

Race and Punishment in American Prisons

Abstract

American prison staff face the difficult challenge of maintaining order in an often overcrowded, potentially dangerous environment. Prison staff are given wide discretion over treatment decisions inside prisons, including the various means of using punishment. Adding to the discretionary nature of the prison setting, staff are forced to make quick decisions in an uncertain environment, and are likely to use commonly understood heuristics to simplify their decision-making. These heuristics include stereotypes about race and criminality. This article uses data on over 10,000 prisoners to examine the determinants of one of the harshest punishments available, the use of solitary confinement in American prisons. Consistent with the broader literature on race and criminal justice, I find that black inmates report higher rates of placement in solitary confinement than white inmates.

Incarceration and Punishment

With over two million inmates, the United States' prison population is the largest in the world, in both per capita and absolute numbers (Walmsley 2007). Nearly one in one hundred Americans are behind bars, either in jails or prisons (Pew Center for the States). Incarceration is highly concentrated by race, age, education and gender. One out of every nine young black men is incarcerated and one out of every three black men without a high school education is incarcerated (Lerman 2014). The rapid growth in incarceration is well documented (Alexander 2010; Lerman 2014; Simon 2007; Western 2006; Yates and Fording 2005). The negative effects of incarceration are also increasingly examined. Former prisoners face a number of formal penalties, including the loss of voting rights (Uggen and Manza 2002) and exclusion from public

aid such as welfare payments, disability support, veterans' benefits and food stamps (Wacquant 2005). Former prisoners are subject to other disadvantages, such as lower wages and fewer job opportunities (Western 2006), lower levels of political participation (Weaver and Lerman 2010) and maladaptive social skills and networks (Lerman 2014). Harsh prison conditions are also linked to an increase in recidivism (Chen and Shapiro 2007; Drago, Galbiati and Vertova 2008).

While social scientists have examined the use and consequences of incarceration, relatively little work focuses on differential treatment inside prisons, largely due to difficulties in securing access. American prisons are a difficult research environment to access, due to a lack of openness and cooperation with many American correctional departments (Wacquant 2002). Recently, scholars have delved into this neglected field (e.g. Calvita and Jenness 2013; Goodman 2008; Lerman 2014; Mears and Bales 2008, 2009; Reiter 2012), yet there remain important questions related to prisoner treatment in the United States. In particular, we need to identify treatment patterns in American prisons, especially given the size and reach of the American prison system and to examine their potential effects on different prison populations.

This article examines differential treatment inside American prisons. Specifically, I examine differences in the use of solitary confinement, one of the harshest prison punishments. Solitary confinement is a way to manage some of the most difficult and aggressive prison inmates, but the use of solitary confinement has negative effects as well. Large-scale use of solitary confinement is an American invention, dating back to the 1820s, with the opening of Eastern State Penitentiary in Philadelphia, Pennsylvania (Banks 2005). Designed to isolate inmates and provide an opportunity for penitence and self-reflection, penitentiaries fell out of favor due to concerns about mental illness and cruelty. Charles Dickens described Eastern State Penitentiary in 1842 as a system that is “rigid, strict and hopeless solitary confinement. I believe, in its

effects, to be cruel and wrong” (Davis 2003). Following a more punitive turn in criminal justice (Garland 2001) modern solitary confinement expanded rapidly from the late 1980s until the present with the building of supermax facilities. Although designed to house the “worst of the worst”, solitary confinement applies to many inmates, with California supermaxes alone holding more than 3,300 inmates (Reiter 2012).

Solitary confinement is not without its costs. Financially, the Federal prison system spends about 75,000 dollars per solitary confinement per year, three times as much as incarceration in a regular prison unit (Johnson and Chappell 2014). Solitary confinement has the potential to aggravate existing or to create new mental illnesses for inmates including perceptual distortions, panic attacks, paranoia, obsessive and aggressive thoughts and problems with impulse control (Grassian 2006). Isolated inmates develop unhealthy coping mechanisms, including drug use and anti-social behavior, which can also cause or aggravate mental illnesses (Nurse, Woodcock and Ormsby, 2003). Previous research has examined harsh prison conditions and found a link to increased recidivism (Chen and Shapiro 2007; Drago, Galbiati and Vertova 2008) and maladaptive social skills and networks (Lerman 2014). Given the many potential detrimental effects of solitary confinement, from a public policy perspective, as well as from a concern with equity, we need to know why inmates are selected for this severe punishment.

Estimates about the size of the prison population subjected to solitary confinement vary, but about fifteen percent of the survey respondents reported being placed in a solitary confinement unit at some point in their incarceration. Solitary confinement is not limited to supermax or even maximum security prisons. Many medium security prisons also operate solitary confinement units. Prisons vary in their use of solitary confinement. Obviously, prisons are limited by the number of solitary confinement cells, but given overcrowding and many

possible violations that lead to solitary confinement, there are usually more inmates who could be placed in solitary than there are solitary cells. Why then are prisoners placed in those cells?

