Revisiting Hawes: Social Capital and Racial Disparity in Incarceration Rates

Daniel D. Oladejo[1], Kruti R. Lehenbauer[2]

[1]DBA Student, University of the Incarnate Word, San Antonio, TX, oladejo@student.uiwtx.edu
[2]Associate Professor of Economics, University of the Incarnate Word, San Antonio, TX, Lehenbau@uiwtx.edu

ABSTRACT: Over the past twenty-five years, the U.S prison system has experienced continuous substantial increment in the prison population. At the same time, incarceration rates have risen by more than 300%, a phenomenon that many analysts have referred to as mass incarceration (DeFina & Hannon, 2013). This study investigates the various divergent impacts of social capital on policy egalitarianism in state outcomes. Notably, this paper reviews the relationships connecting social capital and incarceration rates, while analyzing the level of racial disparities in incarceration rates in the American states using a state-level panel data spanning 1980 to 2015. Building on work by Hawes (2017), we present a theoretical description and empirical examination for how social capital functions uniquely under different racial contexts using a newer dataset. The results suggest that there is a positive correlation between social capital and the incarceration of many African American which is more profound in some states than others.

KEYWORDS: mass incarceration, social capital, racial diversity, inequality, poverty, social control

Introduction

The growth in the number of incarcerations in the United States started in the early 1970s and has troubled both, academics and policymakers since then. Interestingly, the number of incarcerations continued to grow even after crime rates fell sharply in the 1990s. Between 1972 and 2001, the federal and state prison incarceration rate went from 93 to 470 inmates per 100,000 population (Pettit & Western, 2004). One of the disturbing aspects of these increased incarceration rates has to do with the racial inequality in the composition of those that are incarcerated. Although most prisoners are white (approximately 58%), blacks are remarkably over-represented in the prison population making up over 38% of the total prison population while comprising only 13.4% of the total U.S. population. According to Western (2006), black men are seven times more prone to be incarcerated than white men within the same age group, particularly if they are in their mid-30's.

One of the most profound reasons for this article is to traverse the factors that decisively affects mass incarcerations and the racial inequality of incarcerations in the American states. Diverse fields of works such as criminology, political science, and sociology have outstanding works of literature which elaborate on how social activities, monetary determinants, and public governmental policies exponentially have a substantial effect on incarceration rate. We focus more on how to explain incarceration rate explosion using the critical position of social capital and racial context. We build upon on the prior published work on social capital and inequality by Hero (2003, 2007) and Hawes (2017) and test if strong evidence exits to support the argument that social capital intensifies social empathy and trust, or can social capital be intensified by increasing social controls such as the correctional system. The hypothesis is that higher levels of social capital are likely to magnify social control mechanisms (rather than empathy) as racial diversity and racial intimidation rise, which would result in enhanced racial differences in incarceration rates. Using state-level panel data from the year 1978 to 2015 for 48 contiguous states in the USA, the dataset tests the hypothesis that the effect of social capital on incarcerations is dependent on racial context and that social capital worsens the racial gap in specific circumstances.

Literature Review

The privatization of public services has earned quite a reputation in recent years as concerns about government debt and deficits have risen. However, the concept of privatization in the US prison system is not a new one. The first privatization of prison efforts dates back to the 1870s when prisoners were

placed under contracts to work for private enterprises (Culp 2009). The advent of the current private prison system in the USA occurred in the late 1970s when the Immigration and Naturalization Service (INS) contracted with private companies to provide accommodation for illegal immigrants (Culp 2009). As of now, privatization has spread throughout the prison system with private services for medical care, food, finances, transportation, janitorial work, and security that are hired by both public and private prisons (Richard & Lipton 2013).

