Examining the Relationship Between Socioeconomic Factors, Public Safety Budgets, and Arrest Rate in Bay County Florida

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<u>Introduction</u>
Since the 1980s, rapid expansion of jail and prison populations in the United States has evolved into an epidemic of mass incarceration, with Florida emerging as a national leader per 100,000 (Annual UCR reports, 2019). A pervasive socioeconomic issue, the implications of mass incarceration profoundly affect American communities. In particular, 1 in 2 American adults have had a family member incarcerated at some point, and a staggering 6.5 million Americans had a family member incarcerated as of 2018 (fwd.us, 2018). These figures are a salient representation of this uniquely American epidemic, where United States carceral rates far exceed international norms. In 2021, the U.S. arrested approximately 2110.3 individuals per 100,000 (FBI.gov, 2023), compared to the United Kingdom which arrested 11.1 per 1000 (gov.uk, 2022), and Canada incarcerated even fewer at a rate of 104 per 100,000 (Widra & Herring, 2021).

In Florida, the problem is substantially worse. Each year, approximately 3,000 Floridians per 100,000 are arrested at the state-level, a rate over three times greater than the United States as a whole (Florida Department of Law Enforcement, 2019). At the county level, the implications are far more deleterious. Although prior research has explored the implications and predictors of mass incarceration, Florida is most often used as a point of statistical comparison instead of a central focus. As such, the present study will examine the socioeconomic factors that contribute to Florida's high arrest rate by focusing on Bay County, which routinely arrests the highest number of individuals per 100,000 in the state. The reach of the criminal justice system is expansive, and touches the lives of millions of Americans. Thus, it is imperative to identify and predict circumstances that increase a one's propensity of coming into contact with the system in order to steer them away from system involvement all together, promoting upward social mobility along the way. Data analysis produced by the present study will assist the broader conversation about predictors and implications of mass incarceration throughout Florida.

Mass incarceration remains a contentious topic among policy makers, prosecutors and judges, where each group aligns with a different solution to the problem. Decades of policies that favor back-end solutions to front-end issues have ubiquitously prevented meaningful policy change. The result is a failing punitive system that does little to ensure community safety or offender success upon release (Avriam, 2017; Cook & Roesch, 2012; Iglesias, 2017; Wakefield et al., 2012). Shifts in political initiatives through all levels of government, and prosecutorial discretion enables policy makers to shift blame onto victims of the system, instead of scrutinizing a system that victimizes millions of Americans annually (Iglesias, 2017). Moreover, 25% of the American jail population are serving misdemeanor sentences of less than a year, but the overall majority of individuals involved with the criminal justice system are under some form of supervisory control (e.g., parole or probation) (fwd.us, 2018). More alarmingly, research suggests that a great deal of people fulfilling probation sentences may not have even committed the crime for which they were accused (fwd.us, 2018). Legal counsel is not always appointed to those facing misdemeanor charges, and arrested individuals may feel pressure to plead guilty in exchange for a probation sentence, thereby avoiding possible jail time. Although this may appear to be the preferential course of action for a low-level charge, these individuals will still face the far-reaching consequences of a criminal record (Sawyer & Wagner, 2022).

Of course, people do participate in criminal behavior for which harsh punitive measures are a necessary consequence, but imprisonment generally offers no means of rehabilitation that would facilitate a successful reentry into society upon completion of a sentence. While measures such as half-way houses or group homes are often available for those under penal control, a majority of modern prisons do not teach behavior that is productive upon release, where research suggests a need for therapeutic measures to adjunct traditional rehabilitative practices (Halleck, 1974). Further, measures that result in the expungement of one's criminal record have produced positive outcomes in rehabilitation program-completion and overall reduction of recidivism (Bland, Ariel & Kumar, 2023). The lack of proper resources provided to the majority of formerly incarcerated individuals, along with strict measures of community supervision designed to catch and punish mistakes, compound the issue of recidivism, and approximately one in four individuals find themselves back in jail within a year of being released as a result (Flores, 2018; Sawyer & Wagner, 2022).

Implications of Poverty

Though all people facing criminal justice system involvement (hereafter system involvement), experience its harmful effects, not all communities bear the burden equally. Even spending a single night in jail can dramatically undermine the framework of a family unit, and the consequences are amplified the longer the family member is incarcerated (Hood & Gaston, 2021; fwd.us, 2018). Unfortunately, millions of Americans have experienced this reality. At its core, the criminal justice system disproportionately affects low-income families and people of color, with research routinely observing a strong correlation between race and poverty (Keene et al., 2012; Willie, 1974). Non-white families are often affected by poverty at higher rates than white families and racial minorities are continuously over-represented among carceral populations (Mauer, 2011). Each year, the United States sentences approximately 10.6 million jail and 600,000 prison terms, and these figures do not include those detained in Indian Country jails and immigration detention centers (Sawyer & Wagner, 2022; fwd.us, 2018). However, most jailed individuals have not been convicted, and will only be behind bars for as long as it takes to pay their bail. Most individuals in long term pre-trial detention are simply too poor to pay their bail, and this fact emphasizes the reciprocal relationship between poverty and incarceration. As of 2022, the median bail amount for felonies in the United States was approximately $10,000 (Sawyer & Wagner, 2022). Since individuals who live below the poverty line are more likely to be arrested, $10,000 represents approximately eight months' worth of wages for an average jail detainee (Sawyer & Wagner, 2022; fwd.us, 2018). Of the hundreds of thousands of individuals in jail, only around 103,000 on any given day have been convicted. (Sawyer & Wagner, 2022). In this way the justice system is systemically criminalizing impoverished Americans and trapping them in a cycle of poverty.

Poverty is routinely found to be a predictor of arrest rate and recidivism (Covin, 2012), and a national survey of American families found that households earning $25,000 or less were 61% more likely to have a family member incarcerated compared to families with a household income of at least $100,000 (fwd.us, 2018). For reference, the federal poverty line for a family of four is approximately $26,500 (United States Census Bureau, 2020). Thus, if an individual is arrested and cannot make bail, their pre-trial detention only serves to prevent them from working, spending time with their family, and keeping up with essential payments, further impoverishing them in the name of an uncertain conviction. It is, however, important to note that

this subsection of incarcerated individuals does not include pre-trial detainees for which a judge has denied bail based on the severity of the alleged crime.

