Explaining Dimensions of State-Level Punitiveness in the United States: The Roles of Social, Economic and Cultural Factors

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Abstract

The US currently imprisons more citizens than any other Western nation. Over the last few decades the trend across the US has been to increase penalties for many offenses. This increase in state punitiveness has likely contributed to the existing state of mass incarceration. If there are certain factors that enhance a state's penchant for punitiveness, identifying these factors can offer a better understanding of mass incarceration and why certain policy choices are made. Drawing from theories of social control and racial threat, we test social and economic explanations for variations in state punitiveness across several dimensions. We find the effect of the independent variables is not uniform across the dimensions, suggesting there is a difference in how criminal justice policy decisions are made depending on the policy area in question. This finding begs for further investigation into the issue of state punitiveness.

The United States' incarceration rate has grown exponentially over the last few decades. In the 1960s and early 1970s, declines in prison populations, the dominance of the rehabilitation approach to criminal justice, and various theories regarding the eventual dispersal of the carceral function to the other major institutions of society, led many theorists to conclude that the use of the prison as a response to crime was in decline (Wacquant, 2005). However, since the mid-1970s the inmate population has increased remarkably (Cahalan, 1986; Guerino, Harrison, & Sabol, 2012; Stemen & Rengifo, 2011; Zimring, 2010). Often referred to as "mass imprisonment," the current trend in incarceration is characterized by the exponential increase in the use of imprisonment and the focus on groups, rather than individuals, as the subject of incarceration, particularly young black men (Garland, 2001). While one may argue that this increase in imprisonment is simply a response to an increase in crime, crime rates have leveled off and then declined during the time that incarceration rates continued to increase (Wacquant, 2005; Zimring, 2001). Rather, policy changes regarding what we classify as criminal behavior, how we punish certain crimes, how we understand the goals of corrections, and the ways in which we choose to pursue and prosecute suspected criminals, are greater factors in explaining the increase in imprisonment (Garland, 2001).

Many observers argue that federal and state government policies have taken a punitive turn, visible in the enhanced penalties for offenses, increased spending on law enforcement, and the retrenchment of the welfare state (Wacquant, 2005). Assuming there has been a change in the way governments respond to crime, what factors have brought about these changes? Increasing state punitiveness has significant import for mass imprisonment as it has likely contributed to, and now reinforces, the generally harsh response to crime that leads to the crowding of jails and prisons. Thus it is important to understand the factors contributing to this development.

Examining punitiveness at the state level is a worthy pursuit for several reasons. First, most incarcerated individuals are held in state facilities, making the state the government actor most directly

responsible for mass imprisonment. Second, while it appears that punitive responses to crime have increased nationally, there is considerable variation among states (Barker, 2009; Brown, 2013; Jacobs & Carmichael, 2001; M. Lynch, 2011a, 2011b; Page, 2011; Pfaff, 2008; Rengifo & Stemen, 2012; Stemen & Rengifo, 2011; Unnever & Cullen, 2010; Yates & Fording, 2005; Zimring & Hawkins, 1991). For example, in June 2008 the imprisonment rates (per 100,000 residents) varied from 305 in the Northeast, 395 in the Midwest, 437 in the West, and 559 in the South (West & Sabol, 2009). Maine had the lowest rate (133) and Louisiana had the highest rate (858). As noted by Gottschalk (2011, p. 484), "state-level variation in incarceration rates is still enormous ... This great variation and the fact that crime control in the United States is primarily a local and state function, not a federal one, suggest that local, state, and perhaps regional factors might help explain the sharp punitive turn in U.S. penal policies." Determining the systematic reasons for this variation is the purpose of this study.

Prior research on state punishment policy has looked at factors affecting the adoption or implementation of specific criminal justice policies (see, for example, Williams, 2003), and there is a body of research that examines variation in punitiveness as a specific concept, typically operationalized as state incarceration rates (Jacobs & Carmichael, 2001; Ouimet & Tremblay, 1996; Yates & Fording, 2005). However, we propose, as have others (Frost, 2008; Tonry, 2007), that punitiveness is a multi-dimensional concept and cannot be captured by incarceration rates alone. For example, a state may incarcerate a larger proportion of its population relative to other states, but sentences may be significantly shorter (see, for example, Frost, 2008). Which of these scenarios—propensity to incarcerate or lengthy sentences—should be considered more punitive? Or, a state may have punitive criminal statutes but not implement them to the same degree as other states.

Our study uses a measure of punitiveness developed by Kutateladze (2011) that accounts for different types of punitiveness by using a variety of state level policies to measure and rank states according to several indicators. We use this measure of punitiveness to create a one-period cross-

sectional dataset that allows for examination of state-level punitiveness, measured across the years 2002-2007, in relation to social/cultural, economic, and political factors that we posit may influence punitiveness levels. We use multivariate regression to examine factors explaining variations in Kutateladze's indicators across states.

This study is important for several reasons. The punitive response to crime has contributed to mass imprisonment. This phenomenon is likely unsustainable; not only is it costly to taxpayers, but it also creates a population of "internal exiles," people who are citizens of this country but not contributing members to society and who pose a governance challenge to the state (Simon, 2007, p. 175). Mass imprisonment also becomes a moral problem because of the way in which it disproportionally affects minorities generally and young black men in particular. Finally, punitiveness becomes a problem for democracy. Involuntary contact with the criminal justice system leads citizens to be less trustful of government and decreases citizen participation through lower voter turnout and felon disenfranchisement (Weaver and Lerman ,2010). Identifying those factors that enhance a state's penchant for punitiveness offers a better understanding of the nature of mass incarceration and why certain policy choices are made.

