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# LOCAL INCARCERATION AS SOCIAL CONTROL: A NATIONAL ANALYSIS OF SOCIAL, ECONOMIC, AND POLITICAL DETERMINANTS OF JAIL USE IN THE UNITED STATES

by

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# Abstract

Previous research indicates that community context impacts social control. Several scholars have identified social, economic and political factors to be important predictors of police force size, arrests rates and incarceration rates. Few studies, however, have examined jail use as an indicator of formal social control. Millions of individuals pass through jails every year, and these local facilities are at the center of the criminal justice system, reflecting mobilization of social control by law enforcement, courts and corrections.

Drawing from a social threat perspective and political framework, this study seeks to understand how community context affects local incarceration. Specifically, this study examines to what extent jail use is influenced by racial and ethnic heterogeneity, economic inequality, and political conservatism using a nationally representative sample of U.S. jails. The main dataset for this study was developed from the Bureau of Justice Statistics's 2013 Census of Jails. Using the Law Enforcement Crosswalk File and government identifiers, the Census of Jails was merged with other secondary datasets to investigate county-level variation in local incarceration.

This study finds that community context impacts jail use. It is found that countylevel black presence and Hispanic presence differentially impact jail use. Specifically, racial threat has a U-shaped curvilinear relationship with local incarceration, and ethnic threat has an inverted U-shaped curvilinear relationship with jail use. The economic

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characteristics of counties also differentially impact jail use. Income inequality is negatively related to jail use, and both the unemployment rate and poverty rate are positively associated with jail use. Political conservatism among county residents is also associated with higher rates of jail use. This study reveals the importance of examining the impact of minority threat by assessing the racial make-up of local areas separately from ethnic composition. Additionally, the importance of testing for nonlinear effects is revealed. Further, inclusion of counties' economic conditions and political ideology are critical in more fully accounting for how variations in the local community impact jail use.

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# CHAPTER 1

### **INTRODUCTION**

As any correctional scholar knows, the United States is the world's leading jailer with more than 2.1 million adults behind bars (Kaeble & Cowhig, 2018). Of these inmates, nearly one-third are held in one of the approximately 3,000 local jails across the United States (Minton & Zeng, 2016). An even more striking number of people encounter these locally run facilities. The latest estimates show roughly 11 million admissions to local jails every year (Minton & Zeng, 2016), a number 18 times greater than persons admitted to state and federal prisons (Carson & Anderson, 2016). Sparse knowledge on jails exist despite their reach (Backstrand, Gibbons, & Jones, 1992; Bales & Garduno, 2016; Frost & Clear, 2012; Klofas, 1990a). This is especially salient in light of our nation's current discussion surrounding mass incarceration (Lynch, 2011; Subramanian, Delaney, Roberts, Fishman, & McGarry, 2015).

There have been several recent calls for scholars to further examine jails (e.g., Frost & Clear, 2012; Henrichson & Fishman, 2016) and, more specifically, to study the contribution of local jurisdictions to mass imprisonment (Lynch, 2011; Subramanian et al., 2015). The American Jail Association featured an article in their 2016 Jail Resource Guide written by the Vera Institute of Justice (Henrichson & Fishman, 2016). To highlight gaps in current knowledge regarding jail use, the authors of this essay posed several questions local jurisdictions should be asking about their jail population.

Identification of the factors that drive jail population growth, as well as issues that may impact female, racial and ethnic minority overrepresentation in our nation's jails were but a few of the areas Henrichson and Fishman (2016) mentioned in calling for more data. These questions are commonly considered in discussions of state and federal incarceration, but they are relevant too in the discussion of jail incarceration. It is at the local level that "mass incarceration begins" (Subramanian et al., 2015, p. 2) and "the power to imprison resides" (Lynch, 2011, p. 674). Through examination of the community context, important factors may be identified that extend our understanding of the forces behind jail use (Applegate & Sitren, 2008; Klofas, 1990a, 1991; Thompson & Mays, 1991), overall incarceration (Frost & Clear, 2012), and mass imprisonment specifically (Lynch, 2011).

One theoretical framework that has been used by scholars to understand the scope of the criminal justice system has been social threat theory. Research on social threat theory has shown that population composition and economic factors impact arrests (e.g., Liska & Chamlin, 1984; Parker, Stults, & Rice, 2005), law enforcement size and expenditures (e.g., Kent & Jacobs, 2005; McCarty, Ren, & Zhai, 2012), correctional expenditures (e.g., Jacobs & Helms, 1999), and incarceration (e.g., Brown, 2016; Campbell, Vogel, & Williams, 2015). In addition to social and economic determinants, research on political determinants reveals that citizen ideology and partisanship impact criminal justice outcomes (e.g., Jacobs & Carmichael, 2001, 2002).

Few studies simultaneously examine social, economic and political determinants of incarceration. Additionally, previous research examining the effect of community context on incarceration has largely relied on national and state-level data, not local or

county-level data (Lynch, 2011). As a result of aggregation at a higher geographic level, these studies have been unable to assess how local variations in the scale of incarceration may be connected to social, economic, and political characteristics. The purpose of this research is to explore the extent to which community context impacts jail use. Specifically, this research seeks to understand how racial and ethnic heterogeneity, economic inequality and political conservatism impact local incarceration across the United States. Chapter 2 provides an overview of the literature regarding jail use. Notably, this chapter examines the various entry points into the local jail. Jails have been referred to as the "hub" of the criminal justice system (Bales & Garduno, 2016, p. 268), with the nature and size of their inmate populations reflecting decisions made by police, prosecutors, judges and community correctional officers. From police stops to arrests, to charging, pretrial and sentencing decisions, and probation and parole revocations, these decisions and operations of U.S. law enforcement, courts and corrections influence who goes to jail and how long they stay.

Jail use, much like prison use, has expanded greatly in the past few decades. Its growth began in the 1970s and continued to rise until it reached its peak in 2008 with roughly 777,000 people being detained (Minton & Zeng, 2016), nearly five times the 1970 level. Today, we are in a period of recent stability with an estimated 741,000 people being held in local jails in 2016, and a rate of 217 per 100,000 U.S. residents (Zeng, 2018). Even greater are the number of people jails encounter on a yearly basis (Minton & Zeng, 2016). These aggregate numbers inform the public about the use of jail at the national level, but do not reveal the impact of local incarceration across jurisdictions. While the national rate of jail incarceration stands at 217 per 100,000, there is wide

variation in local incarceration. Some counties have similar incarceration rates to the national average while others are well above the national average, and still, some counties do not incarcerate much of their population (Vera Institute of Justice, 2017).

Chapter 2 also examines the social threat perspective and political climate with particular emphasis on incarceration. The social threat perspective will be explored by examining the minority and economic threat perspectives. The minority threat thesis proposes that a relationship exists between the relative size of the minority population and incarceration (Liska, 1992). An alternative perspective examining the threat thesis has focused on the economic underclass, arguing that higher incarceration rates are the result of the rise of income inequality (Chambliss & Seidman, 1971; Garland, 1990). A political explanation of the use of incarceration differs from minority or economic threat in that it is not the relative size of marginalized groups which poses a threat; rather, it is the politics of crime and punishment that influence greater social control (Smith, 2004).

This chapter also discusses the current empirical status regarding these community characteristics and their relationship to incarceration. Overall, it appears that minority threat is positively related to incarceration (Beckett & Western, 2001; Campbell et al., 2015); economic threat as measured by income inequality has largely been shown to have no effect on incarceration (Jacobs & Kleban, 2003; Padgett, 2002); and conservative citizen ideology and partisanship typically is found to be significant and positively associated with incarceration (Keen & Jacobs, 2009; Jacobs & Carmichael, 2001). To be sure, some empirical research shows that minority threat (Jacob & Helms, 2001) and political climate are not related to incarceration (Yates & Fording, 2005), and at times, economic threat is significant and positively associated with incarceration

(Arvanites & Asher, 1998). These varied findings are largely attributable to methodological issues regarding conceptualization, operationalization, and research design (Liska, 1992; Campbell et al., 2015). These issues will be discussed in Section 2.9.

The primary purpose of my study is to determine the impact of community context on aggregated and disaggregated jail incarceration. To date, no research has simultaneously examined the impact of racial and ethnic heterogeneity, economic inequality, and political conservatism on jail admission and population rates and raceand ethnic-specific population rates at the county level; the present study addresses this gap. Chapter 2 concludes with a brief overview of the current study and hypotheses.

Chapter 3 provides a detailed description of the current study's methodology. This chapter provides conceptualization and operationalization of jail use and community context. Additionally, the proposed analytic strategy to examine the effects of social, economic and political factors on aggregated jail admission and population rates, and disaggregated jail population rates is outlined. Specifically, this chapter discusses the use of a nationally representative sample of all publicly operated jails at the county level (n=2,394). Federal facilities, privately run facilities and regional jails are excluded. This study draws from several data sets. The main dataset for this study comes from the 2013 Census of Jails. Other data sets examining social and economic characteristics are drawn from the 2010 Decennial Census. Political affiliation is drawn from the 2012 election data provided by *The Guardian*. Additionally, several factors which have been identified as important predictors of imprisonment or are predicted to impact imprisonment, are controlled for in this study. These data are drawn from the Census of State and Local Law Enforcement and the Bureau of Labor Statistics.

Chapter 4 reports the results of the ordinary least squares regressions of jail admission rates, jail population rates, non-Hispanic black jail population rates and Hispanic jail population rates on racial and ethnic population composition, income inequality, political conservatism and control variables. Overall, the results indicate that percent black and percent Hispanic contribute to local corrections use, though not entirely in the direction hypothesized. County-level black presence is associated with jail use and when significantly related, reveals a U-shaped curvilinear pattern, while county-level Hispanic presence reveals an inverted U-shaped curvilinear pattern with jail use. Additionally, income inequality appears to be negatively associated with jail use, and political conservatism is positively associated with local corrections use. These results and other findings will be described in detail in Chapter 4.

Chapter 5 begins with a discussion of the main findings of this study, placing them in a broader context by reviewing prior research regarding social, economic and political determinates of social control mechanisms. In light of the main findings, the implications for both theory and research are considered. Next, the limitations of this study are acknowledged, and finally, recommendations for future research are presented.

# CHAPTER 2

## **REVIEW OF THE LITERATURE**

The sheer number of persons who come into contact with local jails across the United States is by itself justification to explore the determinants of local incarceration. Additionally, the importance of including local jailing in the current discussion of mass imprisonment is demonstrated by examining its diverse functions and the central role jails play in our criminal justice system. A description of the role of jails, the extent of their use, and the interrelationship with local criminal justice agencies follows to provide a clearer understanding of local incarceration.

## 2.1 Jail Functions

Jails are correctional institutions that serve every criminal justice agency (Bales & Garduno, 2016). These facilities are largely run at the county level by a local law enforcement agency such as a sheriff's department (Bales & Garduno, 2016; Minton, Ginder, Brumbaugh, Smiley-McDonald, & Rohloff, 2015). In 2013 there were 3,163 local and 12 federal jail facilities across 2,872 jail jurisdictions nationwide (Minton et al., 2015). Due to the unique functions of local jails, these facilities are responsible for holding a wide variety of persons.

In contrast to prisons, which are typically responsible for holding persons sentenced to a period of incarceration for at least one year, jails hold persons convicted of an offense with a sentence usually of 12 months or less (Bales & Garduno, 2016).<sup>1</sup> Jails also detain defendants who have not yet been convicted of an offense. For these individuals incarceration in jail is a matter of being held pending legal processing – such as those who have been booked but not yet arraigned – or to assure appearance in court or protect the public (Applegate, 2011). Others may have been convicted but not yet sentenced, or waiting for a sentence to be executed. Additionally, jails incarcerate persons who violate probation, parole and bail conditions and house inmates awaiting transfer to state or federal prisons, as well as hold individuals on behalf of state and federal authorities when prisons are overcrowded. In some jurisdictions, jails also are responsible for the supervision of persons sentenced to a community sanction (Minton & Zeng, 2016). Individuals may come into contact with and remain in the custody of the local jail through a series of avenues, all interrelated to some degree.

## 2.2 Local Criminal Justice Policies and Practices and Their Impact on Jail Use

Jails, sometimes referred to as the "hub" (Bales & Garduno, 2016, p. 268) of, or "gateway" (Subramaniam et al., 2015, p.4) to, the criminal justice system are influenced by local conditions (Klofas, 1990a; Lynch, 2011). While in theory law dictates incarceration, local surroundings influence how law is practiced and thus shape jail use (Lynch, 2011). Criminal justice actors—police, prosecutors, defense attorneys, judges and community correctional officers—are part of the community structure. Indeed, these

<sup>&</sup>lt;sup>1</sup> In California, however, county jails are responsible for detaining some offenders for longer periods of time. The California Criminal Justice Realignment Act of 2011 made community corrections, including jails, responsible for supervising low-level felony offenders with no prior serious, violent or sex convictions—persons who previously would have been sentenced to state prison facilities. Section 1170(h) states that if probation is denied to a defendant then he/she must be sentenced to a county jail, typically for a term of 16, 24 or 36 months in a California county jail (Couzens & Bigelow, 2017, p. 6).

agencies and actors have different agendas that influence their decisions and impact local corrections (Bales & Garduno, 2016; Bureau of Justice Assistance, 2000; Greenberg & West, 2001; Hall, Henry, Perlstein & Smith, 1985; Mattick, 1974; Subramanian et al., 2015). An examination of the various entry points into the local jail illustrates the impact of local practices on jail populations.

**Police and Prosecutors.** Police provide the first point of entry in the criminal justice system. Upon contact with an individual, law enforcement agents have several options available to them. Not all police encounters result in arrest, and arrest does not guarantee jail booking; some individuals are given a warning, cited and released, or referred to a community program (Bureau of Justice Assistance, 2000; President's Commission, 1968; Subramanian et al., 2015). For many people, however, arrest means transport, booking and admission to a local jail. The Vera Institute reports that arrest and booking rates have nearly doubled from a rate of 51 admissions for every 100 arrests in 1983 to 95 admissions for every 100 arrests in 2012 (Subramaniam et al., 2015, p. 22). Since the 1980s and 1990s, it appears many more persons are being admitted to jail after arrest.

A number of developments in policing policies and practices have impacted the number of persons who are arrested and subsequently jailed. In particular, the war on drugs and broken windows policing has impacted the number of people in our nation's jails (Alexander, 2010; Beckett, 2016; Petteruti & Walsh, 2008). For example, zero-tolerance policies, borne from broken windows policing, require police action toward minor offenses and disorder in an effort to combat quality-of-life offenses; such a policy may result in a greater number of low-level, non-violent persons being booked into jail

(Petteruti & Walsh, 2008; Subramanian et al., 2015). Additionally, the war on drugs led to more drug law enforcement officers and increased the number of low-level drug arrests (Alexander, 2010; Petteruti & Walsh, 2008). In 2010, for example, there were roughly 1.3 million arrests for drug possession or use, an increase of 80% from 1990 reported drug arrest data (741,600) (Snyder, 2012). It appears that despite recognition of the collateral consequences of the policies and practices associated with the war on drugs, substantial resources are still being used to police drugs and drug users (Alexander, 2010; Beckett, 2016).

After arrest and jail booking, prosecutors' charging decisions influence who will be held and for how long in a local jail. Prosecutors may decline to file charges due to insufficient evidence or a clear indication a person did not commit the crime for which they were arrested; increase, reduce or dismiss charges after they were officially filed; or recommend alternatives outside the formal criminal justice system (President's Commission, 1968; Subramaniam et al., 2015). When formal charges are filed, prosecutors make pretrial recommendations while persons await trial. These recommendations include pretrial release or detention and are influenced by a variety of factors (see, e.g., Applegate, 2011; Subramaniam et al., 2015; Williams, 2016). Many cases are resolved before trial through plea agreements which prosecutors negotiate (Ostrom & Hanson, 2000; President's Commission, 1968). Additionally, prosecutors recommend sentencing for convicted persons (President's Commission, 1968) which may entail a period of incarceration or a community-based sanction (Subramaniam et al., 2015), for which a person may or may not be under the supervision of local jail authorities.

**Pretrial Release.** It is presumed that persons are innocent until proven guilty, and as such will be released prior to adjudication if several legal circumstances are met (Applegate, 2011). The decision on whether to detain or release is often based on the severity of charges, flight risk, community safety, and prior criminal history (Applegate, 2011; Demuth, 2003; Williams, 2016). If no risk is posed, it is to the benefit of the individual, the courts and the local jail to release individuals pretrial (Applegate, 2011; Demuth, 2003; Klein, 1997; President's Commission, 1968; Williams, 2016). For individuals, even short stays in jail have collateral consequences (Irwin, 1985; Petteruti & Walsh, 2008; Weisheit & Klofas, 1990; Williams, 2003), and when facilities are overcrowded, pretrial release offers facilities a mechanism to reduce their overpopulation (Demuth, 2003; Williams, 2016). Yet, over 60% of persons held in jail on any given day are held pretrial (Minton & Zeng, 2016).

Defendants who are granted pretrial release may be ordered released by a court prior to their trial with no conditions, or they may have to meet nonfinancial or financial conditions to be released (Applegate, 2011; Williams, 2016). First, a person may be released ROR, or released on her or his own recognizance where he or she, in a signed agreement with the court, promises to appear in court and is required to pay nothing to secure release (Applegate, 2011; Williams, 2016). Another condition of release is an unsecured bond (Applegate, 2011). An unsecured bond releases a person with a set bail amount that will be paid only in the event that the person does not appear for a court hearing (Applegate, 2011). ROR and unsecured bonds may include other conditions such as substance or alcohol abuse treatment, electronic monitoring, or supervision (Applegate, 2011; Jones, 2013). Financial conditions of pretrial release involve a number

of different bail bonds. A cash bond requires full payment of a set bail amount to the court in order for an individual to be released (Applegate, 2011; Williams, 2016). A property bond requires an individual to post property that is of equal or greater value than the set bail amount (Williams, 2016). A surety bond is perhaps the most widely known mechanism of release. For a surety bond, an individual pays a service fee and/or percentage of their bail amount to a third party, such as a bail agent (Applegate, 2011; Williams, 2016).

Over the past thirty years, bail bonds have dominated. More individuals are offered financial conditions and required to post bail than nonfinancial prelease conditions (Smith, 1993; Reeves, 2013). In 1990, roughly 2 in 5 defendants (37%) were released pretrial with financial conditions (Smith, 1993). Nearly 20 years later, this number had increased to 3 in 5 defendants (Reeves, 2013). This increase in the number of defendants being released with financial conditions is largely attributed to the rise in the number of surety bonds ordered (Reeves, 2013). In 1990, over one-third of defendants were released on their own recognizance (40%) and roughly one-quarter were released on surety bond (24%) (Smith, 1993). By 2009, this pattern had reversed with nearly half of defendants being released on a surety bond (49%) and one-quarter released on their own recognizance (24%) (Reeves, 2013). Additionally, there has been an increase in the amount of bail that defendants are ordered to pay (Smith, 1993; Reeves, 2013). In 1990, roughly 20% of defendants had a bail amount set at \$10,000 or more, in 2009 the percentage of defendants with a bail amount set at \$10,000 or more had risen to roughly 58% (Smith, 1993; Reeves, 2013). Roughly 82% and 90% of defendants in 1990 in 2009, respectively, had bail set but were held pretrial because they were unable to post bail

(Smith, 1993; Reeves, 2013). More than 40 years ago, Mattick (1974) observed that monetary bail impinges more acutely on defendants with limited financial resources. It appears the pattern of disparate outcomes for the poor continues today. Recently, Subramanian et al., (2015) concluded that defendants' inability to pay bail amounts has been and continues to be a large factor in the number of pretrial detainees.

Judiciary. In 2000, the Bureau of Justice Assistance stated, "no other actors have more control over the ebb and flow of jail populations than judges...judges are involved, directly and indirectly, in all aspects of criminal case processing" (p. 53). Judges may issue a court summons rather than an arrest warrant, schedule arraignments, make bail decisions, hold bond review hearings, and determine adjudication and disposition of case outcomes (Bureau of Justice Assistance, 2000). Case processing by itself can greatly influence the jail population dependent on how quickly each of the above-mentioned stages occur. Although jails typically hold people for short lengths of time, even brief delays in court processing can increase the average daily population in a jurisdiction; whether it be delays in scheduled court hearings or on decisions regarding bail, inmates spend longer periods of time incarcerated. Given that millions of individuals are admitted to local jails every year, such delays in court processing for defendants are likely to add up and affect jail populations. To be sure, case processing and its subsequent time are influenced by all court agents, including district attorneys, prosecutors, bail agents, and judges (Bureau of Justice Assistance, 2000; Subramanian et al., 2015).

**Probation/Parole.** Far more adults are under community supervision than those incarcerated in jails or prisons across the United States. In 2015, roughly 70 percent of U.S. adults under correctional supervision were on probation or parole (Kaeble et al.,

2015). Community corrections play a vital role, however, in jail population rates as these sanctions can reduce jail populations by diverting potential inmates (Frase, 2000). As an alternative to incarceration, offenders may receive a period of probation without incarceration, a lesser sentence with a period of probation to follow incarceration, or parole after serving only a portion of their sentence in prison (Bureau of Justice Statistics, 2000). Community corrections can also contribute to increased jail populations (Frase, 2000). Typically, conditions such as electronic monitoring, work, and substance abuse counseling are ordered on probationers or parolees. Failure to meet these requirements can result in revocation and subsequent incarceration (Subramanian et al., 2015). In a national sample of nearly 7,000 jail inmates, James (2004) reports an estimated 46% of jail inmates were on probation or parole when they were arrested, and nearly two-thirds had their release revoked. Of these, over half had their release revoked because of a technical violation – not a new crime, but a violation of the conditions of community supervision (James, 2004).

Entry into a local jail involves numerous agencies and actors whose decisions impact whether someone is arrested, booked into jail, charged, detained or released pretrial, convicted and sentenced to a period of incarceration or given a community sanction. Differing agendas among these agencies and actors impact decisions that affect who is housed in local jails and ultimately the overall jail population. Local criminal justice actors acknowledge their role in jail use and note that issues such as overcrowding pose problems for public safety and disrupt smooth criminal justice processes among many agencies (Davis, Applegate, Otto, Surette, McCarthy, 2004; Welsh, 1995). It is clear that jail use is impacted by criminal justice community relations. Drawing on

surveys and interviews with local criminal justice actors, Davis et al. (2004) conclude, "Jail does not operate autonomously. Rather, each component of the local criminal justice system is in a symbiotic relationship with the other components" (p. 470-471). Put another way, the scope of a community's jail population reflects the culmination of the social control polices, practices, and decisions of numerous actors spread across multiple agencies. The size of that community's jail operation is a natural indicator of the comprehensive extent of legal control exerted by police, prosecutors, judges, community correctional officials and others.

## 2.3 Growth and Trends

While national estimates of jail use can be found as early as 1880 (Cahalan & Parsons, 1986), interpreting these figures is problematic. At that time, the U.S. Census Bureau counted only persons who had been sentenced. The data exclude an unknown number of jail inmates held before trial and those who were convicted but not yet sentenced. It was not until 1970 that national estimates on all jail inmates, regardless of conviction status, were collected by the U.S. Census Bureau (Cahalan & Parsons, 1986). For comparative purposes, this discussion of jail trends will begin with the year 1970.

During the past four decades, the number of persons held in jail facilities has grown considerably. In 1970, the United States incarcerated roughly 161,000 persons in its local jails (Cahalan & Parsons, 1986). Data show the jail population remained relatively stable from 1970 to 1978 and then began to grow through 1983 (Cahalan & Parsons, 1986). During the following ten-year period, the nation saw its largest increase in jail inmates when the number of confined inmates nearly doubled climbing from 227,541 in 1983 to 446,155 in 1993 (Perkins, Stephan, & Beck, 1995) and continued to

rise until the jail population reached its peak in 2008 with 776,600 persons detained (Minton & Zeng, 2016). The most recently available data show an estimated 740,700 people were held in local jails at midyear 2016 (Zeng, 2018), four and a half times the 1970 level. In addition to examining raw data or frequencies to demonstrate jail use in the United States, incarceration rates provide another view of jail use while accounting for population growth. Incarceration rates, much like the average daily population (ADP), demonstrate our increasing use of local corrections in the United States over the last few decades. In 1983, 96 U.S. residents were incarcerated in jails per 100,000 population (Perkins et al., 1995); by 2006 and continuing through 2008, that rate had nearly tripled to 260 per 100,000 (Minton & Zeng, 2016). The national jail incarceration rate stood at 217 per 100,000 U.S. residents at year-end 2016 (Zeng, 2018).

A unique feature of jails not reflected by the average daily population and incarceration rate is the amount of people such facilities encounter on a yearly basis. Across the United States every year, local jails admit millions of individuals. For example, in 2016, roughly 10.6 million individuals were admitted to local jails (Zeng, 2018). In comparison, state and federal prisons admitted roughly 608,000 inmates that same year (Carson & Anderson, 2016). While on any single day, the number of individuals held in state and federal prisons is nearly 1.5 times (1, 526,800 million) greater than those held in local jails (740,700), across a one-year span local jails admit nearly 18 times the number of individuals than do state and federal authorities (Carson & Anderson, 2016; Minton & Zeng, 2016) – a number that is largely attributable to differences in the typical length of stay in state and federal prison and local jails. Recall that state and federal authorities typically house individuals for one or more years

(Carson & Anderson, 2016), whereas the average length of stay in local jails is approximately three weeks (Minton et al., 2015).<sup>2</sup> As Minton and Zeng (2016) point out, higher turnover rates suggest shorter periods of confinement in local jails (p. 8).

In 1983, the first year national estimates of annual jail admissions were made available, there were roughly 6 million admissions to local jails (Perkins et al., 1995); a number 25 times the size of jails' average daily population. Since the early 1980s, jail admissions have increased, reaching their peak in 2008 (13.6 million) (Minton et al., 2015; Perkins et al., 1995). Following a slight decline, the latest available estimates report roughly 10.6 million admissions in 2016; a number approximately 14.5 times the size of the average daily population (Zeng, 2018).

National jail estimates provide an important overview of jail use, but do not reveal the wide variation that exists among states and counties. For example, in 2013, the rate of incarceration for Maine was 160 per 100,000 while in Louisiana, 870 U.S. residents were incarcerated per 100,000 (Minton et al., 2015). Great variation exists at the county level, even within states. For example, in Waldo County, Kentucky, 1080 U.S. residents were incarcerated per 100,000 whereas in Scott County, Kentucky, the county-level rate is closer to the national average with 260 per 100,000 U.S residents incarcerated (Vera Institute of Justice, 2017).

The discussion of jail growth and trends often include jail population or jail admissions descriptives. Prior research has shown inclusion of both indicators of jail use levels are important to examine simultaneously. For example, Klofas (1987, 1991) developed a typology to explain jail use patterns and found that the stock (i.e., average

<sup>&</sup>lt;sup>2</sup> This excludes combined jail and prisons systems, as well as federal jurisdictions (Minton et al., 2015).

daily population rate) and flow (e.g. booking rate) of jails differ and as a result impact the jail function. Specifically, Klofas (1987, 1991) identified "holding" facilities which are described as *high-low* jails in that they have a high stock rate and low flow rate. In contrast, *low-high* facilities are those with low flow rates and high stock rates and are characterized as "processing" jails (Klofas, 1987, 1991). Further, jails that have both high stock and flow rates are "high-use" facilities, while those with low stock and flows rates are "low-use" facilities (Klofas, 1987, 1991). If local jails were always high-use or lowuse, one could argue there is nothing to be gained by using both indicators of jail use. However, research conducted by Klofas (1987, 1991) and Applegate (2004) reveal that while patterns of high-high or low-low facilities are more common than high-low or lowhigh facilities, they are not universal. For example, Klofas's (1987, 1991) examination of Illinois county jails revealed that most facilities (64%) were operating as low-use (n=30) or high-use (n=31), yet 36% were holding (n=17) or processing facilities (n=17). Similarly, Applegate (2004) examined 1,445 Southern and Midwestern county jail systems to understand community jail use patterns and found the distribution of jail use types were largely high-high and low-low. That is, roughly 62% of his sample were highuse (31%) and low-use (31%) facilities, however, 38% were high-low (19%) or low-high (19%). Similar results are also found among large jail jurisdictions across the country (Klofas, 1990b). To summarize, some communities may be high on one indicator and low on the other, suggesting population and admissions capture different dimensions of community jail use. It is important, therefore, to examine both population and admission rates to capture a more complete understanding of local incarceration across jurisdictions.

The extent to which the jail population is pretrial is important to consider as it affects the average daily population. In fact, the average daily population is influenced by admissions, lengths of stay and releases (Olson & Huddle, 2013). Importantly, the increase in the jail population over the past few decades is due largely to the number of jail inmates being held pretrial (Minton & Zeng, 2016). In 1970, approximately half of jail inmates had been convicted (Cahalan & Parson, 1986). The most recent estimates report approximately one-third of persons incarcerated have been convicted (Minton & Zeng, 2016). When more defendants are held in jail, whether due to pretrial detention or a defendant's inability to post bail, this contributes to local jails average daily population (Olson & Huddle, 2013). As some scholars have indicated, the increasing number of persons being held pretrial reflect a system that is primarily functioning as "holding facilities" (Cahalan & Parsons, 1986, p. 75; Klofas, 1990). Still, there are a variety of factors that can influence whether persons will be released prior to resolution of their cases (see, for a discussion, Applegate, 2011).

