



UNITED
WAY

Systematic Barriers and Institutional Failures

LVJI Research on Justice and Infrastructure Equity

Prepared by:

Victoria Wrigley, M.S.

Jeniya Austin

William Bosworth

Reed Collins

Christian Dieter

Ekemini Ekpo

Lillian Hercik

Kaleb Missmer

Adam Perone

Natalie Werbel

Compiled and formatted by Timothy Loftus

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Foreword

Throughout 2024 and 2025, various interns have completed projects in collaboration with the Lehigh Valley Justice Institute (LVJI) under United Way of the Greater Lehigh Valley. These projects, under the direction of Institute Director Victoria Wrigley, were completed to elucidate inequities in infrastructure and justice systems both nationwide and in the Lehigh Valley. Researchers closely examined how institutions such as the criminal justice system and city infrastructure perpetuate disparities, resulting in the vulnerability of marginalized populations due to fragmentation and inherent bias. From analysis of the carceral system's role as a gatekeeper of maternal health, to documenting how historical policies like redlining create spatial poverty traps via poor community infrastructure, to unpacking the overrepresentation of disabled individuals in criminal justice systems, their findings identify sources of institutional neglect and inequity. The projects range from comprehensive literature reviews to large-scale, empirical studies. Collectively, these researchers dissect many of the multifaceted systemic failures that deny equitable treatment and access to resources for socially and economically disadvantaged individuals. The authors and their work can be seen below. LVJI would like to thank all authors for their contributions.

About the Lehigh Valley Justice Institute

The Lehigh Valley Justice Institute (LVJI) is a 501(c)(3) independent nonpartisan research, policy and advocacy nonprofit organization that employs a data-driven approach to developing and promoting a reimagined justice system that is equitable and fair for all communities. LVJI uses a three-step approach:

1. **Research** - Utilizing academic resources, LVJI provides a solid empirical, data-driven approach to assessing the current deficiencies and inequities inherent in criminal justice processes.
2. **Policy Development** - Building upon solid data analysis, modeling and research of innovative and best practices nationwide, LVJI develops policy and procedural recommendations for the management of local governmental systems.
3. **Advocacy** - LVJI promotes the adoption of its recommendations through interaction with community and governmental stakeholders, public awareness, news media and media platforms.

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Maternal Health Care for Incarcerated Individuals

By Natalie Werbel

Introduction

Several formative laws and regulations entrenched in U.S. history influence the experience of countless women in the carceral system. The existing laws aim to protect women but disregard the unique needs and circumstances of this population. The prison and jail system within the United States was built with consideration of the male sex. However from 2008 to 2018 the female inmate population increased by 15% (Zeng, 2020). Approximately 75% of the 3,800 women housed in PA county correctional facilities are of reproductive age (ACLU, 2012, p. 4). PA State Representative, Mike Jones, recognized on the House floor in December 2023, the disparity of the carceral system after his visit to the Muncy State Correctional Institution. Jones testified that “prisons were not designed with women in mind” (McGoldrick, 2024). As the country developed, little consideration was given to adjusting and adapting this system to fit the needs of women.

Resistance to adaptation highlights that existing laws and regulations fail to adequately address the needs of the demographic at hand and protect vulnerable incarcerated mothers. Incarceration worsens existing mental health conditions and increases risks for new ones during pregnancy (Bronson & Sufrin, 2019, p. 58S). These compounding effects are exacerbated by limitations to care during incarceration. First hand or even relative

exposure to incarceration increases barriers to prenatal care, such as transportation, finances, childcare, free time, and knowledge of pregnancy (Testa & Jackson, 2020). Incarceration poses an extended disruption, often “sudden and unexpected”, forcibly removing an individual from their routine life (Testa & Jackson, 2020, p. 2). Proper governance and best care practices for this intersectional demographic should consider context.

This research discusses maternal healthcare within incarcerated demographics. Maternal health is one’s health throughout “pregnancy, childbirth, and the postpartum period” (Bronson & Sufrin, 2019). This research examines laws and surrounding discourse coupled with the subsequent experience that incarcerated women and mothers face. The focus was to explore what laws and regulations exist, their influence, the connection to personal testimonies, and what can be drawn on for future growth within this research; focusing on Pennsylvania as compared to other places.

Court Case Analysis

Estelle v. Gamble Establishes a Right to Medical Care

Estelle v. Gamble (1976) is a landmark court case that established a right to medical care for convicted and sentenced individuals. In this case, an injured inmate filed a complaint alleging that the correctional staff subjected him to cruel and unusual punishment, violating the Eighth Amendment on the grounds of inadequate treatment and lack of diagnosis following his injury (*Estelle v. Gamble*, 429 U.S. 97 (1976)).

In the court case opinion, Justice Marshall distinguished what constitutes a violation of the Eighth Amendment (cruel and unusual punishment), including deliberate indifference to medical needs, excluding accidents, inadvertent failure, negligence, or medical malpractice. It upheld that none of these situations are valid claims of constitutional violations “merely because the victim is a prisoner” (*Estelle v. Gamble*, 429 U.S. 97 p. 10 (1976)). There must be evidence of reckless and intentional disregard. Because incarcerated individuals are restricted from taking control of their healthcare and rely on prison authorities, the government is obligated and responsible to provide medical care (*Estelle v. Gamble*, 429 U.S. 97 (1976)). Deliberate disregard for an inmate's serious medical needs violates this constitutional right. The decision recognizes two requisite components that deem an incident a violation of cruel and unusual punishment: the existence of a serious medical need and a display of deliberate indifference to that need. The correctional staff must be aware of and indifferent to the inmate's serious medical needs.

While this decision seems helpful at first glance, it does not account for the multiple

hurdles that contribute to an incarcerated individual accessing care. It narrowly focuses on deliberate indifference while excluding the persistent and common realities of inconsistent and substandard care within the carceral system. There are countless steps riddled with barriers for incarcerated individuals to obtain healthcare. This is expounded in personal testimonies shared on online blogs. When receiving care, one woman shared she was “not given the option to refuse [treatment], and to [her] knowledge parental consent was not required” (Silvonek, 2024). She elaborated that “learning how to navigate the bureaucracy of prison on my own was isolation, confusing and often frightening” (Silvonek, 2024). Medical second opinions are not an option and the inmate's “agency is clouded by a force beyond [their] control” (Silvonek, 2024). Justice Marshall shared these ideas and described that the inmate is “granted a pass” to the unit hospital, suggesting that inmates must earn access to healthcare services. This aligns with the idea of the institution staff playing a role as gatekeepers that the inmate must pass. Additionally in *Estelle v. Gamble* the inmate advocated for himself continuously but experienced constant disregard, delays in care, and threats. These barriers create spaces and opportunities for negligence and medical malpractice to occur. Without legal precedent for these problems, incarcerated individuals are not protected from such complications resulting in poor healthcare.

Further, in considering cases such as *Estelle v. Gamble*, the healthcare and correctional systems were considered separately. Justice Marshall suggested that if these two systems are evaluated without distinction, the carceral administration could bear more responsibility for the court decision, exemplifying the gaps that incarcerated individuals must navigate when seeking healthcare. Examining the relationship between these two systems

minimizes systemic barriers that favor a system of control. Without explicitly outlined standards and distinctions, incarcerated individuals are left vulnerable and unprotected.

The Supreme Court decided that when a person is “incarcerated under conditions that pose a substantial risk of serious harm”, it warrants serious medical need (Johnson-Brown, 2024, p. 8). However, prenatal care is not determined to be a serious medical need during routine pregnancies. *Estelle v. Gamble* does not specifically address women’s medical needs or pregnancy, and courts haven’t extended this reasoning to cover such situations. This is a gap that exacerbates the ongoing challenge of ensuring serious medical needs are addressed. Recognizing maternal and reproductive care as a serious medical need advocates to protect women's health.

Monmouth v. Lanzaro Establishes Serious Medical Needs

In a 1987 New Jersey district court case, *Monmouth County Correctional Institutional Inmates v. Lanzaro*, it was argued that pregnancy with outcomes of childbirth or abortion is a serious medical condition (*Monmouth County Correctional Institutional Inmates v. Lanzaro*, 834 F.2d 326, (1987)). In this class action court case, inmates at Monmouth County Correctional Institute (MCCI) in New Jersey raised concerns about the prison’s policies on healthcare and access to abortion services. This was sparked by prison policy denying an inmate access to funds for an abortion without a court order. The court decided that a court-order requirement for obtaining an “elective, nontherapeutic abortion was arbitrary and irrational”, as it lacked connection to penological interest and prohibited inmates from exercising their right to terminate pregnancies (*Monmouth County Correctional*

Institutional Inmates v. Lanzaro, 834 F.2d 326, (1987)). The court refers to the process of obtaining a court-ordered release as burdensome and prone to delays at the fault of MCCI officials. This supports the notion that denial of abortion-related services “constitutes deliberate indifference to a serious medical need”, a violation of the Eighth Amendment and foundational concept of *Estelle v. Gamble* (*Monmouth County Correctional Institutional Inmates v. Lanzaro*, 834 F.2d 326, p.1 (1987)). The court case opinion, written by A. Leon Higginbotham Jr., recognized that pregnancy is a unique medical condition involving a threshold of options determining the nature of the medical care. Childbirth or abortion requires distinct medical treatments. Prohibiting this choice and creating barriers to a certain route can cause psychological or physical harm.

Reframing Court Case Rulings

These cases highlight the general nature of seminal court cases still considered since their origin in 1976. Often, this ambiguity is seen to strip individuals of their rights, but in a recent law review, these inconsistencies were reframed in a positive manner.

Constitutional law scholar Ainslee Johnson-Brown references two relevant court case decisions, the *Dobbs v. Jackson Women's Health Organization* overturning of *Roe v. Wade*, and *Estelle v. Gamble* in the 2024 article, “Symposium: Gender, Health & The Constitution: On the Constitutional Requirement for Adequate Prenatal Care Post-*Dobbs*”. This opinion provides insight into the considerations and discourse around these influential court cases. After the *Dobbs v. Jackson Women's Health Organization* Supreme Court decision, the government codified the interest of an unborn child and

therefore must further uphold standardized prenatal care for mothers (Johnson-Brown, 2024, p. 7).

This law review takes a court case decision, often deemed an erosion of maternal and female rights, and switches the focus and narrative to advance the protection of healthcare. The *Dobbs v. Jackson Women's Health Organization* decision is often deemed negative because, before the decision, access to abortion was protected for incarcerated individuals by *Roe v. Wade*. In simple terms, abortion is a form of healthcare. Access was previously protected as a form of healthcare for incarcerated individuals by the Constitution. Johnson-Brown upholds the argument that after the Supreme Court eliminated a federal form of healthcare, the state is now responsible for using "its power to protect the health and welfare of the unborn" in environments where the government is responsible for providing healthcare (namely, prisons and jails). In considering the interest of the unborn child (a priority and foundational idea of the *Dobbs* decision), it is necessary to provide incarcerated pregnant mothers with prenatal care, as this extends care and protection from vulnerability to the unborn child.

With the collectively shifting sentiments prompted by *Dobbs*, it is more apparent that *Estelle v. Gamble* did not create a system in which all serious medical needs are defined. Nor did it clarify the standards for how healthcare should be provided within prisons and jails. *Estelle v. Gamble* set a precedent in which deliberate indifference is not protected constitutionally, but despite this, it did not prompt consistency and standardization for incarcerated healthcare. Although typically deemed a positive progression in the rights of healthcare for incarcerated individuals, this article employed a negative tone to nearly

scrutinize the *Estelle v. Gamble* court case decision.