We know from the literature that in other areas of criminal justice, bureaucrats use race-based heuristics to help decide who to punish (e.g. Bradbury and Kellough 2011; Close and Mason 2006, 2007; Epp, Maynard-Moody and Haider-Markel 2014; Theobald and Haider-Markel 2009). I test whether racial categories similarly impact the likelihood of placement of prisoners in solitary confinement. If race based heuristics are used, it has important implications not just for recidivism but also for political inclusiveness and participation. The determinants of solitary confinement therefore are an important policy problem that deserves systematic scholarly attention.

Prison Staff and Heuristics

American correctional departments are among the country's largest bureaucracies. State spending on corrections in 2011 was estimated at fifty-one billion dollars, representing about three percent of total expenditures (National Association of State Budget Officers, 2011). Over 750,000 people are employed in state correctional departments working at 1,721 different prisons (Stephan, 2008). Not surprisingly, there is a great deal of variation across prisons, including differences in security levels, financial resources, educational programming, healthcare opportunities and punishment options. Equally important, there is variation within prisons, with some inmates facing harsher conditions than others, even within the same facility. 'Doing time' is not a uniform experience, even for inmates in the same prison (Lerman 2014).

While political actors provide the legal basis for prison treatment, and state correctional departments add rules and regulations, most of the day-to-day decision-making is left to staff at

individual prisons. Political actors may decide how much money to allocate toward building maximum security cells or decide what offenses warrant solitary confinement, but it is up to prison staff to decide which particular inmates to sanction. American prison inmates are the literal definition of a captive clientele, with few advocates and few formal rights within prisons. An inmate can appeal a punishment, but those appeals go through the prison bureaucracy and are rarely overturned (Calavita and Jenness 2013). Prison staff therefore exert wide discretion over inmate sanctions and other treatment.

This level of discretion is commonly left to front-line governmental workers, known as street-level bureaucrats. Street-level bureaucrats have “considerable discretion in determining the nature, amount, and quality of benefits and sanctions provided by their agencies” (Lipsky 1980). This discretion is given because street-level bureaucrats work in difficult environments that cannot be reduced to step-by-step routines. A prison guard is almost always outnumbered and it is impractical to define every aspect of the guard’s daily routine. Discretion is also necessary because of the human dimensions of problems. Two inmates may exhibit the exact same behavior, but only one inmate may deserve punishment. This is not necessarily unfair; the inmates may have chosen the same behavior for different reasons, or the inmates may differ on other important characteristics. If, for example, one of the goals of punishment is deterrence, and one inmate is more easily deterred than another, it may be appropriate to give a lighter punishment to the more easily deterred inmate.

Prison staff have similar reward and punishment powers as other street level bureaucrats (Liebling 2000). Prison staff also experience many of the same temporal, cognitive and financial resource constraints (Brehm and Gates 1997; Lipsky 1980; Schaufeli and Peeters 2000) as other street-level bureaucrats. Due to these limitations, prison staff are intentionally given wide

discretion. This is necessary because prison officials have large caseloads and low levels of resources. Furthermore, many American prisons are overcrowded, and face high inmate to staff ratios. Prisons are also involve extensive rules that can lead to prisoner violations. Some rule violations, such as being disrespectful to an officer, are open to interpretation. Other rules, such as having contraband or not properly wearing the inmate uniform, are commonly violated. An abundance of rules often makes the enforcement of any particular rule difficult. Most prisons contain an abundance of rule violators, and some portion of those rule violators must be punished. However, it is not feasible to punish all rule violations. If some, but not all, violations necessitate a disciplinary response, how do prison staff decide who to punish?

It is likely that prison staff use similar decision mechanisms as other street-level bureaucrats. Steven Maynard-Moody and Michael Musheno describe two coexisting narratives for street-level bureaucrats. Under the state-agent narrative, street-level bureaucrats are concerned with following rules, proper procedures and professional norms. The state-agent narrative may be difficult for prison staff, given the plethora of procedures and possible violations and the threat of violence. Under the citizen-agent narrative, street-level bureaucrats are concerned with identifying clients who are worthy citizens and those who are not. Once a client's worth is determined, the client's worth determines the treatment option (Maynard-Moody and Musheno, 2003). Prison staff may place inmates into worthy and unworthy categories, but the presence of high caseloads and the need for fast decisions likely means prison staff cannot dedicate resources to learning about each individual inmate. Even if prison staff try to get to know inmates individually, there is high turnover rate within prisons. Annually, 630,000 inmates leave prison and new inmates take their place (Mears and Bales 2008). There also is turnover in prison staff. Hence, prison staff have to make decisions, often with a great deal of uncertainty about the inmate's history.