It is assumed individuals who are arrested, booked and detained in local jails have committed or are suspected of having committed a criminal offense. This view suggests jails are simply a reflection of the amount of crime in a community. An alternative perspective suggests that jails are primarily used as "rabble management" (Irwin, 1985). This viewpoint was forwarded by John Irwin (1985) in his now classic work *The Jail: Managing the Underclass in American Society*. In it, Irwin (1985) suggests that jail use levels reflect discretionary justice in which people who are viewed as offensive in some way are arrested, booked and housed in local jails to control the underclass. Specifically, Irwin (1985) notes those identified as "rabble" are both detached and disreputable and

become targets of the police and the courts (p.2). That is, individuals who are not a part of conventional society and who engage in behaviors society has deemed deviant are the focus of arrest and holding practices. In his field work, in which he randomly selected 100 individuals who had been arrested and booked in a large San Francisco jail for felony offense(s), Irwin (1985) found that many individuals were held for a period of 10 or more days based largely on offensiveness rather than crime seriousness. Similar findings have been found in more recent data in which homeless persons were more likely than domiciled persons to be arrested and booked into local jails for less serious crimes such as order maintenance and property crimes, after controlling for prior criminal history, offense seriousness, and other offenses types (Fitzpatrick & Myrstol, 2011). This suggests those who are "detached" and "disreputable" are managed due to their offensiveness rather than their threat to society (Fitzpatrick & Myrstol, 2011). Scholars have discussed "rabble management" among police officers in urban areas (Stuart, 2014). Law enforcement policies and practices such as order-maintenance policing often result in officer encounters with "disorderly" neighborhoods and citizens - homeless, addicts, mentally impaired individuals, etc.—encouraging their removal from the streets (Harcourt, 1998, 2005; Stuart, 2014). Harcourt (1998) notes, "The fine art of policing creates the disorderly as a person with a full biography of habits, inclinations and desires. It simultaneously creates the disorderly as an object of surveillance and control" (p. 298). Indeed, the characteristics of persons held in jail show a diverse and impoverished population.

Many individuals incarcerated in local jails, especially those with mental health disorders, are often homeless, unemployed, and have a history of physical and/or sexual

abuse (James & Glaze, 2006). Mental health and substance abuse problems are prevalent. Jail inmates have higher rates of mental health disorders than state or federal prisoners (James & Glaze, 2006). Roughly 60% of jail inmates report symptoms of a mental health disorder in the prior twelve months; the percentage is higher for females (75%) than males (63%) (James & Glaze, 2006, p. 1). Many inmates with a mental health disorder also report substance abuse problems (76.4%) (James & Glaze, 2006). Those incarcerated persons without a mental health disorder also report high rates of substance dependence or abuse with alcohol or drugs. It is apparent that several issues characteristic of the "disorderly" are found in local jails across the United States.

The latest data seem to lend support to the view that jails serve an instrumental purpose; that is, jails function to control crime. In 2002, roughly one-quarter of inmates were held for a violent offense and 41% had a current or past violent offense (James, 2004). Many inmates, however, were held for nonviolent offenses, with roughly half being held for drug and public-order offenses, and one-third held for property offenses (James, 2004). In contrast, the most recent estimates report nearly two-thirds of jail inmates are being held for a felony offense (Minton & Zeng, 2016). It appears jails today typically hold persons accused or convicted of more serious types of crimes (Backstrand et al., 1992; Minton & Zeng, 2016). This estimate, however, is not categorized into violent and nonviolent offenses so the latest available data cannot speak to crime seriousness and are over a decade old.

**Differential Representation.** No discussion of trends in jail populations would be complete without considering representation of minorities and women in local incarceration. Most jail inmates are male (86%) (Minton et al., 2015). The latest available

census data show there are roughly 627,000 male inmates and 101,000 female inmates confined in local jails (Minton et al., 2015). In 2015, male inmates comprised roughly 80% of the 10.9 million admissions to local jails (USDOJ BJS, 2016, ICPSR36128).<sup>3</sup> The rate of male jail incarceration stands at about 377 per 100,000 male U.S. residents while the female jail incarceration rate is 62 per 100,000 female U.S. residents (Zeng, 2018). While females comprise a smaller number of jail inmates and have a lower rate of incarceration than do their male counterparts, females are the fastest growing segment of the jail inmate population.

Over the past 45 years, the number of women held in local jails has increased nearly 11-fold (Cahalan & Parsons, 1986; Minton et al., 2015). The female jail population grew from roughly 6% (7,751) of the total jail population (Cahalan & Parsons, 1986) in 1970 to more than 14% of its total in 2013 (Minton et al., 2015). Similarly, the number of women held in local jails in 2013 was 101,000; a 48% increase from 1999 (Minton et al., 2015). In comparison, the male jail population increased by roughly 17% during this same period (Minton et al., 2015). While both the male and female jail population have increased, the female jail incarceration rate continues to grow faster than the male incarceration rate (Minton & Zeng, 2016).

It is difficult to draw historical jail trends regarding race and ethnicity because in the 1970s and early 1980s individuals of Hispanic heritage were included in counts of race (Cahalan & Parsons, 1986). The Bureau of Justice Statistics reported Hispanic

<sup>&</sup>lt;sup>3</sup> The Census does not collect disaggregated race- or ethnic-admission counts, therefore race- and ethnicspecific admissions rates regarding gender cannot be reported. Further, it is not possible to discuss the number of inmates on a given day with reference to race- and ethnic-specific figures (e.g., black, non-Hispanic males or females) regarding gender because the number of jail inmates on a given day are collected separately for males and females and race and ethnicity.

ethnicity separately, however, an inmate was also classified as belonging to a racial group such as black, white, Asian and American Indian (Cahalan & Parsons, 1986). More recently, the Bureau of Justice Statistics clearly distinguishes between counts of race and ethnicity—inmates may be classified as White, non-Hispanic; Black, non-Hispanic; America Indian/Alaska Native, non-Hispanic; Asian, non-Hispanic; Native Hawaiian or Other Pacific Islander, non-Hispanic; Two or more races, non-Hispanic; and Hispanic or Latino (Bureau of Justice Statistics, 2013). With this challenge in mind, apparent changes in the racial composition of jail populations should be interpreted with appropriate caution. In 1978, the racial composition of jail inmates was 57% white, 41% black, 2% other and 10% of these individuals considered themselves Hispanic (Cahalan & Parsons, 1986).<sup>4,5</sup> Nearly identical counts were found among inmates in 1982 (Kalish, 1983). Through the late 1980s and early 1990s the racial and ethnic composition of jail inmates remained relatively stable. In 1994, roughly 39% of inmates were white, non-Hispanic; 44% black, non-Hispanic; 15% Hispanic; and 2% other (Asian, Pacific Islanders, American Indians, and Alaska Natives) (Perkins et al., 1995). Between 2000 and 2016 there has been an increase in the white non-Hispanic population – from 42% to 48% – a decline in the black non-Hispanic population – from 41% to 34% – and the portion of Hispanic inmates have remained relatively stable at 15% (Zeng, 2018).<sup>6</sup> Despite the

<sup>&</sup>lt;sup>4</sup> "Other" races were reported by Cahalan and Parsons (1986) as "primarily includ[ing] Indians and Asians" (p. 91).

<sup>&</sup>lt;sup>5</sup> Note: this is the first year in which race, to include the category of "other," and Hispanic origin were all reported. Further, it is also the first year that most state-unified systems were excluded from counts (Connecticut, Delaware, Hawaii, Rhode Island, and Vermont) (Cahalan & Parsons, 1986).

<sup>&</sup>lt;sup>6</sup> Note: The figures for year 2000 represent mid-year percentages, while the 2016 figures represent year-end percentages because the Annual Survey of Jails collected data at year-end rather than at midyear in 2016 (Zeng, 2018, footnote p. 4).

decline in non-Hispanic black jail incarceration, black residents have the highest jail incarceration rate of any other racial or ethnic group in the United States (Zeng, 2018).

Minority incarceration rates at the state and county level are much higher than the national rate of jail incarceration which stands at 217 per 100,000 U.S. residents (Zeng, 2018). For example, in South Carolina the black, non-Hispanic incarceration rate stands at 678.3 per 100,000 residents and in Florida the black, non-Hispanic rate of incarceration stands at 1003.5 per 100,000. At the county level, high minority incarceration rates are also evident. For example, Charleston County, South Carolina, has a black, non-Hispanic incarceration rate of 1089.4 per 100,000, and in Martin County, Florida, the black, non-Hispanic incarceration stands at 3283.7 per 100,000 residents. These rates are much higher than the overall national rate, the black, non-Hispanic national rate (599 per 100,000) (Zeng, 2018), and the state jail incarceration rate in South Carolina and Florida (340.4 per 100,000 and 416.4 per 100,000, respectively) (Vera Institute of Justice, 2017). Taken together, these figures reflect not only high minority incarceration rates, but also significant variation in state and county jail incarceration rates for minorities.

National estimates of ethnic incarceration rates suggest that those of Hispanic origin are not disproportionality impacted by jail. The national rate of incarceration among Hispanics stands at 185 per 100,000 residents, a rate that is slightly lower than the overall national average of jail incarceration (217 per 100,000) (Zeng, 2018). While nationally Hispanics are proportionately represented in U.S. jails, examination of stateand county-level estimates of Hispanic jail incarceration reveal Hispanics are disproportionality impacted in some locations, though overall, this situation does not appear to be as pervasive as we find for racial minorities. For example, the Hispanic rate

of incarceration in Montana is 722.5 per 100,000, and in South Dakota, the rate of incarceration for Hispanics is 628.4 per 100,000 residents; both much higher than the overall national or Hispanic national rate of jail incarceration. At the county level, the disparate outcomes for ethnic minorities is more evident. For example, in Silver Bow County, Montana, the Hispanic rate of incarceration is 2272.7 per 100,000 residents and in Hughes County, South Dakota, the rate of incarceration for Hispanics is 1408.8 per 100,000 (Vera Institute of Justice, 2017). Similar to the jail incarceration rates of racial minorities, ethnic minority rates reflect significant variation across states and counties and, at least in some cases, disproportionate contact with U.S. jails.

The overrepresentation of minorities in incarceration relative to their percentage in the population is commonly referred to as disproportionate minority confinement (DMC). There are several perspectives that have been forwarded to help identify the causes of DMC but largely, the two more common explanations are differential involvement and differential treatment. The differential involvement perspective argues that minorities engage in more crime than do whites (Blumstein, 1982). In comparison, the differential treatment thesis assumes that minorities are treated differently than whites and are targets of discriminatory practices whether due to overt racism or implicit bias in the criminal justice system (Mauer, 2017).

Alfred Blumstein's work (1982) work in this area was one of the first to examine the effect of differences in arrest rates and subsequent incarceration. The argument is that if arrest rates are similar to corresponding incarceration rates, then the criminal justice system is not inherently engaged in discriminatory practices, rather it is a system that merely reflects the amount of crime in a given community. Blumstein (1982) posited that

if no discrimination occurred after arrest then the proportion of black and white imprisonment rates for an offense would match black and white arrest rates for the same crimes. Blumstein's (1982) influential study on racial disparities in imprisonment found that arrest rates explain a relatively large percentage of the disparity among black and white imprisonment (80% and 76%, in 1979 and 1991, respectively) (Blumstein, 1982, p. 1268, 1983, p. 751; for similar findings utilizing victimization data, see Langan, 1985). Specifically, the racial differences in arrests for violent offenses explained a larger proportion of racial disparities in imprisonment (80% and 77%) than did less serious crimes like property and drug crimes—approximately half for less serious crimes (Blumstein, 1982). In a more recent study, Tonry and Melewski (2005) utilized data from 2004 and found unexplained disparities between arrest rates and imprisonment to be much greater than those in the 1970s and 1990s. Roughly 39% of disparities in incarceration could not be explained by arrest rates (Tonry & Melewski, 2005), suggesting that differential treatment could explain incarceration disparities. To be sure, arrest rates reflect crime rates and policing practices and are thus not a wholly accurate measure of criminal involvement (Pettit & Western, 2004; Travis, Western, & Redburn, 2014). While Blumstein's (1982, 1993) findings could be construed simply as a system reflecting differences due to differential involvement in crime, one cannot rule out differential treatment (e.g., racial bias and stereotyping).

It is unclear at the county level whether similar analyses would produce similar results regarding differential treatment or differential involvement (Garland, Spohn, & Wodahl, 2008). Given that larger percentages of unexplained disparities are found for less serious crimes, perhaps a similar analysis conducted at the local level—where

individuals are often held for less serious crimes—would reveal that jail confinement, more that state imprisonment reflects a system of greater social control.

Recently, the National Academy of Sciences committee summarized their review of the literature on disparities in sentencing outcomes and mass imprisonment and stated, "[R]acial bias and discrimination are not the primary causes of disparities in sentencing decisions or rates of imprisonment. There are differences, but they are relatively small. No doubt they result partly from the various forms of attribution and stereotyping discussed below. *Minority defendants are, however, treated differently at several stages of the criminal justice process, and those differences influence resulting disparities*" [emphasis added] (Travis et al., 2014, p. 97).

Decades of research suggest this general conclusion of cumulative disadvantage to be true. Examples of racial disparities have been documented at every stage of the criminal justice system. For example, while non-Hispanic blacks, non-Hispanic whites, and Hispanics are stopped by police at similar rates, it is black (6%) and Hispanic (7%) drivers more often searched than whites (2%) (Langton & Durose, 2013). Once arrested, minorities are more likely to be negatively affected by pretrial release decisions and outcomes. Nonfinancial release decisions appear to be distributed in fairly equal proportions across race; however, financial release disproportionately restricts release among minority members (Demuth, 2003). It appears that higher bail amounts are set for Hispanics and blacks and they are less likely to afford bail and meet these requirements, and they are more likely to be detained pretrial (Demuth, 2003; Demuth & Steffensmeier, 2004). Relatively little is known about prosecutorial decision making because their work occurs at the city or county level (Mauer, 2011), however, still there is evidence that

minority disparities in plea negotiations as well as at the charging and sentencing stage exist (Spohn, 2000, 2013; Spohn & Holleran, 2000). For example, black defendants receive harsher charges than do white defendants in Federal court, after controlling for extra-legal factors, criminal history, and offense characteristics (Starr & Rehavi, 2014). Evidence of harsher penalties in Federal sentencing outcomes among Hispanic defendants has also been reported (Steffensmeier & Demuth, 2000). In sum, disparities in incarceration outcomes stem, in part, from the cumulative nature in differences in policing, charging and sentencing decisions.

## **2.4 Conceptual Frameworks**

There are several explanations of the nature and operation of the legal system. The two main perspectives typically used to explain the legal system are the consensus and conflict models. The consensus perspective assumes all members of a society have shared beliefs about norms and laws (Durkheim, 1984). Specifically, there are shared understandings and agreement on what constitutes acceptable and unacceptable criminal—behaviors, as well as shared expectations on appropriate responses to such behaviors. That is, all members of a community come together to decide on definitions of right and wrong as well as the consequences of violations. These decisions are thought to be equally distributed throughout members of society. The alternative model argues that these choices are made primarily by some—not all—members of society. The conflict perspective also asserts that people hold conflicting beliefs and as such have different definitions on what constitutes acceptable and unacceptable behaviors. Due to the unequal distributions of power and differing views in society, definitions of right and wrong held by powerful members of society become codified (Quinney, 1970; Spitzer,

1975). Social and racial inequality in the legal system has often been described through this lens. It is the powerful who construct a legal system that defines what is and is not acceptable behavior and operate the law to their advantage. As a result of this unequal distribution of power and group conflict, disadvantaged members of society are disproportionally impacted (Quinney, 1970, 1977; Spitzer, 1975; Turk, 1969). The criminal justice system, then, is an instrument used by powerful groups to control segments of the population and to maintain the social hierarchy (Turk, 1969).

A derivative of this perspective, social threat theory, posits greater social control will be utilized when the number of acts and people who are threatening to the prevailing social order increase (Liska, 1992). It is assumed certain behaviors and activities pose more of a threat than others, and this threat is more pronounced when such behaviors and activities are committed by some people more than others (Liska, 1992). As such, crime control is used by the powerful—often wealthy, white individuals—to protect the status quo. The law, then, criminalizes behaviors and activities that are viewed by the powerful as a threat *and* these laws are enforced more often, and against the subordinate—often, poor minorities—in an effort to control threatening acts and people and maintain the social structure (Liska, 1992; Quinney, 1970). This perspective asserts that any increase in the level of social control is a response to the threat posed to the dominant group by the subordinate group (Liska, 1992). Research examining the factors that influence crime control using social threat theory have typically been disaggregated into two components: minority threat and economic threat.

#### 2.5 Minority Threat

Minority threat posits that crime control efforts increase when there is an increase in the presence of minorities. The increase in social control is a direct result of the threat minority members pose to the majority. This threat, whether real or perceived, can be presented through three different avenues—political, economic or criminal.

Blalock (1967) provides one of the first explicit arguments about minority threat theory. His discussion focused on the power relationship between blacks and whites but also drew on political and economic conditions. Blalock (1967) suggested that blacks pose an economic and political threat to whites which leads to increased discrimination and inequality. Specifically, Blalock (1967) asserts that as the proportion of the black population increases, discrimination will also increase because minority group members pose an economic threat to whites through perceived competition for jobs. He argued further that blacks also pose as a political threat, more commonly referred to as power-threat to whites because of their assumed ability to gain numbers and mobilize on the political front (Blalock, 1967). Blalock (1967) believes it is these power relationships between minority and dominant group members for economic and political resources and their ability to mobilize such resources which effect discrimination and segregation (p. 111).

Blalock (1967) posited the relationships between the relative size of the minority population—which can pose an economic and political threat—and discrimination or the motivation to discriminate would be nonlinear. In both cases, social control will increase with the relative size of the minority population until they reach a certain threshold, and then discrimination will reverse as a result of minority mobilization of resources.

Specifically, Blalock (1967) proposed these relationships would be positive, curvilinear relationships but the direction for both economic and political threat differ. Specifically, Blalock (1967) argues economic threat would be curvilinear with a positive and declining slope. That is, as the minority population increases so too will various forms of discrimination because minority members are perceived to compete with whites for economic resources (e.g., employment). However, the intensity of social control or discrimination will begin to decline as the minority population increases because it is assumed that with larger minority population, there is already a great deal of discrimination preventing blacks from gaining economic resources. Therefore, the greater proportion of blacks in a community, the greater level of discrimination and less competition for employment from blacks to whites; less threat predicates less of a need to control (Blalock, 1967, p. 148). In contrast to economic threat, Blalock (1967) proposes that a political threat will have an increasing slope, rather than a declining slope. It is assumed that discrimination will increase along with the relative size of the minority population. Blalock (1967) proposes that for whites to maintain their power on the political front they must not only maintain their level of discrimination consist with the relative size of the minority population but the discrimination "must also rise at an increasing rate" (p. 153). More recent empirical research suggests this social control or discrimination does increase but occurs only to a certain point. The threshold at which social control will begin to decline occurs when the minority population comprises a relatively large proportion of the population (Keen & Jacobs, 2009). Once this population shift has occurred, it is assumed that blacks will have gained enough political mobilization to offset white control (Keen & Jacobs, 2009).

A more recent conceptualization of minority threat includes the criminal threat hypothesis (Liska & Chamlin, 1984; Chamlin & Liska, 1992; Eitle, D'Alessio, & Stolzenberg, 2002). This thesis advances Blalock's (1967) sociological discussion of minority threat and provides an application to the criminal justice system. The criminal threat hypothesis holds that greater demands for social control occur because nonwhites are perceived to be a criminal threat (Liska & Chamlin, 1984). Specifically, it is the fear of black-on-white crime—not economic or political threats—that will trigger greater levels of criminal control of minorities (Liska & Chamlin, 1984; Chamlin & Liska, 1992). The criminal threat hypothesis parallels the economic and political threat hypotheses in that it asserts a larger proportion of minority members will result in greater social control. This association, however, is assumed to be positive and linear.

Liska and Chamlin (1984) outline a benign neglect hypothesis. In contrast to the minority threat thesis, the benign neglect hypothesis proposes formal social control will decline as the percentage of minorities increase in a community. It is assumed that as the relative size of the minority populations increases, so too will intraracial crime. A greater ratio of black-on-black crime may not pose a significant threat to the dominant group, resulting in less social control (Liska & Chamlin, 1984). Liska and Chamlin (1984) also suggest that intraracial crime among minorities may be subject to less crime control because fewer resources are allocated to minority victims because they are viewed as less worthy than whites.

A key assumption of minority threat is that the racial minority population is viewed in a negative way, as a potential challenge to the social hierarchy. Available empirical evidence is consistent with this position. Prior research shows that racial

prejudice, stereotypes and punitive attitudes are linked to minority group members (Chiricos, McEntire, & Gertz, 2001; King & Wheelock, 2007; Ousey & Unnever; 2012; Welch, Payne, Chiricos, & Gertz, 2011). Punitive attitudes are related to perceived minority threat to public safety and perceived interracial competition for economic resources (King & Wheelock, 2007). Large proportions of minority populations are also linked to fear of crime (Chiricos et al., 2001; Eitle & Jacobs, 2008; Liska, Lawrence, & Sanchirico, 1982) and perceived levels of neighborhood crime, controlling for crime rates (Quillian & Pager, 2001). For example, Liska, Lawrence and Sanchirico (1982) found that metropolitan residents are more fearful of crime in areas where larger proportions of blacks reside, controlling for crime rates. Eitle and Taylor (2008) found fear of crime was higher in areas where a large proportion of the population was Hispanic, but that fear of crime did not extend to the black population. In another study, Quillian and Pager (2001) examine the effect of neighborhood racial composition on the level of perceived neighborhood crime level, controlling for crime rates. They find that neighborhoods with a larger proportion of young black men are perceived as having a larger crime problem. These research findings lend support to the theoretical assumption that stereotypes regarding criminality are attached to minority group members (Liska et al., 1982; Welch et al., 2011). While this literature fills an important gap in the minority threat perspective, it does not speak to whether large or growing percentages of minority population result in greater utilization of crime control.

Much of the empirical work on minority threat has been conducted at the macrolevel and shows an association between large or growing minority populations and increased crime control activities. For example, areas marked with larger minority

populations have been associated with more police arrests (e.g., Eitle et al., 2002), greater police strength and expenditures (Kent & Jacobs, 2005; McCarty et al., 2012), higher incarceration rates (Campbell et al., 2015), corrections expenditures (Jacobs & Helms, 1999) and prioritization of corrections spending (Breunig & Ernst, 2011). The minority threat perspective has also been associated with the use of capital punishment and support for the death penalty (Jacobs & Carmichael, 2002, 2004; Jacobs, Carmichael, & Kent, 2005).

Empirical Research on Minority Threat and Incarceration. Given the premise of the minority threat perspective, imprisonment rates will be higher in areas with large or growing minority group populations. Consistent with the racial threat prediction, there has been support that areas with larger black populations have higher incarceration rates (Arvanites, 1993; Arvanites & Asher, 1995, Beckett & Western, 2001; Brown, 2016; Phelps & Pager, 2016; Myers, 1990; Western 2006). For example, percent black is positive and statistically correlated with jail admission rates at the county level (Applegate, 2004) and in major U.S. cities (Carmichael, 2005). In fact, Applegate (2004) found that percent black was significantly correlated with both jail admission rates and the average daily population rate across 1,445 jail systems in Southern and Midwestern counties. Appendix A provides a summary of empirical studies on the effects of minority threat, economic threat and/or political determinants on jail incarceration. Additionally, support for the racial threat hypothesis has also been found in studies examining overall prison admission rates (Padgett, 2002) and state incarceration rates (Greenberg & West, 2001; Jacobs & Carmichael, 2001). For example, in a recent study conducted by Campbell et al. (2015), percent non-Hispanic black was associated with higher state

incarceration rates in 1970, 1980, 1990, 2000 and 2010. In 2010, the only positive and statistically significant factor related to incarceration rates was the non-Hispanic black population, and this variable was the only factor to have a stronger effect in 2010 than in 1970, after controlling for crime, economic and political factors.

While the majority of studies examining racial threat have found positive associations, others have found that the relative size of the black population does not impact incarceration rates (Jacob & Helms, 2001; Stucky, Heimer, & Lang, 2005) nor have been negatively associated with incarceration rates (Liska, Markowitz, Whaley, & Bellair, 1999). For example, Liska, Markowitz, Whaley and Bellair (1999) sought to determine the effects of the mental health system and criminal justice system on jail admissions across 100 cities in 1978, 1983 and 1988. Liska et al. (1999) found that percent black was negatively related to jail admission rates in 1978 and 1983.<sup>7</sup> In 1988, Liska et al. (1999) found percent black was not correlated with jail admission rates.

In some cases, scholars have tested minority threat by not only examining the effect of minority presence but also by examining the presence of minority political figures, tapping more closely into Blalock's (1967) political threat thesis. For example, Carmichael (2005) examined the impact of minority mayor presence on jail admissions, hypothesizing that repression of the black population should be reduced when a black mayor holds political office. Liska et al. (1999) also examined the extent that white or nonwhite mayor presence could influence the jail admission rate. In both cases, the presence of a nonwhite or white mayor (Liska et al., 1999) and black mayor (Carmichael, 2005) had no independent effect on the jail admission rate.

<sup>&</sup>lt;sup>7</sup> Liska et al. (1999) note that it is possible race has a positive, indirect effect through its effect on jail capacity, which influences jail admissions.

Some scholars argue that the lack of significant findings for minority threat among formal control mechanisms may be due in part to due methodological issues (Keen & Jacobs, 2009). Specifically, the vast majority of studies examining racial threat have largely focused on linear relationships. When researchers have examined nonlinear relationships, they often find support for the benign threat hypothesis (Greenberg & West, 2001, Keen & Jacobs, 2009). For example, Keen and Jacobs (2009) examined prison admission rates for the years 1983-1999 and found that percent black had a positive and statistically significant impact on black-to-white prison admissions until percent black reached roughly 23% and then the trend reversed. With regard to state imprisonment rates, Greenberg and West (2001) found that the relative size of the black population was related but "at higher levels of percent black" the association was weaker (p. 630).

In recent years, several scholars have extended the traditional minority threat hypothesis to include Hispanics; this is commonly referred to as ethnic threat. In comparison to racial threat, fewer studies have examined the effect that the presence of Hispanics has on incarceration (for exceptions, see Applegate, 2004; Campbell et al., 2015; Carmichael, 2005; Greenberg & West, 2001; Jacobs & Carmichael, 2001; Johnson, 1992; Padgett, 2002). To date, there seems to be a lack of support for ethnic threat as an explanation of state imprisonment rates (Greenberg & West, 2001) or prison admission rates (Stucky et al., 2005), after controlling for other relevant variables.<sup>8</sup> For example, Greenberg and West (2001) utilized a pooled time-series design to examine the effect of

<sup>&</sup>lt;sup>8</sup> For an exception, see Jacobs and Carmichael (2001) who found percent Hispanic had a positive and statistically significant effect on incarceration rates in 1990, after other relevant variables are controlled. These findings will be described briefly in section 2.8.

black and Hispanic composition on state-level imprisonment rates in 1971, 1981 and 1991. They found the proportion of the population that was Hispanic was not related to state imprisonment when controlling for violent crime and economic and political factors. In comparison, Carmichael (2005) found that percent Hispanic was positively associated with jail admission rates in 100 large U.S. cities, independent of statistical controls. Additionally, at the county level Applegate (2004) found that percent Hispanic was positively correlated with jail admission rates but not on the average daily population. Consistent with these findings, at the county level Padgett (2002) found that percent Hispanic had a positive and statistically significant effect on prison admission rates in the state of Florida, but not the average daily jail population. It may also be the case that the effect of ethnic threat is dependent on region. In one study, Campbell et al., (2015) used state-level decennial data from 1970 to 2010 to determine whether differences of social, economic and political factors between Sunbelt and non-Sunbelt states explain incarceration. They found percent Hispanic was not associated with incarceration rates in non-Sunbelt states, yet the proportion of Hispanics was negatively related to incarceration in Sunbelt states. The discrepancy between positive, negative and null findings between percent Hispanic and incarceration may be the result of aggregation; national- and statelevel data may mask county-level effects (Lynch, 2011). Further, these inconsistencies may be due to the use of different outcome measures.

While most studies of minority threat have examined overall incarceration rates, some scholars have investigated minority threat and race-specific incarceration rates. Examining disaggregated rates of incarceration in light of minority threat theory provides an opportunity to explain black and white incarceration disparities and offer possible

avenues to combat the disproportionate impact of incarceration on people of color. Some have found a positive and statistically significant association between percent nonwhite and non-white imprisonment rates at the county level. Bridges, Crutchfield and Simpson (1987) found the percent of the population that was nonwhite—black, Hispanic, and Native American—had no effect on white imprisonment rates, but it was positively related to nonwhite imprisonment rates. Conversely, some researchers have found a negative association between the percent of the population who is black and black imprisonment rates (Bridges & Crutchfield, 1988) and black prison admission rates (Padgett, 2002). Interestingly, while Padgett (2002) found that percent black resulted in lower black admission rates, she found that percent Hispanic was statistically significant and positively related to black admission rates. Padgett (2002) speculates that it could be possible that ethnic threat also produces greater social control for racial minorities. Unfortunately, Padgett (2002) does not have an outcome measure for Hispanic admission rates so it is unclear whether percent Hispanic would impact Hispanic incarceration rates.