Brown and Potoski (2004) find that privatization of prison services motivates the inclination to monopolize the provision of these services. King and Pitchford (2008) also model the option of public versus private management as a trade-off between inefficiency (due to the many rules involved in public administration) and incentives (due to the cost-quality exchange in private company management system). Culp (2009) characterizes the US private prison industry as an oligopoly of three (now two) dominant corporations: Corrections Corporation of America (CCA), Geo Group, Inc. (GEO), and Cornell Companies, Inc. (CRN), which was acquired by GEO in 2010. This market composition is comparable to that in other countries that have experimented with privatization, including the UK and Australia. The Bureau of Prisons published the annual determination of average cost of incarceration for the Fiscal Years (FY) 2016 and 2017. The price to cover the average expense of incarceration for Federal inmates was $34,704.12 ($94.82 per day) in FY 2016 and $36,299.25 ($99.45 per day) in FY 2017. The average annual cost to confine an inmate in a Residential Re-entry Center was $29,166.54 ($79.69 per day) for FY 2016 and $32,309.80 ($88.52 per day) for FY 2017. Thus, from an economic standpoint, the business of incarceration is a profitable one as long a company can reduce its costs and continue to increase its prison-population to maximize their revenues. This creates the potential for encouraging laws and systems that result in higher incarceration rates of the population, regardless of race or ethnicity.

The primary aim of this paper is to analyze the pivotal role of social capital critically and racial context as it relates to disparities in incarceration rate in different states and years across the U.S. Work by Carson and Anderson (2016) agree with the idea that there is substantial racial inequality in incarceration rates in the U.S. The paper emphasis that black men are six times more prone to arrest and jail term than white men.

Keeping in line with the privatization of prisons and their respective consequences, Fosten (2016) explores the competing panoramas on the policies for federal and state criminal justice systems. The study focuses on how the need for jails by citizens is impacted in conjunction with the private sector's appetite for profits and what these outcomes mean in the context of the incarceration rates of African-American males. Due to the prejudicial viewpoint on incarceration, racial disparity within incarceration rates is not fundamentally understood by every citizen, especially the regular individuals in the society (Western & Pettit, 2010) except by the means of media and popular movements, which tend not to be objective. Surprisingly, racial and stringent state laws create some unique social outliers whose collective effect is distinctive from most of the American society. Fundamental factors such as poverty, educational level attainment, unemployment, criminal record, gang membership in communities, and arrest history of arrests in the lineage drive how the judicial system makes certain specific laws, which could further enhance racial disparity (Western & Pettit 2010).

Putnam (2000) simply defined social capital as the continuous collective relationship between people or a group of individuals which may produce some form of a network built on trust. Others such as Coleman (2000) called it a fundamental structure that describes a social environment that creates social (interaction, ties, faith, and value). Taylor (1996) is a cross-sectional study that proposes the ideology that upon examining the residential stability and educational level of people living in regions struggling with more crime was more attached to and involved in their communities than those living in lower crime communities. The results suggest that higher crime rates in some areas can improve social organization and thereby cause an increase in social capital. Although, the long run potential impacts of increased social organization on lowered crime rates, however, are not considered in the Taylor (1996) cross-sectional study. In order to increase our

focus on the relevant variables we are proposing to use in our model, let us take a brief overview of the specific literature pertaining to those variables, next.

    Social Capital: Adam & Roncevi (2003) recounts the extreme difficulty that researchers experience when measuring social capital stating that problems with separating form, source, and consequences are essential to consider. Trust is a vital integral part of social capital, Putnam (2000) equate trust as the backbone of social capital. As the discussion regarding the relationship between social capital and inequality has primarily centered around the arguments raised in Putnam (2000), this study will use a model of social capital that is in line with the conceptualization of social capital by Putnam (2000). There are five components to social capital as presented by Putnam (2000): Starting with three behavioral elements (Volunteerism, public engagement and life in the community) and ending with factors relating to attitude (sociability and social trust). A single composite index value is constructed using factor analysis of twenty-two behavioral components of social capital.

    Racial Diversity: According to the U.S. Census Bureau, the country may see a significant shift from a majority-minority society as early as 2043. The country is recognized worldwide as the land of racial and ethnic immigrants with diverse sociocultural and economic backgrounds (Hirschman 2005; Tienda 2002). Some scholars such (Alba and Nee 2003; Hochschild et al. 2012; Lee and Bean 2010) see a future with integrated diversity; however, others see a lot of resistance with politics of racial diversity (Bobo 2011; Hero 2007). As recommended by Hero (2007) which enumerates the effect that social capital has on state policy, this research added racial diversity to expand on crime and criminal justice policy outcomes and its effect crime and incarceration.

