NEW HANOVER COUNTY GANnS: AN INTEGRATED APPROACH TO ANALYZE
GANG CRIME IN NEW HANOVER COUNTY

Robin Pascoe

A Thesis Submitted to the
University of North Carolina Wilmington in Partial Fulfillment
of the Requirements for the Degree of
Master of Arts

Department of Sociology and Criminology
University of North Carolina Wilmington
2016

Approved by

Advisory Committee
Michael Maume Kristen DeVall

Christina Lanier
Chair

Accepted By

Dean, Graduate School
TABLE OF CONTENTS

ABSTRACT .............................................................................................................................. iv
ACKNOWLEDGEMENTS .......................................................................................................... v
LIST OF TABLES ..................................................................................................................... vi
LIST OF FIGURES ................................................................................................................ vii
INTRODUCTION ................................................................................................................... 1
LITERATURE REVIEW .......................................................................................................... 2
  Defining Gang & Demographic Profile of Gang Members .................................................. 2
  Why Youth May Join a Gang ............................................................................................. 9
  Gangs and Crime .............................................................................................................. 12
THEORETICAL ANALYSIS .................................................................................................. 17
  Environmental Criminology ............................................................................................. 18
  Lifestyle-Routine Activities ............................................................................................. 20
  Social Disorganization ..................................................................................................... 25
  Theoretical Integration .................................................................................................... 30
RESEARCH CONTEXT ......................................................................................................... 33
RESEARCH QUESTIONS ....................................................................................................... 36
DATA AND METHODS ......................................................................................................... 36
  Data Source ...................................................................................................................... 36
  Sampling and Unit of Analysis ......................................................................................... 37
  Dependent Variables ....................................................................................................... 39
  Independent Variables ..................................................................................................... 40
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANALYTICAL APPROACH</td>
<td>43</td>
</tr>
<tr>
<td>ANALYSIS AND RESULTS</td>
<td>44</td>
</tr>
<tr>
<td>Descriptive Statistics</td>
<td>44</td>
</tr>
<tr>
<td>Bi-Variate Analysis</td>
<td>48</td>
</tr>
<tr>
<td>Linear Regression</td>
<td>51</td>
</tr>
<tr>
<td>Logistic Regression</td>
<td>55</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>56</td>
</tr>
<tr>
<td>Limitations</td>
<td>61</td>
</tr>
<tr>
<td>Future Research</td>
<td>64</td>
</tr>
<tr>
<td>REFLECTION ON INTERNSHIP</td>
<td>65</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>72</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>77</td>
</tr>
</tbody>
</table>
ABSTRACT

This study follows the criminology of place methodology by utilizing two different spatial theories of crime—social disorganization theory and routine activities theory. Using crime incident data for 2014 from two different law enforcement agencies in New Hanover County, NC combined with social, demographic, economic, and opportunity measures taken from various sources, this study examines the geographical location of crime incidents to establish an association between crime and place at the census block group level. Included in the incident data were gang related incidents, which will also be examined for the same purpose. The results of the study yielded that majority of the gang related incidents were the three selected part II crimes (other assaults, weapons related charges, and drug related charges) and also that when compared to non-gang related crime, are more violent. Using OLS regression to measure social disorganization and routine activities measures, the census block groups that suffer from neighborhood deterioration and a lack of stability (home foreclosures and vacant homes) along with a lower economic status (lower median household income, more people on government assistance, and more rented homes) have higher crime rates. Census block groups with a higher number of public facilities also had higher crime rates. Findings from the linear regression models illustrated that heterogeneity percent, economic measures, and public facilities had significant explanatory power in predicting the occurrence of gang incidents in the block groups. Several recommendations to improve the current research as well as broaden its scope and reach are provided.
ACKNOWLEDGEMENTS

First and foremost I could not have completed this without the love and support from my wife and family. When this Master’s Degree endeavor started, we were not yet married and you had to endure many long hours without me while I was locked away in my office and had to put up with my stress and frustration, and even plan a wedding in the middle of it. You provided me with the love and support that I needed to keep going and complete the task. This endeavor took me three semesters longer to complete than anticipated and without the support and enthusiasm from my wife and family, it would have taken me a lot longer.

Thank you to my committee: Christina Lanier, Michael Maume, and Kristen DeVall! At times this project seemed very overwhelming and its direction changed multiple times. I could not have completed this task without Christy’s guidance in multiple office meetings and emails and without Mike’s knowledge in the realm of SPSS and data analysis. Kristen, you were one of the main reasons I decided to further my education with a Master’s Degree. If you hadn’t approached me that one day in the hall while I was an undergrad and told me that you personally felt I would be a good candidate for graduate school, I may have never done it.

I really need to thank all of my professors from my time at UNCW. Every single one of them impacted my life in different ways. A special thanks to Carrie Buist, John Rice, and Randy LaGrange.

Along with my professors, I need to thank my cohort. Even though I was not able to graduate at the same time as the rest of you, we all pushed each other, supported each other, and found a way to prevent each other from going crazy with stress.

Last but not least, I need to thank the New Hanover County Sheriff’s Office. If it wasn’t for them affording me the internship opportunity, this project would have not existed.
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Demographic Composition of Wilmington/New Hanover County, NC</td>
<td>34</td>
</tr>
<tr>
<td>2.</td>
<td>Descriptive Statistics for Violent, Property and Select Part II Crime Rates by Census Block Groups</td>
<td>44</td>
</tr>
<tr>
<td>3.</td>
<td>Distribution of Gang-Related Incidents Compared to Non-Gang Related Incidents for Violent, Property and Select Part II Crime Rates in New Hanover County, 2014</td>
<td>45</td>
</tr>
<tr>
<td>4.</td>
<td>Descriptive Statistics for Social Disorganization Theory Measures</td>
<td>47</td>
</tr>
<tr>
<td>5.</td>
<td>Descriptive Statistics for Routine Activities Theory Measure</td>
<td>47</td>
</tr>
<tr>
<td>6.</td>
<td>Bivariate Correlation Matrix</td>
<td>49</td>
</tr>
<tr>
<td>7.</td>
<td>Results of OLS Regression Examining Violent, Property and Select Part II Crime Rates and Social Disorganization Theory</td>
<td>53</td>
</tr>
<tr>
<td>8.</td>
<td>Results of OLS Regression Examining Violent, Property and Select Part II Crime Rates and Routine Activities Theory</td>
<td>54</td>
</tr>
<tr>
<td>9.</td>
<td>Results of Logistic Regression Examining Gang Crime Incidents by Block Groups and Social Disorganization Theory and Routine Activities Theory</td>
<td>56</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>New Hanover County, NC</td>
<td>77</td>
</tr>
<tr>
<td>2.</td>
<td>Gang Related Incidents Map by Census Block Groups</td>
<td>78</td>
</tr>
<tr>
<td>3.</td>
<td>Parental Notification Letter of Gang Involvement</td>
<td>79</td>
</tr>
<tr>
<td>4.</td>
<td>Gang Related Activity</td>
<td>80</td>
</tr>
</tbody>
</table>
INTRODUCTION

Gangs and the types of crimes that they commit have been a topic of interest for researchers and social scientists throughout the history of gangs in the U.S. Previous research has identified multiple conditions and factors that lead or induce a person to join a gang. Some examples are that gangs form due to the rigidity or flexibility of their surrounding environment, difficult life conditions, a need to protect loved ones, due to a lack of institutional resources and/or the decaying urban environment. In addition, there are a number of risk factors associated with gang membership, gang activity, and gang involvement found at the neighborhood, family, school, peer group, and individual levels. In the pages to follow, the literature review will examine how gangs and gang membership have disproportionately contributed to the levels of crime in society and how gang membership creates an environment in which members are more likely to be involved in higher rates of delinquency as well as more violent crimes.

The present study uses a theoretical mixing of environmental criminology, also known as crime-event criminology, and social disorganization to analyze the place, or environment, where crimes, generally, and gang crimes, more specifically, occur in New Hanover County, North Carolina. Even though the current study will not be incorporating a model of theoretical integration, both routine activities theory, falling under environmental criminology, and social disorganization theory are spatial theories of crime, which stress the importance of geographic location and crime. These two theories are utilized to examine measures that influence crime rates and gang related crime incidents at the census block group level. Using crime incidents from the New Hanover County Sheriff’s Office and Wilmington Police Department for 2014, along with social disorganization and routine activities measures from various sources, the current study addresses the following research questions revolving around the criminology of
place: What types of crimes do gangs in New Hanover County commit?; 2) What is the relationship between social disorganization theory/routine activities theory and the overall crime rates in New Hanover County?; and what factors of social disorganization theory/routine activities theory influence the occurrence or non-occurrence of gang crime in specific block groups? Following Weisburd et al. (2012), elements consistent with the Criminology of Place guide the overall theoretical framework of the study and the literature reviewed. Both linear regression and logistic regression were utilized to answer the five research questions, and to give a better understanding of how these measures contribute to gang crime in New Hanover County.

**LITERATURE REVIEW**

*Defining Gang & Demographic Profile of Gang Members*

In order to fully research, study, and understand any phenomenon it is important to first define it, which involves selecting a definition that is understood and applied. Decker and Curry (2008) write about a debate that currently exists in the research on gangs: how to operationalize a formal definition of what constitutes a gang. The main controversy on defining a gang is whether or not the definition should include delinquent or criminal behavior as part of the collective action of a gang. Decker and Curry (2008) postulate that on one side of the argument researchers maintain that the relationship between gangs and delinquency becomes redundant when the definition requires this relationship; on the other side of the argument, the exclusion of delinquency from the definition disrupts the ability to fully explain why gangs are unique and a phenomenon to be studied.

Klein (1991) stated that, during the 1960s, gangs were considered to be generic, that is they looked alike and members acted alike—“There was little pressure to attend carefully to
issues of definition…what is a gang, when is a group not a gang, what constitutes gang membership or different levels of gang membership?” (p. ii). For a few decades, U.S. researchers have debated over a formal definition for “gang.” To date, there is currently no consensus on a formal and universal gang definition in the U.S. “Precise definitions elude us because so many interested parties (e.g., academics, policy makers, media, politicians) utilize different definitions which lead to distorted media and public officials’ views of gangs” (Wood & Alleyne, 2009, p. 101). Most states have adopted their own definition of a gang which follows many of the same guidelines as North Carolina’s definition.

The North Carolina Gang Investigators Association defines a gang as a group or association of three or more persons who may have a common identifying sign, symbol, or name and who individually or collectively engage in, or have engaged in, criminal activity which creates an atmosphere of fear and intimidation (NC Governor’s Crime Commission, 2008).

The importance of the definition utilized is evident given the findings of research examining “at-risk” youth and gang members. Wood and Alleyne (2008) state that when gangs are defined as engaging in criminal activity, research has found that a youth’s level of delinquency increases dramatically during gang membership and then decreases when they leave the gang, if such a situation arises, or before the member is killed or incarcerated. At-risk youth are defined separately from youth gangs and research has also shown that “gang members are twenty times more likely than at-risk youth to participate in a drive-by shooting, ten times more likely to commit a homicide, eight times more likely to commit a robbery, and three times more likely to commit assault in public” (Wood & Alleyne, 2008, p. 101).

During the urban industrial development in the latter part of the 19th century, large cities in the United States had a large influx of European immigrants. By the late 1800s, youth gangs mostly comprised of second generation Italians and Irish immigrants that began emerging in
New York, Philadelphia, Boston, Chicago, St. Louis, and Pittsburgh. These gangs were mostly involved in petty forms of property crime and conflict with members of rival gangs. The youth in these gangs were regarded as representing the lowest levels of the economic strata in their communities. During the latter part of the 19th century and through 1920s researchers noted an apparent decline in gang activity. This rise and decline in gang activity was the first recorded change by researchers (Decker and Curry, 2008).

Historically, the United States has encountered cyclical gang patterns. After the recognition of gangs in the latter part of the 19th century, the U.S. seemed to have a prominent gang problem in the 1950s and 1960s that seemed to lessen by the 1980s. Shortly after this decline, the pattern seemed to have started over with yet another increase in gangs and gang activity (Esbensen, 2010; Taylor et al., 2008). In examining prior releases of the National Youth Gang Survey (NYGS), these cyclical patterns are apparent. The number of gangs and gang members seemed to be on a constant rise until around 1996, where they seemed to peak and then start dropping again. The latest NYGS, in 2012, reports that the number of gang members were back on the rise and, at the time, equal to the peak 1996 numbers. According to Decker and Curry (2008), the post- World War II gangs differed from the gangs of the late 19th and early 20th centuries. For the first time, large numbers of African American, Puerto Rican, and Mexican-American youths were involved in gangs. The latest wave of gang activity emerged in the early 1990s and the United States experienced a period of “gang hysteria” (Esbensen, 2010, p. 70-71). Decker and Curry (2008) maintain that beginning in the 1980s, “gang problems were recognized in only a few large cities, but by the end of the decade, gangs taking on the symbols and names of the Blood and Crip ‘nations’ from Los Angeles and the People and Folk ‘nations’ from Chicago were appearing in large and medium sized cities across the nation” (n.p.). The growth
and spreading of gangs, not just in large cities, aided in bringing the study of gangs to the academic research forefront. The increased interest in gangs was supported by the fact that gang violence was indeed increasing during this time. Esbensen (2010) states that gang motivated homicides in Chicago increased from 51 to 240 between 1987 and 1994; from 387 to 803 in Los Angeles County between 1987 and 1992. There was also emerging evidence that girls were more active in gangs than generally believed and there was also an emergence of gangs in rural and non-urban communities during the 1990s (p. 70). It is important to note that the “gang hysteria” was mainly focused in urban areas with a large disadvantaged minority population.

Both Greene and Pranis (2007) and Esbensen (2010) argue that law enforcement data can only measure the strength of gang prevalence and gang populations in accordance with current police records and that data are hindered by this limitation. Law enforcement accounts of gang size and population are based off of local estimates that can “fluctuate from year to year based on shifting definitions of gang activity and changes in the capacity to track it” (Greene & Pranis, 2007, p. 33). Law enforcement accounts can also vary from year to year depending on the current policies, the societal response to alleged behavior, and political influence to control gang activity (Greene & Pranis, 2007; Esbensen, 2010). Gang initiatives and gang task forces are constantly being created and changed and have a huge impact on law enforcement accounts of gangs. These sharp year-to-year changes in local gang population estimates are “excellent fodder for sensational media reports but say little about the severity of a local gang problem” (Greene & Pranis, 2007, p. 34).