# 2.6 Economic Threat

An alternative facet of the social threat perspective emphasizes that social control mechanisms are mobilized against an economic rather than a minority underclass (Chambliss & Seidman, 1971; Garland, 1990). Similar to the racial threat hypothesis, the economic threat perspective argues that social control efforts respond to the perceived threat of disadvantaged groups. Economic threat theories propose, however, that the unequal distribution of wealth in society influences the exercise of social control (Chambliss & Seidman, 1971). The theory proposes that areas marked with greater economic inequality experience greater class conflict. In turn, the dominant group views

the economic underclass as a threat and uses its power to increase crime control measures against the underclass to maintain its interests (Chambliss and Seidman, 1971; Jacobs, 1979; Liska & Chamlin, 1984; Spitzer, 1975). Chambliss and Seidman (1971) summarize the effect of class inequality on social control: "The more economically stratified a society becomes, the more it becomes necessary for the dominant groups in the society to enforce through coercion the norms of conduct which guarantee their supremacy" (p. 33). It is the affluent—who have economic and political power—who are capable of influencing the creation and implementation of law which represent their best interests (Chambliss & Seidman, 1971). The law then is used as an instrument by the affluent to control the economic underclass. The economic underclass is a threat to the wealthy's interests through the possibility that they are a criminal threat and may steal from the wealthy, they oppose traditional values of hard work as evidenced by their unwillingness or inability to work, and they may view the inherent social order negatively and propose change to the social organization (Spitzer, 1975, p. 642).

**Empirical Research on Economic Threat and Incarceration**. A review of the literature reveals that economic inequality is often included in studies examining race and incarceration. Sometimes economic inequality is cast as an alternate explanation for incarceration (Arvanites & Asher, 1998; Greenberg & West, 2001; Jacobs & Carmichael, 2001; Jacobs & Kleban, 2003; Phelps & Pager, 2016) while in other studies it is included as a control against other competing theoretical explanations (Campbell et al., 2015; Padgett, 2002).

With few exceptions, the majority of studies find that income inequality is either weakly related or unrelated to state incarceration rates, independent of statistical controls

(Campbell et al., 2015; Greenberg & West, 2001; Jacobs & Carmichael, 2001; Jacobs & Kleban, 2003). For example, in time-series analyses utilizing decennial census data from the 1970s, 1980s, and 1990s, Greenberg and West (2001) and Jacobs & Carmichael (2001) found income inequality was not related to state prison incarceration rates, after controlling for crime and other important predictors such as racial composition. Still, other scholars have found income inequality is positively associated with state imprisonment rates, after controlling for crime rates and other pertinent variables (Jacobs & Helms, 2001; Phelps & Pager, 2016; Western 2006). The research on jail incarceration also reveals that income inequality is related to local incarceration. For example, in Padgett's (2002) analysis of jail county-level incarceration rates in Florida, income inequality was statistically significant and positively related to the jail population rate, but not the prison or black prison admission rates. In another study, Arvanites and Asher (1998) examined state-level jail census data for 50 states and DC for 1993 and found that income inequality was statistically significant and positively related to jail incarceration rates when controlling for violent crime. However, when controlling for total crime rather than violent crime, income inequality was insignificant for jail incarceration rates but was positive and significantly related to combined state and county incarceration rates.

Other researchers have found positive associations between incarceration and other economic indicators, such as unemployment (Applegate, 2004; Greenberg & West, 2001; Inverarity & Grattet, 1988) and poverty (Applegate, 2004; Arvanites & Asher, 1995; Beckett & Western, 2001). These indicators have often been used to explain overall incarceration rates and are often utilized as measures of economic inequality in studies which examine race-specific incarceration rates. Examination of aggregate

incarceration rates have also revealed no association between unemployment and incarceration (Arvanites, 1993; Carmichael, 2005; Johnson, 1992; Michalowski & Pearson, 1990; Padgett, 2002) and poverty and incarceration (Jacobs & Carmichael, 2001). For example, both Padgett (2002) and Carmichael (2005) found that unemployment was unrelated to jail incarceration rates (Padgett, 2002) and jail admission rates (Carmichael, 2005). The inconsistent results could be, in part, be due to outcome measures. As an example, in an examination of the effect of race on sentences to California state prisons and county jails, McCarthy (1990) found that poverty influences the use of prison but not jail confinement, and unemployment is related to jail use but not prison confinement, after controlling for crime.

Studies examining race-specific incarceration utilize race-specific poverty rates and unemployment rates (Yates & Fording, 2005) and overall unemployment rates (Padgett, 2002), while others examine black-to-white ratios of unemployment (Keen & Jacobs, 2009; Western, 2006; Yates & Fording, 2005) and black-to-white ratios of poverty (Bridges & Crutchfield 1988; Bridges, Crutchfield, & Simpson, 1987; Yates & Fording, 2005) or some combination of these, such as both overall unemployment and black-to-white ratios of unemployment (Keen & Jacobs, 2009). One could argue that differences in unemployment and poverty between blacks and whites are more closely aligned with the minority threat hypothesis. That is, such measures are an indicator of the "competition" for economic resources, rather than the threat associated with economically marginalized groups. Nevertheless, research reveals that regardless of measurement, unemployment is unrelated to black prison admissions (Padgett, 2002), black to white prison admission ratios (Keen & Jacobs, 2009) and black and white

imprisonment rates and imprisonment disparity (Yates & Fording, 2005). In contrast, the examination of race-specific incarceration rates utilizing poverty as an indicator of economic inequality reveals inconsistent results. For example, Yates and Fording (2005) in an examination of state imprisonment rates and racial imprisonment disparity from 1977-1995 found that poverty was statistically significant and positively related to white and black imprisonment rates as well as imprisonment disparity, while Bridges et al. (1987) found poverty was not related to white or nonwhite rate of sentences to prison. Still, in another study, the black-white ratio of poverty was found to be significantly and negatively related to white state imprisonment rates and unrelated to black state imprisonment rates (Bridges & Crutchfield, 1988).<sup>9</sup>

## **2.7 Political Characteristics**

In addition to social and economic determinants of incarceration, another perspective describes incarceration as largely being determined by the political landscape (Beckett, 1997; Beckett & Sasson, 2003; Simon, 2007). A political explanation of the use of incarceration differs from the minority or economic threat theses in that the key is not the relative size of the racial minority or economic population, rather, it is the politics of crime and punishment that produce greater social control (Simon, 2007; Smith, 2004). Although "tough on crime" rhetoric has been used by both Republicans and Democrats, explanations used to account for the association between politics and imprisonment typically revolve around conservative partisanship and citizen ideology (Beckett & Sasson, 2004).

<sup>&</sup>lt;sup>9</sup> Bridges and Crutchfield (1988) calculated state black-white economic inequality by dividing percent black below the poverty level by percent white below the poverty level (p. 706).

The notion that conservative party affiliation will influence the use of incarceration has been referred to as the partisanship hypothesis (Smith, 2004). Law and order politics have been a successful strategy among Republicans to gain swing voters (Alexander, 2010; Beckett & Sasson, 2003; Smith, 2004). Often referred to as the Southern Strategy, racial rhetoric was used to gain the votes of lower- and middle-class whites who were socially conservative but who traditionally did not vote Republican because they were often did not benefit from conservative economic policies (Beckett & Sasson, 2004). By appealing to these groups' implicit biases regarding crime, conservative politicians were able to collect more votes through endorsements of harsh punishment (Alexander, 2010). The infamous "Willie Horton" ad is but one example where politicians used racial rhetoric and framed crime as a result of Democrats who are "soft on crime" (Alexander, 2010; Beckett & Sasson, 2004; Hurwitz & Peffley, 2005). Scholars point out that such anti-minority sentiments today are more implicit then they were in the past (Alexander, 2010; Hurwitz & Peffley, 2005). There is evidence that law and order political rhetoric increases citizens' fear of crime and that such racial rhetoric and racialized code words influence citizens' support for harsher policies and practices (Beckett, 1997; Hurwitz & Peffley, 2005).

In addition to partisanship, it has been argued that the use of incarceration is a response to the public calling for harsh punishment regarding crime (Smith, 2004). The public's perception regarding crime, whether real or imagined, does not drive punitive policies and practices; rather, it is their demand for harsh sanctions (Smith, 2004). Typically, political conservatives call for punitive policies regarding crime (King &

Wheelock, 2007), while liberals are often less supportive of punitive practices (Langworthy & Whitehead, 1986).

**Empirical Research on Political Characteristics and Incarceration**. Empirical research on the political determinants of incarceration reveal that indeed politics do contribute to incarceration use. Prior research shows that states with more politically conservative citizens typically have higher incarceration rates (Campbell et al., 2015; Jacobs & Carmichael, 2001). Scholars have used a variety of measures to gauge citizen political ideology to include public opinion polls (Greenberg & West, 2001), the percent of citizens voting for a Republican political candidate (Keen & Jacobs, 2009), as well as scales constructed from political roll calls and voter outcomes with specific intent to measure citizen and political ideology (Campbell et al., 2015; Jacobs & Carmichael, 2001). These operationalizations will be discussed briefly in Section 2.9. For now, evidence of the effects of politically conservative citizens is presented. Greenberg and West (2001) found that states with more conservative constituents, as measured through CBS News-New York Times polls, not only had higher rates of incarceration but also these areas had the sharpest increases in incarceration over time (p. 637). Additionally, conservative citizen ideology, as measured by the percent of citizens voting for the Republican presidential candidate, has also been reported to be positively associated with the ratio of black-to-white prison admissions (Keen & Jacobs, 2009). The portrait painted by studies in this area, however, is not completely consistent. While some studies support that conservative ideology impacts incarceration rates, other analyses find that conservative public attitudes do not impact prison admission or incarceration rates

(Smith, 2004; Stucky et al., 2005), and they do not explain imprisonment disparities between blacks and whites (Yates & Fording, 2005).

Scholars have also approached this issue using an alternative method of gauging politics. They have considered a possible link between variation in the use of state incarceration and differences across geographic areas in the relative size and strength of political parties. Several studies report a significant positive association of Republican Party strength on state imprisonment (Beckett & Western, 2001; Campbell et al., 2015; Jacobs & Carmichael, 2001; Jacobs & Helms, 1996, 2001; Keen & Jacobs, 2009; Phelps & Pager, 2016; Smith, 2004: Stucky et al 2005; Yates & Fording, 2005). Existing empirical research finds that Republican Party strength matters at the national and state level. For example, Republican control of the executive and legislative branches of government have been linked to increases in prison admissions (Jacobs & Helms, 1996) and imprisonment rates (Jacobs & Helms, 2001). In a nuanced study, Stucky, Heimer, and Lang (2005) found that the effect of Republic strength depended, in part, on the competition among state legislatures. When competition among state legislatures increased so too did admission rates and this association increased over time (Stucky et al., 2005). Republican legislative control, but not executive control was statistically significant and positively related to racial imprisonment disparities (Yates & Fording, 2005), yet executive control is not associated with black and white imprisonment rates (Yates & Fording, 2005). Still, others have found no significant association between Republican strength and incarceration rates in the United States (Greenberg & West, 2001) or Canada (Neil & Carmichael, 2015). This finding has also been found among scholars investigating racial disparities in prison admissions (Keen & Jacobs, 2009). All

of these studies have operationalized social control through prison incarceration, not by considering variation in jail use.

#### 2.8 Social, Economic, and Political Context

Thus far, I have discussed the impact of minority threat, economic threat, and politics individually for greater clarity regarding the empirical status of each theory on incarceration. While some scholars have tested individual positions to determine the independent effects of racial or ethnic threat, economic threat, or politics on incarceration, others have included two or all three potential determinants of incarceration. These scholars have advanced the literature and simultaneously examined the effect of the presence of minorities, economic inequality and public conservatism and/or political climate on incarceration rates. The examination of these multiple theoretical perspectives contributes to a better overall understanding of the underlying causes of incarceration use.

Many of the studies I have examined throughout this chapter have tested two (Arvanites, 1993; Arvanites & Asher, 1995; Bridges & Crutchfield, 1988; Bridges et al., 1987; Michalowski & Pearson, 1990) or all three (Beckett & Western, 2001; Brown, 2016; Campbell et al., 2015; Greenberg & Western, 2001; Jacobs & Carmichael, 2001; Jacobs & Helms, 2001; Keen & Jacobs, 2009; Neil & Carmichael, 2015; Phelps & Pager, 2016; Stucky et al., 2005; Smith, 2004) determinants of state incarceration. Those studies that have included two determinants exclude political factors and instead focus on the minority threat and economic threat theses. Generally, these studies find support for racial threat but not economic threat (Arvanites, 1993; Arvanites & Asher, 1995; Bridges

& Crutchfield, 1988; Bridges et al., 1987; Michalowski & Pearson, 1990), after controlling for crime.

Inclusion of social, economic and political determinants largely reveals that minority threat and political factors impact incarceration. Contrary to the economic threat hypothesis, however, economic features tend not to predict the imprisonment scale once other variables are considered (Campbell et al., 2005; Greenberg & West, 2001; Jacobs & Carmichael, 2001; Smith, 2004; Stucky et al., 2005). In one of the most comprehensive studies conducted on political determinants of incarceration, Smith (2004) examined several social, economic and political factors utilizing a pooled state-level analysis for the years 1980 through 1995. He found no association among economic predictors—Gini index, poverty, unemployment—and incarceration rates, nor citizen ideology or presidential election years. However, the percent black was significantly related to incarceration rates as was Democrat Party strength in the state legislature and gubernatorial election year. In another study, Jacobs and Carmichael (2001) utilized decennial census data from 1970, 1980, and 1990 to explore the impact of percent black, percent Hispanic, Republican strength, political ideology, unemployment, poverty and income inequality on state incarceration rates, they found associations between racial composition and political factors and higher incarceration rates, but economic factors were not related to incarceration, after controlling for other relevant variables. These studies show the importance not only of simultaneously examining social, economic and political factors, but also of including multiple explanations of economic and political factors when determining their impact on incarceration (Jacobs & Carmichael, 2001).

To date, most studies examining local incarceration in light of social, economic and political factors have examined minority and economic threat and excluded political variables (Applegate, 2004; Arvanites & Asher, 1998; Carmichael, 2005; Liska et al., 1999; McCarthy, 1990; Padgett, 2002). Broadly, the literature on local incarceration examining minority and economic threat lends support to the minority threat hypothesis and fails to find support for economic threat; similar to those studies examining state imprisonment. The extent to which politics as defined by politically conservative citizen ideology or partisanship influence local incarceration is unclear has only one study to date has examined social, economic and political determinants. Johnson (1992) examined jail population rates across states for 1983 and 1987 using the Census of Local Jails. He found minority threat was positively associated with jail populations for both years. Specifically, young black males, not young Hispanic males had an independent effect, net of statistical controls on jail population rates. Similarly, economic threatunemployment—was unrelated to jail population rates (Johnson, 1992). It appears Johnson (1992) initially had a measure for conservative citizenry, however, it is not possible to determine whether conservative citizenry was considered in Johnson's (1992) final model because no covariates are reported for 1983 or 1987 (Table 5.12 and Table 5.13, pp. 98-99). Johnson (1992) reports that he retained from his initial models a control for crime and composite measure of drug sales and all variables he believed were marginally significant ( $p \le .20$ ) included. It seems that Johnson (1992) excluded conservative citizenry from the final model because it was not marginally significant in the initial model. With that said, it is impossible to interpret whether this study did in fact test all three theoretical explanations of jail use.

#### 2.9 Methodological Issues

The empirical research on the effect of minority threat, economic threat, and political factors on incarceration rates is decidedly mixed and inconsistent. Many scholars have written about the difficulty in making conclusive statements regarding these explanations, noting the challenge can largely be attributed to varying methodological choices among researchers (Bridges & Crutchfield, 1988; Campbell et al., 2015; Liska, 1992; Stucky et al., 2005). For example, many scholars have operationalized minority threat in terms of the relative size of the black population (Campbell et al., 2015; Carmichael, 2005; Greenberg & West, 2001), or the percent of young black—Hispanic and non-Hispanic—males (Brown, 2016), or percent nonwhite (Arvanites & Asher, 1995; 1998; McCarthy, 1990). Failing to separate race and ethnicity is problematic. Defining minority threat only in terms of race may obscure important differences between blacks and Hispanics. Recent studies have extended minority threat to include examination of the Hispanic population (Campbell et al., 2015; Carmichael, 2005; Greenberg & West, 2001; Jacobs & Carmichael, 2001; Padgett, 2002), but this literature is sparse. The Hispanic population has grown nearly four-fold since 1980 and is now the largest minority group in the U.S. comprising 57.5 million people or 17.8% of the U.S. total population (American FactFinder, 2016; Hobbs & Stoops, 2002). The U.S. Census projects Hispanic population growth will continue and by 2060 will comprise 119 million or roughly 29% of the U.S. total population (Colby & Ortman, 2015). Additionally, the forecast suggests the non-Hispanic White population will drop below 50 percent of the population (43.6%) making the current majority the "majority-minority" in 2044 (Colby & Ortman, 2015, p. 13). Given our changing ethnic landscape in the United States,

examination of the impact of ethnic minorities on crime control is especially important. In 2010, Markert (2010) asserted that Hispanics may soon be viewed as a threat by both the majority and traditional minority—whites and blacks, respectively. Recent work conducted by Craig and Richeson (2014; 2017) lends support to Markert's (2010) claim. Both majority (Craig & Richeson, 2014) and non-Hispanic minority group members were more supportive of conservative policies when the Hispanic population was believed to be a larger proportion of the population (Craig & Richeson, 2017). It is still unclear, however, whether Hispanics are viewed as a real threat and the impact of ethnic threat on local incarceration.

Conceptual and operational issues also complicate the literature on economic threat and incarceration. Economic factors have been measured as a dimension of racial threat (e.g., white-to-black household mean income), as a direct test of economic threat, and indirectly as a control variable in studies examining racial threat. Further, the operationalization of economic threat is quite varied: income inequality as measured by the Gini index (Greenberg & West, 2001; Jacobs & Carmichael, 2001), poverty as measured by the percentage of the population living in poverty (Jacobs & Carmichael, 2001; McCarthy, 1990) and unemployment as measured by the percent of unemployed persons or unemployment rate (McCarthy, 1990; Padgett, 2002). When economic threat is conceptualized as economic stratification, the operationalization differs. For example, Jacobs and Helms (1996) measured income inequality by both the Gini index and variance of incomes and found these measures impacted state prison admission rates differently. The Gini index was not associated with admission rates, but the variance of incomes had a positive and significant effect on admission rates (Jacobs & Helms, 1996).

Likewise, the political climate has been conceptualized and operationalized in numerous ways. Republican strength has been measured by the percentage of Republicans in state legislatures (Brown, 2016; Beckett & Western, 2001; Stucky et al., 2005), governor's party affiliation (Greenberg & West, 2001; Jacobs & Helms, 2001; Smith, 2004), or a combination of the presence of a Republican governor and the percent of Republicans in state legislatures (Campbell et al., 2015; Jacobs & Carmichael, 2001; Jacobs & Helms, 2001; Phelps & Pager, 2016). In another study, Jacobs & Helms (2001) operationalized Republican strength as Republican presidency, the number of consecutive years a Republican held the presidency and the percentage of Republican governors or Republicans in state legislators. Rather than focusing on political leadership, other scholars have assessed the impact of politics on social control through characteristics of the jurisdiction's populace. The political climate has been measured by the percentage of voters who voted for a Republican presidential candidate (Keen & Jacobs, 2009; Johnson, 1992; Smith, 2004) or based on a scale constructed by Berry, Ringquist, Fording and Hanson (1998) (Campbell et al., 2015; Jacobs & Carmichael, 2001). Berry et al. (1998) measure citizen ideology as the average score on a liberal-conservative scale of voters in a state. The scale relies on the ideological position of states legislators and the governor in each year using the Americans for Democratic Action (ADA) and AFL-CIO Committee on Political Education (COPE) interest group ratings which reflect voting of state congressional leaders. An ideology score for constituents in a congressional district is then calculated based on the district's incumbent, then an ideology score for the individual challenging the incumbent, and election results of voters which are assumed to demonstrate divisions in citizen ideology (Berry et al., 1998, p. 330-331; Berry, Fording,

Ringquist, Hanson, & Klarner, 2010). Scores from each congressional district are then computed to represent citizen ideology in a state (Berry et al., 1998; Berry et al., 2010). While existing studies may shed light on various theoretical constructs, to date, no one has systematically examined how these different methods of operationalizing minority threat, economic threat, and political context impact outcomes.

Complicating matters further is the reality that incarceration has been measured multiple ways. Incarceration has been defined as prison population rates, prison admissions, jail admissions, or jail population rates. As McCarthy (1990) points out, it is important to examine different types of incarceration as there may be different operating mechanisms that influence these outcomes. The few studies that have examined federal and state incarceration rates and jail incarceration rates indeed show there are likely different mechanisms at play (Arvanites & Asher, 1998; McCarthy, 1990; Padgett, 2002). For example, in examining the effect of race on sentences to California state prisons and county jails, McCarthy (1990) found that percent nonwhite influences the use of jail but not prison confinement, after controlling for crime. In contrast, Padgett (2002) found that percentage of blacks in the population was unrelated to jail population rates but did influence total prison admission rates. The discrepancy between these studies could be attributed to many things—differences in the operationalization of minority threat and incarceration, the state where the study was conducted, as well as the time-period. Various studies suggest that the effects of social, economic and political determinants on state incarceration vary over time (Brown, 2016; Campbell et al., 2016; Phelps & Pager, 2016). An additional concern, then, involves the use of cross-sectional designs (e.g., Arvanites & Asher, 1995; 1998; Beckett & Western, 2001; McCarthy, 1990;

Michalowski & Pearson, 1990) which cannot speak to changes over time. The diverse methodological issues including the operationalization of incarceration make it difficult to draw conclusive remarks regarding different theoretical explanations of incarceration.

## 2.10 The Current Study

The current study extends previous research examining the effects of contextual factors on incarceration in a number of ways. Many of the studies examining community impact on incarceration have relied on state and federal data. Millions of individuals pass through local jails every year and many individuals who are sentenced to state or federal prison will first pass through a local jail. Yet, the focus of incarceration remains at the state and federal level. As a result, jails have been studied less thoroughly than prisons. The need for research regarding jails is urgent. This project's use of an enumeration of all county jails in the United States allows the examination of contextual effects at the local level throughout the United States. As previously discussed, jails are the "gateway" to the criminal justice system (Subramaniam et al., 2015, p. 4) and reflect mobilization of social control by law enforcement, courts and corrections. Prisons and jails are both affected by sentencing policies and practices made locally by criminal justice actors, however, jails reflect a more immediate decision or what Lynch (2011) calls "microlevel variation" which speaks to how "local norms and culture" effect how criminal justice is implemented (p. 674; see also Klofas, 1990b). Communities are potentially more sensitive than are states to changes in the local community (Bridges et al., 1987; Lynch, 2011) and therefore, examination of jail use across the United States may provide a better understanding of mass imprisonment. As Lynch (2011) argues "[T]o understand the

proliferation of penal populations, we also must look at where the power to imprison resides, which is typically at the county level in the United States" (p. 674).

To date, only one study has examined the impact of social, economic and political factors on jail use. Johnson's (1992) study used data that is now more than thirty years old and examined jail use aggregated to the state level. Since the early to mid-1980s the United States social and economic landscape has experienced many changes. The system of mass incarceration has continued to grow in some jurisdictions, while in others, incarceration has slowed or even reversed (Vera Institute of Justice, 2017). The nation's social landscape is experiencing an ever-changing racial and ethnic makeup that will continue to expand (Colby & Ortman, 2015). In fall 2008, the United States experienced the worst economic recession since the Great Depression witnessing nationwide unemployment rates that nearly reached 10-percent (Council of Economic Advisors, 2010; 2017). However, since 2009 the nation has been in a period of recovery, adding millions of jobs to the U.S. economy, experiencing rising median household family incomes and declining poverty rates (Council of Economic Advisors, 2017). Given the changes in the last few decades and the acknowledgment that mass incarceration cannot and should not be sustained, the question remains – what impacts jail use?

My study extends prior work by examining jail use at the county level with the latest available jail data, and it will examine the microlevel of incarceration—counties. Further, the current study will assess the impact of social, economic and political factors on minority-specific rates of incarceration in local jails. The minority and economic threat theories speak to mobilizing social control against minority members and economically disadvantaged groups, and race and crime have been conflated in

conservative, tough-on-crime political rhetoric. Examining disaggregated rates of incarceration considering these three determinants may provide useful insight into how community structure impacts community use of local jails. To date, no study has examined how social, economic and political factors impact minorities held in local jails. That is, no study has utilized race- and ethnic-disaggregated jail incarceration rates. Relatedly, the current study will also examine curvilinear relationships, which few studies examining state incarceration rates have modeled, and no study of jail incarceration rates have modeled.

Two primary research questions will be addressed in this study: (1) What is the impact of racial and ethnic heterogeneity, economic inequality, and political conservatism on jail admission and population rates? and (2) what is the impact of these factors on race- and ethnic-specific jail population rates? Based on the theoretical arguments and guided by the existing empirical research on the minority and economic threat perspectives and political determinants of incarceration, I propose 14 specific hypotheses to be tested.<sup>10</sup> Appendix B provides a summary of these hypotheses and predicted signs.

*Hypothesis 1*: Racial threat, as measured by the relative size of the black, non-Hispanic population, will have a curvilinear relationship with overall jail admission rates. That is, jail admission rates will increase as the county-level percent black, non-Hispanic grows, but only until the percent black, non-Hispanic population reaches a certain threshold, at which point jail admission rates will reverse, resulting in lower overall jail admission rates.

<sup>&</sup>lt;sup>10</sup> It must be acknowledged that the hypotheses are not completely independent as all measures of jail use are related. While the bivariate correlations indeed show the outcome variables are significantly related, the correlations are relatively low ranging from .06 to .32 (see Appendix E), indicating the outcome variables represent distinct features of jail use.

*Hypothesis 2*: Racial threat, as measured by the relative size of the black, non-Hispanic population, will have a curvilinear relationship with overall jail population rates. That is, jail population rates will increase as the county-level percent black, non-Hispanic grows, but only until the percent black, non-Hispanic population reaches a certain threshold, at which point jail population rates will reverse, resulting in lower overall jail population rates.

*Hypothesis 3*: Racial threat, as measured by the relative size of the black, non-Hispanic population, will have a curvilinear relationship with jail population rates of black inmates. That is, black jail population rates will increase as the countylevel percent black, non-Hispanic grows, but only until the percent black, non-Hispanic population reaches a certain threshold, at which point black jail population rates will reverse, resulting in lower black jail population rates. *Hypothesis 4*: Ethnic threat, as measured by the relative size of the Hispanic population, will have a curvilinear relationship with overall jail admission rates. That is, jail admission rates will increase as the county-level percent Hispanic grows, but only until the Hispanic population reaches a certain threshold, at which point jail admission rates will reverse, resulting in lower overall admission rates. *Hypothesis 5*: Ethnic threat, as measured by the relative size of the Hispanic population, will have a curvilinear relationship with overall jail population rates. That is, jail population rates will increase as the county-level percent Hispanic grows, but only until the Hispanic population reaches a certain threshold, at which point jail population rates will reverse, resulting in lower overall population rates.

*Hypothesis 6*: Ethnic threat, as measured by the relative size of the Hispanic population, will have a curvilinear relationship with jail population rates of Hispanic inmates. That is, Hispanic jail population rates will increase as the county-level percent Hispanic grows, but only until the percent Hispanic population reaches a certain threshold, at which point Hispanic jail population rates will reverse, resulting in lower Hispanic jail population rates.

*Hypothesis* 7: Economic threat, as measured by income inequality, will result in higher overall admission rates.

*Hypothesis 8*: Economic threat, as measured by income inequality, will result in higher overall jail population rates.

*Hypothesis 9*: Economic threat, as measured by income inequality, will result in higher black jail population rates.

*Hypothesis 10*: Economic threat, as measured by income inequality, will result in higher Hispanic jail population rates.

*Hypothesis 11*: Political conservatism, as measured by the percent of U.S. constituents who voted for Mitt Romney in the 2012 presidential election, will result in higher overall jail admission rates.

*Hypothesis 12*: Political conservatism, as measured by the percent of U.S. constituents who voted for Mitt Romney in the 2012 presidential election, will result in higher overall jail population rates.

*Hypothesis 13*: Political conservatism, as measured by the percent of U.S. constituents who voted for Mitt Romney in the 2012 presidential election, will result in higher black jail population rates.

*Hypothesis 14*: Political conservatism, as measured by the percent of U.S. constituents who voted for Mitt Romney in the 2012 presidential election, will result in higher Hispanic jail population rates.

# CHAPTER 3

## METHODOLOGY

### **3.1 Data Sources and Sample**

The main dataset for this study was created from the Bureau of Justice Statistics' 2013 Census of Jails and was obtained through the Inter-university Consortium for Political and Social Research (USDOJ BJS, 2016, ICPSR36128). The Census of Jails was first administered in 1970 and has been conducted on ten occasions (1970, 1972, 1978, 1983, 1988, 1993, 1999, 2005<sup>11</sup>, 2006, and 2013) (USDOJ BJS, 2016, Codebook). In 2013, the Census of Jails was combined with the Deaths in Custody Reporting Program (DCRP) to reduce subject burden (Minton et al., 2015; USDOJ BJS, 2016, Codebook).<sup>12</sup> The Census of Jails collects facility-level data on a variety of jail features including information about the physical plant, jail operations, and staff and inmates.

The 2013 Census of Jails is a complete enumeration of all local jails in the United States (Minton et al., 2015; USDOJ BJS, 2016, Codebook). It includes all local, regional and federally administered jails that hold individuals past arraignment. Excluded from the Census of Jails are "physically separate temporary holding facilities such as holding tanks and police lockups" which release persons after arraignment (USDOJ BJS, 2016,

<sup>&</sup>lt;sup>11</sup> This data was part one of two collections and measured individual-level data (USDOJ BJS, 2007, Codebook).

