DUKE UNIVERSITY SOCIOLOGY

Unequal Odds: The Effects of Race and State Context on Recidivism

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Honors Thesis 2012

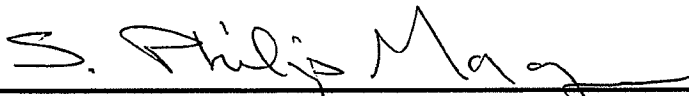# Unequal Odds: The Effects of Race and State Context on Recidivism

By

Lindsay Lincoln

An Honors thesis submitted to the faculty of the Department of Sociology at Duke University in partial fulfillment of the requirements for graduation with a Bachelor of Arts with Distinction in Sociology.
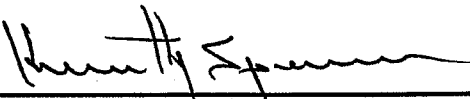
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ABSTRACT

Recidivism of Prisoners Released in 1994, conducted by the U.S. Bureau of Justice Statistics, is the most thorough and extensive compilation of official data on recidivism in the United States. It contains criminal history and demographic information on 38,624 prisoners released in 1994 from prisons in 15 states (Arizona, California, Delaware, Florida, Illinois, Maryland, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, Texas, and Virginia) and followed for three years thereafter. Using these data, I found a significant effect of race on recidivism, such that black males are significantly more likely to recidivate than white males, after controlling for individual-level variables, including age and criminal history, and for structural-level variables, including state of release. I also found a significant effect of state of release on recidivism, which is partially accounted for by the state unemployment rate and the percentage of minority individuals in the state population. The implications of these findings with regard to larger issues of social and economic stratification as well as to policy efforts are discussed.

INTRODUCTION

The prison population in the United States far surpasses that of any other nation. As of 2009, state and federal prisons housed over 1.6 million prisoners (West, Sabol, & Greenman, 2010). As the majority of these individuals are eventually released back into society, many research and policy efforts have focused on the impact that incarceration has on individuals and communities and on the best approach to prisoner reintegration. Special consideration has been given to the issue of determining which prisoners have the highest risk of committing crimes once released. In my research, I examined a cohort of over 30,000 released prisoners from 15 states with the goal of estimating recidivism rates across combined race and ethnicity categories and across states. Further, I tested the hypothesis that black non-Hispanic and white Hispanic males would be more likely to recidivate than white non-Hispanic males, even after controlling for criminal history, age at release, type of release, and state of release. I expected this result because of the continuing significance of race and ethnicity as sources of social stratification in this country. All else equal, individuals of minority status still do not have the same opportunities as whites in areas such as education and employment. In addition, I analyzed state variation in the odds of recidivism that remains after controlling for the differential makeup of each state's released prisoner population. In an effort to explain this variation, I tested the hypothesis that the state unemployment rate and the percentage of minority individuals in the state population would partially account for differences in recidivism rates.

There are a myriad of factors responsible for an individual's imprisonment. Additionally, once released, prisoners carry with them diverse individual criminal histories and return to state environments that are incredibly varied in their approaches to criminal justice and prisoner reintegration as well as, more broadly, in their levels of economic and racial inequality. To begin

with the premise that with release comes the chance for prisoners to start over unencumbered is to ignore a history often involving chronic, systemic disadvantage and a future of recurrent public mistrust and persistent unemployment (Western, 2006).

BACKGROUND

Theories of Crime

A principal hypothesis tested in my research is that certain characteristics of the environment to which prisoners return would exacerbate their level of recidivism risk. This hypothesis is grounded in theories that situate individual offending in the context of structural-level factors or elements of interpersonal interaction. These theories also help to elucidate the reasoning behind my expectation that, net of criminal history, particular racial and ethnic groups would have a higher recidivism risk than others. It is not uncommon for communities to be divided along racial or ethnic lines and for minority neighborhoods to be typified by a combination of elements that the following theorists find correlate with delinquency and crime (Massey, 1990; Western, 2006).

In an effort to explain the pervasive delinquency concentrated in urban areas, scholars of what is now known as the Chicago School established the ecological approach and the concept of social disorganization (Gabbidon, 2007). Park and Burgess (1925), through the Concentric Zone Model, demonstrate that cities expand radially and form concentric rings such that social and physical degeneration is focused at the city center and as one progresses outward conditions gradually improve and crime decreases. This pattern is observed because of the city center's continual state of flux and inability to maintain economic and social stability. One result is social disorganization, the "breakdown in the equilibrium of forces, a decay in the social structure, so that old habits and forms of social control no longer function effectively" (Elliott & Merrill, 1934,

20). Often minority populations are concentrated in these areas. To support the conclusion that social disorganization, and not characteristics of the individuals living in the inner city, generates increased levels of crime, Shaw and McKay (1942) provide evidence that even through changes to the nationality and race composition of Chicago's population over the years, delinquency rates remained high and relatively constant in the city center. Many researchers have used and expanded this theory to explain crime rates in black communities with high concentrations of poverty and to reveal the mechanism by which higher incarceration rates can actually increase crime rates in disadvantaged neighborhoods (Gabbidon, 2007). In my research, attention to state unemployment rates, as reflective of economic or social instability, has ties to this literature.

