

1) The aggregation of Latinos and immigrants. The blanket terms Latino and immigrant are used to include many different populations of divergent cultural, economic, and political backgrounds (Brown 2006).

2) Social disorganization’s effects of types of homicide. Initial research on how disorganization relates to expressive and instrumental homicide showed significant but mixed findings (Martinez, Stowell, Cancino 2008). This warrants further investigation.

3) Spatial dimensions of disorganization. Despite existing techniques, this area has largely been absent from contemporary SDT research.

The first area is confounded by the fact that official crime reports often do not include a useful ethnic variable, meaning that exploration is needed for determining a useful measure. The second two areas are less challenging as there are established methods and measures in criminology. This paper proposes to examine the final two of these aspects. Using SDT, this research hypothesizes that the levels of social disorganization will be higher in the high traffic areas around ports of entry. The transient nature of this area will produce a sense of anonymity, dilute social networks, and weaken informal social control. According to SDT, this would result in an increase in violent crimes such as homicide. Significance should be found for homicide in general, but also an increase of expressive and instrumental homicides should be found upon deeper examination of homicide types.
Section 4: Data

For this research three sets of data will be needed. The first set of independent variables will be comprised of demographic information from the US Census. The second independent variables will be spatial in nature created using specialized software. The dependent variables will be homicides, from data obtained from the EPPD. This section will explore the manner in which this data will be obtained, the necessary content of the data, and its utility for the purpose of this research.

4.1: Demographic Data

Examining social disorganization will demand demographic variables. Since the homicide data that will be used for this research are from the years of 1985 through 1995 (see 4.3), census data from 1990 will be used as per standard practice. These data will be downloaded in the tract unit. Independent variables of interest will include population size (as an offset term), youth population, divorced population, married families, home ownership, sex ratio, crowding (households with more than one person per room), residential stability (population over five years old who at the time of the survey lived in the same house they had lived in five years prior), households on assistance, poverty, low education levels (population with less than a high school degree or equivalent), single-mother headed households, and unemployment. These data is available with the proper geographic identifiers that will allow for this census data to be used spatially.

It should be noted that the terms Latino and Hispanic are used in an imprecise manner to encompass many ethnicities, but in an effort to maintain consistency this paper has used the term Latino primarily (Geiger 2006; Martinez 2002). A myriad of factors has confounded research on Latino crime. Latino, Hispanic, or any form of associated ethnicity is not reported in the uniform crime report, a common, if not always accurate, source of crime data, forcing researchers who chose to look at Latino crime trends to use crime data that does not have valid ethnic information or obtain alternative data (Lee 2003). Even with crime data coded with ethnic identifiers, the data aggregates many Latino ethnic identities into one. Latino terminology in research may aggregate people of Mexican, Central American, Cuban, Dominican, Puerto Rican, Spanish, Argentinean, Chilean, and Brazilian decent
among others (Geiger 2006). These varied ethnic backgrounds cover a diverse set of cultural and structural positions that are not adequately captured by the simple labels of Hispanic or Latino, but the ethnic makeup of El Paso does not make this a problem. As a result, the utility of such terms must be drawn into question; particularly with contemporary research focusing on immigrant destination cities like Miami which attract many ethnicities of Latino people (see Nielsen, Lee, and Martinez 2005; Lee 2003; Martinez 2002; Lee, Martinez, and Rodriguez 2000). Fortunately, the detective logs used for this research more precisely identify Mexican as a category when reporting ethnicity in the homicide cases.

4.2: Spatial Data

The required spatial data includes shapefiles of designated 1990 census tracts, El Paso’s streets, and ports of entry. The census tracts serve as the base map where other data can be joined to and displayed. The streets are needed to geocode homicides. The ports of entry are required to create a measure of how far each tract is from the nearest port of entry. All three of these required shapefiles are available for download on the internet.

4.3: Homicide Data

Homicide data comprises the dependent variable. This has been obtained in the form of detective logs from the El Paso Police Department and supplemented with media reports. This data currently consists of the years between 1979 and 1997. From these years 1985-1995 are used as the research period. The detective logs are then coded using an existing codebook. The dataset includes addresses that can be used to geocode these homicides. The descriptions with each case can be used to determine if these homicides are instrumental or expressive and can be coded accordingly.
Section 5: Methods

While the data is available online there are several steps that were taken to prepare it for analysis. First, since the census data are presented in raw numbers most will need to be converted to percentages to standardize them. The sex ratio was created by dividing males by females and the tract population was left as a raw number. At this point factor analysis was run and based on the results two indices were created. Variables that were conceptually linked and loaded above .500 were grouped together for the indices creation. A concentrated poverty index was created using crowding, poverty, households on assistance, low education, single-mother families, and unemployment. A stable family index was created using married households, home ownership, and youth population. These two indexes were created by converting the percentages to z scores, summing the variables, and then dividing that sum by the number of variables used (six for concentrated poverty and three for stable family). The use of z scores allows for the variables to be weighed equally while dividing allows for easier interpretation. The census data was converted to a DBF IV file (a type of spreadsheet compatible with ArcGIS), imported into ArcGIS, and joined to the tract shapefile. Once the data was gathered and transformed into useful shapefiles they were imported into ArcGIS and several steps were taken to create a new inclusive data set. ArcGIS is a computer program and set of tools that allows for information to be displayed and analyzed in a spatial manner.