Greene and Pranis (2007) conclude that today, the primary source of law enforcement reports on the prevalence of gang problems is based on the NYGS. The NYGS is an annual survey of law enforcement agencies that has been conducted since 1996. The NYGS is based on
a nationally representative sample of more than 2,500 law enforcement agencies that serve suburban counties and cities with 50,000 or more residents, along with a random sample of police departments that serve small cities and rural counties (Greene & Pranis, 2007). The NYGS combines data from participating jurisdictions to create national estimates of gang prevalence. Despite the flaws associated with a national sample of law enforcement records, NYGS data serve the purpose of providing a “general picture of the scope and direction of the gang problem as it is perceived by law enforcement” (Greene & Pranis, 2007, p. 34). In 1996, the first year of reporting, the NYGS reported an estimate of 850,000 gang members and 30,800 gangs in the United States. In 2001 the NYGS reported 693,500 gang members and 23,500 gangs, which was the lowest recorded number of gang members to date. Interestingly, 2003 showed the lowest reported number of gangs at 20,100. Since 1996, the number of gang members and the number of gangs has fluctuated but has not exceeded the 1996 numbers. The latest publication of the NYGS (2012) estimated the number of gang members to be 850,000 and the number of gangs to be 30,700. These estimates are almost an exact match to the 1996 report. In response to gangs over the past decade and a half there has been a huge growth of federal, state, and local efforts to control gangs through various legislative actions (National Gang Center). The data presented by the NYGS shows that gang membership numbers have not changed much, regardless of the actions and policies put in place by legislators and the criminal justice system.

The most recent data from the NYGS (2012) reported the demographics of gang members according to age, age by area type, gender of gang members, gangs with female members, race/ethnicity of gang members, and race/ethnicity of gang members by area type. In 1996, the NYGS estimated that gangs were split 50/50 in terms of age—juveniles under 18 and
adults 18 and over. However, in 2011, the NYGS estimated that the age of gang members were approximately 35% juveniles and 65% adults. Examining age of members by geographic area revealed that with the exception of rural counties, adults made up a higher percentage of gang members than juveniles. Looking at gender, the NYGS reported that females made up less than 10% of the total number of gang members from 1998-2010 and Rural counties were found to have the highest percentage of gangs with females (49.5%), while large cities had the lowest percentage (22.8%). Lastly, race and ethnicity of gang members is reported in the NYGS.

Overall, the distribution of gang members by race/ethnicity has remained relatively stable across time. Specifically, the data show that the greatest percentage of gang members were reported to be Hispanic or Latino, followed by Black or African-American, White, and Other. The data for 2011 reports that Hispanic or Latinos made up 46.2% of all gang members in jurisdictions “reporting a gang problem.” This same report found Hispanic or Latinos to be most prevalent in smaller cities, whereas Black or African America gang members made up 56.8% of members in rural counties (National Gang Center). The NYGS report makes a note that the results should be interpreted cautiously due to a large amount of missing data that some agencies do not measure or report.

In comparison to the NYGS, Esbensen and Winfree (1998) examined gang affiliation in a multisite survey of 5,935 eighth grade students in 42 schools located in 11 cities across the United States. This youth survey, which came from a diverse sample, was utilized to examine the demographic composition of gangs and to measure the level of delinquent activity among gang members compared to non-gang members. They examined gender and race/ethnicity differences among gang members; as well as delinquency rates. Esbensen and Winfree (2008) found that 24% of gang youths were white; 31% African-American; 25% Hispanic; and 19%
were some other race/ethnicity. Esbensen (2010) stated that the findings illustrated that “white youth are about one-half as likely as youth from other racial or ethnic backgrounds to report current gang membership…[and] gang affiliated youths look remarkably similar to the youths in their particular community” (p. 80).

Various methodological approaches have been used in studying the gang phenomenon, much like Esbensen and Winfree (2008), who surveyed the general population rather than focusing on law enforcement perceptions and records. Findings from such population based studies differ from the findings of the NYGS and others that utilize law enforcement and other government agencies as their sample. Surveys that utilizes samples from the general population, like Esbensen and Winfree’s youth survey, take a more micro approach to try and examine differences in gangs and gang membership. Studies, like the NYGS, that utilizes these official agencies generally use a national sample and can only portray the perceptions of the agencies selected. Both methods are valid and reliable and help researchers gain a deeper understanding of the gang phenomenon.

Why Youth May Join a Gang

According to Barkan and Snowden (2008), the conditions that lead or induce a person to join a gang are: changes in the political system of a country; the rigidity or flexibility of the society (rigidity makes life stressful for people); a need to protect loved ones; and/or difficult life conditions, such as job loss, that result in high levels of frustration and threat. Street gangs join together for various reasons, such as to protect themselves from feared neighborhood members, in response to a competing gang in their area, lack of institutional resources and the decaying urban environment, and/or neglectful parents.
A number of risk factors are associated with gang membership, gang activity, and gang involvement, but there is no single factor or set of factors than can be used to successfully predict which youth will, or will not, become gang members. Hill, Lui, & Hawkins (2004) used data from The Seattle Social Development Project (SSDP)—a longitudinal study that tracked 5th grade students beginning in 1985 at 18 Seattle, Washington public schools that serve high-crime neighborhoods—to outline childhood risk factors that predict joining and remaining in a gang. The risk factors associated with gang membership were found at the neighborhood, family, school, peer group, and individual levels. Risk factors in the neighborhood were related to the availability of drugs, youth in trouble, and low neighborhood attachment. In the realm of family, family structure, a child’s bond with parents, and low household income were relevant risk factors. The primary risk factor in the peer group was the association with friends who engage in problem behavior. Finally, at the individual level, early violence and substance use, externalizing behaviors and antisocial beliefs were primary risk factors. SSDP findings “suggest that youth join a gang as a result of antisocial influences in neighborhoods, antisocial tendencies in families and peers, failure to perform well in school, and early initiation of individual problem behaviors” (Hill et al., 2004, p. 195).

In terms of gang membership duration, Hill et al. (2004) found that youth who were the most behaviorally and socially maladjusted in childhood were most likely to be gang members for several years. Moreover, youth who exhibited early signs of violent and externalizing behavior, including those who associated with antisocial peers, were more than twice as likely to remain in a gang for more than one year (Hill et al., 2004). The authors hypothesize that the more risk factors a youth experienced, the more likely s/he is to join a gang. The SSDP study divided the participants into four separate groups based on the number of risk factors (none, low,
medium, and high) for gang membership and found that compared with no-risk youth, low-risk youth were 3 times more likely to join a gang, medium-risk youth were 5 times more likely, and high-risk were 13 times more likely to join.

In Thornberry’s (2001) analysis of the Rochester Youth Survey and the Seattle Social Development Project, he noted that gang membership is strongly associated with problems across multiple domains. Thornberry found that the variables that most strongly correlated with gang membership include negative life events, externalizing behaviors, positive values about drugs, association with delinquent peers, and low school attachment and commitment. Generally, youth that become involved and attached to gang activity perform poorly in elementary school and tend to have low commitment to and involvement in school; these youth also display weak attachment to their teachers. Howell (2010) points out that future gang members often come from schools with greater levels of student victimization, poor student-teacher relations, and a system of punishment that students did not accept well and that these poorly functioning schools often had “high rates of social sanctions (suspensions, expulsions, referrals to juvenile court)” (p. 7). “Nearly 8 of 10 gang-involved youth referred to juvenile court in Durham, NC, had been suspended, truant, expelled, or otherwise disconnected from school” (Howell, 2010, p. 7). Community risk factors (e.g., availability of drugs and neighborhood integration) that inhibit gang membership are associated with neighborhoods that are ecologically clustered “hot-spots” with high-crime and economically disadvantaged members. These neighborhoods generally have low levels of attachment and lack the formal and informal institutions for involvement, commitment, and belief in the norms of a socially accepted community. Schools, churches, and other community agencies and institutions do not provide
adequate gang prevention and intervention services; thus, “collective efficacy may be lacking” (Howell, 2010, p. 8).

Howell (2010) notes that gangs have the possibility of forming by marginalized children in extreme community conditions where youth are alienated from key socializing institutions, especially families and schools, and who find it difficult to adjust socially and culturally to the American way of life. When youth are deprived of important socializing institutions, they lose attachment to formal sanctions and generally find gangs appealing. Howell (2010) hypothesizes that most youths who join a gang want to actually belong to a gang affiliated with their neighborhood or community boundaries. These gangs are “at the center of appealing social action—parties, hanging out, music, drugs, and opportunities to socialize with members of the opposite sex” (p. 4). When family, school, and the community fail to provide the support, education, and social networks for youth, they lose attachment, commitment, involvement, and belief associated with formal and informal institutions and find these elements elsewhere, like a gang that meets their social needs. “Gang membership is not a product of several specific risk factors, but the result of the accumulation of many varied kinds of risk factors” (Howell, 2010, p. 8).

In sum, youth may join a gang for a number of reasons. Some of these reasons may be due to community, family, school, peers, or individual related risk factors, or it may be a combination of several different risk factors. Prior research has shown that once a person makes the decision to join a gang, they are more likely to be involved in crime and also participate in more violent crime.
Scholars have consistently noted the disproportionate contribution that gang members make to the level of crime in society and have found that gang members, as compared to non-gang members, are more involved in delinquency and at higher rates (Battin-Pearson, Hill, Abbott, Catalano, & Hawkins, 1998; Curry, Decker, & Egley, 2002; Melde & Esbensen, 2013; Thornberry, Krohn, Lizotte, Smith, & Tobin, 2003). Thornberry et al. (2003) posit that these findings have “been made across time, geographical and national boundaries, and methods of data collection” and illustrate that gang members are involved in multiple forms of delinquency (p. 1). Thornberry et al. (2003) cites several observational studies (Spergel, 1964; Miller, 1966; Klein, 1971; Moore, 1978; Horowitz, 1983; Vigil, 1988; Taylor, 1990; Decker and Van Winkle, 1996; and Hagedorn, 1998); studies that rely on official data to compare gang and non-gang members (Cohen, 1969; Huff, 1996; Klein et al., 1986; Klein & Maxson, 1989); and survey research studies (Short & Strodtbeck, 1965; Tracy, 1979; Fagan et al., 1989,1990; Huff, 1996; and Esbensen & Winfree, 1998) that have found a strong association between gang membership and delinquent activity.

Thornberry et al. (2003) utilized the Rochester Youth Development Study, a longitudinal investigation of antisocial behavior in Rochester, New York, to examine the variety of criminal behaviors related to gang activity—delinquency, violence, drug use, drug selling, and gun carrying and use. Thornberry et al. (2003) found, in terms of general delinquency—which includes 32 non-overlapping items covering a range of delinquent behaviors from status offenses, vandalism, and minor property crimes to serious violent and property crimes—98.1% of the male gang members are involved compared to 68.4% of male non-gang members. With regards to violent delinquency, which covers six items including attacking someone with a
Thornberry et al. (2003) found that 90.6% of the male gang members reported some involvement as compared with 46.4% of male non-gang members; and 39.5% of male gang members reported involvement in drug sales compared to 9.5% of male non-gang members. Thornberry et al. (2003) also found similar results in relation to female gang members when compared to female non-gang members. When examining official statistics, such as arrests, Thornberry et al. (2003) found that both male and female gang members are significantly more likely to be arrested than male and female non-gang members.

Prior research has found that both prior delinquency and association with peers who engage in delinquency are two of the strongest and most consistent predictors of delinquent and violent behavior. Even though studies have compared delinquent youth to non-delinquent youth and gang members to non-gang members separately, Battin-Pearson et al. (1998) argued that, at the time of their study, no other research examined the simultaneous effects of gang membership and delinquent peers on subsequent delinquency. The authors were interested in examining the extent to which gang membership contributed to delinquency above and beyond having delinquent friends. Battin-Pearson et al. (1998) utilized the Seattle Social Development Project to distinguish between three different groups for comparison: 1) self-reported gang members; 2) individuals involved with delinquent peers but who were not gang members; and 3) individuals who were not in a gang and had few or no delinquent friends. Their findings revealed a “consistent pattern across all violent, nonviolent, and general delinquency measures, as well as the majority of substance use measures” (p. 101). As expected, youths without delinquent friends ranked the lowest; youths with delinquent friends were higher; and gang members were highest on all measures of delinquency and substance use (Battin-Pearson et al., 1998). Even though individuals involved with delinquent peers had higher rates of offending than those
individuals without delinquent peers, gang membership appeared to further intensify “participation in self-reported violent crimes, general delinquency, drug selling, and alcohol use” (pg. 104). Battin-Pearson et al. (1998) also found that “gang membership also predicted general delinquency above and beyond prior delinquency, indicating that gang membership significantly and uniquely contributed to delinquency, regardless of associations with delinquent peers or prior delinquency” (p. 106). The authors state that even though gang membership appeared to intensify violent and general delinquency acts, “significant differences between gang members and youths with delinquent friends were not obtained for nonviolent crimes, such as minor theft and other property crimes” (p. 107). These findings would suggest that gang membership and the gang lifestyle not only increases the likelihood that youth will be involved in delinquency, but also that youth will be involved in more violent types of crime.

Battin-Pearson et al. (1998) give three possible explanations as to why gang membership may contribute to delinquency beyond the influence of delinquent peers: 1) social selection; 2) gang norms and group processes; and 3) a combination of the two. In citing Glueck and Glueck (1950) and Gottfredson and Hirschi’s (1990) idea of social selection, Battin-Pearson et al. (1998) state that gangs may recruit “individuals who are predisposed to aggressive and acting-out behavior and, in turn, delinquency and violence” (p. 107). Since the gang becomes comprised of youth already predisposed of delinquent tendencies, the gang itself is more delinquent. Using Thornberry et al.’s (1993) facilitation model, Battin-Pearson et al. (1998) suggest that the norms and the group processes within the gang create an atmosphere in which gang members are more likely to be involved in violence and delinquency. Finally, Battin-Pearson et al. (1998) cite Cairns and Cairns (1991), Esbensen and Huizinga (1993), and Hill et al.’s (1996) enhancement model, which combines social selection and group norms and processes. The youths who exhibit
favorable aggressive behaviors are both recruited and join a gang with similar norms. Once in
the gang, the group processes and norms favorable to violence and delinquency encourage and
reinforce the behavior.

To support the notion made above that gang membership and the gang lifestyle not only
increases the likelihood that youth will be involved in delinquency, but also that youth will be
involved in more violent types of crime, Melde and Esbensen (2013) conducted a study to
determine whether gang membership provides a unique social forum for violence amplification.
The authors posit that even though prior studies of gangs and their members suggest that the
frequency of offending is higher than those of similar non-gang peers and that the level of
violence associated with gangs is also more severe, prior methodological limitations have
hindered the ability of researchers to fully grasp how gangs influence the behavior of its
members. As Thornberry et al. (2003) stated, “Although we know that gang members are
heavily involved in delinquency, especially serious and violent delinquency, we know much less
about the extent to which gang membership plays a causal role in eliciting this behavior” (p. 3).