If an individual was in dire straits at the time of their arrest, they will often find themselves in a worse socioeconomic position post-incarceration regardless of whether they receive a conviction (Denison & Demuth, 2017). Research indicates that system involvement can result in extreme socioeconomic disadvantage for those under any type of penal control, not just those who are incarcerated (Denison & Demuth, 2017; Flores, 2018; fwd.us, 2018). Compared to individuals of a lower socioeconomic status, those with a higher socioeconomic status when their system involvement begins will find themselves at a greater socioeconomic disadvantage post-system involvement. In other words, the more someone has, the more they stand to lose at the onset of system involvement. To that end, the effects of the criminal justice system do not discriminate based on income (Denison & Demuth, 2017). At their core, arrest and incarceration entail removing individuals from their lives and their ability to maintain financial commitments if family and friends on the outside are not able to help. Thus, the financial burden placed upon both incarcerated individuals and their families is enormous.

It is a common misconception that private prisons are to blame for America's carceral epidemic, as the private sector has lobbied to keep their confinement rates up (Justice Policy Institute, 2011), but research has shown private prisons are just as susceptible to the shortcomings of those in the public sector (Camp & Gaes, 2002; Wagner, 2015). Only about 8% of all incarcerated individuals are held in privately-run facilities, so the majority of the financial burden of incarceration falls upon those involved with publicly run facilities (Sawyer & Wagner, 2022). To offset operational costs, publicly run jails and prisons shift their financial burden onto incarcerated individuals and their families (Sawyer & Wagner, 2022). The questionable ethics of the system are exacerbated when carceral facilities monetize phone calls, medical visits and basic hygiene products for an already largely economically disadvantaged population (Lindquist & Lindquist, 1999). While most jails and prisons do financially compensate incarcerated individuals for employment, this money goes right back into the system when inmates must pay for the aforementioned services, a direct hindrance to their economic success upon release (Sawyer, 2017).

Employment and Educational Disadvantage

The relationship between poverty and incarceration is also linked to poor outcomes in terms of high school graduation and post-secondary education (Ensminger & Slusarick, 1992; Schweinhart, 2013; Worrell, 1997). For children and families, this cyclic relationship is especially harmful. One study found that by age fourteen, a staggering 50.5% of black children born in 1990 to high school dropouts had a father imprisoned, and revealed a substantial difference in the probability of a child having an imprisoned parent depending on whether the parent is college educated (Wildeman, 2006). Further, post-secondary enrollment is often contingent on the disclosure of prior convictions, which nearly eliminates the chances of acceptance for a formerly incarcerated person, and the same is true with employment prospects. Researchers agree that the link between post-secondary education and occupational attainment is profound, but an individual facing system involvement has significantly depleted chances of obtaining an economically sustainable job (Cantora, 2015).

Formerly incarcerated people face an unemployment rate of approximately 27%, which exceeds depression-era unemployment rates of 24.9% (Coulute & Kopf, 2018; Shannon et al., 2017). Sociologists refer to this condition as the "prison penalty" of employment, and an analysis

of employment data obtained from the Internal Revenue Service revealed that even when formerly incarcerated individuals do obtain employment, their wages usually place them well below the poverty line (Looney & Turner, 2018). Considering the detrimental consequences that poverty presents to one's life outcome, it becomes increasingly probable that a previously incarcerated person living in impoverished conditions would chronically face system involvement.

Eviction, Housing Stability, and Forensic Events

Providing support to previously arrested or incarcerated individuals is crucial to their successful reintegration into society. A longitudinal study by Walsh et al. (2019) observed an independent association between an individual's experience with prior forensic events (arrest or incarceration), and precarious housing situations that involved increased residential moves compared to those who had not experienced a forensic event. This study indicated both women and those with a history of substance abuse were further at risk of housing instability when they had previously experienced a forensic event. Considering that single mothers are more likely than men to end up homeless or precariously housed (Maurin et al., 1989), the experience of a forensic event can, once again, seriously disrupt a family unit in terms of housing stability. Furthermore, households headed by single mothers without any social support are 33% more likely to make late rent payments than those headed by two adults, where the connection between residential instability and social disadvantage is clear (Martin-West, 2019).

Successful reintegration post-release often places formerly incarcerated individuals at a unique crossroads that is contingent on housing stability in order to produce favorable life outcomes (Ahmed et al., 2016). Previously incarcerated people are a vulnerable population, and those who are not equipped to secure stable housing upon release will not only face housing instability but may also report worse health outcomes, higher rates of substance use, and recidivism (Ahmed et al., 2016). While housing stability is undeniably a major component in reducing recidivism, much like employment and educational attainment, the compulsory disclosure of past forensic events or evictions on most housing applications serves as a major hindrance to obtaining housing. Although Rapid Re-Housing and homelessness prevention initiatives do assist vulnerable populations facing housing insecurity, research has shown that chronically housing-insecure individuals often adopt a logic of hyper-independence, in which they believe in their sole responsibility for their situation and lack acknowledgement of the external factors that placed them in a precarious situation to begin with (Hall, 2021). As such, a type of internalization persists for one's perceived wrongdoings, where the individual believes they cannot be helped, and their housing instability is exacerbated as a result. Rather unsurprisingly, such internalization of perceived moral inferiority often persists for a majority of those who have previously been incarcerated (Gendreau et al., 1979), creating a vicious cycle of poor mental health outcomes, recidivism and housing insecurity when community resources are not sought out. In addition to the often-limited social services available to inmates post-release, research has suggested that different forms of government spending and fiscal policy do contribute to arrest rates across geographic regions (Cadora, 2014). For this reason, the present study will be partially informed by regional county budgeting, with emphasis on county level per-capita public safety spending.

Florida's Role in the American Incarceration Epidemic

From its climate to carceral rates, Florida is a distinct case. As previously mentioned, Florida's incarceration rate is greater than that of entire countries, and the state stands out on several key socioeconomic and demographic factors as well. As of the 2010 census, black Americans comprised about 16% of Florida's overall population, but accounted for 46% of the total incarcerated population. Conversely, white individuals were underrepresented in Florida's carceral population, making up about 58% of the state population but only 41% of the incarcerated population (United States Census Bureau, 2010). What's more, until Florida's clemency rules were changed in March 2021, individuals with previous felony and most misdemeanor convictions were barred from serving on a jury (Florida Rules on Executive Clemency, 2021). The American Bar Association argued that these harsh guidelines, which are inconsistent with jury guidelines in most other states, violated an individual's right to a jury of their peers based on jury diversity (Joshi & Kline, 2015). In Florida, jury diversity is especially important in ensuring a fair trial because black individuals are overrepresented in the carceral population, making them more likely to be barred from future jury service. Since black individuals are also more likely to be arrested, the lack of a racially-representative jury can certainly hinder their chances of a fair trial (Peter-Hagene, 2019). Once again, mass incarceration becomes an intersectional issue of systemic racism, social cognition and policy.