The tract shapefile was reduced to just the city of El Paso since this is the area that the homicide data pertains to. To do this a shapefile that displays the municipal boundaries of the city of El Paso was used in conjunction with the tracts. Using location, only the 85 census tracts that were centered within the municipal boundaries of El Paso were selected and used for this research.

Turning to the homicide data, the information was first coded using an existing codebook. Two additional codes were added to this dataset. The first was a basic motive code that indicated instrumental or expressive homicides. The second code indicated whether the homicide was gang related or not. Gang relation was included because during this period in El Paso gang violence was a major issue, but often the homicides did not fall clearly into instrumental or expressive homicide categories. Following this the file was transformed into a DBF IV file so that it may be imported into
ArcGIS. Using an existing address locator each case was geocoded to create a point based shapefile consisting of all homicides. Selecting by attribute three additional shapefiles were created representing only expressive, instrumental, and gang homicides. Subsequently these four shapefiles were be joined by location to create counts in the dataset. Not all data was able to be geocoded often because homicide locations were not located around a street and any attempt to approximate a location would introduce inaccuracy. Of those that were geocoded a handful of homicides fell outside of the study area. This natural attrition of data resulted in the successfully representation of 416 of 450 homicides, or 92.4%.

Following this a distance from port of entry variable was created. A port of entry shapefile was imported, representing the four ports of entry within the city. A spatial join was completed that created a measure that stated how far each tract was from the nearest port of entry. After completing this, the new dataset includes demographic data; counts of total homicides, expressive homicides, instrumental homicides, gang homicides; and a distance measure.

This new dataset was then imported into SPSS to compute descriptive statistics. Following the descriptive statistics, SAS was used for a series of negative-binomial regressions to examine social disorganization in El Paso as a whole, the proximity to ports of entry, and how motive interacts with social disorganization.
Section 6: Results

The descriptive statistics for the measures of social disorganization used are located in table 6.1. A few things to note in this table is that by reduced the tracts to only the city, it leaves 85 (N) census tracts in the study area. The measures of concentrated poverty and stable family are both indexes created using z scores resulting in a mean of zero with variation from zero showing an increase or decrease in a particular tract’s level of poverty or family stability. The extremely high maximum sex ratio may also require explaining. The tract with more than two men per woman can likely be attributed to the presence of the army base, Ft. Bliss. While Ft Bliss itself was not included in the analysis, it has many satellite posts that are used for housing. These posts are often not large enough to warrant their own tract, but the presence of a barracks within a tract is likely enough to produce a drastically uneven sex distribution.

Table 6.2 displays the descriptive statistics for the dependent variables. Upon examination a few items deserve explanation. The total (sum) number of instrumental homicides is only 63. The extremely low number of instrumental homicides in El Paso, while interesting, limits the number of cases that can be used for analysis of instrumental homicides. It is also important to notice that summing the total number of gang, expressive, and instrumental homicides comes out to only 338 homicides of the 416 or 81.25%. This results primarily from two factors. 17 homicides resulted from recklessness or accidents and were coded as no-motive. The remaining cases were coded for missing motive because the cases were unsolved or the detective logs did not provide enough information for the motive to be determined. This lack of information was common in the earlier years, but information became more available as time progressed. This reduces the number of homicides that were used for the regression to investigate motive, but excluding these homicides also decreases the likelihood that error is needlessly introduced into the research. Ultimately, a higher number of homicides would make the research finer, but having low incidences of homicide is a good problem to have for the citizens of El Paso.
Table 6.1: Independent Variables

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Concentrated Poverty Index</td>
</tr>
<tr>
<td>Stable Family Index</td>
</tr>
<tr>
<td>Sex Ratio</td>
</tr>
<tr>
<td>Percent Divorced</td>
</tr>
<tr>
<td>Percent Same House</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
</tbody>
</table>

Table 6.2: Dependent Variables

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>All types of homicides</td>
</tr>
<tr>
<td>Expressive homicides</td>
</tr>
<tr>
<td>Instrumental homicides</td>
</tr>
<tr>
<td>Gang related homicides</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
</tbody>
</table>