    Crime Rates: Crime rate has statistical interpretation with links to other essential variables thereby creating an enormous database of research paper cutting across numerous fields of studies including criminology, economics, law, politics and sociology (Becker, 1968; Cohen and Felson, 1979; Cantor and Land 1985; Smith 1997; Marvell and Moody 2001). Western (2006) highlighted the growth of crime rate between 1960 to 1990 (early years) was significant but has since reduced sharply afterward, in fact, the crime rate in 2005 was almost equal to the rate experienced in the early 1970s when the sudden rise in incarceration was impactful to the society.

    There exists abundant literature when considering the implications of social capital upon crime on the one hand, and racial disparities in incarceration rates on the other. However, there is insufficient literature that focuses on the relationship between social capital and incarceration rates, or more precisely, the relationship between social capital and racial disparities in incarceration rates.

Data and Methodology

Mertens (2009) hail researchers that are trying to promote social justice with the overall effort to reduce the inequality experienced, however, the major hurdle is to find the right model to support their work. Hawes (2017) analyzed incarceration models using Seemingly Unrelated Regression (SUR) method and heteroscedastic panel-corrected standard errors created by (Beck & Katz 1995). This Hawes (2017) model for ratio models to manage heterogeneity in the dataset used is the model we are testing as well. While Hawes (2017) used the dataset for the years 1986-2008, we are using an updated dataset ranging from 1978 to 2015 obtained from the Bureau of Justice Statistics National Prisoners Statistics Study database created more robust data for this research. Table 1 shows the summary statistics for all variables used in the model.

Table 1. Summary Statistics for Dependent and Independent Variables

Variables	Name	N	M	SD	Source
Dependent variables					
Total inmates per 100,000 population	*jprison_totalrt*	1,561	330.12	211.58	BJS National Prison Statistics (ICPSR Study No. 36657)
White inmates per 100,000 population	*prison_whtrt*	1,559	189.98	96.78	BJS National Prison Statistics (ICPSR Study No. 36657)
Black inmates per 100,000 population	*prison_blkrt*	1,551	1362.00	662.72	BJS National Prison Statistics (ICPSR Study No. 36657)
Black–white incarceration ratio	*prison_Bwratio*	1,548	8.14	4.68	BJS National Prison Statistics (ICPSR Study No. 36657)
Independent variables					
Social capital index	*SC8609_ma*	1,296	0. 197	1.03	Hawes, Rocha & Meier (2015)
Racial diversity (Blau index)	*racialdiversity*	1,550	0.30	0.16	U.S. Census Bureau
Percent black population	*pop_pctblk*	1,571	10.55	10.95	U.S. Census Bureau
Total violent crimes per 100,000 population	*VCRate_Total*	1,938	466.50	296.22	FBI Uniform Crime Report
Total property crimes per 100,000 population	*PCRate_Total*	1,938	3951.63	1278.15	FBI Uniform Crime Report
Government ideology	*govideo*	1,550	50.82	25.09	Berry et al. (2013)
Percent Democrats in state legislature	*totdempct*	1,550	55.21	16.97	Indiana State University—Klarner Politics
Percent females in state legislature	*women_leg*	1,200	20.49	7.76	Center for American Women and Politics
Percent African Americans in state legislature	*blk_leg*	1,500	6.33	6.27	National Conference of State Legislatures/Joint Center
Three-strikes law (yes/no)	*threestrikes*	1,581	0.29	0.46	National Conference of State Legislatures/Joint Center
Trial court clearance rate	*gtclear*	1,321	87.55	26.29	State Court Statistics (ICPSR Study No. 9266)
Drug arrests/population	*darrest2*	1,268	0.00	0.00	FBI Uniform Crime Report
GSP per Capita (2015)	*gsppc_k*	1,500	27.56	11.72	U.S. Department of Commerce, Bureau of Economic Analysis
Unemployment rate	*unemp*	1,500	5.80	2.08	U.S. Department of State
Poverty rate	*pov_rtfull*	1,500	12.89	3.88	U.S. Census Bureau Population Survey
Poverty inequality (black–white ratio)	*bwpovratio*	1,554	2.76	0.75	U.S. Census Bureau Population Survey
Percent with college degree	*edattain_ma*	1,530	22.10	5.80	U.S. Census Bureau Population Survey
Education inequality (black–white ratio)	*bwcolratio*	1,550	0.63	0.20	U.S. Census Bureau Population Survey
Divorces per 1,000 population	*divorcerate*	1,792	4.46	1.52	National Center for Health Statistics
Voting-ineligible felons per 100,000	*felonspc*	1,571	1084.71	778.40	George Mason University, United States Election Project

Note. A moving average (when possible) or the most recent available years were used to replace missing years for the independent variables. BJS = Bureau of Justice Statistics; ICPSR = Inter-university Consortium for Political and Social Research; FBI = Federal Bureau of Investigation.