A prison guard may be responsible for supervising 70 to 100 inmates. To maintain control and order, it is necessary to sanction some inmates, but it is difficult to know which inmate to sanction if there are multiple rule violators. A trial and error approach is unlikely to be successful (Simon et al, 1987). Some inmates are more physically dangerous than others, and a staff member who used a trial and error approach may be assaulted. Prison staff must also make numerous decisions and those decisions need to be made quickly. Psychologists distinguish between two systems of thought; one based on reasoning and one on intuition. System 1 decision-making is typically fast, automatic and emotionally charged. System 2 decision making is slower, takes more effort and is potentially more rule governed (Kahneman 2003; 2011). System 1 decision-making is prevalent in other areas of criminal justice, such as the decision-making of judges (Bradbury and Kellough 2011), federal probation officers (Kautt 2009) and police officers (Epp, Maynard-Moody and Haider-Markel 2014). Prison staff are likely to use System 1 thinking, as well.

Instead of the controlled reasoning of System 2, System 1 thinking relies on the use of heuristics or rules of thumb to simplify decision-making (Simon et al, 1987). One common heuristic is the idea of representativeness (Kautt 2009; Tversky and Kahneman 1974). Paula Kautt (2009) writes that representativeness is “when equivalence is assumed from a surface or limited similarity (e.g. appearance, a certain number of common characteristics)”. Representativeness simplifies decision-making because a person can make decisions based on group characteristics rather than obtaining information about every individual. A prison guard may have stereotypes about inmates based on age, gender, race or criminal record. Rather than judge each inmate individually (which may be impractical if not impossible) the guard can judge inmates based on their representativeness.

Similarly, Anne Schneider and Helen Ingram (1993) argue that the social construction of a group, which is the group's stereotypes and reputation, help determine the policy options for that group. Schneider and Ingram write, "There are strong pressures for public officials to provide beneficial policy to powerful, positively constructed target populations and to devise punitive, punishment-oriented policy for negatively constructed groups". While the socially constructed groups that Schneider and Ingram describe are different from prison populations, their main insights are still useful in understanding the issue of who to punish. Prison staff have an incentive to punish those inmates who are stereotyped as more likely to break rules and/or to become violent. In the United States, an easy group stereotype regarding criminality and violence associates blacks, and in particular young black males, as more likely to break rules and become violent. As with the use of stereotypes in other settings, these social constructions have detrimental consequences in the prison setting. These negative consequences are not only experienced by the prisoners involved; they also create significant externalities that can create further public policy problems for society in general, such as the effects of solitary confinement on mental illness and recidivism rates. It is for these multiple reasons that it is important to examine this issue.

Race as a Heuristic in Criminal Justice Policy

Despite progress towards greater racial equality, many Americans still hold negative stereotypes about black Americans. Those negative stereotypes have a long tradition in the United States. White Americans long have viewed criminal behavior as an inherent characteristic for blacks, a reputation that extends back to the enslavement of Africans in the United States (Welch 2007). In the 1890s, some social scientists argued that crime in black communities was a sign of racial inferiority, while similar criminality in white communities was a result of poverty

and structural problems. Due to supposed racial inferiority, scholars wrote that blacks were incapable of controlling their sexual impulses, working together for a common purpose or delaying gratification (Muhammad 2010). Sadly, these views are not completely a vestige of the past. Current media portrayals disproportionately associate blacks with crime stories and politicians have used stereotypes of black criminality, such as the Willie Horton ads, to attract voters (Garland 2001; Western 2006).

Research also has shown that blacks are stereotyped as more aggressive, hostile and criminal (Devine and Elliot 1995). It is unnecessary for someone to be explicitly racist in order for that person to respond to stereotypic-consistent cues. Research by Jennifer Eberhardt and her colleagues (2004) illustrates how such cues may effect policy decisions. In one study, Eberhardt et al subliminally primed participants with black male faces, white male faces or no faces at all. Then participants were presented with objects on a computer screen that was severely degraded and became less degraded in small increments. Some of the objects were crime related (a gun or a knife) and some were unrelated to crime (a camera or a book). Participants were asked to write down what they thought the object was. Participants who were given a white face prime took longer to identify a crime related object while participants who were given a black face prime identified a crime related object much quicker. Since prison guards often must make quick decisions, based on heuristics, this research is of particular relevance to the prison setting.

The relevance of stereotypical heuristics already has been associated to law enforcement personnel. Eberhardt et al (2004) presented police officers with black and white male faces and asked the question “Who looks criminal?” Participants were exposed to 40 black or 40 white male faces. One third of the police officers were asked to indicate how stereotypically black or white each face looked. Another third of the police officers were asked how attractive each face

looked. Finally, a third of the police officers were asked whether they thought the face looked criminal. More black faces were viewed as criminal than white faces. Also, more black faces rated high on the stereotypical range were judged as criminal than black faces that rated low on the stereotypical range. Highly stereotypical black faces were more likely to be judged criminal than any other group. Again, these results suggest that similar types of heuristics may motivate prison guards, who are but another type of law enforcement personnel.