<sup>&</sup>lt;sup>12</sup> The DCRP is conducted by BJS and collects data on national, state and incident-level adult deaths in correctional facilities nationwide (Minton et al., 2015).

Codebook, p. 5). Also excluded from the Census of Jails are state unified systems (i.e., Alaska,<sup>13</sup> Connecticut, Delaware, Hawaii, Rhode Island and Vermont) which are operated by state departments of correction rather than local administrations (Minton et al., 2015; USDOJ BJS, 2016, Codebook).<sup>14</sup> In total, the 2013 Census of Jails questionnaire was administered to 3,163 jail facilities across 2,872 jurisdictions in the United States (Minton et al., 2015; USDOJ BJS, 2016, Codebook). The final response rate was 92.4% (Minton et al., 2015).

The sample for this study was drawn from the 2013 Census of Jails (USDOJ BJS, 2016, ICPSR36128). This study focuses on jails that operate at the local level, therefore, several cases were eliminated to maintain a county-level analysis.<sup>15</sup> First, regional jails (87 facilities) were eliminated as these jails incarcerate persons from two or more counties.<sup>16</sup> No measure in the questionnaire details individuals' residency so it is not possible to separate regional jail data into the constituent counties to determine county-level effects. Second, privately operated jails (41 facilities) were omitted. Features such as financing, oversight and incentives to incarceration suggest privately-run correctional facilities may operate differently from public institutions (Blakely, 2005; Shichor, 1995).

<sup>&</sup>lt;sup>13</sup> The Census included fifteen independently operated jails in Alaska (Minton et al., 2015; USDOJ BJS, 2016, Codebook).

<sup>&</sup>lt;sup>14</sup> For a review of state unified systems see e.g., Krauth (1997).

<sup>&</sup>lt;sup>15</sup> Data on a single jurisdiction that includes all Federal Bureau of Prison (BOP) facilities that operate as jails (12 facilities) were not available for public use and thus excluded from this study.

<sup>&</sup>lt;sup>16</sup> The Census defines regional jails as those with "2 or more jail jurisdictions having a formal agreement to operate" (Minton et al., 2015, p. 20). A list of regional jails (and identification of private facilities) was obtained from the Bureau of Justice Statistics (T. Minton, email correspondence, December 12, 2017). Many jails, in addition to regional jails, have informal and formal agreements to house inmates from neighboring counties, perhaps due to issues of overcrowding in other jails and/or prisons, for example. A limitation of the current data then is the inability to determine how many jails not defined as regional have informal or formal agreements which nonetheless impact the location where someone is incarcerated and may inflate county-level rates of incarceration.

In summary, the sample includes all publicly-operated, county-level jails in the United States (n=2,411).<sup>17</sup>

County-specific data were obtained through various secondary data sources and merged with the Census of Jails data using codes provided in the 2012 Law Enforcement Agency Identifiers Crosswalk (LEAIC) (USDOJ BJS, 2015, ICPSR 35158). The LEAIC dataset was created by the Bureau of Justice Statistics to facilitate data mergers such as the one used for this study (Lindgren & Zawitz, 2001). County-level measures of social and economic predictors were compiled from the U.S. Census Bureau (U.S. Census Bureau, 2010b, 2010c, 2012) the Bureau of Labor Statistics (Bureau of Labor Statistics, 2010) and the University of Michigan Population Studies Center ("Racial Residential Segregation," n.d.). County-level crime rates were calculated from the 2012 Uniform Crime Reports (USDOJ FBI, 2014, ICPSR 35019). A scale of political conservatism was created using 2012 county-level election data provided, open access, by The Guardian (Rogers & Cage, 2012). Criminal justice capacity measures were extracted from the 2013 Census of Jails and the 2008 Census of State and Local Law Enforcement Agencies (USDOJ BJS, 2011). Following Brown (2016), determinate sentencing was accessed by researching individual state sentencing websites.

### **3.2 Dependent Variables**

**Jail Use.** While the vast majority of incarceration studies have utilized population rates rather than admission rates, some scholars argue these rates reflect different processes in our criminal justice system (Klofas, 1987; McCarthy, 1990). Indeed, as

<sup>&</sup>lt;sup>17</sup> Here, the term "sample" is not used in the traditional sense, but rather as a convenient way to refer to the group of facilities being analyzed. That is, my sample includes the whole population of U.S. jails minus those I excluded (i.e., regional and privately-run facilities.) to maintain focus on county-level social control.

evidenced in my discussion of jail growth and trends in Chapter 2, population and admission rates vary considerably. McCarthy (1990) contends that admission rates rather than population rates should be the primary measurement of incarceration as admission rates reflect "a more simple and more direct measure of social control practices" (p. 330) that are not affected by sentence length and release rates. McCarthy's (1990) observations have merit, but sentence lengths and other determinants of release also characterize a community's overall orientation toward social control through incarceration. Omitting these factors by considering only jail admission rates risks misrepresenting the extent of jail use. Klofas (1987) explains the difference between admission and populations rates by describing which populace is represented by each rate. He argues population rates may overrepresent serious offenses because population rates represent persons in jail on any given day, whereas admission rates may better represent those persons held in jails as many persons may not be incarcerated for lengthy periods of time and as such may not be represented in data collected on population rates. Overall, Klofas (1987) argues that jail use measurements must include both admission and population rates due to the amount of variability in jail use.

Given the importance of both indicators, the current study measures jail use based on the size of a jail's population and the extent of admissions. Jail use was measured using overall admission and population rates, as well as and race- and ethnic-specific jail population rates (USDOJ BJS, 2016, ICPSR36128). Rather than use the raw counts provided by the 2013 Census of Jails, rates were computed to account for variations in the size of respective jurisdictions. The overall population count was obtained using the item "On December 31, 2013, how many persons CONFINED in this facility were…"

(USDOJ BJS, 2013, Form CJ-9A/10A, pp. 3). Response categories include adult males (age 18 or older), adult females (age 18 or older), males under age 18, females under age 18, and total (sum of all items). The category of "total" was used as this best represents overall jail population rates.<sup>18</sup> This count also included persons confined to a local jail for other authorities (e.g., state and federal). Because this study focuses on local incarceration, inmates held under other authority, including local, state, federal and tribal authorities were subtracted from the count before calculating rates. The count for persons held under other authority was obtained using the item "On December 31, 2013, how many persons CONFINED in this facility were held for..." (USDOJ BJS, 2013, Form CJ-9A/10A, pp. 3). Response categories include federal authorities (e.g., U.S. Immigration and Customs Enforcement (ICE); Bureau of Indian Affairs (BIA); U.S. Marshals Service), state prison authorities (in-state and out-of-state), American Indian/Alaska Tribal governments (excluding those housed for BIA), other local jail jurisdictions (in-state and out-of-state), and total (sum of all items).<sup>19</sup> The *jail population rate* was computed by dividing the one-day population count by the county population size and multiplying by 100,000 using population data from the 2010 U.S. Census (U.S. Census Bureau, 2010b). The admission count was obtained with the item "Between January 1, 2013, and December 31, 2013, how many persons were new admissions to this facility?" (USDOJ BJS, 2013, Form CJ-9A/10A, pp. 4).<sup>20</sup> The admission rate was

<sup>&</sup>lt;sup>18</sup> Youth under 18 years of age are included because (1) jurisdictions differ in the definition of juvenile, so excluding them would introduce bias across jurisdictions, (2) they are part of the overall use of jail, and (3) the data do not allow exclusion from the admission rates or from race- and ethnic-specific population rates, therefore, including them in the overall population count maintains some consistency across the dependent variables.

<sup>&</sup>lt;sup>19</sup> Other local jail jurisdictions include inmates being housed for a county or city other than the responding jail.

<sup>&</sup>lt;sup>20</sup> Includes: (1) "persons officially booked into and housed in [the] facility by formal legal document and by the authority of the courts or some other official agency," (2) "repeat offenders booked on new charges,"

computed by dividing the number of admissions by the county population size and then multiplying by 100,000 using population data from the 2010 U.S. Census. Responses to the admission count items include males, females, and total (the sum of the male and female category). The category "total" was used as it best represents overall admission counts.

*Race- and ethnic-specific jail population rates* were calculated using the item "On December 31, 2013, how many persons CONFINED in this facility were…" (USDOJ BJS, 2013, Form CJ-9A/10A, pp. 3).<sup>21</sup> Response categories included (1) White, not of Hispanic origin; (2) Black or African American, not of Hispanic origin; (3) Hispanic or Latino; (4) American Indian/Alaska Native, not of Hispanic origin; (5) Asian, not of Hispanic origin; (6) Native Hawaiian or Other Pacific Islander, not of Hispanic origin; (7) Two or more races, not of Hispanic origin; (8) Additional categories in your information system – Specify; and (9) Not known. The items also asked for a total (sum of all items). As they are the primary interest in this study, the categories Black or African American, not of Hispanic origin; and Hispanic or Latino provided race- and ethnic-specific jail population counts, respectively. These raw figures were converted to rates per 100,000 using population data provided by the 2010 U.S. Census (U.S. Census Bureau, 2010b). Specifically, I divided the Black count by county Black population, and the Hispanic count by county Hispanic population, then multiplied these figures by 100,000 to obtain

and (3) "those persons serving a weekend sentence coming into the facility for the <u>first</u> time," (USDOJ BJS, 2013, Form CJ-9A/10A, pp. 4). Excluded are "returns from escape, work release, medical appointments/treatment facilities, furloughs, bail/bond releases, and court appearances" (USDOJ BJS, 2013, Form CJ-9A/10A, pp. 4).

<sup>&</sup>lt;sup>21</sup> "Confined" includes: (1) persons on transfer to treatment facilities but who remain under the jurisdiction of this facility, (2) persons held for other jurisdictions, (3) persons in community-based programs (e.g., work release, day release, drug/alcohol treatment) who return to jail at night, and (4) persons out to court while under the jurisdiction of [the] facility (USDOJ BJS, 2013, Form CJ-9A/10A, pp. 2).

the *Black jail population rate* and *Hispanic jail population rate*, respectively. Race- and ethnic-specific admission rates were *not* calculated because the census does not provide admission counts disaggregated by race or ethnicity.<sup>22</sup>

## **3.3 Independent Variables**

Minority threat. Black population composition and Hispanic population composition were obtained from the 2010 U.S. Census of Population and Housing (U.S. Census Bureau, 2010b) and consist of the percent of county residents who are Black or African American not Hispanic or Latino and the percent of county residents who are Hispanic or Latino, respectively. Including separate measures of black residents and Hispanic residents allows inclusion of two important dimensions of minority threat: racial threat and ethnic threat. Prior research reveals racial prejudice and punitive attitudes are linked to minority group members (King & Wheelock, 2007). Today, explicit forms of overt racism are unacceptable in mainstream society. Arguments are made that incarceration today is merely "The New Jim Crow" (Alexander, 2010), implicit bias that serves to control poor, minority members of society in response to the changing social and demographic landscape (Alexander, 2010; Mauer, 2017, pp. 33). This landscape also includes Hispanics who are now the fastest growing and largest minority group in the United States. Prior research shows that fear of crime (Eitle & Taylor, 2008) and support for conservative initiatives among whites (Craig & Richeson, 2014) and non-Hispanic racial minorities (Craig & Richeson, 2017) are greater in areas with marked Hispanics.

<sup>&</sup>lt;sup>22</sup> A potential limitation to the data is that persons being held for other authorities (i.e., local, state, tribal, and federal) cannot be excluded from these nor the admission count. Therefore, these rates may be inflated to some degree due to persons being held for other jurisdictions.

Given the changing social landscape in American society, it is important to examine both the potential impact of incarceration on both African Americans and Hispanics.

Economic threat. Income inequality, as measured by the Gini coefficient, was obtained from the 2012 American Community Survey 5-year estimates (U.S. Census Bureau, 2012). Given the premise of economic threat, areas with greater economic stratification will experience greater class conflict and subsequent social control – the Gini index is the most appropriate measure of economic threat because it is a precise measure of income differences across counties. Still, because the unemployment rate and poverty rate have been used as alternative measures of economic threat, they too will be examined. The Gini coefficient is a measure of income inequality that varies between 0.0 and 1.0, where G = 0 indicates complete equality (proportionate income distribution among households) and G = 1 indicates perfect inequality (uneven income distribution among households where one household has all the income and everyone else has an income of zero). The Gini coefficient is derived from the Lorenz curve which represents the observed cumulative income distribution among households and is represented by the function l = l(z), where z is the cumulative share of income receivers and l is the cumulative share of income received (Abounoori & McCloughan, 2003, p. 505; Bee, 2012; U.S. Census Bureau, 2018b).

The Gini coefficient is calculated as:

$$G = 1 - 2 \int_0^1 l(z) \mathrm{d}z$$

*Unemployment.* Unlike the class inequality argument, which suggests power differentials between the rich and the poor result in increased crime control due to greater class conflict, the labor market explanation argues incarceration is used to control the

surplus labor force (Inverarity, 1992; Rusche-Kirchheimer, 1968). This explanation posits that when unemployment is high, the economic underclass threatens the "social relationships of production" (Liska, 1987, p. 80) and incarceration rates therefore may increase (Rusche-Kirchheimer, 1968). Likewise, when unemployment is low, incarceration rates may decrease because there is a need for additional workers (Rusche-Kirchheimer, 1968). The evidence regarding the effects of the unemploymentincarceration relationship are mixed. Some studies have found a positive and statistically significant association between unemployment and imprisonment rates (Greenberg & West, 2001; Inverarity & Grattet, 1988; Jankovic, 1977; McCarthy, 1990; Padgett, 2002), while others have found no association (Jacobs & Carmichael, 2001; Jacobs & Helms, 2001; Keen & Jacobs, 2009). Chiricos and Delone (1992) conducted a review that examined the association between imprisonment and unemployment and found that of the 147 reported relationships, 60% were positive. Because some studies have found a positive association between unemployment and incarceration, I include this variable as a control by including county-level *unemployment rates* obtained from the U.S. Bureau of Labor Statistics for 2010 (Bureau of Labor Statistics, 2010). The unemployment rate is a percent of the labor force who are unemployed and represents persons who are not employed, have in the prior month actively sought employment, are available for work, and those who have been temporarily laid off and waiting to be recalled to their place of employment (Bureau of Labor Statistics, 2018). Every month, the Census Bureau disseminates the Current Population Survey (CPS) to roughly 60,000 eligible households or 110,000 individuals and collects these data as well as a variety of other labor force information for the Bureau of Labor Statistics (Bureau of Labor Statistics, 2018).

*Poverty.* In addition to using unemployment as a measure of economic threat, some scholars have utilized poverty. Similar to the findings on the unemploymentincarceration relationship, results on the poverty-incarceration relationship are also mixed. Some studies have found poverty is positively related to incarceration (Arvanites, 1993; Arvanites & Asher, 1995; Beckett & Western, 2001) while others find no relationship (Jacobs & Carmichael, 2001). The poverty-incarceration relationship has also been found to differ for prison and jail sentences. McCarthy (1990) found that poverty was correlated with state prison admission sentences but not jail admission sentences. *Poverty* is defined as the percent of residents living below federal poverty thresholds as measured by and obtained from the U.S. Census Small Area Income and Poverty Estimates for 2010 (U.S. Census Bureau, 2010c). The Census Bureau determines the poverty rate by examining total family annual before-tax income (e.g., earnings, unemployment compensations, social security, veterans' payments, child support) to a set of federal poverty thresholds (i.e., dollar value) that vary by family size and age of related family members (U.S. Census Bureau, 2018a). For persons not living with family members, poverty status is determined by comparing their total income to their individual poverty threshold (U.S. Census Bureau, 2018a). The federal poverty thresholds are updated yearly to account for inflation using the Consumer Price Index (CPI) (U.S. Census Bureau, 2018a). A person or family (and every individual in it) are considered in poverty if their total money income is less than the federal dollar value threshold (U.S. Census Bureau, 2018a).

**Political Conservatism.** Ideally, the political affiliation of prosecutors and judges would be used in this study as these officials are often voted into office and likely

represent the local preferences of constituents. Such data, however, do not exist. The best available county-level data comes from the 2012 presidential election which is available from *The Guardian* (Rogers & Cage, 2012). This data was used to create a measure of *political conservatism* consisting of the percent of constituents who voted for Mitt Romney, the Republican Party candidate, in the 2012 presidential election.

### **3.4 Control Variables**

Prior research examining social threat theory and political determinants of incarceration and their impact on various forms of social control has identified several variables that may be important to include in a well-specified model. Below, I discuss briefly the controls that are common in studies examining social control, and how these variables were operationalized for the current study.

Crime Rates. Both violent and property crime rates are shown to be positively related to imprisonment rates (Arvanites & Asher, 1998; Greenberg & West, 2001; Jacobs & Carmichael, 2001; McCarthy, 1990). Crime rates, as defined by offenses known to the police, were obtained from the 2012 Uniform Crime Reports (USDOJ FBI, 2014, ICPSR 35019). *Violent Crime Rate* is measured as the rate of murder, rape, robbery and assault per 100,000 people. *Property Crime Rate* is measured as the rate of burglary, larceny/theft, motor vehicle theft, and arson per 100,000 people.

**Police Strength.** As I discussed in Chapter 2, the use of incarceration is a function of various policies and practices implemented by criminal justice actors (see e.g., Greenberg & West, 2001; Subramanian et al., 2015; Travis et al., 2014). As such, it stands to reason that criminal justice capacity influences jail use. In areas with large numbers of sworn police officers, it is possible the chance of arrest is greater which in

turn could lead to higher local incarceration rates. Prior studies have revealed statistically significant and positive associations between percent black and police strength (Greenberg, Kessler, & Loftin, 1985; Liska, Lawrence, & Benson 1981), as well as economic inequality and police force size (Jacobs, 1979; Kent & Jacobs, 2005). Police strength was measured using the item "Enter the number of AUTHORIZED FULL-TIME paid positions in your agency's budget as of September 30, 2008 – and enter the number of ACTUAL FULL-TME and PART-TIME paid agency employees during the pay period that included September 30, 2008" and was extracted from the 2008 Census of State and Local Law Enforcement Agencies (CSLLEA) (USDOJ BJS, 2008, Form CH-38S).<sup>23</sup> Response categories include sworn personal, officers with restricted or no arrest power, all other personnel, and total authorized positions/actual employees (USDOJ BJS, 2008, Form CH-38S). The full-time sworn personnel category was used as this best represents the number of officers with general arrest powers. This raw figure was computed to a rate by dividing the total number of full-time sworn personnel by the county population size and multiplying by 100,000 using population data from the 2010 Decennial Census (U.S. Census Bureau, 2010b).

Jail Capacity. In addition to police strength or force size, it is also possible jail capacity influences local criminal justice actors 'decisions (Bolduc, 1995). Prior research has shown jail capacity influences judges' bail decisions (Williams, 2016) and impacts admission rates (Liska et al., 1999) and population rates (D'Alessio & Stolzenberg, 1997). *Jail capacity* was obtained from the 2013 Census of Jails and measured with the

<sup>&</sup>lt;sup>23</sup> The 2014 Census of Federal, State and Local Law Enforcement Agencies was still being fielded in late 2016, and is not yet available (Banks, Hendrix, Hickman, & Kyckelhahn, 2016).

item "On December 31, 2013, what was the total rated capacity of this facility, excluding separate temporary holding areas?" (USDOJ BJS, 2013, Form CJ-9A/10A, p. 4).

**Determinate Sentencing Laws.** Contrary to popular belief, the vast majority of studies show determinate sentencing has a negative or no effect on incarceration rates (Bridges & Crutchfield, 1988; Brown, 2016; Greenberg & West, 2001; Jacobs & Carmichael, 2001, Smith, 2004; Yates & Fording, 2005). While many observers believed that implementing determinate sentencing laws would increase incarceration rates by limiting discretion in sentencing decisions, the empirical research shows either a null effect or that such laws decrease imprisonment rates. Only a few studies have examined the effects of determinate sentencing laws (DSL) on jail incarceration and these have produced mixed results. For example, D'Alessio and Stolzenberg (1995) found that DSLs had a positive and significant effect on jail incarceration rates in Minnesota, while Carmichael (2005) found DSLs have no effect on large city jails. Due to these discrepancies, it is not clear that the presence or absence of a determinate sentencing scheme will affect the scope of jail use across jurisdictions. Even so, I will include a control variable for *determinate sentencing laws*. Currently, a list of states' determinate sentencing laws does not exist. Following Brown (2016), I conducted a manual search of state sentencing websites to determine whether a state did (=1) or did not (=0) have determinate sentencing laws in 2012 (see Appendix C).

**Region.** Many scholars have noted the historical significance of examining region in the United States with regard to imprisonment (Arvanites, 1993; Arvanites & Asher, 1995; Greenberg & West, 2001; Jacobs & Carmichael, 2001; Klofas, 1990; Michalowski & Pearson, 1990; Padgett, 2002). The South, compared to other regions in the United

States, has a long history of strained race relations (Alexander, 2010) and is typically considered to be more punitive (Borg, 1997; Kutateladze, 2009). Indeed, while some scholars have found no regional effects on incarceration rates, after controlling for crime rates (Arvanites & Asher, 1995; Greenberg & West, 2001; Jacobs & Carmichael, 2001), others have found Southern regions (Applegate, 2004; Klofas, 1990; Michalowski & Pearson, 1990) and areas characterized as being more representative of the South (i.e., "Old" Florida; Padgett, 2002) tend to have higher incarceration rates. *Region*, then, is included as a control variable and is measured according to the U.S. Census Bureau classification of region (U.S. Census Bureau, 2010; see Appendix D).

**Urbanization**. Measures of urbanization are frequently controlled for in studies examining incarceration. While many studies have found urbanization is not related to incarceration (Beckett & Western, 2001; Campbell et al., 2015; Greenberg & West, 2001), others have found urbanization is positively related to incarceration, net of statistical controls (McCarthy, 1990; Padgett, 2002). Because of its potential empirical relevance, *urbanization* was measured using 2013 county-level data provided by the Economic Research Service (ERA) of the U.S. Department of Agriculture (USDA). The ERA established rural-urban continuum codes, which range from *1* (Metro – Counties in metro areas of 1 million population or more) to *9* (Nonmetro – Completely rural or less than 2,500 urban population, not adjacent to a metro area) (Economic Research Service, 2013).

**Residential Segregation.** Measures of residential segregation have been introduced as control variables in studies examining racial threat and social control mechanisms. Residential segregation is a mechanism in and of itself that is used to

control minority group members (Massey & Denton, 1993). Therefore, in areas where residential segregation is high – that is, minority and majority group populations do not live in close proximity to one another – minority group members are not viewed as a threat and formal social control mechanisms are utilized less often (Carmichael, 2005; Liska & Chamlin, 1984). Two studies have examined residential segregation and jail incarceration measures (Carmichael, 2005; Liska et al., 1999). In one study, Carmichael (2005) found a curvilinear relationship between racial residential segregation and jail admission rates at the city level. Specifically, he found that the most segregated cities have the lowest rates of jail admission, while those cities with moderate integration or segregation have the highest rates of jail admission. In another study, Liska and colleagues (1999) found racial residential segregation was unrelated to jail admission rates in 1978, 1983, and 1988 in 100 U.S. cities. Yet, Liska et al. (1999) found racial residential segregation was significantly and positively associated with jail *capacity* in 1983 and 1988. Recall too that Liska et al. (1999) found jail capacity is significant and positively related to jail admissions. It is unclear, then, the effect of residential segregation on local incarceration use. For this reason, residential segregation is examined in the analyses. *Residential segregation* was measured using the dissimilarity index at the county-level. The dissimilarity index was calculated and provided, open access, by the University of Michigan Population Studies Center using 2000 U.S. Census Bureau data ("Racial Residential Segregation," n.d.).

The dissimilarity index is estimated as

$$D = \frac{1}{2} \sum_{i=1}^{n} \left| \frac{a_i}{A_T} - \frac{b_i}{B_T} \right|$$

where *n* is the number of census tracts in the county,  $a_i$  is the number of minority residents (i.e., blacks or Hispanics) in the *i*<sup>th</sup> census tract,  $A_T$  is the total minority population count in the county,  $b_i$  is the number of White residents in the *i*<sup>th</sup> census tract, and  $B_T$  is the total White population count in the county ("Racial Residential Segregation," n.d.). *D* represents the percentage of the minority or majority group population who would have to move to reach parity. The index ranges from 0 (no segregation) to 100 (complete segregation). In the models presented below, residential segregation is represented by two variables. *White\_black* captures the level of racial segregation between white and African American residents, while *White\_Hispanic* is the extent of ethic segregation between white and Hispanic residents.

### **3.5 Analytic Strategy**

The analytic strategy consists of thirty-two ordinary least squares (OLS) regression and polynomial regression models to determine the effects of minority threat, economic threat and political conservatism on the outcome variables: jail admission rates (section 4.1), jail population rates (section 4.2), black population rates (section 4.3) and Hispanic population rates (section 4.4). Each section includes a series of eight models that examine the impact of racial and ethnic composition, income inequality and political conservativism, holding all other variables constant. To construct the best-fitting models, I examine the nature of linear and nonlinear relationships for percent black and percent Hispanic. The eight models in each section examine the following: the first model (Model 1) and third model (Model 3) present the findings for the linear effects of percent black and percent Hispanic compositions, respectively, net of statistical controls. The second and fourth models (Model 2 and 4) introduce quadratic terms of percent black and

percent Hispanic, respectively, to test nonlinear effects of racial and ethnic threat, net of statistical controls. Model 5 tests the effects of income inequality, net of statistical controls. Model 6 examines the effects of political conservatism, net of statistical controls. The seventh and eighth models test the linear (Model 7) and nonlinear (Model 8) effects of minority threat, economic threat and political conservatism, simultaneously, net of statistical controls. Two control variables—region and determinate sentencing laws (DSL)—will be constants across many counties and therefore are not independent and identically distributed. To account for the nested nature of these variables I calculate robust standard errors as these relax the independent and identically distributed assumption inherent in OLS models (Berry & Feldman, 1985).

# CHAPTER 4

## RESULTS

Table 4.1 presents the descriptive statistics for the independent and dependent variables. On average, there are 5,696 admissions per 100,000 county residents yearly. The sample used in the analyses for the admission rates has fewer cases and is substantially different than the full population—the reduced sample will be explained below. These data reveal roughly 4,738 admissions per 100,000 residents yearly. On a given day in county jail the jail population rates is roughly 180 per 100,000. The rate of minority jail population on a given day is much greater than the overall jail population rate. On average, the Black jail population rate reaches about 2,400 per 100,000 black county residents individuals and the Hispanic jail population rate is approximately 570 per 100,000 on a given day.

Substantial variation exists across counties in the key independent variables social, economic and political demographics. In some counties, there are no reported black residents, while in others, black non-Hispanic residents constitute roughly 82 percent of the population. Representation of Hispanic residents is as low as one-tenth of one percent of the population and a high as 96 percent of county residents. Turning to county economic demographics, income inequality ranges from 0.34 to 0.55. The unemployment and poverty rates range from a low of 2.20 and 3.20 percent to a high of 28.80 and 43.30 percent, respectively. Political divides are present among counties, with

	Ν	Mean	S.D.	Min	Max
Dependent Variables					
Admission rate <sup>a</sup>	2,394	5695.52	13315.54	0.00	389508.20
Admission rate <sup>b</sup>	2,364	4738.40	3007.47	0.00	21785.82
Population rate <sup>a</sup>	2,286	182.94	243.11	0.00	9095.41
Population rate <sup>b</sup>	2,278	179.17	130.33	0.00	1028.92
Black, non-Hispanic population rate	2,394	2399.51	9639.50	0.00	238584.67
Ln black, non-Hispanic population rate	2,394	24.40	1.33	0.00	5.38
Hispanic population rate	2,394	569.20	4109.74	0.00	150158.39
Ln Hispanic population rate	2,394	0.77	0.40	0.00	1.99
Independent Variables					
Percent black, non-Hispanic	2,394	8.63	13.89	0.00	82.20
Percent black, non-Hispanic <sup>2</sup>	2,394	267.33	735.02	0.00	6756.84
Percent Hispanic	2,394	8.83	13.42	0.10	95.70
Percent Hispanic <sup>2</sup>	2,394	257.93	875.16	0.01	9158.49
Income inequality (Gini coefficient)	2,394	0.44	0.03	0.34	0.55
Unemployment rate (%)	2,394	9.53	3.06	2.20	28.80
Poverty (%)	2,394	16.58	5.84	3.20	43.30
Political conservatism (% Romney)	2,394	59.86	14.25	7.12	93.29
Control Variables					
Jail capacity	2,394	326.00	893.11	2.00	22943.00
Ln jail capacity	2,394	2.06	0.60	0.48	4.36
Violent crime rate	2,394	250.32	192.44	0.00	1470.59
Property crime rate	2,394	2161.57	1178.59	0.00	6622.34
Police strength rate	2,394	204.58	148.11	11.46	2487.57
Ln police strength rate	2,394	2.26	0.19	1.10	3.40
Urbanization <sup>c</sup>	2,394	4.74	2.59	1	9
Residential segregation					
White_black, non-Hispanic	2,394	36.61	17.26	0.00	86.30
White_Hispanic	2,394	23.79	13.62	0.00	71.80
South <sup>d</sup>	2,394	0.44		0	1
Determinate sentencing <sup>e</sup>	2,394	0.37		0	1

Table 4.1. Descriptive statistics for independent and dependent variables.