Dependent Variables: Putnam (2000) suggests that minorities will have some advantage in high a social capital vicinity because social capital is presumed to produce more beneficial policy in such area. Hero (2003) disputes Putman's argument which may lead to a nonconclusive view that maybe they are both correct. Hawes (2017) further analyzed the odds ratio for white and black prisoners giving a value of one for equality and any number higher represents higher odd ratio incarceration for the black population. The primary dependent variable used in this study is the Total Inmates per 100,000 population. Moreover, White Inmates per 100,000 population, Black Inmates per 100,000 population, Black/White Incarceration Ratio and Logged Black/White Incarceration Ratio are the inclusive endogenous variables in the model analysis.

Independent Variables: As discussed in the literature review, we take variables that pertain to Social Capital for creating a Social Capital Index, Racial Diversity variables, and variables related to Crime Rates in the state as our primary independent variables of interest. These independent variables consist of Poverty Rate in the state, Percent with College Degree, Racial diversity or composition, demographic factors, and Crime rates in each state used in conjunction with other political and economic control variables as shown in Table 1, in an effort to remain consistent with the model proposed by Hawes (2017). One critical variable (*politics*) can be broken down into the state-level political variables (1) government principles called *ideology* by Berry et al (2013), (2) the percent of females in state legislature (3) percent of Democrats in state legislature and lastly (4) the percent of African Americans in the state legislature.

The assumption with these specific control variables is that there exists a significant influence on crime and incarceration rates in states with a higher number of males, less African Americans, and majority conservative Republican lawmakers, who are all likely to pursue an agenda of a "war on crime" instead of an agenda to reduce the causes of crime in terms of policy. The Three-strikes law is a dichotomous variable that indicates whether the state has embraced a policy with enhanced sentences for perpetual offenders. Currently, there are 28 states with some form of three strikes laws, as compared to only two states in 1990. Most of the approvals of three strikes laws occurred in the mid-1990s with 23 adoptions in 1994 and 1995 precisely. Prior to that, California was considered to have the strictest three strikes law in the nation. However, in 2000, California began to ease the punishments when voters passed Proposition 36. Instead of drug possession carrying a potential 25 years to life, Proposition 36 acknowledged the possibility of drug treatment.

Recently in 2012, California voters enacted a new redaction of Proposition 36. The variable Drug arrests/population measures the total number of drug-related arrests (age 18 or older) per capita. States that target and massively enforce drug use are expected to have higher incarceration rates than others. These variables summarized in Table 1 show that these policy variables have a disproportionately immense effect on blacks relative to whites. Hence, these policies are expected to enhance the overall incarceration rate and especially African American incarceration rates. The last two measures recognize the level of racial inequality in poverty and educational attainment: the black-white odds ratios for poverty and college degrees, respectively. Higher values on these measures symbolize that blacks have a higher rate of poverty or educational attainment within the state than whites, respectively.

Results and Discussions

The model is presented using data that is closely related to the data used by Hawes (2017) and using STATA Version 15 for conducting the analysis. The difference is that Hawes (2017) used data from 1986 to 2009 from the Bureau of Justice Statistics' National Prisoners Statistics study whereas we are using the data from 1978 to 2015. We are running fundamentally the same models as Hawes (2017) to identify if the results are significantly different with the new data added to the original dataset.

Table 2. Social Capital and Prison Incarceration Rate.