Discursive themes that arose in the discussion include the vulnerability of incarcerated mothers, the unborn child, and the responsibility of the government. An incarcerated mother's vulnerability to the "decisions and conduct of government officials" extends to the unborn child (Johnson-Brown, 2024, p. 1). This connects to the idea frequently resurfacing throughout the literature review, that incarcerated mothers in any maternal stage lose authority over their body and health-based decisions to the government or carceral staff. One woman undergoing gynecological care shared, "in prison, my agency is constantly clouded by forces beyond my control" (Silvonek, 2024). In situations with power dynamics, the correctional officers become "gatekeeper[s] to inmates seeking medical care" (Johnson-Brown, 2024, p. 4). These women must rely on correctional officers to listen and advocate for their health. The discourse suggests that officers use their authority as a barrier to accessible healthcare. How vulnerability continues and extends to the unborn child is important to consider, as it aligns with the *Dobbs* priority to protect the unborn. If the laws and precedents set by court cases are fostering vulnerability for the mother and unborn child, these practices must be reconsidered and adapted.

This review references the challenges *Estelle v. Gamble* poses in terms of inconsistencies and demonstrates a new way of considering the *Dobbs* decision. These ideas consider a new perspective for inmate maternal health. And although consistent standards are necessary to stabilize maternal-health-centered policies, such laws and regulations can be reframed to consider methods of granting rights. In spite of the barriers to implementing standardized policies and

healthcare, these laws must not be deemed one-dimensional. To advocate for rights and access to maternal healthcare for incarcerated women, it is most beneficial to reframe these inconsistencies and find proactive ways to foster protective rights.

Broader Law and Regulation Analysis

The landscape of these laws and regulations depicts progress alongside fragmentation. While laws and court decisions work to ensure protections and security for incarcerated individuals, they often fall short of uniform coverage and enforcement. Analyzing the scope reveals inherent gaps and persistent differences among these laws and regulations.

Target Demographic

Most laws and regulations fail to address the needs of pregnant incarcerated individuals, a complex demographic marked by intersectionality. Laws and regulations such as the Healthy Birth for Incarcerated Women Pennsylvania statute of 2012, insufficiently define their target group. This statute dictates that restraints should not be applied to a “detainee known to be pregnant”. This language is ambiguous, implying that a pregnancy must be known to all, which is often not the case during short holding periods when women lack resources to confirm potential pregnancies. This predicament was further supported in the personal testimony of an incarcerated woman who struggled to detect her cervical cancer early, a product of the diminished autonomy over medical choices and self-advocacy in her institution (Stone, 2023). The federal Adoption of Safe Families Act of 1997 targets a broader demographic, including the families of incarcerated mothers. Many of these laws and regulations impact the related families subsequently, but this Act

directly influences family relationships. There is no clear consensus on whether narrowly targeted or broadly inclusive laws and regulations better serve incarcerated mothers’ rights and healthcare. Additionally, these laws and regulations often operate within a gender binary framework, overlooking gender diversity and the experiences of gender nonconforming or transgender individuals. While many of these laws and regulations target narrow groups like pregnant women or incarcerated mothers, broader policies focused on reproductive rights, gynecological care, healthcare, and abortion impact larger demographics. The holding in *Estelle v. Gamble* concerns broader healthcare for all inmates. The Adoption of Safe Families Act influences families beyond the incarcerated population. Maternal healthcare policies affect families of incarcerated individuals outside the institution and intergenerational populations. Although these laws and regulations appear to influence a niche target population, they extend beyond the intended demographic. It is also necessary to note the missing discourse surrounding transgender and nonbinary individuals in the same situations who may lack protections due to exclusive language within laws and regulations.

Implementation

Enforcement of these laws and regulations varies significantly on a national level. Pennsylvania’s statute mandates active monitoring of pregnant detainees during transportation and medical visits, clearly allocating responsibility to the correctional institution. This statute is proactive and clearly outlines the parties that must take part in this situation. California Penal Code 4023.8 grants inmates access to pregnancy tests and nondirective, unbiased, and noncoercive healthcare at any time, promoting bodily autonomy. It does not transfer responsibility to correctional staff, enabling delays, mistakes, or

negligence. This regulation proactively encourages knowledge of one's healthcare condition and autonomy to take care of oneself. Conversely, the federally introduced but not enacted, Dignity for Incarcerated Women Act relies on institutional discretion in mandating parenting classes, providing healthcare products, and facilitating access to gynecologists. This statute leaves enforcement to the discretion of facility administrators, as the institution director is responsible for providing parenting classes to each primary caretaker inmate, as well as appropriate quantities of healthcare products in correlation to the inmate's healthcare needs. Additionally, the director must allow female inmates access to a gynecologist. While these details of the statute are highly beneficial and considerate of the female inmate's needs, they are guarded by the discretion of the institution. The Healthy Birth for Incarcerated Women Pennsylvania Statute responds reactively to violations of rights, banning practices like shackling, but not proactively promoting maternal health. The PA Department of Corrections reported 64 incidents of restraints on pregnant females in county jails in the County Prison Extraordinary Occurrence Statistics report from 2021 to 2024 (PA Department of Corrections, n.d.). These statistics demonstrate that this practice is persistent despite prohibitive laws. Court decisions like *Estelle v. Gamble* and *Monmouth v. Lanzaro* set standards but lacked detailed guidance for implementation, highlighting a need for more effective approaches.

Level of Influence

These laws, regulations, and court decisions operate at various levels of influence. Federal laws and regulations, such as PA's proposed but not passed Dignity Act, court cases *Estelle v. Gamble*, *Roe v. Wade*, and *Monmouth v. Lanzaro*, as well as U.S. Federal regulations

establish broad frameworks but lack abundant enforcement across states. This creates gaps in inmate right protections. State policies, like those in Pennsylvania and California, are more detailed and enforceable. In California, the Health and Safety Codes and Penal Codes guide institutional laws and regulations. These state-level laws and regulations are largely influential on the tone of institutional-level policies. With these levels of implementation the impact varies among locations, cultures, and resources. In Pennsylvania, the Healthy Birth for Incarcerated Women Act and Restraints on Pregnant Women Act brings awareness to actions such as shackling that violate rights and cause health concerns. The Restraints on Pregnant Women Act mandates thorough reporting of each restraint applied, with the circumstances, extraordinary medical or security circumstances, and more. But written laws do not ensure that it is followed and interpreted with the best intentions. The Pennsylvania ACLU discovered that compliance with the Healthy Birth for Incarcerated Women Act is low and "pregnant prisoners were routinely shackled in their second or third trimester and during transport" (ACLU Maine, 2014). Additionally, most clinicians working with this demographic were unfamiliar with this Law or their ability to ask correctional officers to remove restraints. This investigation uncovered the story of a seven-month pregnant jail prisoner who tripped over her restraints, falling face first at a hospital visit. This statute, a mere step in the right direction, falls short of successful wide-scale implementation, adequate clinician awareness, and needs improved advocacy to be effective.

This analysis focuses on the multiple ways to support maternal health among incarcerated women and incarcerated individuals. The current fragmentation perpetuates inconsistencies experienced by this complex demographic and defined by an intersectional

nature. An intersectional and multidimensional approach that integrates a cohesive application will protect incarcerated women and their broader circumstances. Reducing fragmentation and applying comprehensive laws and regulations at multiple levels can better support this vulnerable population within the carceral system.

Themes

Throughout the literature reviews, law and regulation analysis, and personal testimonies, notable themes explain the experience of the incarcerated maternal demographic. Throughout the research, vulnerability was the most notable theme and is defined by a loss of autonomy, choice, authority, and advocacy. Vulnerability arose when both laws fell short of standardization and consistency, and the healthcare and carceral systems did not align. Inconsistencies within practice and enforcement repeatedly led to vulnerability. In maternal cases, the unborn child is a factor and vulnerability is transitive. All of these issues tie into this overarching theme of vulnerability.

Another related theme is the carceral institution's inherent role as a gatekeeper to health. When health and correctional priorities are bifurcated, the individual suffers consequences. The inmate must advocate for themselves to a correctional officer to advance to the other system (healthcare). This asynchrony between systems fosters the gatekeeper and when the gatekeeper is not focused or educated on protecting the individual, the inmate endures vulnerability. Incarcerated women in the maternal stages are caught at the intersection of two systems that are not built to work in tandem. An incarcerated woman seeking the results of her medical examination waited over two weeks, needing to call her family outside the correctional facility (Stone, 2023). This

prompted a summons to the medical department and eventual clarity of her results. This instance of individual autonomy not sufficing and requiring outside influence to reach the medical system occurred twice for this individual, representing a faulty, absent, and harmful connection between the carceral and health systems.

Additionally, the theme gendered infrastructure arose when considering the history of this demographic and the carceral system. The dated practice of shackling is persistent, and prohibiting laws are not strictly enforced (Clarke & Simon, 2013). Shackling pregnant and birthing women is a remnant "protocol designated for male institutions and is not based on genuine security concerns" (Clarke & Simon, 2013, p. 780). This is representative of the various existing carceral practices not adapted to best treat women throughout the maternal stages.

Next, a recurring lack of knowledge throughout research was interwoven in themes of a gatekeeper. In shared personal stories, correctional officers gave the inmate notice of their medical need with the bare minimum amount of information, generally leaving the individual in the dark (Silvonek, 2024). This left the individual unable to assist themselves, impeding their "ability to make informed decisions about [their] health" (Silvonek, 2024). Without information, incarcerated individuals face barriers to decision making and lose the power to care for themselves. These themes are interdependent and manifest through the personal stories in which women repeatedly seek medical treatment but fail to receive the guidance, information, or care they deserve (Stone, 2023). This type of experience poses a great impediment as women noted feeling "scared and confused", "dispensable", and trapped in a body other than their own (Silvonek, 2024).

Another notable deterrent to care was evident in a mother's breastfeeding story. The legal right to pump breast milk in the U.S does not explicitly extend to incarcerated mothers, posing significant health consequences and handicapping family care (Burnley, 2019). By promulgating a lactation program in the institution, mothers strengthened their family stability and felt happy and clear-minded (Burnley, 2019). This lactation program reached intergenerationally to target the neurological effects of children resulting from the psychological stress of an incarcerated mother. This program strengthened emotional bonds and also fought to minimize the distance between mothers and their families (Burnley, 2019). This ties back to the importance of a woman's physical distance and connection to their support networks. Through breastfeeding, the mother could continue their active role in their child's health and development despite being physically distant. These points elevate the larger ideas drawn from this research and embody the challenging experience of incarcerated women throughout all maternal stages and correlating healthcare.

Forward Action

and allocation for incarcerated maternal women within research and literature endorses a recognition and thwarts potential gaps in care. Current efforts are underway, such as the Pregnancy in Prison Statistics (PIPS) project that aims to fill data gaps in pregnancy-related outcomes, conditions, and care within prisons and jails.

Coupled with the necessary standardization for data collection, creative approaches provide paths for action, correction, and advancement. Similar to Johnson-Brown's way of finding spaces for advocacy within gaps, other successful situations implemented by non-carceral institutions can be borrowed and applied to maternal healthcare instances.

For example, unwillingness to transport pregnant women within carceral institutions can be scrutinized in comparison to a carceral system to transport for other needs such as job training or visiting a sick relative (Kasdan, 2009). This same framework applies to barriers to care, such as co-pays and fees. Additionally, promoting trauma-informed training for correctional officers would encourage a deeper understanding of the stress and challenges inherent in this experience (McGoldrick, 2024). A similar and already implemented idea proving success is the Doula Program at two Pennsylvania state correctional facilities. This program delivers non-clinical physical and emotional support throughout pregnancy, labor and delivery, and the postpartum period ("Wolf Administration", 2022). The positive impacts of this program are especially evident among marginalized groups such as first-time mothers, lower-income populations, or individuals with language or cultural barriers. This care fosters a connection between women and a network of support and care providers, encouraging these women to vocalize their preferences and needs ("Wolf Administration", 2022). Supplementing the necessary standardization of data with creative and power-enabling, proactive laws and programs will best support a healthy future for incarcerated mothers and women.