Defining and Measuring Punitiveness

Punitiveness is an elusive concept. Matthews (2005, p. 178) describes it as "under-theorized." As Tonry (2007, p. 5) explains, "Usually the thing being described is left vague; what is usually meant is an unspecified mix of attitudes, enactments, motivations, policies, practices, and ways of thinking that taken together express greater intolerance of deviance and deviants, and greater support for harsher policies and severer punishments." Punitiveness has been described as involving excessive punishment (Matthews, 2005), harshness and severity (J. P. Lynch, 1988; M. Lynch, 2011b; Roberts, Stalans, Indermaur, & Hough, 2003; Whitman, 2003), cruelty (Simon, 2001), and penal harm (Clear, 1994). Cohen

(1994, p. 67) provides a more specific definition of the punitive approach: "It entails the infliction of pain (loss, harm, suffering); it must always identify an individual held responsible for the breaking of abstract rules (notably legal rules); it is moralistic in essence; it is coercive rather than voluntary and... it involves the transfer of social control functions to a third party" such as the criminal justice system.

Kutateladze (2011, p.155, emphasis in original) defines state punitiveness as "a combination of an official political state's ideologies, policies, and programs of dealing with *objects* of the criminal justice system," where "objects" include those individuals who are suspected of committing a crime, arrested for a crime, prosecuted for a crime, sentenced for a crime, and under supervisions after serving time for a crime. Kutateladze's approach to punitiveness ranks states according to their degree of punitiveness relative to other states, which implies that those states that rank toward the bottom are comparatively non-punitive. Therefore the term punitiveness remains broad enough to include both punitive and non-punitive policies and actions. We adopt this definition to remain consistent with the measure of punitiveness used in the study.

Prior studies have used a variety of different measures of punitiveness. By far, the most common state level measure has been incarceration or imprisonment rates. While this measure lends itself well to statistical analysis, it only captures one aspect of state punitiveness. Frost (2008) measures state punitiveness in two ways: (1) the propensity to imprison convicted offenders, and (2) the intensity of punishment, or average length of imprisonment. Comparing corrections expenditures has been used as another way to test state preferences for punishment (Stucky, Heimer, & Lang, 2007). While these measures may indicate a state's reliance on imprisonment, they do not necessarily capture lawmaker intent when crafting crime policy and leave out other areas of criminal justice policy that may have significant punitive impact on the targeted population. Other studies have examined states' adoption of a particular criminal justice policy. For example, several studies have looked at the adoption of "three strikes," truth-in-sentencing, juvenile transfer, and capital punishment-related policies across states

(Allen, Pettus, & Haider-Markel, 2004; Grossback, Nicholson-Crotty, & Peterson, 2004; Jacobs & Carmichael, 2002). Studies have also looked at other aspects of state punishment policies, such as felon disenfranchisement laws and other post-incarceration sanctions associated with felony conviction (Ewald, 2012).

To date, Kutateladze (2011) appears to offer the most inclusive index of state punitiveness. Using 44 variables, he creates five indices of state punitiveness, including incarceration rates, political and symbolic punishments, punishments for "immorality" crimes (i.e., prostitution, gambling), conditions of confinement, and juvenile justice. These rankings indicate that while a state may score relatively high for one dimension of punitiveness, it can score quite low in another area. For example, Maine scores very low on the political and symbolic punishment dimension but much higher on the incarceration dimension. (The punitiveness index is discussed in further detail below.) Such differences, along with prior work examining the complexities of state punitiveness (Frost, 2008; Tonry, 2007) suggest that to better understand state punitiveness it is necessary to consider different ways in which a state can be punitive. Not only may a state be punitive in different ways and exhibit varying degrees of punitiveness depending on the policy area in question, but it may also be the case that not all types of punitiveness can be explained by the same factors. Thus, one purpose of this study is to apply traditional arguments of state punitiveness to significantly different policy areas to determine whether different factors drive different types of punitiveness. The five dimensions included in this study are not exhaustive; however, they serve as a starting point to explore varying types of punitiveness. These dimensions will be discussed in further detail in the methods section.

What Factors Account for Variation in Punitiveness?

National trends have shown significant growth in prison populations, but it is inaccurate to consider these imprisonment trends as "a unitary phenomenon" (Zimring, 2010, p. 1233) since "national

figures hide variation in rates of growth across states and over time" (Stemen & Rengifo, 2011, p. 175). States vary significantly in their responses to crime. Zimring and Hawkins (1991, p. 151) have found that although imprisonment rates across states have fluctuated over time, with current trends showing an increase in incarceration across most states, states have generally maintained "the same position relative to other states in imprisonment rate over time." This suggests that, while the tough on crime era may affect states across the board, there remain some relatively stable distinctions between states that may account for this variation.

Numerous theories attempt to explain the rise in punitiveness at the aggregate level.
Structurally based social control theories argue that punitive crime measures represent a shift in how the state governs socially marginal groups that has developed as a response to social and economic changes in society (Beckett & Western, 2001; Garland, 2001; Wacquant, 2005). Racial threat theories hold that prison is a means to control the black population, which is viewed generally as a potential threat to the status quo. Racial and ethnic intolerance and the association of crime with black males are shown to affect individual attitudes towards punitiveness (Unnever & Cullen, 2010), indicating that there may be reason to believe that punitiveness is linked to race at both the macro and micro levels. That black males are incarcerated at much higher rates relative to their crime rates also provides prima facie support for this line of argument.

Others see politics as a primary driving force of punitiveness (Simon, 2007; Yates & Fording, 2005) or as an additional factor complimenting and reinforcing the state's desire to maintain order (Stucky et al., 2007). Still others argue that variations in punitiveness cannot be explained by structural or political theories alone and stress the importance of examining state level variation in terms of the interactions between civil society and cultural characteristics and the actions of governing institutions and interest groups (Barker, 2006; Campbell, 2011; M. Lynch, 2011b; Page, 2011).