The 2010 census also reported that 15.5%, or 1 in every 6.5 Floridians live in poverty, which is higher than the national average of 14.9%, and the cost of being poor in Florida is high (United States Census Bureau, 2010). Due to its tourism-driven economy, the state has an unusually high percentage of low wage jobs, resulting in a higher percentage of "working poor" individuals. Working poor is generally defined as those who have year-round, full-time jobs but remain at or below the poverty line (Nissen & Borum, 2005). Children are most likely to be impacted by poverty in Florida, where census data reveals that about 18% of Florida's children under age eighteen live in poverty. Comparatively, about 8% of children in the rest of the United States live in poverty (U.S. Census Bureau, 2020). Given that Florida is more likely than any other state to transfer juvenile offenders to adult court or prison (Bishop et al., 1999), and a sizable number of children in Florida are impoverished and therefore at a higher risk of incarceration, the intrinsic relationship between poverty and carceral outcomes in Florida is clear.

In terms of eviction, research has indicated that eviction is positively associated with neighborhood violent crime, even when controlling for structural neighborhood factors that typically predict crime. This is likely due to the individual and community disruption caused by evictions (Kirk, 2021). Further, the Princeton Eviction Lab reported that in 2018, Florida had the most rent-burdened residents in the county, where 33.5% of renters spent 30% or more of their income on rent or other housing needs (Desmond et al., 2018).Implications in Bay County, Florida

The analysis of annual county municipal reports from 2010-2019 revealed that Bay County Florida has consistently had the highest arrest rate in the state for nearly every year we examined. Most alarmingly, in 2019, Florida's arrest rate was 3,202.6 per 100,000, but Bay County's was 9,472 per 100,000 (Annual UCR Reports, 2019). Figure 1 demonstrates the stark contrast between Bay County's arrest rate, the state level, and four other demographically comparable counties from 2010 to 2019.
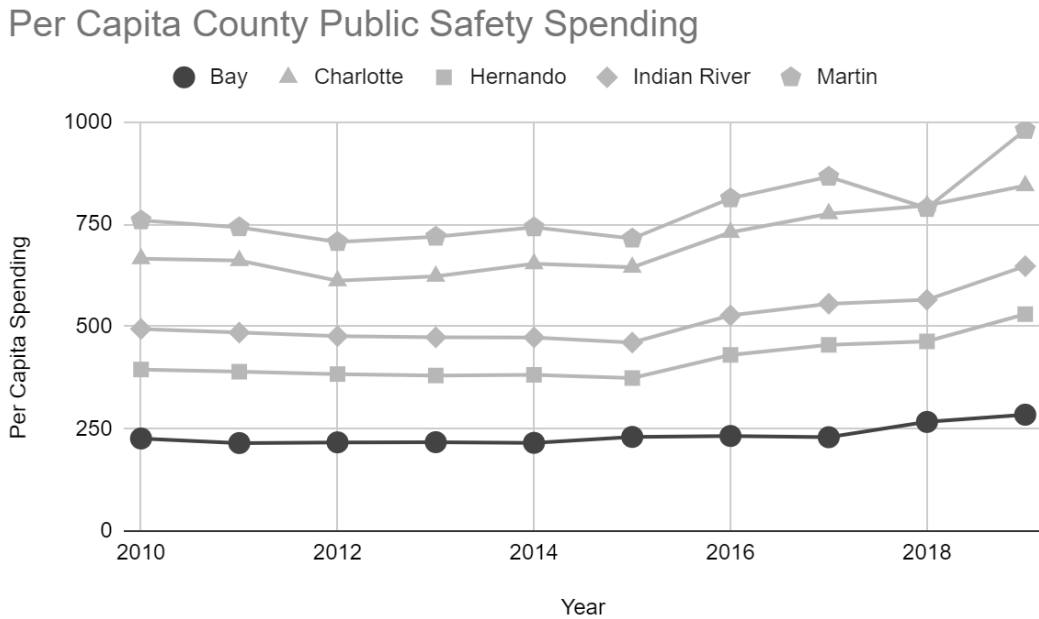
Figure 1

Comparison of Arrest Rate by County from 2010-2019

Arrest Rate by County, 2010-2019
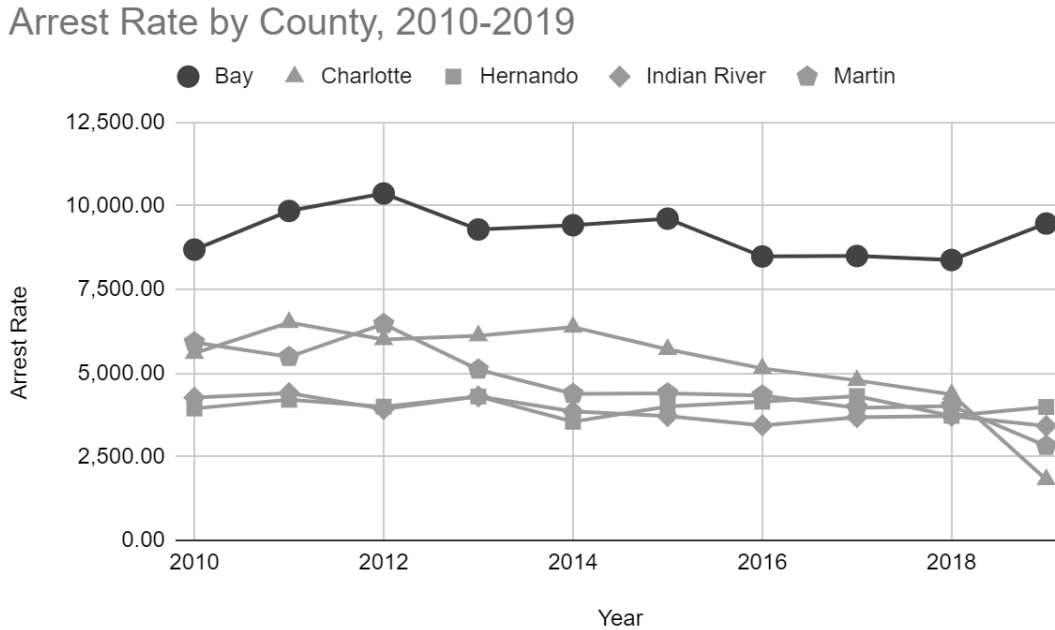
Note: Figure represents annual arrest rates per 100,000 from 2010-2019 for Bay, Charlotte, Hernando, Indian River and Martin County, Florida. Rates include all documented juvenile and adult arrests made in each county for the specified time period. From "Annual UCR Reports," Florida Department of Law Enforcement. (2019). https://www.fdle.state.fl.us/CJAB/UCR/Annual-Reports

  In terms of other known predictors of arrest rate, Bay County stands out, or is on par with state levels of key metrics. Bay County is afflicted by poverty at similar rates to the state level, where approximately 13% of Bay residents live below the poverty line, and 18% of all Bay County residents under age eighteen live in poverty (U.S. Census Bureau, 2020). Between 2010 and 2015, Bay County arrested white individuals at a rate of 262 per 100,000 U.S. residents, but black individuals were arrested at a rate of 5,247 per 100,000 U.S. residents (American Community Survey, 2015). Although Bay County consistently reports above average annual arrest rates, our analysis of each county's Annual Comprehensive Financial Reports indicated they have spent considerably less on public safety measures (Figure 2) for each year that was examined. Further, in recent years, Bay County has displayed a slightly below average high school graduation rate (Figure 3), and a moderately above average eviction rate (Figure 4).

