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More Than What Meets the Eye: An Examination of Characteristics That Impact Juvenile Justice Detention Decisions

Ashley Maria Buchanan
Old Dominion University

MORE THAN WHAT MEETS THE EYE: AN EXAMINATION OF CHARACTERISTICS

THAT IMPACT JUVENILE JUSTICE DETENTION DECISIONS

by

Ashley Maria Buchanan
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Approved by:

Allison Chappell (Director)

Scott Maggard (Member)

Ruth Triplett (Member)

ABSTRACT

MORE THAN WHAT MEETS THE EYE: AN EXAMINATION OF CHARACTERISTICS
THAT IMPACT JUVENILE JUSTICE DETENTION DECISIONS

Ashley Maria Buchanan
Old Dominion University, 2018
Director: Dr. Allison Chappell

Research shows that disparities still exist in the juvenile justice decision-making process, but there is a gap in our understanding of neighborhood characteristics that may affect those detention decisions. Therefore, this research examines structural factors influenced by social disorganization theory to explore the impact they have on juvenile detention decisions. Neighborhood parks and recreation centers are examined as important local institutions that provide informal social control to the neighborhood. The Virginia Department of Juvenile Justice (DJJ) for the city of Norfolk compiled juvenile justice data, and 2016 Census data were also used to obtain neighborhood structural information. Non-White juveniles were more likely to be detained than White juveniles. Males were more likely to receive detention. The older the juvenile, the more likely they were to be detained at intake. The more available recreation centers in a neighborhood, the less likely a juvenile will be detained at intake from the same neighborhood. Poverty and heterogeneity also showed significance in the decision to detain a juvenile at intake. The policy implications are discusses as well as limitations and directions for future research.

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CHAPTER I

INTRODUCTION

Juvenile justice continues to be at the forefront of new research and current studies in sociology and criminology. Research shows that juveniles face race, gender, and age disparities in the juvenile justice decision-making process (Sampson and Laub, 1993; MacDonald and Chesney-Lind, 2011; Rodriguez, 2010; Peck et al., 2014). Juveniles with prior adjudications are more likely to be detained at intake, juveniles who commit a serious offense are more likely to be detained, and juveniles already under supervision are more likely to be detained at intake (Fenwick, 1982; Armstrong and Rodriguez, 2005; Rodriguez, 2010). These legal variables have helped researchers understand the decision to detain a juvenile. Many studies have examined the extent to which legal and extralegal factors describe the affect on preadjudication detention decisions (Leiber, 2013). Race has been found to be a significant predictor of the decision to detain a juvenile (Bortner and Reed, 1985; Poe-Yagamata & Jones, 2000; Leiber, 2003; Leiber and Mack, 2003; Bishop, 2005). Gender and age have also been found to be significant predictors of juvenile detention when controlling for legal variables such as offense seriousness and prior adjudications (Leiber et al., 2013; Peck et al., 2016).

Research has shown that structural factors measuring context influence decision-making as well. Since the early 1900's, theoretical explanations of crime and delinquency in neighborhoods were generated. Shaw and McKay (1942) provided the framework to study how poverty, residential mobility, and heterogeneity influenced crime and delinquency, which was later coined as the social disorganization theory. The focus has been on neighborhood structural disadvantage and crime, the ability of neighborhoods to activate informal social controls, and how local institutions impact poverty, heterogeneity, residential mobility and crime (Peterson et

al., 2000; Sampson, Raudenbush and Earls, 1997; Bursik and Grasmick, 1993a; Sampson and Groves, 1989). This body of work led to the exploration of mediating factors that impact neighborhood structural characteristics, which ultimately contribute to low informal social control and delinquency.

Family disruption, urbanization, informal and formal social controls, local institutions, and peer networks have all been shown to serve as mediators between neighborhood structural factors and crime (Shaw and McKay, 1942; Bursik, 1988; Sampson and Groves, 1989; Bursik and Grasmick; 1993). Research shows that the lack of informal social control decreases the ability of a community to maintain local institutions, such as parks, clubs and other organizations (Sampson and Groves, 1989). Therefore, informal social controls and neighborhood collective efficacy serve as mediating factors between neighborhood structural disadvantage and crime (Sampson et. al, 1997). Neighborhoods lacking informal social controls are also subject to increased formal social control by the justice system, leading to an increase in formal juvenile justice sanctions, such as detention, in disadvantaged areas (Sampson and Laub 1993; Shook and Goodkind, 2009).

Previous research has found support for social disorganization theory in the study of delinquency (Sampson and Groves, 1989; Bursick and Grasmick, 1993). Studies show that high poverty, low residential instability, and heterogeneous neighborhoods experience an increased rate of delinquency. On the contrary, there is little research that examines the factors mediating social disorganization or discussing structural characteristics impact juvenile justice decisions (Thornberry, 1979; Rodriguez, 2007).

This study is influenced by social disorganization theory to help understand what demographic and neighborhood structural characteristics are related to detention decisions.

Specifically, the purpose of the current study is to examine parks and recreation centers to observe if their presence reduces the impact of neighborhood social disorganization variables on juvenile detention decisions. The examination of these variables while controlling for relevant legal variables will aid in understanding the impact of mediating variables on disorganization factors. Based on the data on juveniles referred to Virginia's Juvenile and Domestic Relations Court from 2001 to 2015, the study addresses five research questions:

A. Is race a significant predictor of juvenile justice detention decisions?

B. Is gender a significant predictor of juvenile justice detention decisions?

C. Is age a significant predictor of juvenile justice detention decisions?

D. Are neighborhood structural factors such as poverty, residential mobility and heterogeneity associated with detention decisions?

E. Does the availability of parks/recreation centers mediate the influence of poverty, residential mobility, and heterogeneity on detention?

This research will contribute to the limited body of research by using insight from social disorganization theory to help understand what neighborhood structural characteristics are associated with detention. Race and gender have consistently been linked to juvenile justice detention decisions, but examining the structural characteristics may clarify its relationship with detention decisions. Chapter two provides an overview of three main juvenile justice disparities: race, gender, and age. Next, social disorganization is examined and empirical evidence is presented. Then, important mediating factors that impact social disorganization variables are discussed. Finally, the literature on the relationship between juvenile justice disparities and neighborhood social disorganization are discussed.

CHAPTER II

REVIEW OF LITERATURE

This chapter will first provide insight on race, gender, and age disparities experienced by juveniles through the justice system. Next, an overview of the social disorganization theory will be discussed, followed by empirical evidence that supports the theory. Then, mediating factors such as social control and neighborhood parks and recreation centers will be addressed as they affect structural characteristics. Finally, the intersection between juvenile justice disparities and social disorganization will be discussed.

JUVENILE JUSTICE DISPARITIES

Previous research has found that disparities exist in the juvenile justice system. To help alleviate the problem of disparities in the juvenile justice system, the Juvenile Justice and Delinquency Prevention Act (JJDP Act) of 1974 encouraged the development and implementation of services for females, minorities, and status offenders to reduce their presence in the juvenile justice system (Peck et al., 2014). In the 1990's, there was a shift in the imagery of a child. The idea of youthful minds declined, and a new perception emerged that youth were more like adults who should be responsible for their crimes (Fader, Kurlychek, and Morgan, 2014). In 1992, the disproportionate minority contact (DMC) mandate was added to the Juvenile Justice and Delinquency Prevention Act of 1974 (Peck et al., 2014). This mandate was created to establish equal treatment for all youth within the juvenile justice system (Leiber and Rodriquez, 2011). An abundance of research has examined the impact of race on juvenile court proceedings that shows disparities still exist at arrest and secure detention decisions (Rodriquez, 2010; Leiber and Rodriguez, 2010). It is to this research that we now turn.