 Determinate sentencing
 2,394
 0.37
 - 0
 1

 Note: Ln denotes the variable is log-transformed.

 a Full population

 <sup>b</sup> Population used in OLS regressions

 <sup>c</sup> Coding: 1 (metro—metro areas 1 million population or more) through 9 (nonmetro—completely rural or less than 2,500 urban population, not adjacent to metro area)

 <sup>d</sup> 1 = South, 0 = Otherwise
 <sup>e</sup> 1 = Determinate sentencing, 0 = Indeterminate sentencing

the number of constituents voting for Mitt Romney in the 2012 presidential election, varying between roughly 7 percent and 93 percent. County-level differences exist too among jail capacity, crime rates, police strength, urbanization and residential segregation of blacks and Hispanics and can be seen in Table 4.1.

Prior to analyses, diagnostic tests were run to test the assumptions of ordinary least squares regression. The initial step of data screening revealed that 13 cases had missing values on political conservatism, violent and property crime, police strength, or black and/or white residential segregation. These cases were deleted, leaving 2,398 cases in the population. Missing data was less than 5% of the sample, an acceptable percent to choose deletion of cases over other practices of handling missing data (Tabachnick & Fidell, 2004). Additionally, four cases were identified as multivariate outliers for all outcome variables through examination of the plotted residuals of independent variables and outcomes. These cases were also deleted. With all four outliers and the 13 cases with missing values deleted, 2,394 cases remain in the sample. Thirteen additional cases were identified as multivariate outliers for the jail admission outcome, as such, these cases were eliminated. With all 17 outliers and the cases with missing values deleted, 2, 364 cases remain for analyses of jail admission rates. For the jail population outcome, there were 108 cases with missing values for the item which summed the number of individuals held for other authorities (i.e., local, state, tribal and federal).<sup>24</sup> These cases, along with eight additional cases that were identified as multivariate outliers, were

<sup>&</sup>lt;sup>24</sup> Recall that the one-day incarceration rate was calculated by first subtracting the number of inmates held for other authorities from the one-day incarceration count, and then divided by the county population total and multiplied by 100,000.

deleted from the sample. With all 12 outliers and the cases with missing values deleted, 2,278 cases remain for analyses of population rates.

Four variables were highly skewed – two of the dependent variables, *Black, non-Hispanic jail population* and *Hispanic jail population*, and two independent variables, *jail capacity* and *police strength* – and contributed to regression residuals violating the assumption of normality. All violations were resolved by replacing the original variables with their natural logs to reduce skewness and the influence of outliers and move them toward a more normal distribution (Tabachnick & Fidell, 2007).<sup>25</sup>

Collinearity diagnostics demonstrated that collinearity was present among the linear and quadratic terms of percent black and percent Hispanic (see Appendix E). Collinearity of product terms and polynomial (i.e., quadratic) terms, also known as *nonessential ill-conditioning* is expected, as the quadratic term is calculated from the product term (Aiken & West, 1991; DeMaris, 2004). Therefore, the issue with collinearity here is due to scaling and not an issue of *essential ill-conditioning*, or independent variables that are entirely different and related (Aiken & West, 1991; DeMaris, 2004). One recommendation to reduce problems associated with collinearity due to nonessential ill-conditioning is mean-centering variables before creating nonlinear terms, as centering changes the scale of the variables (Aiken & West, 1991; DeMaris, 2004). Another advantage of centering is the interpretation of the main effect or lower order term in quadratic models (DeMaris, 2004). Therefore, percent black and percent

 $<sup>^{25}</sup>$  Pre-transformation (N=2,394): Black, non-Hispanic jail population rate skewness = 13.579, kurtosis = 252.221; Hispanic jail population rate skewness = 25.975, kurtosis = 822.292; jail capacity skewness = 12.020, kurtosis = 226.552; police strength skewness = 7.501, kurtosis = 82.409. Post-transformation (N=2,394): Black, non-Hispanic jail population rate skewness = -.965, kurtosis = -.371; Hispanic jail population rate skewness = -.358, kurtosis = -.362; jail capacity skewness = .234, kurtosis = -.034; police strength skewness = .655, kurtosis = 5.125.

Hispanic are mean-centered for all models. The quadratic terms, percent black<sup>2</sup> and percent Hispanic<sup>2</sup>, were calculated by squaring these centered variables. Correlations for linear and quadratic terms for percent black and percent Hispanic were reduced by only minor amounts (0.09 and 0.07, respectively). However, prior to mean centering, the variance inflation factors for the racial and ethnic population composition were above or close to the threshold of 10.0 (DeMaris, 2004). Post transformation the variance inflation factors for all other variables were below 3.0, and bivariate correlations fell below an absolute value of 0.57 (see Appendix E), indicating multicollinearity is not problematic among any other variables (DeMaris, 2004; Tabachnick & Fidell, 2007).

## 4.1 Jail Admission Rates

Table 4.2 shows the results of ordinary least squares regressions that estimate the impact of racial and ethnic threat on jail admission rates. In Model 1, the unstandardized regression coefficient (B) suggests that percent black is associated with the rate of jail admission (B = -38.292, p < .001). Generally, areas with more black residents have lower jail admission rates. Several control variables were also significantly associated with jail admissions, but discussion of relationships among the control variables will be reserved for the fully specified model (Model 8) below. Overall, Model 1 was significantly different from zero (F = 43.70, p < .001) and accounts for approximately 15 percent of the variance in jail admission rates.

<sup>&</sup>lt;sup>26</sup> Pre-mean centering VIF scores: Percent black = 11.651; Percent black<sup>2</sup> = 9.178; Percent Hispanic = 8.126; Percent Hispanic<sup>2</sup> = 8.036. Post-mean centering VIF scores: Percent black = 6.753; Percent black<sup>2</sup> = 4.649; Percent Hispanic = 4.770; Percent Hispanic<sup>2</sup> = 4.672. Note: these values reflect the jail population rates (Model 8). All other outcome variables produced similar VIF scores pre- and post-transformation of the linear and quadratic terms.

	Model	1	Model	2	Model	3	Model	4
Variable	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β
Percent black <sup>a,b</sup>	-38.292*** (6.797)	177	-78.099*** (12.439)	361				
Percent black <sup>2</sup>			1.061** (.332)	.185				
Percent Hispanic <sup>a,c</sup>					7.077 (5.735)	.031	4.080 (9.674)	.018
Percent Hispanic <sup>2</sup>							.068 (.232)	.015
Income inequality (Gini)								
Unemployment (%)								
Poverty (%)								
Political conservatism								
Ln jail capacity	1107.733*** (172.467)	.220	1201.371*** (170.411)	.239	1082.475*** (172.394)	.215	1087.459*** (173.212)	.216
Violent crime rate	.676 (.475)	.043	.841 (.465)	.054	076 (.464)	005	073 (.463)	005
Property crime rate	.429*** (.083)	.168	.414*** (.081)	.162	.428*** (.083)	.168	.426*** (.083)	.167
Ln police strength	1815.956*** (388.043)	.112	1892.748*** (387.251)	.117	1437.674*** (392.409)	.089	1452.241*** (395.836)	.090
Urbanization	257.376*** (33.465)	.222	248.379*** (33.441)	.214	257.304*** (33.755)	.222	257.160*** (33.753)	.222

Table 4.2. Ordinary least squares regressions of jail admission rates on racial and ethnic threat and control variables.

	Model	1	Model	2	Model	3	Model	4
Variable	В	β	В	β	В	β	В	β
vanable	(SE)	-	(SE)	-	(SE)	-	(SE)	-
Residential segregation								
White_black	-10.419*	060	-9.370*	054	-7.097*	041	-7.242	041
—	(5.660)		(4.006)		(4.070)		(4.175)	
White Hispanic	-24.153***	109	-23.752***	107	-28.903***	130	-28.497***	128
	(5.660)		(5.641)		(5.807)		(6.074)	
South	1193.573***	.197	1411.326***	.120	729.162***	.120	728.518**	.120
	(150.993)		(159.151)		(136.365)		(136.244)	
Determinate sentencing	-435.478***	070	-405.228**	072	-447.628***	072	-466.858***	072
-	(122.723)		(122.261)		(123.626)		(123.626)	
Constant	-3366.993		-4062.909		-2069.357		-2125.496	
F test	43.70	***	41.08	8***	36.9	8***	33.5	4***
Adjusted $R^2$	.15	1	.15	58	.1	32	.1	32

Table 4.2. (continued). Ordinary least squares regressions of jail admission rates on racial and ethnic threat and control variables.

Notes: p < .05; \*p < .01; \*\*p < .001. Ln denotes the variable is log-transformed. SE represents the robust standard error for the<br/>unstandardized coefficients.a Variable is mean centeredb Percent black, non-Hispanic  $\mu = 8.5117$ c Percent Hispanic  $\mu = 8.7720$ 

In Model 2, the percent black racial quadratic term is introduced to test the nonlinear relationship with jail admission rates. The unstandardized regression coefficients indicate that percent black (B = -78.099, p < .001) and percent black squared (B = 1.061, p < .01) are associated with jail admission rates, and the negative unstandardized regression coefficient for the linear term and positive unstandardized regression coefficient for the quadratic term suggest a nonlinear relationship between county-level black presence and jail admission rates. Figure 4.1 illustrates the curvilinear relationship estimated by these variables between percent black residents and jail admission rates. Contrary to the first hypothesis (H<sub>1</sub>), the association between percent black and jail admission rates reveals a U-shaped curvilinear pattern. Specifically, as the relative size of the black population increases, the likelihood of jail admission decreases, until county black presence reaches roughly 37% at which point the trend reverses, resulting in a positive association between county-level black composition and jail admission rates.<sup>27</sup>

In Model 3, the percent Hispanic term is introduced to test the linear effects of percent Hispanic on jail admission rates. The model as a whole is statistically significant and has 1.9 percent less explanatory power (adjusted  $R^2 = 13.2\%$ ) than Model 1, which tested the linear effect of percent black on jail admissions. As can be seen from Table 4.2, the linear term of percent Hispanic is not statistically significant. The findings in Model 4 show a similar pattern as the findings in Model 3: Percent Hispanic (linear and quadratic terms) has no significant effect on the rate of jail admissions, suggesting the presence of

<sup>&</sup>lt;sup>27</sup> The inflection point, also commonly referred to as the turning point, describes the *minimum* or *maximum* of a curve. The inflection point is calculated as follows: X = -b/2a, where "b" represents the coefficient of the linear term and "a" represents the coefficient of the squared term (Greenberg, Kessler, and Loftin, 1985, p. 696, see also Aiken & West, 1991).

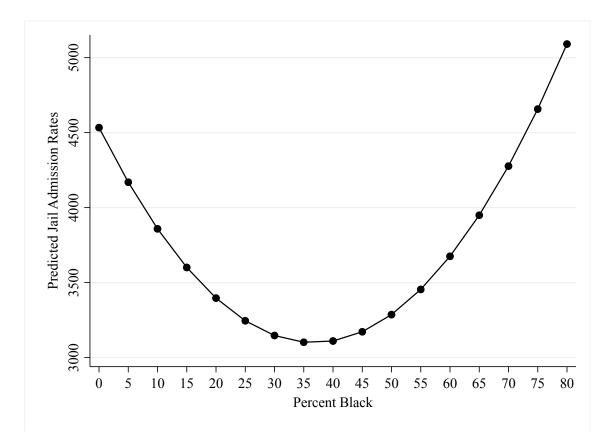


Figure 4.1. Predicted jail admission rates at observed levels of county percent black (Model 2).

Hispanics in a county does not contribute to local corrections use. This finding stands in contrast to the proposed curvilinear association stated in the fourth hypothesis (H<sub>4</sub>). Because the Hispanic-squared term is not significant, it is dropped from the final model (Model 8), but the lower order term is retained as a control.

Table 4.3 presents tests of the economic threat and political climate explanations of jail admission rates. It also includes models that analyze the effects of minority threat, economic threat and political conservatism, simultaneously, holding all other variables constant. In Model 5, and as predicted in H<sub>7</sub>, income inequality is significant and positively associated with jail admissions (B = 9362.674, p < .001). The percentage of

	Model	5	Model	6	Model	7	Model	8
Variable	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β
Percent black <sup>a,b</sup>					-45.024*** (7.981)	213	-83.035*** (12.753)	384
Percent black <sup>2</sup>							1.048** (.340)	.182
Percent Hispanic <sup>a,c</sup>					-9.581 (5.999)	042	-10.912 (6.003)	048
Percent Hispanic <sup>2</sup>								
Income inequality (Gini)	9362.674*** (2253.432)	105			-6754.676** (2263.97)	076	-6353.236** (2224.035)	072
Unemployment (%)	.271 (27.517)	.000			29.394 (27.442)	.030	26.655 (27.482)	.027
Poverty (%)	66.449*** (17.319)	.129			105.931*** (17.397)	.205	100.544*** (17.499)	.195
Political conservatism			26.940*** (5.475)	.128	16.654** (5.816)	.079	20.258*** (5.794)	.096
Ln jail capacity	1170.678*** (173.914)	.232	1168.895*** (173.393)	.232	1198.137*** (174.341)	.238	1304.988*** (172.831)	.259
Violent crime rate	214 (.480)	014	.298 (.465)	.019	.466 (.485)	.030	.676 (.474)	.043
Property crime rate	.388*** (.084)	.152	.429*** (.082)	.168	.349*** (.084)	.137	.338*** (.083)	.132
Ln police strength	1800.51*** (415.383)	.111	1702.535*** (387.908)	.105	2527.51*** (418.561)	.156	2595.64*** (416.519)	.161
Urbanization	233.071*** (35.720)	.201	249.201*** (33.458)	.215	179.176*** (34.618)	.154	173.389*** (34.498)	.149

Table 4.3. Ordinary least squares regressions of jail admission rates on minority threat, economic threat, and political conservatism and control variables.

	Model	5	Model	6	Model	7	Model	8
Variable	В	β	В	β	В	β	В	В
vallable	(SE)	•	(SE)		(SE)	•	(SE)	
Residential segregation								
White black	-7.576	043	-8.277*	047	-12.706**	073	-11.707**	067
_	(4.075)		(4.080)		(4.040)		(4.013)	
White Hispanic	-25.455***	115	-21.866***	098	-16.103**	073	-15.009**	067
	(5.738)		(5.713)		(5.767)		(5.769)	
South	630.653***	.104	556.594***	.092	802.218***	.132	987.788***	.163
	(143.436)		(144.696)		(177.710)		(184.708)	
Determinate sentencing	-468.562***	075	-350.024**	056	-413.076**	066	-366.979**	059
-	(128.012)		(126.062)		(129.744)		(129.318)	
Constant	120.615		-4602.746		-4604.702		-5616.605	
F test	32.44	***	44.22	2***	35.6	7***	34.8	7***
Adjusted $R^2$	.14	1	.14	44	.1	74	.1	80

Table 4.3. (continued). Ordinary least squares regressions of jail admission rates on minority threat, economic threat, and political conservatism and control variables.

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*Notes:* \*p < .05; \*\*p < .01, \*\*\*p < .001. Ln denotes the variable is log-transformed. SE represents the robust standard error for the unstandardized coefficients.

<sup>a</sup> Variable is mean centered.

<sup>b</sup> Percent black, non-Hispanic  $\mu = 8.6286$ <sup>c</sup> Percent Hispanic  $\mu = 8.7900$ 

families living below the poverty line is also significant and positively associated with jail admissions (B = 66.449, p < .001), while the unemployment rate does not have a significant effect of jail admissions. Model 6 tests the effects of political threat. As predicted in the eleventh hypothesis (H<sub>11</sub>), jail admissions are greater in counties with more conservative voters.

Models 7 and 8 test the effects of all independent variables—racial and ethnic composition, income inequality and political threat—simultaneously. Model 7 tests the linear effects of percent black and percent Latino on jail admissions. As can be seen in Table 4.3, net of all control variables, percent black remains significant and negatively associated with jail admissions, while percent Hispanic has no significant effect on jail admission rates. In comparison to Model 5, which tested the independent effects of income inequality, the Gini coefficient is negatively associated with jail admission rates (B = -6754.676, p < .01). The unemployment rate remains non-significant, and the poverty rate maintains a positive association with admission rates. Political threat continues to exert a significant and positive effect on jail admissions as well, thus supporting H<sub>11</sub>.

In Model 8, the nonlinear effect of racial threat is introduced and reveals a curvilinear pattern, as indicated by the negative unstandardized regression coefficient of the linear term (B = -83.035, p < .001) and the positive unstandardized regression coefficient of the quadratic term (B = 1.048, p < .01). Contrary to H<sub>1</sub> the curvilinear pattern is U-shaped. Figure 4.2 presents the nonlinear relationship. This figure demonstrates that as the relative size of the black population increases from very low to modest levels, the rate of jail admissions decreases. Once county-level black presence

reaches roughly 40% however, this trend shifts, resulting in greater jail admissions as the black composition increases. In fact, the standardized beta coefficients tell us that percentage black is the strongest predictor of jail admissions ( $\beta = -.384$ , p < .001). The Gini coefficient continues to be significant and negatively associated with jail admission rates (B = -6353.236, p < .01), thus contradicting H<sub>7</sub>. The unemployment rate remains non-significant, and the poverty rate maintains a positive association with jail admission rates (B = 100.544, p < .001). The political threat variable also maintains a positive association (B = 20.258, p < .001) with jail admission rates, supporting H<sub>11</sub>.

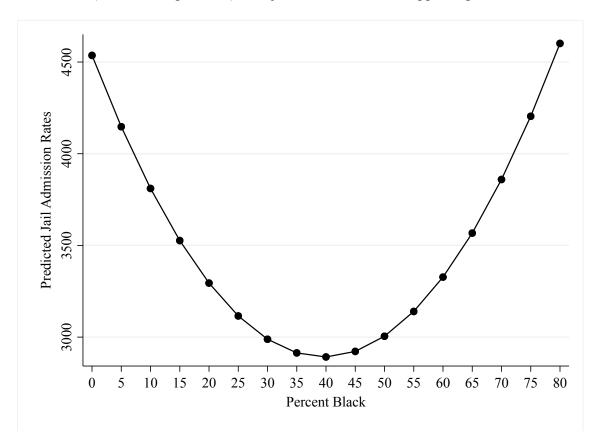


Figure 4.2. Predicted jail admission rates at observed levels of county percent black (Model 8).

The final model (Model 8) shows several control variables are also significantly associated with jail admission rates. Both the log of jail capacity (B = 1304.988, p < .001)

and the log of the number of full-time police officers (B = 2595.64, p < .001) are positively associated with jail admissions. Generally, jail admissions are higher in areas that have greater jail capacity and greater numbers of police officers. Property crime is also positively related to jail admissions (B = .338, p < .001), while the positive association with violent crime did not reach statistical significance. Compared to other parts of the country, the South has greater jail admissions (B = 987.788, p < .001) as do areas marked as more rural (B = 173.389, p < .001).

Several control variables were significant and negatively associated with jail admission rates: segregation among African Americans and Latinos and determinate sentencing laws. Recall that higher values of residential segregation indicate greater segregation. Model 8 of Table 4.3 shows as segregation among whites and blacks increases, jail admissions decrease (B = -11.707, p < .01). Similarly, jail admissions decrease (B = -11.707, p < .01). Similarly, jail admissions decrease as white and Hispanic segregation increases (B = -15.009, p < .01). Generally, in segregated counties, jail admissions are lower. Jail admission rates are also smaller in counties with determinate sentencing legislation than those without (B = -366.979, p < .01).

The strongest predictors of jail admission rates among the primary independent variables, as evidenced by the standardized beta coefficients ( $\beta$ ) are the county racial composition ( $\beta$  = -.384, *p* < .001, linear component;  $\beta$  = .182, *p* < .01, quadratic component) and poverty rate ( $\beta$  = .195, *p* < .001). Examination of minority threat, economic threat, political conservatism and control variables reveal percent black continues to be the strongest predictor of jail admission rates. Overall, this model was significantly different from zero (*F* = 34.87, *p* < .001) and explained the greatest

proportion of variance (adjusted  $R^2 = .180$ ) suggesting that it is the combination of social, economic and political variables that best explains local admission rates.

#### **4.2 Jail Population Rates**

Table 4.4 shows the results of ordinary least squares regressions that estimate the impact of minority—racial and ethnic—threat on overall jail population rates. Model 1 and Model 3 show that neither percent black racial composition nor percent Hispanic racial composition has a significant linear effect on jail population rates. Overall, Model 1 (F = 64.62, p < .001) and Model 3 (F = 63.79, p < .001) are significantly different from zero, and each explains roughly 22% of the variance in local incarceration, owing to control variables which will be discussed below with the presentation of Model 8.

The introduction of the quadratic terms of percent black (Model 2) and percent Hispanic (Model 4) reveals a different pattern than that observed with only the linear terms. In Model 2, the unstandardized regression coefficient for percent black squared suggests the black composition in a community is associated with local jail population rates (B = .031, p < .05); the linear term does not reach statistical significance. This finding suggests the association between county-level black composition and jail population rates is curvilinear. Figure 4.3 presents the predicted jail population rate at various levels of percent black. As can be seen from Figure 4.3, the rate of jail population decreases, if only slightly, as county black presence increases until blacks make up roughly 12 percent of the county population, at which point local population rates increases with percent black. This curvilinear pattern stands in contrast to the proposed association stated in the second hypothesis (H<sub>2</sub>).

	Model	1	Model	2	Model	3	Model	4
Variable	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β
Percent black <sup>a,b</sup>	.377 (.302)	.040	773 (.516)	082				
Percent black <sup>2</sup>			.031* (.013)	.122				
Percent Hispanic <sup>a,c</sup>					.072 (.241)	.007	1.040** (.393)	.107
Percent Hispanic <sup>2</sup>							022* (.008	112
Income inequality (Gini)								
Unemployment (%)								
Poverty (%)								
Political conservatism								
Ln jail capacity	90.480*** (6.382)	.412	93.153*** (6.354)	.425	90.188*** (6.455)	.411	88.564*** (6.531)	.404
Violent crime rate	.055** (.020)	.080	.059** (.020)	.087	.061** (.019)	.089	.060** (.019)	.087
Property crime rate	.009* (.004)	.082	.009* (.004)	.079	.010** (.004)	.084	.010** (.004)	.089
Ln police strength	17.536 (14.665)	.025	19.739 (14.738)	.029	19.400 (14.780)	.028	15.248 (14.940)	.022
Urbanization	10.309*** (1.372)	.205	10.074*** (1.380)	.201	10.252*** (1.378)	.204	10.285*** (1.384)	.205

Table 4.4. Ordinary least squares regressions of jail population rates on racial and ethnic threat and control variables.

	Model	1	Model	2	Model	3	Model	4
Variable	В	В	В	β	В	β	В	β
Variable	(SE)		(SE)		(SE)		(SE)	-
Residential segregation								
White black	219	029	186	024	233	031	189	025
_	(.162)		(.162)		(.166)		(.167)	
White Hispanic	861***	090	849***	088	883***	088	973***	101
	(.206)		(.206)		(.213)		(.217)	
South	49.445***	.188	55.475***	.211	53.710***	.204	53.930***	.205
	(6.183)		(6.537)		(5.538)		(5.529)	
Determinate sentencing	11.952*	.044	12.730*	.047	12.066*	.045	11.807*	.044
-	(5.078)		(5.085)		(5.087)		(5.077)	
Constant	-125.887		-145.920		-133.143		-116.119	
F test	64.62	***	59.85	5***	63.7	9***	62.3	1***
Adjusted $R^2$	.22	2	.22	25	.22	21	.22	24

Table 4.4. (continued). Ordinary least squares regressions of jail population rates on racial and ethnic threat and control variables.

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*Notes:* \*p < .05; \*\*p < .01, \*\*\*p < .001. Ln denotes the variable is log-transformed. SE represents the robust standard error for the notes: p < .03, p < .01, p < .01, p < .01,  $\mu$ unstandardized coefficients. <sup>a</sup> Variable is mean centered. <sup>b</sup> Percent black, non-Hispanic  $\mu = 8.5117$ <sup>c</sup> Percent Hispanic  $\mu = 8.7720$ 

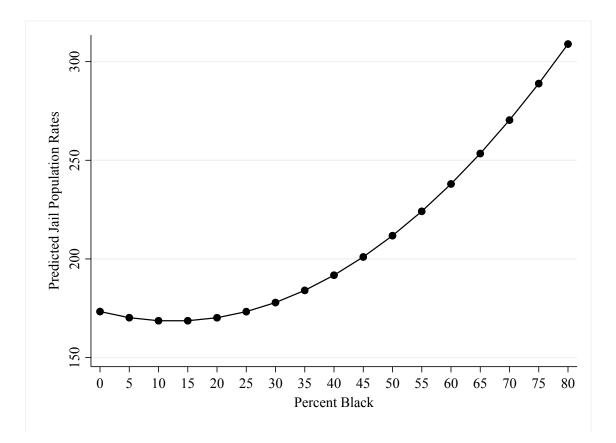


Figure 4.3. Predicted jail population rates at observed levels of county percent black (Model 2).

Returning to Table 4.4, in Model 4, we see significant linear and nonlinear effects of percent Hispanic on jail population rates. The percent Hispanic linear term is positive (B = 1.040, p < .01), and the percent Hispanic quadratic term is negative (B = -.022, p < .05), indicating a curvilinear pattern. Figure 4.4 illustrates this association. Specifically, we see that as the percentage of Hispanic county residents increases, so too does the rate of jail population, but only to a point. The inflection point suggests that after county-level Hispanic presence reaches roughly 24%, jail population rates begin to decrease alongside further increases in the Hispanic population, supporting the fifth hypothesis (H<sub>5</sub>).

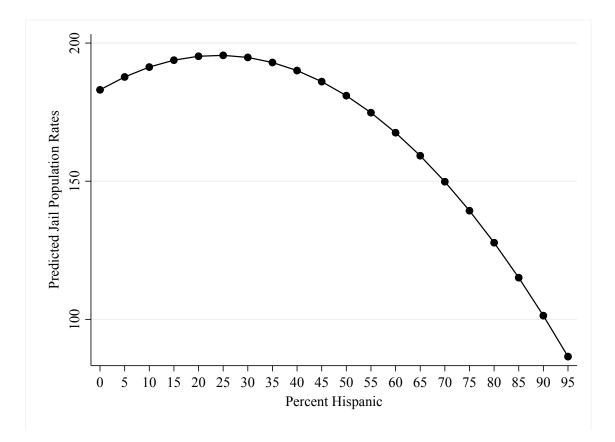


Figure 4.4. Predicted jail population rates at observed levels of county percent Hispanic (Model 4).

In Table 4.5, the ordinary least squares regressions test the effects of income equality and political conservatism separately. Then, models are presented with variables from all three theoretical perspectives included simultaneously. In Model 5, contrary to the eighth hypothesis (H<sub>8</sub>), income inequality is significant and negatively associated with jail population (B = -342.058, p < .0001). As income inequality increases, jail populations decrease (B = -342.058, p < .001). The unemployment rate (B = 2.063, p < .05) and percent of families living below the poverty line (B = 2.752, p < .001) are significant and positively associated with jail population rates. In Model 6, we see the percentage of conservative voters in a county effects jail population in the direction predicted in the twelfth hypothesis (H<sub>12</sub>).

	Model	5	Model	6	Model	7	Model	8
Variable	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β
	(SL)		(SL)		(SL)		(SL)	
Percent black <sup>a,b</sup>					.733*	.077	560	059
					(.361)		(.542)	
Percent black <sup>2</sup>							.033*	.133
							(.013)	
Percent Hispanic <sup>a,c</sup>					.224	.023	1.148**	.118
<b>D</b> (11: : ?					(.246)		(.411)	117
Percent Hispanic <sup>2</sup>							023*	117
Income inequality (Gini)	-342.058***	089			-256.105**	066	(.009) -254.263**	066
mediate mequality (Onin)	(94.326)	089			(94.060)	000	(93.800)	000
Unemployment (%)	2.063*	.049			2.784**	.066	2.847**	.068
	(.945)				(.924)		(.923)	
Poverty (%)	2.752***	.123			2.758***	.123	2.882***	.128
	(.697)				(.924)		(.687)	
Political conservatism			.629**	.069	1.282***	.140	1.173***	.128
			(.213)		(.218)		(.220)	
Ln jail capacity	90.930***	.414	92.045***	.420	92.158***	.420	93.306***	.425
	(6.500)		(6.501)	101	(6.546)	0.60	(6.627)	0.64
Violent crime rate	.046*	.067	.069***	.101	.041*	.060	.044*	.064
Property crime rate	(.019) .007*	.068	(.019) 24.155	.086	(.020) .008*	.069	(.020) .008*	.068
Floperty crime rate	(.004)	.008	(14.894)	.080	(.004)	.009	(.004)	.008
Ln police strength	38.088*	.055	10.027***	.035	40.805**	.059	39.625*	.058
En ponte suongui	(15.124)		(1.378)	.055	(15.292)		(15.484)	.000
Urbanization	8.656***	.172	250	.200	7.703***	.153	7.433***	.148
	(1.470)		(.163)		(1.468)		(1.475)	

Table 4.5. Ordinary least squares regressions of jail population rates on minority threat, economic threat, and political conservatism and control variables.