Figure 2

*Comparison of Per Capita Public Safety Spending 2010-2019*

Per Capita County Public Safety Spending

● Bay   ▲ Charlotte   ■ Hernando   ◆ Indian River   ⬠ Martin

Note*:* Figure represents annual county-level public safety budget spending per capita from 2010-2019 for Bay, Charlotte, Hernando, Indian River and Martin County, Florida. From County Annual Comprehensive Financial Reports 2010-2019

Bay County Clerk of Court. (2019). *Annual Comprehensive Financial Reports*. https://baycoclerk.com/comptroller-services/comprehensive-annual-financial-reports-cafr/.

Charlotte County. (2021) *Charlotte County 2021 Annual Report*. https://www.charlottecountyfl.gov/core/fileparse.php/971/urlt/annual-report-2021.pdf

Management and Budget. (2019). Hernando County. https://www.hernandocounty.us/departments/departments-f-m/management-and-budget

Indian River County Clerk of Court. (2019). *Annual Comprehensive Financial Report – Indian River Clerk of the Circuit Court & Comptroller*. https://indianriverclerk.com/acfr/

Martin County Clerk. (2019). *Annual Financial Reports*. (2019). https://www.martinclerk.com/237/Annual-Financial-Reports

Figure 3
Comparison of High School Graduation Rates Across Counties, 2010-2019
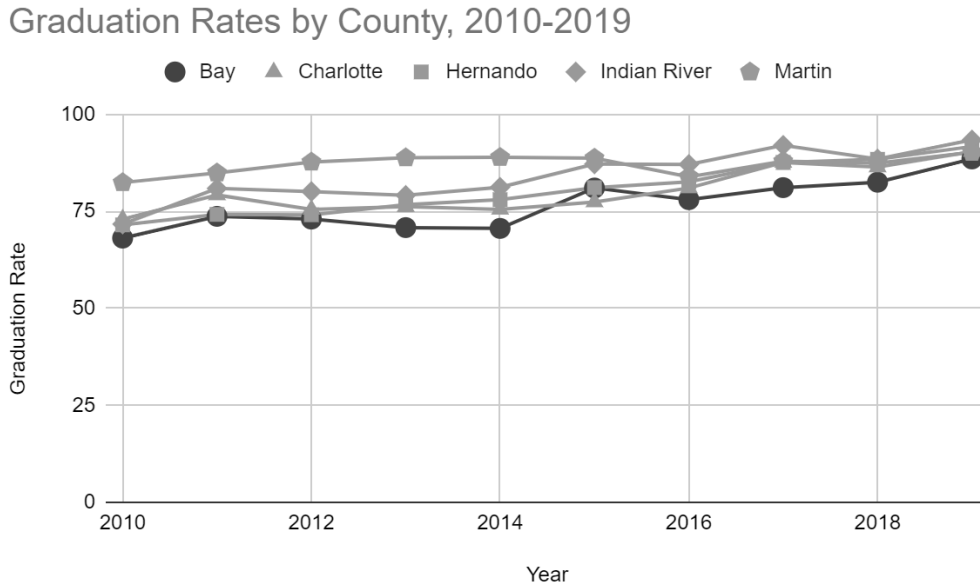
Note*:* Figure indicates the annual percentage of high school graduations from 2010-2019 for Bay, Charlotte, Hernando, Indian River and Martin County, Florida. From Florida Department of Health *County and State Reports* (2010-2019).
https://www.flhealthcharts.gov/charts/QASpecial.aspx

Figure 4
Eviction Rates by County, 2010-2019
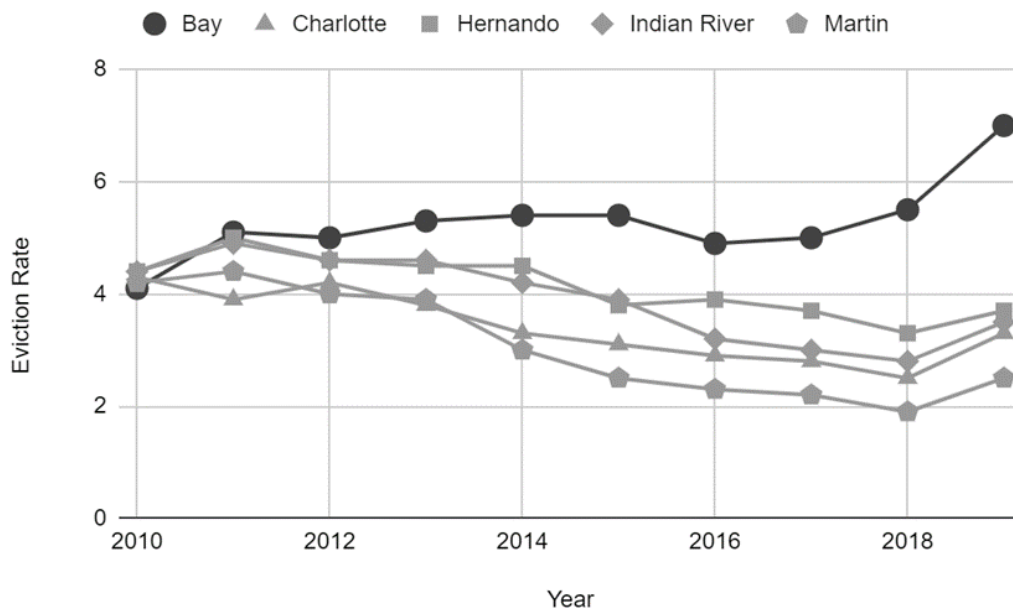
Note*:* Figure represents the annual percentage of evictions from 2010-2019 for Bay, Charlotte, Hernando, Indian River and Martin County, Florida. From National Eviction Lab. Desmond M.,

Gromis A., Edmonds L., Hendrickson J., Krywokulski K., Leung L., Porton A. (2018a). *Eviction Lab national database: Version 1.0*. Princeton University. https://evictionlab.org/

Theoretical Perspective

The statistical modeling procedures are largely informed by social cognitive theory (Bandura, 1989). Understanding and utilizing social cognitive theory can help explain the reciprocal relationship between socially deviant behavior, and the environmental factors that can predict it. In terms of criminality, social cognitive theory suggests that an individual's perceived ability to desist from deviant behavior is largely based upon their own internal perception of agency, self-efficacy and the ability to produce desired outcomes that make changes (Johnston et al., 2019). In essence, one's level of confidence in their personal ability to desist from social deviance plays a major role in their likelihood of doing just that. If they possess the agency and self-efficacy to "stay the course", then their likelihood of veering away from criminal activity increases significantly. However, it is necessary to emphasize that one's ability to produce desired outcomes and utilize their own agency to desist from criminality also depends on their environmental circumstances. One cannot produce a desired behavioral change in their life if they lack the circumstantial facilities to do so.