¹ In this context punitiveness can be understood as a broad concept involving unnecessary or excessive punishment.

In an attempt to develop a model to predict state punitiveness, this exploratory study borrows from several of these theories to develop various explanations for state punitiveness. While several of the studies cited focus on variations in punitiveness at the individual level, one assumption here is that those characteristics—i.e., racial intolerance, political conservatism—that help predict punitiveness in an individual will, when examined in the aggregate, help predict a state's punitiveness as well.

Furthermore, although we are treating punitiveness as a multi-dimensional concept for the analysis, the literature on punitiveness often treats it as a broad idea relating to excessive punishment, typically (but not always) in the form of incarceration rates. Given the exploratory nature of this research, the study purpose is to determine whether the factors thought to explain punitiveness generally still apply when the concept is treated in a more nuanced, multi-dimensional manner. We expect that the factors we discuss next will impact state-level punitiveness, but to varying degrees.

Possible Predictors of State Punitiveness

Several factors have been used to predict preferences for punitiveness at the individual and state levels. These factors can be organized into three categories of explanations: (1) racial threat, social control, and cultural explanations; (2) economic explanations; and (3) political explanations.

² The literature on punitiveness and state incarceration rates discusses a multitude of variables that may offer explanations for variations in state behavior, including Republican dominance in elected positions (Jacobs & Carmichael, 2001; Yates & Fording, 2005); the religiosity of the citizenry (Jacobs & Carmichael, 2001); unemployment rates (Chiricos & Delone, 1992; Rusche & Kirchheimer, 1939); size of black representation in state legislatures (Stucky et al., 2007; Yates & Fording, 2005), and whether the state is located in the South (Goldfield, 1990; Unnever & Cullen, 2010). However, initial analyses found these variables to lack significance; due to space limitations they have been omitted from the literature review.

³ While most studies at the individual level have measured punitiveness using multiple indicators, the majority of studies at the state level have measured punitiveness using a single indicator, usually incarceration rates. Thus, the assumption here is that, as incarceration rates are often used as a proxy measure for overall punitiveness, and as this measure is certainly one aspect of punitiveness, a relationship between various state-level factors and incarceration rates should also hold for a more encompassing measure of punitiveness.

Racial threat, social control, and cultural explanations. Several studies have found evidence of a relationship between race and greater punitiveness, both at the individual and state levels (Beckett & Western, 2001; Bobo & Johnson, 2004; Jacobs & Carmichael, 2001; Stucky et al., 2007; Unnever & Cullen, 2010). Evidence also points to the disproportionate effects mass imprisonment has had on minority groups, especially young black males, who are incarcerated at a much higher rate than any other demographic (Garland, 2001; Wacquant, 2005). Racial threat theory holds that large and/or growing minority populations are perceived as threatening by dominant groups. The response then is to contain and control these groups. Crime particularly is viewed by the public in racial terms, and black males have come to represent the predatory street criminal in media depictions and the minds of many citizens (Unnever & Cullen, 2010). Thus, at the individual level, white citizens may be more likely to support punitive crime policies if they think they will be more likely to target a population they fear or dislike (Bobo & Johnson, 2004; Unnever & Cullen, 2010).

At the state level, there is evidence indicating that states with larger black populations have higher rates of incarceration (Beckett & Western, 2001; Jacobs & Carmichael, 2001). States that have smaller black populations but experience a significant increase over time are also more likely to increase spending on corrections than states that experience an increase in an already high black population, suggesting that the racial threat is perceived as greater in states that are unaccustomed to large minority populations (Stucky et al., 2007). Similarly, Soss, Schram, Vartanian, and O'Brien (2001) find that states that have a higher percentage of black citizens on their welfare rolls are more likely to adopt stricter rules regarding access to government assistance. This finding is consistent with findings that states with larger black populations incarcerate at higher rates because welfare spending is typically regarded as a more generous alternative than imprisonment for addressing the challenges associated with marginalized populations (Beckett & Western, 2001). In this context the racial threat and social

control hypotheses act quite similarly; a large black population is viewed as undesirable and as a threat that must be controlled to maintain the preferred social structure.

As indicated above, racial threat concerns are often related to more general arguments regarding social control. All states have some element of deviance which they must confront. States may choose to deal with issues of deviance by spending money to address its underlying causes, typically by investing in welfare and educational institutions. Conversely, a state may choose to deal with deviance by enhancing the resources and authority of the penal system. Stucky et al. (2007) find that states that invest more in education and welfare spend less on corrections. Welfare and penal institutions both represent means of addressing deviant and marginal populations. Beckett and Western (2001) find that states with more generous welfare programs have lower rates of incarceration, and that states with more limited welfare programs have higher rates of incarceration, lending support to the hypothesis that a trade-off takes place between investment in social and penal institutions. Thus an important social control explanation to explore is the relationship between state welfare generosity and punitiveness.

The education level of a state's residents also may have an effect on the punitiveness of that state. At the individual level, there have been studies supporting a negative relationship between education and support for punitiveness (Bobo & Johnson, 2004; Hogan, Chiricos, & Gerz, 2005; Unnever & Cullen, 2010). This may be because higher educated individuals are more open to new information regarding various issues, including crime policy (Bobo & Johnson, 2004). It may also be that with education comes a greater tolerance for difference, as well as greater confidence in one's own prospects for economic advancement, negating the potential effects of the racial threat and social control hypotheses. Higher educated individuals may also be more accepting of the structural arguments for the causes of crime, leading them to favor remedies that address underlying issues such as poverty. At the same time, higher educated individuals also tend to engage more frequently in the

democratic process (Hillyguys, 2005), and if citizen engagement does temper a state's punitiveness (Barkley, Henry, & Nair, 2006), then an educated citizenry may play a part in determining a state's approach toward crime.