The study conducted by Melde and Esbensen (2013) utilized five waves of panel data
from over 3,700 youth ages nine to 18 across 31 schools. The longitudinal data were used to aid
Melde and Esbensen (2013) in determining the extent to which gang membership increases the
odds of violent offending by differentiating patterns of criminal behavior for youth before,
during, and after gang involvement. In their findings, Melde and Esbensen (2013) report
substantial, but similar, increases in both violent and property offending for youth who go from
non-gang members to gang members, “suggesting that gangs do not specialize in violence to the
exclusion of other types of offending” (p. 156). Following the findings of prior studies, Melde
and Esbensen (2013) found that gang membership was highly associated with an increase in
overall delinquency propensity, but unlike other studies, they found that after youth reported leaving the gang, their levels of delinquency dropped but remained higher than non-gang youth. In terms of violence, the authors found that when youth are involved in gangs, their odds of violent offending increase. They state that “periods of self-reported gang membership are associated with a 21% increase in the violent-to-non-violent offense ration…as youth leave the gang their ratio of violent to non-violent behavior is no different than non-gang youth” (p. 158). Melde and Esbensen (2013) suggest that by being in a gang, a situational context occurs in which there is an increased risk of violent offending, above and beyond the non-gang member’s propensity for violence. Their analysis implies that joining a gang is “associated with a greater increase in violent offending than in general delinquency, suggesting that the gang milieu does more than simply provide an environment supportive of illegal activity” (Melde & Esbensen, 2010, p. 160).

Thus far, the literature review has focused more on the micro perspective in order to give the reader a general understanding of how gangs are defined, what their members look like, why individuals may join a gang, and also their involvement in crime. From this point forward, this study takes a step back from the individual gang members and analyzes the types and locations of crime generally, and gang crime more specifically, in New Hanover County, NC.

THEORETICAL ANALYSIS

The traditional questions regarding crime are usually based around the individual criminals and the crimes that they commit. Scholars in criminology and criminal justice have repeatedly asked questions that tend to assume that the key components of crime is the individual and that there is a “loose coupling” between the criminal, the crime, and the situational factors
surrounding the crime (Weisburd, Groff, & Yang, 2012, pg. 9). Weisburd et al. (2012) state that “loose coupling” refers to the traditional criminologists assumption that “situational factors played a relatively minor role in explaining crime as compared with the ‘driving force of criminal dispositions’” (pgs. 9-10). The current study examined the places where crime occurred instead of focusing on the individual and the crime committed. Similar to Weisburd et al. (2012), the current study does not downplay the traditional concern with criminals, but rather tries to “raise the possibilities of what we can achieve by reorienting our approach to the crime problem so that place takes a central role” (p. 5).

The term criminology of place was coined by Lawrence Sherman, Patrick Gartin, and Michael Buerger (1989) who examined crime incidents at the street address and intersection level, in Minneapolis, between December 15, 1985 and December 15, 1986. Their study examined small geographic areas for their contribution to the crime problem. The criminology of place was inspired by Cohen and Felson’s Routine Activities Theory as well as by Environmental Criminology—which includes: Routine Activities; Opportunity Theory; Rational Choice Theory; Social Disorganization; Broken Windows Theory; Situational Crime Prevention and Defensible Space (Weisburd et al., 2012; Wilcox and Gialopsos, 2015). Weisburd et al. (2012) portrayed the importance of routine activities, and crime opportunities more generally, to the generation of crime and also found that social and structural factors “that are more often associated with community-based theories of crime are also important factors in understanding crime trends at micro places” (p. 13). The present study uses a theoretical mixing of Environmental Criminology, also known as Crime-Event Criminology, and Social Disorganization to analyze crime generally and gang crime more specifically in New Hanover County, North Carolina.
Environmental Criminology

Environmental criminology, also known as crime-event criminology, focuses on the spatial and temporal distribution of crime events, positing that certain places are more attractive to crime (Wilcox & Gialopsos, 2015; Felson and Boba, 2010; Lersch, 2007; Schneider, 2005; Felson, 2002; Cullen and Agnew, 1999; Brantingham & Brantingham, 1998; 1981; Jeffery, 1977; 1971; Newman, 1972). Methodologically, by recognizing the importance of physical place, environmental criminology involves systematically identifying geographic patterns with respect to crime and the external factors which contribute to that crime (Lersch, 2007; Hagan, 1997; Brantingham & Brantingham, 1981).

In the United States, the origins of crime-event criminology can be traced to the Chicago School, which is well known for specializing in urban sociology, and later, criminology. According to Weisburd et al. (2012), the Chicago School began taking a leadership role in the development of geographic criminology during the 1930s. Even though geographic mapping of crime was not a new phenomenon in other places around the world, especially in Europe, the Chicago School’s geographic criminology made a radical breakthrough by focusing on neighborhoods or communities rather than much larger administrative areas. From the Chicago School, a group of American sociologists, among them Robert Park, William Thomas, Louis Wirth, Ernest Burgess, Clifford Shaw, and Henry McKay, took the lead in bringing crime-event criminology to the forefront of criminological research. Robert Park was the initiator of urban social research on crime places who, unlike the European scholars, shifted the unit of analysis from countries and large areas to cities and their neighborhoods (Weisburd et al., 2012).

Robert Park’s colleague, Ernest Burgess, developed a concentric-zone model of the distribution of social problems and crime in various Chicago neighborhoods. Within Burgess’
concentric-zone model are five concentric zones: I) the loop; II) the zone in transition; III) the zone of workingmen’s homes; IV) the residential zone; and V) the commuter zone. Burgess theorized that depending on the distance to the center, the levels of crime would vary—higher crime being in the center and dispersing as you move away from the center. From Burgess’s concentric zone model, Clifford Shaw and Henry McKay began producing empirical research on the geographical distribution of crime (Weisburd et al., 2012). By systematically mapping areas of Chicago, Shaw and McKay developed a zonal model which was able to display the prevalent distinctions of different areas, specifically the socioeconomic status and land use. Delinquency rates were correlated with social problems, indicating a positive relationship between crime incidents and poverty, disease, broken homes, and population change (Shaw & McKay, 1942). Shaw and McKay were able to provide empirical evidence to support the association of crime and social factors within their zonal model by following Burgess’ concept. Their analysis depicted juvenile delinquency being the highest in the center core zones and decreasing with each successive zone outward.

The Chicago School was a pioneer in geographic criminology by examining the dynamics of cities and bringing the unit of analysis down to the community and neighborhood level. This research opened up new avenues for other researchers interested in crime and place and the topic started gaining considerable attention and criticism. Along with the growing notion that a motivated offender, the criminal, needs an opportunity to actually commit a crime, crime-event criminology gained considerable attention in the 1970s when crime prevention theories, such as routine activities theory, became prominent (Wilcox & Gialopsos, 2015; Lersch & Hart, 2011; Felson & Boba, 2010; Lersch 2007; Felson, 2002; Brantingham & Brantingham, 1998; Crowe & Zahm, 1994; Jeffery, 1977; 1971; Newman, 1996; 1972).
Lifestyle-Routine Activities

Lifestyle-Routine Activities Theory (L-RAT) is an extension of opportunity theory that, according to McNeely (2015), focuses on how “variations in criminal opportunity affect the occurrence of crime events” (p. 30). Opportunity theory posits that without the opportunity to commit a crime—crime targets which vary in their attractiveness and the presence of capable guardianship—a motivated offender will not commit a crime (Guerette & Santana, 2010). A large part of opportunity theory focuses on how lifestyle and routine activities affect the opportunity for crime. L-RAT focuses on this aspect of opportunity theory and is an integration of routine activities and life-style exposure theories which explains crime events as “the products of day-to-day activities that influence the extent to which opportunities for crime exist” (McNeely, 2015, p. 30). With origins in routine activity explanations for rates of crime, L-RAT includes Cohen and Felson’s (1979) three necessary elements for crime to occur: a motivated offender; a suitable target; and the lack of a capable guardian. These three elements must converge in time and space for crime to be possible.

Along with routine activities theory, L-RAT integrates Hindelang et al.’s (1978) Lifestyle-exposure Theory which, according to McNeely (2015), maintained that there were “differences in victimization rates across demographic groups because of the variations in lifestyles led by individuals of different groups” (p. 32). Hindelang et al. (1978) defined “lifestyle” as “routine daily activities, both vocational activities (e.g., work, school, keeping house) and leisure activities” (p. 241). Hindelang et al. (1978) hypothesize that demographic characteristics such as age, sex, race, marital status, income, education, and occupation are believed to affect lifestyles because they affect role expectations—or behaviors that individuals are expected to engage in—and structural constraints—social factors affecting or limiting choices (McNeely, 2015; Taylor
According to McNeeley (2015) and Taylor et al. (2008), individuals’ lifestyles and daily routines create consistency and potentially expose them to high-risk people and places and bring them into contact with potential motivated offenders when crime is likely to occur. Lifestyles also have the potential to affect the presence or absence of potential guardians, who can prevent crime from occurring. As an integrated theory, L-RAT is a more general explanation of crime/victimization events (McNeeley, 2015).

In their conceptualization of L-RAT, Cohen, Kluegal, and Land (1981) identified five factors that mediate the relationship between demographic characteristics and predatory victimization: exposure; proximity; attractiveness; guardianship; and definitional properties of crimes themselves. Exposure refers to persons or objects that are more visible or accessible to motivated offenders. Exposure can be measured by utilizing demographics to explain how those with similar characteristics to motivated offenders are at a greater risk of victimization and also by public activities—activities that take individuals away from their homes, creating more opportunities for victimization (McNeeley, 2015). Proximity refers to the physical space or location of potential targets. In citing Cohen et al. (1981), McNeeley (2015) stated that, all else being equal, “those who were closer in distance to large populations of motivated offenders were more likely to be victimized” (p. 33). Attractiveness refers to target congruence—which McNeeley (2015) states is the “extent to which individuals’ characteristics match up with offenders’ needs, motives, or reactivities” (p. 34). In accordance with Routine Activities Theory, attractiveness can be related to the suitability of targets. By having a larger number of suitable targets in one area, the potential for higher crime rates is present (Weisburd et al., 2012). The attractiveness or suitability of an area can be measured by examining the flow of people in and out of that area, the businesses in that area, the residential population, and the accessibility in and
out of an area. Guardianship, especially the absence of capable guardians can create opportunities in which a motivated offender is attracted to a suitable target. Lastly, the definitional properties of crime refers to the fact that crime opportunity and the preceding four factors can vary by the type of crime (Cohen et al., 1981, McNeeley, 2015). The indicators of opportunity are important for the actual commission of a crime and these indicators can vary depending on the type of crime. Cohen et al. (1981) conclude that the definitional properties of specific crimes may help explain why some of the key demographic correlates of victimization show different relationships between crimes against property and crimes against persons.

McNeeley (2015) hypothesizes that an individual’s or a group’s lifestyle affects the motivation and opportunity to offend. “Because a great deal of crime events involve co-offenders, the process through which co-offenders find each other is important” (McNeeley, 2015, p. 36). This concept is important to consider when studying gangs and the types of crimes that gangs participate in. Gang members can be considered co-offenders and gangs usually have a defined territory in which they operate. Thus, it is important to examine “certain locations as convergent spaces, or places where potential co-offenders meet, sometimes committing offenses together in that location or planning future offenses there” (McNeeley, 2015, p. 36). McNeeley (2015) cites Bernburg and Thorlindsson’s 2001 study stating that “the presence of deviant peers increases delinquency through the perception of criminal activities and subsequent identification of criminal opportunity…[and] unstructured interaction with peers was related to both violent and property offending” (pgs. 36-37).

In their research, Melde & Esbensen (2013) found that the gang lifestyle affects routine activity patterns and the nature of public interactions among gang members which in turn, increases their exposure to high-risk situations. “[I]f gang membership changes routine activities
and the perceived meaning of social exchanges, the opportunity structure for violent crime, in particular, is likely enhanced as youth become gang involved” (Melde & Esbensen, 2013, p. 146). Gangs and gang membership provide a unique context in which to study the relationship between lifestyles and routine activities (L-RAT), specifically, gang members’ increased involvement in activities representing delinquent lifestyles and daily routines. According to Taylor et al. (2008), gang membership, by definition, involves extensive interactions with delinquent peers. In examining lifestyle choices and routine activities, Curry et al. (2002) found that interaction or association with delinquent peers increases youths’ involvement in delinquent behavior. In a self-report study involving 15-year olds, Battin-Pearson et al. (1998), found that gang members committed twice as many violent acts as non-gang members that had delinquent friends. They also found that gang youth reported committing seven times as many violent acts as the youth who were not gang members and reported not having delinquent friends. Taylor et al. (2008) posit that, as victims of violence, gang members may be viewed as suitable targets lacking capable guardianship, but as motivated offenders, gang members have extensive interactions with other motivated offenders. Gang members also have “[e]xposure and proximity to high-risk situations abound. Involvement in delinquency and violence is more common among gang members than their nongang peers, and a growing body of work has illustrated violent victimization among gang members” (Taylor et al., 2008, p. 1445).

aimed to examine serious violent victimization by examining the mediating effects of lifestyles and routine activities. The analysis revealed that gang membership “retains a statistically significant relationship with serious violent victimization, net other factors” (p. 1451).

Moreover, the study found that two lifestyle and routine activities factors—the availability of drugs and/or alcohol and involvement in delinquent activities—were significantly associated with higher rates of serious violent victimization. This study is useful in illustrating how an individual’s lifestyle and daily routine activities, especially when they involve other delinquent youth, can influence one’s own delinquency as well as increase the chances of victimization.

Since the conception of Routine Activities Theory, the physical space or place in which a crime occurs has been an important factor; as it was stated before, the three elements of routine activities must converge in time and space for a crime to occur. As demonstrated by the Chicago School and other scholars who have followed in the crime-event perspective, the characteristics of place may be particularly important in generating opportunities for crime events and in understanding crime-clustering and hot-spot areas (McNeeley, 2015). Longitudinal work by Weisburd et al. (2012) demonstrated stability in crime patterns and crime concentration across street segments in Seattle. They found that crime remained stable across certain streets and that decreases in crime were largely accounted for by improvements in some high-crime street segments (Weisburd et al., 2012; McNeeley, 2015). Their study reinforced the crime-event notion that “crime is not randomly spatially distributed, but rather is concentrated in certain communities and micro-places” (McNeeley, 2015, p. 38).
Social Disorganization

According to Weisburd et al. (2012), William Thomas, from the Chicago School, contributed to the work of crime-event criminology by introducing the concept of Social Disorganization; defining it as a "decrease of the influence of existing social rules of behavior upon individual members of the group" (p. 33). Following in Thomas’s footsteps and in their utilization of Ernest Burgess’s concentric-zone model to map crime in Chicago, Clifford Shaw and Henry McKay aided in the formulation of social disorganization theory. Shaw and McKay (1942) discovered that rates of crime were not evenly distributed across time and space and seemed to be concentrated in certain areas of the city. These observations led them to the conclusion that it was not the residential neighborhood itself, or the individuals inside the neighborhood, that caused crime but rather crime existed in certain neighborhoods, especially neighborhoods marked with social disorganization. Shaw and McKay (1942) identified the physical status of a location, economic status of its residents, and the composition of the population as being three key elements to areas subjected to high crime rates. The stability of an area drastically decreases when there are signs of high physical disorder, residents of low income—that are likely to be impoverished, immigrants, ethnic minorities, and a transient population. “Social disorganization refers to the inability of a community structure to realize the common values of its residents and maintain effective social controls” (Sampson and Grove, 1989, p. 777). Social disorganization theory states that crime will be prevalent in an area that is unable to provide the necessary controls and measures to support the people within.