Conclusion

This research on incarcerated women and maternal healthcare reveals a complex interplay of legal, systemic, social and institutional failures that perpetuate vulnerabilities. Foundational court cases historically established necessary constitutional rights to care, and subsequent laws and regulations have targeted more specific maternal health and incarcerated health needs. This fragmentation of laws across federal, state, and institutional levels

fosters gaps in protection, education, and care. The analyzed themes of vulnerability, gatekeeper to health, asynchrony between systems, gender, lack of knowledge, barriers to care, loss of power, and physical distance to support networks demonstrate that these legal protections need comprehensive reform to actively support this demographic. Throughout the research, written laws and regulations proved to be far more accessible than the subsequent discourse and personal testimonies. In the few testimonies analyzed, the gaps between laws and practice were glaringly evident. This lack of conversation indicates the insufficient level of engagement collectively around this topic. Moving forward, standardizing data collection, creating comprehensive and actively protective laws, and implementing creative programming such as doula services will best support this intersectional demographic. Most importantly, this demographic must be recognized with consideration of the intersection of incarceration and maternal health. These women and mothers deserve dignified, comprehensive, and individualized care that address the profound health inequities extending beyond institutional walls and to families, communities, and future generations. Achieving justice and care will begin to tackle public health concerns of all topics from a new angle.

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Systemic Ableism in the System: The Unethical Treatment of People with IDD Throughout the Criminal Justice System

By Adam Perone

Abstract

Marginalized groups have historically faced mistreatment under the criminal justice system. Race, low-income, and mental health conditions are just some of the factors that can impact someone's journey throughout intake, prosecution, and corrections. A group that does not have quite the amount of literature that the previous groups have is that of disabilities, specifically IDD, or Intellectual and Developmental Disabilities. Recent research suggests that people with IDD are significantly overrepresented in all areas of the criminal justice system including, but not limited to, the intake process, the court system, and the correctional system. People with IDD are found to have an increased criminalization rate compared to those without disabilities. Court rooms have issues properly giving the necessary accommodations to individuals with IDD, whether they are the defendant or simply serving on the jury. Jails and prisons also do not adequately serve the increased needs of people with IDD; in regards to certain medical treatment they need or having proper living conditions while in containment. People with IDD are unethically treated throughout many aspects of the criminal justice system.

Introduction

The impetus for this project comes two places: my fascination with the journey someone can take through the criminal justice system and the empathy I feel for other people with disabilities. As someone with a disability myself, I wanted to focus on the disability community and shine a spotlight on the unique experiences that people of varying disabilities face. With this project, I hope people can take away that people with disabilities can still face challenges in the criminal justice system, and that greater awareness can be made to highlight their experiences. Together, through empathy and bridging understanding, we can grow closer as a community and stick up for one another whenever there is injustice.

Scope

Disability can be hard to define, especially in the realm of criminal justice research. As characteristics like poverty and race become more clearly identifiable, defining disabilities presents distinct challenges for the institutions that engage with them with. For instance, for the wide range of different disabilities there are, not one affects each person the same.

Each person has a unique experience with a disability; albeit, having some shared characteristics that make up a broader community. With this being known, it is important to distinguish the experiences and differences between those living with a physical disability compared to a cognitive disability. Defining the terminology and usage of definitions in this paper will help clarify the information discussed, and may be different to how other experts define these terms.

Disabilities, according to the Americans with Disabilities Act (ADA), are defined in three broad categories, but mentions physical and mental impairments in the first category. First, it defines someone with a disability that “has a physical or mental impairment that substantially limits one or more major life activities.” (Americans with Disabilities Act, 1990). A substantially limiting disability is broadly defined as something that can hinder an activity to a greater extent compared to a milder degree (Americans with Disabilities Act, 1990). The ADA refers to “major life activities” as activities and movements that are done every day, including internal body functions (Americans with Disabilities Act, 1990).

This paper will focus on IDD, or Intellectual and Developmental Disabilities. These disabilities, defined by the American Association on Intellectual and Developmental Disabilities, are a collection of conditions that affect people throughout their whole life and hinders their mental capacity as well as their behavioral skills (Criteria, n.d). Intellectual disabilities are specifically characterized as conditions that significantly limit adaptive behavior and intellectual functioning during the developmental period, or before the age of 22 (Criteria, n.d). There are two factors that make up intellectual disability: intellectual functioning and adaptive behavior (Criteria, n.d). Intellectual functioning, also known as

intelligence, refers to mental skills like reasoning and learning; typically measured by IQ test with a score of 70-75 being the mark for having an intellectual disability (Criteria, n.d). Adaptive Behavior are the practical and social skills that are used in everyday lives (Criteria, n.d). These include, but not limited to, literacy, language, personal care, and social responsibility skills. It is important to note that intellectual disability is a part of the greater developmental disabilities umbrella, which are chronic conditions that affect the developmental stages of life; childhood and adolescence (Criteria, n.d). Some common examples of IDD include Autism, Down Syndrome, and Cerebral Palsy.

Having a technical definition established, it is important to remind the reader that disability does not affect all people equally, and the definitions previously described do not mean to define the experiences of people with disabilities entirely. Rather, other factors such as familial upbringing and cultural differences contribute to the experiences of an individual and their disability. In the context that will be explored in this paper, the legal system fails to notices these intricacies regarding defining and understanding the experiences of people with disabilities.

Scope of Literature

There is a plethora of literature regarding the experiences of people with disabilities in the criminal justice system, yet they are scattered across different views and varying definitions. One of the most apparent changes in the last 20 years alone is the language professionals use when describing disability, specifically with IDD (Johnson et al., 2019). “Retardation” was the common term used then to describe someone with a mental impairment or disability (Johnson et al., 2019). In one of the most prominent Supreme Court cases regarding disability, *Atkins v. Virginia* uses

language like “mentally retarded” to describe Daryl Atkins, the defendant (Johnson et al., 2019). While it is true to say that the vernacular in 2002 is different than today’s, it is also a reminder that the law, like society, is always changing and redefining the meaning behind our words. Words are important, especially in discussion about disability, because it establishes a standard of respecting human dignity at the human level.

Another obstacle that is found in disability research is how researchers define what a disability is in the first place. Prior to the Americans with Disabilities Act in 1990, it was difficult to find a broad definition of disability under the law (Americans with Disabilities Act, 1990). Even now, disability can be hard to quantify and effort must be made to specify if a topic centers around physical disability, mental disability, or invisible disability. For example, some people may view ADHD as a psychiatric disability, but others may view it strictly as an invisible disability. Mental illness can be considered a disability, according to the ADA, but it is important to recognize that some mental illnesses are disabling for some, but not for others (Americans with Disabilities Act, 1990). The threat of not properly defining certain disabilities is that someone with specific needs may be grouped into a section where their needs are not properly met, like living accommodations, misunderstanding of their symptoms, or improper medical treatment. Researchers must analyze the intricacies case by case to show that not all disability experiences are equal and that everyone with a disability is recognized.

Methodology and Data

The qualitative data presented in this project comes in the form of two interviews: one with Chief of Police Michelle Kott from the City of Bethlehem Police Department and Ez Homonoff, a school psychologist based out of

New Mexico. The interviewees were chosen based on their experience having interacted with IDD within the criminal justice system as well as having experience with how some people with IDD eventually end up in the criminal justice system. As both are professionals in their respective fields, questions included inquiries about their professions, their experiences with IDD, and what strategies can be employed to better accommodate people with IDD in the criminal justice system. Interviews were conducted in July 2025 and range between 20-30 minutes each. The findings will be a combination of data collected from the interviews and national data from the Department of Justice.

Findings

The following findings are based on the experiences of the individuals interviewed and act as a window into how and why people with IDD are disproportionately affected by the criminal justice system. Particular focus is also placed on the experiences of youth with IDD, and disability in general, and how their behavior can be misunderstood as disobedience rather than something attributed to their disability. Different programs and initiatives were found to be in place within the Lehigh Valley in order to properly assist those with IDD. Common pitfalls noticed were the lack of quantitative data regarding individuals with IDD in the Lehigh Valley, specifically in Bethlehem. It is also important to note that more research needs to be done to further detail the experiences of people with IDD and how the criminal justice system affects them, especially in the Lehigh Valley.

Programs and Initiatives

In the city of Bethlehem, Chief Michelle Kott pioneered a program to help accommodate people with intellectual disabilities during arrests. The Community Connections Program

was introduced in Chief Kott's first year as Chief of Police in 2020 as a response to national events occurring in policing at the time, like the murder of George Floyd. The Health Bureau of Bethlehem collaborated with the police department to develop the program and to ensure it follows through with its goal. As Kott puts it, "The goal of the program is to promote the health and safety of our community.". Under the program, officers would refer individuals they encountered in the community who had a "social service need", as described by Kott, "such as food insecurity, lack of housing, substance abuse...". Disability can also fall under this need, and these individuals would be referred to a medical professional under the program so that their needs can be properly met. According to Chief Kott, this helped to "bridge the gap" between officers and the community members they encountered as well as being a successful program from the start.

Over time, the program began to shift in focus with the addition of social workers on the patrols of police officers. Now a Co-response program, this allows social workers to have more of an impact with an individual in order for their needs to be met and not disregarded. For Kott, "The ability to have a social worker out in the field with an officer, who can directly contact the citizen and build a relationship from the get-go, is so incredibly important.". However, a common problem that arises, with policing in general, is communication. Kott emphasizes this by stating, "it's not the gun on the gun belt, it's not the asp, it's not the handcuffs, it's our brain and our ability to communicate.". Communication proves to be a pitfall around interacting with IDD, since the disability can add extra barriers to basic speech.

Chief Kott discussed some ways we can better support people with IDD in the overall criminal justice system. One of these ideas is to

establish a problem-solving court specifically for IDD, where their unique problems can be addressed and not get swept up in other courts that cannot properly address their needs. Incapacitation is a philosophy of punishment that is often given to individuals where they have nowhere else to go; they either can't pay their bail charge or cannot afford a decent defense. Kott describes this as "warehousing", and it can be seen in people with IDD who may have trouble arguing for their needs on their own with the help of a specialty court. She also goes on to say, in her current role at her department, that the overall aim is to keep people out of jail and to keep interactions between police and people as peaceful as possible.

Other ways Kott discussed better supporting individuals with IDD would be to standardize 40 Crisis Intervention Team (CIT) training for officers. Crisis Intervention Team is a training that educates police officers on how to properly respond and accommodate someone having a mental health crisis. According to Chief Kott, this is something that the federal government already mandates; taking it as far as to train federal officers in traffic stop scenarios, which is something that many people with IDD struggle with. This is something that Chief Kott aspires to bring into her department. Kott also mentions that something the department can do better in is actually track incidents that involve disabilities, which is something they do not do. However, something an individual can do during a traffic stop is what's called the "Blue Envelope Program", which through the Lehigh Valley Health Network, an individual with a disability can register for a personal blue envelope for them to keep, so that it can be given to an officer during a traffic stop as a discreet way to disclose that the individual has a disability.

Disability within Education

Ez Homonoff has had plenty of experience as a school psychologist working with students in preschool to as old as their early twenties. They aim to rule in or rule out what type of disability a student may have that can affect their discipline and learning behavior. Their expertise comes in the form of classifying disability and how schools place certain labels on students that can affect their lives way after school. As previously touched on, disabilities affect people differently and it can be difficult to define them, which prompts institutions to paint with broad strokes. Consequently, the label defines what needs the student gets, and it may not be accurate due to how institutions decide to label these disabilities.

Ez brings up the concept of intersectionality, which they define as "...identities that overlap and create a holistic view of a person...", rather than focusing on one identity that making conclusions from that one lens. Through viewing someone with all of their identities taken into account, Ez says we "...can draw more meaningful conclusions.". This more than applies to disability since it's an identity that already has many overlapping elements, like how some disabilities are related to mental illness or how some disabilities are more invisible to an outside perspective. However, a common issue that surmounts is how the state defines and describe what a disability is. For example, Ez explains that in Connecticut, in the context of schools, the state uses the term "emotional disability", while federally it is called an "emotional disturbance". Under the emotional disturbance label, most students tend to not have an intellectual disability, and simply have behavioral challenges.