Economic explanations. Prior research has shown a positive relationship between poverty rates and punitiveness (Beckett & Western, 2001; Yates & Fording, 2005) There may be both an economic and a social control explanation for this relationship. People who are poor may turn to crime to make a living. If so, then states may feel the need to enact stricter punishments to deter this behavior. On the other hand, it may be that incarceration is used as a way to control an underclass that presents a potential threat to the established social and economic order. These explanations do not need to be mutually exclusive; it is quite possible that both economic and social control mechanisms are at work. It may also be that, in line with the political arguments made above, lower income individuals feel more threatened by crime than their wealthier counterparts, making punitiveness a preference in states where poverty is higher and average income is lower. In line with the economic argument, state median income is also important to include as an indicator of state economic health. States in which citizens enjoy higher incomes may be less punitive because fewer citizens need to turn to crime as a way to succeed economically.

Political explanations. Several studies have suggested a linkage between conservative political ideology and punitiveness. Individuals who identify with a conservative ideology have been shown to be more likely to support a punitive response to crime (Bobo & Johnson, 2004; Hogan et al., 2005; Johnson, 2009; Unnever & Cullen, 2010). At the state level, a conservative citizenry has been a significant predictor of state imprisonment rates (Jacobs & Carmichael, 2001). Elected officials who identify as

conservative are also more likely to support punitive crime policies (Jacobs & Carmichael, 2001; Yates & Fording, 2005).⁴

Prior research has also found that public participation may temper state punitiveness. In a case study of three US states, Barker (2006) finds a relationship between high levels of civic engagement and lower rates of incarceration. Emphasizing the importance of the relationship between civic society and political institutions, she suggests that this effect may be because citizens who participate more in the democratic process are also more likely to limit the state's repressive powers. While the findings of this study are not generalizable to the rest of the states, if such a relationship does exist between civic engagement and state imprisonment rates, then perhaps the political explanations for state variation in punitiveness are more complex than simply differences in ideology and party control.

Controls. One of the arguments made in defense of the growing rate of incarceration is that it is in response to rising crime rates. However, historical data actually show that the crime rate has fluctuated over the past three decades and has been declining since the 1990s, even as incarceration rates have increased steadily over that same time period (Yates & Fording, 2005). Prior studies have shown that although the violent crime rate has a significant positive impact on levels of incarceration (Beckett & Western, 2001; Jacobs & Carmichael, 2001), property crime rates may actually have a significant negative impact, suggesting that the connection between crime rates and incarceration is a tenuous one (Beckett & Western, 2001). Indeed, Ouimet and Tremblay (1996, p. 121) suggest that states "do not attempt directly to adjust their imprisonment rates (supply of punishment) to their crime rates (demand of punishment) but worry instead about whether they can be blamed for being either more punitive or less punitive than other states." Nevertheless, state violent and property crime rates should

⁴ There is an extensive literature on the relationship between conservative political ideology and punitiveness. However, as initial analyses did not find these variables to be significant they have been omitted from discussion for space concerns.

be controlled for in order to address the argument that a state's approach towards crime is a reaction to crime occurrence.

Data and Methodology

Dependent Variables

The dependent variables in this study are five variables that measure different dimensions of state punitiveness. These measures come from the work of Kutateladze (2011), who created an index for state punitiveness using 44 different criterion indicators representing five different dimensions of punitiveness (see Figure 1 for the five dimensions and their corresponding elements). Data for these criterion indicators were gathered primarily for the years ranging from 2002 to 2007. However, for a few variables concerning average annual arrest rates (i.e., average annual arrests for murder and nonnegligent manslaughter; average arrests for violent offenses, etc.) data from 1995 to 2006 were used. While efforts were made to use the most recent available data and to keep the years as consistent as possible, data limitations required some variation in the years used. The raw values for these criterion indicators were adjusted or standardized using various anchors, ranked, and then converted into ordinal values ranging from 0 (minimal punitiveness) to 4 (high punitiveness) representing the quintiles within which the states were ranked. States in the first quintile were assigned scores of 0, those in the second quintile were assigned scores of 1, and those in the third, fourth and fifth quintiles were assigned scores of 2, 3, and 4, respectively. For each of the five dimensions of punitiveness, the scores for the respective criterion indicators were averaged to calculate the punitiveness score for the dimensions. Table 1 presents the five dimensions of punitiveness for the states.

For an example of how punitiveness was measured by Kutateladze (2008), one can look to the variable for arrests for drug abuse included in the punishing immorality dimension for the state of Alabama. The arrests for drug abuse criterion indicator provides an aggregate number for drug sale,

manufacture, and possession. It is operationalized as the number of times that persons of all ages were arrested for drug abuse violations in the given year (2005) divided by the state population (in thousands). For Alabama, the number of arrests for drug abuse violations was 15,704 and the state population (in thousands) was 4,631. The resulting arrest score value was 3.39, which put the state of Alabama in the second quintile (along with 9 other states). For Alabama, the indicator for arrests for drug abuse was assigned a value of 1. Arrests for drug abuse is a criterion indicator for the punishing immorality dimension of punitiveness. The other criterion indicators for this dimension are statutory rape and age consent, arrests for prostitution, arrests for gambling, and arrests for drunkenness, which for Alabama take on values of 0, 1, 3, and 3, respectively. Averaging the scores across the five criterion indicators for punishing immorality gives Alabama a value of 1.6 for the punishing immorality variable.

Figure 1. Dimensions and Criterion Indicators of State Punitiveness Unable to make changes in figure-- Under "Political & Symbolic Punishment", there needs to be a space between "Life without possibility of parole" and " Prison sentence of 20yrs to life. Under "Incarceration", 4th down, it should be "Ratio of imprisonment to probation." Under "Conditions of Confinement", "Inmate Deaths" should be "Inmate deaths."