Blacks also are judged more harshly than whites on crime. In a set of survey experiments when the race of a suspect varied, white respondents were more likely to view blacks as guilty of crimes, to envision that blacks would commit more crimes in the future and to suggest harsher punishments for blacks (Hurwitz and Peffley 1997; Peffley, Hurwitz, and Sniderman, 1997). Experimental studies with juvenile probation and police officers found that a black prime led to preferences for harsher punishments (Graham and Lowery 2004). Perceptions are not necessarily accurate. For example, the percentage of young black men in a neighborhood is associated with higher perceptions of crime, even after controlling for crime rates and other neighborhood characteristics (Quillian and Pager 2001).

These stereotypes about crime likely are shared by street-level bureaucrats working in the criminal justice system. Official training films by the Drug Enforcement Agency specifically identified blacks and Hispanics as more likely to carry drugs. This DEA training reached around twenty-seven thousand state and local police officers, many of whom went on to train others. The New York police department also trained its officers to implicitly and sometimes explicitly consider the race of a driver when deciding who to stop and frisk. Experimental evidence suggests that police officers were significantly more likely than non-officers to perceive evidence

of guilt and deceptiveness by blacks, compared to similar actions of whites (Epp, Maynard-Moody and Haider-Markel 2014).

Whether or not criminal justice bureaucrats explicitly share stereotypes about black criminality, there is convincing evidence that blacks are subjected to disproportionate punishment in the implementation of criminal justice policy. Blacks are more likely than whites to come into contact with police or other law enforcement officers (Alexander 2010), and those interactions are more punitive for blacks. For example, there is substantial evidence of racial discrimination in traffic stops, the most common interaction between police and the public (see Bradbury and Kellough 2011; Close and Mason 2006, 2007; and Theobald and Haider-Markel 2009). Charles Epp, Steven Maynard-Moody and Donald Haider-Markel (2014) argue that the most important factor in investigative police stops is not how people drive but how they look, with blacks 2.2 times more likely to be stopped than other drivers. Blacks are more likely to report unfair treatment by the police (Peffley and Hurwitz 2010) and police are more likely to punish black suspects (Close and Mason 2006, 2007; Ridgeway 2006).

The disparate treatment in interactions with the police is matched by disparate treatment in incarceration. In 2007, the incarceration rate for whites was 412 per 100,000 residents, compared to 2,290 for blacks. 2.3 percent of all blacks were incarcerated in 2007, compared to less than one percent for the white and Hispanic populations (Mauer and King 2007). Eleven percent of black men aged 25 to 29 are incarcerated and a third is under some type of correctional supervision (Weaver and Lerman 2010). Bruce Western estimates that the cumulative lifetime risk of incarceration for black males is twenty percent, versus three percent for white males. Black males are more likely to be incarcerated than to receive a bachelor's degree or serve in the military (Western 2006). Empirically, one of the largest drivers of state

incarceration rates is the size of the state's minority population (e.g. Beckett and Western 2001; Greenberg and West 2001; Jacobs and Helms 1996; Smith 2004; Sorensen 2002). In part due to the statistical realities of disparate treatment, blacks are more likely to perceive unfairness in the criminal justice system and have lower levels of support for punitive measures (Engle 2005; Peffley and Hurwitz 2010).