**6.1: Total Homicides**

The regression results for total homicides are located in table 6.3. From the negative binomial regression, significance was found using Chi Square for .05. As a result, three variables were found to be significant: concentrated poverty, family stability, and residential stability. This falls in line with theory and previous social disorganization research. Take note of the standard error to interpret how substantial these results are. The estimate is the statistically expected change to the homicide count for a given tract when the independent variable increases by one unit. Since all variables were converted to z scores, a one unit change is a standard deviation change. For example, using concentrated poverty, the most substantial result, the proper interpretation would be a tract that has a score of two would likely...
have approximately one homicide more than a tract with the score of zero. This is also true when heading in the negative direction. A tract with a score of negative two should expectedly have one homicide less than a tract scoring 0. Note that the two stability measures have negative estimates and should be understood as an increase in stability produces a decrease in homicides.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Standard Error</th>
<th>Wald 95% Min</th>
<th>Wald 95% Max</th>
<th>Chi Square</th>
<th>Pr &gt; ChiSq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrated Poverty</td>
<td>.48</td>
<td>.12</td>
<td>.24</td>
<td>.71</td>
<td>15.47</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Stable Family</td>
<td>-.34</td>
<td>.15</td>
<td>-.62</td>
<td>-.05</td>
<td>5.25</td>
<td>.02</td>
</tr>
<tr>
<td>Divorce</td>
<td>-.16</td>
<td>.10</td>
<td>-.37</td>
<td>.04</td>
<td>2.41</td>
<td>.12</td>
</tr>
<tr>
<td>Same House</td>
<td>-.26</td>
<td>.10</td>
<td>-.45</td>
<td>-.07</td>
<td>7.31</td>
<td>.01</td>
</tr>
<tr>
<td>Sex Ratio</td>
<td>-.02</td>
<td>.37</td>
<td>-.74</td>
<td>.70</td>
<td>0</td>
<td>.95</td>
</tr>
<tr>
<td>Dispersion</td>
<td>.21</td>
<td>.07</td>
<td>.07</td>
<td>.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-7.16</td>
<td>.35</td>
<td>-7.85</td>
<td>-6.47</td>
<td>409.98</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

The results above are useful for understanding statistical significance, but lack a visual aspect that is useful when studying a phenomenon. Examining these four maps should aid in understanding the distribution of homicides in El Paso. Note that in all maps, each of the shaded areas represents a census tract, each dot represents a homicide location, and the green stars represent a port of entry. All homicides are represented, but when multiple homicides occur at a single location their representations overlap and only appear as a single dot. Maps 6.1 and 6.3 depict the entire study area while maps 6.2 and 6.4 are a magnified depiction of areas surrounding three of the ports of entry. For maps 6.1 and 6.2 the shading of the tracts represent its concentrated poverty score. The light areas experience relatively low concentrated poverty, but concentrated poverty increases with the intensity of color. Notice that the areas that display the greatest concentrated poverty are concentrated around the ports of entry. The Westside of El Paso experiences very low scores and occurrences of homicides, while the developing Northeast and Eastside share middling levels.
Map 6.1: El Paso Concentrated Poverty and Homicides

Legend

- Port of Entry
- Homicide

Concentrated Poverty Z Scores

-1.463873 - -1.008207
-1.008206 - -0.483484
-0.483483 - 0.356821
0.356822 - 1.042214
1.042215 - 1.880971

This map displays cases of homicides overlaying the concentrated poverty index created for this research consisting of crowding, female headed households, poverty, households on assistance, low education, and unemployment.

Created by Nicholas Emerick
3/24/2010

Map 6.1: El Paso Concentrated Poverty and Homicides
Map 6.2: Magnified El Paso Concentrated Poverty and Homicides

Legend

- Port of Entry
- Homicide

Concentrated Poverty Z Scores

-1.463873 -1.008207
-1.008206 -0.483484
-0.483483 -0.356821
0.356822 -1.042214
1.042215 -1.880971

This map displays cases of homicides overlaying the concentrated poverty index created for this research consisting of crowding, female headed households, poverty, households on assistance, low education, and unemployment.

Created by Nicholas Emerick 3/24/2010

Map 6.2: Magnified El Paso Concentrated Poverty and Homicides
Map 6.3: El Paso Family Stability and Homicides

This map displays cases of homicides overlaying the stable family index created for this research consisting of married households, owning property and having children.

Created by Nicholas Emerick
3/24/2010
Map 6.4: Magnified El Paso Family Stability and Homicides

**Legend**
- Port of Entry
- Homicide

**Concentrated Poverty Z Scores**
- $-1.468373 \leq z < -1.008207$
- $-1.008208 \leq z < -0.483484$
- $-0.483483 \leq z < 0.356821$
- $0.356822 \leq z < 1.042214$
- $1.042215 \leq z < 1.890971$

This map displays cases of homicides overlying the stable family index created for this research consisting of married households, owning property and having children.