Students with IDD can be targeted by institutional punishments more easily due to their cognitive limitations. As Ez describes, "...something beautifully sad about this where they seem to trust people more easily... and

that tends to mean they get taken advantage of more easily.". With the lack of abstract thinking, students with IDD are typically more impulsive compared to a student without a disability who may realize the rule they are breaking is wrong. For example, as Ez explains, they had a student classified with a learning disability, but was still engaging in rule breaking behavior. It was realized later that the student did not understand what they were doing was wrong, and so they were reclassified as having a cognitive disability, which ensures that their needs are better met.

Students can trap themselves in a cycle of wrongdoing that Ez labels as "learned helplessness". The phenomenon, described by Ez, "when there's a student who misbehaves... they get in trouble... and they realize 'no matter what I do I get in trouble, therefore I can do what I want because I'll get in trouble anyway'". It turns into a snowball effect, where the student becomes disillusioned by their environment because they realize no one understand them. As Ez puts it, "It's giving up because the system has let them down.". The cycle can lead students to develop similar cycles outside a school; becoming affiliated with crime is a real concern.

Despite the challenges students with disabilities face in schools, there are methods that schools can incorporate that can save students from their cycle and protect them from ever diving into crime after they graduate. Aside from an increase and focus on school counseling, Ez mentions that trauma-informed education is a good tool, "You're recognizing that many students come from a very difficult background... and that not everyone has had an easy homelife or upbringing." At the end of the day, however, it's the personal relationships that are fostered by teachers that can truly help break the divide between student and instructor. According to Ez, "If students have just one teacher that they

trust... students don't struggle with discipline as much." Fostering genuine connection as well as openly accepting and understanding their emotions goes a long way for a student in the educational system.

Literature Review

Interactions with Police

The police are, for many people, their first introduction to the criminal justice system, and the same is true for people with IDD. When police encounter an individual either in their daily routine or during an active crime scene, they are always looking for facial cues and behavior that can help them deduce if someone is lying, telling the truth, or simply trying to understand their perspective (Hepworth, 2017). As one can imagine, this becomes difficult when the individual the officer is communicating with has difficulties reading facial cues themselves, and the officer becomes begins to misinterpret their behavior (Hepworth, 2017). Certain impairments like lack of eye contact, reluctance to speak, and misunderstanding of directions can all be misinterpreted by an officer as signs that the individual is guilty (Hepworth, 2017). Having an officer misinterpret actions during a stop can be extremely damaging for an individual with IDD, and can increase the likelihood of an officer to perform an impulsive action if the individual does something out of the ordinary (Hepworth, 2017).

An example of misinterpretation by police can be seen in the case of Gilberto Powell in 2011. When Powell was walking home in the evening, he was stopped by Miami police when they saw a "bulge" in his pants, believing it to be a firearm (Leotti & Slayter, 2022). In actuality, Powell had a colostomy bag in his pants, and police attempted to pat him down, but Powell attempted to flee, resulting in him

being beaten for noncompliance (Leotti & Slayter, 2022).

Sometimes the misinterpretations by police are not just in physical mannerisms by an individual, but rather from misidentified objects on the person that contribute to the individual's disability in some way. Police departments should provide/require more training on physical and intellectual disabilities to minimize misunderstandings with IDD.

While many people can react differently when under pressure, people with IDD are especially susceptible to additional pressure during an arrest or police encounter. In an interview by Emory University researchers Sarrett & Ucar, a man with autism recounted how confused he felt after being told to "Freeze. Don't move" by police, and then proceeding to be forced to the ground on his knees (Sarrett & Ucar, 2021). He recalls the contradiction in the moment and felt confusion; which is important to recognize during a police procedure since any sign of not following instructions can be seen as failure to obey an officer (Sarrett & Ucar, 2021). People with IDD are also hypersensitive to sensory stimuli in the outside environment or through physical touch (Sarrett & Ucar, 2021). It can be incredibly distressing for an individual to be touched by someone else during an arrest; which can cause aggressive behavior and further increase the divide between police and people with IDD.

Prosecution and the Courts

New environments can cause stress and confusion, especially for those who are under pressure relating to the criminal justice system. The court system can present many difficulties for people with IDD, whether they act as the defendant, juror, or witness. Each role presents its own difficulty for people with IDD and the adversarial system does not help in aiding people with disabilities throughout

the process. It can be hard for people with IDD to understand the facts of a case as a juror or be able to properly recount an event as a witness. In response to the common challenges experienced by people with IDD, the ADA aims to protect necessary accommodations for disabled people (Leotti & Slayter, 2022).

The ADA requires that the government must provide reasonable accommodations that do not fundamentally alter the program in session (Leotti & Slayter, 2022). In regard to IDD, there are a few ways that people can be properly accommodated within the court. One way is through the use of pretrial programs that prepare people with IDD more about what will be said and what to expect in order for them to feel more comfortable in their new environment (Linhorst et al., 2018). Other alternative includes the hiring of intermediaries that can help coach the person with the disability and act as their interpreter in a way (Linhorst et al., 2018). Courts have also utilized the use of asking simpler questions and using less complex language to help people better understand the facts of the case (Hepworth, 2017).

Mental Health Courts

Mental Health courts has been another way for the court system to better accommodate those with IDD. These types of courts are dubbed “problem-solving courts”, meaning they are courts that deal with a specific issue through a rehabilitative mindset in order to reduce criminal recidivism (Linhorst et al., 2018). They typically hear only misdemeanor cases and their effectiveness is often debated, but the general consensus is that they are moderately effective (Linhorst et al., 2018). While many people with mental illness disorders rely on mental health courts to properly represent them, the same cannot be said for those with IDD (Linhorst et al., 2018).

The participation of people with IDD in mental health courts is unclear due to the majority of defendants identifying as having a mental illness rather than an intellectual disability (Linhorst et al., 2018). One study shows about 8% of MHC participants had developmental disabilities, but, as previously mentioned, “developmental disabilities” is a broad label that encompasses many different disabilities in one (Linhorst et al., 2018).

In a study done by Linhorst et al., a sample size was taken from people with IDD who were referred to a municipal mental health court, or MMHC, in a large Midwestern County (Linhorst et al., 2018). The study was conducted to determine if people with IDD get the appropriate treatment while in mental health courts (Linhorst et al., 2018). One of the findings was that defendants with IDD were less likely to have a severe mental illness; making their inclusion in mental health courts questionable (Linhorst et al., 2018). People with IDD were also found to less likely have a history of substance abuse and typically be younger in age (Linhorst et al., 2018). It is unclear from the study if people with IDD are only allowed into mental health courts by having a co-occurring mental illness (Linhorst et al., 2018). However, it is clear that there is no conclusive definition for people with IDD in mental health courts; if their inclusion in the courts is appropriate for their needs or not.

Intersectionality

The term intersectionality can be defined as the combination of different demographics that can create a unique experience for a person who undergoes discrimination. For example, if an individual is of a racial minority and also happens to have a disability, then that would be a case of intersectionality because both identities have historically been disproportionately represented in the criminal justice system. Intersectionality can be found

in all aspects of the system, and can be used to define how different systems themselves intersect (Harvey et al., 2024). From a study conducted by Harvey et al., they identified a “multi-system collusion” that include the education, foster, legal, and mental health systems in funneling youths toward incarceration (Harvey et al., 2024). Individuals with one characteristic can be already be negatively impacted by one system, but the collection of others based on multiple identities, can further accumulate the disadvantages that come with being in just one system (Harvey et al., 2024).

The Youth Perspective

The educational system is meant to educate the youth in this country and provide a sustainable basis of knowledge and experience for the outside world. However, the same cannot be said for marginalized groups that fall behind and do not enjoy the same benefits as their white counterparts. The educational system is one of the many systems that can be found to have an intersectionality of marginalized groups who are impacted by criminal justice system after leaving the educational system. Many people refer to this phenomenon as a “pipeline”, meaning the path marginalized individuals take is a straight line towards another system (e.i the criminal justice system) that restricts their freedom from moving outside of a predefined system. According to the US Department of Education’s Office of Civil Rights, Black, American Indian, Alaska Native, and Multiracial youth were overrepresented in suspensions from 2017-2018 (Harold & Makoshi, 2022). There is sufficient evidence to claim that there is a disproportionate rate of marginalized groups whose law enforcement referrals and school-related arrests are greater than actual enrollment (Harold & Makoshi, 2022).

An example of this happening in the state of Pennsylvania can be found in a study done in Allegany County. During the 2018-2019 school year, Black students were found to be arrested at nine times the rate white students were in Allegany County (Harold & Makoshi, 2022). Adding disability onto that, through data taken from the Individuals with Disabilities Education Act (IDEA), students with disabilities were arrested at a higher rate than students without students; about nearly three times that (Harold & Makoshi, 2022). This makes Black students with a disability the most vulnerable group to arrests in Allegany County. It’s important to recognize that the sample of this study was taken from students in K-12 and that arrests are characterized as “referrals” to law enforcement, which are reports to law enforcement about an incident that occurs with a student on school grounds, or while on school transportation (Harold & Makoshi, 2022). The data reveals that this harsh targeting of marginalized groups on schools will have damaging effects to the future of students, since these arrests can lead to convictions for minor infractions that can stay on a student’s record well into adulthood; harming their chances at getting jobs or continuing education (Harold & Makoshi, 2022).

Corrections

The correctional system of the United States is one of the most controversial aspects of the criminal justice system. Widely known as the country with one of the largest incarceration rates in the world, the United States spends over \$80 billion in the mass incarceration of individuals; especially those in marginalized populations (Vallas, 2016). Within the realm of disability, the numbers of incarcerated individuals are staggering. Based on a study by the Bureau of Justice Statistics in 2016, about 4 in 10 state prisoners reported having a disability, with one in four reported as having

a cognitive disability (Marushak et al., 2021). The study conducted by the Bureau of Justice makes broad definitions for the types of disabilities studied, like how cognitive is defined as having any serious difficulty concentrating, remembering, or making decisions (Marushak et al., 2021). In order to eliminate any confusion between definitions, cognitive disabilities are interchangeable with intellectual disabilities (Marushak et al., 2021).

Prisons

The primary concern for people with IDD in the overall prison system is the access to reasonable accommodations behind bars. An accommodation is a modification to a routine or process that enables an individual with a disability to successfully perform or participate in it to the same extent as people without disabilities do (Leotti & Slayter, 2022). Accommodations are protected under law in the workplace as well as in schools, but in prisons, it becomes scarce (Leotti & Slayter, 2022). An example of a necessary accommodation for someone with IDD would be a separate prison cell that is removed from the loud and hostile environment that is typical in U.S. prisons (Cho, 2024). However, many prisons resort to putting individuals with disabilities in solitary confinement as their “accommodation”, which is an even more dehumanizing action that prisons place on inmates with disabilities (Cho, 2024). The inconsistency of providing reasonable accommodations to people with disabilities ranges from various prisons to different disabilities, including physical and cognitive.

Even though they are receiving punishment, inmates should nonetheless be treated fairly and be provided with basic needs in that their punishment does not equate to suffering. There is significant evidence to show that accommodations are not properly delivered to people with physical or cognitive disabilities.

One of the first steps in acquiring an accommodation is an assessment of the needs of an inmate and properly delivering those necessities to them; typically, in the form of a medical exam or cognitive/physical evaluation. However, according to a study by the American Journal of Public Health, about 20 percent of state prison inmates failed to receive a medical exam in 2009 (Vallas, 2016). Dietary accommodations are also of concern as many of the general population in a prison consume the same food every day (Cho, 2024). Every person has a right to eat, and it can be especially hard for someone with a chronic condition that cannot eat the typical food served in prison. The food in some prisons can be borderline inedible as well, with reports of food being served as moldy, rotten, and even maggot-infested (Cho, 2024).