Another theory of relevance is Merton's (1938) Structural Strain or Anomie Theory. According to Merton, there exist socially or culturally approved goals and values and the structure of society constrains and inhibits the ability to achieve these goals through an uneven distribution of opportunities. Blocked opportunities thus produce strain or status frustration. Crime and delinquency can result when disadvantaged members of society either create their own goals or devise illegitimate methods for achieving goals deemed worthy by the larger society. Merton considered particularly notable the situation of blacks in America. While largely socialized to accept as achievable and to desire for themselves mainstream values (e.g. the "American Dream"), black citizens thus experience exceptional strain as systemic disadvantage and discrimination essentially preclude success at attempts to have for themselves the economic success prescribed by whites. Therefore to attain similar material status, blacks must innovate, must create new methods (e.g. crime) by which to achieve social goals. More recently, scholars have expanded Merton's theory to include consideration of the experiences of other minority groups (Gabbidon, 2007).

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Due to criticism of Merton's theory, Agnew (1992) put forth a revision, General Strain Theory, which includes a wider definition of goals (i.e. they are no longer purely economic). Agnew also widens the sources of strain, and thus crime, to include both the removal of positively-valued stimuli (e.g. death of a friend; suspension from school) and the introduction of negatively-valued stimuli (e.g. negative peer relationships; abuse or neglect).

A final relevant perspective is Labeling Theory, grounded principally in the work of sociologists George Herbert Mead and Charles Cooley, the premise of which is that our identities are created and reinforced based on an understanding of how others see us, such that personal identities are products of the surrounding social environment (Gabbidon, 2007). Individuals who commit deviant acts are labeled "criminal," carrying with them all of the negative implications of this stigma that they thereafter view as significant elements of their identity. Also, once labeled, individuals are treated largely with disregard to personal characteristics and are believed to embody their stigma. Of particular danger is the tendency for the criminal label to be inextricably linked to minority individuals through media portrayals and chronic racial stereotypes (Gabbidon, 2007). The application of this perspective to employers' hiring practices regarding individuals with criminal records, most notably black males, is especially relevant when considering factors that influence recidivism (Pager, 2003).

Racial Inequalities and the Persistence of Disadvantage

The classic theories noted above suggest the importance of race and ethnicity as they relate to social division and stratification, but there also has been considerable research focused directly on minority populations and crime. To explain my expectation that blacks would be more likely to recidivate than whites, even after controlling for individual criminal history and state of release, requires an acknowledgment of the continuing importance of race as a source of

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social and economic division in this country. Hagan and Peterson (1995) offer two possible, and indeed compatible, explanations for the disproportionate level of crime and delinquency observed among young, black males. First, race-driven discrimination and the resulting stratification generate community disadvantage through barriers to quality education and employment. The result of these converging factors is increased criminal activity. Second, prejudice and discrimination in the criminal justice system result in more arrests, prosecutions, and convictions of minority males. The authors also make note of the seemingly paradoxical fact that rates of violent crime continued to increase during times of record imprisonment, likely either due to new inmates taking on values of older prisoners and creating new criminal networks or to the decreased employment opportunities available to released prisoners, who have outdated skills and low levels of social capital, which in turn increased the likelihood of reinvolvement in criminal activity. In response to the discontinuity between imprisonment and crime rates, Clear (2007) argues that a high concentration of incarceration exacerbates the problems it is meant to solve by breaking up families and depriving them of needed support as well as by destabilizing community infrastructure and networks of informal social control. Returning to these areas, worsened by the consequences of mass imprisonment, does not allow released prisoners much chance at successful reintegration through legitimate employment opportunities.

Applying the concepts of social disorganization theorists, multiple researchers have identified the racial segregation bred in the 1970s as the crucial factor in cementing the fate of black urban communities as neighborhoods characterized by unemployment, concentrated poverty, poor schools, physical deterioration, and, consequently, disorder, instability, and crime (e.g. Massey, 1990; Western, 2006). Western (2006) cites the 1970s' transition in the criminal justice system from a philosophy of rehabilitation to one of punishment (evidenced by prison

expansion, mandated prison time, lengthened sentences, and severe punishments for drug crimes), not actual increases in the crime rate, as the driving force behind mass incarceration. Those most susceptible to falling victim to this shift were less-skilled, uneducated urban blacks who had suffered greatly from deindustrialization. The concurrence of conservative racial politics and urban economic failure resulted in marginalized poor black communities, with the largest inequalities produced not between whites and blacks but within the black population. So pervasive is incarceration among this population that it has been identified as "a new stage in the life course of young low-skill black men" (Pettit & Western, 2004, 151). It is essential to remember that prisoners often return to these neighborhoods once released, now carrying the burden of a prison record. Western (2006) notes that incarceration "triggers a cumulative spiral of disadvantage," as a released prisoner's opportunities for good, steady employment and a livable wage are severely restricted (109).

Unemployment and the Criminal Label

Arguably, the key measure of the economic conditions as relevant to reoffense is the unemployment rate. Multiple researchers have contended that the inability of prisoners to obtain and maintain steady employment after release is a significant factor in the likelihood that they will resume criminal activity (e.g. Rakis, 2005; Stafford, 2006; Weiman, 2007). Not only are many prisoners uneducated and unqualified, but they also must face the stigma and prejudice that comes with their criminal label. Prisoners who are released into a harsh economic environment are thus further burdened than the average citizen in their efforts to find a job. As such, some researchers argue that prison and post-release reform programs should focus on increasing the education level of prisoners and also on public awareness and understanding, with constant recognition that the ultimate goal is successful prisoner reentry (e.g. Rakis, 2005; Stafford, 2006).