Race

A review of literature shows studies that examine the effect of race on juvenile justice decisions. The first study was completed by Armstrong and Rodriguez (2005). They studied 8,289 referrals to juvenile courts for delinquent acts in a northeastern state during 1990. This research was completed in order to examine how legal, extralegal and contextual variables influence juvenile justice decisions across neighborhoods. Results from their study showed that racial composition significantly affected preadjudication detention decisions (Armstrong and Rodriguez, 2005). Results also revealed the importance of the individual and contextual variables in preadjudication detention decisions, since juveniles living in areas with high minority populations are more likely to be detained, regardless of race (Armstrong and Rodriguez, 2005).

Eight years later, Leiber (2013) studied a total of 927 non-detained youth in Black Hawk County, Iowa to examine the factors associated with pre- and post-adjudication secure detention. Like Armstrong and Rodriquez (2005), results suggested that African American youths were more likely than whites to be detained pre-adjudication (2 to 1) (Leiber, 2013). Additionally, White youth charged for property offenses inversely affect the detention decision, whereas there is no effect for African American youth charged with property crimes (Leiber, 2013). Leiber (2013) also revealed that legal factors such as the seriousness of the offense and previous detentions were often predictors of each type of secure detention and decision-making process.

A year later, Fader and colleagues (2014) studied 12,906 youth in 28 residential programs from the Program Development and Evaluation System (ProDES), in order to further examine the factors that influence juvenile court decision-making. As with the two previous studies, their results showed that race had the strongest effect of any factors considered on any decision made by the court, whether the juveniles were placed in a residential program or a physical regimen program (Fader et al., 2014). Even after controlling for legal variables (prior arrest, offense

seriousness, etc.), race was the strongest predictor of detaining and committing a juvenile to a facility.

Finally, Leiber, Peck, and Rodriguez (2016) researched the relative effects of White-to-minority unemployment on the intake and minority population. After examining 37 juvenile courts with over 16,000 delinquent cases, Leiber et al. (2016) found that the main effect of Black presence does not influence the mean rate of intake, adjudication or disposition. Additionally, findings show the probability of youth being processed formally at intake is contingent on the level of White-to-Black unemployment ratio (Leiber et al., 2016:64). That statement is not supportive of their hypothesis, but revealed the Hispanic threat (a threat to the English language and Anglo-American culture) is not a statistically significant determinant of intake, adjudication, or disposition (Leiber e. al., 2016). Therefore, Leiber et al. (2016) reported communities where White-to-Black and White-to-Hispanic equality ratio increased the probability of youth receiving lenient outcomes.

Gender

Another look at juvenile justice disparities, show a relationship with gender and detention decisions. In an empirical examination of gender bias conducted by MacDonald and Chesney-Lind (2001), 85,692 cases referred to the Hawaii Family Court were used to study gender differences from 1980-1991. Results show that males and females with serious offenses and were tried in rural courts, were more likely to be petitioned or detained (MacDonald and Chesney-Lind, 2001). This research suggested that females are more likely to be formally disposed for less serious offenses and once the female is found guilty, the offense seriousness has less influence on determining the court's disposition (MacDonald and Chesney- Lind, 2001). Results are similar to previous studies, which find females to be more likely than males to be informally

handled, but these effects are different when race is included (MacDonald and Chesney-Lind, 2001).

Tracy, Kempf-Leonard, and Abramoske-James (2009) examined contemporary evidence about the similarities and differences between females and males with respect to the juvenile justice processing system. Using data from the National Center for Juvenile Justice from 1985 to 2005, results suggest that the rate of females referred to juvenile court increased from 1985-1997, then remained steady thereafter (Tracy et al., 2009). Whereas males referred to juvenile court, showed an increased in referrals between 1985-1997, and a decrease in referrals until 2002. The study emphasizes the similarities of bother genders in respect to juvenile court processing, but highlights the differences between the relationship gender has with offense type. In other words, for simple assault, property index crimes, and public order offenses, results showed females had about the same number of referrals to the juvenile court (Tracy et al., 2009).

In 2013, Maggard, Chappell, and Higgins used 4,059 cases from the Virginia Department of Juvenile Justice from 2006 to 2008 to examine if race and gender predict the decision to detain, release, or employ a detention alternative. Research suggests that gender was significant as girl's odds of receiving a detention alternative over secure detention increased by 71 percent (Maggard et al., 2013). In connection with race, this study supports the belief that nonwhite girls will be more likely to receive detention than white girls, and boys are treated more harshly than girls (Maggard et al., 2013).

Peck, Leiber, Beaudry-Cyr, and Toman (2016) used data from two Mid-Atlantic states where the juvenile was referred to court between 2003 and 2008 to compare and contrast outcomes, but to also examine the extent to which gender predicts harsher outcomes. With a sample of 36, 378, researchers found that females had a larger presence in the court when it came

to status and contempt offenses (Peck et al., 2016). Results from this study also showed that female cases experienced a decrease in the odds of receiving an intake referral, while being a male charged with a misdemeanor or felony increased the odds of receiving and intake referral. Altogether, it is important to note from this study that gender failed to show a linear relationship with detention, but had an inverse effect with intake outcomes (Peck et al., 2016).

Age

Most studies that examine race or gender have an age variable to gather more information about the demographics of the juveniles. There are not many studies that look at age specifically; therefore, previous research presented looks at age in combination with other demographic variables.

While conducting research on the role of race and community characteristics on detention decisions, Rodriguez (2007) found that the average age to detain a juvenile was 15 years old, and they were more likely to be detained if they were not attending school. Leiber (2013) examined race and juvenile justice decision-making on detention. Along with race, age was shown to be a significant predictor of detention. Findings from that study showed that 74 percent of the sample was 15 years of age when detained (Leiber, 2013). Maggard et al. (2013) examined race and gender to predict the decision to detain, release, or employ a detention alternative. While conducting their study, they found that for each year a juvenile gets older, the odds of receiving a detention alternative versus secure detention decreased by 16 percent (Maggard et al., 2013). Previous research suggests that juveniles are more likely to experience detention on average, at the age of 15. This is important for the current research as it also looks at age with regards to race and gender.

While research indicates the importance of individual demographic factors of juvenile justice decision making, theory suggest that context matters as well. In the next section, an overview of the social disorganization theory is presented with an examination of previous studies that support the theory.

SOCIAL DISORGANIZATION THEORY

Social disorganization theory can be defined as the inability of community members to achieve shared values in order to solve a common problem experienced by the community (Osgood and Chambers, 2003). It is said that once residents can realize the desired goals of the community (versus being forced by formal social controls), neighborhoods can increase residential stability and decrease disadvantage (Sampson, Raudenbush, and Earls, 1997). Social disorganization theory can be traced back to the work of Robert Park and Ernest Burgess who conducted innovative research on the relationship between socioeconomic status and delinquency mostly in the city of Chicago (Bursik and Webb, 1982). During the uprising of modern industrialization, the cities' population increased. As the population increased, researchers saw an increase in neighborhood disorganization and a change in residential attitudes, based on the urban growth of the city (Park and Burgess, 1925). To study the urban growth in the city, researchers used concentric zones. Concentric zones are systemized ecological communities that ranged from inner-city ghettos, also termed central business districts, to suburban areas where the social class improved, and better housing was available (Quinn, 1940).