Created by Nicholas Emerick
3/24/2010

Map 6.4: Magnified El Paso Family Stability and Homicides
The significance of the concentrated poverty measure supports the theoretical projections and prior research. Poverty makes many aspects of life more strenuous due to the lack of resources. Areas that score high in the concentrated poverty index likely do not have the financial resources to deal with social problems and maintain parochial social control. Similarly, due to the education aspect of the index, there may be a lack of cultural capital that will inhibit the production of public social control.

Maps 6.3 and 6.4 display homicides overlaying the constructed family stability index. In these maps the darkest shaded tracts have the highest scores for family stability. Notice that the tracts in the downtown area (surrounding the two ports of entry furthest west) experience the highest levels of instability. While moving outwards from the downtown area, stability increases with the exception of the three tracts located on the northern edge of the Eastside. This can be attributed to their proximity to Ft. Bliss and Biggs Army Airfield. It is likely that a large number of military personnel live in these tracts, and the high mobility of military lifestyles generally does not lend itself to this index’s construction of stability. This family stability is useful in facilitating social organization in a number of ways. When a person or family owns property they are more likely to act on concerns about a neighborhood because they have a vested interest in their property’s security. The marriage and children aspect of this index helps to expand social capital and further people’s interest in a secure community to protect their loved ones.

The third significant variable for homicides in El Paso was the measure of residential stability. Residential stability plays a role in social organization as it provides time for social control to develop. Some time may be required to identify and respond to a social problem, and often public and parochial social control are often need some time to become established. These steps are unlikely to happen with a mobile population that cannot integrate into a neighborhood unit. This analysis of the total homicides in El Paso illustrates that a neighborhood likely to have low incidents of homicides has resources, established families living in it, and has a population that has lived in the area for an extended period of time.
6.2: Homicides by Motive

Expressive homicide results can be found in table 6.4. Using the same measure of significance and interpretation, concentrated poverty and residential stability came out to be significant with poverty being the most substantial.

Table 6.4: Expressive Homicides

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Standard Error</th>
<th>Wald 95% Min</th>
<th>Wald 95% Max</th>
<th>Chi Square</th>
<th>Pr &gt; ChiSq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrated Poverty</td>
<td>0.41</td>
<td>0.17</td>
<td>0.08</td>
<td>0.73</td>
<td>6.11</td>
<td>0.01</td>
</tr>
<tr>
<td>Stable Family</td>
<td>-0.26</td>
<td>0.20</td>
<td>-0.65</td>
<td>0.14</td>
<td>1.61</td>
<td>0.20</td>
</tr>
<tr>
<td>Divorce</td>
<td>-0.18</td>
<td>0.14</td>
<td>-0.45</td>
<td>0.09</td>
<td>1.72</td>
<td>0.19</td>
</tr>
<tr>
<td>Same House</td>
<td>-0.33</td>
<td>0.13</td>
<td>-0.59</td>
<td>-0.07</td>
<td>6.11</td>
<td>0.01</td>
</tr>
<tr>
<td>Sex Ratio</td>
<td>0.03</td>
<td>0.52</td>
<td>-0.99</td>
<td>1.04</td>
<td>0</td>
<td>0.96</td>
</tr>
<tr>
<td>Dispersion</td>
<td>0.29</td>
<td>0.13</td>
<td>0.03</td>
<td>0.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-8.10</td>
<td>0.50</td>
<td>-9.07</td>
<td>-7.12</td>
<td>265.84</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

The homicides disaggregated by motive display similar significance to total homicides. The findings that concentrated disadvantage and residential stability are significant in the case of expressive homicides supports the findings of Nielsen, Lee and Martinez’s (2005) examination of Miami and San Diego. Organizationally, poverty and instability inhibit the development of a community able to respond to threats of violence, but similarly poverty and instability can be strains placed on a population that may increase play into the spontaneous nature of expressive homicides. Having qualitatively examined the cases as they were coded, the expressive homicides occurred at rapid speeds and in discreet locations that were not disposed to prevent an expressive homicide with anything less than direct physical intervention. Domestic homicides often occur within privacy of the home, but in a stable neighborhood neighbors may identify an abusive relationship and attempt to intervene before a homicide occurs. Escalation homicides tend to happen in common areas such as streets and bars. In unstable and impoverished areas are less likely to have produced effective intervening organizations while the population must deal with the added strains of their environment and social position. As a result, the relationship homicide has with poverty and instability should be examined as dual-faceted. Poverty and instability both inhibit functioning organizations and provide additional strain.
The regression outputs for instrumental homicides can be found in table 6.5. The only significant measure found for this type of homicide was the measure for residential stability.