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Weiman (2007) details the difficulty faced by released prisoners seeking employment and how cycling in and out of prison further reduces their chances of being active members of the labor market. On the supply side of the labor market are former prisoners who lack the education, work experience, and skills to qualify for a good job. Additionally, many prisoners return to areas with high poverty and unemployment and to old habits and former friends. On the demand side are employers reluctant to hire individuals with criminal records, especially at jobs where customer contact or handling of valuable merchandise is likely. Incarcerated individuals often miss the crucial life-course transition, whereby men in their mid-twenties and mid-thirties gain steady employment in long-term jobs with projected salary growth. In conclusion, Weiman argues that prisoners are returning to areas that do not contain potential job opportunities and that only by direct labor market intervention (e.g. through work release programs or efforts at increasing economic growth) can post-release unemployment rates decrease.

In their study examining the relationship between employment environments and prisoner reentry, Wang, Mears, and Bales (2010) investigate whether macro-level unemployment rates influence individual-level offending, with particular attention to race- and offense-specific effects. The researchers outline the various employment challenges faced by released prisoners, from having a disadvantaged background to the social stigma associated with a criminal history. They then note that the employment contexts faced by blacks and whites are extremely different, most notably that blacks are more affected by labor market fluctuations, live in different, more disadvantaged areas, and face greater employer prejudice (also see Wakefield & Uggen, 2010).

In assessing the impact of incarceration on racial inequality, Western (2002) argues that, because of the difficulty faced by former inmates in gaining steady and good employment and because blacks are disproportionately represented among the prison population, the effect of

incarceration on individual wages widens the wage divide between blacks and whites at the macro level. Interestingly, Reisig et al. (2007) find that various risk factors for black released prisoners are magnified if they are released into areas with higher racial inequality, as measured by the ratio of white to black median family income, the ratio of joblessness rates, and the ratio of poverty rates. These findings are relevant in that they demonstrate the aggregate effects individuals can have and the influence structural-level elements can have on individuals.

An experimental study conducted by Pager (2003), in which black and white individuals who were matched on all relevant application characteristics, excepting criminal history, applied for real entry-level jobs, indicates that job applicants with histories of criminal involvement face discrimination from employers reluctant to hire them. Ex-offenders were only one-half to one-third as likely as non-offenders to receive callbacks by employers. There was also an observed difference by race such that blacks were less than half as likely to receive callbacks than their white analogs and, even more striking, blacks without criminal histories were less likely to be considered by employers than whites with felony convictions. These findings call attention to the intensified discrimination faced by minority individuals with criminal backgrounds. In times of high unemployment, when job opportunities are scarce, it is even more difficult for released prisoners to find work compared to the average applicant. They are likely to be disregarded by employers who can readily hire individuals without this stigmatizing history. Certainly facing the greatest uphill battle are black prisoners, who bear both minority and criminal labels.

METHODS

Data – Recidivism of Prisoners Released in 1994

The data I analyzed were collated by the Bureau of Justice Statistics (BJS), of the United States Department of Justice, from state Departments of Corrections and FBI Records of Arrests

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and Prosecutions (RAP) sheets and criminal history files. The study, Recidivism of Prisoners Released in 1994, constitutes the most thorough and extensive collection of recidivism, criminal history, and demographic data at a national level in the United States. It contains information on 38,624 sampled prisoners released in 1994 from prisons in 15 states (Arizona, California, Delaware, Florida, Illinois, Maryland, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, Texas, and Virginia) and followed for three years thereafter. These states were chosen as a purposive sample due to willingness to participate, relative contribution to the national prison population, and inclusion in the only other national BJS recidivism study, Recidivism Among Released Prisoners, 1983.

Data were collected on all 302,309 prisoners released from the 15 states in 1994. Information was collated on each prisoner's entire officially recorded criminal history, including records of arrests, adjudications, and sentences. Demographic data include race, ethnicity, sex, and date of birth. To create the sample, BJS sorted the prisoners into 13 categories (e.g. homicide; robbery; drug trafficking) based on the type of offense that brought the prison term from which they were released in 1994. Samples from each category were then drawn within each state to fill set targets, such that an equal number of cases were taken per offense category from each state. There are a few notable deviations from this pattern. All prisoners convicted of rape/sexual assault were included. Also, all prisoners in every category were included for both Delaware and Minnesota, and the set targets for each category were doubled for California. Once sampling was completed, BJS assigned each case a weight representing the inverse of the probability of selection. Every regression analysis conducted in the current research (Tables 4-7) uses this case weight variable. For more details on sampling, including a full listing of the 13

offense categories, total released prison population by state, and targeted sample sizes for each offense category, see Langan and Levin (2002).

To obtain the above data, I completed and submitted a User Agreement to the Inter-University Consortium for Political and Social Research, detailing my research goals and plan for storing the restricted data. To ensure confidentiality, all data were stored on a removable hard drive and accessed on a stand-alone computer that was isolated from servers and local area networks, had no Internet or e-mail access, and required a unique password. All reported analyses were conducted using Stata software.

Analysis

The published BJS report by Langan and Levin (2002) is based on 33,796 of the 38,624 sampled prisoners. To be included in that report, prisoners had to meet four selection criteria: 1) a RAP sheet was found for the prisoner in the state criminal history repository; 2) the prisoner was alive throughout the three-year follow-up period; 3) the prisoner's sentence was greater than one year; 4) the prisoner's release type was not indicated as a release to custody/detainer/ warrant, absent without leave, escape, transfer, administrative release, or release on appeal. Following this logic, I also dropped from my analysis all prisoners who did not meet the selection criteria.