	Model	5	Model	6	Mode	17	Model	8
Variable	В	β	В	β	В	β	В	β
variable	(SE)		(SE)		(SE)		(SE)	
Residential segregation								
White_black	252	033	250	033	210	028	139	018
	(.163)		(.163)		(.168)		(.168)	
White Hispanic	724***	075	701**	073	578**	060	700**	073
	(.207)		(.209)		(.216)		(.222)	
South	45.567***	.173	49.424***	.188	24.947**	.095	32.471***	.124
	(5.811)		(5.954)		(7.517)		(7.719)	
Determinate sentencing	8.913	.033	4.228**	.052	12.458*	.046	12.652*	.047
-	(5.167)		(5.089)		(5.139)		(5.130)	
Constant	-75.356		-188.362		-197.213		-198.363	
F test	57.68	***	67.68	8***	53.5	4***	51.3	3***
Adjusted $R^2$	.23	5	.22	25	.244		.250	

Table 4.5. (continued). Ordinary least squares regressions of jail population rates on minority threat, economic threat, and political conservatism and control variables.

*Notes:* \*p < .05; \*\*p < .01, \*\*\*p < .001. Ln denotes the variable is log-transformed. SE represents the robust standard error for the unstandardized coefficients.

<sup>a</sup> Variable is mean centered.

<sup>b</sup> Percent black, non-Hispanic  $\mu = 8.5117$ <sup>c</sup> Percent Hispanic  $\mu = 8.7720$ 

In Models 7 and 8, show equations that include control variables, measures of political threat and economic threat, and the linear and nonlinear effects of percent black and percent Hispanic county composition on jail population rates. In Model 7, the county-level presence of black residents is significant and positively related to jail population (B = .733, p < .05), whereas in Model 1, percent black did not reach statistical significance. This suggests that as county-level black presence grows, jail population rates increase. Similar to Model 3, percent Hispanic continues not to have a significant linear effect on jail population. Consistent with Model 5, income inequality continues to be significant and negatively associated with jail population rates (B=-.342.058, p < .001), while unemployment (B=2.784, p < .01) and poverty (B=2.758, p < .001) remain positively associated with jail population rates (B=1.282, p < .001).

Model 8 assesses whether racial and ethnic threat are represented better by nonlinear effects, and the results suggest that they are in both cases. Model 8 displays similar patterns to those found in Models 2 and 4. The quadratic term of percent black is significant and positively associated with jail population rates (B = .033, p < .05), suggesting a nonlinear pattern. Figure 4.5 displays this association graphically. As we can see from Figure 4.5, the association between percent black and jail population is negative until county-level black presence reaches 8%, and thereafter the association shifts, resulting in increases in jail population alongside increases in county-level black presence. This U-shaped curvilinear pattern stands in contrast to the proposed inverted Ushape pattern predict in H<sub>2</sub>.

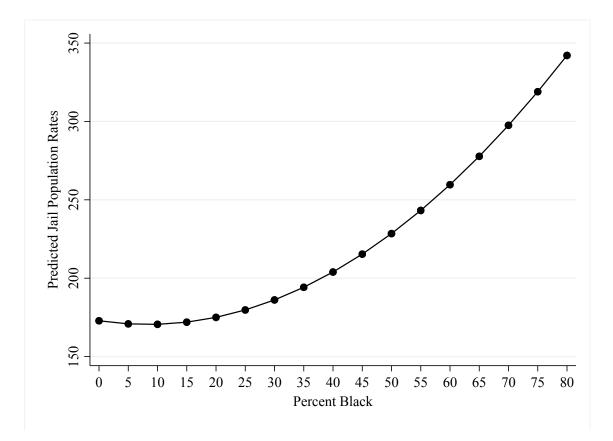


Figure 4.5. Predicted jail population rates at observed levels of county percent black (Model 8).

Returning to Table 4.5, we see county Hispanic presence continues to have a significant effect on the jail population, and that the association between county-level Hispanic presence and the jail population rate is curvilinear as indicated by the positive percent Hispanic linear term (B = 1.148, p < .01) and negative Hispanic-squared term (B = -.023, p < .05). As Figure 4.6 illustrates, supporting the H<sub>5</sub>, as percent Hispanic increases, jail population rates increase until the Hispanic population rates a sizeable proportion of the county, roughly 25%, at which point jail population rates begin to decrease with further increases in the Hispanic citizenry.

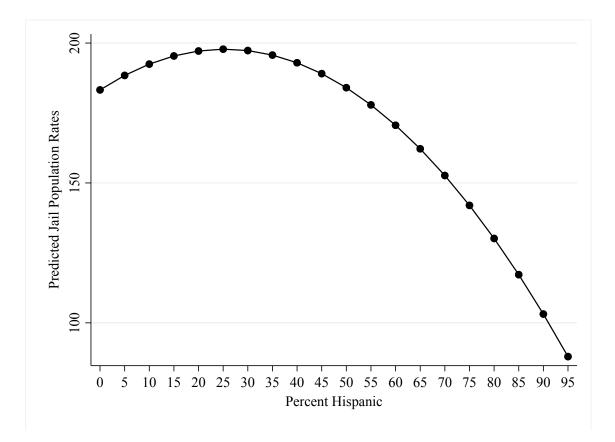


Figure 4.6. Predicted jail population rates at observed levels of county percent Hispanic (Model 8).

Model 8 also reveals that income inequality remains significant and, in contrast to  $H_8$ , is negatively associated with jail population rates (B = -254.263, *p* < .01). The unemployment rate (B=2.847, *p* < .01) and poverty rate (B=2.882, *p* < .001) maintain positive associations with jail population rates. Political conservatism continues to be significant and positively associated with jail population rates, thus supporting  $H_{12}$ .

Several control variables also appear to be significant predictors of jail population rates. The log of jail capacity is positively associated with jail population rates (B =  $93.306 \ p < .001$ ). Both the violent crime rate (B = .044, p < .05) and property crime rate (B = .008, p < .05) are positively associated with jail population rates. Police strength is also significant and positively associated with jail population rates (B = 39.625, < p .05).

Counties marked as more rural have greater jail population rates (B=7.433, p < .001). Similarly, compared to other areas of the country, jails in the south have greater estimated jail population rates (B=32.471, p < .001). Likewise, jail population rates in states with determinate sentencing are greater than those that have indeterminate sentencing (B=12.652, p < .05). It is notable that determinate sentencing legislation was significant and positively associated in all models except for Model 5. It appears that economic factors—income inequality, unemployment and poverty—may account for the apparent relationship observed in the other models. Similarly, both property crime and urbanization are significant and positively associated in all models except for Model 6, which explored the impact of political conservatism. It may be that the percentage of conservative voters in a county accounts for the apparent relationship observed in the other models.

Residential segregation among whites and Hispanics results in a smaller jail population rate (B = -.700, p < .01). Generally, in segregated counties, jail population rates are lower, but the negative association of racial residential segregation between black and white residents did not reach statistical significance. Overall, it appears that jail capacity ( $\beta$  = .425, p < .001) and urbanization ( $\beta$  = .148, p < .001) are the strongest predictors of jail population rates. The standardized beta coefficients show that the log of jail capacity is the strongest predictor of jail population rates ( $\beta$  = .425, p < .001). However, three of the primary independent variables are also strong predictors – county Hispanic composition ( $\beta$  = .118, p < .01, linear component;  $\beta$  = -.117, p < .05, quadratic component), poverty ( $\beta$  = .128, p < .001), and political conservatism ( $\beta$  = .128, p < .001) p < .001) and explains the greatest amount of variance (adjusted  $R^2 = .250$ ) in jail population rates.

#### 4.3 Black, non-Hispanic Jail Population Rates

Turning to analysis of race-specific jail population rates, Table 4.6 reports ordinary least squares regression models that estimate the impact of racial and ethnic threat on black jail population rates. In Model 1, percent black does not have a significant linear effect on black jail population rates. In Model 2, however, the unstandardized regression coefficient for the percent black quadratic term indicates (B =  $1.555 \times 10^{-4}$ , p < .05) that percent black is associated with black jail population rates. Specifically, the negative coefficient for the linear term and positive coefficient for the quadratic term suggest a nonlinear association between county-level black presence and black jail population rates. Figure 4.7 illustrates the U-shaped curvilinear pattern. As we can see in Figure 4.7, contrary to the third hypothesis (H<sub>3</sub>) as county-level black presence increases, black jail population rates decrease until percent black reaches roughly 15% of the county population at which point the trend reverses and black jail population rates increase alongside percentage black. Overall, Model 1 (F = 64.55, p < .001) and Model 2 (F =60.11, p < .001) are significantly different from zero, and explain roughly 23 percent of the variance in black jail population rates.

Models 3 and 4 introduce the linear and nonlinear terms to test the effects of percent Hispanic on black jail population rates. While no prediction regarding the relationship between county-level Hispanic presence and black incarceration rates was made, it is important to examine as one prior study found county-level Hispanic presence impacts black incarceration (Padgett, 2002). The unstandardized regression coefficient

	Model	1	Model	2	Model	3	Model	4
Variable	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β
	(5L)		(SL)		(SL)		(SL)	
Percent black <sup>a,b</sup>	.001 (.002)	.012	005 (.003)	049				
Percent black <sup>2</sup>			1.555 <sup>c</sup> * (6.896) <sup>d</sup>	.061				
Percent Hispanic <sup>a,e</sup>					013*** (.002)	133	017*** (.004)	175
Percent Hispanic <sup>2,d</sup>							9.521 (8.188)	.048
Income inequality (Gini)								
Unemployment (%)								
Poverty (%)								
Political conservatism								
Ln jail capacity	1.096*** (.066)	.495	1.109*** (.066)	.501	1.140*** (.065)	.515	1.147*** (.065)	.518
Violent crime rate <sup>c</sup>	-8.084*** (1.707)	117	-7.837*** (1.717)	114	-6.795*** (1.636)	099	-6.742*** (1.632)	098
Property crime rate <sup>d</sup>	7.670** (2.927)	.068	7.454* (2.933)	.066	6.196* (2.849)	.055	5.973* (2.854)	.053
Ln police strength	532*** (.138)	076	522*** (.138)	075	420** (.133)	060	402** (.133)	058
Urbanization	.004 (.013)	.008	.003 (.013)	.005	.009 (.013)	.018	.009 (.013)	.018

Figure 4.6. Ordinary least squares regressions of black jail population rates on racial and ethnic threat and control variables.

	Model	1	Mode	el 2	Model	3	Model	4
	В	В	В	β	В	β	В	β
Variable	(SE)		(SE)		(SE)		(SE)	
Residential segregation								
White_black	002	032	002	030	004*	054	004*	057
—	(.002)		(.002)		(.002)		(.002)	
White_Hispanic	001	011	001	011	.002	.018	.002	.024
	(.002)		(.002)		(.002)		(.002)	
South	.221***	.083	.252	.094	.256***	.096	.255***	.095
	(.060)		(.064)		(.052)		(.052)	
Determinate sentencing	.038	.054	.043	.016	.044	.016	.045	.016
	(.054)		(.054)		(.053)		(.054)	
Constant	1.368		1.270		.976		.901	
F test	64.55	***	60.	1***	70.28***		64.34	4***
Adjusted $R^2$	.22	9	, 	230	.245		.245	

Table 4.6. (continued). Ordinary least squares regressions of black jail population rates on racial and ethnic threat and control variables.

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*Notes:* \*p < .05; \*\*p < .01, \*\*\*p < .001. Ln denotes the variable is log-transformed. SE represents the robust standard error for the unstandardized coefficients. When a footnote (i.e., <sup>c, d</sup>) indicating scientific notation is placed on the variable name, rather than an individual coefficient or robust standard error, the point estimate and SE are multiplied by the same number.

<sup>a</sup> Variable is mean centered.

<sup>b</sup> Percent black, non-Hispanic  $\mu = 8.6316$ 

<sup>c</sup>Coefficients and/or robust standard errors multiplied by 10<sup>-4</sup>

<sup>d</sup>Coefficients and/or robust standard errors multiplied by 10<sup>-5</sup>

<sup>e</sup> Percent Hispanic  $\mu = 8.8324$ 

indicates that percent Hispanic (B = -.013, p < .001) is associated with black jail population rates. Turning to Model 4, the linear term of percent Hispanic continues to be associated with black jail population rates (B = -.017, p < .001) while the percent Hispanic squared term is not significant. For this reason, the quadratic term is dropped from further analyses, but the linear term is held as a control in the final model.

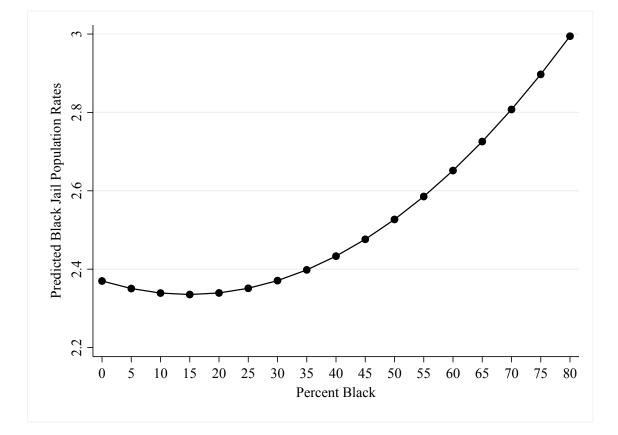


Figure 4.7. Predicted black jail population rates at observed levels of county percent black (Model 2).

Table 4.7 begins with presentations of the separate effects of economic threat (Model 5) and political conservatism (Model 6) on black jail population rates. Table 4.7 also presents the results of the effects of minority threat, economic threat and political conservatism, simultaneously, on black jail population rates. In Model 5, income

	Model 5		Model 6		Model 7		Model 8	
Variable	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β
Percent black <sup>a,b</sup>					007** (.003)	071	014** (.004)	146
Percent black <sup>2</sup>							$2.022^{c*}$ (6.980) <sup>d</sup>	.079
Percent Hispanic <sup>a,e</sup>					015*** (.002)	156	016*** (.002)	158
Percent Hispanic <sup>2</sup>								
Income inequality (Gini)	-1.976* (.945)	050			-1.588 (.947)	041	-1.503 (.949)	038
Unemployment (%)	.036*** (.010)	.084			.031* (.010)	.071	.030** (.010)	.070
Poverty (%)	.007 (.007)	.029			.022** (.007)	.096	.021** (.007)	.092
Political conservatism	'		.004 (.002)	.038	.004 (.004)	.039	.004 (.003)	.046
Ln jail capacity	1.076*** (.067)	.486	1.104*** (.066)	.499	1.139*** (.066)	.514	1.159*** (.066)	.524
Violent crime rate <sup>c</sup>	-8.829*** (1.710)	128	-7.450*** (1.677)	108	-6.871*** (1.713)	100	-6.463*** (1.726)	094
Property crime rate <sup>d</sup>	6.945* (2.996)	.062	7.829** (2.923)	.070	4.223 (2.901)	.037	4.003 (2.897)	.036
Ln police strength	374** (.014)	054	499*** (.137)	072	162 (.139)	023	151 (.138)	022
Urbanization	002 (.014)	003	.003 (.013)	.005	011 (.014)	022	012 (.014)	024

Table 4.7. Ordinary least squares regressions of black jail population rates on minority threat, economic threat, and political conservatism and control variables.

	Model	5	Model	Model 6		17	Model	8
-	В	β	В	β	В	В	В	β
Variable	(SE)	·	(SE)		(SE)		(SE)	
Residential segregation								
White black	003	035	003	034	005**	068	005**	066
—	(.002)		(.013)		(.002)		(.002)	
White Hispanic	9.430 <sup>d</sup>	.001	-2.577 <sup>c</sup>	003	.005*	.047	.005*	.049
	(.002)		(.002)		(.002)		(.002)	
South	.203***	.076	.211***	.079	.240**	.079	.246***	.092
	(.058)		(.055)		(.073)		(.073)	
Determinate sentencing	008	003	.051	.019	.035	.008	.032	.012
-	(.055)		(.055)		(.056)		(.056)	
Constant	1.525		1.037		.352		.159	
F test	56.20***		64.03***		50.12***		48.13	5***
Adjusted $R^2$	.23	7	.23	30	.256		.257	

Table 4.7. (continued). Ordinary least squares regressions of black jail population rates on minority threat, economic threat, and political conservatism and control variables

*Notes:* \*p < .05; \*\*p < .01, \*\*\*p < .001. Ln denotes the variable is log-transformed. SE represents the robust standard error for the unstandardized coefficients. When a footnote (i.e., <sup>c, d</sup>) indicating scientific notation is placed on the variable name, rather than an individual coefficient or robust standard error, the point estimate and SE are multiplied by the same number.

<sup>a</sup> Variable is mean centered.

<sup>b</sup> Percent black, non-Hispanic  $\mu = 8.6316$ <sup>c</sup> Coefficient and robust standard error multiplied by  $10^{-4}$ 

<sup>d</sup>Coefficient and robust standard error multiplied by 10<sup>-5</sup>

<sup>e</sup> Percent Hispanic  $\mu = 8.8324$ 

inequality is significant and negatively associated with black population rates, contrary to the ninth hypothesis (H<sub>9</sub>). In contrast, the unemployment rate is significant and positively associated with the black jail population (B = .036, p < .001), though the impact is small. The percentage of families living below the poverty line does not have a significant effect on black jail population rates. The model overall is statistically significant, but it results in slightly less explanatory power than the models testing the linear and nonlinear effects of percent Hispanic (adjusted  $R^2$  is reduced by .008) but has more explanatory power than the model testing the linear and nonlinear effects of percentage black (adjusted  $R^2$  is increased by .007).

Model 6 tests the effects of political conservatism on black jail population rates. Contrary to the thirteenth hypothesis (H<sub>13</sub>), it does not appear that counties with more conservative voters have higher black jail population rates. While the unstandardized regression coefficient for political conservatism is positive (B = .004) it does not reach statistical significance.

Models 7 and 8 test the linear and nonlinear effects of minority threat, economic threat and political conservatism, simultaneously, on black jail population rates. Model 7 tests the linear effects of percent black and percent Latino on black jail population rates. As Table 4.7 reveals, the unstandardized regression coefficients of percent black (B = -.007, p < .01) and percent Hispanic (B = -.015, p < .001) indicate percent black and percent Hispanic are negatively associated with black jail population rates. With the inclusion of the other theoretical variables, income inequality no longer has a significant effect. The unstandardized regression coefficients for poverty (B = .022, p < .01) and unemployment (B = .031, p < .05), however, are both positively and significantly

associated with black population rates. Political conservatism remains insignificant. Overall, the model is significantly different from zero (F = 50.12, p < .001) and explains roughly 25.6% of the variance in black jail population rates.

Model 8 introduces the quadratic terms to model a nonlinear effect of percent black on black jail population rates. The model is statistically significant (F = 48.15, p < .001) and explains roughly 26 percent of the variance in black population rates. The unstandardized regression coefficients of percent black (B = -.014, p < .01) and percent black squared (B =  $2.022 \times 10^{-4}$ , p < .05) suggest a statistically significant, nonlinear association between county-level black presence and black jail population rates. Figure 4.8 illustrates the U-shaped pattern. Specifically, as county-level black presence increases, black jail population rates decrease until percent black reaches roughly 35%, at which point the trend reverses and black jail population rates increase alongside the percentage of black residents in a county. This U-shaped pattern stands in contrast to the predicted inverted U-shaped association proposed in H<sub>3</sub>. The county-level Hispanic presence remains significant and negatively related with black population rates (B = -.016, p < .001). This, again, suggests that as county-level Hispanic presence increases, black jail population rates decrease.

The final model reveals that income inequality continues to be unrelated to black jail population rates, contrary to H<sub>9</sub>. The unemployment rate (B = .030, p < .01) and poverty rate (B = .021, p < .01), however, remain positively associated with black jail population rates. Political conservatism remains unrelated to black jail population rates. Contrary to H<sub>13</sub> then, it appears the percentage of conservative voters in a county does not predict black jail population rates.

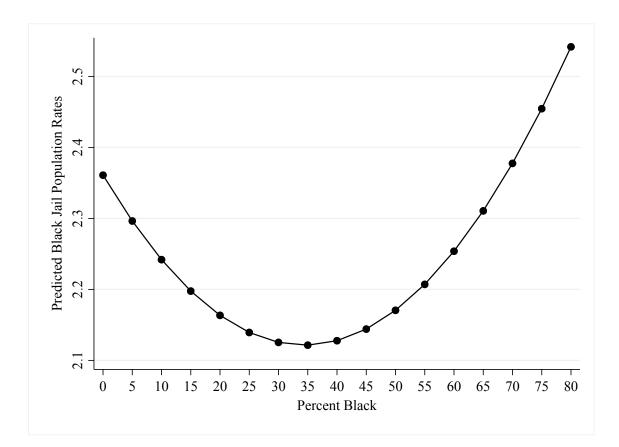


Figure 4.8. Predicted black jail population rates at observed levels of county percent black (Model 8).

Model 8 also shows several control variables are significant and associated with black jail population rates. The log of jail capacity is positively associated with black jail population rates (B = 1.159, p < .001). The violent crime (B = -6.463, p < .001) and white and black segregation (B=-.005, p < .01) are negatively associated with black jail population rates. In contrast, white and Hispanic segregation is positively associated with black jail populations. Generally, counties with greater racial residential segregation have lower black jail population rates. Whereas greater ethnic residential segregation results in higher black jail population rates (B = .005, p < .05). Compared to the northeast, Midwest

and west, jails in the South have higher black jail population rates (B = .246, p < .001). Overall, the standardized beta coefficient indicates the log of jail capacity is the strongest predictor of black jail populations ( $\beta$  = .524 p < .001). Additionally, the standardized beta coefficients for racial threat ( $\beta$  = -.146, p < .01, linear component;  $\beta$  = .079, p < .05) and ethnic threat ( $\beta$  = -.158, p < .001) indicate that along with jail capacity, black jail population rates are most strongly influenced by county racial and ethnic compositions.

### 4.4 Hispanic Jail Population Rates

The results reported in Table 4.8 used ordinary least squares regressions to estimate the impact of minority—racial and ethnic—threat on Hispanic jail population rates. Model 1 shows that percent black (B = .017, p < .001) has a significant and positive linear effect on Hispanic jail population rates. Although statistically significant, the effect is negligible. Overall, Model 1 (F = 38.43, p < .001) is significantly different from zero and explains roughly 12 percent of the variance in the Hispanic jail population rate.

Model 2 introduces the quadratic term of percent black to test the nonlinear effect of county-level black presence on Hispanic jail population rates. Model 2 demonstrates that percent black continues to have a significant linear effect on Hispanic jail population rates (B = -.019, p < .001), but now the coefficient is negative and remains trivial. The quadratic term of percent black is not significantly related to Hispanic jail population rates, showing there is no curvilinear relationship. For this reason, the quadratic term is dropped from the final model, but the linear term of percent black is retained as a control.

Models 3 and 4 test the effects of the linear and nonlinear terms of percent Hispanic. In Model 3, the unstandardized regression coefficient (B = .014, p < .001) indicates percent Hispanic has a significant and positive linear effect on Hispanic jail

	Model	1	Model	Model 2		Model 3		4
Variable	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β
Percent black <sup>a,b</sup>	.017*** (.002)	193	019*** (.004)	216				
Percent black <sup>2,c</sup>			5.383 (8.222)	.023				
Percent Hispanic <sup>a,d</sup>					.014*** (.001)	.153	.026*** (.003)	.280
Percent Hispanic <sup>2</sup>							-2.639 <sup>c</sup> *** (5.407) <sup>e</sup>	142
Income inequality (Gini)								
Unemployment (%)								
Poverty (%)								
Political conservatism								
Ln jail capacity	.687*** (.066)	.333	.692*** (.067)	.335	.639*** (.067)	.310	.620*** (.067)	.301
Violent crime rate	-4.331 <sup>e</sup> (1.796) <sup>c</sup>	007	-3.473 <sup>e</sup> (1.805) <sup>e</sup>	005	-4.798 <sup>c</sup> ** (1.773) <sup>c</sup>	075	-4.947 <sup>c</sup> ** (1.773) <sup>c</sup>	077
Property crime rate <sup>e</sup>	3.621 (2.988)	.035	3.546 (2.990)	.034	4.746 (3.054)	.045	5.365 (3.056)	.051
Ln police strength	.490*** (.136)	.075	.493*** (.136)	.076	.254 (.136)	.039	.203 (.137)	.031
Urbanization	.008 (.014)	.017	.008 (.014)	.016	.004 (.014)	.008	.004 (.013)	.008

Table 4.8. Ordinary least squares regressions of Hispanic jail population rates on racial and ethnic threat and control variables.

	Mode	11	Mode	12	Mode	13	Mode	14
	В	β	В	β	В	β	В	β
Variable	(SE)		(SE)		(SE)		(SE)	
Residential segregation								
White_black	005**	074	005**	073	002	034	002	026
—	(.002)		(.002)		(.002)		(.002)	
White Hispanic	.005*	.051	.005*	.051	8.190 <sup>d</sup>	.001	002	017
	(.002)		(.002)		(.002)		(.002)	
South	.049	.019	.059	.024	178**	071	175**	070
	(.059)		(.062)		(.054)		(.054)	
Determinate sentencing	.049*	048	121*	047	133*	052	137*	053
	(.059)		(.055)		(.054)		(.054)	
Constant	867		901		022		.186	
F test	38.43	3***	35.2	1***	37.7	'0***	35.4	17***
Adjusted $R^2$	.12	20	.1	20	.1	18	.1	22

Table 4.8. (continued). Ordinary least squares regressions of Hispanic jail population rates on racial and ethnic threat and control variables.

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*Notes:* \*p < .05; \*\*p < .01; \*\*\*p < .001. Ln denotes the variable is log-transformed. SE represents the robust standard error for the unstandardized coefficients. When a footnote (i.e., <sup>c, e</sup>) indicating scientific notation is placed on the variable name, rather than an individual coefficient or robust standard error, the point estimate and SE are multiplied by the same number.

<sup>a</sup> Variable is mean centered.

<sup>b</sup> Percent black, non-Hispanic  $\mu = 8.6316$ 

<sup>c</sup> Coefficient and robust standard error multiplied by 10<sup>-4</sup>

<sup>d</sup> Percent Hispanic  $\mu = 8.8324$ 

<sup>e</sup> Coefficient and robust standard error multiplied by 10<sup>-5</sup>

population rates. Model 3 ( $F = 63.37.70 \ p < .001$ ) is significantly different from zero and explains roughly 12 percent of the variation in local population.

In Model 4, the unstandardized regression coefficient for percent Hispanic (B = .026, p < .001) and the percent Hispanic squared term (B = -2.639x10<sup>-4</sup>, p < .0001) indicate county-level Hispanic presence is associated with local Hispanic population rates and that the association is curvilinear. Figure 4.9 presents the predicted rates of Hispanic jail population at various levels of percentage Hispanic in the county. As Figure 4.9 illustrates, supporting the sixth hypothesis (H<sub>6</sub>), the Hispanic jail population rate increases as county-level Hispanic presence increases, until the proportion of Hispanics make up a sizeable proportion of the county, roughly 49%, at which point local Hispanic jail population rates decrease with further increases in the Hispanic population. Overall, the model is significantly different from zero (F = 35.47, p < .001) and explains roughly the same amount of variation in Hispanic population rates as Model 3 (adjusted  $R^2 = .122$ ).

Table 4.9 begins with presentations of the separate effects of economic threat (Model 5) and political conservatism (Model 6) on Hispanic jail population rates. Table 4.7 also presents the results of ordinary least squares regression tests of the effects minority threat, economic threat and political conservatism simultaneously, holding all other variables constant. Model 5 tests the effects of income inequality, poverty, and unemployment, and the model as a whole is statistically significant (F = 28.08, p < .001). The standardized regression coefficient demonstrates income inequality (B = -3.712, p < .001) is significant and negatively associated with Hispanic jail population rates, contrary to the tenth hypothesis (H<sub>10</sub>). Similarly, the unemployment rate is negatively related to

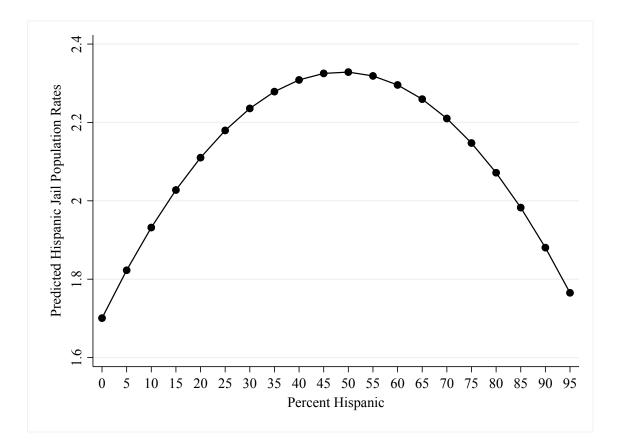


Figure 4.9. Predicted Hispanic jail population rates at observed levels of county percent Hispanic (Model 4).

Turning to Model 6, we see the model testing the effects of political conservatism is significantly different from zero (F = 33.84, p < .001) and explains roughly the same amount of variance as Model 5 (adjusted  $R^2 = .111$ ). The unstandardized regression coefficient reveals Hispanic jail population rates are associated with the number of conservative voters in a county (B = .012, p < .001), supporting the fourteenth hypothesis (H<sub>14</sub>).