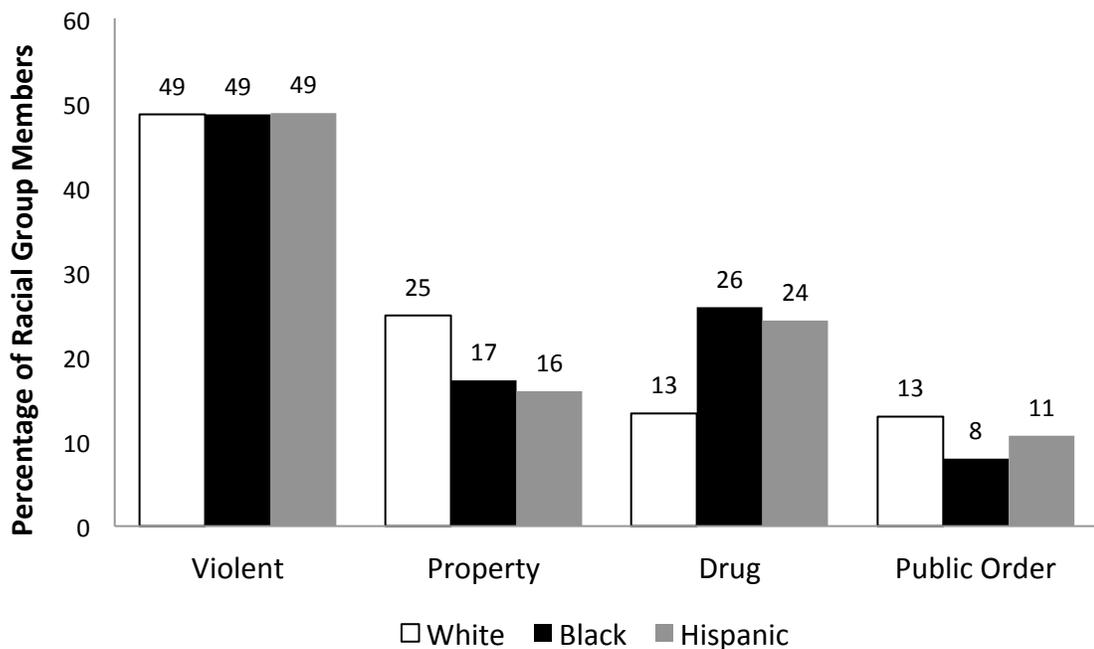
Higher levels of punishment for blacks may not be as much of a cause for concern, if blacks committed crimes at higher rates. However, differences in incarceration rates cannot be completely explained by differences in criminal activity (Alexander 2010; Yates and Fording 2005; Western 2006). For instance, all racial groups have similar rates of drug use and drug dealing (Alexander 2010; SAMSHA 2010). There are some suggestions that young whites use harder drugs (cocaine and heroin) at higher rates than other racial groups (Alexander 2010). Whites also have two to three times as many drug-related emergency room visits than blacks (Western 2006). The current literature suggests that drug use among different racial groups are similar if not identical, with some evidence that white males, rather than black males, commit more drug crimes.

Black Americans do have higher rates of violent crime and violent crime victimization, which could lead to higher incarceration rates. However, that may be due to higher levels of social disorganization in primarily black communities. Peterson and Krivo (2005) performed a meta-analysis of articles on race and violent crime. They found zero significant differences in criminal violence between neighborhoods of varying racial composition when the neighborhoods were similarly disadvantaged. Peterson and Krivo (2005) also found that disadvantaged neighborhoods exhibit more tolerance for crime and deviance, but there is no evidence of a unique black subculture of violence. One consistent finding in the meta-analysis was that

structural disadvantage contributes significantly to violence for both blacks and whites, and that the findings were resilient to the exact operationalization of social disorganization; i.e. poverty, income, family disruption and unemployment (Peterson and Krivo 2005), echoing a hundred and twenty year old debate on race vs structural factors (Muhammad 2010).

Even if there are differences in behavior prior to incarceration, the more important concern for this article is whether black and white inmates are significantly different. If black inmates are systematically different than white inmates, then we would expect differential treatment. The Bureau of Justice Statistics provides descriptive statistics on race and offense for state prison inmates. Figure 1 reports the percentage distribution by race and offense.

-Figure 1 Percentage Distribution of U.S. State Prison Population by Race and Offense, 2000



If black prisoners were more likely to behave differently in prison, this might be reflected in the types of offenses they committed which resulted in their incarceration. Figure 1 suggests little support for such differences. Remarkably, the percentage of violent offenders in state prisons was exactly the same for blacks, Hispanics and whites at 49%. For prison staff, violent behavior is probably the largest concern, and there do not seem to be racial differences in violent offenses. To the extent that there are racial differences in offense characteristics, black and Latino prisoners were significantly more likely to be convicted for drug offenses, while whites were more likely to be sent to prison for property and public order offenses. For this reason, this article controls for other factors including inmate offenses, which allows for a more reliable test of whether race is a factor in selection for punishment.

Is race an important heuristic for determining punishment inside prison? From the literature I have cited we know that race is certainly an important factor in other aspects of criminal justice policy. We also know that other types of law enforcement personnel respond to race heuristics. The question then is whether there is evidence that prison staff, even

unconsciously, are partially selecting prisoners for punishment based on race? If so, racialized patterns are likely to emerge. To address this question I now turn to an empirical test which examines approximately 10,000 state prison inmates.

Data

The data comes from the Bureau of Justice Statistics *Survey of Inmates in State and Federal Correctional Facilities, 2004* (2004 Survey). The 2004 Survey involved personal interviews in both state and federal prisons that provided information about the inmate's criminal offense, criminal history, pre-incarceral life, participation in treatment programs and punishment inside prison. The 2004 Survey is a nationally representative sample of inmates, selected in a two-stage process. Prisons were selected in the first stage and inmates within the sampled prisons were selected in the second. In the first stage 290 State prisons were selected, including 225 male facilities and 65 female facilities. The 14 largest male prisons and 7 largest female prisons were selected with certainty. The remaining facilities were selected based on probability proportional to size. From the 290 state prisons, approximately 1 in every 85 male inmates and 1 in every 24 female inmates in were selected. There were 14,499 complete interviews for the 2004 survey. Around 1,100 inmates were dropped from the analysis because those inmates were in a prison facility where either all or zero inmates reported being placed in solitary confinement (which took away the ability to examine within facility variation). Additionally, the analysis is limited to black and white inmates for whom all explanatory variables were reported. This leaves 10,480 inmates available for the analysis.