Table 6.5: Instrumental Homicides

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Standard Error</th>
<th>Wald 95%</th>
<th>Chi Square</th>
<th>Pr &gt; ChiSq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrated Poverty</td>
<td>0.40</td>
<td>0.34</td>
<td>-0.27</td>
<td>1.08</td>
<td>1.36</td>
</tr>
<tr>
<td>Stable Family</td>
<td>-0.33</td>
<td>0.35</td>
<td>-1.02</td>
<td>0.36</td>
<td>0.89</td>
</tr>
<tr>
<td>Divorce</td>
<td>-0.30</td>
<td>0.27</td>
<td>-0.83</td>
<td>0.23</td>
<td>1.25</td>
</tr>
<tr>
<td>Same House</td>
<td>-0.65</td>
<td>0.26</td>
<td>-1.16</td>
<td>-0.14</td>
<td>6.30</td>
</tr>
<tr>
<td>Sex Ratio</td>
<td>-0.27</td>
<td>0.93</td>
<td>-2.10</td>
<td>1.56</td>
<td>0.09</td>
</tr>
<tr>
<td>Dispersion</td>
<td>1.61</td>
<td>0.56</td>
<td>0.51</td>
<td>2.71</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-8.82</td>
<td>0.89</td>
<td>-10.56</td>
<td>-7.07</td>
<td>97.77</td>
</tr>
</tbody>
</table>

Residential stability is the only significant variable for instrumental homicides. Nielsen, Lee and Martinez (2005) found residential stability to factor into drug-related killings of Latinos in San Diego, but insignificant amongst black victimization or in Miami. Nielsen, Lee and Martinez’s (2005) measure of poverty also appeared to be significant in their research area, where it was not in El Paso. The impact of residential stability likely comes from the fact that instrumental homicides do often result from some level of premeditation. A stable neighborhood has had the opportunity to develop guards against robberies or drug related crimes in to form of neighborhood networks and established responses for dealing with activities that are undesirable. Through an established neighborhood watch or even informal neighborhood network, residents of the neighborhood may recognize the suspicious activities associated with dealing drugs or staking out a potential robbery victim and contact law enforcement before harm could be done. Residents who have lived in a particular area for an extended period of time have developed social capital and a vested interest in preserving their interests in the neighborhood. Essentially, the neighborhood has become a harder target perhaps deterring a potential criminal or intervening before a crime is able to produce a homicide.

Finally, the gang related homicide output can be found in table 6.6. The concentrated poverty index shows to be the only significant variable, but shows to be the most powerful result amongst all the regressions at .71.
Table 6.6: Gang Related Homicides

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Standard Error</th>
<th>Wald 95% Min</th>
<th>Max</th>
<th>Chi Square</th>
<th>Pr &gt; ChiSq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrated Poverty</td>
<td>0.71</td>
<td>0.21</td>
<td>0.29</td>
<td>1.12</td>
<td>11.18</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Stable Family</td>
<td>-0.33</td>
<td>0.26</td>
<td>-0.83</td>
<td>0.17</td>
<td>1.71</td>
<td>0.19</td>
</tr>
<tr>
<td>Divorce</td>
<td>-0.12</td>
<td>0.19</td>
<td>-0.51</td>
<td>0.26</td>
<td>0.41</td>
<td>0.52</td>
</tr>
<tr>
<td>Same House</td>
<td>0.23</td>
<td>0.18</td>
<td>-0.13</td>
<td>0.59</td>
<td>1.56</td>
<td>0.21</td>
</tr>
<tr>
<td>Sex Ratio</td>
<td>-0.24</td>
<td>0.78</td>
<td>-1.76</td>
<td>1.28</td>
<td>0.10</td>
<td>0.76</td>
</tr>
<tr>
<td>Dispersion</td>
<td>0.20</td>
<td>0.16</td>
<td>-0.11</td>
<td>0.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-8.52</td>
<td>0.74</td>
<td>-9.96</td>
<td>-7.08</td>
<td>134.14</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

Concentrated disadvantage was the only significant measure from the regression. From a qualitative review of the detective logs, El Paso’s gangs at this time were primarily conflict gangs made up of marginalized youth acting violently as an expression of their alienation concept of choloizations. These gangs were not primarily interested in engaging in criminal enterprises, but rather the group would congregate and often fights would occur. Gang violence was a major issue in El Paso at this time and it is reflected in the relatively high number of homicides. The concentrated poverty measure can be interpreted in two manners. In line with social disorganization theory the first would argue that the neighborhoods that experience concentrated poverty would have fewer resources for programs to occupy youth or disrupt gang activities. Also, similar to expressive homicides, the concentrated disadvantage can be seen as a strain that enhances what Vigil (2002) called choloization.