Following Park and Burgess, Clifford Shaw and Henry McKay researched for decades in Chicago to polish their theory; their final product, *Juvenile Delinquency and Urban Areas* was published in 1942 (Sampson and Groves, 1989). They believed "certain social structural

characteristics-- low economic status, high ethnic heterogeneity, and high residential mobility—led to the disruption of community-level social organization, which in turn was associated with higher delinquency rates" (Kaylen & Pridemore 2013: 906). The classical model they proposed consisted of three main factors: poverty, residential mobility, and ethnic heterogeneity.

Poverty

Shaw and McKay (1969) argued that disadvantaged and impoverished neighborhoods are more likely to experience increased crime and delinquency. Socioeconomic status (SES) can be based on one's income, education, and occupation. The model by Shaw and McKay suggests that low SES communities suffer from a weak organizational base, lack of participation from the community, and a lack of control over their community (Sampson and Grove, 1989). It is implied that neighborhoods with high rates of poverty, will experience more crime resulting from the lack of social controls (Chamberlain and Hipp, 2015). Wilson's (1987) research on urban poverty suggests that the transformation of inner-city neighborhoods has resulted in the "truly disadvantaged", or populations with low community SES. Urban minorities have been vulnerable to structural economic changes including increased polarization of the labor market, lower wages, the relocation of manufacturing out of the inner city, and income inequality (Sampson & Laub, 1993). Thus, community-level SES is a strong determinant of participation within the community. Some researchers suggest that disadvantage and poverty influence crime and delinquency, while others stressed the importance of residential stability.

Residential Mobility

Residential mobility refers to the process of individuals moving in and out of the neighborhood and the length of stay. The longer residents live in the community, the more likely that collective efficacy will increase, while crime will decrease (Wo, 2016). It is important for

individuals to build relationships in their community to increase the informal social controls within that neighborhood, but that cannot occur when there are individuals consistently moving in and out of the neighborhood. Residential mobility disrupts social networks and social ties because it takes time to develop those characteristics in a community (Kingston, Huizinga, and Elliot, 2009). Kasarda and Janowitz (1974) saw social ties and social networks as a necessary process to create development for friendship networks, kinship bonds, and local ties. Community residential stability is posited to have a positive effect on local friendship networks, which ultimately reduce crime (Sampson & Groves, 1989).

Heterogeneity

An ethnic heterogeneous neighborhood consists of people from different racial and ethnic backgrounds living together in the same community. Ethnic heterogeneity can interfere with the communication between neighbors in terms of solving common problems. Shaw and McKay (1969) argued that high ethnic heterogeneity, along with poverty and residential mobility, would disrupt the community's social organization, and in turn increase crime and delinquency. This can weaken the supervising capabilities of relationships among residents (Bursik and Grasmick, 1993). Various ethnic groups may share conventional values such as reducing crime or not loitering after a certain time, but heterogeneity can impede those communication patterns (Sampson and Groves, 1989).

EMPIRICAL SUPPORT FOR SOCIAL DISORGANIZATION THEORY

Numerous studies emerged in the years following the creation of social disorganization theory. In this section, these studies illustrate key findings that are reviewed to exemplify research finding in this area. These studies were chosen for their known prevalence in the field, as well as showing significant results that help guide the current study.

In 1974, Kasarda and Janowitz used sample surveys to examine community attachment in mass society, but also to understand the importance of residential instability. This study viewed the local community as a system of friendship, kinship, and associational networks, assimilating new residents and generations (Kasarda and Janowitz, 1974). While interviewing 2199 adults in England (excluding London), Kasarda and Janowitz (1974) found that individuals who lived in large communities are more likely to have social bonds and ties to their community versus individuals who lived in rural communities. They also found that the length of residency is correlated with crime in the neighborhood, while social class and age reflect access to greater mobility (Kasarda and Janowitz (1974).

Almost three decades later, Peterson, Krivo, and Harris (2000) sampled 700 people within Columbus, Ohio to assess whether local institutions provide a linking mechanism that influences economically deprived neighborhoods as it is associated with violent crime. The study revealed that public housing does not have a direct influence on crime, whereas it does affect economic deprivation levels in a neighborhood. Moreover, results showed that economic deprivation leads to higher amounts of violence, and neighborhoods with more institutions have lower rates of rape, robbery and assault (Peterson et al., 2000). Following Shaw and McKay's results, research revealed that social disorganization factors are the leading predictors of neighborhood violence (Peterson et al., 2000).

De Coster, Heimer, and Wittrock (2006) examined data from the ADD Health Study of adolescents in grades 7 through 12 (11,207 individuals), which included individual-level characteristics and community-level characteristics that allowed the researchers to link this information to community disadvantage. The intended purpose of this study was to research the relationship between communities and crime (De Coster et al., 2006). De Coster et al.'s (2006)

study revealed that violent delinquency is largely a product of the juveniles' environment as well as their status characteristics including family disadvantage, community disadvantage, and exposure to street context. These findings suggest that disadvantaged families are more likely to reside in disadvantaged neighborhoods (De Coster et al., 2006).

A few years later, Kingston, Huizinga, and Elliot (2009) used the Denver Youth Survey (DYS) between 1989 and 1990, to explain and test the relationship between neighborhood social structure and delinquency amongst structurally disadvantaged neighborhoods. Research showed that high–poverty neighborhoods have limited resources like educational support, recreational support, and even health/medical support, because they lack such stable institutions (Kingston et al., 2009). Therefore, neighborhoods with higher rates of poverty have higher rates of violent offending and residents from poorer neighborhoods perceive less effective social institutions (Kingston et al., 2009). These findings align with Shaw and McKay's findings that higher levels of disadvantage would result in higher levels of delinquency.

Hipp (2010) examined the relationship structural characteristics have on neighborhood crime using over 4,300 residents from 13 different cities. The study showed that neighborhoods with a higher level of disadvantage are more likely to experience higher levels of violent and property crime (Hipp, 2010). Findings from Hipp's (2010) study revealed that not only did concentrated disadvantage and crime have a positive relationship, but also neighborhoods with fewer economic resources are less likely to ward off crime over time. There is evidence that ethnic minorities may have limited mobility and are less likely to avoid undesirable neighborhoods (Hipp, 2010). Therefore, Hipp (2010) revealed that violent crime does not significantly affect heterogeneity, but neighborhoods with more violent crime had high levels of heterogeneity.

MEDIATING FACTORS

Criticisms of the classical model of social disorganization theory emerged as criminologists realized the theory had missing concepts and failed to establish mediating factors. In order to improve the theory, researchers addressed criticisms that expanded the scope of social disorganization. First, Stark (1987) and Reiss (1987:7-8) argued that when it comes to the volume of crime, it is important to combine individual-level analysis and aggregate-level analysis. This would place more emphasis on how social disorganization reduced social control and impacted other neighborhood aspects (Stark, 1987). Second, since social disorganization theory is a macro-level theory because of its emphasis on crime rates at a community-level, it cannot explain individual behavior (Sampson and Groves, 1989). Lastly, confusion generated regarding the conceptualization of social disorganization. There was a different understanding of the "focus on the causal process by which crime influences neighborhood characteristics" (Markowitz, p. 297, 2001). In other words, Shaw and McKay were able to draw elements from other theories like strain and control, but failed to link the causal effects between social disorganization and neighborhood crime rates (Bursik, 1988).