Additionally, I excluded all female prisoners from analysis. As supported by the data, the distribution of female crime across offense type is significantly different than the distribution of male crime. Essentially, women commit different crimes than men in different proportions. Further, males constituted over 90 percent of the sample and in general are the predominate perpetrators of crime. I therefore decided to focus my attention on male prisoners only.

The final exclusion I made is due to my dependent variable, or recidivism measure, choice. Included in the data set are numerous recidivism categories: rearrest; reconviction; resentenced to confinement; reconfined, including technical violators; resentenced to prison; and returned to prison, including technical violators. Since each measure comes with its own set of complications in regard to missing data, I had to choose one for practicality purposes. One of my aims is to determine which released prisoners are relatively more likely than others to commit new crime once released. Because individuals with longer criminal histories and/or those who commit more serious crimes have a disproportionate likelihood of being reconfined or reimprisoned, I did not use these measures, as the resulting analyses would not have included individuals who once released resumed forms of criminal activity bearing lesser punishment. I did not use rearrest as the recidivism measure because of the chance, albeit probably slight at the aggregate level, of individuals being arrested erroneously or, also, arrested for typically noncriminal acts that constitute violations of their parole, for example. I therefore chose reconviction as the recidivism measure. It accounts for new crime committed during the follow-up period but is not affected by crimes' seriousness levels. An individual is counted as a recidivist, then, if he was convicted of a crime at any point in the three-year period following his 1994 release. Because of the missing data associated with this variable, I excluded all prisoners released from Ohio. In total, my analysis includes 29,982 male prisoners from 14 states.

To test the hypothesis that black non-Hispanic and white Hispanic males would be more likely to recidivate than white non-Hispanic males, I created a combined race and ethnicity variable. Already in the data set is a collapsed race variable with four categories: white; black; other; and missing. "Other" denotes American Indian, Aleutian, Asian, or Pacific Islander. Also in the data set is an ethnicity variable with three categories: Hispanic; non-Hispanic; and missing.

Those who did not have race or ethnicity noted in their files were categorized as "missing." From these two variables, I created a singular race and ethnicity variable with 12 categories (race, ethnicity): white, non-Hispanic; black, non-Hispanic; other, non-Hispanic; missing, non-Hispanic; white, Hispanic; black, Hispanic; other, Hispanic; missing, Hispanic; white, missing; black, missing; other, missing; missing, missing. While I would have preferred to collapse this variable into fewer categories, significant and not readily explicable differences in recidivism rates and odds ratios between certain race/ethnicity groups made this an impossible task (see Results).

Other individual-level control variables included in the analyses are age, number of prior arrests (excluding the arrest that eventually resulted in the 1994 release), time served in prison for the sentence with the 1994 release, type of offense for which the individual was convicted, and type of release. I made no changes to the age or number of prior arrests variables. I collapsed the time served variable provided in the data set from nine categories to five. For example, the two categories of 13-18 months and 19-24 months became the single category of 13-24 months. Instead of using the 13-category offense type variable, I chose to use the 5-category variable, as the type of crime committed is not a primary focus. Violent offenses include homicide, rape/sexual assault, robbery, and aggravated assault. Property offenses include burglary, larceny/motor vehicle theft, fraud, forgery, and embezzlement. Drug offenses include drug possession and drug trafficking. Public order crimes include weapons offenses and driving under the influence. I reduced the release type variable to its most inclusive but crucial elements: releases that are conditional and releases that are unconditional. Conditional releases include: parole board decision—served no minimum; mandatory parole release; probation release—shock

probation; and other conditional release. Unconditional releases include: expiration of sentence; commutation—pardon; other unconditional release; other type of release; and unknown.

In order to test the hypothesis that the observed variation in recidivism by state would be largely accounted for by the state unemployment rate and the percentage of minority individuals in the population, I first obtained local area unemployment statistics from the Bureau of Labor Statistics. For each state, I averaged the yearly unemployment rates from 1994 through 1997 (the three-year follow-up period). I then inputted the 14 states' average rates into Stata to generate a state unemployment rate variable. Instead of creating a single minority percentage variable, I created a percentage black variable and a percentage Hispanic variable, using USA Counties Data collated by the U.S. Census Bureau. Minority percentages by state are from 2000, as this is the year closest to the follow-up period for which these data are easily accessible online.

RESULTS

Frequency Distributions and Recidivism Rates

Table 1 provides a frequency distribution of the 29,982 prisoners by all race and ethnicity categories, as well as the overall percent recidivist in each group. The bolded categories are those that constitute my primary focus in subsequent analyses. Notable are the results that black non-Hispanics have the highest recidivism rate of all categories and that white Hispanics have the lowest recidivism rate of the categories of interest.

Table 1. Race/Ethnicity Frequency Distribution & Recidivism Rates

Race, Ethnicity	Frequency	Percent	Percent Recidivist
White, Non-Hispanic	9,311	31.06	36.28
Black, Non-Hispanic	9,132	30.46	49.64
Other, Non-Hispanic	367	1.22	41.42
Missing, Non-Hispanic	7	0.02	28.57
White, Hispanic	3,925	13.09	33.91
Black, Hispanic	133	0.44	42.86
Other, Hispanic	22	0.07	22.73
Missing, Hispanic	511	1.70	39.33
White, Missing	2,734	9.12	28.24
Black, Missing	3,735	12.46	37.48
Other, Missing	76	0.25	30.26
Missing, Missing	29	0.10	13.79
Total	29,982	100	39.55

Pearson chi2(11) = 650.5503
Pr = 0.000

Table 2 gives the number of prisoners included from each state, as well as the percentage contribution of each state to the sample. Listed recidivism rates vary significantly by state, with Delaware as the prominent outlier, with a recidivism rate of roughly 75 percent.