Influenced by the Chicago School, Frederic Thrasher’s (1927) The Gang: A Study of 1,313 Gangs in Chicago is one of the founding texts in the study of gang life. Throughout the gang literature, Thrasher (1927) appears to be one of the most highly cited gang researchers and
as Monti (1994) writes: “Any assessment of what we know and do not know about gangs in this century must begin with Frederic Thrasher” (p. 135). Even though outdated, Thrasher’s (1927) key questions are still being asked by researchers today—What is a gang and who is in it? Where are gangs found? How are gangs organized? In what kind of activities do gangs engage? What is the gang’s relation to the community? And, finally, what is to be done about gangs? Thrasher (1927) conducted his research during a time when Chicago was going through many changes and was experiencing an industrial boom (Dimitriadis, 2006). With this industrial boom came a huge immigrant population that filled the urban areas of Chicago. Dimitriadis (2006) posits that the urban life for immigrants meant new divisions of labor and new modes of association, new kinds of human connections around a wide range of tastes, dispositions, and lifestyles which lead to a breakdown of traditional social orders and social mores. This breakdown of traditional social orders and social mores meant the rise of vice and crime inside the city of Chicago. According to Thrasher (1927), youth gangs formed, mostly by second generation immigrants who were caught between two worlds—their parent’s norms and values that came with them from their country of origin and the influence of the norms and values of the new world. Thrasher (1927) posited that there was a “blind groping for order, without much understanding of the nature of the problems involved or of their difficulties” (p. 488). Thrasher (1927) coined the term “interstitial” sites/spaces, meaning: “spaces that intervene between one thing and another” (p. 22). He continues, “In nature foreign matter tends to collect and cake in every crack, crevice, and cranny—interstices. These are also fissures and breaks in the structure of social organization. The gang may be regarded as an interstitial element in the framework of society…” (p. 22). Thrasher (1927) was referring to the inner city areas where immigrants were trying to assimilate to the American way of life and suffered high levels of social
disorganization. It was here, in these “in-between” areas that gangs formed, where formal institutions had failed to take hold and where levels of social disorganization were high.

Dimitriadis (2006) postulates that Thrasher’s (1927) notions have obviously been criticized since then, but it is important to remember that Thrasher was a man of his time and the historical context of what was occurring in Chicago was the basis for Thrasher’s research. For the study of gangs, the concept of social disorganization is still relevant.

“As the earliest writings of the Chicago School of Criminology, ecological accounts of community organization and disorganization have been associated with crime and the emergence of organized criminal groups, including gangs (e.g., Bursik 1988; Shaw and McKay 1931, 1942; Thrasher 1927)” (Wells and Weisheit, 2001, p. 794). Ecological explanations account for changes that occur in a community that exert pressure on social life. Existing in the realm of ecological explanations exist social stability factors and economic stability factors. Wells and Weisheit (2001) came to the consensus that ecological explanations, which reflect “a homeostatic view of social life that presumes order, consensus, homogeneity, and stability,” generally emphasize the “disruptive causal effects that changes in community conditions exert on the regulation of social life” (p. 794). This point of view creates a multistep cause and effect sequence in which the negative changes occurring in the community lead to gang problems. Wells and Weisheit (2001) posit that “weakening of community organization and loss of social control over young people are the intermediate causes” of gang problems (p. 794). Wells and Weisheit (2001) cite Bursik (1988) and Sampson and Groves (1989) for revising social disorganization theory to give greater emphasis to the intervening events representing social networks and relationships.
According to Sampson and Groves (1989), three main structural factors exist that disrupt social organization. These three factors are low economic status, ethnic heterogeneity, and residential mobility. The structural barriers in impoverished communities harshly impact the “development of formal and informal ties that promote the ability to solve common problems” (p. 777). Sampson and Groves (1989) argue that in addition to the lack of institutional resources, marital and family disruption also decreased informal social controls in these impoverished communities. Kubrin and Weitzer (2003) hypothesize that social control mechanisms are important to social disorganization theory and discuss informal control methods by residents such as monitoring the streets of their neighborhoods and intervening in situations to prevent crime from occurring. Kubrin and Weitzer (2003) state that a community’s level of social organization is constantly changing, and changes in the ecological structure of the neighborhood can influence the social ties of neighborhoods, its social control and the residents’ willingness to work together to prevent crime.

As a derivative of social disorganization theory, Sampson, Raudenbush, & Earls (1997) analyzed collective efficacy and how the social and organizational characteristics of a neighborhood help to explain the variation in crime rates. Sampson et al. (1997) theorize that collective efficacy is defined as the ability of a community to exhibit social control over itself by its exertion of power to self-regulate crime rates with the common neighborhood goal of living in a safe and orderly environment. Sampson and Groves (1989) outlined three main measures of collective efficacy for social organization based on Shaw and McKay’s work: 1) the ability of a community to supervise and control teenage peer groups (gangs), 2) informal local friendship networks, and 3) the rate of participation in formal and voluntary organizations (p. 778-779). Shaw and McKay argued that gangs form out of unsupervised, spontaneous play groups and
those communities with unit cohesion were better able to control the teenage behaviors that could possibly lead to delinquency. Communities that were capable of enacting controls to supervise youth leisure-time and intervene in suspicious activities were more capable of controlling youth delinquency. Informal relationships, such as friendships, are an integral part of creating an organized community that entails citizens caring and looking out for each other. It was also in organized communities that existed formal and voluntary organizations. These social organizations promote community solidarity and created institutional stability (Sampson and Groves, 1989, p. 778-780).

Sampson et al. (1997) found that residential tenure and homeownership are two factors that promote collective efforts of the neighborhood residents to maintain social control. Based upon 847 census tracts, Sampson et al. (1997) created 343 neighborhood clusters by combining similar areas using geographic boundaries. Sampson et al. (1997) found that collective efficacy was negatively correlated with the level of violence perceived by residents, violent victimization of residents, and homicide rates inside the clusters. As correlates of collective efficacy, concentrated disadvantage, residential stability, and immigration concentration (which are also all measures of social organization) accounted for 70 percent of the variation in collective efficacy (Sampson et al., 1997).

Some residents in these socially disorganized communities may have distrust in the formal and informal institutions and also their community members. This is a key principle in social disorganization theory; “the structural dimensions of community disorganization can be measured in terms of the prevalence and interdependence of social networks in a community—both informal (friendship ties) and formal (organizational participation)” (Sampson and Groves, 1989, p. 777).
Theoretical Integration

Both routine activities theory and social disorganization theory are spatial theories of crime, which stress the importance of geographic location and crime. Smith, Frazee, & Davidson (2000) posit that social disorganization theory is used to examine crime that occurs in neighborhoods characterized by low income, ethnic heterogeneity, and residential mobility, and routine activities theory examines crime that occurs in specific locations where motivated offenders come together with suitable crime targets in the absence of capable guardians. According to Smith et al. (2000), numerous researchers have suggested that the integration of social disorganization and routine activities would benefit the state of knowledge surrounding environmental criminology and the criminology of place. The current study utilizes routine activities theory instead of life-style routine activities due to the fact that it does not examine the individual lifestyles of gang members and does not test lifestyle variables. It is important for the reader to understand that L-RAT was examined and explained due to the empirical evidence that shows that the gang lifestyle has a significant effect on violence and delinquency. Smith et al. (2000) maintain that individual predisposition interacts with context such that decisions to commit crime are made. “The fundamental hypothesis is that the effects of individual characteristics change as a function of neighborhood characteristics” (Smith et al., 2000, p. 491). As with individual characteristics, it is argued that group characteristics in a gang also change as a function of neighborhood or community characteristics. The application of L-RAT should be taken into consideration for future research on gangs at both the micro and macro levels.

Weisburd et al. (2012) posit that the criminology of place departs from the traditional study of the geography of crime by utilizing theoretical perspectives that have been used to explain crime variations across place. These theoretical perspectives have generally been
“opportunity theories” (e.g. routine activities, situational crime prevention, etc.) compared to the study of crime at higher geographic levels, which have utilized more macro theories like social disorganization. Weisburd et al. (2012) state that “it is striking that scholars who study the criminology of place have virtually ignored social disorganization theories in empirical analysis and theoretical discussion” (p. 43). Weisburd et al. (2012) argue that theoretical integration of social disorganization and opportunity theory is an appropriate approach because the theories make different but not contradictory predictions. Weisburd et al. (2012) cite Cloward (1959) who sought to integrate opportunity perspectives with social disorganization more than a half century ago. “More recently, a number of criminologists have sought theoretical integration of opportunity and social disorganization theories at place…(e.g., see Joiner and Mansourian, 2009; Wikstrom, et al., 2010; Wilcox, Madensen, and Tillyer, 2007)” (p. 44).

Smith et al. (2000) examine the implications and application of an integrated theory and its ability to measure crime trends. Smith et al. (2000) argue that it is not sufficient to include variables from each theory and assume their function is still the same. There has to be empirical evidence to show the relationship between variables from each theory that still correctly measure the desired information and yielding accurate results. Even though the current study will not be creating a model of theoretical integration, it is important to note that one way to integrate the two theories is to interrelate the concepts in which “relationships among variables derived from one theory are contingent on values of the variables of another theory” (Smith et al., p. 491). The successful integration of these two theories can be accomplished by combining the interaction effects between risk factors (as specified by routine activities) and type of neighborhood (as specified in social disorganization) (Smith et al., 2000).
In their study, Smith et al. (2000) analyze street robbery on the face block level for a midsized southeastern U.S. city. Variables utilized under social disorganization theory were as follows: racial heterogeneity; family structure (single-parent households); economic composition (building property values); and distance from the geographic center of the city. The routine activities theory variables utilized were: an index of multifamily residences; an index of youth-related places (movie theaters, video arcades, swimming pools, and middle and high schools); an index of public facilities (bars, restaurants, and gas stations); an index of commercial places (business offices, industrial buildings, and warehouse facilities); and finally, owner occupied households. Smith et al. (2000) found that the number of places per face block is positively associated with street robbery; the number of single-parent households, distance from the center of the city, racial heterogeneity; and average value of buildings were all statistically significant. As they moved further away from the city center, street robberies declined by about 2% per mile; each single-parent household increased the number of robberies by about 1%; and for the land use variables, the higher the number of businesses and public facilities, the higher amount of street robberies. In their findings, Smith et al. (2000) postulated that both social disorganization and routine activity variables determined the number of street robberies. The authors state “street robbery potential is caused more by social disorganization than by routine activity factors, whereas street robbery is the result of combination of both social disorganization and routine activity factors” (p. 514).

The objective of this study was to analyze the place, or environment, where crime and gang crimes occur and to identify the role of social disorganization theory and routine activities in understanding possible explanations as to why crimes and gang crimes occur in those places. In utilizing these theories together, I argue that particular social structures of neighborhoods
(social disorganization) induce higher rates of crime by increasing the number of motivated offenders and reducing the number of capable guardians (routine activities). As noted above, the gang lifestyle appears to create a social setting in which gang members appear to commit higher levels of crime and violence than non-gang members. The daily routine activities of gangs are affected by this lifestyle and the gang association. The current study utilizes the block group as the unit of analysis due to having many of the traits of a community that have been seen as crucial to social disorganization and routine activities theories. As a community, these areas are social settings in which transitions can represent heightened social disorganization.

RESEARCH CONTEXT

New Hanover County is located in the southeast corner of North Carolina and takes up roughly 200 square miles of land along the Atlantic coastline (see figure 1 in Appendix). Wilmington is located within New Hanover County, and is among the top 10 largest cities in NC. New Hanover County is an attractive location for tourists due to the vast history of the area and being a popular beach town (Mazzocchi, 2006). Table 1 displays basic demographics of the City of Wilmington, New Hanover County, and the State of NC.

The U.S. Census Bureau estimates the population in New Hanover County to be 213,267, with over half the population residing within the City of Wilmington (n=112,067). As a whole, the Census Bureau estimates that New Hanover County has a population that is roughly 80% White, 15% Black or African American, 5.5% Hispanic or Latino, and 2% Other. The City of Wilmington’s population is comprised of Whites (73.5%), African Americans (19.9%), Hispanics and Latinos (6.1%), and Other (1.7%). The percent of residents with incomes below the poverty level were 23.2% for the City of Wilmington and 16.9% for New Hanover County.
Table 1: Demographic Composition of Wilmington/New Hanover County, NC

<table>
<thead>
<tr>
<th></th>
<th>City of Wilmington</th>
<th>New Hanover County</th>
<th>NC Statewide</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Population</strong> (Based off 2009-2013 estimates)</td>
<td>112,067</td>
<td>213,267</td>
<td>9,848,917</td>
</tr>
<tr>
<td>% Male</td>
<td>47.8</td>
<td>48.4</td>
<td>48.7</td>
</tr>
<tr>
<td>% Female</td>
<td>52.2</td>
<td>51.6</td>
<td>51.3</td>
</tr>
<tr>
<td>% 18 and over</td>
<td>81.6</td>
<td>80.2</td>
<td>77.8</td>
</tr>
<tr>
<td>% 65 and over</td>
<td>14.0</td>
<td>14.3</td>
<td>14.3</td>
</tr>
<tr>
<td><strong>Median Age in Years</strong></td>
<td>34.6</td>
<td>37.6</td>
<td>37.6</td>
</tr>
<tr>
<td>% White</td>
<td>73.5</td>
<td>81.3</td>
<td>71.7</td>
</tr>
<tr>
<td>% Black or African American</td>
<td>19.9</td>
<td>14.6</td>
<td>22.0</td>
</tr>
<tr>
<td>% Hispanic or Latino</td>
<td>6.1</td>
<td>5.5</td>
<td>8.9</td>
</tr>
<tr>
<td>% American Indian/Alaska Native</td>
<td>0.5</td>
<td>0.6</td>
<td>1.6</td>
</tr>
<tr>
<td>% Asian</td>
<td>1.2</td>
<td>1.5</td>
<td>2.6</td>
</tr>
<tr>
<td>% Residents w/ income below poverty level</td>
<td>23.2</td>
<td>16.9</td>
<td>17.5</td>
</tr>
<tr>
<td>% Unemployed (Age 16 and over)</td>
<td>7.7</td>
<td>6.9</td>
<td>6.9</td>
</tr>
</tbody>
</table>

Sources: 1) U.S. Census Bureau, 2009-2013 5-Year American Community Survey  
2) State and County QuickFacts U.S. Census Bureau, 2014

Since 1998, the North Carolina Governor’s Crime Commission has conducted gang research with law enforcement agencies, and since 2008 has produced annual reports on gangs and gang membership trends (Grey, 2015). The number of gangs and gang members has continued to rise in the last 15 years with New Hanover County consistently reporting as one of the counties in the State with a high gang presence (Hayes & Guarino, 2013; Grey, 2015). In response to a gang presence, New Hanover County created a specialized unit. In May 1998, the New Hanover County Sheriff’s Office and the Wilmington Police Department (WPD) established a Gang Task Force (GTF). The GTF consisted of two Detectives from the Wilmington Police Department, two Detectives from the Sheriff’s Office, one analyst, one Social Worker, and one Sergeant in charge. The GTF was funded by a Governor’s Crime Commission grant and was headed by the Wilmington Police Department. When the grant ended in September of 2001, the GTF was disbanded and the two jurisdictions separated. It wasn’t until a few years later that both the City and the County started noticing more and more gang activity within New Hanover County. In 2006, the City and the County reestablished their own Gang
Task Forces. While being housed in the same building and working collaboratively, these entities are independent of each other (Leonard, 2015).