Dependent Variables

The dependent variable for this article is inmate punishment. *Solitary Confinement* is a dichotomous variable for whether the inmate is placed in a specialized punishment unit. Solitary confinement is one of the harshest punishments that a prison can enforce. An inmate in solitary confinement will have most of their personal property taken away, will be forced to eat alone in their cells and will often be forced to exercise alone. Inmates must stay in solitary confinement cells 23 hours a day. These inmates often have little to no human contact for weeks, months or even years at a time (Reiter 2012). Solitary confinement is one of the most severe forms of inmate punishment.

Explanatory Variables

The 2004 Survey offers an opportunity to explore a nuanced examination of inmate characteristics. Nearly three thousand variables are included in the 2004 Survey, capturing many aspects of the inmate's pre-incarceral and incarceral life. The main explanatory variables of interest focus on the race of the inmate. Models also include measures of the inmate's pre-incarceration life and criminal history.

Demographic Variables

I test for differences in treatment between white and black inmates. Other racial categories were excluded due to relatively small sample sizes, which makes it difficult to draw valid and reliable conclusions. It is also not possible to include variables on ethnicity. The survey includes a category for Hispanic inmates, but those inmates overwhelmingly are also categorized as white. *Black* is a dichotomous dummy variable measuring the inmate's race. White inmates are the reference category.

Variables measuring the inmate's age and gender are included. *Age* is the inmate's age, ranging from sixteen to eighty-four years old, with a mean age of thirty-five. It is expected that older inmates will have lower levels of punishment. Criminal behavior is negatively associated with age, with most criminals "aging out" of the criminal lifestyle by their late thirties (Farrington 1986). Therefore older inmates are expected to commit fewer disciplinary infractions. *Female* is a dichotomous variable for whether the inmate is a woman. Since I control for fixed effects at the facility level, it is not expected that gender will be statistically significant. Most prison facilities are segregated by gender.

Pre-Incarceral Life

Three measures of the inmate's pre-incarceral life are included as control variables. *Drug User* is a dichotomous variable for whether the inmate used drugs before their arrest. *Drug User* includes all illegal drugs, including marijuana. It is expected that drug users will be punished more frequently, because many drug users continue their use in prison (Gillespie 2005; Strang et al 2006). *Highest Grade Attended* is a measure of the inmate's education level. The average surveyed inmate did not complete high school, and in fact stopped attending school in the tenth grade. The inmates surveyed ranged from the equivalent of no formal education to a master's degree. It is predicted that better educated inmates will be less likely to be punished. Finally *Ever Homeless* is a dichotomous variable for whether the inmate was ever homeless in their pre-incarceral life. Nearly ten percent of the inmates reported being homeless. It is expected that inmates reporting being homeless will be punished more, due to maladaptive life skills.

Criminal History

The second set of controls measure the inmate's criminal history. Three variables are included, labeled *Violent Offender*, *Number of Arrests* and *Number of Incarcerations*. *Violent Offender* is a dichotomous variable for whether the inmate was convicted of a violent offense, such as assault or murder. It is expected that violent offenders will be punished at higher rates, since they already have proven their willingness to act violently. *Number of Arrests* and *Number of Incarcerations* measure the number of times an inmate has been arrested and incarcerated, respectively. A higher number of arrests/incarcerations suggest a longer criminal history and a propensity towards trouble making, or at least a propensity towards getting caught. Inmates with a higher number of arrests/incarcerations are expected to receive higher levels of punishment.

Table One provides descriptive statistics for the dependent and explanatory variables.