Overall Punitiveness

Punishing

Immorality

Political & Symbolic Punishment

Incarceration

Conditions of Confinement

Juvenile Justice

Life without possibility of parole Prison sentence of 20 yrs to life

Application of death penalty

Frequency of executions

Number of death row inmates

Use of sex offender registries

Application of felon disenfranchisement laws

Size of disenfranchised population

Three-strikes laws' application and sentence

Number of three strikes prisoners

No. of prison & jail inmates

Prison admission rates

Prison release trends

Ratio of imprisonment & probation

Avg. incarceration terms for all offenses

Avg. terms served for voluntary/nonnegligent manslaughter

Avg. terms served for vehicular & nonvehicular manslaughter

Avg. terms served for forcible rape

Avg. terms served for armed robbery

Avg. terms served for burglary

Avg. terms served for auto theft

Avg. terms served for the possession & use of marijuana

Avg. total max term imposed for all offenses

Avg. prison term expected to be served for all offenses

Statutory rape & age of consent

Arrests for prostitution

Arrests for drug abuse

Arrests for gambling

Arrests for drunkenness

Prison overcrowding

Operating costs per inmate

Food service costs per inmate

Medical care costs per inmate

Inmate deaths

Inmate-on-inmate & staff-on-inmate sexual violence

Lawsuits filed against agencies & staff

Age of juvenile court jurisdiction

Juvenile transfer laws

Juvenile inmates in adult prisons

State	Political and Symbolic Punishment	Incarceration	Punishing Immorality	Conditions of Confinement	Juvenile Justice
Alabama	2.82	2.67	1.6	2.43	2.83
Alaska	1.27	1.13	1.4	1.14	2.67
Arizona	1.91	2.6	2.2	1	2.5
Arkansas	2.91	1.33	2	2.14	2.17
California	2.36	1.47	3.8	1.71	1.67
Colorado	2	1.93	2	2.29	2.17
Connecticut	2	1.6	2	2.14	2.33
Delaware	2.55	0.87	3	2.14	3
Florida	3	2.53	3.8	1.43	2.83
Georgia	2.91	2.6	2.6	1.86	2.67
Hawaii	0.73	2.27	1.6	2	1.33
Idaho	1.82	2.4	1.6	2.71	1.2
Illinois	1.64	1.67	2.8	2.71	2.67
Indiana	2.18	2	2.8	2.14	2.5
lowa	1.45	2.07	1.6	2.29	2.17
Kansas	1.82	3.6	1.2	2.14	2
Kentucky	2.64	1.93	2.6	2	1.17
Louisiana	2.04	1.87	2.0	2.57	2.33
Maine	0.55	2.73	1	0.57	0.83
Maryland	2.18	2.67	2.8	2.43	2
Massachusetts	0.82	3.13	1.6	2.71	2.33
Michigan	0.82	2.67	2	0.86	2.53
-	0.55	0.67	1.8	1.43	1.83
Minnesota Mississippi	2.91	3.07	2.4	2.14	2.17
Missouri	1.73	1.53	0.6	2.14	2.17
Montana	2.18	3.47	2.6	2.57	1.5
Nebraska		1.6	2.4	1.86	2.67
Nevada	2.09	1.8	1.4	1.71	2.5
	1.09	2.07	1.4	2.14	1.17
New Hampshire	1.09	1.4	1.8	1.86	1.33
New Jersey New Mexico	1.82	2.73	1.6	1.14	1.67
New York	1.82	1.87	1.6	2.14	2.5
North Carolina	2.18		2.2		2.17
North Dakota	1.27	1.33		1.83	
		0.8	1.8	1.43	1.67
Ohio	2.09		1.8	1.71	2.67
Oklahoma		2.53	2.6	1.57	1.83
Oregon	1.55	1.6	1.8	1.86	1.17
Pennsylvania	1.91	3.13	2.4	1.29	2.17
Rhode Island	0.73	0.47	1.2	1.14	2.5
South Carolina	2.73	2.67	2.8	1.86	3.17
South Dakota	1.64	2.13	1	1.71	2
Tennessee	2.82	1.53	2.4	1.57	2 2 17
Texas	2.27	3	2	1.86	2.17
Utah	1.55	1.4	1.8	2.5	1.5
Vermont	1 2.72	1.07	1	2.29	1.33
Virginia	2.73	2.4	2.8	1.86	2.67
Washington	2.45	1	1.6	2	1.83

West Virginia	1.36	1.6	1.4	1	1.67
Wisconsin	1.27	1.6	1.8	2.71	1
Wyoming	1.82	2.73	2.2	1.86	1.83

Independent Variables

Data for all explanatory variables are gathered for the year 1999, except for variables concerning participation in national elections, for which data was gathered for the year 2000. The year 1999 was chosen because it falls just outside the range for the indicators used to create the punitiveness measures, which were built using data primarily from 2002 to 2007. In this way we can have more confidence in the causal direction between the explanatory variables and the dependent variable. While this may result in a long lag time for those variables for which data was collected from later years, the composite measure does not allow for separation of dependent variables by year of study. Although this is a limitation of the study, the variables of interest here, such as poverty rate, black population size, and median income, tend to remain relatively stable over short periods of time. In this way the results should not be overly affected by potentially long lag times.

This study uses voter participation (measured as percentage of eligible voters who voted in the 2000 presidential election) as a proxy for citizen engagement. The economic factors are poverty rates and state median income. The social control variables include the generosity of a state's welfare spending, which is measured by the size of the state's welfare payments per person living in poverty, and the proportions of a state's population that are black, and that are high school graduates. Data for all of these variables were obtained from the U.S. Census Statistical Abstracts. Data for state violent and property crime rates were collected from the FBI's Uniform Crime Reporting Statistics database.