The GTF has acknowledged the presence of several Bloods, CRIPS, Domestic Terrorists, Mexican/Latin, and motorcycle gang sets in New Hanover County and have multiple validated, associated, or suspected gang members, which come from New Hanover County Sherriff’s Office, the County Jail, and Wilmington Police Department. Even though the GTF is a collaborative operation, the County and the City suffer from jurisdictional issues that, among others, include the use of separate records management systems. There is overlap in the validated gang members between the two entities, but for jurisdictional issues remain separate—i.e. the county may or may not have a validated gang member that the city has or doesn’t have validated. The count of validated, associated, and suspected gang members is constantly changing due to new validations being created on a daily basis and also validations being purged from the system. If a juvenile is validated as a gang member, he or she is purged from the system once they turn 16 and if applicable, a new validation has to be completed. Also, if a validated gang member does not have any updated activity in their file for five years, they are then purged as a validated gang member. The validation process is both a tedious and ongoing process that has to be maintained daily by the GTF.

**RESEARCH QUESTIONS**

After a review of past literature and following the methodology of Weisburd et al. (2012), the following research questions will be addressed:

1. What types of crimes do gangs in New Hanover County commit?

2. What is the relationship between social disorganization theory and the overall crime rates in New Hanover County?
3. What is the relationship between routine activities theory and the overall crime rates in New Hanover County?

4. What factors of social disorganization theory influence the occurrence or non-occurrence of gang crime in specific block groups?

5. What factors of routine activities theory influence the occurrence or non-occurrence of gang crime in specific block groups?

**DATA AND METHODS**

*Data Source*

The data for this study were created by combining computerized records of crime incident reports for 2014 from the New Hanover County Sheriff’s Office and the Wilmington Police Department. Both agencies use computerized records management systems in which crimes are identified and categorized according to the Uniform Crime Report Index. In addition, officers have the capability to identify whether or not an incident was gang related. The majority of the social, demographic, and economic variables were obtained from the American Community Survey (ACS) for 2009 through 2013, as provided by the U.S. Census Bureau through the American Factfinder website. All real estate owned (REO) home foreclosures listed in New Hanover County from 2012 through 2014 were provided by a colleague, who obtained the list from a local real estate broker. ArcGIS shape-files, which contained the schools, parks, Fire Departments, and libraries in New Hanover County, were obtained from the New Hanover County GIS portal and from the county and city planning departments.

*Sampling and Unit of Analysis*

Two data sets were created for the analysis. The first contained 12,888 individual incidents for 2014 classified based on the FBI’s Uniform Crime Reporting Handbook. Part I
offenses (UCR codes 1-8) are separated into violent crimes (UCR codes 1-4) and property crimes (UCR codes 5-8). The Part II crimes (UCR codes 9-29) are all other crimes that do not fall under Part I crimes (U.S. Department of Justice, FBI, 2004). Esbensen (2010) states that the FBI’s Uniform Crime Report (UCR) provides the “most commonly cited information about crime, including juvenile crime, in the United States” and includes crimes known to the police, arrests, and also crimes that have been cleared by arrest (p. 3). The data for the current study includes all Part I crimes and a subset of Part II crimes—other assaults (UCR code 9); weapons (UCR code 15); and drug abuse violations (UCR code 18). These Part II crimes were selected due to the empirical evidence relating these crimes to gang activity (Battin-Pearson et al., 1998; Thornberry et al., 2003; Valdez, 2000).

The second data set was created by aggregating the independent and dependent variables into census block groups. New Hanover County is comprised of 120 census block groups but two census block groups were removed from the data because they did not contain any crimes. These locations include the Wilmington Airport and non-residential oceanfront with a population of one or zero occupants. The same crime incidents utilized in the first data set were used in the construction of this data set. The incidents were geocoded and aggregated based on the remaining 118 census block groups that comprise New Hanover County, NC. These incidents were geocoded using ArcGIS based on the address provided in the incident report. The ArcGIS software automatically matched 96% of the incidents. A few of the remaining gang related incidents were hand matched using Google maps alongside ArcGIS to determine the location of the incident. Due to possible reporting errors, some incidents were not matched with a location based on the address provided and are not included in the analysis.
As defined by the Census Bureau, census block groups are subunits of census tracts. The census block group is the smallest unit for which the Census publishes data and usually contains a population between 600 and 3,000 people (U.S. Census Bureau). In criminological research, the census block group is a common proxy for a neighborhood, which is analytically important when integrating opportunity and social disorganization theories.

A vast amount of research has focused on how structural characteristics of neighborhoods affect various aggregate outcomes such as crime, but, according to Hipp (2007), one commonality with these studies is that less attention is paid to the appropriate level of aggregation. Due to definitional issues related to the term “neighborhood,” Hipp (2007) posits that past studies and research have tested the effects of neighborhood structural characteristics on various outcomes. Hipp (2007) argues that the appropriate unit of analysis when analyzing crime is unclear but that census tracts and census block groups are the most frequently employed units of analysis in studies on neighborhood crime and disorder. Even though Hipp (2007) states that there is no “gold standard” when determining the appropriate level of aggregation. The current study utilizes the census block group as a proxy for neighborhood due to the availability of data as well as the many characteristics of the block group that are important for social disorganization theory and routine activities theory.

**Dependent Variables**

The total number of Part I incidents, a select few of the Part II incidents, and reported gang related incidents recorded in New Hanover County and the City of Wilmington, North Carolina for 2014 were utilized as the dependent variables. The incidents are sorted by the FBI’s Uniform Crime Report (UCR) index crimes list. Part I offenses include a total of 8 crimes:
criminal homicide; forcible rape; robbery; aggravated assaults; burglary; larceny-theft (except motor vehicle theft); motor vehicle theft; and arson. A violent crime total was constructed by combining the first 4 Part I offenses listed above. Similarly, a property total was created using the latter 4 Part I offenses. For this study, the selected Part II offenses (other assaults; weapons charges; and drug abuse violations) were combined to create a selected Part II crime total. The violent, property, and select Part II crime incidents totals were aggregated and reported per block group. Each category total was then converted into a rate by dividing the number of incidents by the total estimated population of each block group and then multiplying it by 1,000. The reported incidents are standardized to a “per one thousand” base due to the relevantly small population size of block groups.

In order to analyze gang related incidents separately, the part I and selected part II incidents that were reported as being gang related will also be used as a dependent variable. Gang related incidents will be reported as the actual number of incidents in each block group in order to describe the types of crimes that gangs and gang members commit. These incidents will also be used to analyze the relationship between social disorganization and routine activities theories and the occurrence of gang incidents in each block group.

Independent Variables

The independent variables for the current study build on both the social disorganization model and the routine activities perspective. In studying the appropriate level of aggregation, Hipp (2007) found several variables that are appropriate for analyzing these two theories and crime at the census block group level. Following the work of Hipp (2007), Weisburd et al. (2012), Melde & Esbensen (2013), and Smith et al. (2000), the current study utilized measures
that were relevant to the integration of social disorganization theory and routine activities. All variables were aggregated to the block-group level.

Measures related to social disorganization theory utilized in the current study were racial/ethnic heterogeneity; the percent of the population 16 and over that are unemployed; the home foreclosure rate per 1,000 (REOrate); percent of female headed households with at least one child less than 18 years of age; the percent of households on Foodstamps/SNAP; the household median income; the percent of vacant homes; and the percent of residents who own or rent their home.

Racial/ethnic heterogeneity was computed using racial demographics from the U.S. Census’ American Community Survey. The following formula, originally proposed by Messner and South (1992), was utilized to calculate racial/ethnic heterogeneity:

\[ 1 - (P_w^2 + P_{aa}^2 + P_o^2) \]

where \( P_w \) = the proportion of the block group population that is white; \( P_{aa} \) = the proportion of the block group population that is African American; and \( P_o \) = the proportion of the block group population that is labeled as Other.

The “Other” category is comprised of an aggregate of American Indian or Alaskan and Asian. To measure ethnic heterogeneity, the White, African American, and Other were divided by the total population within each group. Next, each proportion value is squared, summed across all three groups, and subtracted from one. Finally, in order to standardize racial/ethnic heterogeneity with the other variables, the proportion value for each block group was multiplied by 100 to turn the proportion into a percentage. The range is between 0 and 100%, with higher values indicating more racial/ethnic heterogeneity.

As a measure of social disorganization theory, home foreclosures were utilized to measure neighborhood deterioration. Specifically, if a community suffers from a high number of
home foreclosures that same community is most likely experiencing financial hardship and may be lacking social organization. Home foreclosures were aggregated to the census block group level, and were converted into a per one thousand rate in order to homogenize the block groups. This was accomplished by dividing the number of foreclosures per block group by the number of total housing units per block group and multiplying it by one thousand. The list of home foreclosures for New Hanover County only include listings that were released by the banks, which reclaimed ownership of them and therefore is not exhaustive. These foreclosures include single-family households that were on the market between 2012 and 2014.

Since Hipp (2007) states that “past work suggests that the presence of youth hanging out on the street corners fosters a sense of disorder” (p. 667), the number of people 16 and over in each block-group that are unemployed was included in the analysis. This factor is important for social disorganization theory because the number of people not in the labor force can foster a sense of disorder in the community. The number of people 16 and over in each block group that are unemployed was converted into a percentage by dividing the number of unemployed people by the total population of each block group. Vacant homes and also rented homes are key variables in understanding neighborhood stability and neighborhood deterioration. The number of female headed households is also an important variable for social disorganization theory, in that it can be used to measure the presence socioeconomic disadvantage. The number of vacant homes, the number of rented homes, and female headed households for each block group were also converted into a percentage in order to standardize the data and the block groups. The household median income will help to analyze the economic status of each block-group.

Routine activities variables were grouped according to two of the three main characteristics of the theory: presence of a suitable target and lack of capable guardianship. The
number of parks, schools, and libraries were utilized to analyze suitable targets in each block group. According to routine activities theory, these variables are also public crime attractors and crime generators (Weisburd et al., 2012). In theory, the greater the number of public facilities in one area, the higher the crime rate due to the fact that they attract and generate crime by bringing a mass of people (potential targets) into a concentrated area. The number of fire departments and police stations in each block-group were utilized as a proxy for guardianship of the area.

According to routine activities theory and Weisburd et al. (2012), the higher number of fire departments and police stations represents a higher presence of capable guardians to deter crime. The residential population of each block group was also included as a control variable. This study was unable to fulfill the motivated offender characteristic of the theory due to the lack of available data and also because the model utilized was not an integrated theoretical model. It is difficult to determine the number of motivated offenders in an area by simply examining population variables due to the complexity and difficulty in distinguishing motivated offenders from suitable targets or even guardians. Opportunity theorists generally assume that the higher the numbers of people in an area, the higher the crime rates. This assumption is based on the idea that this situation creates a greater number of potential victims (Weisburd et al., 2012).

ANALYTICAL APPROACH

A unique analytical approach was taken in order to answer all of the research questions. The first research question was addressed by examining the descriptive statistics for all of the crimes annotated as being gang related. These crimes were broken down according to whether they were violent crimes, property crimes, or the selected Part II crimes and were compared to
the non-gang related crimes. By comparing the distribution of gang related crimes and non-gang related crimes, this study was able to differentiate the types of crimes that gangs commit.

Ordinary Least Squares (OLS), or linear regression, was utilized to analyze the relationship between both social disorganization theory and routine activities theory and the overall crime rates in New Hanover County. The first assumption of OLS regression is that the variables are interval level and the only exception to this assumption is if the dependent variable is binary or dichotomous, in which case it would be nominal level or dummy coded. A dichotomous dependent variable cannot be analyzed using OLS and requires a logistic regression analysis (Walker & Maddan, 2013, p. 186). In order to answer the fourth and fifth research questions in determining what factors of each theory influence the occurrence of gang crimes to occur is specific block groups, a dichotomous variable had to be created. The occurrence or non-occurrence of gang-related incidents variable was created and utilized in the logistic regression models.

**ANALYSIS AND RESULTS**

*Descriptive Statistics*

In order to analyze the crime rates for New Hanover County and take into consideration the gang crime, the overall mean crime rates for the block groups were calculated (see table 2 below). The average violent crime rate among the block groups in New Hanover County was 6.1 crimes per one thousand people with a standard deviation of 10.9 per one thousand people. The average property crime rate among the block groups was 53.27 crimes per one thousand people with a standard deviation of 59.42. Lastly, the selected Part II crime rate had a mean of 28.81 crimes per one thousand people and a standard deviation of 46.18 per one thousand people.
It is important to note that all of the standard deviations are greater than the mean rate, which indicates the data are positively skewed. This may be due to the varying population size of each block group and also due to the fact that some block groups did not have any, or had low incidents of violent crime, property crime, or the selected Part II crimes.