Related theories of criminal behavior (e.g., strain theory by Agnew, 1992 or self-control theory by Gottfredson & Hirschi, 1990) neglect the influence of environmental factors when assessing or predicting criminality. As such, social cognitive theory is paramount in informing our examination of the relationship between socioeconomic factors, which are largely circumstantial, and arrest rate, which, according to social cognitive theory, is the result of low self-efficacy. The present study's examination of this relationship would be incomplete if it operated under the assumption that criminal behavior is purely motivated by psychological factors and neglected any other mitigating factors.

Extending the ideas of social cognitive theory to criminal behavior, Johnston et al. (2019) studied a large sample of serious offenders, and uncovered strong evidence that social cognitive theory can be used to understand behaviors related to criminality. Their study revealed, in congruence with widely accepted hypotheses about social cognitive theory, that overall criminal involvement decreased when an individual expressed an increase in desistance self-efficacy (Johnston et al., 2019). Further, and more relevant to the present study, Johnston et al. uncovered a slew of environmental factors including substance use, peer pressure and time spent on the street, were all related to increased criminal behavior (Johnston et al., 2019). As such, providing the framework for the present study using social cognitive theory offers a well-informed approach to understanding both Florida and Bay County's elevated carceral rates.

Hypothesis

The present study seeks to uncover if any of the following socioeconomic influences are significantly increasing Bay County's arrest rate (where p > .05), as compared to four other counties that are similar in population size, median income and racial demographics. Socioeconomic factors being tested include: poverty rate, high school graduation rate, eviction rate, unemployment rate as well as transportation, physical environment, economic environment, culture and recreation, public safety and general government budget data. These results are expected to be generalized to Florida's entire population, in order to understand what, if anything, is contributing to Florida's high arrest rate from a statistical standpoint.

Methods

To identify which factors are driving Bay County's high arrest rate, we identified five demographically comparable Florida counties- Charlotte, Hernando, Indian River, Martin and Santa Rosa County, based on population reports from the 2020 Census and American Community Survey. Table 1 demonstrates the demographics we used to select our sample.

Table 1

Demographic Comparisons from 2017-2021 American Community Survey

	County					
Demographic	Bay	Charlotte	Hernando	Indian River	Martin	Santa Rosa
Population	175,204	194,934	194,515	163,814	158,435	187,991
Percent White	81.6%	90.3%	88.9%	86.6%	89.8%	86.4%
Percent Non-White	18.4%	9.07%	11.1%	13.4%	10.2%	13.6%
Median Income	$60,473	$57,887	$53,301	$61,594	$69,769	$77,260

Note: Table represents a sample of averages for each demographic based on the most recent American Community Survey (2017-2021). Our analysis was based on annual rates from the 2011-2021 American Community Survey's and 2020 Census data.

Subsequently, we collected arrest rate data from the Florida Department of Law Enforcement's county municipal reports from 2010-2019. For the same time period, poverty rate, high school graduation rate, and unemployment rate data were collected from annual reports published by the Florida Department of Health, along with transportation, physical environment, economic environment, culture and recreation, public safety and general government budget data, which were gathered from each county's Annual Comprehensive Financial Report. Annual county eviction rate data was collected from the Shimberg Center via the National Eviction Lab. Assumptions for ANOVA and regression testing were checked and satisfied, and a single factor, one-way ANOVA test was performed for each metric to compare the rates between 2010-2019 across counties. From there, Bonferroni-corrected post-hoc tests were performed to determine which metrics were unique to Bay County at $p<.005$. Finally, we performed a series of least-squares regression analyses in SPSS to determine which combinations of variables served to most adequately predict arrest rate in each county at $α=.05$.

Results

Though it was demographically comparable to Bay County, Santa Rosa County was excluded from the data set as it contained metrics that failed to meet the homoskedasticity conditions necessary for further testing. Significant differences in the unemployment rate across the 5 counties were not observed where $F(4,45)=0.75$, $p = .56$, and the same result was observed for

general government spending F(4,45)=1.30, p = .26. Moreover, differences in physical environment spending were shown to be significant F(4,45)=6.62, p<.001, but the data set contained a substantial outlier and was ultimately excluded.

Significant ANOVA results were also obtained for a number of metrics including per capita public safety spending across counties, F(4,45)=111.48, p<.001, poverty rate F(4,45)=14.88, p<.001 and high school graduation rate F(4,45)=4.47, p=.004. However, subsequent regression testing revealed that high school graduation rate was not a predictor of arrest rate in any county. We observed a statistically significant ANOVA result for eviction rate F(4,45) =13.38, p<.001 across all 5 counties, where further Bonferroni pairwise t-tests indicated Bay County's eviction to be unique from other counties in the data set. For other county budget metrics, significant ANOVA results were obtained and indicated uniqueness in Bay County for human services spending F(4,45)=121.45, p<.001, economic environment spending F(4,45)=185.97, p<.001, culture and recreation spending F(4,45)=134.22, p<.001. A significant result was observed for transportation spending F(4,45)=55.98, p<.001, but Bay County could not account for the mean difference in all cases. We did not report a statistically significant result (p<.05) in instances where county-level per capita human services spending and per capita culture and recreation spending were accounted for within the regression model.

Based on our final least squares analysis, the strongest predictors of arrest rate in Bay County were eviction rate β=1.108, p=.009, per capita county public safety spending β =-.955, p<.001 and poverty rate β=-0.543, p=.042, with significant regression results for the overall model (R=.88, $R2$= .77, adj $R2$=.65, F(3,6)=6.60, p=.025). Table 2 demonstrates further regression statistics for predictors in each county from our model. The results from each overall model were comparable as significant predictors of arrest rate in Charlotte County (R=.92, $R2$=.85, adj. $R2$=.80, F(3,6)=12.69, p=.005), Indian River County (R=.94, $R2$=.87, adj. $R2$=.82, F(3,6)=12.90, p=.005) and Martin County (R=.97, $R2$ = .84, adj. $R2$=.89, F(3,6)=10.87, p=.009). However, in Hernando County, this combination of factors did not prove to be significant predictors of arrest rate in the overall regression model (R= .21, $R2$=.04, adj. $R2$=-.45, F(3,6)=0.09, p=.96).