⁵ Admittedly this is a limited measure of citizen engagement; there are many other ways in which citizens can be involved in their community and with their government, such as through civic leagues, issue specific or general activism, and participation on citizen consultation boards.

skewness and kurtosis. As a result, the variables measuring the percent of the population that is black, percent of the population with a high school diploma, and welfare payments were transformed by taking their respective square roots. The variable operationalization and descriptive statistics are provided in Table 2.

Table 2. Variable Operationalization and Descriptive Statistics (n=50)

Variable Name	Description	Mean	Std. Dev.	Min	Max
Political & Symbolic Punishment	Forms of punishment with overt political or symbolic characteristics	1.875	0.700	0.550	3.000
Incarceration	Prison admissions and release trends; average time served for various crimes	2.039	0.759	0.470	3.600
Punishing Immorality	Laws that criminalize non-violent behavior that concerns traditional notions moral character, such as sexual behavior	2.000	0.658	0.600	3.800
Conditions of Confinement	Factors that affect quality of prison life such as crowding, threats of violence, health care access	1.892	0.516	0.570	2.710
Juvenile Justice	Degree to which juvenile justice system emphasizes punishment or rehabilitation	2.055	0.571	0.830	3.170
% Voted	% of eligible voters who voted in the 2000 presidential election	54.806	7.054	42.900	69.500
% Poverty	% of population living at or below the poverty rate	11.342	3.211	5.700	20.700
Median Income	Median income in thousands	41.371	6.347	29.696	55.146
Welfare Payments	Welfare payments per person living in poverty	7316.620	2917.403	3287.000	15997.000
% Black	% of population that is black	10.214	9.608	0.340	36.470
% High school graduates	% of population with high school diploma	81.960	4.369	72.900	88.300
Violent Crime Rate	Violent crime rate per 100,000,000 residents	0.435	0.204	0.067	0.854
Property Crime rate	Property crime rate per 100,000,000 residents	3.673	0.843	2.185	5.352

⁻

⁶ A power ladder was used to determine the appropriate transformation. While taking the square root or the log of the data produced similar results in most cases, for the welfare generosity measure, the log transformation did not sufficiently normalize the variable. Square roots were taken for all variables to keep the transformations consistent.

Analysis and Results

Our analysis involves regressing multiple dependent variables measuring state punitiveness on a series of independent variables representing racial, social control, cultural, political, and economic factors. Specifically, we run multivariate regression by simultaneously estimating the five indicators of the different dimensions of state punitiveness using seemingly unrelated regression. The seemingly unrelated regression approach allows for the error terms of the five models to be correlated, which is appropriate given that all five dependent variables are measures of the same underlying construct (punitiveness).⁷

We simultaneously regressed the five dependent variables against four categories of independent variables that have traditionally been used in the extant literature. These included political variables (citizen ideology and citizen engagement), economic variables (unemployment, poverty, and median income), social control variables (percent black, percent high school graduates, percent evangelical, percent black legislature, and welfare spending), and control variables (violent crime and property crime rates and percent population living in urban areas). However, not all variables were retained in our final analysis.

Given the small sample size (50 states) and concerns over degrees-of-freedom in the analysis, we first ran a full model with the preliminary 13 independent variables followed by a more parsimonious model that included the eight independent variables that were significant at the p<0.20 level in the initial model. The models for political and symbolic punishment, incarceration, punishing immorality, and juvenile justice were statistically significant at the p<0.05 level. The model for conditions of confinement, however, was not statistically significant (p=0.210) and only explained 6 percent of the variance in the dependent variable. While the omission of the remaining independent variables may

⁷ The correlations between the error terms from the seemingly unrelated regression models ranged between - 0.104 and 0.403 and were statistically significant at p<.10, suggesting that this approach is indeed appropriate.

prompt concerns regarding an underspecified model and a negative effect on the explanatory power of the model, we believe the benefits of parsimony outweigh these concerns. Furthermore, analysis of the correlations between the variables dropped from the models and those included in the final models suggest that omitted variable bias is not a significant problem.

As shown in Table 3, the poverty rate and welfare spending are the dominant negative drivers of state punitiveness in terms of political and symbolic punishment. For the incarceration dimension, citizen engagement and property crime have a statistically significant and negative impact on state punitiveness, while the percent of population that is black and the percent of population with high school diploma have a significant and positive effect. The violent crime rate was a significant and positive driver of the punishing immorality dimension of state punitiveness. For juvenile justice, the violent crime rate and the percent of the population that is black are positive and statistically significant. Each model is discussed in further detail below.

Table 3. Results of Multivariate Regression for the Five Dimensions of Punitiveness (N=50)

	5 1 1							I	1	
	Political									
	and						Conditions			
	Symbolic				Punishing		of		Juvenile	
	Punishment		Incarceration		Immorality		Confinement		Justice	
									Coeff.	
	Coeff.		Coeff.		Coeff. (Std.		Coeff.		(Std.	
	(Std. Error)	Р	(Std. Error)	Р	Error)	Р	(Std. Error)	Р	Error)	Р
% Voted	009		055		001		004		011	
% voted	(.019)	.618	(.025)	.028	(.023)	.997	(.019)	.821	(.016)	.508
0/ Dayorty	121		.052		067		.026		059	
% Poverty	(.042)	.004	(.057)	.363	(.052)	.193	(.044)	.562	(.037)	.114
Median Income	032		042		.006		.013		030	
Median income	(.020)	.107	(.027)	.118	(.024)	.790	(.021)	.524	(.018)	.085
% Black (square	.164		.304		.074		.218		.223	
root)	(.086)	.058	(.115)	.009	(.105)	.478	(.089)	.015	(.076)	.004
% High school	272		3.375		203		1.174		.970	
(square root)	(.792)	.731	(1.063)	.002	(.968)	.834	(.824)	.156	(.702)	.168
Welfare										
Payments (square	024		015		016		009		002	
root)	(.008)	.003	(.011)	.162	(.010)	.110	(.008)	.290	(.007)	.771