6.3: Homicides by Distance from Ports of Entry

As displayed in table 6.7, distance was a significant factor in total homicides and gang related homicides. Expressive and instrumental homicides did not have a significant relationship to proximity to a port of entry. When interpreting the estimate the unit increase is the kilometer. The prior maps display clustering around the ports of entry so some correlation was expected. The significance of proximity to ports of entry disappeared for both total and gang related homicides with the introduction of the social variables discussed in prior regressions as seen in tables 6.8 and 6.9. This tends to suggest that the areas around ports of entry exist in a state of concentrated disadvantage and instability. The initial ideas of this research suggested that the high levels of traffic involving people who lack ties to the
area would produce feelings of anonymity and indifference. If the proximity to a port of entry does have any effect on social disorganization it is masked by the strong correlation that exists between the proximity to a port of entry and concentrated poverty and family instability that already exists in the area as can be seen in table 6.10. The areas described by the census data paint an unflattering image that may produce a cycle of neglect and violence. Having concentrations of poverty in high traffic areas reflects the slum development trends described by Davis (2006) where the most marginalized populations are often forced to live in the least desirable places since many people would seek to avoid the noise and congestion of these areas. The correlation between the increase and homicides and the proximity to ports of entry is more complex than it initially appears.

Table 6.7: Distance from Port of Entry

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Total Homicides N=416</th>
<th>Gang Related N=105</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Distance (KM)</td>
<td>Distance (KM)</td>
</tr>
<tr>
<td>Estimate</td>
<td>-0.08</td>
<td>-0.14</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>Wald 95% Min</td>
<td>-0.12</td>
<td>-0.20</td>
</tr>
<tr>
<td>Max</td>
<td>-0.04</td>
<td>-0.07</td>
</tr>
<tr>
<td>Chi Square</td>
<td>18.23</td>
<td>17.91</td>
</tr>
<tr>
<td>Pr &gt; ChiSq</td>
<td>&lt;.01</td>
<td>&lt;.01</td>
</tr>
<tr>
<td></td>
<td>Dispersion</td>
<td>Dispersion</td>
</tr>
<tr>
<td></td>
<td>0.41</td>
<td>0.55</td>
</tr>
<tr>
<td></td>
<td>0.10</td>
<td>0.24</td>
</tr>
<tr>
<td></td>
<td>0.21</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>0.61</td>
<td>1.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intercept</td>
<td>Intercept</td>
</tr>
<tr>
<td></td>
<td>-6.59</td>
<td>-7.73</td>
</tr>
<tr>
<td></td>
<td>0.14</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>-6.87</td>
<td>-8.14</td>
</tr>
<tr>
<td></td>
<td>-6.31</td>
<td>-7.33</td>
</tr>
<tr>
<td></td>
<td>2167.22</td>
<td>1424.72</td>
</tr>
<tr>
<td></td>
<td>&lt;.01</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>
Table 6.8: Total Homicides with Distance

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Standard Error</th>
<th>Wald 95% Min</th>
<th>Wald 95% Max</th>
<th>Chi Square</th>
<th>Pr &gt; ChiSq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrated Poverty</td>
<td>0.49</td>
<td>0.13</td>
<td>0.23</td>
<td>0.75</td>
<td>13.64</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Stable Family</td>
<td>-0.35</td>
<td>0.16</td>
<td>-0.67</td>
<td>-0.03</td>
<td>4.63</td>
<td>0.03</td>
</tr>
<tr>
<td>Divorce</td>
<td>-0.17</td>
<td>0.11</td>
<td>-0.38</td>
<td>0.04</td>
<td>2.41</td>
<td>0.12</td>
</tr>
<tr>
<td>Same House</td>
<td>-0.26</td>
<td>0.1</td>
<td>-0.45</td>
<td>-0.07</td>
<td>6.9</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Sex Ratio</td>
<td>-0.02</td>
<td>0.37</td>
<td>-0.74</td>
<td>0.70</td>
<td>0</td>
<td>0.95</td>
</tr>
<tr>
<td>Distance (KM)</td>
<td>0.01</td>
<td>0.03</td>
<td>-0.04</td>
<td>0.06</td>
<td>0.05</td>
<td>0.82</td>
</tr>
<tr>
<td>Dispersion</td>
<td>0.21</td>
<td>0.07</td>
<td>0.07</td>
<td>0.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-7.2</td>
<td>0.39</td>
<td>-7.95</td>
<td>-6.44</td>
<td>345.89</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