Table 2. Prisoners' State of Release & State Recidivism Rates

State	Frequency	Percent	Recidivism Rate
Arizona	1,312	4.38	39.41
California	6,711	22.38	34.67
Delaware	610	2.03	75.08
Florida	2,394	7.98	36.88
Illinois	2,199	7.33	38.34
Maryland	1,507	5.03	44.92
Michigan	1,847	6.16	28.91
Minnesota	1,606	5.36	43.90
New Jersey	1,973	6.58	39.18
New York	2,332	7.78	48.50
North Carolina	1,847	6.16	42.34
Oregon	1,458	4.86	54.87
Texas	2,297	7.66	29.08
Virginia	1,889	6.30	40.23
Total	29,982	100	

Pearson chi2(13) = 848.6914
Pr = 0.000

Table 3 contains the average unemployment rate across the three-year follow-up period

for each state. It ranges from 3.75 percent in Minnesota to 7.55 percent in California. Also in

Table 3 are the state minority percentages, which vary wildly. The percentage of the population

that is black is only 1.7 percent in Oregon but is 28.3 percent in Maryland. The percent Hispanic

ranges from as low as 2.9 percent in Minnesota to as high as 32.5 percent in California.

Table 3. Unemployment Rate & Minority Population Percentages By State

State	Unemployment Rate '94-'97	Percent Black '00	Percent Hispanic '00
Arizona	5.38	3.3	25.4
California	7.55	7.0	32.5
Delaware	4.30	19.6	4.8
Florida	5.63	15.2	16.9
Illinois	5.28	15.3	12.4
Maryland	5.00	28.3	4.3
Michigan	5.18	14.4	3.3
Minnesota	3.75	3.7	2.9
New Jersey	6.20	14.4	13.4
New York	6.53	17.6	15.2
North Carolina	4.28	21.8	4.7
Oregon	5.40	1.7	8.1
Texas	5.98	11.8	32.2
Virginia	4.30	19.9	4.7

Logistic Regression Analyses

Table 4 displays the results of a logistic regression including only race and ethnicity. The

odds ratios shown give a sense of the variation between these groups. In all regressions, the odds

ratio is the ratio of the odds that prisoners belonging to the displayed category would be

reconvicted divided by the odds that prisoners belonging to the omitted category would be

reconvicted, controlling for all other variables included in the analysis. For example, Table 4

shows a highly significant odds ratio of 1.40 for black non-Hispanics. This means that the odds

of reconviction during the three-year follow-up period for black non-Hispanic males are 1.40

times the odds of reconviction for white non-Hispanic males (not controlling for any other individual or structural variable).

Table 4. Gross Effect of Race/Ethnicity on Recidivism

Race/Ethnicity	
White, Non-Hispanic	-----
Black, Non-Hispanic	1.40**
Other, Non-Hispanic	0.64*
Missing, Non-Hispanic	0.22
White, Hispanic	0.87*
Black, Hispanic	1.38
Other, Hispanic	0.03**
Missing, Hispanic	1.01
White, Missing	0.62**
Black, Missing	0.80**
Other, Missing	0.80
Missing, Missing	0.50
Number of Observations	29,982
Wald chi2 (df)	232.20 (11)

*Significant at 0.05   **Significant at 0.01

I have included Table 4 primarily to demonstrate the difficulty I faced in creating a variable that captured accurately the differences between categories of race and ethnicity. For example, I initially assumed that the 2,734 prisoners that constitute white missing did not have ethnicity information in their file because they were non-Hispanic. As such, white missing should behave in a similar way statistically to the omitted comparison, white non-Hispanic. This is not the case. Also, white missing remains significant at the 0.01 level throughout all phases of my analysis, even as the category of white Hispanic loses significance in Model 4. Additionally, black missing has an odds ratio significantly less than 1.0, which is inconsistent with both black Hispanic and black non-Hispanic results. Had these puzzling differences lost significance after further regression analyses controlling for individual- and structural-level variables, I would have felt comfortable either dropping these cases or collapsing the variable into fewer categories. As they did not, however, I kept this variable to 12 categories. Since a principal focus of this

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research is to determine the effects of race on recidivism, I wanted to keep the analysis as detailed as possible. Deleting whole categories of cases because of confusing results would also have taken away from other variables of interest to which these individuals contribute valid data.

Of the 12 race and ethnicity categories, which are all included in each regression analysis, I focus on the three bolded categories in my discussion: white non-Hispanic, which for brevity's sake I refer to as white; black non-Hispanic, which I refer to as black; and white Hispanic, which I refer to as Hispanic. Additionally, I may refer to the combined elements of race and ethnicity as race. If detailed examination of this variable is desired, included in Table 7 in the Appendix are the odds ratios for all race and ethnicity groups across the four models.

Table 5 contains a progression of four regression models that I conducted to understand the effects of race on recidivism. Odds ratios represent the likelihood of individuals in the observed category being reconvicted in the three years following release relative to those in the omitted category, controlling for all other variables in the model. Model 1 shows the gross effect of race on recidivism, as no other variables are included. The odds of blacks recidivating are 1.40 times the odds of whites recidivating. For Hispanics, this ratio is 0.87.