Models 7 and 8 test the linear relationships of economic threat and political conservatism as well as the linear and nonlinear effects of minority threat on Hispanic-specific jail population rates, simultaneously. Both models are statistically significant

	Model	5	Model	Model 6		7	Model	8
Variable	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β
Percent black <sup>a,b</sup>					007** (.003)	082	008** (.003)	090
Percent black <sup>2</sup>								
Percent Hispanic <sup>a,c</sup>					.012*** (.002)	.132	.018*** (.003)	.200
Percent Hispanic <sup>2</sup>							$-1.477^{d*}$ (6.161) <sup>e</sup>	079
Income inequality (Gini)	-3.712*** (.927)	102			-2.869** (.938)	079	-2.960** (.940)	081
Unemployment (%)	033** (.010)	081			015 (.010)	038	014 (.010)	035
Poverty (%)	.005 (.006)	.026			.005 (.007)	.022	.007 (.007)	.031
Political conservatism			.012*** (.002)	.136	.007** (.002)	.077	.005* (.002)	.061
Ln jail capacity	.743*** (.066)	.361	.714*** (.066)	.346	.695 <sup>*</sup> ** (.067)	.337	.682*** (.068)	.331
Violent crime rate <sup>d</sup>	-2.003 (1.804)	031	-2.245 (1.777)	035	-1.553 (1.799)	024	-1.775 (1.809)	028
Property crime rate <sup>e</sup>	4.185 (3.080)	.040	3.552 (3.003)	.034	5.556 (3.027)	.053	5.683 (3.037)	.054
Ln police strength	.342* (.139)	.053	.447* (.136)	.069	.381** (.140)	.059	.359* (.141)	.055
Urbanization	.022 (.014)	.047	.004 (.014)	.009	.009 (.014)	.019	.008 (.014)	.018

Table 4.9. Ordinary least squares regressions of Hispanic jail population rates on minority threat, economic threat, and political conservatism and control variables.

	Mode	el 5	Model	6	Mode	el 7	Mode	el 8
	В	β	В	β	В	В	В	В
Variable	(SE)		(SE)	-	(SE)		(SE)	
Residential segregation								
White_black	004*	051	004*	061	003	040	003	037
—	(.002)		(.002)		(.002)		(.002)	
White_Hispanic	.003	.035	.006**	.061	.003	.031	.002	.020
	(.002)		(.002)		(.002)		(.002)	
South	063	025	234***	094	077	031	065	026
	(.059)		(.056)		(.071)		(.072)	
Determinate sentencing	102	040	085	033	098	038	106	041
-	(.056)		(.055)		(.056)		(.056)	
Constant	1.160		-1.414		.226		.464	
F test	28.0	8***	33.84	4***	31.32***		29.4	48***
Adjusted $R^2$	.1	08	.1	11	.138		.139	

Table 4.9. (continued). Ordinary least squares regressions of Hispanic jail population rates on minority threat, economic threat, and political conservatism and control variables.

*Notes:* \*p < .05; \*\*p < .01, \*\*\*p < .001. Ln denotes the variable is log-transformed. SE represents the robust standard error for the unstandardized coefficients. When a footnote (i.e., <sup>d, e</sup>) indicating scientific notation is placed on the variable name, rather than an individual coefficient or robust standard error, the point estimate and SE are multiplied by the same number.

<sup>a</sup> Variable is mean centered.

<sup>b</sup> Percent black, non-Hispanic  $\mu = 8.6316$ <sup>c</sup> Percent Hispanic  $\mu = 8.8324$ 

<sup>d</sup> Coefficient and/or robust standard error multiplied by 10<sup>-4</sup>

<sup>e</sup> Coefficient and/or robust standard error multiped by 10<sup>-5</sup>

(Model 7, F = 31.32, p < .001; Model 8, F = 29.48, p < .001) and explain the largest amounts of variance in Hispanic jail population rates among the models shown in Tables 4.8 and 4.9 (adjusted  $R^2 = 13.8$  and 13.9, respectively). In Model 7, the unstandardized regression coefficients for the linear terms of percent black (B = -.007, p < .001) and percent Hispanic (B = .012, p < .001) suggests racial and ethnic community composition influence Hispanic jail population rates, but they do so in opposite directions. Countylevel black presence is negatively associated with Hispanic population rates, while Hispanic county presence maintains a positive relationship. Income inequality remains negatively associated (B = -2.869, p < .01) with Hispanic jail population rates, while unemployment no longer has a significant effect. Political conservatism remains positively associated with Hispanic population rates (B = .007, p < .01).

In Table 4.9, Model 8, we see that percent black remains significant and negatively associated with Hispanic jail population rates (B = .008, *p* .01). The unstandardized regression coefficients of percent Hispanic (B = .018, *p* < .001) and percent Hispanic squared ( $B = -1.477 \times 10^{-4}$ , *p* < .05) suggest a nonlinear association between county-level Hispanic presence and Hispanic-specific jail population rates. Figure 4.10 illustrates this nonlinear pattern. As predicted in H<sub>6</sub>, we see as county-level Hispanic presence increases, Hispanic jail population rates increase until percent Hispanic reaches a sizeable proportion of the county, roughly 63%, at which point the trend reverses and Hispanic jail population rates begin to decrease. With the addition of the nonlinear component to ethnic threat, the relationships between Hispanic jail population rates and the other theoretically important variables remain substantively unchanged. Specifically, income inequality continues to be negatively and significantly

associated with Hispanic population rates (B = 2.960, p < .01), contrary to H<sub>10</sub>. The unemployment rate and poverty rate remain unrelated to Hispanic jail population rates. Consistent with H<sub>14</sub>, political conservatism continues to be significantly and positively associated with Hispanic jail population rates (B = .005, p < .05).

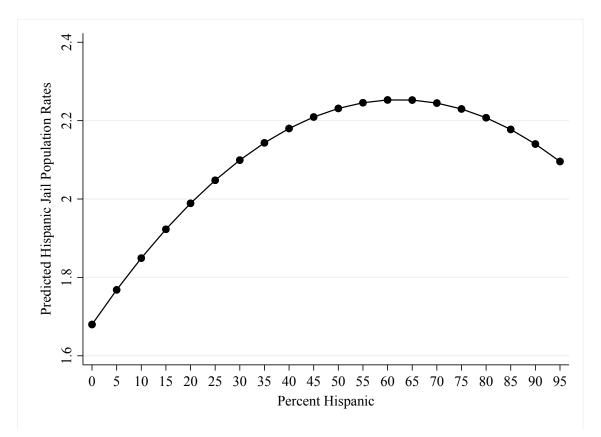


Figure 4.10. Predicted Hispanic jail population rates at observed levels of county percent Hispanic (Model 8).

In Table 4.9, Model 8, we see there are few control variables that significantly influence Hispanic jail population—the log of jail capacity (B = .682, p < .001) and the log of police strength (B = .359, p < .05) are significant and positively associated with Hispanic population rates. The standardized beta coefficients indicate the strongest predictor of the Hispanic jail population is the log of jail capacity ( $\beta$  = .331, p < .001). It is notable that police strength is significant for all Models except Models 3 and 4 which

examined the linear and nonlinear terms of percent Hispanic on Hispanic jail population rates. It appears that percent Hispanic may account for the variation found in other models. In addition to jail capacity, the county racial and ethnic composition are the strongest predictors of Hispanic jail population rates as evidence by the standardized beta coefficients for percent black ( $\beta = -.090$ , p < .01) and percent Hispanic ( $\beta = .200$ , p <001, linear component;  $\beta = -.079$ , p < .05, quadratic component).

## CHAPTER 5

## DISCUSSION AND CONCLUSION

This study sought to contribute to our understanding of how community context impacts local jail use. Prior studies examining the impact of community context on incarceration rely largely on state and federal data, ignoring the impact of local community features on jail use. The importance of including local corrections in our discussions of incarceration cannot be overstated – every year local jails come into contact with 18 times the number of individuals than do state and federal prisons (Carson & Anderson, 2016; Minton & Zeng, 2016). To my knowledge, no study has examined simultaneously the impact of racial and ethnic heterogeneity, economic inequality, and political conservatism on jail admission and population rates at the county level. Further, no study has examined how these social, economic and political factors impact minorities held in local jails. Recall that this study attempts to fill these gaps in the literature by answering two primary research questions: (1) what is the impact of racial and ethnic population compositions, income inequality and political conservatism on jail admission and population rates, and (2) what is the impact of these factors on black and Hispanic jail population rates? This study further sought to understand the impact of county racial and ethnic heterogeneity on local incarceration by examining curvilinear relationships; the first study on jail use to do so.

#### 5.1 Summary of Findings

Table 5.1 provides a summary of the findings for all outcomes (see Appendix F for a summary of hypotheses' outcomes). The following is a summary of the main findings. The county-level black population is associated with variations in local corrections use, net of all theoretical covariates and statistical controls. Examination of the linear terms reveals that percent black is negatively associated with jail admissions and black jail population rates and these findings are consistent with prior research that has found larger black populations result in lower jail admissions (Liska et al., 1999) and black imprisonment rates (Bridges & Crutchfield, 1988; Padgett, 2002). In contrast, a positive statistically significant linear association was found among county-level black presence and overall jail population rates. This finding is consistent with prior empirical research on the racial threat hypothesis that finds a larger proportion of African Americans is associated with greater jail population rates (Johnson, 1992). These divergent findings may be due to the examination of only linear relationships, thus not uncovering potentially nonlinear relationships.

Much of the research regarding the racial threat hypothesis examines linear relationships with few examining curvilinear relationships on state incarceration and no study has examined curvilinear relationships among minority threat—racial or ethnic threat— and local incarceration. This study finds that the relationship between African American county-level presence and local incarceration is nonlinear. Contrary to the hypotheses (H<sub>1</sub>, H<sub>2</sub>, and H<sub>3</sub>), which proposed an inverted U-shaped pattern between racial threat and jail use, the results reveal a U-shaped relationship between racial threat and jail use. Specifically, when county-level black presence is below 8% for overall jail

# Table 5.1 Summary of findings.

Variable	Jail Admission Rate	Jail Population Rate	Black, non-Hispanic Jail Population Rate	Hispanic Jail Population Rate
Percent black	U	U	U	-
Percent black <sup>2</sup>	U	U	U	
Percent Hispanic	ns	Π	-	Ω
Percent Hispanic <sup>2</sup>	*	11		11
Income inequality (Gini coefficient)	-	-	ns	-
Unemployment rate (%)	ns	+	+	ns
Poverty (%)	+	+	+	ns
Political conservatism (% Romney)	+	+	ns	+
Ln jail capacity	+	+	+	+
Violent crime rate	ns	+	-	ns
Property crime rate	+	+	ns	ns
Ln police strength	+	+	ns	+
Urbanization	+	+	ns	ns
Black residential segregation	-	ns	-	ns
Hispanic residential segregation	-	-	+	ns
South	+	+	+	ns
Determinate sentencing	-	+	ns	ns

*Notes*: Ln = log-transformation; "U" = U-shaped curvilinear pattern; " $\cap$ " = inverted U-shaped curvilinear pattern ;"+" = positive association; "-" = negative association; "---" = no prediction; "ns" = nonsignificant relationship; "\*" = dropped from final model due to insignificant relationship in earlier model.

population rates, 35% for black jail population rates, and 40% for jail admission rates, the relationship between percent black and local incarceration is negative. When the percentage black population composition reaches the respective levels, the relationship

becomes positive.<sup>28</sup> Prior studies examining nonlinear relationships have largely found inverse U-shaped relationships between racial threat and coercive controls (Greenberg et al., 1985; Keen & Jacobs, 2009; Stults & Baumer, 2007). Still, the results of this study, specifically a U-shaped curve, are supportive of Blalock's (1967) power-threat hypothesis and Liska's (1992) social threat thesis which claim greater proportions of African Americans pose more of a threat to the majority and, hence, result in greater discrimination and social control. The present results suggest that African Americans do not become a threat until they make up over one-third of the county population—barring overall jail populations—at which point local incarceration increases.

Turning to the ethnic threat hypothesis and linear relationships, county-level Hispanic presence results in higher overall jail population rates and Hispanic jail population rates but is unrelated to jail admission rates. The positive association between percent Hispanic and Latino jail population rates are consistent with other findings examining ethnic disparities in state incarceration (Durant, 2017) and nonwhite state imprisonment rates (Bridges et al., 1987). However, the results regarding overall jail population rates are inconsistent with prior literature; several scholars have found no statistically significant effect of percent Hispanic on jail population rates (Applegate, 2004; Johnson, 1992; Padgett, 2002). Further, prior studies have found percent Hispanic to be related to jail admission rates (Applegate, 2004; Carmichael, 2005), yet this study found no support for ethnic threat and jail admissions. Perhaps these differences are due to location. That is, Applegate (2004) examined jails in the Southeast and Midwest, and

<sup>&</sup>lt;sup>28</sup> The findings regarding curvilinear trends among minority threat—either for race or for ethnicity—are informative, however, it would be premature to conclude that these trends, or turning points, are identical in every county. That is, curvilinear trends may differ across counties and obscure the relationships found here. Future research should attempt to disentangle these trends.

Carmichael (2005) examined only major cities. The current project examined jails across the United States at the county-level. The ethnic distribution across the United States is decidedly uneven, with the majority of Hispanics residing in the South and West and large major cities (Brown & Hugo Lopez, 2013; Ennis, Rios-Vargas, & Albert, 2011). Conceivably, the examination of Hispanics throughout the United States, including in areas where there are small numbers of Latinos, is masking relationships (Holmes et al., 2008; Kent & Jacobs, 2005). Another plausible explanation can be gleaned from Klofas's (1987, 1991) and Applegate's (2004) work. Recall that Klofas (1987, 1991) developed a typology to explain jail use patterns and found that population and admission rates differ across jails which impact their function. Perhaps examination of the specific function of jails (i.e., "high-high," "high-low," "low-high," and "low-low") would reveal a better understanding of these differences. Future research utilizing national county-level data should examine these patterns to potentially uncover if and to what extent the specific function of jails may impact Hispanic jail population rates.

Examination of nonlinear relationships between ethnic threat and local incarceration reveal a different trend than those found for racial threat. Contrary to the racial threat findings, county-level Hispanic presence reveals an inverted U-shaped relationship with jail use, supporting two of three ethnic threat hypotheses (H<sub>5</sub> and H<sub>6</sub>).<sup>29</sup> Specifically, the data reveal the presence of Hispanic residents in a county is positively associated with overall jail population rates and Hispanic-specific population rates, but only until the size of the Hispanic population reaches a sizeable proportion of the

<sup>&</sup>lt;sup>29</sup> Recall from Chapter 4 that the linear and quadric terms of percent Latino were not significantly associated with jail admissions rates. Therefore, the quadric form was dropped from the final model and is not discussed here.

county—roughly 25% for jail population rates and 63% for Hispanic jail populations rates-at which point overall and Hispanic jail population rates begin to decrease. These findings are inconsistent with some studies examining ethnic threat and social control which have found a U-shaped relationship (Kane, 2003; Kent & Jacobs, 2005). However, findings similar to those revealed in the current study have been reported in the sentencing literature. Feldmeyer and Ulmer (2011) in their analysis of the impact of racial and ethnic compositions on federal sentencing decisions found that Hispanic defendants receive the harshest sentences when they comprise a relatively small percentage of the population and experience lenient sentences when they make up a substantial percentage of the population. While this relationship is not identical to the inverted U-shaped curvilinear pattern revealed in this study, it is consistent that greater proportions of Latinos result in leniency rather than harsher sanctions. The results of this study suggest that Latinos are a threat until they make up roughly 25% or 63% of the county population, depending on the measure of jail use employed, at which point incarceration begins to decrease.

The inverse U-shaped pattern can be explained through prior research regarding minority threat and incarceration in a number of ways. The first explanation is aligned with the benign neglect hypothesis and suggests that Hispanics are treated more leniently, or have little effect on jail use, because there is an assumption that greater intraracial crime occurs alongside increases in minority presence, thereby decreasing Whites fears and subsequent use of jail (Liska & Chamlin, 1984). An alternative but related explanation involves society's view of Hispanic minority group members. Prior research has found fear of crime and support for conservative initiatives among Whites and non-

Hispanic racial minorities are greater in areas with larger proportions of Hispanics (Eitle & Taylor, 2008; Craig & Richeson, 2014, 2017; Johnson et al., 2011). Scholars have suggested that Hispanics are viewed as less dangerous than are blacks which may not translate into greater social control (Wang & Mears, 2010a). Alternatively, it is plausible that in counties where Hispanics make-up a sizeable proportion of the population they have gained enough social and political power to off-set coercive control and discrimination (Blalock, 1967; Feldmeyer & Ulmer, 2011; Keen & Jacobs, 2009). Relatedly, it may be that in areas where greater proportions of Hispanics reside, there is less willingness to support more punitive sanctions and instead alternative sanctions are sought (Wang & Mears, 2010a). It is unclear which of these explanations is the most accurate since the data used in this project cannot directly explore such propositions. Future research should attempt to disentangle such mechanisms to further explore the impact of ethnic threat on local incarceration.

Taken together, the findings regarding racial threat and ethnic threat appear to represent two distinct dimensions of minority threat. The relative size of the African American population reveals a nonlinear, U-shaped curvilinear relationship, resulting in harsher treatment with greater proportions of black county residents. In contrast, county-level Hispanic presence reveals an inverted U-shaped curvilinear association with local incarceration, suggesting lenient treatment with greater numbers of Hispanic county residents. These findings suggest that the traditional minority threat thesis does not apply to Latinos as it does African Americans. In fact, all models are better predictors of black jail populations rates than Hispanic jail population rates, as evidenced by the *Adjusted R*<sup>2</sup> values. The reasons are varied, and the differential results could be due to perceived

threat differences among African Americans and Hispanics and Whites (Dixon, 2006; Wang & Mears, 2010a, 2010b), the level (or lack thereof) of social and/or political clout (Feldmeyer & Ulmer, 2011), or differences in outcome measurement (Wang & Mears, 2010a). For example, Wang and Mears (2010a) found that minority threat differently impacted black and Hispanic sentencing. Specifically, their results showed that racial threat resulted in a greater likelihood of state imprisonment rather than jail for African Americans, while ethnic threat resulted in a greater likelihood of local incarceration rather than prison for Hispanics. Wang and Mears (2010a) point out that "drivers of jail sanctions may differ from those of prison sanctions" (p. 204). It is important that future research examine racial threat and ethnic threat separately rather than examining overall minority threat and compiling both African Americans and Hispanics into the category of "nonwhite" (Wang & Mears, 2010a, p. 210, 2010b) as there appear to be differences in the impact on jail use (Carmichael, 2005).<sup>30</sup>

The results of this project also reveal interesting findings regarding the effect of the proportion of black and Hispanic county residents on each other's respective jail populations rates. Specifically, racial threat is negatively related to Hispanic jail population rates, and ethnic threat is negatively related to black jail populations rates; both outcomes are statistically significant. One plausible explanation for the negative association between percent black and Hispanic jail population rates may be that larger proportions of African Americans pose a greater threat than do Hispanics, thus blacks

<sup>&</sup>lt;sup>30</sup> It is important to exercise caution when investigating racial and ethnic differences in the criminal justice system (Wang & Mears, 2010a). Criminal justice actors' (mis)identification or classification of inmates' racial and ethnic identity and the lack of data on Hispanics in the criminal justice system can impact findings among criminal justice research whether it be underestimating the minority population, overestimating the white population, or both (Eppler-Epstein, Gurvis, & King, 2016; Subramanian, Riley, & Mai, 2018).

may become the target of social control in areas with greater proportions of African Americans, alleviating coercive control of Hispanics, and decreasing Latino jail population rates. The effect of percent Hispanic on black jail population rates is more perplexing. The models examining overall jail population rates reveal an inverted Ushaped curvilinear pattern with percent Hispanic, suggesting greater proportions of Hispanics also result in greater overall leniency once Hispanic county residents reach a certain threshold. As discussed earlier, one plausible explanation for this relationship is that Hispanics support alternative sanctions more than punitive sanctions (Wang & Mears, 2010a, 2010b). Perhaps greater proportions of Hispanics similarly result in lower black jail population rates because, generally speaking, Latinos prefer alternative sanctions for all racial and ethnic groups.<sup>31</sup> Examination of nonlinear trends among racial and ethnic threat and respective jail population rates reveal no statistically significant relationships.

Along this line of inquiry, the importance of examining curvilinear relationships is revealed in this study. Most of the prior literature examining minority threat and social control mechanisms has investigated linear relationships. Nonlinear relationships should be examined because even when linear effects do not exist, nonlinear effects may be present (Wang & Mears, 2010a). This project's examination of the impact of county level black presence on jail population rates and black jail population rates reveal insignificant linear trends, yet a nonlinear relationship is revealed when the percent black quadratic

<sup>&</sup>lt;sup>31</sup> Recall that Padgett (2002) found percent Hispanic was positively associated with black prison admission rates. While my finding stands in contrast to Padgett's (2002) results, the differences may be due to measurement. I examined jail population rates, while Padgett focused on prison admission rates. Further, my examination includes counties throughout the United States, while Padgett focused her attention on Florida counties.

term is introduced. Modeling only linear terms, for example, might lead one to conclude there is no relationship between county-level black presence and jail use (Wang & Mears, 2010a). Studies examining racial threat and ethnic threat and social control mechanisms should also examine nonlinear relationships because Blalock (1967) argued that the relationship between percent minority and discrimination would be curvilinear.

In addition to the findings associated with racial and ethnic population compositions, the results also point to other important community factors that are related to local incarceration. This project examined the influence of three economic factors: income inequality, unemployment and poverty. The findings of this study offer mixed support for the economic threat thesis. According to economic threat theory, social control will be greatest in areas marked with greater economic inequality. The analysis of income inequality reveals that increases in the Gini coefficient result in reductions in jail admission rates, jail population rates, and Hispanic jail population rates. This finding stands in contrast to the proposed positive relationship among jail use and economic threat theory (H<sub>7</sub>, H<sub>8</sub>, H<sub>9</sub>, and H<sub>10</sub>) and is somewhat inconsistent with prior studies. However, several scholars have indeed found a negative association between income inequality and incarceration, though the findings have been statistically insignificant (e.g., Campbell et al., 2015; Campbell & Vogel, 2017; Greenberg & West, 2001; Jacobs & Helms, 1996; Western, 2006).

It is unclear how greater income inequality results in lower jail use. Greenberg and West (2001) state, "where the gap in wealth and income between rich and poor is higher, the social distance between the classes will be larger, and the well-off are expected to be less concerned about the well-being of the poor" (p. 624), thus resulting in

greater incarceration. The results of this study suggest greater social distance results in less incarceration. Conflict theory posits that it is the dominant group that has the power to control the poor and influence social control agents to conform to their preferences, maintaining their economic position in society. Perhaps, then, greater social distance among these two groups diminishes the threat posed to the well-off by the underclass, resulting in less social control. While the wealthy have the means to control the poor, perhaps they do not use their power to control the poor; at least, not through local incarceration. Given historical preferences to control the working poor and the underclass (Alexander, 2010; Beckett & Western, 2001), however, it seems an unlikely explanation for these findings. Perhaps these communities have other resources which control and take the visibly disadvantaged out of the public's view. It would be worthwhile for future research to examine the impact of community resources (e.g., pretrial and bail reform, drug courts, mental health and substance abuse services) on jail use.

The findings regarding unemployment are decidedly uneven. The results of this study show the unemployment rate is positively associated with overall jail population rates and black jail populations rates. The positive association among unemployment rates and jail use is consistent with studies of local incarceration (Applegate, 2004) and state incarceration (Greenberg & West, 2001). The results regarding unemployment and black jail populations rates, however, are inconsistent with prior research which has found unemployment is not associated with black prison admissions (Padgett, 2002), black-white prison admission ratios (Keen & Jacobs 2009) or black-white imprisonment disparities (Yates & Fording, 2005). Yet the finding is consistent with prior research that has explored disaggregated rates of unemployment. For example, Durante (2017) found

black-white disparities in unemployment are significant and positively related with blackwhite prison admission disparities. The results of my study also reveal that unemployment is unrelated to jail admissions and Hispanic jail population rates. These results are consistent with prior studies which have found unemployment is unrelated to jail admissions (Carmichael, 2005).

The poverty rate is positively associated with all jail outcomes, except Hispanic jail population rates. These finding are consistent with prior literature that finds poverty rates are positively related to local and state incarceration (Applegate, 2004; Greenberg & West, 2001; Inverarity & Grattet, 1988). The results are also consistent with studies that have examined race-specific incarceration. Specifically, black-to-white ratios of poverty are positively related to black imprisonment rates (Bridges et al., 1987; Yates & Fording, 2005). While no prediction was made regarding poverty and jail use, the results of this study lend further support to the economic threat thesis.

Several null relationships were revealed among the key economic independent variables and black- and Latino-jail population rates: (1) economic inequality is unrelated to black jail population rates, (2) unemployment is unrelated to Hispanic jail population rates, and (3) poverty is unrelated to Hispanic jail population rates. The findings regarding the Hispanic jail population stand in contrast to some prior research that has found unemployment inequality among whites and Hispanics is related to Latino-white disparities in prison admissions (Durant, 2017). Future research should conduct disaggregated analyses of economic inequality measures and incarceration (Western, 2006). As an example, Padgett (2002) found differential effects of income inequality on prison admissions rates when examining time periods with low and high unemployment

rates. Specifically, in county-years with low unemployment rates, income inequality was positively associated with prison admissions, while in county-years with high unemployment rates, income inequality was negatively associated with prison admission rates. It may that a similar analysis conducted with local incarceration may potentially uncover a more nuanced understanding of how the economic structure impacts jail use. It is also important that future work examine disaggregated measures of economic variables among black and Hispanic residents, rather than aggregate measures of economic structure across the United States. This issue will be addressed following a discussion of the political threat findings.

In addition to examining socio-economic effects on jail, this study included political effects. While most studies examining local incarceration and community context ignore political determinants, this study offers support to a political threat explanation and jail use. Consistent with the literature, this study shows that counties with more conservative voters use local incarceration to a greater extent (Campbell et al., 2015; Greenberg & West, 2001; James & Carmichael, 2001; Keen & Jacobs, 2009; Percival, 2010). Supporting H<sub>11</sub>, H<sub>12</sub>, and H<sub>14</sub>, political conservatism is positively associated with jail admission rates, overall jail population rates, and Hispanic jail populations rates. County-level political conservative ideology, however, is unrelated to black jail population rates, thus not supporting H<sub>13</sub>. Prior research on African American state imprisonment rates (Percival, 2010) and black-to-white prison admission disparities (Keen & Jacobs, 2009) shows greater racial imprisonment in areas where conservative ideology among residents is greatest. Further, much of the law-and-order rhetoric, or racialized crime rhetoric, forwarded by some conservative candidates promotes the

perception that African Americans are violent criminals to be feared and managed—a stereotype that has been linked to citizens' support for harsher policies and practices (Beckett, 1997; Beckett & Sasson, 2004; Hurwitz & Peffley, 1997; 2005). This stereotype also perpetuates the view that African Americans and the criminal justice system are inevitably linked (Hurwitz & Peffley, 1997; 2005). It is perplexing, then, why the proportion of conservative voters in a county is unrelated to black jail population rates. Prior research has found citizen ideology is unrelated to black state incarceration rates and black-to-white state imprisonment disparities (Yates & Fording, 2005), yet several other political variables (i.e., republican legislature, judicial conservatism, and female legislators) strongly influence these outcomes. Perhaps, then, additional measures of political conservatism should be included in studies examining black jail incarceration.

As stated earlier, the majority of the null relationships among the key independent predictors and outcomes variables were found among the race- and ethnic-specific jail population rates. Specifically, the relationships between economic factors and political conservatism and black and Hispanic jail population rates did not reach statistical significance. These null relationships could be due to the measurement of socio-economic and political factors in the aggregate (Western, 2006). Several scholars have called for research that more closely aligns with Blalock's minority threat—specifically the economic and political threat causal mechanisms (e.g., Eitle et al., 2002). Some scholars have answered this call and examined economic differences in unemployment, poverty and/or income among minority and majority group members, and some have examined political power differences among minority and majority groups (e.g., representation among criminal justice actors and voting), or both (e.g., Bridges & Crutchfield, 1988;

Durante, 2017; Eitle et al., 2002; Parker et al., 2005; Wang & Mears, 2010a). Similar to analyses examining aggregate rates of economic and political factors, studies examining these disaggregated factors have found varying results with reported positive associations, negative associations, and no significant correlations with incarceration, sentencing, and arrests (see e.g., Bridges & Crutchfield, 1988; Durante, 2017; Eitle et al., 2002; Parker et al., 2005; Wang & Mears, 2010a). To date, two studies focusing on local incarceration have examined one of these more specific dimensions—political threat and found the presence of nonwhite and black mayors to have no independent effect on jail admission rates (Carmichael, 2005; Liska et al., 1999). Future research should examine jail use in light of both of these more specific dimensions—racial/ethnic economic threat and political threat—to potentially discover a more nuanced understanding of the impact of socio-economic and political factors on African American and Latino jail population rates.

A few findings among the control are notable. First, jail capacity is positively and significantly associated with all jail outcomes—jail admission rates, jail populations rate, black jail population rates, and Hispanic jail population rates. In fact, it is the strongest predictor of jail use for every outcome measure, save jail admission rates. The results of this study, then, reveal the importance of including jail capacity as a control when examining aggregated and disaggregated (i.e., race- and ethnic-specific jail rates) measures of jail use. Prior research has established that jail capacity strongly influences jail use (Carmichael, 2005; D'Alessio, & Stolzenberg, 1997; Liska et al., 1999). This study lends further support to claims that increasing the number of jail beds results in greater numbers of people being locked up (Liska et al., 1999).

A second notable finding concerns the influence of county police strength on jail use. The number of full-time sworn police officers is significant and positively related to three of the four outcome measures: jail admission rates, jail population rates, and Hispanic jail population rates. To date, few studies have utilized police strength as a control while examining correlates of jail use, and those that have report mixed results. Padgett (2002) reports police strength has no significant effect on jail population rates and Carmichael (2005) found a negative association between police strength and jail admissions. This study finds that a greater number of sworn police officers in a county increases jail use. Perhaps counties with larger police departments have more time and resources than counties with smaller police departments, which results in more arrests and bookings.