Table 2: Descriptive Statistics for Violent, Property and Select Part II Crime Rates by Census Block Group, 2014 (N=118)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum Value</th>
<th>Maximum Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Violent Crime Rate</td>
<td>6.1</td>
<td>10.9</td>
<td>.00</td>
<td>92.65</td>
</tr>
<tr>
<td>Overall Property Crime Rate</td>
<td>53.27</td>
<td>59.42</td>
<td>.00</td>
<td>329.57</td>
</tr>
<tr>
<td>Overall Selected Part II Crime Rate</td>
<td>28.81</td>
<td>46.18</td>
<td>.00</td>
<td>399.36</td>
</tr>
</tbody>
</table>

Table 3 illustrates the individual gang related incidents for New Hanover County. The total number of gang incidents in 2014 classified as violent, property, and the select Part II crimes was 215. Violent gang crime accounted for 14% of the total amount of gang crime with reports of 1 gang related homicide, 0 rapes, 10 robberies, and 19 aggravated assaults. From the 16 gang related property crime incidents there were 6 robberies, 9 larceny-thefts, 1 motor-theft, and 0 reports of arson. The selected Part II crimes accounted for the majority of all gang related crimes with 16 “other” assault incidents, 31 weapons related incidents, and 122 drug related incidents.
Table 3: Distribution of Gang-Related Incidents Compared to Non-Gang Related Incidents for Violent, Property and Select Part II Crime Rates for New Hanover County, 2014

<table>
<thead>
<tr>
<th>Type</th>
<th>Gang Incidents</th>
<th>Percentage</th>
<th>Non-Gang Incidents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent Crime</td>
<td>30</td>
<td>14%</td>
<td>827</td>
<td>6.5%</td>
</tr>
<tr>
<td>Property Crime</td>
<td>16</td>
<td>7.4%</td>
<td>8,113</td>
<td>64%</td>
</tr>
<tr>
<td>Select Part II Crime</td>
<td>169</td>
<td>78.6%</td>
<td>3,733</td>
<td>29.5%</td>
</tr>
<tr>
<td>Totals</td>
<td>215</td>
<td>100%</td>
<td>12,673</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3 also illustrates the distribution of non-gang related incidents by type. The total number of incidents, excluding gang-related incidents, in 2014 classified as violent, property, and the select Part II crimes was 12,673. In examining Table 3, the reader should be able to better understand how the gang-related incidents differ from the non-gang related incidents different crime type. When examining the non-gang related incidents, 6.5% of the incidents were classified as violent crimes; 64% were property crimes; and 29.5% were Part II crimes. For non-gang related incidents, property crime had the highest distribution and made up the majority of incidents. The gang related incidents were distributed as follows: 14% were violent crimes; 7.4% were property crimes, and 78.6% were comprised of the select Part II crimes. This table helps to illustrate that majority of the gang related incidents were the select Part II crimes and that the distribution of violent crime is higher among gang related incidents than non-gang related incidents. Among the 118 block groups included, 39 (33%) had one or more gang incidents in 2014 and the remaining 79 had zero gang incidents (see figure 2: Gang Related Incidents in Appendix).

Tables 4 and 5 illustrate the descriptive statistics for the social disorganization variables and the routine activities variables. All of the variables had a sample size of 118 block groups except for the home foreclosure rate, which only included 116 block groups due to missing data.
Out of the 118 census block groups, the mean racial/ethnic heterogeneity percentage was 23.02, which also converts to a proportion of .2302 on a scale between 0 and 1. This variable illustrates that New Hanover County, as a whole, was not very diverse. This finding is also supported by examining the demographic composition of New Hanover County and Wilmington (see table 1). The mean percentage within the block groups of the population that is 16 and over and is unemployed is 6.2% with a standard deviation of 3.8; the mean percent of female headed households with at least one child under the age of 18 is 10.73% with a standard deviation of 13.86; the percent of households on government assistance is 10.88%; the mean percent of rented homes is 35.69% and the mean percent of vacant homes is 15.62%. One major factor related to social disorganization theory is household median income, which has a mean of $54,079.52 and a standard deviation of $26,680.89. The standard deviation of the median household income illustrates that there is a wide range of household incomes averaging from $27,398.63 to $80,760.41. The average home foreclosure rate among the block groups was 17.22 homes per 1,000 with a standard deviation of 12.14 homes per 1,000.

The percent of female headed households with at least one child under the age of 18, the percent of households on government assistance and socioeconomic disadvantage all had standard deviations that were higher than the mean, which indicates the data is positively skewed. This may be due to the fact that some block groups did not have any, or had a low occurrence of households that were female headed or on government assistance.
Table 4: Descriptive Statistics for Social Disorganization Theory Measures

<table>
<thead>
<tr>
<th>Social Disorganization</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Racial/Ethnic Heterogeneity %</td>
<td>118</td>
<td>23.02</td>
<td>17.49</td>
</tr>
<tr>
<td>% 16 and Over Unemployed</td>
<td>118</td>
<td>6.2</td>
<td>3.8</td>
</tr>
<tr>
<td>Home Foreclosure Rate*</td>
<td>116</td>
<td>17.22</td>
<td>12.14</td>
</tr>
<tr>
<td>% Female Headed HH with child under 18</td>
<td>118</td>
<td>10.73</td>
<td>13.86</td>
</tr>
<tr>
<td>% Households on Foodstamps/SNAP</td>
<td>118</td>
<td>10.88</td>
<td>11.38</td>
</tr>
<tr>
<td>Household Median Income</td>
<td>118</td>
<td>$54,079.52</td>
<td>$26,680.89</td>
</tr>
<tr>
<td>% Rented Homes</td>
<td>118</td>
<td>35.69</td>
<td>23.97</td>
</tr>
<tr>
<td>% Vacant Homes</td>
<td>118</td>
<td>15.62</td>
<td>15.62</td>
</tr>
</tbody>
</table>

*Missing Data for 2 block groups

Table 5: Descriptive Statistics for Routine Activities Theory Measures

<table>
<thead>
<tr>
<th>Routine Activities</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Facilities</td>
<td>118</td>
<td>.97</td>
<td>1.29</td>
</tr>
<tr>
<td>Parks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libraries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guardianship Facilities</td>
<td>118</td>
<td>0.25</td>
<td>0.49</td>
</tr>
<tr>
<td>Fire Departments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police Stations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Population</td>
<td>118</td>
<td>1749.18</td>
<td>1050.62</td>
</tr>
</tbody>
</table>

The routine activities theory variables consisted of public facilities and guardianship facilities. The public facilities measure was created by including all parks, schools, and libraries together for each block group. The average number of public facilities per block group was 0.97 with a standard deviation of 1.29. It is important to note that some block groups did not have any of these public facilities while others had multiple public facilities. New Hanover County
has 63 parks, 46 schools, and 5 libraries, which equals 114 total public facilities that were included in the analysis. The list of public facilities is not mutually exclusive or exhaustive.

The guardianship facilities variable was created by adding the number fire departments and police stations together for each block group. The guardianship facilities had a mean of 0.25 and a standard deviation of 0.49. New Hanover County only has 22 fire stations and 8 police stations. It is important to note, that the police and Sheriff’s department have satellite locations that were not included in the analysis due to the lack of data available (i.e. lack of addresses and an exact number of locations).

The residential population for New Hanover County was utilized as a control variable. The average number of residents per block group was 1,749.18 people with a standard deviation of 1,050.62. Yet again, the population of each block group varies with some block groups having a much greater population than others.

**Bi-Variate Analysis**

Table 6 illustrates the findings from a bivariate correlation analysis for the dependent variables, independent variables, and the control variable. In order to understand the impact on the dependent variables, the Pearson’s r-values will be examined along with the statistical significance. When examining the overall violent crime rate, all of the independent variables, except for the percent of vacant homes, public facilities, and guardianship facilities, were significantly correlated.
Racial/ethnic heterogeneity had a positive, weak but significant correlation with the overall violent crime rate with a Pearson’s r-value of .242, at the alpha significance level of .01.

The percent of the population 16 and over that is unemployed had a positive and moderate relationship and was significantly correlated with the overall violent crime rate, with a Pearson’s r-value of .334, at the alpha significance level of .01. The percent of female headed households with at least one child under the age of 18, the percent of households on government assistance,
and the percent of rented homes all have a moderate and positive relationship with the alpha significance of at least .05. The only variable with the opposite association is median household income. Median household income has a significantly negative and moderate correlation with the overall violent crime rate (Pearson’s r-value of -.407, at the alpha significance level of .01). The control variable, residential population, has a negative, moderate significant correlation with the violent crime rate (Pearson r-value of -.300, at the alpha significance of .01) and as the population increases the violent crime rate decreases.

When examining the overall property crime rate, only two variables and the control variable had a significant association. Median household income was significantly correlated with the property crime rate (Pearson’s r-value of -.274, and an alpha significance level of .01). The percent of rented homes was also significantly correlated to the property crime rate (Pearson’s r-value of .255, and an alpha significance of .01). The control variable, residential population was significantly correlated to the property crime rate (Pearson’s r-value of -.392, and an alpha significance of .01).

When examining the overall Part II crime rate, all of the social disorganization variables, except for REO rate and percent of vacant homes had a significant correlation. Neither of the routine activities variables was significantly correlated with the property crime rates. The control variable was significantly correlated to the property crime rate at the alpha significance level of .01 and with a Pearson r-values of -.343.
**Linear Regression**

Before running the multivariate regression analysis, diagnostics were completed on the dependent variables to examine variability and skewness. Histograms of all three dependent variables illustrated that they all had curves that were skewed to the right due to a high number of zeros and lower crime rates for the census block groups. To control for this, the dependent variables were all transformed by taking the log of the mean crime rate per 1,000 plus 1. This transformation minimized the heteroscedasticity of the data.

The OLS regression analysis for social disorganization theory yielded several multicollinearity issues, especially with the following variables: the percent of households on foodstamps/SNAP; median household income; and the percent of rented homes. In terms of multicollinearity, a tolerance value below .40 and a variance inflation factor above 2.50 is cause for concern (Allison, 1999).

To address these multicollinearity issues, a factor analysis was conducted in order to explain the variance and correlation of each independent variable. The rotated Component Matrix illustrated that the percent of female headed households with at least one child under the age of 18 (loading of .689), the percent of households on foodstamps/SNAP (.883), median household income (-.799), and the percent of rented homes (.765) all loaded together in component 1. Tabachnick and Fidell (2001) state that “only variables with loadings of .32 and above are interpreted. The greater the loading, the more the variable is a pure measure of the factor” (p. 625). In the original regression analysis, the percent of female headed households with at least one child under the age of 18 variable did not have any multicollinearity issues and therefore was excluded from the factor. It is also important to note that due to the median household income variable being negative and opposite, it was computed into a positive by
multiplying it by negative one. Once this was completed, the regression approach was utilized to create a factor score. “This approach results in the highest correlations between factors and factor scores” (Tabachnick & Fidell, 2001, p. 626). The regression factor score created an index variable comprised of the following variables: % of households on foodstamps/SNAP; median household income; and % of rented homes. Following the thought process behind social disorganization theory, this measure was labeled as the economic index measure.

Table 7 illustrates the findings of the OLS regressions when analyzing the relationship between social disorganization theory and the overall crime rates in New Hanover County. All three OLS regression models had statistical power in explaining the relationship between these social disorganization variables and the violent, property and select Part II crime rates per 1,000 people. It is also worth mentioning that the R-squared value for the total violent crime rate per 1,000 people was .478 and the adjusted R-squared was .444. This states that roughly 45% of the variation in the total violent crime rate per 1,000 people was explained by this model. The R-squared value for the total property crime rate per 1,000 people was .450 and the adjusted R-squared was .415. This states that roughly 42% of the variation in the total property crime rate per 1,000 people was explained by this model. In the final model, the R-squared for the selected Part II crimes per 1,000 people was .596 and the adjusted R-squared was .570. This illustrates that roughly 57% of the variation in the part II crime rate per 1,000 people was explained by this model.

When examining both the violent crime rate per 1,000 persons and the property crime rate per 1,000 persons, the findings revealed the same two significant measures of social disorganization theory for each: the home foreclosure rate and the economic index. When controlling for the other independent variables, an increase in the REO rate will increase the total
violent crime rate and property crime rate. An increase in the economic index will also lead to an increase in the violent crime rate and the property crime rate.

Table 7: Results of OLS Regression Examining Violent, Property, and Select Part II Crime Rates and Social Disorganization Theory

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>Beta</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent Crime Rate per 1,000 (LG10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterogeneity %</td>
<td>.003</td>
<td>.106</td>
<td>.002</td>
</tr>
<tr>
<td>Unemployed %</td>
<td>-.006</td>
<td>-.049</td>
<td>.010</td>
</tr>
<tr>
<td>REORate</td>
<td>.006*</td>
<td>.153</td>
<td>.003</td>
</tr>
<tr>
<td>% of Female HH with child under 18</td>
<td>.169</td>
<td>.052</td>
<td>.276</td>
</tr>
<tr>
<td>Economic index</td>
<td>.260**</td>
<td>.578</td>
<td>.050</td>
</tr>
<tr>
<td>% Vacant Homes</td>
<td>-.405</td>
<td>.142</td>
<td>.223</td>
</tr>
<tr>
<td>Estimated Population</td>
<td>-8.027E-005*</td>
<td>-1.82</td>
<td>.000</td>
</tr>
<tr>
<td>Property Crime Rate per 1,000 (LG10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterogeneity %</td>
<td>.003</td>
<td>.110</td>
<td>.002</td>
</tr>
<tr>
<td>Unemployed %</td>
<td>-.11</td>
<td>-.093</td>
<td>.010</td>
</tr>
<tr>
<td>REORate</td>
<td>.010*</td>
<td>.260</td>
<td>.003</td>
</tr>
<tr>
<td>% of Female HH with child under 18</td>
<td>-.492</td>
<td>-.151</td>
<td>.287</td>
</tr>
<tr>
<td>Economic index</td>
<td>.221**</td>
<td>.486</td>
<td>.051</td>
</tr>
<tr>
<td>% Vacant Homes</td>
<td>-3.75</td>
<td>-.130</td>
<td>.231</td>
</tr>
<tr>
<td>Estimated Population</td>
<td>.000**</td>
<td>-.377</td>
<td>.000</td>
</tr>
<tr>
<td>Part II Crime Rate per 1,000 (LG10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterogeneity %</td>
<td>.003</td>
<td>.083</td>
<td>.003</td>
</tr>
<tr>
<td>Unemployed %</td>
<td>3.979E-005</td>
<td>.000</td>
<td>.011</td>
</tr>
<tr>
<td>REORate</td>
<td>.008*</td>
<td>.148</td>
<td>.003</td>
</tr>
<tr>
<td>% of Female HH with child under 18</td>
<td>-.016</td>
<td>-.004</td>
<td>.333</td>
</tr>
<tr>
<td>Economic index</td>
<td>.338**</td>
<td>.550</td>
<td>.060</td>
</tr>
<tr>
<td>% Vacant Homes</td>
<td>.717**</td>
<td>.183</td>
<td>.268</td>
</tr>
<tr>
<td>Estimated Population</td>
<td>-.000**</td>
<td>-.375</td>
<td>.000</td>
</tr>
</tbody>
</table>

*p< .05  
**p< .01

The OLS regression results for the select Part II crime rate, again revealed, similar findings to the first two models with the REO rate and the economic index being positive and significant predictors of these types of crimes. However, an additional measure, the % vacant homes, was also positive and significant. When controlling for all other independent variables in the model and viewing each one independently, an increase in the REO rate, the economic index, or the % of vacant homes will increase the select Part II crime rate. Interestingly enough, the control variable, estimated population, was significant in all three models and contributed to all three different crime rates.
Table 8 illustrates the findings of the OLS regression models analyzing the relationship between routine activities theory and the overall crime rates in New Hanover County.