-Table One Descriptive Statistics for Dependent and Explanatory Variables

| Dependent Variable | Mean | Std. Dev. | Min | Max |
|-----------------------------|-------------|------------------|------------|------------|
| Solitary Confinement | 0.149 | 0.356 | 0 | 1 |
| Explanatory Variable | | | | |
| Female | 0.204 | 0.403 | 0 | 1 |
| Black | 0.469 | 0.499 | 0 | 1 |
| Age | 35.482 | 10.433 | 16 | 84 |
| Ever Homeless | 0.091 | 0.288 | 0 | 1 |
| Married | 0.162 | 0.369 | 0 | 1 |
| Highest Grade Attended | 10.869 | 2.324 | 0 | 18 |
| Working Before Arrest | 0.701 | 0.458 | 0 | 1 |
| Drug Use | 0.321 | 0.467 | 0 | 1 |
| Violent Offense | 0.293 | 0.455 | 0 | 1 |
| Number of Times Arrested | 4.423 | 5.072 | 0 | 10 |
| Total Incarcerations | 1.387 | 2.091 | 0 | 20 |

Hypothesis

My main hypothesis is that inmate punishment is related to inmate race. Specifically, I hypothesize that black inmates will report higher rates of solitary confinement than white

inmates. Likewise, being homeless, another negative heuristic, should also be associated with higher levels of solitary confinement, with blacks who also have been homeless more likely to be confined than whites who were homeless. I also hypothesize that certain factors should increase the potential for solitary confinement including drug use, a prior violent offense, an increase in the number of times arrested and a larger number of total incarcerations. On the other hand, several factors should mitigate against the use of solitary confinement. These are factors that are evidence of personal stability such as being married, and finishing a higher grade in school.

Methods

Data was analyzed using conditional logit models. Conditional logit allows for fixed effects, which in this case were grouped by the facility code. Each model is therefore explaining **within** facility variation, after controlling for prison fixed effects. It is likely that Prison A operates differently than Prison B, in terms of organizational culture, resources and inmate characteristics. Previous research explored the differences between harsh and less harsh facilities (Chen and Shapiro 2007; Drago, Galbiati and Vertova 2008; Lerman 2014) but the 2004 Survey allows for examination of inmates within the same prison. By comparing within facilities rather than across facilities, I isolate the impact of race, independent of facility characteristics.

Results

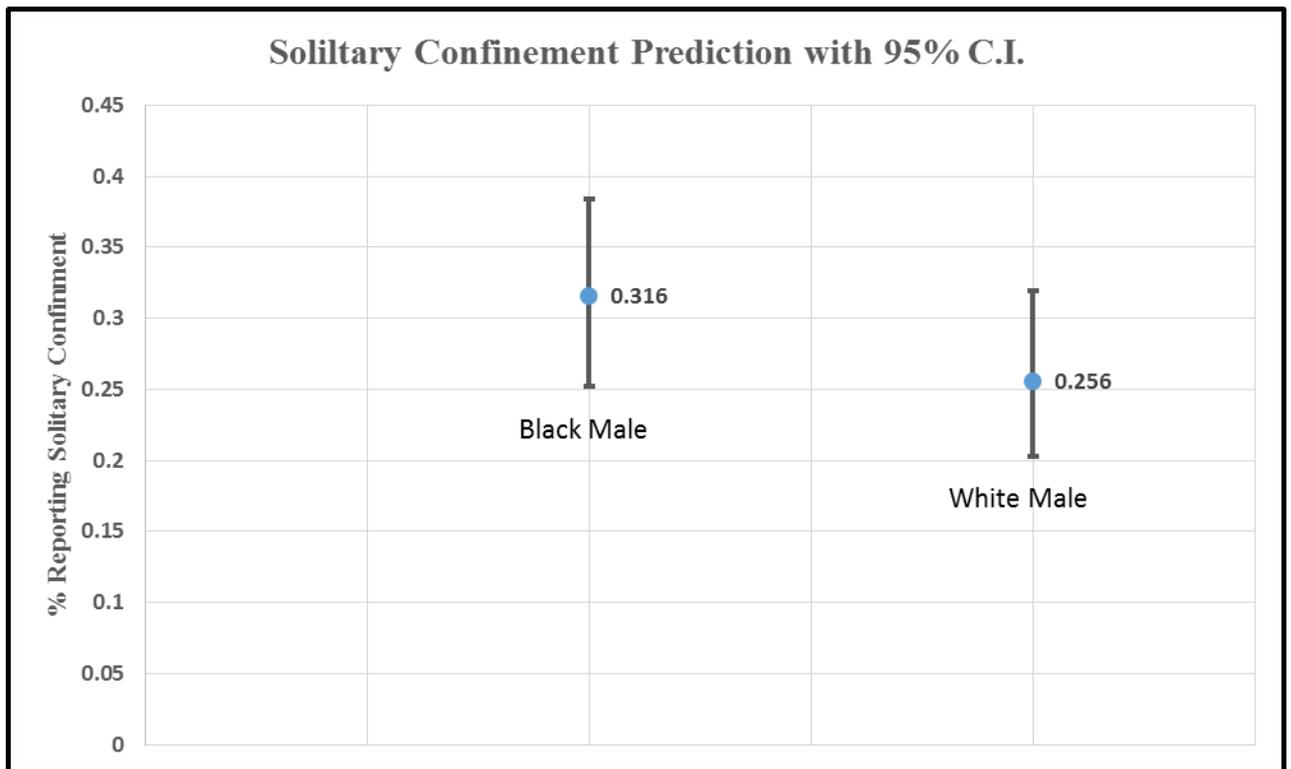
Table Two presents the model estimation for the solitary confinement dependent variable.