Stark (1987) responded to the criticisms by examining how neighborhood disorganization reduced social control and impacted crime rates. He focused on the density of the population, the dilapidation of the buildings in the community and areas with both residential and commercial lands use (Stark 1987). Results suggested that weak structural factors weakened social controls, and increased feedback factors that attract criminals (Stark, 1987). Sampson and Groves (1989) responded to the criticisms by testing the social disorganization model and making additions to the theory while using British Crime Surveys in 1982. The main concept presented in their study clarified how to measure social disorganization. Urbanization, socioeconomic status,

heterogeneity, family disruption, and residential stability all had an influence on local friendship networks, and those local friendships influenced the informal social controls in the community (Sampson and Groves, 1989). Their study found that ethnic heterogeneity and urbanization of neighborhoods decreased the ability of the community to control their youth and linked structural factors of social disorganization to crime and delinquency (Sampson and Groves, 1989).

Bursik and Grasmick (1993) addressed some of the major criticisms about the social disorganization theory by putting a greater emphasis on the social control aspect of neighborhoods that are affected by structural factors. Their major focus separated social controls into three categories: private, parochial, and public controls (Bursik and Grasmick, 1993). Research suggested that for communities who have higher rates of crime and delinquency, those neighborhoods lack the ability to possess the three types of social control, which mediates the impact of structural variables (poverty, residential mobility, and heterogeneity) (Bursik and Grasmick, 1993). It was not until the early 1990's, when research examining specific social controls like local institutions became prevalent because local institutions were shown to provide supervision over youth and positive influences (Peterson, Krivo, and Harris, 2000; Wilson 1987; Sullivan, 1993).

While some research suggests that local institutions, such as neighborhood parks and recreation facilities, may increase the number of potential offenders, social bonds within the community built on length of residency, kinship, and friendship can increase the mechanisms of informal and formal social control (Brantingham and Brantingham, 1995; Bursik, 1988; Kasarda and Janowitz, 1974). Disorganized neighborhoods have weak ties to local institutions that can provide benefits to the neighborhood (Bursick and Grasmick, 1993; Chamberlain and Hipp, 2015).

Local institutions such as parks and recreation centers serve as a linking mechanism to economic deprivation and residential mobility to crime in the neighborhood (Peterson et. al, 2000). The availability of local institutions in a community has an influence on crimes committed in that neighborhood. For example, parks act as gathering places for many types of people and could potentially attract offenders where there is little formal or informal social control (Groff & McCord, 2011). Social disorganization theory points to community institutions as they connect individuals with valued roles in society (Peterson et. al, 2000); for example, recreation center employees and coaches provide supervision during formal and informal activities. Therefore, the modernization of social disorganization theory has its foundation in social controls, where disadvantaged neighborhoods find it difficult to sustain institutions and controls.

Brantingham and Brantingham (1995) conducted multiple studies on the urban settings that create crime and fear, which has been said by researchers to be the by-product of our environment. In one study, Brantingham and Brantingham (1995) examined the nodes (committing offenses in central places in their lives), paths (where people go and what they learn), and edges (enough distinctiveness from one location to make it noticeable). While studying the city of Burnaby, one of the largest and most populated suburbs in Vancouver, Brantingham and Brantingham (1995) revealed that a combination of neighborhood attractions serve as crime generators and crime attractors. Results showed that generators and attractors like recreation centers support high levels of crime (Brantingham and Brantingham, 1995) Also, areas around edges often experience high crime rates, and since parks have edges, results show areas around parks often experience high crime rates (Brantingham and Brantingham, 1995).

Groff and McCord (2011) examined, labeled and designated 249 neighborhood parks in the city of Philadelphia. Groff and McCord (2011) revealed that the presence of playing fields such as baseball and football fields were associated with lower rates of all crime. Results showed that as the number of activity generators increased, the amount of crime decreased significantly for violent, property and disorderly crime (Groff and McCord, 2011). Findings also showed that crime densities in park environs (areas and characteristics surrounding the park) were much higher than areas surrounding intersections or recreation centers (Groff and McCord, 2011). Additionally, park environs (between 14% to 17%) account for 50 percent of all crimes at parks that indicated there were a subset of parks that had a crime problem (Groff and McCord, 2011). The literature suggests that local institutions such as parks and recreation centers influence crime in neighborhoods positively and negatively.

INTERSECTION OF DISPARITIES AND DISORGANIZATION

Social disorganization theory suggests that structural factors (i.e., poverty, residential mobility, and ethnic/racial heterogeneity) have an influence on crime and delinquency. The evolution of the theory has suggested factors such as social controls, local institutions, local friendship networks, organizational participation, and peer groups are concepts mediating delinquency (Sampson and Groves, 1989). Studies have also shown structural factors like poverty and heterogeneity influence the juvenile justice decision-making process. Both legal and extralegal factors alone cannot account for the disparities of youth referred to the juvenile justice court system (Peck and Jennings, 2016). Previous literature implies that race, gender, and neighborhood structural characteristics influence juvenile justice detention decisions. This section will review neighborhood social disorganization factors as they impact juvenile justice disparities.

In 1993, Sampson and Laub conducted an empirical assessment on the structural context of juvenile court processing. They were also interested in how the concentration of racial poverty and inequality would exert macro-level effects on punitive forms of social control (Sampson and Laub, 1993). To conduct their study, Sampson and Laub (1993) used data from the National Juvenile Court Data Archive where raw juvenile case records rendered 322 counties for their sample. Results suggested that racial inequality has the largest effect of all variables on personal and public order offenses. Results also suggested underclass concentration is significantly and positively related to detention, while racial inequality and wealth both increase detention rates (Sampson and Laub, 1993). In Sampson and Laub's (1993) study, results also showed that the structural context of underclass poverty and racial inequality are shown to increase the rate of juvenile justice processing.

Chung and Steinberg (2006) researched a group of 488 male participants in Philadelphia, Pennsylvania to examine whether there was a relationship between neighborhood characteristics and adolescent offending. The study theorized that high rates of residential instability were related to the decrease of social cohesion and the lack of social cohesion and neighborhood connectedness is possibly linked to youths spending time with more deviant friends (Chung et al., 2006). These results suggest an increase in criminal behavior is associated with ineffective parenting, poor neighborhood environments, and peer networks (Chung et al., 2006).

Shook and Goodkind (2009) studied 1,302 youth in an urban county in Michigan, who were charged with an offense between 1997 and 2000, in order to assess the influence of race, geography, and interaction on detention decisions. In this study, offense characteristics influence detention decisions, race is strongly related to detention, and there is a geographic location effect on detention decisions (Shook and Goodkind (2009). Results revealed offense characteristics like

severity and type influence the chances of being detained, and for each year in age increase, youth experienced a 29 percent increase in the likelihood of being detained (Shook and Goodkind, 2009). Their results also suggested that Black youth are three times more likely to be detained than White youth, and geographically, 82 percent of youth were detained in the city versus 57 percent of youth detained in the suburbs (Shook and Goodkind, 2009).

Research Questions and Hypotheses

This section summarizes the research questions that guide the current study, which examines structural factors and disparities of the juvenile justice system decision-making process. The elements of the theory help guide the research questions presented below.

A. Is race a significant predictor of juvenile justice detention decisions?

B. Is gender a significant predictor of juvenile justice detention decisions?

C. Is age a significant predictor of juvenile justice detention decisions?

D. Are neighborhood structural factors such as poverty, residential mobility and heterogeneity associated with detention decisions?

E. Does the availability of parks/recreation centers mediate the influence of poverty, residential mobility, and heterogeneity on delinquency?

Based on the conclusions of previous literature and implications of social disorganization theory, the current research hypothesizes that (1) non-white juveniles will be more likely to receive detention compared to their white counterparts; (2) Males will be more likely to receive a detention decision compared to females; (3) As age increases, detention is more likely to increase; (4) Poverty, residential mobility, and heterogeneity will be associated with increased detention decisions; and (5) Neighborhood parks and recreation centers will mediate the influence of neighborhood structural factors on detention.