Jails

The needs of every inmate should be met while under the correctional system, especially in jails. Compared to prisons, jails are short-term holding facilities designed to house someone until they appear in court or released back into society (Leotti & Slayter, 2022). Jails, in the state of Pennsylvania typically hold individuals for no more than two years, usually for a misdemeanor or felony. Aside from awaiting trial, many detainees in jails are those who cannot afford bail, and are forced to live out their sentence in the small facility (Leotti & Slayter, 2022). The conditions in jails can vary from place to place, but the treatment of people with disabilities is on the border of being unethical.

People with IDD are transferred to mental health facilities to be evaluated and get the proper care they need. Often is the case that these mental health facilities are overcrowded, and the transfer of inmates is delayed (Leotti & Slayter, 2022). This means people with IDD remain in jails longer than expected, and the

need for their accommodations to be met becomes strained (Leotti & Slayter, 2022). The deprivation of accommodations and medical care for people with IDD can worsen existing health conditions and increase unnecessary trauma (Leotti & Slayter, 2022). Individuals with IDD may be intimidated or unaware that they are allowed to ask for assistance and accommodations while in jail, which leads them to sit in the poor conditions that they have (Leotti & Slayter, 2022). Jails are not sufficient in adequately giving the support that people with IDD need to function and be healthy in a confined setting.

Implementation & Evaluation

People with IDD, and the broader disability community for that matter, encounter a wealth of obstacles in and out of the criminal justice system. Despite this, there have been considerable efforts made to not only increase the awareness of the blights suffered by people with IDD, but to change the way we think about identity in the overall system. While the country has laws that protect the rights of people with disabilities, often those laws are broad and almost intentionally vague. The issue comes down to a misunderstanding and ignorance around IDD, and we can use frameworks to change our thinking when in discussion of how people with IDD are affected by the criminal justice system.

Lenses

Viewing an issue or community through a lens can provide a different perspective that was once unnoticeable and unconsidered by an individual or the greater community. A lens is a process that allows people to view a subject through a different perspective that otherwise wouldn't be known to them. This can help readers to better understand the struggles experienced by people with disabilities. There is not one universal lens to view all issues;

instead, every issue can be viewed in multiple different lenses. It can be a framework to base policy on as it highlights issues within the system that can be worked on. As the system continues to take in individuals and push them out, it can be difficult to keep track of the specific experiences shared by different groups. It's important to recognize and keep in the mind the experiences of marginalized groups that come into contact with the criminal justice system; creating a more holistic approach to reform.

DisCrit

Disability Critical Race Theory, or DisCrit for short, is an example of a lens to view the intersection of race and disability and how it affects the experiences of people who have faced racism and ableism in their lives (Harvey et al., 2024). The theory helps to track the experiences of people of a marginalized race and disability and how those outside of the system can reduce the inequality that occurs (Harvey et al., 2024). Through a traditional lens, a student will get in trouble and be punished until the punishments become arrests, which enters the student into the criminal justice system where they can be cycled through it, ruining their chances at having a stable place in society. DisCrit reframes the punishment model by viewing the behavioral problems of students as attempts to resist the system rather than individual problems (Harvey et al., 2024). With a student identifying to multiple identity factors, their experiences through the system can be harsher than their white counterparts. From the study done by Harvey et al., the researchers used the DisCrit model for the basis of their study design in order to study the navigation of disabled Girls of Color through one institution to another (Harvey et al., 2024).

Disability Justice

Disability Justice views disability itself as a collective struggle for all of those involved and recognizes the intersectionality of different identities based on how it affects the experiences of each individual person (Berne, 2015). Described by Patty Berne, an author and disability rights activist, the movement calls for self-determination of people with disabilities and for a deep analysis as to how the greater society confines people with disabilities (Berne, 2015). The ultimate goal is to lead towards a future where people with disabilities are liberated from their constraints to society, whether that be in the form of unfair incarceration, improper access to accommodations, or just general ableism (Berne, 2015). It's important to note that the movement is self-proclaimed to be anti-capitalist, and that it has inherent political motives that coincide with the belief to break out of the capitalist system that oppresses people with disabilities (Berne, 2015). The lens can be used to view disability in a more political perspective and reveal how the system can restrict the freedoms of those with disabilities.

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The Effectiveness of Risk Assessment Tools

By Jeniya Austin

Introduction

The use of risk assessment tools are increasing worldwide in the criminal justice system. Probation officers, parole officers and judges all take part in using the risk assessment tool. This tool, when used at its best capacity, can determine how likely it is for an offender to recidivate and revert back to committing crimes. Additionally, risk assessment tools can help officers choose what strategies to use to help reduce an offender's risk if necessary (Monahan & Skeem, 2016). When parole and probation officers establish an offender's risk level, in some states, judges use the risk assessment as a factor to decide an offender's sentence. A judge is more likely to either choose a lower sentence or an alternative to prison like probation or parole when an offender has a lower risk level.

To assess the riskiness of releasing an individual, the risk assessment tool looks at a variety of factors. A lot of the factors are shown in a pre-sentence report (PSR) created by probation officers. Pre-sentence reports contain defendant information like case history, criminal history, personal background, family history, and physical and mental health issues, which are the kind of factors risk assessment tools look at (Stevenson, 2018). There is also a section where the probation officer calculates the defendant's sentencing

were hurt and money was stolen, like an armed robbery case, the probation officer would give a higher sentencing range based on the facts of the case. Additionally, other sections of the PSR would include other mitigating or aggravating factors that may affect the defendant's sentence. Mitigating factors include details about a defendant that may decrease their sentence.

For example, if a defendant played a minor role in a crime and they show genuine remorse for what they did, that could decrease their sentence. Aggravating factors, on the other hand, include details about a defendant that may increase their sentence. For example, if the defendant used a deadly weapon and has prior convictions (especially for violent offenses), that could increase their sentence. Research shows that the use of risk assessment tools might bring ethical concerns with that. The predictive aspect of risk assessment tools may use bias data which could make the predicted results unreliable (Douglas et al., 2017). With bias, an officer could wrongfully than they actually are. Some argue that the risk assessment tool focuses too much on singling out each offender by using some forms of racial profiling (Bonta, 2002; Douglas et al., 2017). An officer may assume that because an offender is African-American with one prior conviction, they are more of a risk than a white man that also only has one prior conviction, which is not fair. Making the risk assessment

tools more equitable and fair could definitely improve a lot, but it would not be as effective in the long run if it still lacks predictive accuracy. When looking at the different theories of crime, officers must be able to decipher an offender's risk and needs in order to efficiently help them. It is difficult to do that if an offender's risk assessment shows they are less or more of a risk than they actually are. Additionally, taking care of the offender is another concern with risk assessment tools (Goel et al., 2021). It is good practice to make sure that offenders are receiving treatments or punishments for their best interests. Whether it is extending their sentence or releasing them, every offender deserves to be treated with fairness and proper care. This research is intended to provide officers and other officials with the proper information to determine for themselves whether risk assessment tools are still useful.

History of Risk Assessment Tools

The use of risk assessment tools has evolved over time since the early 1900's. When it was first brought about, parole and probation officers used their own knowledge and training to determine an offender's risk. This was the first generation of risk assessment and it was helpful that officers were actively trying to predict offender behavior and danger instead of overflowing prisons and jails (Bonta & Andrews, 2007). As innovative as the first generation of risk assessment was in the criminal justice system, there were many flaws. Considering the fact that everyone received a variety of knowledge or interpreted their training differently, using this method was unreliable. Additionally, whether or not someone is aware of it, they have their own biases, and using their own opinion and knowledge has a higher risk of being implicitly biased. Being aware of the many limitations

that came with the use of the first generation of risk assessment, around 1930, the second generation of risk assessment was on the rise.

Completely moving away from professional judgment alone, officers took an actuarial approach while using static factors (Bonta & Andrews, 2007). The actuarial approach refers to the use of numbers and measurements based on factors that do not change (static factors) like race, gender, criminal history, and childhood abuse. The second generation was more reliable than the first generation because it included the use of factual evidence to measure how much of a risk an offender is. Unlike the first generation of risk assessment, no matter what type of training or education an officer may have had, the facts help decrease the likelihood of bias, discrimination, or other unethical concerns. Unfortunately, there were still some improvements that could be made with the second generation, so the third generation of risk assessment was created. The third generation allowed officers to account for not only static, but dynamic factors to assess an individual's risk of reoffending (Bonta & Andrews, 2007). It helps officers determine the specific needs that play a part in reoffending risks and address them accurately.

For example, those with a higher risk of reoffending and have many severe risk factors would get the toughest form of rehabilitation. Those who are lower risk, however, would get less intense rehabilitative efforts since they are less likely to reoffend anyway. It is essential that rehabilitative efforts and the level of risk an individual matches (Bonta & Andrews, 2007). Along with the potential for bias, the third generation of risk assessment was also time-consuming. There is a lot of information and interviews needed to determine the dynamic need factors of an offender. Considering that dynamic factors can change

quickly and often, it was also difficult to capture that information accurately.

The fourth generation of risk assessment, while still assessing static and dynamic needs/factors, included the use of case management as well (Bonta & Andrews, 2007). With a wider range of offender risk factors, the fourth generation helps expand treatment efforts and increase the benefits of supervision. In the risk-need-responsivity model, this generation of risk assessment focuses on responsivity the most. This helps officers choose the proper intervention strategy at the right time (Bonta & Andrews, 2007). For example, it would not be appropriate if an officer sends someone who is a drug addict to anger management courses just because of one fight they had in high school. It would be more appropriate and effective for the officer to use other means to reduce drug use like rehab in order to tackle the underlying issues.

Literature Review

Equity & Fairness

Many researchers claim that one of the biggest ethical concerns about risk assessment is the lack of equity and fairness (Geol et al., 2021; Stevenson, 2018). Without realizing, risk assessment tools may accidentally discriminate against race or gender. Due to the fact that it is based on human input and data it is difficult for risk assessment tools to be fair. As stated previously, humans are biased whether they are aware of it or not, so if they are the ones putting the information into the tools and machines, the machines ultimately end up being biased as well (Geol et al., 2021). There may not be a way to completely eliminate racial bias when it comes to using risk assessment tools. For example, a risk assessment instrument can be restructured to not include protected characteristics of individuals. Instead, they can include data and

information about an individual's motives, incentives, and desires based on face-to-face interviews. Doing that, however, still leaves room for certain judgments, decisions, or opinions to be vulnerable to implicit biases (Douglas et al., 2017). This concern with risk assessment might also have an impact on sentencing disparities.

Sentencing disparities are situations when two offenders with similar charges and backgrounds are given two completely different sentences. An example of this would be a 25-year old hispanic man charged with burglary and theft getting a sentence of 4 years. A 23-year old white woman, on the other hand, also is charged with burglary and theft, but gets a two year split sentence. They both have similar backgrounds and charges but they still received different sentences. There are many reasons why sentencing disparities occur, so risk assessment tools may not be the only issue at hand. There is not a lot of concrete research covering exactly how risk assessment tools are associated with sentencing disparities. According to Monahan and Skeem (2016), based on the context of the sentencing (sentencing guidelines) and the type of risk assessment instrument used, might determine the correlation between the use of risk assessment tools and sentencing disparities. Based on location, disparities may vary, so people should judge risk assessment tools in relation to the sentencing practices in the area. Additionally, when choosing a type of instrument for risk assessment, officers must be sure that it can predict recidivism fairly across a variety of groups (Monahan & Skeem, 2016). Certain instruments may give stronger scores than other instruments for different people, which ultimately leads to a judge deciding differently on similar cases.