-Table Two Model Estimation for Solitary Confinement

| <i>Explanatory Variable</i> | Solitary Confinement |
|-----------------------------|-----------------------------|
| Female | -0.778 1.378 |
| Black | 0.159 *** 0.061 |
| Age | -0.022 *** 0.003 |
| Ever Homeless | 0.302 *** 0.094 |
| Married | -0.233 *** 0.084 |
| Highest Grade Attended | -0.037 *** 0.013 |
| Working Before Arrest | -0.067 0.063 |
| Drug Use | 0.067 0.065 |
| Violent Offense | 0.295 *** 0.061 |
| Number of Times Arrested | 0.013 *** 0.006 |
| Total Incarcerations | 0.047 * 0.016 |
| Number of Observations | 10480 |
| Cox-Snell R2 | 0.442 |
| *p<.10, **p<.05, ***p<.01 | |

Table Two shows that black inmates report being placed in solitary confinement at a higher rate than white inmates. Since racial differences are the primary variable of interest for this article, I used Clarify to simulate estimates of racial effects. Table Three graphs the differences between black male and white male inmates reporting placement in solitary confinement, with 95 percent confidence intervals. The only difference in the estimation is the race of the inmate, all other values are held to their averages.

-Table Three Solitary Confinement Prediction with 95% C.I.



Estimates place the likelihood of an average black male inmate reporting placement in solitary confinement at 31.6 percent, while the likelihood for an average white male inmate is 6 percentage points lower, at 25.6 percent. According to the estimation, for every 100 average white male inmates placed in solitary confinement, we would expect 123 average black males placed in solitary confinement. It is important to note that this effect is independent of the inmate's pre-incarceral life and criminal history. Black inmates are subject to higher rates of solitary confinement in part because of their race.

The use of solitary confinement seems to have a racial component, even after controlling for criminal behavior and personal stability. Even after controlling for violent offenses, the number of arrests, and the number of incarcerations (all factors that should increase the likelihood of violent behavior in prison), there is still an effect related to the inmate's race. While certain factors mitigate against punishment; being older, married, and better educated, all factors

that suggest greater personal stability; being black or being homeless are the only demographic factors that increase the likelihood of solitary confinement.

Discussion

Prison staff have an incredibly difficult job. It is necessary to maintain security and provide programming in a volatile and potentially violent environment. Prisons are often overcrowded and prison staff face the need to make quick decisions with limited information. Recognizing this difficulty, political leaders have given discretion to state correctional departments, and state correctional departments have given discretion to their individual employees. Lacking the resources to always make well-reasoned and informed decisions, street-level bureaucrats often use heuristics to simplify their decision-making. Group stereotypes or representativeness is one commonly used heuristic. In the United States, blacks are stereotyped as more criminal, aggressive and violent than whites. Scholars have found evidence of race based treatment in multiple areas of criminal justice policy. This article suggests that race based treatment also occurs inside prisons, with black inmates subjected to higher rates of solitary confinement.

The use of solitary confinement has serious consequences on the inmate and their future lives. Harsh prison conditions, including isolation, may lead to increased recidivism (Chen and Shapiro 2007; Drago, Galbiati and Vertova 2008). Isolated inmates develop unhealthy coping mechanisms, including drug use and anti-social behavior and those coping mechanisms lead to increased incidences of mental illness (Grassian 2006; Nurse, Woodcock and Ormsby, 2003). Treatment inside prison affects recidivism, future criminal activity, future wages and future political activity (Chen and Shapiro 2007; Drago, Galbiati and Vertova 2008; Lerman 2014; Weaver and Lerman 2010; Western 2006), all important policy issues. Most inmates will

eventually be released from prison, and treatment decisions, including the decision to punish, impact the life skills that inmates have upon release. Keramet Reiter (2012) finds that in California alone, hundreds of inmates are released directly from supermax prisons onto parole, having spent at most 90 days outside of solitary confinement before being released. These inmates, unsurprisingly, have higher recidivism rates.

This article contributes to the rising interest and recent work on the effects of American prisons. It is important to look behind the walls and investigate treatment inside prisons. The 2004 Survey enables us to examine individualized treatment for prison inmates, and to explore the role that race plays in the decision to punish. Unfortunately, as in many other areas of criminal justice, black males are disproportionately punished. The use of solitary confinement seems to be racially biased, and that should be considered in addition to the high financial cost of solitary confinement and its effect on mental illness and recidivism. Whatever deterrent effect solitary confinement may have, it is important that the use of solitary confinement is unbiased. If it cannot be unbiased, it may be time to identify alternative forms of punishment.

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