CHAPTER III

METHODOLOGY

This chapter examines the research design used in the study as well as the data and variables used in the study. The sample of juvenile cases processed through the court service unit of the Virginia Department of Juvenile Justice (DJJ) are examined for Norfolk, Virginia and neighborhood structural characteristics are described.

DATA

This research is a quantitative research study designed to examine if neighborhood parks and also recreation centers reduce the impact of structural factors on detention decisions. The sample for this study consists of 8,372 juvenile cases processed at intake.

This study uses official data compiled by the Virginia Department of Juvenile Justice (DJJ), where the population of juveniles is referred to Virginia's Juvenile and Domestic Relations Court from January 2011 to December 2015. To gather information about the neighborhood parks and recreation centers in Norfolk, Virginia, data was collected from the City of Norfolk (https://www.norfolk.gov/rpos/parks.asp) by zip codes including: parks that encompass basketball courts, open playing fields for football or soccer, playgrounds, and picnic tables/ seating areas. Altogether there are 14 zip codes in the city of Norfolk. Recreation centers follow the same guidelines but include supervised activities. In order to assess the neighborhood structural factors of social disorganization, data was collected from the 2016 fiscal year Census, and also categorized into zip codes to examine the statistics within each neighborhood.

This study is designed to explore the relationship between neighborhood structural characteristics and juvenile detention decisions in Norfolk, Virginia. To examine this relationship, research questions are used to guide this study.

VARIABLES IN THE STUDY

Dependent Variables

The dependent variable in this study is the detention decision at the current intake case. The decision to detain a juvenile prior to adjudication is operationalized as a categorical variable. Detention is coded as either receiving detention (yes=1), or not receiving detention (no=0). Not receiving pre-dispositional detention serves as the reference category.

Independent Variables

The independent variables include race, gender, age, and age at 1st arrest, poverty, residential mobility, heterogeneity, neighborhood parks, and recreation centers. Race is operationalized as a dichotomous variable that differentiates between Non-white and White juvenile offenders (White=0, Nonwhite=1). Gender is also operationalized as a dichotomous variable looking at female juvenile offenders versus male juvenile offenders (male=0, female=1). Age is operationalized as a continuous variable; it is calculated by date of birth. Age at first arrest is also a continuous variable, operationalized as the age the juvenile was first arrested. Poverty level is the average percent of the population living in poverty across all zip codes. Heterogeneity is operationalized as a nominal scale variable, which is calculated as the percentage of the population that is Black. Residential mobility is operationalized as a scale variable, which takes the log of residential instability. Neighborhood parks are operationalized as a continuous variable that shows how many parks are within each zip code. Similarly, the neighborhood recreation centers are operationalized as a continuous variable to show the number of recreation centers available by zip code.

Control Variables

The control variables for this study include supervision status (on probation or parole), most serious offense, and prior adjudication of guilt. These variables have been related to juvenile justice outcomes in prior research, and therefore are relevant to this study. Most serious offense is operationalized as a dichotomous variable distinguishing between felony at current intake (felony=1) and other. Prior adjudications of guilt are operationalized as one dummy variable (one or more prior adjudication=1). No prior adjudications of guilt will serve as the reference. Supervision status is coded as being supervised (yes=1) at the time of intake, or not being supervised (no=1) at the time of intake.

Hypotheses

Based on the literature and the characteristics of social disorganization theory presented in the previous section, it is hypothesized that:

I.   Non-white juveniles will be more likely to receive detention compared to their white counterparts;

II.   Males will be more likely to receive a detention decision compared to females;

III.   As age increases, detention is more likely to increase;

IV.   Poverty, residential mobility, and heterogeneity will be associated with increased detention decisions; and

V.   Neighborhood parks and recreation centers will mediate the influence of neighborhood structural factors on detention.

DATA ANALYSIS

The purpose of this study is to examine the influence of race, gender, age and neighborhood characteristics on juvenile intake cases involving detention. Several statistical techniques were utilized in this study to provide descriptive, bivariate, and multivariate analyses.

Univariate Analysis

In this study, univariate statistics were used to provide a description of the sample. These include the mean, median, and mode of each variable.

Bivariate Analysis

Next, a crosstabulation was used in order to determine the relationship between the dependent variable (detention) and the dichotomous independent variables used in this study (race, gender, most serious offense, prior adjudications, and supervision). T-Tests were used to determine the relationship between the dependent variable and the continuous independent variables (age, age at 1st arrest, poverty, residential mobility, heterogeneity, neighborhood parks and recreation centers).

Table 1. Variables in Study.

Dependent Variables	Operationalization	Coding
Detention	Was the juvenile detained	Yes=1; No=0
Independent Variables		
Race	Classified as Non-white or other	White=0 Nonwhite=1
Gender	What is your gender?	Male=0; Female=1
Age	What is your date of birth?	Scale
Age at 1st Arrest	What was the age at first arrest?	Scale
Poverty	Overall poverty rate of population by zip code	Scale
Heterogeneity	Percent of Black population per zip code	Scale
Residential Mobility	Log of residential instability per zip code	Scale
Neighborhood Parks	Number of neighborhood parks per zip code	Scale
Neighborhood Recreation Centers	Number of neighborhood recreation centers per zip code	Scale
Control Variables		
Supervision Status	Whether youth are currently under court supervision?	Yes=1; No=0
Prior Adjudication of Guilt	Whether youth have prior felonies, misdemeanors, probation/parole violations, or status offenses?	Yes=1; No=0
Offense Seriousness	Most serious offense?	Felony=1 Misdemeanor=0

Multi-variate Analysis

Finally, a series of logistic regression models were used to examine the relationships between the variables at interest in this study. Model 1 includes the control variables (offense seriousness, prior adjudication of guilt, and supervision status). Model 2 includes control variables as well as race, gender, age, and age at 1st arrest. Model 3 added the social disorganization variables (poverty, residential mobility, and heterogeneity). In addition to the other independent variables, Model 4 added the neighborhood parks and neighborhood recreation center variables.

Significance Level

Based on prior research literature, the p-value for this study, which reveals the significance level and power used to measure the performance of the test, is 0.05 (Sackrowitz et. al, 1999). This chapter discussed the research design, research questions, the data source, the variables in the study and the data analysis of the study. The next chapter will present the findings for this research study.

CHAPTER IV

RESULTS

The data were analyzed using univariate, bivariate, and multivariate statistics. Univariate analysis was used to provide a general description of each variable used in the current study. Bivariate and multivariate analyses were used to determine the relationship between the variables and to test the hypotheses.

UNIVARIATE ANALYSIS

To provide a description of the sample, univariate analysis was used. Almost 26 percent of the juvenile intake cases resulted in detention, while 74.1 percent did not result in detention. This means only about one-fourth of the juvenile intake cases resulted in detention. Over three-fourths of the sample identified themselves as non-white (87.2 %). On the contrary, only 12.8 percent were white. The majority of the juveniles were male (67.7%), while females (32.3%) made up about a third of intake cases. The average age for juvenile intake cases in Norfolk was about 15 years, while the data shows that on average, juveniles were first arrested on average at the age of 13.

Looking at the structural variables or social disorganization variables, less than one-fourth of the intake cases involved juveniles living in poverty (23.12%). This rate is higher than the national average, which was estimated at 12.7 percent in 2016 (Semega, J., Fotenot, K.R., & Kollar, M.A. 2017). In reference to the residential instability variable, the mean alone is not nearly as significant as the other variables, but further analysis will show if high or low instability affects the outcome. The average proportion of black residents by zip code was about 55 percent.