Table 8: Results of OLS Regression Examining Violent, Property and Select Part II Crime Rates and Routine Activities Theory Measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variable</th>
<th>b</th>
<th>Beta</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent Crime Rate per 1,000</td>
<td>Guardianship Facilities</td>
<td>-.080</td>
<td>-.086</td>
<td>.081</td>
</tr>
<tr>
<td></td>
<td>Public Facilities</td>
<td>.074*</td>
<td>.211</td>
<td>.031</td>
</tr>
<tr>
<td></td>
<td>Estimated Population</td>
<td>-.000**</td>
<td>-.313</td>
<td>.000</td>
</tr>
<tr>
<td>Property Crime Rate per 1,000</td>
<td>Guardianship Facilities</td>
<td>-.086</td>
<td>-.089</td>
<td>.080</td>
</tr>
<tr>
<td></td>
<td>Public Facilities</td>
<td>.051</td>
<td>.140</td>
<td>.030</td>
</tr>
<tr>
<td></td>
<td>Estimated Population</td>
<td>.000**</td>
<td>-.459</td>
<td>.000</td>
</tr>
<tr>
<td>Part II Crime Rate per 1,000</td>
<td>Guardianship Facilities</td>
<td>-.039</td>
<td>-.031</td>
<td>.098</td>
</tr>
<tr>
<td></td>
<td>Public Facilities</td>
<td>.105</td>
<td>.220</td>
<td>.037</td>
</tr>
<tr>
<td></td>
<td>Estimated Population</td>
<td>.000**</td>
<td>-.528</td>
<td>.000</td>
</tr>
</tbody>
</table>

*p< .05  
**p< .01

When examining the overall violent crime rate per 1,000 at the census block group level, one measure of routine activities was found to be significant: public facilities. When controlling for guardianship facilities and the estimated population, a one-unit increase in public facilities will increase the violent crime rate by .074. This model had an adjusted R-square of .129, which states that roughly 13% of the variation in the violent crime rate is explained by this model.

The models examining the property crime rate and the selected Part II crimes were found to be similar. Neither of the routine activities measures were found to be significant predictors of these types of crime. It is worth noting that in the Part II crime rate model, public facilities had a significance of exactly .05, which is the confidence threshold for determining significance. Roughly 22% of the variation in the property crime rate and 32% of the variation in the part II crime rate was explained by these models.
Logistic Regression

Out of the 118 census block groups in this study, 79 did not have any gang related incidents occur in 2014. Logistic regression was utilized to estimate why some block groups had gang related incidents and others did not, and to predict what independent variables influence the presence of gang incidents.

Table 9 illustrates how the measures for both social disorganization theory and routine-activities theory predict the occurrence of gang related incidents in each block group. It is important to note that 2 block groups were not included in the analysis due to having missing REO rate data. The statistically significant Chi-Square tests for the models indicate that the models do have predictive capabilities. The Nagelkerke R Square, .414, can also be interpreted as 41.4% of the variance in the social disorganization model is explained by the independent variables; 18.4% of the variance in the routine activities model is explained by the independent variables.

Table 9: Results of Logistic Regression Examining Gang Crime Incidents by Block Groups and Social Disorganization Theory and Routine Activities Theory

<table>
<thead>
<tr>
<th>Variable</th>
<th>$b$</th>
<th>$Exp(B)$</th>
<th>$SE$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Disorganization</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterogeneity %</td>
<td>.039*</td>
<td>1.040</td>
<td>.018</td>
</tr>
<tr>
<td>Unemployed %</td>
<td>-.127</td>
<td>.881</td>
<td>.072</td>
</tr>
<tr>
<td>REORate</td>
<td>-.001</td>
<td>.999</td>
<td>.024</td>
</tr>
<tr>
<td>% of Female HH with child under 18</td>
<td>.197</td>
<td>1.218</td>
<td>2.019</td>
</tr>
<tr>
<td>Economic index</td>
<td>1.025*</td>
<td>2.788</td>
<td>.406</td>
</tr>
<tr>
<td>% Vacant Homes</td>
<td>1.93</td>
<td>6.891</td>
<td>1.660</td>
</tr>
<tr>
<td>Estimated Population</td>
<td>-.001**</td>
<td>.999</td>
<td>.000</td>
</tr>
<tr>
<td><strong>Routine Activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guardianship Facilities</td>
<td>-.464</td>
<td>.629</td>
<td>.447</td>
</tr>
<tr>
<td>Public Facilities</td>
<td>.397*</td>
<td>1.488</td>
<td>.168</td>
</tr>
<tr>
<td>Estimated Population</td>
<td>-.001**</td>
<td>.999</td>
<td>.000</td>
</tr>
</tbody>
</table>

*p< .05  
**p< .01
According to the results of the social disorganization theory logistic regression model, heterogeneity percent and the economic index were statistically significant. When controlling for all other variables, each unit increase in heterogeneity in a block group significantly increases the odds of a gang incident occurring by 1.04 times. Moreover, for each unit increase in the economic index, there is a 2.79 increase in the odds that a gang incident will occur.

The findings from the routine activities theory logistic regression model illustrate that the number of public facilities within a block group was statistically significant. When controlling for the other two variables, each unit increase in public facilities in a block group significantly increases the odds of a gang incident occurring by 1.49 times.

CONCLUSION

The objective of this study was to analyze the place, or environment, where crime and gang crimes occur and to identify the role of social disorganization theory and routine activities theory in order to have a better understanding of why these crimes may occur in certain places. The study of crime has generally and historically focused on the individual criminal with the ideology that crime is a product of human agency. Following this ideology social scientists have “focused on the factors that cause individuals to become involved in crime or that lead them to desist from criminal behavior” and thus, crime prevention policies have looked at how to fix/rehabilitate or deter the individual from committing crime (Weisburd et al., 2012, p. 166). While individuals are an integral part of the crime equation and crime needs to be understood from an individualistic perspective, but it is also important to study environmental and structural factors that influence the occurrence of crime. As Weisburd et al. (2012) state: the human agency aspect of “choosing to commit crimes is carried out in the context of particular
environments” (p. 166). To this end, this study examined small geographic areas within New Hanover County—the census block group, which was utilized due to having many of the traits of a community that have been seen as crucial to social disorganization and routine activities theories. As a community, these areas are social settings in which transitions can represent heightened social disorganization and create opportunities for crime.

Routine activities theory is an opportunity theory wherein the focus is on the crime committed and the opportunities that led up to and allowed the crime to occur. In studying these key variables, opportunity theorists are focused on understanding the elements of specific places and/or situations that lead to a crime occurring and often ignore that “places have a social context that may reflect not situational opportunities but underlying social processes that impact upon crime” (Weisburd et al., 2012, p. 177). On the other hand, social disorganization theory has traditionally been utilized to examine crime at higher levels of geography and “places emphasis on the social processes that occur in social systems, emphasizing that the ecological nature of the community is key to understanding the crime problem” (Weisburd et al., 2012, p. 177). Social disorganization theorists believe that opportunity-based solutions may be beneficial for short-term interventions, but social interventions will need to be more broadly focused for long-term effects on crime. Even though this study was not able to fully incorporate a model of theoretical integration, it was able to follow Weisburd et al. (2012) and the criminology of place methodology by utilizing two different spatial theories of crime, which stress the importance of geographical location and crime. Utilizing the census block group as a proxy for neighborhood/community allows for future researchers and policy makers to take into consideration the micro behavioral/opportunity perspectives of crime while at the same time
directing for social interventions that is within reach of crime prevention practitioners at the county or city level.

The numerous data sources used in conjunction with quantitative techniques did not fully provide ample evidence to answer the five research questions with certainty, but did allow for a greater understanding of how social disorganization theory and routine activities theory measures influence crime and gang crime in New Hanover County. Although small, this study also aided in establishing an association between crime and place. By examining the individual gang incidents from New Hanover County and Wilmington, we are able to state that gangs in these areas were more likely to participate in the select Part II crimes: other assaults; weapons-related incidents; and drug-related incidents. When compared to non-gang related incidents, these part II crimes accounted for 78.6% of all gang incidents in comparison to only 29.5% of all non-gang related incidents. In addition, the results of this study support the notion that gang membership and the gang lifestyle increases the likelihood of being involved in more violent types of crime, given that 14% of all gang related incidents were violent crimes compared to 6.5% of all non-gang related incidents.

Multivariate regression models examined the relationship between social disorganization theory and the crime rates and the relationship between routine activities theory and the crime rates within the census block groups. For both the violent crime rate and the property crime rate, the social disorganization measures that had significant explanatory power were: 1) the home foreclosure rate per 1,000 and 2) the economic index. When examining the select Part II crimes, both of the above measures along with the percent of vacant homes had significant explanatory power. These findings illustrate that the census block groups that suffer from neighborhood deterioration and a lack of stability (home foreclosures and vacant homes) along with a lower
economic status (lower median household income, more people on government assistance, and more rented homes) have higher crime rates. These findings reinforce Shaw and McKay’s (1942) social disorganization theory in which they identified the physical status of a location, the economic status of its residents, and the composition of the population as being three key elements to areas subjected to high crime rates. The structural barriers in these impoverished communities harshly impact the ability of a community to self-correct or solve common problems. Although this study did not directly measure collective efficacy, Sampson et al. (1997) found that residential tenure and home ownership are two factors that promote collective efforts of the neighborhood residents to maintain social control. This study found that block groups that had a greater number of home foreclosures had a statistically significant impact on the all three crime rates. The violent crime rate and the property crime rate were also significantly dependent on the economic index, which included the percent of rented homes. The Part II crime rate was significantly dependent on block groups with all of the above plus the percent of vacant homes. According to the theoretical concepts of social disorganization theory, some residents in these areas may have distrust in the formal and informal institutions and also their community members; and thus, collective efficacy may be lacking.

The analysis examining routine activities theory revealed that public facilities was the single significant measure, but only when examining the violent crime rate. The public facilities measure was an index variable created by combining the number of parks, schools, and libraries in New Hanover County and the City of Wilmington. Routine activities theory describes these measures as public crime attractors and crime generators. Routine activities theory is based around the theory that a crime incident will occur when a motivated offender, a suitable target, and the lack of a capable guardian all converge in time and space. One complexity with routine
activities comes into play when distinguishing suitable targets from offenders or even guardians. Unfortunately, this study was not able to incorporate any motivated offender measures and was only capable of capturing minor public facility and guardianship measures. With that being said, it was found that public facilities, even though each block group had an average of less than 1, statistically impact the violent crime rate.

In order to examine each individual block group and why some had gang related incidents and others did not, logistic regression was utilized to predict what measures, from both social disorganization theory and routine activities theory, influence the presence of gang incidents. Following in the footsteps of Shaw and McKay, from this data, it could be argued that gang incidents only exist in certain block groups, especially in block groups marked with social disorganization. Not including the control variable, heterogeneity percentage and the economic index variable have significant explanatory power in predicting which block groups will have the occurrence of gang incidents. The whole of New Hanover County had a mean heterogeneity percentage of 23%, which could illustrate an uneven distribution of the population in the block groups.

Just like in the OLS regression model, the routine activities logistic regression model illustrated that the public facilities measure had statistically significant explanatory power in predicting the presence of gang incidents in each block group. According to this model and routine activities, the block groups with the higher number of crime generators and attractors will have a greater potential for gang incidents to occur. The guardianship facilities measure was not statistically significant but the model did also illustrate that the potential for gang incidents to occur in a block group was reduced by the presence of these facilities.
In their study, Smith et al. (2000) posit that both social disorganization and routine activity variables determined the number of street robberies. Like Weisburd et al. (2012) and Smith et al. (2000), this study was able to utilize both social disorganization theory and routine activities theory in order to create a better understanding of why certain crimes, to include gang related crimes, may occur in certain geographical locations. It can be argued that actual gang formation is caused more by social disorganization that by routine activities factors, but actual gang-related crime is the result of combination of both social disorganization and routine activity factors.

Limitations

There are several limitations in the current study that should be addressed. One of the most relevant limitations was the actual incident reports. Weisburd et al. (2012) argue that incident reports are more inclusive than arrest reports but less inclusive than emergency calls for service. Arrest reports are only produced when an arrest is made and emergency calls for service would include all events reported to the police. An incident report is generated after a call for service, and only if the responding officer deemed it worthy of a report. This creates the issue of crime rates being underrepresented. First, the crime has to be called in or brought to the attention of law enforcement and, second, an incident report has to be initiated and entered into the records management system. With regards to gang crime, the incident itself has to be marked as being gang-related by the reporting officer. If an officer is not sure if the incident is gang related or decided to not fill in the appropriate box, the incident is not counted; therefore, gang related incidents also stand the potential of being underrepresented. Lastly, New Hanover County has a total of 6 different local law enforcement agencies and 1 State Highway Patrol
Station. The incidents used in this study only came from two agencies: New Hanover County Sheriff’s Office and Wilmington Police Department.

Despite the fact that census block groups are widely used in criminological research, there are many limitations associated with using this unit of analysis. Sperling (2012) posits that the perceptions of neighborhoods are social constructs and context dependent and by using census block groups, census tracts, or ZIP codes as a unit of analysis can possibly lead to flawed findings. Changes in local government, school boundaries, socioeconomic, demographic, and other characteristics do not always adhere along the same spatial lines as census tracts or block groups and these different boundaries can affect the statistics in different ways. “Just as census tracts do not conform to the popular conception of a neighborhood, census blocks do not always align with the popular notion of a block, particularly in urban areas where both sides of a street are considered part of the same block” (Sperling, 2012, pg. 221). Census block groups offer a better approximation of neighborhood areas than census tracts or ZIP codes but often suffer from having a smaller sample size in census surveys, such as the ACS (Sperling, 2012).