Table 6.9: Gang Related Homicides with Distance

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Standard Error</th>
<th>Wald 95% Min</th>
<th>Wald 95% Max</th>
<th>Chi Square</th>
<th>Pr &gt; ChiSq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrated Poverty</td>
<td>0.7</td>
<td>0.23</td>
<td>0.25</td>
<td>1.15</td>
<td>9.31</td>
<td>&lt;.01</td>
</tr>
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<td>Stable Family</td>
<td>-0.32</td>
<td>0.28</td>
<td>-0.87</td>
<td>0.23</td>
<td>1.33</td>
<td>0.25</td>
</tr>
<tr>
<td>Divorce</td>
<td>-0.12</td>
<td>0.2</td>
<td>-0.52</td>
<td>0.28</td>
<td>0.34</td>
<td>0.56</td>
</tr>
<tr>
<td>Same House</td>
<td>0.22</td>
<td>0.19</td>
<td>-0.14</td>
<td>0.59</td>
<td>1.42</td>
<td>0.23</td>
</tr>
<tr>
<td>Sex Ratio</td>
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<td>0.78</td>
<td>-1.76</td>
<td>1.28</td>
<td>0.1</td>
<td>0.75</td>
</tr>
<tr>
<td>Distance (KM)</td>
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<td>-0.09</td>
<td>0.08</td>
<td>0.01</td>
<td>0.91</td>
</tr>
<tr>
<td>Dispersion</td>
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<td>0.16</td>
<td>-0.12</td>
<td>0.52</td>
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</tr>
<tr>
<td>Intercept</td>
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<td>-10.03</td>
<td>-6.94</td>
<td>116.35</td>
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Table 6.10: Distance and Proxies

29
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<thead>
<tr>
<th></th>
<th>KM</th>
<th>Family</th>
<th>Poverty</th>
<th>House</th>
</tr>
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<td>KM from Nearest Port of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
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<td>.470**</td>
<td>-.671**</td>
<td>-.195</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.074</td>
</tr>
<tr>
<td>N</td>
<td>85</td>
<td>85</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Family Stability</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>1.000</td>
<td>-.269*</td>
<td>.189</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
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<td>.013</td>
<td>.083</td>
<td></td>
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<tr>
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<td>85</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Concentrated Poverty</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
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<td>-.269*</td>
<td>1.000</td>
<td>.430**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
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<td>.000</td>
<td></td>
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<tr>
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<td>85</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Same Household</td>
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<td></td>
<td></td>
<td></td>
</tr>
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<td>Pearson Correlation</td>
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<td>.189</td>
<td>.430**</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.074</td>
<td>.083</td>
<td>.000</td>
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<tr>
<td>N</td>
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<td>85</td>
<td>85</td>
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</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
Section 7: Conclusion

This research used EPPD homicide data from 1985-1995 and census data from 1990 to test SDT in El Paso in relation to homicide generally, specific types of homicide, and location in relation to ports of entry. Findings largely conform to theoretical predictions, but with some key differences. Exploring homicides in El Paso revealed that concentrated disadvantage had the hypothesized positive relationship with homicide counts, while family stability and residential stability produced the expected negative relationship. While social disorganization theory does not specifically address the issue of different types of criminal motivation, the results show that expressive, instrumental, and gang related homicides have different relations to theoretical variables compared to homicide generally. Expressive homicides were related to residential stability and concentrated poverty, while instrumental homicides were only associated with residential stability, and gang related homicides only showed a connection with concentrated poverty. Considering the nature of these types of homicides begins to shed light on why different homicides have divergent relationships with different theoretical variables. This is particularly important because homicides tend to be aggregated in SDT research, which may obscure the specific social contexts that influence particular forms of crime. As a result, when conducting SDT research or when a city tries to address a problem regarding homicides its conclusions will likely be different if it treats homicides as homogeneous occurrences rather than recognizing the fact that homicides emanate from several distinct social situations.

The fact that different social variables were related to different types of homicides indicates that SDT does not interact with motive specific homicides in the same manner. Conceptually, SDT can use instability or disadvantage proxies to predict higher crime rates, but the research does not bear this out. This could be particularly true when dealing with gang related homicides where residential stability may actually encourage the formation of gangs. The development of networks has generally been accepted as a positive, but gangs or other criminal networks are counter-productive. On the other hand, the alienation associated with disadvantage has shown to have substantial impacts on the development of gangs, and homicides associated with them. Further, instrumental homicide’s level of premeditation could alter how it interacts with poverty. A potential robber may seek a victim that has more resources
and avoid an impoverished area. Dealing drugs has often been associated with poverty, but drug use has become an issue in all classes of American society. As a result drug related crimes could to exist independent of economic factors. Expressive homicides were the only types that proved to be associated with both stability and concentrated poverty.