The data shows that there are an average of 3.89 neighborhood parks per zip code, and about 2.35 neighborhood recreation centers available per zip code in Norfolk. Data shows that only 16.2 percent of juvenile intake cases were under court-ordered supervision at the time of their encounter, and about one-third of the sample had prior adjudications (36.7%). The offense seriousness variable was labeled by the most serious offense being a felony or other, and for 18.9 percent of the population, a felony was their most serious offense.

BIVARIATE ANALYSIS

To examine the relationships between the independent variables and the dependent variables, crosstabulations and T-test were used. The purpose of using crosstabulation with Chi Square is to determine if there is a statistically significant relationship between the categorical independent variables and dependent variable. Chi square test is used to determine whether we accept or reject the null hypotheses and also calculate the probability of how well the hypotheses are supported (Griffiths et al., 2000). Table 3 shows the results of the correlations. Certain independent variables from this study are continuous variables, which means they are not restricted to a whole number, but to a range of numbers. Variables such as age, age at first arrest, poverty, residential mobility, heterogeneity, neighborhood parks and recreation centers are continuous variables and therefore, independent sample t-test were performed to assess the differences between those who were detained and not detained. An independent sample t-test is used to compare the means of two scale groups (or continuous variables) (Sweet and Martin, 2012).

The results of the crosstabulation analysis with chi square is shown in Table 3, as well as the independent samples t-tests in Tables 3, 4 and 5.

Table 2. Descriptive Statistics (N= 6964).

Variable	N	Sample Percentage
Detention		
Detained	1805	25.9
Not Detained	5159	74.1
Race		
Non-White	6072	87.2
White	2250	12.8
Gender		
Male	4714	67.7
Female	2250	32.3

Age (continuous)
      Mean = 14.92
      SD = 2.24
      Range = 22

Age at 1st Arrest
      Mean = 13.41
      SD = 2.52
      Range = 21

Poverty
      Mean =.231
      SD = .089
      Range = .51

Residential Instability
      Mean = -.673
      SD = .10
      Range =.86

Percent Black (Heterogeneity)
      Mean =.55
      SD = .23
      Range =.90

Neighborhood Parks
      Mean = 3.89
      SD = 1.89
      Range = 6

Neighborhood Recreation Centers
      Mean = 2.35
      SD = .831
      Range = 4

Table 2. Continued.

Variable	N	Sample Percent
Supervision at Intake		
Yes	1128	16.2
No	5836	83.8
Prior Adjudications		
Yes	2554	36.7
No	4410	63.3
Most Serious Offense		
Felony	1314	18.9
Other	5650	81.1

The first table shows that race, gender, supervision at intake, prior adjudications, and most serious offense are all significantly related to the dependent variable (juvenile detention decisions).

Race was significant, which supports Hypothesis 1. The analysis indicates that 26.7 percent of non-white intake cases resulted in detention and 20.9 percent of white juvenile intake cases resulted in detention. Male juveniles are more likely to be detained than female juveniles ($x^2=167.3$). In particular, 30.6 percent of male intake cases resulted in detention and 16.1 percent of female intake cases resulted in detention. These results support Hypothesis 2, which indicates males will be more likely to receive a detention decision than females.

All three control variables (supervision, prior adjudications, and most serious offense) showed a statistically significant relationship with the decision to detain a juvenile. The analysis shows that 53.5 percent of juveniles under court-ordered supervision resulted in detention at intake, while 20.6 percent of juveniles not under court-ordered supervision resulted in detention at intake ($x^2=531.63$). Among the respondents who had prior adjudications, results show that

juveniles with prior adjudications were more likely to be detained than those who did not have prior adjudications (x^2=782.7). Specifically, 45.2 percent of intake cases where juveniles had prior adjudications resulted in detention and 14.7 percent of intake cases where juveniles did not have prior adjudications resulted in detention. The analysis also shows that 66.2 percent of intake cases where the juvenile had a prior felony resulted in detention, whereas 16.5 percent of intake cases where the juvenile had other charges resulted in detention (x^2=1,369.30).

Table 3. Crosstabulation for Independent Variables by Detention (n= 6964).

	Detention						
	Yes		No		Chi Square	Sig.	*
Variable	N	(%)	N	(%)			
Race					13.679	.00	*
Non-White	1619	26.7	4453	73.3			
White	186	20.9	706	79.1			
Gender					167.3	.00	*
Male	1443	30.6	3271	69.4			
Female	362	16.1	1888	83.9			
Supervision at Intake					531.6	.00	*
Yes	603	53.5	525	46.5			
No	1202	20.6	4634	79.4			
Prior Adjudications					782.7	.00	*
Yes	1155	45.2	1399	54.8			
No	650	14.7	3760	85.3			
Most Serious Offense					1369.3	.00	*
Felony	870	66.2	444	33.8			
Other	935	16.5	4715	83.5			

Table 4 displays the independent samples t-test for the demographic variables, age and age at first arrest by zip code. The findings showed that for the variable age, there was a statistically significant difference between juveniles who were detained and juveniles who were not detained. The mean age for those who were detained was 15.5 verses those who were not detained were on average 14.7. This is consistent with Hypothesis 3. The remaining variable (age at first arrest) showed no statistically significant association with juvenile intake cases involving detention.

Table 4. T-test for Demographic Variables (n=6964).

Variable		Mean	SD	t	df	Sig.	
Age				-13.833	6927	.000	**
	Yes	15.54	1.494				
	No	14.70	2.414				
Age at 1st Arrest				1.315	6927	.188	
	Yes	13.34	2.247				
	No	13.43	2.613				

*p<.10, **p<.05; p-values computed for two tailed significance test.

The following table (Table 5) displays the results for the independent samples t-test for the theoretical variables, which include poverty, residential mobility, and heterogeneity. This table shows that there were a couple significant relationships.

Poverty. The findings showed that there is a difference between average poverty across zip code of juvenile intake cases involving detention and those not involving detention. The mean poverty percentage for those that had been detained (M=.236, SD=.088) versus those who were not detained (Mean=.230, SD=.089) was statistically significant. These results indicate that the average poverty across zip codes where intakes involved detention, was slightly more

(23.6%), compared to cases where the juvenile was not detained (23%). This is consistent with hypothesis 4, which proposed that poverty would be associated with increased detention.

Residential Mobility. This variable was not related to juvenile detention decisions. This is inconsistent with hypothesis 4, which states that residential mobility will be associated with increased detention decisions. The mean is not as important but the lowest value means that no one moved away from the neighborhood, while the higher value means that means more instability which means that they did not live in the same house more than a year ago.

Heterogeneity. The heterogeneity variable is operationalized as the percent of Blacks living in the population by zip code. These results were consistent with expectations concerning the effects of heterogeneity on detention decisions. There was a statistically significant difference between juvenile intake cases involving detention (Mean=.567, SD=.231) and those who were not detained (Mean=.549, SD=.235). This means that intake cases involving detention was about 57 percent of the black population, whereas about 55 percent were not detained. This is consistent with Hypothesis 4, which states heterogeneity will be associated with increased detention decisions.

Table 5. T-Test for Theoretical Variables (n=6964).

Variable		Mean	SD	t	df	Sig.	
Poverty				-2.717	6962	.007	**
	Yes	.236	.088				
	No	.230	.089				
Residential Instability				.187	6962	.852	
	Yes	-.673	.101				
	No	-.672	.098				
Percent of Black Population				-2.835	6962	.005	**
	Yes	.567	.231				
	No	.548	.235				

*p<.10, **p<.05; p-values computed for two tailed significance test.