	Prison inmates per 100,000 population			ln(odds ratio)
	Total	**White**	**Black**	**Black/white**
Social capital	1.652	-7.474	80.061***	0.060***
	(2.247)	(1.781)	(14.366)	(0.013)
Racial diversity	371.221***	−62.239**	444.612***	0.629***
	(20.687)	(16.393)	(132.237)	(0.212)
ln(% black)	32.077***	17.349***	-103.297***	-0.095
	(3.795)	(3.005)	(24.236)	(0.019)
Total violent crime rate	0.005	−.0030	0.248	0.000
	(0.013)	(0.010)	(0.084)	(0.001)
Total property crime rate	0.002	.0220***	0.072***	0.000
	(0.002)	(0.002)	(0.016)	(0.000)
Government ideology	-0.261	-0.288	-0.763	0.000
	(0.070)	(0.052)	(0.446)	(0.000)
% Democrats in legislature	-2.113	-1.257	-4.736	0.001*
	(0.139)	(0.110)	(0.885)	(0.001)
% females in legislature	-0.536	-0.188	9.127***	0.001
	(0.294)	(0.232)	(1.875)	(0.002)
% black legislators	4.623***	0.389	-0.718	-0.019
	(0.444)	(0.352)	(2.839)	(0.003)
Three-strikes law	-15.171	-19.935	8.796	0.143***
	(3.577)	(2.832)	(22.845)	(0.018)
Trial court clearance rate	0.018	-0.093***	0.985	0.001***
	(0.061)	(0.048)	(0.390)	(0.000)
Drug arrests/population	-875.155	241.689**	-10326.950	-6.400
	(315.968)	(250.087)	(2017.852)	(1.114)
State GSP per capita	6.266***	5.461***	21.239***	−0.003
	(0.310)	(0.246)	(1.982)	(0.002)
Unemployment rate	-6.776	-3.685	-38.386	-0.001
	(0.962)	(0.763)	(6.155)	(0.006)
Poverty rate	4.850***	4.214***	14.172	−0.018***
	(0.607)	(0.481)	(3.878)	(0.004)
Black−white poverty ratio	-15.331	-40.243***	127.351***	0.328***
	(2.721)	(2.151)	(17.347)	(0.015)
% college degrees	-6.967***	-3.244***	-10.279***	0.001
	(0.609)	(0.482)	(3.886)	(0.004)
Black−white college ratio	190.171***	148.808***	53.528	−0.686***
	(14.557)	(11.514)	(92.757)	(0.100)
Divorces per 1,000 population	17.167***	14.244***	49.366***	−0.034***
	(1.315)	(1.038)	(8.375)	(0.005)
Felons per 100,000	0.0590***	0.032***	0.237***	−0.000***
	(0.002)	(0.002)	(0.015)	(0.000)
Constant	—	—	—	2.002***
	—	—	—	(0.163)
Observations	1,143	1,143	1,143	1,143
R2	—	—	—	0.5559
Number of states	48	48	48	48

Note: Models 1 to 3—Seemingly Unrelated Regression (XTSUR). Model 4—Panel Corrected Standard Errors (PCSE). GSP = gross state product. Standard errors in parentheses. *p < .1. **p < .05. ***p < .01.

Table 2 displays the outcomes for the models exploring the relationship between social capital and incarcerations in state prisons. The first column shows total incarceration rates, followed by white and black rates, respectively. The dependent variables in the first three models are related to each other that is, it is incredibly possible that factors that affect white rates will also affect black rates. The SUR model was used to analyze the dataset incorporating the *xtsur* command in Stata to estimate the models (Nguyen & Nguyen 2010). Although other estimators produce similar results, the SUR models are more suitable given that the errors the analysis may be correlated across the models. Although several variables in the model are incredibly correlated/ related with one another (e.g., percent black legislators and percent black population), multicollinearity does not appear to be a problem in the analysis performed. The average variance inflation factor (VIF) for the model is 3.53. Percent black population is the only variable with a VIF above 10 (12.42); though, the results are valid even if this variable is removed from the model. The essential findings are robust across various specifications, including bivariate models. Moreover, this estimation is consistent with past research studying these dependent variables (e.g., Yates and Fording 2005).

The most significant finding of these models is that the social capital is neither statistically significant nor is it related to total incarceration rates. However, it is a substantial predictor of race-specific rates, although in reverse directions. The analysis shows that social capital is negatively correlated to total and white prison incarcerations. However, the reverse is true for black incarceration rates because there is a strong positive connection between social capital and black incarcerations. An increase of approximately one standard deviation will cause an increase in social capital which is equally representing approximately ten fewer white incarcerations (per 100,000 white population) and almost sixty-six more black incarcerations (per 100,000 black population). The result is an update from Hawes (2017) research. This conclusion is powerful and is not susceptible to model specification in any manner. The implication is that the impacts of social capital are race specific and function differently for whites and blacks, to the disadvantage of the latter.