Third, jails in the South show significantly higher rates of incarceration on three of the four outcome measures. This finding is consistent with prior literature examining jail admission and population rates (Applegate, 2004; Carmichael, 2005). The null findings regarding the impact of the South and Hispanic jail population rates might be explained by demographic distribution across counties in the United States. Racial and ethnic population compositions are unevenly distributed throughout the United States. It seems clear then that the impact of African American and Latino presence on jail use will vary across regions (Carmichael, 2005). In 2010, over three-quarters of the Latino population lived in the South or West, with over half of the population living in just three states: California, Texas and Florida (Ennis et al., 2011). County-level estimates reveal 10 counties in five states comprise nearly one-third of the Latino population: California

(5), Texas (2), Florida (1), Arizona (1), and Illinois (1) (Brown & Hugo Lopez, 2013).<sup>32</sup> Prior research has found that percent Hispanic was not associated with state incarceration rates in non-Sunbelt states, yet the proportion of Hispanics had a negative effect on state incarceration in Sunbelt states (Campbell et al., 2015). It may be that Sunbelt states—the southeastern and southwestern states, ranging from South Carolina to California—reveal significant differences in Hispanic presence and local incarceration (see Campbell et al., 2015).

#### 5.2 Limitations and Future Research

The results of this study offer several important insights, but several limitations must be noted. First, while this project's use of an enumeration of all county jails in the United States allowed the examination of contextual effects at the local level throughout the United States, the data are cross-sectional. The use of cross-sectional data does not allow for examination of how changes in the racial and ethnic population composition, economic, or political features are related to jail use. The Census of Jails—the main dataset for this project – is representative of jails in 2013 (USDOJ BJS, 2016, ICPSR36128). The results may be bound to that particular time point, and the importance of specific factors for determining local jail use may vary with the political and social culture. The United States has experienced changes regarding several issues including the ethnic population composition, widening income inequality, and the political discourse (i.e., Trump administration), to name a few. Projections regarding the racial and ethnic population composition suggest continued diversity in America (Colby

<sup>&</sup>lt;sup>32</sup> Ranked in order of largest percentage to least percentage of county population: (1) Miami-Dade County, FL, (2) Bexar County, TX, (3) San Bernardino County, CA, (4) Los Angeles County, CA, (5) Riverside County, CA, (6) Harris County, TX, (7) Orange County, CA, (8) San Diego County, CA, (9) Maricopa County, AZ, (10) Cook County, IL (Brown & Hugo Lopez, 2013).

& Ortman, 2015); the gap between the rich and everyone else has been widening since the 1970s (Kochhar & Cilluffo, 2018); and while it is unclear the impact of the political climate on criminal justice policy, some records suggest diminished reform (Grawart, 2017). Future research should consider examining the impact of social, economic and political factors on jail use across a number of years and decades. Potential differences resulting from changes in demographic characteristics, socioeconomic characteristics, laws, and criminal justice policies and practices may be discovered using longitudinal data. This approach would also bring the knowledge base closer to identifying causal explanations of jail use. Further, exploring change over time would also allow for the examination of threat changes. Threat changes are an important tenet of Blalock's (1967) minority threat hypothesis in which he discusses the influence of growth or changes in the proportions of minority group members and subsequent discrimination (Kent & Jacobs, 2005; Liska, 1992; Wang & Mears, 2010a, 2010b). Examination of minority population demographic change and its effect on jail incarceration, rather than static threat levels (i.e. percent Black) alone, may prove to be an important contribution to the jail literature.

A second concern involves causal inference. The data allow for discussion of association among the observed relationships, however, causal conclusions cannot be drawn. It is possible that variables omitted from the models could account for the observed relationships. While this possibility is worthy of consideration and investigation in future work, this study sought well-specified models by including variables that are grounded in theory and have been identified in prior empirical work as important factors in describing formal social control mechanisms (e.g., Blalock, 1967; Beckett & Sasson,

2003; Campbell et al., 2015; Carmichael, 2005; Chambliss & Seidman, 1971; Garland, 1990; Greenberg & Western, 2001; Jacobs & Carmichael, 2001; Liska, 1992; Smith, 2004). These factors include a wide range of community characteristics and were included as measures in this project– demographic, socioeconomic and political features; crime; locale and residential segregation; sentencing structures; and finally, police and jail features.

A third concern is related to state laws regarding sentenced offenders' place of confinement. Some states have sentencing policies that allow judges to order defendants to serve their sentence in local jails, even when they are convicted of a felony offense and/or ordered to serve more than a one-year term, a sentence that in the past typically required time be served in prison. In Alabama, for example, felony convictions whereby imprisonment is ordered for 12 months up to 3 years, can be served, at the discretion of the judge, in a state-run prison, county jail, or to hard labor for the county (Code of Alabama §15-18-1(b)). Moreover, some states mandate that inmates serve time in prison rather than jail for even low-level, minor offenses, offenses that normally would require a jail term given the relatively brief period of confinement ordered by a court. In South Carolina, for example, defendants who are sentenced to more than 90 days of imprisonment serve their sentence in state-run facilities (South Carolina Code of Laws, §24-3-20(A)). Taken together, these policies influence both the jail and prison populations. Of concern here is the impact on local incarceration. It may be the case that inmates held for felony offenses and sentenced to a three-year term are held in the local jail, thus inflating jail counts. Others, who traditionally would be represented in the jail population, could instead be included in prison counts, as is the case in South Carolina,

thus underestimating county-level social control. It is unclear how many states have such policies, the degree to which such policies are enforced, or the overall impact of such policies on jail use. Future research could conduct an analysis of place of confinement under state statues and control for such policies. Given the scope of this project, such a search of state policies was not possible.

A related concern involves the dramatic effect that reforms can have on jail population levels. In contrast to sentencing policies regarding place of confinement, these policies-while they impact where an inmate will serve their time and, thus, jail and prison counts—are enacted primarily as reforms to alleviate mass incarceration. In 2011, California passed the Public Safety Realignment Act to "close the revolving door of lowlevel inmates cycling in and out of state prisons" (California Department of Corrections and Rehabilitation, 2013, p. 1). As mentioned in Chapter 2, the realignment act made community corrections, more specifically county jails, responsible for detaining some offenders who previously would have been sentenced to state prison facilities. The implementation of this Act reduced the prison population and as a consequence, increased local jail populations in California (Couzens & Bigelow, 2017; Grattet, Tafoya, Bird, & Nguyen, 2016). Another reform, Proposition 47, enacted to reduce drug and property offenses from felonies to misdemeanors, alleviated some of the jail population increases driven in part by realignment (Grattet et al., 2016). These reforms influence offense types (i.e., more serious drug and property offenses), length of stay, jail (over)capacity, and release mechanisms (i.e., capacity releases and pretrial). Several states are enacting sentencing legislation and reforms to combat mass incarceration (Porter, 2016). It is not yet clear how such reforms may impact local communities and

jails across the United States (Grattet et al., 2016). It may be that alleviating one problem, for example prison overcrowding, results in other problems such as jail (over)capacity or the inability of community resources to keep up with the pace of individuals being released from county- and state-run facilities. Future research should consider the impact of such reforms on local communities and jails across the United States.

Another complication involves the impact of transient populations on jail use estimates. The transient population includes individuals who are homeless, tourists or business travelers. These people are located throughout the United States but are often concentrated in particular areas and/or during particular seasons. For example, the highest rates of estimated homelessness are found in major cities such as New York City, NY, and Los Angeles, CA (Cortes, Henry, de la Cruz, & Brown, 2012; Henry, Watt, Rosenthal, & Shivii, 2017). The latest estimates report roughly 2.2 billion domestic travelers for leisure and business purposes, and 77 million international travelers (U.S. Travel Association, 2018a) in one year in the United States. Regardless of location or time of year, the transient population are included in the jail data if they are arrested and booked into a local jail. They are not, however, counted in county population figures. In the current study, I cannot determine to what extent local jail admission and population rates may have been impacted by these transient populations or how much such bias might have varied across counties.

This study has contributed to a better understanding of how the racial and ethnic composition influences jail use, with specific focus on black, non-Hispanics and on Latinos. It would be meaningful for future research to extend this line of inquiry to other racial and ethnic groups (e.g., Asians, American Indians) as it applies to local

incarceration. The latest reports from the Bureau of Justice Statistics report American Indians or Alaska Natives are incarcerated at a rate of 359 per 100,000 residents, a rate higher than non-Hispanic whites (171 per 100,000) and Hispanics (185 per 100,000) (Zeng, 2018, p. 3). The paucity of data examining non-primary racial and ethnic minorities in the United States, such as Native Americans and Asians, has been noted elsewhere both in the juvenile and criminal justice system literatures (see e.g., Franklin, 2011; Leiber, 1994; Sampson & Lauritsen, 1997). Still, the research examining these minority group members in the criminal justice field is sparse and essentially non-existent in the jail literature. Future research should examine these group members in light of jail use to gain a better understanding of the influence of race and ethnicity on local incarceration.

Lastly, it would also be worthwhile to examine the impact of individual-level factors in combination with contextual-level factors on local incarceration. As Britt (2000) accurately noted, contextual factors do not consider differences in decision making among judges within the same jurisdiction (Britt, 2000, p. 729). Britt's (2000) discussion applied to sentencing but has implications for jail research. As described earlier, jail use is influenced by a number of criminal justice actors: from the police, to bail bondsman, to prosecutors, and judges. Individual practitioners may differ in their views regarding the racial and ethnic population, economic or political structure of the community, and accordingly, react and respond to socioeconomic and political jurisdictional issues in a different manner than their colleagues (Britt, 2000; Feldmeyer, Warren, Siennick, & Neptune, 2015). It may also be the case that offender-, court- and case-level characteristics (e.g., race, ethnicity, gender, and prior record/incarceration)

impact jail use. Prior research has established that individual-level characteristics impact criminal justice decision-making and outcomes (Britt, 2000; Demuth, 2003; Demuth & Steffensmeier, 2004; Ulmer & Johnson, 2004). Future studies should take both a microand macro-level approach to discover a more nuanced understanding of local incarceration and shed light on the decision-making processes of criminal justice actors at the local level.

#### **5.3** Conclusion

This study has contributed to a better understanding of how social, economic and political conditions are related to use of local incarceration. Generally, local community characteristics—racial and ethnic population, economics and political conservatism—are linked to jail use. The effects of socio-economic and political factors are consistent even when violent and property crime rates and other county structural features are controlled for, suggesting that jail use cannot be explained solely as a response to local crime conditions. While a positive association between minority threat and jail use does not by itself demonstrate differential treatment, this project's findings suggest that extra-legal factors may influence decisions made across the justice system that are reflected in social control through use of local incarceration (Carmichael, 2005; Wang & Mears, 2010a, 2010b).

Relatedly, future research should attempt to understand criminal justice actors' views on racial and ethnic composition, economic conditions, and political views, and how they respond to such community issues (Britt, 2000). It would also be beneficial to develop a more complete understanding of interagency relations and how they affect jail use (Davis et al., 2004; Klofas, 1990a, 1990b). This study cannot speak to criminal

justice decision making directly, but it is clear that decisions among actors are linked to individuals being arrested and booked into a jail, held pretrial or released, prosecuted and sentenced to imprisonment or an alternative to incarceration, and held locally for probation or parole violations (Carmichael, 2005). Accordingly, it would be useful to assess criminal justice actors' views and local practices in an effort to determine if, and the extent to which, issues such as interagency relations (or lack thereof), extralegal factors, and community resources impact jail use. Consequent to review of local community views and resources, subsequent steps and integrated solutions among criminal justice actors and community members could be taken to reduce identified problems and concerns such as social and economic inequality, implicit biases, or lack of collaboration or alternatives such as pretrial or jail diversion programs (Eaglin & Solomon, 2015; Kang-Brown & Subramanian, 2017).

Since 2008, our country has seen a decrease in the number of individuals confined in local jails throughout the United States (Zeng, 2018), to include declines in African American and Hispanic jail incarceration rates since 2005 (Subramanian et al., 2018; Zeng, 2018). Similar declines have been found in state imprisonment since the mid- to late- 2000s for both the overall incarceration rate, as well as black and Hispanic incarceration rates (Carson, 2018; Kaeble & Cowhig, 2018). The reasons attributed to decarceration include sentencing law changes, justice reinvestment initiatives, crime reductions, and reclassification of felony offenses to misdemeanors, to name a few (Ghandnoosh, 2018; Grattet et al., 2016; Porter, 2016). While decarceration may offer some promise, the decreases in incarceration have not been consistent across states. Many states have reduced their number of confined individuals, some states have remained

relatively stable, and still, confined populations have increased in other states since peak years (Ghandnoosh, 2018). Further, it appears black residents and rural jurisdictions are at a disadvantage. Despite declines in the African American jail incarceration rate, black residents continue to have the highest jail incarceration rate of any other racial or ethnic group in the United States (Zeng, 2018). In contrast to declines in incarceration in urban areas, examination of local jurisdictions reveal that rural areas have actually seen increases in overall jail incarceration (Kang-Brown, Hinds, Heiss, & Lu, 2018; Kang-Brown & Subramanian, 2017) and African American jail incarceration rates (Subramanian et al., 2018). As several others have pointed out, this realization indicates that locale matters (Kang-Brown et al., 2018; Klofas, 1990a; Lynch, 2011; Subramanaim et a., 2015), an observation reinforced by the findings of the current study. While jail use may shrink in some areas, others-particularly those counties with high levels of minority residents, extensive political conservativism, and high levels of poverty-may be resistant to efforts to reduce how often people are jailed and how long they stay. It is imperative that we continue to examine "micro-level variation" (Lynch, 2011, p. 674; see also Klofas, 1990b) in our discussions of mass incarceration and decarceration.

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# APPENDIX A: MODELS FROM EMPIRICAL STUDIES ON EFFECTS OF MINORITY THREAT, ECONOMIC THREAT AND/OR POLITICAL DETERMINANTS OF JAIL INCARCERATION

Study	Sample	Dependent Variable	Dependent Variable Significant Predictors		
Micro-Level					
McCarthy (1990)	CA felony cases, 1981	JAR	percent nonwhite, unemployment, property crime (-), violent crime	poverty	
		MSA JAR	unemployment, violent crime	percent nonwhite, poverty, property crime	
		Non-MSA JAR		unemployment, percent nonwhite, poverty, property crime, violent crime	
Macro-Level					
Johnson (1992)	50 states, 1983 <sup>a</sup>	JPR	population enrolled in high school (-), young black males, violent crime	mental health admissions, average welfare payment, drug arrests, unemployment rate, sub-employment rate	

Study	Sample         Dependent Variable         Significant P		Significant Predictors	Insignificant Predictors		
Macro-Level (continued)						
Johnson (1992) continued	1987	JPR	population enrolled in high school (-), young black males, violent crime	mental health admissions, average welfare payment, drug arrests, unemployment rate, sub-employment rate		
Arvanites & Asher (1998)	50 states + DC, 1993	JIR		total crime, percent nonwhite, income inequality, crime prone ages, urban		
		JIR	percent nonwhite, income inequality	violent crime, crime prone years, urban		
Liska, Markowitz, Whaley, & Bellair (1999)	100 US cities, 1978	JAR	percent black (-) <sup>d</sup> , jail capacity	population, percent divorce, economic factor (percent unemployment, percent below poverty, and median family income summed and weighted), total crime rate index, violent and property crime <sup>b</sup> , specific crime rates <sup>b</sup> , desegregation, hospital capacity, white or nonwhite mayor <sup>b</sup> , arrest rates <sup>c</sup>		

Study	Sample	Dependent Variable	Significant Predictors	Insignificant Predictors		
Macro-Level (continued)						
Liska, Markowitz, Whaley, & Bellair (1999) continued	1983	JAR	percent black (-) <sup>d</sup> , jail capacity	Population, percent divorce, economic factor, total crime rate index, violent and property crime <sup>b</sup> , specific crime rates <sup>b</sup> , desegregation, hospital capacity, white or nonwhite mayor <sup>b</sup> , arrest rates c		
	1988	JAR	percent divorce, jail capacity	population, economic factor, total crime rate index, violent and property crime <sup>b</sup> , specific crime rates <sup>b</sup> , segregation, percent black, hospital capacity, white or nonwhite mayor <sup>b</sup> , arrest rates <sup>c</sup>		
Padgett (2002)	adgett (2002) 67 FL counties, 1996-1998		income inequality, urban counties (-), drug arrest rate	percent black, percent Hispanic, unemployment, police strength, counties in north Florida, violent index and burglary crime rate		
Applegate (2004) 1445 US counties, 1999		JAR	percent black, percent Hispanic, percent unemployed, percent below the poverty level, median income (-), region	median home value		

Study	Sample	Dependent Variable	Significant Predictors	Insignificant Predictors
Macro-Level (continued)				
Applegate (2004) continued		ADP	percent black, percent unemployed, percent below the poverty level, median income (-), region, booking rate (JAR)	percent Hispanic, median home value
Carmichael (2005)	157 US cities, 1983 °	JAR	black-to-white income ratio (-), percent black, percent Hispanic, segregation, percent divorce (-), rate of liquor establishment, rate of sworn police (-), jail capacity, region	unemployment, serious crime rate/Part I, presence of young males, black mayor <sup>b</sup> , determinant sentencing legislation <sup>b</sup> , overall income inequality <sup>b</sup> , presence of female-headed families <sup>b</sup> , median family income <sup>b</sup> , violent and property crime rates <sup>b</sup> , overall arrest rates <sup>c</sup> , arrest rate for Part II offenses <sup>c</sup>

Notes: MSA = metropolitan statistical areas, JAR = jail admission rate, JIR = jail incarceration rate, JPR = jail population rates (total number of inmates per 100,000 resident pop), ADP = average daily population.

A negative symbol (-) denotes an inverse association between the predictor and outcome variable.

In addition to the above studies, Arvanites (1997) examined the effect of percent nonwhite, poverty and crime on jail incarceration rates. This study is excluded from the present summary because the author provided correlates/description of results without detailed statistical analysis (e.g., tables).

<sup>a</sup> Author could not correct for heteroscedasticity.

<sup>b</sup> Author conducted supplementary analysis not shown and found this variable does not predict jail use.

<sup>°</sup> Author substituted crime rates with this variable in supplementary analysis and found similar results.

<sup>d</sup> Author conducted supplementary analysis and found percent black had a positive, indirect effect on jail admission – percent black effects jail capacity, and jail capacity effects jail admissions.

<sup>e</sup> Author conducted similar analyses not shown using 1999 Jail Census data and found similar results. Author notes these results should be interpreted with caution as there are potential problems with utilizing IV's that occur one year before DV; he provides justificatory reasons for conducting such an analysis.

Dependent Variable		Racial Threat (% black)	Ethnic Threat (% Hispanic)	Economic Threat (Gini coefficient)	Political Conservatism (% Romney)
Admission Rate	Hypothesis	$H_1$	$H_4$	$H_7$	$H_{11}$
Admission Rate	Predicted Sign	Ω	Π	+	+
Dopulation Data	Hypothesis	$H_2$	H5	$H_8$	H <sub>12</sub>
Population Rate	Predicted Sign	Π	Ω	+	+
Black, non-Hispanic Jail	Hypothesis	H <sub>3</sub>	No Prediction	H9	H <sub>13</sub>
Population Rate	Predicted Sign	Π	No Prediction	+	+
Hispanic Jail	Hypothesis	No Prediction	H <sub>6</sub>	$H_{10}$	H <sub>14</sub>
Population Rate	Predicted Sign	no riedicuon	Π	+	+

## APPENDIX B: SUMMARY OF HYPOTHESES AND PREDICTED SIGNS

*Note:* " $\Pi$ " denotes an inverted U-shaped curvilinear pattern where the IV is positively associated with the DV until a certain threshold is met, and then the IV becomes negatively associated with the DV; "+" = positive association.

## APPENDIX C: LIST OF U.S. STATES AND DISTRICT OF COLUMBIA WITH DETERMINATE SENTENCING OR INDETERMINATE SENTENCING FOR MOST CRIMINAL OFFENSES, 2012

State <sup>a</sup>	Determinate	Indeterminate	Statutory Citation
	Sentencing	Sentencing	
Alabama		•	Al. Code §13A-5-6, §13A-5-7, §15-22-28
Alaska		•	As. Code §12.55.125, §12.55.135, §33.16.010
Arizona	•		Ariz. Rev Stat § 13-701
Arkansas		•	Arkansas Code §5-4-401, §16-93-614
California	•		Cal. Penal Code § 1170
Colorado		•	Col. Rev. Stat §18-1.3-401, §17-2-204
DC	•		DC Code §24-403.01, §24-403.02
Florida	•		Fla. Code Title XLVII §921.002
Georgia		•	Ga. Code §17-10-1, §17-10-3, §17-10-5, §17-10-6.1, §42-9-40
Idaho		•	Idaho Stat § 18-112, §18-113, §19-2513, §20-223
Illinois	•		730 IL Complied Stat §5/5-8-1
Indiana	•		Ind. Code §35-50-6-1
Iowa		•	Iowa Code Title XVI §902.3, §903.1, §902.6
Kansas	•		Kan. Stat §21-6806, §22-3717
Kentucky		•	Kentucky Rev Stat §532.060, §532.020, §439.340
Louisiana		•	CCRP Art. 894.1, CCRP Art. 879, CCRP Art. 893, La. Rev Stat §15:574.4
Maine	•		ME 17-A §1252, 17-A §1254
Maryland		•	Correctional Services §7-301
Massachusetts		•	Mass Chapter 279 §24, Chapter 127 §133
Michigan		•	Michigan Code §769.8, §769.10, §791.234
Minnesota	•		Minn. Stat §244.01
Mississippi <sup>b</sup>		•	MS Code Ann §47-7-3

State	Determinate	Indeterminate	Statutory Citation
	Sentencing	Sentencing	
Missouri		•	Missouri Code Title XXXVII §558.011, §217.690
Montana		•	Montana Code Ann §46-18-20, Montana Code Ann §46-23-201
Nebraska		•	Nebraska Rev Stat § 83-1,110, § 83-1,105.01
Nevada		•	Nev Rev Stat §176.033, §213.120
New Hampshire		•	NH Rev Stat Title LXII §651:2, Title LXII §651-A:6
New Jersey		•	New Jersey Rev Stat §2C:43-6, §30:4-123.51
New Mexico	•		New Mexico Stat §31-18-15
New York <sup>c</sup>	•		NYS Penal Law §70.00, §70.45
North Carolina	•		NC General Stat §15A-1340.13
North Dakota		•	ND Code §12.1-32-0, §12-59-05
Ohio	•		Ohio Rev Code §2929.01, §2929.14
Oklahoma		•	Ok. Stat §21-9, Ok. Stat §21-10, §22-991a, §55-332.7
Oregon	•		Oregon Vol. 4, Title 14 §137.010, §137.635
Pennsylvania		•	Pa. Consolidated Stat. Title 18 §1103, Title 18 §1104, Title 42 § 9756
South Carolina		•	SC Code §16-1-20, §24-21-610
South Dakota		•	SD Code § 22-6-1, SD Code §22-6-2, SD Code §24-15-5
Tennessee		•	Tenn. Code Ann. §40-20-107, Tenn. Code Ann. § 40-28-115
Texas		•	Texas Code §12.21-12.23, Texas Code § 12.32-12.34, Texas Code § 508.145
Utah		•	Utah Code §76-3-203, § 77-18-4, §77-27-9
Virginia	•		VA Code, Title §19.2-295.2, §19.2-298.01
Washington	•		WA RCW §9.94A.505, §9.94A.728
West Virginia		•	West VA §61-11-16, West VA §62-12-13
Wisconsin	•		Wis Stat §973.01
Wyoming		•	WY Stat §7-13-201

<sup>a</sup> Omitted are state unified systems as these states were excluded from the Census of Jails, 2013 (i.e., Alaska, Connecticut, Delaware, Hawaii, Rhode Island and Vermont) (Minton et al., 2015; USDOJ BJS, 2016, Codebook). The Census included fifteen independently operated jails in Alaska, therefore this state is included in the table (Minton et al., 2015; USDOJ BJS, 2016, Codebook). Due to missing data on all Alaska counties, however, they were omitted from the analyses.

<sup>b</sup> Parole eligibility applies to all offenders never convicted of a violent crime ((§47-7-3(1)(g)). Because most offenses are parole eligible, Mississippi is coded as indeterminate. <sup>c</sup> New York's sentencing system has been described as "overly complex" (NY State Commission on Sentencing Reform, 2007, p. III). The difficulty in identifying New York as having a primarily determinate or indeterminate sentencing structure is noted elsewhere (see, e.g., NY State Commission on Sentencing Reform, 2007; NY State Permanent Commission on Sentencing, 2014). In brief, indeterminate sentencing generally applies only to non-violent felony, non-drug and non-sex felony offenses (NY State Commission on Sentencing Reform, 2007; NY State Permanent Commission on Sentencing, 2014), therefore it is coded as having a determinate sentencing structure.

Region 1: Northeast	Region 2: Midwest	Region 3: South	Region 4: West
Connecticut	Illinois	Alabama	Alaska
Maine	Indiana	Arkansas	Arizona
Massachusetts	Iowa	Delaware	California
New Hampshire	Kansas	District of Columbia	Colorado
New Jersey	Michigan	Florida	Hawaii
New York	Minnesota	Georgia	Idaho
Pennsylvania	Missouri	Kentucky	Montana
Rhode Island	Nebraska	Louisiana	Nevada
Vermont	North Dakota	Maryland	New Mexico
	Ohio	Mississippi	Oregon
	South Dakota	North Carolina	Utah
	Wisconsin	Oklahoma	Washington
		South Carolina	Wyoming
		Tennessee	
		Texas	
		Virginia	
		West Virginia	

### APPENDIX D: UNITED STATES CENSUS BUREAU REGIONS CLASSIFICATION

Source: U.S. Census Bureau (2010a)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Admission rate	1.0																				
2	Population rate	.06	1.0																			
3	Black pop rate <sup>a</sup>	.06	.15	1.0																		
4	Latino pop rate <sup>a</sup>	.07	.15	.32	1.0																	
5	Percent black	.02	.13	.12	07	1.0																
6	Percent black <sup>2</sup>	.02	.10	.07	10	.94	1.0															
7	Percent Hispanic	.04	.03	06	.20	11	11	1.0														
8	Percent Hispanic <sup>2</sup>	.04	.02	08	.13	10	08	.92	1.0													
9	Gini Index	.03	.09	.08	02	.42	.36	.16	.16	1.0												
10	Unemployment	01	.09	.17	04	.33	.31	02	.04	.22	1.0											
11	Poverty	.07	.13	.05	06	.49	.48	.18	.24	.57	.49	1.0										
12	Political (Romney)	.05	01	08	.01	36	39	10	16	22	25	13	1.0									
13	Jail capacity <sup>a</sup>	.02	.21	.46	.30	.22	.09	.16	.07	.20	.19	01	31	1.0								
14	Violent crime	.03	.14	.12	.09	.43	.33	.16	.11	.35	.24	.33	26	.41	1.0							
15	Property crime	.04	.12	.24	.15	.35	.25	.10	.05	.31	.22	.25	27	.53	.68	1.0						
16	Police strength <sup>a</sup>	.07	.08	.02	.11	.26	.20	.15	.09	.22	04	.08	13	.17	.33	.32	1.0					
17	Urbanization	.03	04	31	18	14	04	06	01	.02	05	.23	.27	66	25	39	09	1.0				
18	White_black	02	.04	.16	.08	.01	05	02	03	.11	.10	01	20	.42	.21	.24	01	31	1.0			
19	White_Hispanic	02	.05	.20	.16	.14	.07	.19	.08	.15	.05	01	34	.48	.27	.30	.06	36	.47	1.0		
20	South	.10	.13	.14	.01	.51	.38	.11	.09	.40	.19	.45	.20	.15	.25	.23	.17	07	-0.4	.01	1.0	
21	DSL	08	04	.03	.01	15	13	01	02	18	.09	21	23	.09	06	.04	01	14	.06	.10	35	1.0
<sup>a</sup> Var	iables are log_transfor	med																				

### APPENDIX E: CORRELATION MATRIX

<sup>a</sup> Variables are log-transformed

Dependent Variable		Racial Threat (% black)	Ethnic Threat (% Hispanic)	Economic Threat (Gini coefficient)	Political Conservatism (% Romney)
	Hypothesis	$H_1$	$H_4$	$H_7$	$H_{11}$
Admission Rate	Predicted Sign	Π	Π	+	+
	Outcome	Not Supported	Not Supported Not Supported		Supported
	Hypothesis	H <sub>2</sub>	H <sub>5</sub>	$H_8$	H <sub>12</sub>
Population Rate	Predicted Sign	Π	Π	+	+
	Outcome	Not Supported	Supported	Not Supported	Supported
	Hypothesis	H <sub>3</sub>		H9	H <sub>13</sub>
Black, non-Hispanic Jail Population Rate	Predicted Sign	Π	No Prediction	+	+
i opulation rate	Outcome	Not Supported		Not Supported	Not Supported
	Hypothesis		H <sub>6</sub>	H <sub>10</sub>	H <sub>14</sub>
Hispanic Jail Population Rate	Predicted Sign	Predicted Sign No Prediction		+	+
	Outcome		Supported	Not Supported	Supported

# APPENDIX F: SUMMARY OF HYPOTHESES, PREDICTED SIGNS AND OUTCOMES

*Notes*: " $\cap$ " denotes an inverted U-shaped curvilinear pattern where the IV is positively associated with the DV until a certain threshold is met, and then the IV becomes negatively associated with the DV; "+" = positive association.