Table 5. The Effect of Race on Recidivism

	Model 1	Model 2	Model 3 - Preferred	Model 4
Race/Ethnicity [a]				
White, Non-Hispanic	------	------	------	------
Black, Non-Hispanic	1.40**	1.33**	1.36**	1.29**
White, Hispanic	0.87*	0.87*	0.83**	0.87
Age at Release				
14-17		------	------	------
18-24		0.66	0.69	0.67
25-29		0.52*	0.53*	0.52*
30-34		0.43**	0.44**	0.44**
35-39		0.36**	0.37**	0.37**
40-44		0.26**	0.26**	0.26**
45 & Older		0.17**	0.18**	0.18**
Unknown		3.15	2.93	3.01
Prior Arrests		1.05**	1.05**	1.05**

Time Served				
12 months or less		------	------	------
13-24 months		0.82**	0.82**	0.80**
25-36 months		0.74**	0.74**	0.71**
More than 36 months		0.84**	0.80**	0.77**
N/A		1.09	1.09	1.06
Offense Type				
Violent		------	------	------
Property		1.52**	1.60**	1.57**
Drugs		1.19**	1.20**	1.18**
Public Order		1.12	1.07	1.11
Other		1.11	1.08	1.07
Unknown		0.32*	0.24*	0.28*
Release Type				
Conditional		------	------	------
Unconditional		1.35**	1.48**	1.38**
State			*b*	
% Population Black				1.01**
% Population Hispanic				0.98**
Unemployment Rate				1.32**
Number of Observations	29,982	29,982	29,982	29,982
Wald chi2 (df)	232.20 (11)	803.08 (29)	1202.29 (42)	901.98 (32)

*Significant at 0.05   **Significant at 0.01

Notes

a - Odds ratios for all race/ethnicity categories are displayed in Table 7.

b - Model 3 includes state controls. Odds ratios are displayed in Table 6 and in Table 7.

Model 2 controls for individual-level variables in an effort to determine whether these observed racial differences in offending can be attributed to race or if in fact they are due to differences in criminal history, age, or type of release (e.g. blacks have a higher recidivism risk because they have longer criminal histories). This model shows that after individual-level controls blacks still have a significantly higher chance of failure than whites. Hispanics, again, are significantly less likely to recidivate.

Perhaps, though, these race effects in fact are attributable to the state of release, a structural-level variable (e.g. blacks have higher odds of recidivating because they are disproportionately released into states characterized by a hostile post-release environment). In Model 3, the Preferred Model, I progress to inclusion of state controls, with consistent results.

With an odds ratio of 1.36, blacks are significantly more likely than whites to be reconvicted once released. With an odds ratio of 0.83, Hispanics are significantly less likely to be reconvicted than whites. Because both individual- and structural-level variables are included, the still significant effects of race and ethnicity are thus evidence that these socially-constructed categories have a true effect and create unequal outcomes for minority and majority individuals.

In Model 4, I test the hypothesis that the elements of the state environment responsible for affecting recidivism can be captured by the unemployment rate (as it would likely influence a released prisoner's chances of getting a job and thus of refraining from involvement in criminal activity) and the percentage of minority individuals in the population (as higher concentrations of minority individuals may indicate higher levels of social stratification and tension) through an examination of the changes to the goodness of fit of the model (discussion below).

Table 6 focuses on the effect of state context on recidivism. It includes Model 3, which controls for race, all other individual-level variables, and state of release, and displays the odds ratios for each state. I have hypothesized that the environment plays a crucial role in the success or failure of a released prisoner. Basically, all environments are not created equal. Model 3 supports this conclusion. If environment were not relevant, the state odds ratios would not be significantly different; but they are. The important finding is not a specific ratio per se, as it will fluctuate depending on the omitted state, but that state of release matters, that regardless of their personal characteristics individuals will have a significantly better chance of post-release success in some states than in others. Arizona is the omitted reference because of its relatively average recidivism rate. Worthy of note are the large odds ratios of Delaware (2.44) and Maryland (2.75), which are not significantly different from each other but are from every other state (as supported by regression models in which either Delaware or Maryland is the excluded category).

Table 6. The Effect of State Context on Recidivism

	Model 3 [a]	Model 4
Race/Ethnicity [b]		
White, Non-Hispanic	------	------
Black, Non-Hispanic	1.36**	1.29**
White, Hispanic	0.83**	0.87
State		
Arizona	------	
California	1.34**	
Delaware	2.44**	
Florida	0.86	
Illinois	0.94	
Maryland	2.75**	
Michigan	1.50**	
Minnesota	1.21*	
New Jersey	0.95	
New York	1.82**	
North Carolina	1.71**	
Oregon	1.86**	
Texas	1.07	
Virginia	1.02	
% Population Black		1.01**
% Population Hispanic		0.98**
Unemployment Rate		1.32**
Individual-Level Variables [c]		
Age at Release		
Prior Arrests		
Time Served		
Offense Type		
Release Type		
Number of Observations	29,982	29,982
Wald chi2 (df)	1202.29 (42)	901.98 (32)

*Significant at 0.05   **Significant at 0.01

Notes

a - This model is the preferred model from Table 5.

b - Odds ratios for all race/ethnicity categories are displayed in Table 7.

c - All individual-level variables are controlled for in both models. Odds ratios are displayed in Table 5 and in Table 7.