The final column in Table 2 displays the correlation between social capital and the relative likelihood of incarceration for blacks and whites. The result shows that social capital displays a high correlation with a higher incarceration rate for blacks relative to whites. The consequence of a one-point increase in social capital is a 6.0% increase in the logged prison ratio. Comparing the average 2014 data with 2015 data to analyze the black-white odd ratio, we found a value of 1.7. The value is currently lower than the value obtained by Hawes (2017) suggesting that a forecast of reduced disparity in incarceration rate in the future is not unreasonable. Racial diversity shows a high correlation with an increment in the black-white odds ratio. Interestingly, the percent of the population that is black is negatively correlated on the black-white odds ratio.

The SUR models in Table 2 imply that in general, incarceration rates show a positive correlation with the percent of a state's black population. However, the black incarceration rate decreases both in the absolute numbers and relative to whites as the percent of the black population rises. Smith (2004) found a positive correlation between black population size and overall incarceration rates, which shows that the relationship is not susceptible to whether racial diversity is inclusive or exclusive in the model. These results from Table 2 are highly consistent with the results obtained by Hawes (2017), which demonstrates that these issues are not only existent, but are also pervasive in nature since time has not impacted these values in any significant manner.

Table 3 shows Autoregressive Error correction models that enumerate the extended term association linking social capital and incarceration rates. The lag of social capital, the change in social capital, and a disequilibrium term ($DV_{t-1} - Social\ Capital_{t-1}$) that captures how quickly the short-term effects disappear (Zhu 2013). The influences of social capital seem to be long-lasting because the disequilibrium term is average in size, implying that the consequences of a change in the social capital do not diffuse instantly or immediately. The simulation used to develop the long-run impact was $1 - (\beta 2\ /\ \gamma)$, where γ is the coefficient from the disequilibrium term (i.e., $DV_{t-1} - Social$

Capital$_{t-1}$). It is worth noting that a one-point increase in social capital is a valuable difference and very unlikely to occur from one year to the next.

Table 3. Long-Term Effect of Social Capital on Black–White Incarceration Ratios.

	Error correction models	
	DV: Δ ln(black–white prison ratio)	
	β	(SE)
ΔSocial capital	0.01392	(0.015)
Social capital(t−1)	-0.14075 ***	(0.020)
DV(t−1) − Social capital(t−1)	-0.15337 ***	(0.023)
Racial diversity	0.17801 **	(0.087)
ln(% black)	-0.00781	(0.012)
Total violent crime rate	0.00004	(0.000)
Total property crime rate	-0.00001	(0.000)
Government ideology	-0.00002	(0.000)
% Democrats in legislature	0.00032	(0.001)
% females in legislature	0.00036	(0.001)
% black legislators	-0.00444 ***	(0.001)
Three-strikes law	0.02420 **	(0.010)
Trial court clearance rate	0.00018	(0.000)
Drug arrests/population	-0.66831	(0.564)
State GSP per capita	-0.00203 ***	(0.001)
Unemployment	-0.00265	(0.003)
Poverty rate	-0.00258	(0.002)
Black–white poverty ratio	0.04886 ***	(0.011)
% college degrees	0.00050	(0.001)
Black–white college degree	-0.05320	(0.066)
Divorce per 1,000 population	-0.00500	(0.003)
Felons per 100,000	-0.00001	(0.000)
Constant	0.28794 ***	(0.099)
Long-run effects 1 − (β2 / γ)	0.095	
Observations	1,141	
R2	0.0933	
Number of states	48	

Note. Panel corrected standard errors in parentheses. DV = dependent variable; GSP = gross state product. $*p < .1$. $**p < .05$. $***p < .01$.

Table 4 (on the next page) displays the results from two responsive models that incorporate a multiplicative term linking social capital and racial diversity and percent of the population that is black, respectively. This incline that the model is constructed to show the link between racial diversity and black group size moderate the effect that social capital has on incarcerations.

The vital principal interest is to review how racial diversity and black group control the impact social capital can thrust on incarceration rate. The analysis indicates that the cardinal effect of social capital is dependent on the racial context. Furthermore, in same conditions it is challenging to link social capital with any increased incarceration for blacks when compared to the data result with whites. The results also show that the influence of social capital is negative, yet statistically significant. Moreover, the outcome also shows an increase in social capital and again statistically significant when aligned with the black-white incarceration odds ratio.