Violent Crime	.400		.135		1.335		719		1.458	
Rate	(.562)	.478	(.754)	.858	(.686)	.053	(.585)	.220	(.498)	.004
Property Crime	.033		323		121		110		088	
Rate	(.121)	.782	(.162)	.047	(.147)	.414	(.126)	.382	(.107)	.413
Constant	8.832		-22.794		5.337		-8.484		-4.962	
Constant	(6.634)	.185	(8.902)	.011	(8.101)	.511	(6.901)	.220	(5.874)	.399
Adjusted R ²	0.526		0.274		0.200		0.058		0.442	

Political and Symbolic Dimension

The model for the political and symbolic dimension of punitiveness was significant at the p<.05 level and explained 52.6 percent of the variance. This was the strongest of the five models. The poverty rate and welfare generosity of the state were significant negative predictors. The common theme shared by the factors making up this dimension is an emphasis on very salient and public forms of punishment for offenders, such as capital punishment, life sentences, use of three strikes use, and sex offender registries. The findings here indicate that states with lower poverty rates and a less generous welfare system are more likely to make use of symbolic forms of punitive policy. While this relationship was expected for welfare generosity, poverty rates were expected to have a positive influence on punitiveness. With respect to welfare generosity, these findings lend support to the argument that states make a decision regarding whether to deal with marginal populations through the penal system or the welfare system. Those states that choose to address poverty through greater public assistance will be less likely to try to contain marginal populations via the penal system. Moreover, to the extent that a state does preside over a relatively generous welfare system, there may be less need for elected officials to emphasize punitive policies for political purposes, as marginal populations are seen as less threatening or more deserving of assistance in comparison to sentiments in less generous states.

While the poverty rate was a significant predictor, it was not in the expected direction. Prior research suggests that states with higher rates of poverty would also be more punitive (Beckett and

Weston, 2001; Yates and Fording, 2005), coinciding with the social control argument. However, we find that states with higher rates of poverty are actually less punitive in political and symbolic punishment.

One reason for this could be that in states where on average citizens enjoy a higher level of wealth crime is seen as more of a threat to economic and physical wellbeing. States with lower rates of poverty may try harder to control this population to ensure that the status quo is maintained, whereas in states with high levels of poverty protecting the status quo is less of a concern. Alternatively, states with less poverty may also enjoy greater revenues and thus be able to spend more money on crime control. It may also be that the poverty rate is not a sufficient measure of social control. The poverty rate does not indicate the level of inequality in a state. States may have a high rate of poverty but relative equality in that most of its citizens are either poor or of modest means. In that case, less punitiveness seems quite plausible, either because the state does not have the tax base to pursue such policy or because controlling marginal populations is not a serious concern. The relationship between poverty, inequality, and punitiveness warrants further study.

Black population size almost reached significance, with a p-value of .058. The relationship was in the expected positive direction. This finding, while not statistically significant, supports the social control argument that blacks are perceived as a potential threat requiring coercive controls. The very public and salient nature of the political and symbolic punishments allows elected officials to prove to citizens that they are "doing something" about crime. That young black males are particularly associated with crime has been well documented (see, for example, Chambers, 2011). Thus political and symbolic punishments may be one mechanism for elected officials to use as evidence of their role in controlling a threatening population.

Juvenile Justice

The model for juvenile justice was significant (p<.05) with an R-squared value of .442, making it the second strongest of the five models. The dimension for juvenile justice attempts to capture the treatment of juveniles in the justice system. Juvenile incarceration rates and overcrowding, transfer laws, the age of juvenile court jurisdiction, and the incidences of juveniles serving time in adult prison or life sentences, are all indicators of how juveniles are perceived in terms of their culpability for the offense committed and their potential or deservingness for rehabilitation. Violent crime rates and the size of the state's black population were both significant and positive predictors of juvenile justice. Both of these relationships are in the expected direction. The violent crime rate is found to be a significant and positive predictor of juvenile justice. This supports the traditional argument that harsh crime policies are a reaction to the problem of crime. This relationship may also reflect a tendency among citizens and the media to overestimate the extent of violent crimes committed by juveniles (Greenwood & Turner, 2011).

States with relatively large black populations also tend to be more punitive in their juvenile justice policies. This supports the social control argument that punitive policies are used as a way to contain a threatening population. Blacks and juveniles may both be viewed as threatening populations and young blacks may be seen as especially threatening. Punitive juvenile justice policies may also have a relatively high degree of public salience (for example, juvenile transfer laws have been used in studies that have asked individuals about their punitive preferences; See Hogan et al., 2005; Johnson, 2009), making them attractive as policy solutions for dealing with threatening populations.

Incarceration

This model for the incarceration dimension of punitiveness was significant at the p<.05 level, and explained 27.4 percent of the variance, making it considerably weaker than the models for political

and symbolic punishments and juvenile justice. States with more high school graduates, a larger black population, less citizen engagement, and lower levels of property crime are less punitive in terms of use of incarceration, which in this context refers to average sentence lengths for various crimes and prison admission and release trends. The relationships between the size of the black population and citizen engagement and punitiveness were expected, but the relationships between property crime rates and high school graduation rates and incarceration were not.