I hypothesized that the state unemployment rate and the percentage of minority individuals in the state population would mostly account for differences in state recidivism ratios. I suspected that high unemployment would likely make it more difficult for prisoners to get jobs

and thus would increase the odds of recidivism and that a higher percentage of minority individuals would be a precondition to high levels of social stratification and thus the negative resultants that contribute to crime. Model 4 in Tables 5 and 6 shows that unemployment rate, percent black, and percent Hispanic are significant in regard to their influence on recidivism, but that only about a third of the variation by state is captured by these variables. The odds ratio corresponding to percent black indicates that with each percent increase in the percentage of blacks in the population, the odds of an individual recidivating are multiplied by a factor of 1.01. With an odds ratio of 0.98, percent Hispanic creates an opposite trend. As anticipated, the unemployment rate significantly affects recidivism. With each percent increase in the unemployment rate, the odds of an individual recidivating are multiplied by a factor of 1.32.

To determine the goodness of fit of Model 4 compared to Model 3, I looked at the chi-square of Model 2 (803.08) as compared with that of the alternative models. By controlling for state in Model 3, the chi-square value increased by 399.21, with 13 additional degrees of freedom. Model 4 increased the chi-square value by 98.9, with 3 additional degrees of freedom. Therefore, roughly a third of the increase in the goodness of fit from Model 2 to Model 3 can be achieved by the three added variables in Model 4 [(399.21-98.9) / (13-3) = 30%]. In other words, if the three variables I thought would largely account for state variation only account for a third of it, I could potentially still need to include six other variables in Model 4 for it to achieve the predictive success of Model 3, which is why Model 3 remains the Preferred Model.

Table 7 in the Appendix contains the odds ratios of all race and ethnicity categories as well as of each state for all four models that were omitted from display in Tables 5 and 6 for aesthetic and concision purposes.

DISCUSSION

The Effects of Race and State

Released black prisoners are significantly more likely than released white prisoners to be reconvicted of a crime during the three years following release. This statement remains supported after controlling for individual-level variables such as age and criminal history and after controlling for structural-level variables such as state of release and unemployment rate. The relative deprivation experienced by blacks, which takes the form of educational and economic disadvantage, has created an underclass whose surrounding environments facilitate criminal activity. The finding that Hispanics have significantly lower odds of failure than whites is unexpected, as they constitute a minority, susceptible to the discrimination and disadvantage that comes with that position. Hagan and Peterson (1995) note that measuring Hispanics as an all-inclusive group ignores important diversity between Mexican Americans, Puerto Ricans, Cubans, and other Latin Americans. It would be beneficial, then, to examine recidivism among individuals of varying Hispanic identities.

Variables that would have been valuable controls at the individual level, and that would have at least partially accounted for degree of disadvantage in the individual's background, are level of education and socioeconomic status. At the structural level, variables such as population density, percentage of single-parent households, level of income inequality, and a measure of overall political party allegiance might prove to be significant factors affecting the environment to which prisoners return. Also, while much can be said about the variation between state environments, crucial too is the variation within states. If black prisoners are more likely to return to inner cities, for example, it would be beneficial to examine unemployment rate and percent minority on a smaller, regional scale.

The Unanswered Questions of Delaware and Maryland

Looking at the distribution of recidivism rates across states in Table 2, Delaware has a markedly high rate of roughly 75 percent. Maryland, on the other hand, has a near-average rate of almost 45 percent. Why, then, are these states significantly more likely than the others to produce recidivists? I can offer only possible answers to this question that would be a worthwhile focus in future research. Maryland, as shown in Table 3, has the highest percentage of blacks relative to the other represented states. The probability and negative effects of racial segregation perhaps may be more pervasive in Maryland because of the higher concentration of minority individuals. A possible reason for Delaware's distinction could be due to patterns of release. Of the prisoners released in Delaware, nearly 92 percent had unconditional releases, accounting for about one-sixth of this category overall. As shown in the Preferred Model in Table 5, prisoners with unconditional releases are significantly more likely to be reconvicted than those with conditional releases. When this variable is not controlled in the regression, Delaware's odds ratio jumps to roughly 3.25. Perhaps this reflects Delaware's disproportionate lack of parole or post-release services, which further indicates a lack of priority for the reintegration success of its prisoners. Future research would benefit from investigating this question by examining detailed State Departments of Corrections expenditures on parole programs or average parole caseload, for example. The degree of state investment in parole services may significantly affect individual recidivism.

Increasing the Odds of Success

Various policy suggestions have been put forth as methods by which to reduce recidivism through increased employment while also considering community hesitation or resistance. Essentially two contrasting policy types dealing with post-release employment have received

attention from support groups and government agencies (as outlined by Pager, 2006). One focuses on making employment for released prisoners easier to obtain, for instance by providing job training or enacting anti-discrimination laws. The other focuses on protecting potential employers and community members, for instance by making criminal records easier to acquire. Indeed, former offenders have been banned from certain occupations and employers face civil liability if they fail to conduct background checks, which have become increasingly easy to access via published government records or through questionable private online companies (Weiman, 2007). Pager (2006) contends, though, that in order to reduce recidivism and increase the success of prisoner reentry, these two policy considerations must be merged, such that concern for the employer goes hand-in-hand with concern for the prisoner and vice versa. Overall success in prisoner reentry and social welfare should be the goal, not the prizing of one group above another.