Concluding Remarks

This study has attempted to expand upon and confirm the results of Hawes (2017) with an updated dataset from 1978 to 2015 to review the link between crime, incarceration and social capital across the U.S using longitudinal state-level data. The first update in the result is that social

capital is associated with a high incarceration rate but with a downward trend with a focus on African Americans. Furthermore, states with a higher proportion of African Americans experience the most substantial effect of social capital when analyzed with incarceration rates despite the control/other variables used in the model.

Table 4. Interactive Models: Social Capital, Racial Diversity, and Black Population.

	DV: ln(black–white prison odds ratio)	
Social capital	0.0142	-0.0619**
	(0.0334)	(0.0249)
Racial diversity	0.6254***	0.5618***
	(0.2176)	(0.2093)
ln(% black)	-0.1063***	-0.1488***
	(0.0219)	(0.0220)
Social Capital × Racial Diversity	0.1669	—
	(0.1156)	—
Social Capital × ln(% Black)	—	0.0668***
	—	(0.0112)
Total violent crime rate	0.0000	0.0000
	(0.0001)	(0.0008)
Total property crime rate	0.0000	0.0000
	(0.0000)	(0.0000)
Government ideology	0.0005	0.0007*
	(0.0004)	(0.0004)
% Democrats in legislature	0.0008*	0.0009
	(0.0008)	(0.0008)
% females in legislature	0.0014	0.0007
	(0.0019)	(0.0020)
% black legislators	-0.01623***	-.00897***
	(0.0030)	(0.0029)
Three-strikes law	0.1430***	0.1350***
	(0.0180)	(0.0168)
Trial court clearance rate	0.00064**	0.00051*
	(0.0002)	(0.0003)
Drug arrests/population	-6.3837***	-6.255***
	(1.0980)	(1.0892)
State GSP per capita	-0.0036*	-0.0052***
	(0.0019)	(0.0019)
Unemployment	−0.003	-0.0044
	(0.0055)	(0.0058)
Poverty rate	-0.0172***	-0.01551***
	(0.0043)	(0.0044)
Black–white poverty ratio	0.3283***	0.3219***
	(0.0153)	(0.0150)
% college degrees	-0.0011	−0.00281
	(0.0036)	(0.0037)
Black–white college ratio	-0.6939***	-0.6725***
	(0.1001)	(0.0978)
Divorces per 1,000 population	−0.03474***	-0.03351***
	(0.0049)	(0.0049)
Felons per 100,000	-0.00002**	-000491*
	(0.0000)	(0.0000)
Constant	2.1509***	2.3387***
	(0.1657)	(0.1637)
Observations	1,143	1,143
R2	0.58	0.58
Number of states	48	48

Note. Panel corrected standard errors in parentheses. DV = dependent variable; GSP = gross state product. *p < .1. **p < .05. ***p < .01.

Therefore, as an environment becomes more diverse, social capital fortifies racially earmarked social controls. Some fundamental critical recommendations for future research would be to analyze the result from the viewpoint of other ethnic groups. More in-depth analysis can be done with the policy of criminal justice to expand on high incarceration rate with social capital. The heavily privatized prison

industry does not leave much room for significant policy revisions and improvements unless it becomes widely recognized that the laws are encouraging incarceration rates in general, and particularly impacting the African American community in a more intensive manner.

References

Adam, Frane, and Borut Roncevi. 2003. "Social Science Information." *Social Capital: Recent Debates and Research Trends* 155-183.

Alba, R., and V. Nee. 2003. Remaking the American mainstream: Assimilation and contemporary immigration. Cambridge: Harvard University Press.

Beck, Nathaniel, and Jonathan N. Katz. 1995. "What to Do (and Not to Do) with Time-Series Cross-Section Data." *American Political Science Review* 34-47.

Becker, G. 1968. "Crime and punishment: an economic approach." *Journal of Political Economy* 169–217.

Berry, William D, Fording C Richard, Ringquist J Evan, Hanson L Russell, and Klarner Carl. 2013. "A New Measure of State Government Ideology, and Evidence that Both the New Measure and an Old Measure Are Valid." *State Politics & Policy Quarterly* 164–82.