According to Berk et al. (2021), it is not possible to fulfill all aspects of fairness and equity without crossing over with or neglecting

another aspect. Whether humans are inputting biased information in risk assessment, there are no clear definitions, or risk assessment tools themselves are biased, risk assessment tools still have a fairness concern. Even though there are risk factors that most people fall into, the individuals that do not fit into those categories tend to fall through the cracks. No matter what, there will be an overlooked group of people that feel like systems such as risk assessment targets them.

Predictive Accuracy

Many researchers are not only concerned with the equity and fairness of risk assessment, but they are also worried about the predictive accuracy. It is not entirely unheard of that risk assessment tools have incorrectly assessed offenders. Whether it was low risk offenders being evaluated as high risk, or high risk offenders being evaluated as low risk, it is not safe to incorrectly classify offenders (Douglas et al., 2017). There are a lot of judges who are in charge of whether or not an offender goes to jail, prison, fined, or released. With them depending on an inaccurate risk assessment, an offender could go to prison when they probably could have just received a fine. This does not mean that the risk assessment tool is the only thing a judge relies on to make their decision, but it does have some impact. Risk assessment tools are based on a scoring system to determine whether they are low-risk, medium-risk, or high-risk. Based on the different factors (criminal history, neighborhood conditions, education level) an offender would get a certain amount of points. For example, on a scale from 1-10, lower risk scores would range from 1-3, medium risk scores would range from 4-6, and higher risk scores would range from 7-10. With those ranges, if there was an offender who had 1 prior criminal record, they would probably receive 1 point. The offender could gain additional points if they also dropped out of

school and live in terrible neighborhood conditions which can lead to being within the high risk range of 7-10. Some research suggests the high risk cut point be shifted upwards in order to help with accuracy. According to the Pennsylvania Commission on Sentencing (2019), after conducting an experiment, there was a significant reduction in false positives after shifting the high risk cut point. At first, the risk assessment tool was about 68% accurate and after the experiment it improved by 11% making the accuracy 79% overall (Pennsylvania Commission on Sentencing, 2019). When it comes to predictive accuracy, people are not only concerned with incorrect classifications, but they are also concerned whether or not risk assessment tools are better at predicting than judges.

If judges and other officials are better at predicting than risk assessment tools, then it would be pointless to waste time and money on perfecting the accuracy of risk assessment tools. Judges have to deal with a lot of unknowns at one time when predicting recidivism, while risk assessment tools are designed to take all of the unknowns into consideration. For example, when setting bail, a judge has to think about how likely a defendant is to get out on bail, how much of a risk they would be temporarily returning to society, and the impact that the bail would have on their pretrial behavior (Stevenson, 2018). As stated previously, risk is not the only factor that judges look at when it comes to decision making. A judge may not think it is right to incarcerate someone on small charges even though they may be assessed as a high-risk offender. The lack of perfecting the measurements of the risk assessment's predictive accuracy is more common than most people think because of the amount of missing variables and outcomes (Stevenson, 2018). Aside from predictive accuracy, research claims that predictive validity is just

as important even though there is very little data on it (Bonta, 2002). Predictive validity focuses on whether or not a tool is correctly assessing an individual's future behaviors. If the risk assessment tool does not represent what it is intended to measure, then there is no good risk assessment.

Concern and Care for the Offender

Regardless of the ethical concerns researchers have with the predictive accuracy and the equity and fairness of risk assessment tools. Some researchers claim they are satisfied with how risk assessment tools take care of some offenders and other civilians in the long run. Risk assessment tools can help identify necessary treatments to help offenders, it can help low-risk offenders be released/discharged into society sooner, and it can benefit high-risk offenders by extending their detention and utilizing other forms of treatment (Douglas et al., 2017). When assessing an offender's risk, officers look at a variety of risk and need factors that would help stop that offender from reoffending or becoming a harm to themselves or others. Acknowledging important risk factors help officers match that factor with the appropriate treatment. For example, if there is an offender who tends to have aggressive, impulsive, irritable and other antisocial behaviors, with the proper assessment, it is effective to help them build their self-management skills (Bonta & Andrews, 2007). In order to find the best treatment for an offender, it is important to match the offender's risk indicators with the best intervention tactics to target it.

Additionally, not every high-risk offender stays at the high-risk level and not every low-risk offender stays at the low-risk level. The risk assessment tool has the unique ability to help individuals over time by looking at how their current treatment has impacted them (Bonta & Andrews, 2007). Offenders who were given an

extended detention have most likely shown that their current treatments, that were supposed to benefit them, are actually not helpful. The extended detention is never intended to further punish the offender, but it is to help the offender improve their behaviors and actions by using other treatments (Hanby, 2013). Offenders who were released early, on the other hand, have proven in many ways that their treatments are effective and they are at a lower risk than where they started. Having a better understanding of an offender's risk, needs, and the types of treatments that are best for them, has a lot to do with understanding the risk-needs-responsivity (RNR) model of criminal justice.

The RNR model prioritizes the psychological side of offending and uses that to determine the best way for an offender to successfully complete their treatment. There are three principles that the RNR model looks at to help reinforce the way an offender thinks. The first part is the risk principle which states that the treatment that the offender receives should be proportionate to their risk level (Bonta & Andrews, 2007; James, 2015). Sending a low-risk offender to an intense and long rehabilitation program could do more harm than good. It is a waste of resources if low-risk offenders are receiving high-risk treatment. So, when there is a high-risk offender that is in need of those long and intense programs, they will not be able to get the best treatment. Additionally, unproportional treatment could lead to other negative effects like labeling. If a

low-risk offender ends up getting labeled because of the high-risk treatment facilities, they could end up becoming high-risk offenders which is not the direction they should be going in. The second part is the needs principle which focuses on targeting the specific dynamic risk factors that are associated with criminal behaviors, which is also known as criminogenic needs (Bonta &

Andrews, 2007; James, 2015). Lastly, the responsivity principle focuses on the offender's incentives, learning style, and attitude to provide them with the best and most unique treatment for each individual offender. Not every offender that recidivates or has the same background will respond the same way to a treatment. Based on the type of person they are, they might only learn or be impacted by their treatment if what they do is more hands-on. Also, some offenders are motivated to get better when they are allowed to visit their kids. Many experts recommend that many risk and needs assessments utilize the RNR model since it helps narrow down the specific causes of criminal behaviors (James, 2015). The RNR model goes a long way when it comes to concern and care for the offender.

Recommendations

#1: Prioritize the Continuous Improvement of Risk Assessment Tools

Officers and researchers must prioritize continually improving the quality of risk assessment tools. Just as offenders evolve and change over time, it is important that risk assessment tools are also evolving as well (St. John et al., 2020). There may be new risk factors or needs factors that would need to be taken into account for future risk assessments. "Most risk assessment tools are only good for 6 months", Dr. Michelle Bolger says, "so risk assessment tools must continue to be validated". (M. Bolger, personal communication, 2025). After around 6 months, offenders' risk should be reassessed to determine whether or not their risk level has changed. Every offender is different, some may have an increase in their risk after 6 months, while other offenders have a decrease in their risk after 6 months. Without continuous improvement, risk assessment tools may lead to more bias. There are some offenders that may need to participate in

another type of rehabilitation program; this type of information would not be known without constantly validating risk assessment tools. Those who administer and manage these tools must be aware of prospective dangers to avoid accidental bias or unfairness.

#2: Properly Train & Educate Those Who Use The Tool

Other than the main concerns for risk assessment tools like the fairness/bias and the accuracy, the different ways that risk assessment tools can be improved comes down to the officers that use them. Knowing if or when an offender may reoffend is useless information if there is no interference by an officer to manage that risk (Viljoen et al., 2018). Every officer has a different way they learn and a different way they interpret the information given to them.

Teaching those who are going to use the risk assessment tools in a way that is best for that officer is important. There may be some officers who do not fully understand what risk assessment tools are used for because they did not get a grasp on their training. Officers should not be blindly following the tool because they know they have to use it, every offender is completely different, so officers should be using their critical thinking skills as well. On top of that, it is also important to continually train these officers. Hopefully, the risk assessment tools being used continue to be evaluated and improved. With that, training must be prioritized in order to match their education with the new evaluation criteria that may be developed. The longer administrators go without training their officers, but also continue to update risk assessment tools, the harder it will be for those officers to keep up.

#3: Continue Thorough Research on Effectiveness of Risk Assessment Tools

While it is generally accepted to believe that risk assessment tools help with risk management, there is not a lot of research or evidence that helps support that belief. Many researchers believe risk assessment tools should be used as violence prevention instead of only being used as violence prediction. It is important to know if the risk assessment tools that are being used worldwide are actually effective. There is not much evidence that risk assessment tools affect any racial disparities in the criminal justice system or that the tools led to incarceration rate improvements (Douglas et al., 2017; Stevenson, 2018). Without the proof to support its effectiveness, there may not be a point in the continued use of these tools.

#4: Risk Assessment Tool Transparency

As of right now a risk assessment tool is not something that is open to the public, one must be getting a criminogenic evaluation in order to have any kind of access to it. That does not have to be the case, however, the public should be able to access these types of tools. On top of building trust, once citizens utilize the tool and evaluate themselves, they would be able to provide feedback on its accuracy and fairness. Even though it may be good, the public should not only rely on feedback from those who created the risk assessment tools because there may be some implicit bias there. Who would want their creation to fail, or even admit that it may be failing? Additionally, public access to these tools can allow

independent researchers to test its effectiveness as well (Garrett & Stevenson, 2020). It does not hurt to gain advice, information, and feedback from researchers outside of the criminal justice system that could give a different perspective.

Conclusion

Numerous concerns arise when risk assessment tools are used like predictive accuracy, equitability, fairness, biases, and care for the offender. As important as all of these factors of a risk assessment tool are, it is nearly impossible to satisfy and perfect all of these concerns for every individual (Berk et al., 2020). No matter how accurate and fair a risk assessment tool can be, there is going to be a group that feels more punished than another group. People can only rely on the risk assessment tools so much; helping these officers in charge of the assessment can make a bigger change than most people think (Goel et al., 2021). After prioritizing the consistent updates and follow-ups with the risk assessment tool, officials must also prioritize the proper training of the officers using the tools. As stated previously, there must be more research that supports the effectiveness of risk assessment tools, otherwise no one can expect an improvement in accuracy and address biases. Risk assessment tools should not be used to replace human decision making, it should be used as evidence to support or back-up any of those decisions made.

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Investigation of Technical Parole Violations

By Kaleb Missmer

Abstract

A technical parole violation is given when a parolee violates parole without technically committing a new crime. This could be through something like a failed drugs test, staying out past curfew, or anything else where a new crime was not committed. There can often be reasons out of the parolee's control that could cause the parolee to commit a technical parole violation. This analysis aimed to investigate the potential factors that helped to explain why technical parole violations happen. Using data requested from the Pennsylvania parole board and the Department of Corrections through right-to-know laws, we acquired a dataset containing 2,296 samples. We ran multiple logistic regression models to show associations between different variables and technical parole violations. We discovered that having more special conditions related to alcohol or mental health show a higher chance of getting a parole violation, having more special conditions related to education or employment show a lower chance of a TPV, and being released from a State Correctional Institution also shows a higher chance of committing a technical parole violation. These findings raise questions about supervision intensity, and the potential for exploring the benefits of educational or employment to improve reentry outcomes.

Introduction

Parole is a critical part of the criminal justice system, offering prisoners an opportunity to reintegrate into society before completing their full sentence. If a parolee abides by all of the rules and conditions set forth, they can live outside of prison; however, if they violate their parole, they may be required to serve the remainder of their sentence in prison. One common way parolees violate the terms of their release is through technical parole violations, which occur when a parolee breaks a rule without committing a new crime. Examples include failing a drug test, missing required meetings, or similar infractions. While technical violations can result in re-incarceration, some research suggests that these violations may not necessarily indicate a higher risk of future misconduct. For example, records from male inmates readmitted to prison for technical violations and new offenses found that "technical violators were found to be significantly less likely to engage in any form of prison misconduct" (Orrick & Morris, 2012). If that is the case, it is worth investigating what makes parolees commit technical parole violations, as the punishment does not seem to fit the crime (or lack of). "Recent scholarship about parole supervision indicates that higher supervision intensity is associated with an increased risk of parole violations" (Grattet & Lin, 2014). This paper

aims to investigate other factors that may contribute to technical parole violations, with a focus on identifying key predictors and understanding how various parole conditions influence the likelihood of such violations. By applying our statistical analysis, we aim to uncover patterns that can inform parole policies and potentially reduce unnecessary re incarceration.