Through an examination of the widespread consequences of prisoner reentry, Petersilia (2003) notes that policy makers have been focused more on appearing tough on crime than on examining and implementing policies that actually serve to reduce recidivism rates among former prisoners. Since the 1980s, a decrease in educational and vocational programs available to inmates behind bars has been accompanied by an increase in laws and regulations that produce barriers to employment, welfare, and housing upon release. Petersilia (2001b) recommends a renewed focus on rehabilitation and parole programs, particularly with regard to funding decisions. The dramatic changes in the United States parole system since the mid-1970s have produced a shift from open-ended indeterminate prison terms, by which prisoners were paroled if they demonstrated rehabilitation and had community ties, to determinate sentencing and automatic release at the end of a fixed term. Paradoxically, then, those prisoners who engage the

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least in rehabilitation are those who go unsupervised after release. Petersilia also notes that parole officers have nearly double the recommended caseloads. The lack of supervision and support, in addition to the fact that most released prisoners are uneducated, unskilled, and lacking a solid support network, results in widespread recidivism and reintegration failure.

Petersilia (2001a) and Travis and Petersilia (2001) describe the problematic cycle that will and has ensued as a result of subpar funding of reentry services. Due to the extreme costs associated with the daily functioning of prisons, states should invest in the funding and research of comparably cheaper reentry programs and parole services. The parole systems now present in various states provide few services necessary for post-release success. Because parolees are not getting the resources they need, they are increasingly likely to recidivate. If they return to prison, they put a further burden on the state, which then pulls funding from the few reentry programs that exist. And the cycle continues. Additionally, the public will not support post-release assistance programs unless government research has shown them to be effective. In the end, the researchers recommend continued state and federal funding of reentry and parole programs and increased uniformity in parole board guidelines that objectively weigh those components proven predictive of recidivism.

CONCLUSION

Prisoners are not released into society with equal odds of success. Regardless of criminal history and state of release, black male prisoners have a significantly higher chance of recidivating. Not only do they often return to neighborhoods characterized by disadvantage and disorganization, but they also carry the burden of a stigma that, along with low levels of skill and education, reduces the likelihood they will gain employment. The problems of the current prison and parole systems cannot be addressed by assuming crime is only a product of bad individuals

doing bad things. Instead, it must be contextualized, recognized as the product of a combination of forces, most far beyond the control of any one individual. While it is not necessarily wise to underestimate the risk some released prisoners pose to the community, being blinded by this possibility such that no prisoner is seen as deserving aid can lead to an inadequate provision of services for the majority of ex-offenders. Patterns of incarceration mirror patterns of social and economic stratification and disadvantage. This fact is no coincidence. Releasing prisoners with the same skill and education level they had prior to incarceration into the same environment with no support and hoping for a different result cannot be the policy with which we go forward. Successful reintegration must begin with a full understanding of the factors that lead to individuals' imprisonment and of the challenges awaiting them, their families, and their communities upon release.

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APPENDIX

Table 7. The Effects of Race/Ethnicity & State Context on Recidivism

	Model 1	Model 2	Model 3	Model 4
Race/Ethnicity				
White, Non-Hispanic	------	------	------	------
Black, Non-Hispanic	1.40**	1.33**	1.36**	1.29**
Other, Non-Hispanic	0.64*	0.64*	0.61*	0.71
Missing, Non-Hispanic	0.22	0.24	0.17*	0.20
White, Hispanic	0.87*	0.87*	0.83**	0.87
Black, Hispanic	1.38	1.63	1.30	1.35
Other, Hispanic	0.03**	0.03**	0.03**	0.03**
Missing, Hispanic	1.01	1.11	0.92	0.93
White, Missing	0.62**	0.71**	0.60**	0.78**
Black, Missing	0.80**	0.91	0.71**	0.97
Other, Missing	0.80	0.70	0.62	0.70
Missing, Missing	0.50	0.72	0.58	0.68
Age at Release				
14-17		------	------	------
18-24		0.66	0.69	0.67
25-29		0.52*	0.53*	0.52*
30-34		0.43**	0.44**	0.44**
35-39		0.36**	0.37**	0.37**
40-44		0.26**	0.26**	0.26**
45 & Older		0.17**	0.18**	0.18**
Unknown		3.15	2.93	3.01
Prior Arrests		1.05**	1.05**	1.05**
Time Served				
12 months or less		------	------	------
13-24 months		0.82**	0.82**	0.80**
25-36 months		0.74**	0.74**	0.71**
More than 36 months		0.84**	0.80**	0.77**
N/A		1.09	1.09	1.06
Offense Type				
Violent		------	------	------
Property		1.52**	1.60**	1.57**
Drugs		1.19**	1.20**	1.18**
Public Order		1.12	1.07	1.11
Other		1.11	1.08	1.07
Unknown		0.32*	0.24*	0.28*
Release Type				

Conditional		------	------	------
Unconditional		1.35**	1.48**	1.38**
State				
Arizona			------	
California			1.34**	
Delaware			2.44**	
Florida			0.86	
Illinois			0.94	
Maryland			2.75**	
Michigan			1.50**	
Minnesota			1.21*	
New Jersey			0.95	
New York			1.82**	
North Carolina			1.71**	
Oregon			1.86**	
Texas			1.07	
Virginia			1.02	
% Population Black				1.01**
% Population Hispanic				0.98**
Unemployment Rate				1.32**
Number of Observations	29,982	29,982	29,982	29,982
Wald chi2 (df)	232.20 (11)	803.08 (29)	1202.29 (42)	901.98 (32)

*Significant at 0.05   **Significant at 0.01