Bobo, L. D. 2011. "Somewhere between Jim Crow & post-racialism: Reflections on the racial divide." *Daedalus* 111–136.

Cantor, D, and K. Land. 1985. "Unemployment and crime rates in the post World War II United States: a theoretical and empirical analysis." *American Sociological Review* 317–332.

Carson, E Ann, and E. Anderson. 2016. "Prisoners in 2015." *Bureau of Justice Statistics* 35.

Cohen, Lawrence E, and Marcus Felson. 1979. "Social change and crime rate trends: A routine activities approach." *American Sociological Review* 44: 588–607.

Coleman, James S. 2000. *Foundations of social theory.* Cambridge, MA: Belknap Press of Harvard Univ. Press.

Culp, Richard. 2009. "Prison Privatization Turns Twenty-Five: The Evolution of a Mature Private Prison Industry in the United States." SSRN: https://ssrn.com/abstract=1462792 38.

DeFina, Robert, and Lance Hannon. 2013. "The Impact of Mass Incarceration on Poverty." *SAGE Publications* 562-586.

Fosten, Gerald K. 2016. "Perspectives on Social Inequality, Criminal Justice, and Race in the United States: A Critical Analysis." *The Journal of Pan African Studies* 20.

Hawes, Daniel P. 2017. "Social Capital, Racial Context, and Incarcerations in the American States." *Sage publication* 339-417.

Hero, Rodney E. 2003. "Multiple Theoretical Traditions in American Politics and Racial Policy Inequality." *Political Research Quarterly* 56:401–408.

Hero, Rodney E. 2007. *Racial Diversity and Social Capital.* New York: Cambridge University Press.

Hirschman, C. 2005. "Immigration and the American century." *Demography* 595–620.

Hochschild, Jennifer Lee, Vesla M Weaver, and Traci R Burch. 2012. *Creating a new racial order: How immigration multiracialism, genomics, and the young can remake race in America*. Princeton, NJ: Princeton University Press.

Lee, J, and F. D. Bean. 2010. "America's changing color lines: Race/ethnicity, immigration, and multiracial identification." *Annual Review of Sociology* 221–242.

Marvell, T, and C. Moody. 2001. "The lethal effects of three-strikes laws." *Journal of Legal Studies* 89–106.

Mertens, Donna M. 2009. "Transformative research and evaluation." In *Transformative research and evaluation*, by Donna M. Mertens, 10. New York: Guilford Press.

Nguyen, Minh, and Hoa Nguyen. 2010. "Stata Module: Estimates of System of Regression Equations with Unbalanced Panel Data and Random Effects." *Working Paper.* http://fmwww.bc.edu/RePEc/bocode/x/xtsur.html.

Pettit, Becky, and Bruce Western. 2004. "Mass imprisonment and the life course: Race and class inequality in U.S. incarceration." *American Sociological Review* 151–69.

Putnam, Robert D. 2000. Bowling Alone: The Collapse and Revival of American Community. New York: Simon & Schuster.

Richard, Kish J, and Amy F Lipton. 2013. "Do Private prisons really offer savings Compared with their Public Counterparts?" *Blackwell Publishing* 15.

Smith, Kevin B. 1997. "Explaining Variation in State–Level Homicide Rates: Does Crime Policy Pay?" *The Journal of Politics* 59: 350–367.

Taylor, Ralph B. 1996. "Neighborhood responses to disorder and local attachments: The systemic model of attachment, social disorganization, and neighborhood use value." *Sociological* 41-74.

Taylor, Ralph B. 1997. "Social order and disorder of street blocks and neighborhoods: Ecology, microecology, and the systemic model of social disorganization." *Journal of Research in Crime and Delinquency* 113-115.

Tienda, M. 2002. "Demography and the social contract." *Demography* 587–616.

U.S. Census Bureau. 2012. http://www.census.gov/population/projections/data/national/2012.html.

Western, Bruce. 2006. *Punishment and Inequality in America.* Russell Sage Foundation.

Western, Bruce, and Becky Pettit. 2010. "Incarceration & social inequality." *Daedalus* 8-19.

Yates, Jeff, and Fording Richard. 2005. "Politics and State Punitiveness in Black and White." *Journal of Politics* 1099–121.