Methodology

We analyzed data obtained from the Pennsylvania Parole Board and Department of Corrections through Right-to-Know requests. The original dataset included one row per special condition assigned to a parolee, resulting in multiple rows per individual. To ensure that each observation represented a single parolee (i.e., independent samples), we aggregated the data by individual, converting the special condition entries into counts by condition type (since some individuals had more than one of the same type).

The initial variables we considered included Parole Number, Release Date, Re Delinquency Date, Residence County, Crime Released On, Crime Description, Sex Description, Race Description, Date of Birth, Ethnicity, Zip Code, Special Condition, Violation Date, Violation Description, and Release from SCI or Other (the facility from which the parolee was released).

To construct our target variable indicating whether a technical parole violation (TPV) occurred, we manually reviewed each individual's Violation Description field, which documented the reason for the parole violation. Based on these descriptions, we categorized each case as either a technical violation or not, using commonly accepted definitions of TPVs.

Several variables were transformed to improve data quality and maintain sample independence. As noted earlier, the Special Condition field was aggregated into counts by type. The Violation Date field was used to generate a Violation Count variable, representing the number of distinct violation dates per parolee. The Crime Description field, which contained hundreds of unique values, was grouped into six categories. Those categories were Violent Crimes, Drug Crimes, Property Crimes, Weapons Crimes, Sexual/Public Crimes, and Other (for descriptions not fitting into the prior groups).

We also created a binary variable called SCI, derived from the "Release from SCI or Other" field, which contains the name of the releasing facility. If the facility name included the substring "SCI" (indicating a State Correctional Institution), the parolee was categorized as released from a State Correctional Institution. Otherwise, they were not.

We used logistic regression in R to examine the associations between different variables and the likelihood of experiencing a technical parole violation. This method was appropriate due to the binary nature of the outcome variable and its ability to estimate both the strength and direction of associations between predictors and TPV status.

To identify the most informative set of predictors, we used stepwise logistic regression based on Akaike Information Criterion (AIC). Variable selection was performed using R's step() function, with the direction parameter set to "both" to allow both forward and backward selection.

The final model retained the following significant predictors: - special conditions related to alcohol, drugs, mental health, and sex offender problems - release from an SCI

facility - release year - ethnicity- sex. These variables were identified as meaningfully associated with the likelihood of a technical parole violation.

Results

As stated previously above, our total number of samples for this analysis was 2,296. Each additional condition related to alcohol, drugs, mental health, and sex offender problems that was given to a parolee is associated with an 8 percent increase in technical parole violations. Each additional condition related to education or employment is associated with a 30 percent decrease in the odds of a technical parole violation. Being released from a State Correctional Institution (SCI) is associated with a 165 percent increase in the odds of a technical parole violation compared to being released from another type of facility. Being released in 2020 is associated with a 42 percent decrease in the odds of a technical parole violation compared to being released in 2019. Being released in 2021 is associated with a 40 percent decrease in the odds of a technical parole violation compared to being released in 2019. Being released

in 2022 is associated with a 55 percent decrease in the odds of a technical parole violation compared to being released in 2019. Being released in 2023 is associated with a 60 percent decrease in the odds of a technical parole violation compared to being released in 2019. Being Non-Hispanic, compared to Hispanic, is associated with a 164 percent increase in the odds of a technical parole violation. Having an unreviewed ethnicity status, compared to being Hispanic, is associated with a 23 percent increase in the odds of a technical parole violation, although this effect is only marginally significant. Being male, compared to being female, is associated with a 71 percent increase in the odds of a technical parole violation. Our final model

containing all of those variables had an AIC score of 2637.7.

Model Diagnostics

To assess the fit of the final logistic regression model, we examined standardized, Pearson, and deviance residual plots. A slight downward trend was observed across all three, with minor curvature most noticeable in the Pearson residuals. However, there were no extreme deviations, influential outliers, or patterns indicating poor model fit. The residuals were generally centered around zero and showed dispersion typical of logistic regression, suggesting that the model's assumptions were reasonably met.

Variable	Estimate	Std. Error	p-value
SC.Alcohol.Drug.MentalHealth.SexOffenderProblems	0.07762	0.01532	4.17×10^{-7}
SC.Education.Employment	-0.35045	0.12965	0.00687
SCI1	0.97389	0.13710	1.22×10^{-12}
ReleaseYear2020	-0.54373	0.13070	3.18×10^{-5}
ReleaseYear2021	-0.50932	0.14232	0.000345
ReleaseYear2022	-0.80346	0.15610	2.65×10^{-7}
ReleaseYear2023	-0.92191	0.16732	3.59×10^{-8}
EthnicityNon-Hispanic	0.97100	0.20883	3.32×10^{-6}
Sex_DescMale	0.53597	0.18761	0.00428

Table 1: Significant Predictors from Logistic Regression Model on Technical Parole Violations

Variable	Odds Ratio (exp(Estimate))
(Intercept)	0.1506
SC.Alcohol.Drug.MentalHealth.SexOffenderProblems	1.0806
SC.Education.Employment	0.7044
SCI1	2.6482
ReleaseYear2020	0.5806
ReleaseYear2021	0.6009
ReleaseYear2022	0.4478
ReleaseYear2023	0.3978
EthnicityNon-Hispanic	2.6406
EthnicityUNREVIEWED	1.2292
Sex_DescMale	1.7091

Table 2: Odds Ratios from Logistic Regression Predicting Technical Parole Violations

Discussion

The results of this report raise discussions about a multitude of topics. Our study showed that any conditions related to Alcohol, Drugs, Mental Health, or Sex Offender Problems increased the chances of a technical parole

violation. This could potentially show that parolees with these special conditions may be given stricter supervision by their parole supervisors. On the contrary, parolees with special conditions related to Education or Employment showed lower chances of committing a technical parole violation. This suggests that educational programming could potentially help to reduce the likelihood of technical parole violations. It is also shown that serving your sentence in a state correctional institute increases chances of a technical parole violation. This could potentially show that parolees from these institutions may be under stricter supervision it may be more likely to commit a regular parole violation. This raises questions about disparities between state correctional institutions and other types of prisons when it comes to parole support. It would be worth investigating further in another report. Each subsequent release year shows lower chances of a technical parole violation. This could potentially be explained by COVID, and potentially tighter supervision during that time period that may be starting to become less scrutinizing during every next year. Both male parolees and non-Hispanic parolees had higher odds of committing a technical parole violations. This is worth investigating further, however it could be down to potential bias within the criminal justice system.

Limitations

While the findings of this report offer important information that could be used to help prevent technical parole violations in the future, it is important to understand the limitations of the report. One limitation would be that this data is only from parolees residing in Northampton or Lehigh County, so it may not be generalizable across other counties or states. A second limitation is the COVID 19 factor. The COVID 19 pandemic happened in 2020 and could potentially have had effects

that changed the patterns within a few years. It would be interesting to see a study done on more data from prior years before the pandemic as well to see if there are any distinct patterns that changed during the pandemic. Lastly, there were plenty of variables that were requested through Right-to-Know laws that were not given to us that may be a better predictor of technical parole violations than what we were given. One example of this would be that we requested a lot of information about each parolees parole officer that was not given to us.

Conclusion

In conclusion, our analysis identified several key factors associated with increased odds of technical parole violation, and also several factors that are associated with decreased odds of technical parole violations. It can be seen that some of the special conditions that are given to a parolee like ones related to mental health, drugs, alcohol, and education show associations with the odds of getting a technical parole violation. It would be interesting to see future studies dive into this deeper, and maybe get data that is more specific as to what exact special condition parolees were given rather than a more general variable like in our study. It would also be interesting to see future studies work with a wider range of data, maybe from all of Pennsylvania to see if the results differ, or stay the same as in this report.

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Abolishing Prejudice Within Community Infrastructure

By Ekemini Ekpo

Introduction

Have you ever driven past a nice neighborhood and immediately assumed economic fortune? There is no doubt that fancy cars and big houses are consistent with good socio-economic stature, but did you know that there are systemic practices that can either bring wealth or poverty to communities? The heart of the issue is infrastructure—from transportation, to water and sewer systems, to even roads and bridges. Infrastructure directly determines which communities have access to economic opportunities. When infrastructure is poorly designed or implemented, it can deepen socioeconomic misfortune in communities. These effects are not merely accidental nor coincidental but demonstrate a long history of systematic oppression.

Background

Infrastructure refers to the basic building blocks needed for a society to function, such as transportation, communication networks, sewer systems, and bridges. To fully understand the degree to which infrastructure can affect the economics of a community, it is critical to discuss urban planning. Urban planning is the process of mapping out the use of land. This can be exhibited through infrastructure and public resources. Numerous studies connect investments in infrastructure

examines how infrastructure is distributed unfairly along racial, ethnic, and economic lines.

Showcasing this was redlining—a common practice of housing discrimination popularized in the 20th century, where Black and Brown families were denied mortgages necessary to live in thriving neighborhoods(Cornell.edu). This placed a significant disadvantage on the quality of communities minority groups were able to establish. As a result, many families were forced to settle in neighborhoods that were already lacking necessary amenities—proper sewage systems, safe housing, or reliable transportation (Schechter et al, 2025). Studies on transportation access have shown that communities with fewer public transit options have higher unemployment rates and lower household incomes (Funk et al, 2023). These patterns show that infrastructure is not only about development, but is also about power, access, and justice. Inequitable infrastructure has created long-lasting racial and economic disparities, shaping which communities have access to opportunity and which remain trapped in cycles of poverty.

Community Health

It is no surprise that an economically wealthy community will invest in quality necessities, including roads, schools, and parks; access to a quality food supply is no exception.

Furthermore, disadvantaged neighborhoods are more likely to have individuals with health issues in comparison to more affluent communities. This is directly linked to the lack of quality infrastructure. According to BioMed Central, “disadvantaged neighborhoods are less likely to have infrastructure in place that promotes health, such as food stores with healthy options, quality health services and safe, walkable spaces” (Wallace et al., 2021). Disproportionately struggling communities have a difficult time reinvesting in themselves; this encourages the turn to unhealthy food alternatives rather than high-quality, nutritious options. Moreover, the quality of life for an individual living in a socioeconomically challenged neighborhood will be negatively affected. As the authors in BMC state, “neighborhood deprivation has been associated with risky health behaviors including excessive alcohol consumption, physical inactivity, and high-fat diets” (Wallace et al., 2021).

Individuals are, in many ways, a product of their environment. A community that has reinvested in quality infrastructure can be observed through the well-being of its residents. This is no coincidence; quality infrastructure fosters a better quality of life. By neglecting a community quality infrastructure, urban planners are neglecting their residents. Addressing these systemic infrastructure issues is non-negotiable; it is imperative if we want a more just and equitable society.