Table 6, presented below, displays the independent sample t-test for neighborhood parks and recreation centers by zip code. The t-test shows that only neighborhood recreation centers were significant with intake cases involving detention. The results show that the mean of recreation centers for juvenile intake cases involving detention was 2.32. Whereas, there was an average of 2.36 recreation centers per juvenile intake case not resulting in detention. This is not consistent with Hypothesis 5, which expected parks and recreation centers to reduce the impact of structural factors on detention.

Table 6. T-test for Neighborhood Parks and Recreation Centers.

Variable		Mean	SD	t	df	Sig.	
Parks				.38	6962	.71	
	Yes	3.88	1.88				
	No	3.90	1.89				
Recreation Centers				1.641	6962	.101	*
	Yes	2.32	.831				
	No	2.36	.831				

*p<.10, **p<.05; p-values computed for two tailed significance test.

MULTIVARIATE ANALYSIS

Logistic regression was used to assess the impact of the structural variables, control variables, and demographic variables on juvenile detention decisions. Logistic regression uses independent variables to estimate the likelihood of occurrence of one of the variables on the dependent variable (Sweet and Martin, 2012). This means that it can do the same functions as linear regression, but logistic regression can predict the likelihood or probability of a relationship. Logistic regression was used in this study because the dependent variable is dichotomous.

Table 7 (Model 1) shows the results from the first logistic regression model, which includes the control variables: supervision status, prior adjudication of guilt, and offense seriousness. Overall, the model explained approximately 40 percent of the variance in juvenile detention decisions (R^2= .393). Results show that all three variables significantly influence juvenile detention decisions. Juvenile intake cases that were already under court-ordered supervision had almost 3 times increase in the odds of being detained than those who were not under court-ordered supervision. Those who had at least one prior adjudication, had 4 times an increase in the odds of being detained at intake compared to those who had no prior adjudications. Juvenile intake cases with a current felony had about 14 percent increase in the odds of being detained at intake compared to those with other charges.

Model 2 illustrates the results for the control variables as well as the demographic variables race, gender, and age. The model explains approximately 40 percent of the variance in juvenile detention decisions (R^2=.396). Overall, results show that all control variables and age significantly influence juvenile detention decisions (although gender and age at 1st arrest were significant at $p < .10$). Race showed no significance when analyzed with these variables. Those

under court-ordered supervision had about 3 times increase in the odds of being detained at intake. Juvenile intake cases that had prior adjudications had a 3.5 times increase in the odds of being detained at intake. Juvenile intake cases with a current felony had about 13 times increase in the odds of being detained at intake compared to those with a other charges. Age was significant showing that for each additional year in age resulted in an 11 percent increase in the odds of being detained, and for each additional year in age at 1st arrest resulted in about 3 percent decrease in odds of being detained. Gender was significant, showing that females had a 15 percent decrease in odds of being detained than males.

Model 3 illustrates the control variables, the demographic variables, and the structural variables, which include poverty, residential mobility, and heterogeneity. The model explained about 40 percent of the variance observed in juvenile detention decisions ($R^2 = .397$). Control variables including offense seriousness, prior adjudication, and supervision status had little to no change in the significance or odds ratio when more variables were added. Also, age at 1st arrest became insignificant when the social disorganization variables were added. On the contrary, all three structural variables showed no significance when added to the model.

Model 4 shows all variables including the control, demographic, and structural variables, which also includes the social disorganization structural variables as well as neighborhood parks and recreation center. The control variables and the demographic variables are indeed significant, except race. When adding the structural variables to the equation, none of the structural variable showed significance. All three control variables had similar increases in the odds of detention rates, and age, age at 1st arrest, and gender had similar findings.

With regard to the first research question age and gender were consistently significant predictors of juvenile intake cases involving detention, while race was not. At the bivariate level,

race, gender and age were all significant for detention decisions, which supports the first hypothesis. This is contrary to the multivariate analysis, which shows gender, age, and age at 1st arrest become statistically significant when controlling for legal variables. While the demographic variables are the strongest predictors of detention decisions, they weakened when other variables were included.

In regards to the second research question, poverty and heterogeneity were both significant predictors at the bivariate level; while at the multivariate level none of the variables were significant. This gives partial support to the second hypothesis, which predicted poverty, residential mobility, and heterogeneity would be associated with increased detention decisions. Regarding the third research question, neighborhood parks and recreation centers were considered structural variables. At the bivariate level, only recreation centers were significantly associated with detention decisions, while neighborhood parks were not. When introduced during the multivariate analysis, both neighborhood parks and recreation centers became insignificant. This does not support the third hypothesis, but may show that a different mediating variable is causing these two variables to be insignificant.

Table 7. Logistic Regression Analysis on Detention (n=6,964).

	Model 1		Model 2		Model 3		Model 4	
	B (SE)	Odds Ratio	B (SE)	Odds Ratio	B (SE)	Odds Ratio	B (SE)	Odds Ration
Supervision Status	1.04 (.09)	2.83**	1.00 (.09)	2.73**	1.01 (.09)	2.74**	1.01 (.09)	2.73**
Prior Adjudications	1.42 (.08)	4.12**	1.26 (.09)	3.51**	1.25 (.09)	3.50**	1.26 (.09)	3.51**
Offense Seriousness	2.66 (.08)	14.26**	2.59 (.08)	13.39**	2.6 (.08)	13.46**	2.6 (.08)	13.45**
Race			.03 (.11)	1.03	-.01 (.11)	1.00	-.01 (.11)	1.0
Gender			-.16 (.08)	.85*	-.16 (.08)	.85*	-.16 (.79)	.85*
Age			.11 (.02)	1.12**	.11 (.02)	1.12**	.10 (.02)	1.12**
Age at 1st Arrest			-.03 (.02)	.97*	-.03 (.02)	.97*	-.03 (.02)	.97*
Poverty					1.02 (.79)	2.79	1.05 (.83)	2.86
Residential Instability					-.13 (.53)	.88	-.12 (.53)	.89
% Black Population					-.15 (.38)	.86	-.17 (.39)	.85
Neighborhood Parks							.01 (.02)	1.01
Neighborhood Recreation Centers							-.01 (.05)	1.0
Pseudo R-Square	.393		.396		.397		.397	

*p<.10, **p<.05; p-value computed for two-ailed significance tests.

CHAPTER V

DISCUSSION

SUMMARY

The effects of juvenile justice detention decisions are a topic discussed more often than imagined. Research continues to attempt to determine what characteristics have an effect on detention decisions. Most research has found legal characteristics (eg., prior adjudication, offense seriousness) and race to be significant factors in the choice to detain a juvenile. The results of the analysis show that there are in fact still disparities in the juvenile detention process, as well as the possibility of neighborhood structural influence on the detention decision process. All of the legal variables, supervision, prior adjudication, and offense seriousness, were all significant predictors of the decision to detain a juvenile.

Some demographic variables expressed significance with the decision to detain a juvenile. The findings during the bivariate analysis for the demographic variables found that race, gender and age had a significant relationship with juvenile detention decisions. Non-white juveniles were about 12 times more likely to be detained than White juveniles. This finding is similar to previous research that finds racial composition a significant predictor in detention decision (Armstrong and Rodriguez, 2005; Leiber, 2013). Analysis at the multivariate level showed the race was not a significant factor of detention, contrary to hypothesis 1. The DMC mandate was created to bring about equality in the juvenile justice system. Virginia, specifically the city of Norfolk, was highlighted in their use of the Juvenile Detention Assessment Initiative (JDAI) and DMC Committees to promote changes to policies, practices, and programs (Orchowsky et al., 2010). Race was one of main disparities that received focus during the implementation of system, because of the large Black population being incarcerated. For this

reason, it is believed that since race has been a high focus area since the early 2000's, it is not as strong of a predictor of detention because the mandate is working.