Using the census block group as the unit of analysis does not minimize spatial heterogeneity as much as the street segment unit of analysis would have, but it does make for easier interpretation of significant effects that may be hidden by aggregation at the census tract or higher. Crime events may be linked or traverse block groups but the block group offers a useful compromise because it allows a unit of analysis large enough to avoid unnecessary crime coding errors, but small enough to avoid large aggregation.

As with all research, a major limitation is time and resources. Variables were used from the American Community Survey due to ease of access and also because it provided data to the census block group unit of analysis. The ACS survey is widely used in sociological and
criminological research but it is important to recognize that it is based on estimates and sample sizes that shift year to year. Also, in relation to time and resources, I was not able to fully expand on the routine activity variables as Weisburd et al. (2000) due to not having the funding to purchase the same type of data that they obtained for their study; such as: the addresses of all the businesses, especially retail businesses, in New Hanover County.

The goal of this research was not to prove causation between these theoretical measures and crime and/or gang related crime. As mentioned previously, the method was exploratory and meant to examine the geographical location in which these incidents occur and to identify social-structural factors as well as opportunity factors, that induce these crime incidents. Overall, with theory and literature, the argument can be made that there is an association between overall crime rates, including gang related crime, and the characteristics of place. Even though results are not statistically generalizable, the study’s findings can contribute theoretically to an analysis of environment and opportunity, and contribute knowledge to the criminology of place research.

Future Research

Longitudinal work by Weisburd et al. (2012) demonstrated stability in crime patterns and crime concentration across street segments in Seattle. They found that crime remained stable across certain streets and that decreases in crime were largely accounted for by improvements in some high-crime street segments (Weisburd et al., 2012; McNeeley, 2015). Their study reinforced the crime-event notion that “crime is not randomly spatially distributed, but rather is concentrated in certain communities and micro-places” (McNeeley, 2015, pg. 38). The data collected here along with many of the patterns discovered during research indicate there is more to be revealed in terms of understanding why certain crimes may occur or be concentrated in
certain places. Following the methodology of Weisburd et al. (2012) and Smith et al. (2000) it is recommended that a longitudinal approach be taken to expand upon the current study and to examine whether or not the occurrence of crime generally, gang crime more specifically, demonstrates stability in the same geographical places. It would also be interesting to learn if future changes in some of these high crime communities leads to changes in crime rates and gang crimes.

In another aspect, future research could expand upon the crime data collected here by using different measures of social disorganization theory and routine activities theory. As mentioned in the limitations section, this research was limited by time and resources and the data used was based on ease of access and availability. This research could go into more depth with a wider spectrum of data that fully incorporated each theory. With that being said, it would also be beneficial for future research to use a fully integrated theoretical model by combining the interaction effects between risk factors (as specified by routine activities) and type of neighborhood (as specified in social disorganization).

Following the above recommendations, it is also recommended that a future study be conducted that examines gang crime more specifically at a more micro unit of analysis. Yet again, several limitations hindered the ability of this research to focus strictly on gang crime at a more micro unit of analysis. Using the census block group as the unit of analysis does not minimize spatial heterogeneity as much as the street segment unit of analysis would have. Aggregating to the census block group level allowed me to use them as proxies for communities but in reality, being able to get to the actual block level or street segment level would allow for a more accurate account of what measures influence gang crime in those specific locations.
In the literature review, lifestyle-routine activities theory was examined and explained due to the empirical evidence that shows that the gang lifestyle provides a unique context in which to study the relationship between lifestyles and routine activities, which has a significant effect on violence and delinquency. The data collected here along with prior empirical evidence indicates that there is more to be revealed in terms of group characteristics interacting with neighborhood or community characteristics. A fundamental hypothesis that could be tested is that the effects of group characteristics in a gang change as a function of neighborhood characteristics. The application of L-RAT should be taken into consideration for a theoretically integrated approach to understanding why gangs may form in certain places and what is it about the geographical place as well as the gang lifestyle that interact to influence crime.

REFLECTION ON INTERNSHIP

Gangs, as a criminal subculture, have always fascinated me and with this fascination came the desire to study them. This desire to study gangs was one of the many reasons that I decided to obtain a Master’s Degree in Criminology and Sociology. Throughout the Master’s program, I focused my attention towards gangs and applied my newly gained knowledge into the understanding of gangs. When it came time to focus on my Master’s thesis, I decided to try fulfill an internship in order to gain first-hand experience with gangs and to add to my intellectual knowledge. After a long drawn out process, in January 2015, I finally obtained an internship slot with the New Hanover County Sheriff’s Office. This internship afforded me the opportunity to be assigned to the joint County/City Gang Unit.

During my time as an intern, the Gang Unit consisted of one Detective Sergeant from both the Sheriff’s Office and WPD; three Gang Detectives from each department; one juvenile
Detective from the Sheriff’s Office; and the City was starting the hiring process for a gang analyst. This combined unit also incorporates a program called ELEMENTS Youth Violence Intervention Program: Prevention, Intervention, and Diversion. ELEMENTS stands for Enrich, Live, Experience, Motivate, Empower, Nourish, Tolerate, and Solve. The ELEMENTS program is funded by the County and currently consists of one program coordinator and two Youth Violence Intervention Specialists. The unit as a whole also requires the support of one administrative support technician. Overall, the GTF unit is specially designed to implement a combination of prevention, intervention, diversion, and suppression strategies to address the many factors that cause and sustain gang violence in New Hanover County.

The Juvenile Detective assigned to the GTF handles all crimes that are reported in NHC Schools and works with the Gang Detectives to determine gang relevance. If an incident is determined to be related to gang activity one of the Gang Detectives will become directly involved. Both Detectives work directly with the School Resource Officers and administration. The Gang Detective assigned to the schools also validates juveniles based on the referrals (10-92 reports) they receive from the school. The GTF Detective then interviews the subjects at school to determine whether the student is gang involved or if a gang incident has taken place and reads them the Gang related activity Policy. The detective then notifies the parents by mailing both a Parental Notification Letter and the Gang Related Activity Policy (see appendix figure 3 and figure 4). These documents are also provided to the Principal of the School that the student currently attends. The file is then turned into the Gang Task Force Administrator and, if deemed necessary, a Gang Task Force referral is completed for Program Elements and turned in to the Program Elements Coordinator.
The Gang Task Force Law Enforcement Officer’s (LEO) scheduled work hours are Monday through Friday 0800hrs – 1600hrs. However, intelligence gathering happens at any time of the day or night and/or on weekends. One of the main tasks of the GTF, along with verifying intelligence and gathering new intelligence, is to complete gang member validation packets. These packets include a validation form, a social media form, and all supporting documents (i.e. reports, pictures, etc). Once validated, these individuals are input into the records management systems with a gang alert message. This intelligence is then passed on to either the NHSO and/or WPD crime analyst for dissemination or passed on to the appropriate agency or law enforcement officer. GTF detectives are extremely flexible; they are subject to being called out at any given time in order to gather intelligence, assist other LEO agencies or to investigate relevant situations as they arise.

All of the Gang Detectives, for both the City and the County, work alongside and collaborate with other Law Enforcement agencies to gather intelligence and suppress gang violence in the tri-county area. Some of these other agencies include: the joint NHSO/WPD Housing Task Force, State and Federal Probation, FBI Safe Streets Task Force, and several other local, state and federal agencies. Along with their assigned gang duties, the detectives assigned to the GTF are also involved in: human trafficking cases both for federal and state cases; assisting general investigators with on-call & man power; assisting courthouse security with man power when violent gang members are on trial; assist the District Attorney’s office with locating and arresting subjects with material warrants; and work directly with ELEMENTS during group activities to help bridge the gap of the negative image that youth may have of law enforcement.

The ELEMENTS program is an all-inclusive program within New Hanover County Sheriff’s Office GTF designed to implement a combination of educational, preventative,
interventional, and divertive strategies to address the many factors that cause and sustain youth violence. The program coordinator and case managers provide youth with support for underlying emotional needs, advocacy, group interaction, and exposure to new activities and positive role models. They work directly with youth, their family, NHC School Resource Officers and Administration, NHC & WPD Law Enforcement, the community, and other community based programs. Each case manager supervises a caseload of approximately 10 kids/families in which they do direct care to help them reach specific goals set by youth, case manager, school, and family. Group activities in the program include: rope’s courses, team building, kayaking, camping, horse-back riding and other outdoor adventure activities.

My internship with the GTF consisted of working 20 hours per week from January 2015 until May 2015. Throughout my internship I assisted the GTF in gathering intelligence from social media sites, assisted with validating gang members, conducted background and records checks for various suspects, assisted with various administrative duties, and assisted GTF detectives with building prosecution cases, both gang related and human trafficking related.

Throughout my time as an intern, I learned the dynamics and organization of the gangs in New Hanover County. From the perspective of the gang detectives, gangs and gang members in New Hanover County do not follow the traditional organizational structure and methods of gangs found in large cities like Los Angeles or Chicago. It was originally thought that the gang members in New Hanover County were “wanna-be gang bangers” and that there was no real threat, but according to the gang detectives, this makes them even more dangerous. Gang members in New Hanover County were trying to prove themselves worthy and were trying to become organized. As time progressed, the gangs in the area did become more organized and formed various sets under the big umbrella groups known as the Bloods and Crips, also including
various Mexican/Latin gangs. But what makes New Hanover County different is the fact that some of these gang members do not stay loyal to one set and will switch back and forth. According to the gang detectives, individuals will switch gang sets due to the fact that their loyalty lies with a set that will show them “love and appreciation” and also with a set that will provide them with the most prestige and lucrative gains. The fact that individuals will switch gang sets makes keeping track of them and their gang affiliation difficult. It is a constant struggle to update validation packets and to keep track of which gang sets are “beefing” with each other or which ones have an alliance. Also, unlike more organized gangs in large cities, the gang sets in New Hanover County align with each other for various reasons and sets under the same umbrella will also fight each other.

In the beginning of 2015, New Hanover County had a history of roughly 50 sets of Bloods, 24 sets of Crips/Folk, 8 different domestic terrorist groups, and 5 Mexican/Latin gangs. Some of these sets arise when a gang member is unhappy with their current set and split off to create a new set; some of them are created by the kids in schools and are not as organized or as violent; and some are subsets from another set. One explanation of why there are so many sets and sub-sets speaks directly to the elusive definition of a gang. Certain sets have been validated due to the fact that they have multiple members with an official group name (i.e. a group created in a school), they have taken on signs and symbols, and individually or as a whole have participated in delinquent behavior. When these sets are recognized and they meet North Carolina’s definition of a gang, they become an official gang set. Most of these sets and sub-sets are later recognized as being a part of one of the bigger “umbrella” groups and can then be reclassified; even once they are re-classified, their original name is still attached as a set or sub-set, which increases the overall count of gang sets in the area. Obviously, there are a few sets
under each umbrella that are the most active and also the most violent. At the time that this was written, New Hanover County and Wilmington had three primary Blood sets that were actively involved in the most violence and gang activity; one primary Crip set; one Latin/Mexican set; and also one “nation” set. The “nation” set that was most active in the area was Folk Nation, which has an extensive history—it is basically an alliance of several different Crip and Latin/Hispanic gangs that originally formed in prison to protect themselves against the opposing Bloods. Like Folk Nation, the Bloods also have a national alliance called Peoples Nation, which was also formed in Prison. The New Hanover County/Wilmington region doesn’t seem to have many Blood gangs and gang members showing allegiance to Peoples Nation. This may be due to the simple fact that the Bloods have majority control in the area and do not need to join together compared to the Crips. By showing allegiance to Folk, the Crips are able to strengthen their numbers and their control.

As of August 2015, I was hired by Wilmington Police Department as the Gang Analyst and currently work with the Gang Unit to continue combating the gangs and gang crime in New Hanover County. As the gang analyst, I perform analytical research and statistical analysis that results in the development, preparation and compilation of gang trends and patterns for dissemination and use to internal and external officials. I am also responsible for gathering data on gangs and preparing gang validation documentation and to provide information on gangs, their members, and ongoing “beefs” to departmental and allied agency partners. By tracking the gang trends and patterns, I work to provide the agencies with the intelligence they need to combat gang related crime.

At the time that this was being written, I was working with Wilmington Police Department’s Command and Staff to implement policies, procedures, and guidelines to improve
the tracking of gang related incidents. In pointing out the fact that 2014 had just over 200 gang related incidents out of over 12,000, it was clear that we needed a better way to document and track gang related incidents. Working with the gang unit detectives and with the records management staff, we created a new policy that outlines how to document and track these incidents and we also created new fields on the report form that requires the reporting officer to fill-in. Once these policies go into effect and all of the officers on the street have been trained on the procedures and guidelines, we will be able to track gang incidents more effectively and accurately.
REFERENCES


APPENDIX

Figure 1: New Hanover County, NC

Source: NCPEDIA.ORG
Figure 2: Gang Related Incidents Map

Legend
Census Block Groups
GANGREL
0
1 - 5
6 - 10
11 - 15
16 - 20
21 - 25
26 - 32
Parental Notification Letter of Gang Involvement

This letter is to inform you that ________________________, has been identified as an □ active gang member or □ associate of a gang, on ______________.
The gang he/she is involved with is: ______________

Property Seized: □ Yes □ No
Description: See attached documents.

□ Your child has signed or been given a copy of the New Hanover County Schools gang contract. Be advised this contract is valid for as long as your child is enrolled in ANY school within the New Hanover County school district.

If you have any questions or concerns, please contact the New Hanover County Sheriff’s Office Gang Task Force at (910) 798-4300.
Figure 4: Gang Related Activity Policy

New Hanover County Schools

Gang Related Activity Policy

Conduct and activity prohibited by this Policy includes:

1. Drawing gang symbols, letters, numbers, or phrases on any personal property or property of New Hanover County Schools (including but not limited to walls, desks, posters, lockers, etc.)

2. Creating graffiti on any property of New Hanover County Schools with any gang related words, symbols, letters, numbers, etc.

3. Making any hand gestures or symbols that represent a gang and/or teaching others any gang-related hand gestures.

4. Wearing, possessing, using, distributing, displaying or selling any clothing, accessories, jewelry, emblems, badges, symbols, signs or other items with the intent to convey membership or affiliation to a gang.

5. Verbal and/or physical threats or confrontations to any student, teacher, or staff member in relation to gang affiliation or representation.

6. Instigating or participating in any action which disrupts the educational process on campus at any time both during and after school hours, which includes, but is not limited to, fighting, arguing, disrespecting, gesturing, or any other action that distracts students from learning or teachers from teaching.

7. Committing any illegal act or violation of school system policies in connection with gang-related activity.

The above policy was read to ______________________ by _______________________

(Student) (Officer/School Admin)

on __________________ at _____________________________.

(Date) (Location)