Table 2

Regressions of Association Between Arrest Rate Predictors

Predictor	*B*	*β*	*t*	*p*
		Bay County		
Constant	14567.978		7.843	<.001*
Eviction Rate	1018.456	1.108	3.810	.009*
Public Safety	-27.131	-.955	-3.390	.015*
Poverty Rate	-307.140	-.543	-2.567	.042*
		Charlotte County		
Constant	26333.927		3.165	.019*
Eviction Rate	-1024.379	-.453	-1.599	.161
Public Safety	-21.136	-1.226	-4.446	.004*
Poverty Rate	-238.872	-.166	-.750	.482
		Hernando County		
Constant	3.477			.280
Eviction Rate	.103	.226	.371	.723
Public Safety	.001	.003	.240	.818
Poverty Rate	-.012	.081	-.068	.885
		Indian River County		
Constant	7.586		4.339	.005*
Eviction Rate	.304	.647	3.205	.018*

	B	β	t	p
Public Safety	-.005	-.779	-2.707	.035*
Poverty Rate	-.184	-.743	-3.021	.023*
Martin County				
Constant	9058.025		1.732	.134
Eviction Rate	626.412	-.082	2.798	.031*
Public Safety	-6.809	-.543	-2.049	.086
Poverty Rate	-85.111	.553	-.352	.737

Note: *Indicates statistical significance at a=.05
B represents the unstandardized coefficient, *β* is the standardized coefficient, *t* is the test statistic associated to specific variable in the model, and *p* is the minimum significance as a probability value. *Constant* is the non-variable coefficient included in the regression model.

Discussion
When constructing the statistical model, ANOVA testing served to distinguish which metrics were most unique to Bay County and could predict its arrest rate as compared to the other four counties analyzed. Although significant ANOVA results for several metrics were obtained, subsequent least-squares analysis revealed that Bay County's arrest rate can be most clearly predicted by their poverty rate, public safety budget per capita, and their eviction rate. This was also found to be the case in Charlotte, Indian River, and Martin County, which suggests that this combination of variables are strong predictors of arrest rate across geographic regions. Finding that our regression model for Bay County served to predict arrest rate in other areas lends itself to a heightened external validity of the study and further examination of poverty rates, public safety budgets, and eviction rates could assist in understanding and predicting the overinflated carceral rates in Florida as a whole.

Limitations and Future Considerations
Presently, our results can explain arrest rates among the State population with 90% confidence and a 5% margin of error, but longitudinal analysis techniques could be used in a future study to increase the statistical power and generalize the results more broadly. Socioeconomic and arrest rate data after 2020 were excluded from the model on the basis of outliers, likely due to nation-wide decarceration efforts in response to the COVID-19 pandemic (Vest et al., 2020). Further, when we began our research, the 2020 Florida Unified Crime Report had not yet been published, so lack of recent data on arrest rates compounded by skewed data from the COVID-19 pandemic resulted in the exclusion of all data points reported after 2019.

Unexpectedly, the regression results demonstrated a negative *β*-value for Bay County's poverty rate. These results are not entirely congruent with pre-existing literature as poverty rate

and arrest rate are often positively correlated (Covin, 2012; Flores, 2018) As such, further analysis of other socioeconomic or demographic factors is warranted in order to understand what may have produced this unique result.

Our findings suggest that housing issues may be at the root of the issue, and prior research has indicated that affordable housing initiatives are essential in overcoming housing instability for all individuals (Baqutaya et al., 2016). Access to subsidized housing is often uncertain and limited after incarceration, and the issue is compounded by an ever-changing housing market (Keene et al., 2017). Moreover, research has indicated that a majority of formerly incarcerated individuals whose income comprises less than 30% of the area's median income will spend 50% of their total income on rent (National Low Income Housing Coalition, 2015). To combat issues of housing attainment, state, local, and national governments have revised their focus to include incentives of mixed-income housing in their affordability initiatives (Kalugina, 2016). The implementation of affordable housing initiatives at the county and state level may lead to a decrease in rates of incarceration and recidivism in Bay County, but further research should consider the potential impact of housing policy change on incarceration.

An analysis of any geographic location's carceral rates would be incomplete if racial differences within the criminal justice system went unacknowledged. Among families, black American adults are 50% more likely than white adults to have a family member incarcerated (fwd.us, 2018), and at the macro level, black and latino individuals are at an overall higher likelihood of being stopped by police and/or arrested (Monk, 2015). Mass incarceration remains just as much of a social issue as one of policy and legality, because social cognition and perception do play a part in determining who actually goes to jail, for how long, and their likelihood of recidivism. Studies and meta-analyses have shown that racial disparities exist deeply at all levels of the criminal justice system even when controlling for both legal factors, such as presence of a witness during a crime, and extralegal factors, such as suspect demeanor. Most often, these disparities are greatest at the initial point of contact with the system; arrest (Kochel et al., 2011; Monk, 2015). For this reason, researchers point to studies that demonstrate a pertinent effect size between white and non-white individuals with respect to arrest rate, where non-white individuals have a higher probability of arrest, even when controlling for mitigating variables (Kochel et al., 2011).

It should be noted that we used exclusively aggregate data and did not control for socio-demographic factors such as gender or race. Disaggregating the data in a future study to control for other known predictors of arrest rate could lead to more precise results. Additionally, Bay County is home to Panama City Beach, a popular tourist destination. While controlling for the potential impact of tourism on Bay County's arrest rate may inform the results more thoroughly in subsequent studies, it is important to consider that Bay County's arrest rate remains approximately three times higher than that of Miami-Dade County (home of Miami Beach), which suggests a more systemic issue at hand (Annual UCR reports, 2019). In our use of aggregate data, we did not account for the types of crimes most often being committed in each region, focusing only on overall rate of arrest. Future studies may factor the type of arrest into our current findings to highlight commonalities, and to ascertain if certain arrest types remain exclusive to Bay County, therefore driving their abnormally high arrest rate. Our study relied only on publicly available archival data, but utilizing more localized, zip-code based data may yield more demographically specific results and could allow the inclusion of more specific predictors in the model.

Conclusion

Mass incarceration at the national, state and county level remains a complex issue of demography, socioeconomics, legality and social disadvantage. Analyses performed in the study are specific to Florida county arrest rates, and the results of our study elucidate the issue at the county and state level. Our modeling efforts open the door to future studies that may further examine the carceral epidemic nationally. Results of the study bolster the social cognitive theory of criminal behavior by exploring how socioeconomic and environmental factors impact the likelihood of arrest, and above all, provide a unique perspective regarding how Florida contributes to the United States' carceral epidemic.