The findings for how the proximity to a port of entry affects a neighborhood’s homicide count are less conclusive. While there is a correlation between the neighborhood’s homicide count and its distance to a port of entry, the fact that disadvantage and instability concentrate in those areas seems to explain away any effect that the high levels of traffic would have. Perhaps the best observation that can be taken from this is the distinct danger that poverty poses for our society. Often a place or people will come to be thought of as dangerous. This research demonstrates that even in locations that are theoretically less than ideal, concentrating poverty demonstrates a much stronger relationship than anything the higher levels of traffic could produce. Rather than conclusively answer the proposed research question, this research has fueled further interest. How have the areas around the ports of entry developed throughout history and how has this development influenced social disorganization? How will the city respond to current revitalization efforts occurring in the downtown area? These issues provide fodder for future research possibilities. There may also be the possibility that spatial features such as ports of entry may interact with concentrated poverty or other components of SDT to impacts crime, which represents a more specific issue that future research may wish to address.

The SDT proxies for El Paso were strong enough to produce a spurious relationship with their proximity to the nearest port on entry. This research demonstrates that social disorganization does not exist aspatially. Also, disaggregating homicide may show differential support for SDT hypotheses as was seen in the varying support of proxies with different motive specific homicides. The findings also suggest that other types of high traffic areas may also increase indifference or anonymity.

This study was not without its limitations, though. The exceptionally low occurrence of homicide in El Paso, even over a ten-year period, meant that analyses disaggregating homicides had even lower frequencies and further disaggregation would reduce the counts too much for proper analyses to be performed. As a result, exploring homicide motives at a finer level was not possible with this
research. The number of homicides for which motive could not be determined also posed a problem for disaggregating by motive.

While it was not a goal of this research, questions about El Paso’s low homicide rates will doubtlessly arise. Since El Paso is comparatively more disadvantaged than many other US cities the findings that concentrated disadvantage has such a substantial impact on homicides may seem to compound the problem, but it should be noted that the standardization of the concentrated disadvantage index compares disadvantage within El Paso. In this sense relative disadvantage between neighborhoods was examined rather than making comparisons to a national average. The presence of Juarez on the Mexican side of the border further expands the relative poverty scale as it introduces additional marginalized populations. The source of El Paso’s exceptionally low homicide rate is not explained by this research, the research suggests that each city has idiosyncrasies that should be considered when research is conducted or social programs are administered. Using spatial techniques helps this research display the strong correlation between ports of entry and two significant proxies for social disorganization that would be missed if the city is treated aspatially.

As this research makes clear, spatial examination can help illuminate social disorganization research in ways that aspatial research cannot. The potential of including spatial techniques appears to have a bright future in social disorganization research. Future possibilities include obtaining the 1995-2005 homicide data for El Paso to replicate the research and see if the prior findings can be replicated. More current data would aid in further exploration of social disorganization’s relation to motive because of the increased information provided in the detective logs compared to the 80s. This would allow a much higher percentage of homicides to be successfully coded for motive. This would also allow for time series research to be done. Using ports of entry in El Paso was only one possible case for how a city’s layout can influence its crime rate. Research can examine how different locations affect crime. For example, a city that relies heavily on tourism may want to examine what crimes happen in areas where tourists frequent and research may aid in producing a safer, friendlier experience.
References


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Vita

Nicholas Andrew Emerick grew up in a military family who lived in many states across the US, as well as, Germany and South Korea before moving to El Paso. His five years of work at McDonald’s and the aid of the Lovett Scholarship allowed him to attend UTEP and receive a bachelor’s degree in criminal justice in May of 2008. As of 2010 he is scheduled to graduate with a Master of Arts in Sociology with a 4.0 GPA, is scheduled to receive the special academic award in sociology, and was selected as the graduate student marshal for the May, 2010 graduation.

In his two years with the graduate program, Nicholas also was ordained as a minister and worked as a teaching assistant for Dr. Collins, Dr. Lee, and Dr. Curry. Through his work he aided in teaching a variety of crime, deviance, sociology, and geography courses. Nicholas prides himself in making education more attainable through his openness with his students and his work to develop online and hybridized courses with Dr. Collins. He was also instrumental in aiding Dr. Collins and Dr. Grineski in their research and survey development. Nicholas has become a local expert on homicide in El Paso and was asked to present his research at the Southwest Social Science Association’s annual 2010 conference and a border violence conference hosted by The Center for the Study of Natural Systems and the Family Border Programs.

Nicholas also has recognizes the importance of community involvement and has consistently volunteered as a religious educator at the Unitarian Universalist Community of El Paso. At this religious community Nicholas has been a mentor to the teen class and been elected two terms to the board of trustees. He has also volunteered with the Humane Society of El Paso to walk dogs, play with cats, and help anyone looking to adopt an animal.

Nicholas sees himself as an educator and would like to lecture sociology and criminal justice.

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This thesis was typed by Nicholas Emerick.