The findings regarding the effects of black population size suggest that the social control argument holds and that for states with large black populations, the white citizenry may be more likely to support policies that will adversely affect blacks as a way to control and contain this population, which it perceives as threatening. Because blacks are incarcerated at much higher rates than other groups, tougher crime policies may be seen as a way to deal with the black population that will have comparatively less adverse impact on the rest of the population. The Soss et al. (2001) finding that the size of a state's black population is predictive of more stringent welfare requirements also supports this argument. Alternatively, the more punitive policies could be a response to higher rates of crime that are often associated with larger black populations. However, since violent crime is controlled for in the analysis and is not significant, it is more likely that punitive incarceration trends are driven by unique concerns related to the black population. It could also be that blacks themselves are more supportive of more punitive crime policy, thus helping to drive policy decisions, although this is unlikely, as they are often significantly and negatively impacted by harsh crime policies and past studies have shown blacks to be less supportive of punitive policies (Bobo & Johnson, 2004; Unnever & Cullen, 2010).

Findings regarding voter turnout and incarceration support the hypothesis that states with low citizen engagement are likely to be more punitive. To the extent that greater voter turnout indicates a more responsive and engaged citizenry, coercive forms of state authority may be viewed more suspiciously, as they run counter to ideals of the democratic process. But while voter turnout is

associated with less punitive incarceration policies, a larger population of high school graduates has the opposite effect. This is an unexpected finding, given that higher levels of education are strongly associated with higher rates of voting (for example, Hillyguys, 2005). The hypothesis was that higher educated individuals would be more accepting of arguments about the structural causes of crime, feel less threatened by marginalized populations, and more engaged in the democratic process. However, with education also comes greater income, and so it may be that a higher educated citizenry is also a wealthier citizenry and therefore feels more threatened by crime and marginalized populations.

Alternatively, it may be that the high school graduation rate is not a sufficient measure and that the percent of the population holding bachelor's degrees or higher would be a more appropriate measure for this hypothesis.

The relationship between property crime and punitive incarceration policies was also unexpected. States with lower rates of property crime are more punitive in the incarceration context than other states. Beckett and Western (2001) find a similar relationship between incarceration and property crime rates. This suggests that the relationship between crime and incarceration is not as strong or direct as supporters of punitive crime policy may suggest. However, an alternative explanation could be that punitive incarceration policies act as a deterrent, resulting in a reduction in property crime.

Immorality Punishment

Although the model for immorality punishments was significant (p<.05), the low R-squared value for this model (.200) suggests there are other factors that drive state punitiveness on this dimension. The only predictor of the immorality dimension that approached significance was the violent crime rate (p=.053), with higher levels of violent crime indicating greater degrees of punitiveness. While this relationship is in the expected direction, it is somewhat puzzling that this is the only significant

predictor, as the types of crime associated with the immorality dimension—drug abuse, prostitution, gambling, drunkenness, and statutory rape—are all non-violent offenses. The lack of findings here suggests that factors other than those typically cited in the literature influence this policy area. While a strong religious presence may be a seemingly obvious factor to consider, an initial correlation test between immorality punishment and the percentage of citizens adhering to a fundamentalist religion was not significant. Because the focus of this dimension centers more on the implementation of immorality policies—that is, arrest rates rather than the legal statutes—it may be that a different set of factors exert greater influence, such as the policies that are in place, the size and budget of the police force, and incidences of vice-related crimes. That being said, following the "broken windows" argument (See Kelling & Wilson, 1982) it may be that higher rates of violent crime are associated with more arrests for these types of offenses because pursuing more visible crimes is regarded as one tactic to combat more serious crime. The lack of significant findings for this dimension suggests the need for further research on the factors driving immorality punishments.

Conditions of Confinement

The model for conditions of confinement was the only model that was not statistically significant. This lack of significance may indicate that conditions of confinement are more a product of state corrections budgets and administrative decisions within individual prisons than a result of socioeconomic factors. Again, the lack of findings here warrants further inquiry into the factors driving conditions of confinement in state correctional institutions.

Conclusion

This study explores the relationship between different state characteristics and variations across five dimensions of state punitiveness. Building on theories of individual punitiveness and past studies, a

model was constructed to test how various social, economic, and cultural factors may affect punitiveness. An already existing index of punitiveness was used. This measure accounts for several concepts of punitiveness and in this way is a more holistic measurement than incarceration rates. The models presented here indicate that punitiveness is not one-dimensional, and that different dimensions of punitiveness are best explained by different combinations of factors.

This study is just as important for the relationships it did not find as for those it did. Further research is required to more fully develop models that can explain both the immorality dimension and the conditions of confinement. For the immorality dimension, we suggest that indicators of violent crime might prove to be significant. Our lack of findings for the conditions of confinement also demand a need for additional work; as noted earlier in this paper, we suggest that state budgetary choices may account for state differences in this variable. The question of state punitiveness is of no small consequence, and untangling the policy drivers in this multidimensional concept is a subject of ongoing study.⁸

There are several limitations to this study, some of which have been noted above. As this is a quantitative model, there are limitations in the ability to capture some of the more dynamic relationships that may influence state punitiveness. Indeed, a more in depth examination of a select group of states would be a valuable supplement to this research. However, for the time being this study is useful because it compares all fifty states and it explores the relationship between punitiveness and basic social, economic, and cultural factors that are popular explanations for many unique policy trends across states. The measures for money spent on welfare and education do not control for state wealth. It may also be useful to use a measure of interparty competition in the state legislature (Soss et al.,

⁸ There are also additional state-level factors that might account for additional variance in our model. Factors such as interest group activity, state revenues, or larger ideological debates in some states may well prove important. These factors, while likely important in some states, will likely be unimportant across all states. We suggest that case study analyses of selected states may provide greater insight into this question. We thank an anonymous reviewer for raising this point.

2001). Citizen participation is another factor that warrants further exploration, and requires a richer measure than voter turnout in a presidential election. The presence of private prisons and their lobbying strength would be another useful variable to include. Finally, once improved this quantitative study should be supplemented with an in-depth analysis of a few select states. Such an analysis would provide richer data that could help put the findings from this analysis in the context of the interactions that occur within states between elected officials, interest groups, and the public.

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