References

Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. Criminology, 30, 47-88. https://doi.org/10.1111/j.1745-9125.1992.tb01093.x

Aviram, H. (2017). Locked in. The True Causes of Mass Incarceration and How to Achieve Real Reform/Breaking the Pendulum: The Long Struggle Over Criminal Justice. Law & Society Review; Amherst, 51(4), 1017-1023. ProQuest. https://www.proquest.com/psycinfo/docview/1963340840/990C571222F045B5PQ/2?acc ountid=10919

Bandura, A. (1989). Human agency in social cognitive theory. American Psychologist, 44(9), 1175–1184. https://doi.org/10.1037/0003-066X.44.9.1175

Baqutaya, S., Affirin, A. S., & Raji, F. (2016). Affordable Housing Policy: Issues and Challenges among Middle-Income Groups. International Journal of Social Science and Humanity, 6(2), 433-436. DOI: 10.7763/IJSSH.2016.V6.686.

Bishop, D., Frazier, C., Lanza, L., & White, G. (1999). A Study of Juvenile Transfers to Criminal Court in Florida. Office of Justice Programs. https://www.ojp.gov/pdffiles1/fs99113.pdf

Bland, M., Ariel, B., & Kumar, S. (2023, February). Criminal records versus rehabilitation and expungement: A randomized controlled trial. Journal of Experimental Criminology. ProQuest. DOI:10.1007/s11292-023-09557-x

Cadora, E. (2014). Civics lessons: How certain schemes to end mass incarceration can fail. Annals of the American Academy of Political and Social Science Preview publication details, 651(1), 277-285. ProQuest. DOI:10.1177/0002716213503786

Camp, S. D., & Gaes, G. D. (2002). Growth and Quality of U.S. Private Prisons: Evidence from a National Survey. Criminology & Public Policy, 1(3), 427-450. https://doi.org/10.1111/j.1745-9133.2002.tb00102.x

Cantora, A. (2015). Navigating the job search after incarceration: The experiences of work-release participants. Criminal Justice Studies: A Critical Journal of Crime, Law & Society, 28(2), 41-160. ProQuest. DOI:10.1080/1478601X.2014.947032

Charlotte County. (2021) Charlotte County 2021 Annual Report. https://www.charlottecountyfl.gov/core/fileparse.php/971/urlt/annual-report-2021.pdf

Cook, A. N., & Roesch, R. (2012, August). "Tough on crime" reforms: What psychology has to say about the recent and proposed justice policy in Canada. Canadian Psychology/Psychologie canadienne, 53(3), 217-225. Proquest. DOI:10.1037/a0025045

Covin, L., Jr. (2012). Homelessness, poverty, and incarceration: The criminalization of despair. Journal of Forensic Psychology Practice, 12(5), 439–456. https://doi.org/10.1080/15228932.2012.713835

Couloute, L., & Kopf, D. (2018). Out of Prison & Out of Work: Unemployment among formerly incarcerated people. Prison Policy Initiative. https://www.prisonpolicy.org/reports/outofwork.html

Desmond M., Gromis A., Edmonds L., Hendrickson J., Krywokulski K., Leung L., Porton A. (2018a). Eviction Lab national database: Version 1.0. Princeton University. Retrieved September 24, 2020, from https://evictionlab.org/

Ensminger, M. E., & Slusarick, A. L. (1992). Paths to high school graduation or dropout: A longitudinal study of a first-grade cohort. Sociology of Education, 65(2), 95-113. ProQuest. DOI:10.2307/2112677

FBI.gov. (2023). FBI Crime Data Explorer. FBI Crime data explorer.
    https://cde.ucr.cjis.gov/LATEST/webapp/#/pages/home

Florez, N. E. (2018). Contributing Factors to Mass Incarceration and Recidivism. Themis:
    Research Journal of Justice Studies and Forensic Science, 6(4). PubMed.
    https://doi.org/10.31979/THEMIS.2018.06

Florida Department of Health. (2019). County and State Reports. FLHealthCHARTS.
    https://www.flhealthcharts.gov/charts/QASpecial.aspx

Florida Department of Law Enforcement. (2019). Annual UCR Reports.
    https://www.fdle.state.fl.us/CJAB/UCR/Annual-Reports

Fwd.us. (2018). Every Second: The Impact of the Incarceration Crisis on America's Families.
    https://everysecond.fwd.us/downloads/everysecond.fwd.us.pdf

Gendreau, P., Grant, B. A., & Leipciger, M. (1979). Self-esteem, incarceration and recidivism.
    Criminal Justice and Behavior, 6(1), 65-75. ProQuest.
    DOI:10.1177/009385487900600110

Gov.uk. (2023, October 24). Arrests - GOV.UK Ethnicity facts and figures. Ethnicity facts and
    figures. https://www.ethnicity-facts-figures.service.gov.uk/crime-justice-and-the-
    law/policing/number-of-arrests/latest

Gottfredson, M. & Hirschi, T. (1990). A General Theory of Crime. Redwood City: Stanford
    University Press. https://doi.org/10.1515/9781503621794

Hall, G. (2021). Normalization, prioritization, and pervasive individualism: Precariously housed
    minority, ex-prisoners, and low-income renters. State University of New York at Buffalo.
    ProQuest Information & Learning. AAI28314301

Halleck, S. (1974). Rehabilitation of criminal offenders: A re-assessment of the concept.
    Psychiatric Annals, 4(3), 61-85. ProQuest.
    https://www.proquest.com/psycinfo/docview/615980569/559D0B04F93641B0PQ/9?acco
    untid=10919&parentSessionId=jL5asfcuAATzUEaDKN%2FW5PY7K2MoBFlh%2FWh
    VYUWVjjc%3D

Hood, B. J., & Gaston, S. (2021). How families respond to the collateral consequences of
    incarceration and prisoner reentry. Family Relations: An Interdisciplinary Journal of
    Applied Family Studies, 71(3), 1175-1190. ProQuest. https://doi.org/10.1111/fare.12616

Iglesias, M. (2017). Locked In: The True Causes of Mass Incarceration and How to Achieve
    Real Reform. International Social Science Review (Online), 93(2), 1-3. ProQuest.
    https://www.proquest.com/psycinfo/docview/1985136620/F7E5B78E3E544029PQ/1?acc
    ountid=10919

Indian River County Clerk of Court. (2019). Annual Comprehensive Financial Report – Indian
    River Clerk of the Circuit Court & Comptroller. https://indianriverclerk.com/acfr/

Johnston, T. M., Brenzia, T., & Crank, B. R. (2019, January 04). Agency, Self-Efficacy, and
    Desistance from Crime: an Application of Social Cognitive Theory. Journal of
    Developmental and Life-Course Criminology, 5, 60-85.
    https://link.springer.com/article/10.1007/s40865-018-0101-1#Abs1