Prior research is consistent in finding differential treatment with account to gender and age (Maggard et al., 2013; Peck et al., 2016). Gender is not discussed as often as race when it comes to disparities, but previous research shows that the juvenile justice system is more lenient on females than males (MacDonald and Chesney-Lind, 2001; Tracey et al., 2009; Peck et al., 2016). The current analysis at the bivariate level showed that males were 4 times more likely to be detained than females. This supports hypothesis 2 and the previous research on gender disparities. At the multivariate level, gender is weakened when included with other demographic variables. Gender has not been a concerted effort to address at the state level, so often it is left behind. The same goes for age disparities in the city of Norfolk. Age has a significant relationship with detention decisions, which is supports hypothesis 3 and previous research.

The findings presented at the bivariate level of analysis for the theoretical variables only found poverty and heterogeneity to be statistically significant with detention decisions, whereas residential mobility was not significantly associated with juvenile detention decisions. Hypothesis 4 suggested that all three variables would be associated with increased detention decisions. This suggests that the overall poverty rate and the percentage of the Black population in the sample are associated with the increased amount of intake cases involving detention. The multivariate analysis showed that none of the three theoretical variables significantly predicted juvenile detention decisions when controlling for legal variables. There are a few explanations for this finding. First, the development of the three structural characteristics has ties in other social organization process including informal social controls, peer association and collective efficacy (Thornberry et al., 1994; Sampson et al., 1997; Chung and Steinberg, 2009). This

suggest since not all are accounted for in previous studies, it would be difficult to narrow the list to three neighborhood factors that account for the increased detention decisions. Second, it is possible that there is a lack of social organization in disadvantaged neighborhoods with high poverty, residential mobility, and heterogeneity rates. As a result, these communities look at misbehavior as a norm, leading to the decreased odds of detention decisions (Freiburger and Jordan, 2011).

At the bivariate level, the neighborhood recreation centers were significant predictors of detention decision, while neighborhood parks were not. Previous research mentions the difference between neighborhood parks and recreation centers that could account for the results in this study. Parks can act as gathering places for many people with little informal social control, which makes it easier to commit crime. Whereas, recreation centers usually have employees and coaches with activities for youth that decrease the amount of delinquent activity. The juvenile intake cases involving detention had about 2.32 recreation centers in their zip code. Thus, it can be assumed that the least amount of available neighborhood recreation centers, the more juvenile detention decisions. The results of the multivariate analysis showed that neighborhood parks and recreation center had no significance when combined with the control, demographic, and theoretical variables. The research does not support hypothesis 5, which states that parks and recreation centers would mediate the impact of poverty, residential mobility or heterogeneity.

POLICY IMPLICATIONS

Important policy implications are derived from this research. While we know that countless studies examine the relationship between race, gender and age as it affects juvenile justice decisions, little research examines geographic areas by looking at those mediating factors.

This study attempts to determine those neighborhood structural characteristics. It is possible that the legal factors have a greater influence on detention decisions and theoretical/structural factors have a lesser impact. In other words, supervision, prior adjudications, and offense seriousness are strong indicators of whether juvenile intake cases result in detention. Additional variables become weakened when using those three control factors.

In reference to the availability of parks and recreation centers, research suggest that activating these space and making them more available would decrease delinquency in the community. Instead of grouping together all theoretical variables, parks and recreation centers may mediate the impact of just one variable, not all three. This means, future research should specify which mediating factors effect neighborhood structural characteristics on delinquency.

In addition to theoretical implications, this study also has practical implications. It is difficult to use community-level measures to examine individual-level characteristics. In this study, the community-level measures were transformed into variables that would apply to individual intake cases involving detention. A study that uses community-level measures community-level characteristics may receive a different outcome.

LIMITATIONS AND FUTURE RESEARCH

This study has limitations like all research. The study is not looking at delinquency per say, it is looking at the response. Official data uses the response of an incident, verses getting the information directly from the source or in this case the individual (juvenile). Therefore, it is not measuring police behavior, how the juvenile justice system operates, or the amount of crime occurring. This is just one of many limitation for using official data.

Even though race was significant with detention, it was not significant in predicting detention decisions, contrary to previous research and the current hypothesis. The current

research was limited in not being able to present the hidden meaning of its insignificance. In other words, race can be hidden behind other factors when it is presented with numerous demographic variables. Race may have been significant if age and age at first arrest were not included, or race could influence poverty on detention decisions if examined specifically. Future research should look at the DMC mandate in the city of Norfolk to examine if the racial composition of juveniles detained has changed.

As the study is cross-sectional, the possibility of reciprocal relationships cannot be addressed. Further research should gather data on intake cases to see if there are any changes in the detention decision process. Also, research should examine if any variables became less or more significant over time. Another limitation includes the measures of social disorganization as they have evolved over time. This gives reason to believe that not only are poverty, residential mobility, and heterogeneity are measures of the social disorganization theory. Other factors include peer relationships, informal social controls, and social efficacy; all of these measures should be considered in future research to show if each individual measure is more significant than the other. The study does test the theory, it just uses it as framework to guide the research questions and the study. Next, the data is derived from one city in the state of Virginia, which has a population unlike other cities. The use of the city of Norfolk with only 14 zip codes limits the variation in which neighborhood data was used. Therefore, the ability of this study to be generalizable to juvenile intake cases involving detention is hampered, given the specific focus of the sample. A multilevel analysis may be best to gain insight on how macro-level characteristics might influence individual-level decision-making disparities.

The findings from this research confirm that legal variables, such as court-ordered supervision, prior adjudications, and severity of the offense, all are the most significant factors in

juvenile intake cases involving detention. It should also be noted that the demographic variables also displayed significance, especially age. This research found that none of the structural variables were significant when combined with the control and demographic variables. Research outside of this study showed that when just examining the structural variables, the availability of neighborhood parks became significant. Future research should explore the relationship between structural variables and how the availability of local institutions affects juvenile detention.

Youth are more likely to act or participate in deviant activity if they are bored, with nothing to keep them busy or entertained. The idea of having more parks or recreation centers in a neighborhood would hypothetically give the youth programs or activities to participate in. Recreation centers were significant to detention decisions in the current study., showing that the more available recreation center the less likely the juvenile I will be detained. Future research may want to look at the rate of neighborhood recreation centers per youth. A more sophisticated measure to capture the ratio would provide detailed information on whether there are available recreation centers in communities with youth, are they less available in harsher parts of the city, and how many take the opportunity to participate. It is impossible to know any of that information with what this study presents. Future research about this topic should be able to explore specific characteristics, which will be helpful in getting a better understanding about which neighborhood structural characteristics effect juvenile detention decisions.

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VITA

Ashley M. Buchanan
Department of Sociology and Criminal Justice
BAL 6000
Old Dominion University
Norfolk, Virginia 23529

Education
M.A.   Applied Sociology, August 2018; Old Dominion University, Norfolk, Virginia

B.A.   Criminal Justice, May 2016; Old Dominion University, Norfolk, Virginia

Related Experience
Graduate Teaching Assistant, Old Dominion University, Norfolk, Virginia,
Fall 2016-Spring 2018

Future Career Plans
Upon graduating, future plans include working as a probation or parole officers at the federal level, becoming a case manager in the Federal Bureau of Prisons, and/or obtaining a Law degree to practice Criminal Law.