Joshi, A. S., & Kline, C. T. (2015, September 1). Lack of Jury Diversity: A National Problem
    with Individual Consequences. American Bar Association.
    https://www.americanbar.org/groups/litigation/committees/diversity-
    inclusion/articles/2015/lack-of-jury-diversity-national-problem-individual-consequences/

Justice Policy Institute. (2011, June 13). Gaming the System: How the Political Strategies of of Private Prison Companies Promote Ineffective Incarceration Policies. Justice Policy Institute. https://justicepolicy.org/wp-content/uploads/2022/02/gaming_the_system.pdf

Kalugina, A. (2016). Affordable Housing Policies: An Overview (Vol. 14). Cornell Real Estate Review. https://ecommons.cornell.edu/handle/1813/70761

Keene, D. E., Rosenburg, A., Schlesinger, P., Guo, M., & Blankenship, K. M. (2017). Navigating Limited and Uncertain Access to Subsidized Housing After Prison. Housing Policy Debate, 28(2), 199-214. PsycInfo. 10.1080/10511482.2017.1336638

Keene, J., Prokos, A. H., & Held, B. (2012). Grandfather caregivers: Race and ethnic differences in poverty. Sociological Inquiry, 81(1), 49-77. ProQuest. DOI:10.1111/j.1475-682X.2011.00398.x

Kirk, E. M. (2022). Untangling Eviction, Disadvantage, Race, and Social Processes: Neighborhood Factors Influencing Crime. Crime & Delinquency, 68(4), 594–612. https://doi.org/10.1177/00111287211010492

Kochel, T. R., Wilson, D. B., & Mastrofski, S. D. (2011). Effect of Suspect Race on Officer's Arrest Decisions. Criminology, 49(2), 473-512. https://doi.org/10.1111/j.1745-9125.2011.00230.x

Lindquist, C. H., & Lindquist, C. A. (1999). Health Behind Bars: Utilization and Evaluation of Medical Care among Jail Inmates. Journal of Community Health, 24, 285–303.

Looney, A., & Turner, N. (2018, March 14). Work and opportunity before and after incarceration. Brookings Institute. https://www.brookings.edu/wp-content/uploads/2018/03/es_20180314_looneyincarceration_final.pdf

Mak, A. (2021, March). States Where Renters Are at Highest Risk of Eviction States Where Renters Are at Highest Risk of Eviction. AdvisorSmith. https://advisorsmith.com/data/states-where-renters-are-at-highest-risk-of-eviction/

Management and Budget. (2019). Hernando County. https://www.hernandocounty.us/departments/departments-f-m/management-and-budget

Martin County Clerk. (2019). Annual Financial Reports. (2019). https://www.martinclerk.com/237/Annual-Financial-Reports

Martin-West, S. (2019, March). The role of social support as a moderator of housing instability in single mother and two-parent households. Social Work Research, 43(1), 31-42. ProQuest. DOI:10.1093/swr/svy028

Mauer, M. (2011). Addressing racial disparities in incarceration. The Prison Journal, 91(3), 87S-101S. ProQuest. DOI:10.1177/0032885511415227

Maurin, J. T., Russell, L., & Memmott, R. J. (1989). An exploration of gender differences among the homeless. Research in Nursing & Health, 12(5), 315-321. https://doi.org/10.1002/nur.4770120507

Monk, E. P. (2019). The Color of Punishment: African Americans, Skin Tone, and the Criminal Justice System. Ethnic and Racial Studies, 42(10), 1593-1612. 10.1080/01419870.2018.1508736

National Low Income Housing Coalition. (2015). Housing spotlight: Affordable housing is nowhere to be found for millions. https://www.novoco.com/sites/default/files/atoms/files/nlihc_housing_spotlight_affordable_housing_031015.pdf

Nissen, B., & Borum, J. W. (2005). Working Poverty: Low Wage Workers in Florida. Research Institute on Social and Economic Policy. https://labor.fiu.edu/publications/faculty-publications/workingpovertylowwageworkersinflorida.pdf

Peter-Hagene, L. (2019). Jurors' cognitive depletion and performance during jury deliberation as a function of jury diversity and defendant race. Law and Human Behavior, 43(3), 232-249. ProQuest. DOI:10.1037/lhb0000332 Prison Policy Initiative (2022). Florida Profile. https://www.prisonpolicy.org/profiles/FL.html

Sawyer, W. (2017, April 10). How much do incarcerated people earn in each state? Prison Policy Initiative. Retrieved March 9, 2023, from https://www.prisonpolicy.org/blog/2017/04/10/wages/

Sawyer, W., & Wagner, P. (2022, March 14). Mass Incarceration: The Whole Pie 2022. Prison Policy Initiative. Retrieved March 9, 2023, from https://www.prisonpolicy.org/reports/pie2022.html

Schweinhart, L. J. (2013). Long-term follow-up of a preschool experiment. Journal of Experimental Criminology, 9(4), 389-409. ProQuest. DOI:10.1007/s11292-013-9190-3

Shannon, S. K.S., Uggen, C., Schnittker, J., Thompson, M., Wakefield, S., & Massoglia, M. (2017). The Growth, Scope, and Spatial Distribution of People With Felony Records in the United States, 1948–2010. Demography, 54(5), 1795–1818. https://doi.org/10.1007/s13524-017-0611-1

United States Census Bureau. (2015). American Community Survey. https://data.census.gov/

United States Census Bureau. (2015). American Pulse Housing Survey. https://data.census.gov/

United States Census Bureau. (2020) Bay County, Florida. https://www.census.gov/quickfacts/fact/table/baycountyflorida/PST040221#PST040221

Wakefield, S., Lee, H., & Wildeman, C. (2016). Tough on crime, tough on families? Criminal justice and family life in America. Annals of the American Academy of Political and Social Science, 665(1), 8-21. ProQuest. DOI:10.1177/0002716216637048

Walsh, C., Hubley, A. M., To, M. J., Norena, M., & Gradermann, A. (2019). The effect of forensic events on health status and housing stability among homeless and vulnerably housed individuals: A cohort study. PLoS ONE, 14(2). ProQuest. DOI:10.1371/journal.pone.0211704

Widra, E., & Herring, T. (2021, September). States of Incarceration: The Global Context 2021. Prison Policy Initiative. https://www.prisonpolicy.org/global/2021.html#methodology

Wildeman, C. (2006, May). Parental imprisonment, the prison boom, and the concentration of childhood disadvantage. Demography, 46(2), 265-280. 10.1353/dem.0.0052

Willie, C. V. (1974). The Black family and social class. American Journal of Orthopsychiatry, 44(1), 50-60. ProQuest. DOI:10.1111/j.1939-0025.1974.tb00868.x

Worrell, F. C. (1997). Predicting successful or non-successful at-risk status using demographic risk factors. The High School Journal, 81(1), 46-53. ProQuest.