Lack of Transportation

Transportation is one of the clearest examples of how infrastructure shapes community wealth. Access to reliable transportation connects residents to jobs, hospitals, schools, and grocery stores. Neighborhoods with lower socioeconomic statuses either lack reliable transportation systems or means of transportation altogether. This leads residents

to rely on long and expensive commuting prospects, or settle for low-paying jobs closer to their neighborhoods. When analyzing “well-developed transportation systems—roads, seaports, railroads, public transport, air transport networks, and river-based transportation—[they] are most often found in nations that are among the wealthiest, whereas the least mobility and the most primitive transportation networks are most often in the poorest countries” (Wachs, 2010). Transportation is not exclusively the means of moving from point A to point B—essentially, transportation serves to flow connections, ideas, and wealth. These are all necessary things to break out of cycles of poverty. In modern society, mobility equals access. When reviewing patterns of communities with low socio-economic status, isolation and resource deserts are among the most common attributes present (Satcher, L. A., 2022). Spatial poverty traps are “regions likely to have high concentrations of chronic poverty...that are far from the centres of economic and political activity in terms of either distance or the time taken to get to and from them. The cost of travel and barriers to movement can also be an important determinant of perceived remoteness” (Bird et al., 2010). Therefore, poverty can be predetermined by the region an individual subsists in, and whether or not there are adequate means of mobility in the area. Systemic infrastructural practices such as redlining create resource deserts and poverty traps. Without proper government support, impoverished communities lack the resources to reinvest in assets, such as reliable transportation, that help grow community wealth.

Highways in Communities

Highways are among the first things that come to mind when discussing infrastructure. Highways serve a majority of benefits. From connecting people to job opportunities to

bringing job prospects to low-income communities, highways can serve as a pipeline for economic growth in neighborhoods. Productivity in the United States has increased since the development of the interstate highway system, and there is evidence that the interstates are one reason why. According to research by the FHWA, “the nation's productivity increase is attributable to increased investment in the highway system.... improving transportation between regions, the interstate highway system has helped to expand the national market for goods as firms can supply their products to much larger geographical areas” (Phelps 2021). At first glance, highways seemingly tackle the issue of resource deserts in low-income neighborhoods. By serving as a bridge of opportunities for those searching, as well as connecting businesses to potential customers, many will argue that highways cure many racist infrastructure problems.

Despite what the majority may say about highways, the costs drastically outweigh the benefits due to the disruptive and dividing nature of highways. Highway projects “tore through the hearts of communities of color, physically segregating low-income neighborhoods from wealthy ones, while displacing over a million people. In addition to burdening neighboring communities with higher rates of pollution, these highways physically impeded the access of low-income communities of color to job opportunities, quality education, and essential resources like healthy food, exacerbating existing inequities”(Accuardi 2023). Ultimately, modern highways serve as a paradox of America’s infrastructure. The very systems designed to connect individuals are used to simultaneously divide low-income communities. The legacy of highways reinforces racial and economic boundaries set by their meticulous placement. Recognizing this legacy is essential, it makes clear that

infrastructure is never neutral. It reflects whose lives are valued and whose are deemed expendable. Only by confronting these choices can we begin to imagine systems that ensure connection without sacrifice, and progress without injustice.

Call for Action

Although the first step in battling these problems is recognition, it is not merely enough to acknowledge the issue of inequitable and flawed infrastructure. The disparities are not coincidental, but a product of decades of policy decisions that prioritized the convenience of elites at the expense of residents. Moving forward, we need stronger and more effective legislation that centers around the modernization of neighborhoods with low socioeconomic statuses. Through refurbishing transportation systems and ensuring that surrounding businesses provide healthier and more sustainable alternatives, once struggling neighborhoods are guaranteed a fair opportunity. Most importantly, we must ensure that the residents who live in these affected communities have a central voice in all decisions about rebuilding and redesign. Meaningful change can only occur when policy is shaped with communities, not imposed on them. Only through committing to inclusive planning and equitable investment, can we begin creating infrastructure that truly supports everyone.

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Hot Spot Policing: Crime Reduction and Racial Disparities

By William Bosworth and Christian Dieter

Introduction

When crime is imagined, it is often thought of as unavoidable and a part of urban life. Many believe that any area in a city is susceptible to crime, which is true to an extent, but modern data analysis and evidence show that crime is not uniformly distributed across urban landscapes. Instead, it tends to cluster intensely in specific, relatively small geographic areas referred to as "hot spots."¹ These high-crime locations can be as small as a single address, a street block, or a cluster of addresses or street blocks, and they are responsible for a disproportionately large share of criminal events.² This empirical observation, supported by numerous studies, laid the groundwork for a significant evolution in law enforcement strategy known as hot spot policing.³

Hot spot policing is a popular and increasingly core strategy in American police agencies that addresses crime by concentrating limited police resources and enforcement efforts in these identified high-risk areas.⁴ This approach emerged in part from a recognized "crisis of confidence" in traditional policing models of the 1970s and 1980s,⁵ which were found to be largely ineffective in preventing crime through broad strategies like random patrol and rapid response.⁶ In response, criminological theory began to shift focus from individual criminal

situational opportunities in understanding crime.⁷ Theories such as routine activities theory and environmental criminology provided the theoretical foundation,⁸ positing that crime occurs when motivated offenders, suitable targets, and the absence of capable guardians converge in specific locations.

The significance of hot spot policing in contemporary law enforcement cannot be overstated. Evaluations, notably randomized experiments like the Minneapolis Hot Spots Experiment and the Jersey City Drug Market Analysis Experiment,¹⁰ have consistently demonstrated that focused police actions can lead to modest yet significant reductions in crime and disorder within these targeted areas.¹¹ This effectiveness challenges earlier views that police had minimal impact on crime rates¹² and has led to the widespread adoption of hot spot identification methods, with over 70% of police departments with a hundred or more sworn officers reportedly using crime mapping for this purpose.¹³ Furthermore, research has often shown that crime prevention efforts in hot spots do not simply displace crime to adjacent areas;¹⁴ instead, they can lead to a "diffusion of crime control benefits," where crime also decreases in the surrounding environment.¹⁵ An example of the widespread use of HSP can be found locally with the Bethlehem Police

Department, which has been using a cloud-native records management system (RMS) called Mark43 RMS and Analytics since 2021. The strategy is also considered more efficient than person-focused interventions, as crime levels at places tend to be more stable over time compared to the criminal propensity of individuals.¹⁶

Despite its proven benefits, hot spot policing continues to evolve, facing questions about the most effective interventions to apply within these areas.¹⁷ While the strategy has its successes, there are concerns about the negative externalities possibly caused by its implementation, chiefly crime displacement.¹⁸ Additionally, there is an ongoing need for deeper insights into how to tailor police responses to the specific physical and social characteristics of criminogenic places,¹⁹ moving beyond merely "putting cops on dots."²⁰ This involves understanding that even optimal police allocations may result in the persistence of hot spots due to their inherent structural attractiveness,²¹ and exploring how structural changes in these locations can generate broader crime reduction benefits through subsequent police reallocation.²²

This paper will explore the theoretical underpinnings, empirical evidence, and practical considerations that highlight the advantages and disadvantages of hot spot policing as a crime prevention strategy. Policing strategies often face criticism for a plethora of reasons, and it is necessary to collect empirical data and synthesize it into a comprehensive review, such as this.

Successes of Hot Spot Policing

Hot spot policing, a strategic approach that allocates police resources to small, high-crime geographic areas, has proven to be a highly

effective and efficient method in modern law enforcement.²³ This strategy is grounded in the empirical observation that crime incidents are not uniformly distributed but rather cluster intensely in specific, confined locations, which often account for a disproportionately large volume of criminal activity.²⁴ The benefits of this concentrated approach are multifaceted, spanning crime reduction, resource optimization, and robust theoretical underpinnings.

A primary advantage of hot spot policing is its demonstrated effectiveness in significantly reducing crime and disorder within targeted areas. Numerous evaluations, including rigorous randomized controlled trials (RCTs), have consistently supported this outcome.²⁵ For example, the Minneapolis Hot Spots Experiment observed a substantial and stable reduction in crime calls and visible disorder when police presence was markedly increased.²⁶ Similarly, the Jersey City Drug Market Analysis Program (DMAP) Experiment showed strong positive effects in decreasing disorder-related emergency calls.²⁷ Furthermore, the Kansas City Gun Project reported a statistically significant 49% decrease in gun crimes within the targeted beats, a success that also garnered strong community support.²⁸ Overall, a review of nine studies indicated that seven reported noteworthy reductions in crime and disorder.²⁹ More recent applications of predictive policing, building on hot spot principles, have also shown promising results, such as a 23% decrease in property crime in the Santa Clara County Sheriff's West Valley patrol area from 2010 to 2011, and a 19% decrease in property thefts in Santa Cruz, California, during a six-month trial period.³⁰

A significant strength of hot spot policing is the overwhelming empirical evidence against widespread crime displacement and, conversely, the frequent observation of a

"diffusion of crime control benefits." While concerns often arise that focusing policing efforts in one area will merely push crime to adjacent locations,³¹ research indicates that crime displacement is neither a common nor substantial outcome of hot spot policing initiatives.³² Instead, studies frequently show that crime also decreases in areas surrounding the targeted hot spots, a phenomenon termed "diffusion of crime control benefits."³³ This positive spillover effect is a major advantage, demonstrating that crime prevention can extend beyond the immediate intervention zone.³⁴ This can occur because crime might be displaced to less conducive locations or times,³⁵ or because structural changes, such as installing video cameras, can trigger geographic spillovers of crime reduction in other areas due to subsequent optimal police reallocation.³⁶

Hot spot policing also offers enhanced efficiency in resource allocation compared to traditional, less effective policing models like random patrol and rapid response.³⁷ By concentrating limited police resources where crime is most prevalent, law enforcement agencies can achieve maximum impact.³⁸ This approach is also more efficient than interventions focused on individuals, as crime levels at specific places tend to be more stable over time than the criminal propensity of individuals.³⁹ For instance, data from Seattle suggested that police would need to target four times as many people as places to account for 50% of crime incidents.⁴⁰ This shows how place, rather than people, can determine crime rates, highlighting the efficacy of hotspot and other place-based policing strategies. Furthermore, research provides practical guidance on optimal patrol durations within hot spots, identifying 13-15 minute stops as particularly effective for directed patrols.⁴¹

From a methodological standpoint, place-based randomized controlled trials (RCTs) are

particularly feasible for evaluating hot spot policing.⁴² These trials often encounter fewer ethical objections than individual-level randomization, as subjects do not directly perceive unequal treatment when allocation occurs at the place level.⁴³ Monitoring treatment fidelity is also facilitated in place-based studies because places are constant, providing a clear and fixed locus for assessing intervention implementation.⁴⁴ Furthermore, advances in crime mapping technologies and predictive policing tools, such as Kernel Density Estimation (KDE) and Risk Terrain Analysis (RTA), have significantly improved the ability to accurately identify and forecast hot spots.⁴⁵ These sophisticated methods offer improved prediction accuracy and can even predict new hot spots based on geographic attributes, moving beyond reliance solely on historical crime data.⁴⁶ KDE is considered robust, with high prediction accuracy, and can be weighted by time or relevance.⁴⁷ Even less sophisticated heuristic methods, often involving manual identification or grid mapping based on local knowledge, are cited by practitioners as effective in uncovering actionable hot spots.⁴⁸ Moreover, near-repeat methods capitalize on the observation that crime risk increases for a short period in areas very close to where a crime has just occurred, particularly for burglaries.⁴⁹

Finally, hot spot policing has achieved widespread adoption and significant influence across American police agencies, solidifying its status as a core strategy.⁵⁰ Over 70% of police departments with 100 or more sworn officers reportedly use crime mapping to identify hot spots.⁵¹ Its proven effectiveness has fundamentally challenged earlier assumptions that police had minimal impact on crime rates, contributing to a "success story" in crime prevention.⁵² Many experts attribute the dramatic decrease in crime observed in major cities like New York to the

implementation of hot spot policing strategies.⁵³

Limitations

While there are multiple examples that showcase the effectiveness of Hot Spot Policing in America, we encountered several limitations during our research. One limitation found was the acknowledgement that there are several methods for using crime mapping and data collection towards police efforts, which can be viewed as contradicting. While the available evidence suggests that even "shallow" problem-solving does better focus police crime prevention efforts at hot spots, it is still difficult for police officers to implement an "ideal" version of problem-oriented policing. This results in cities having different systems that are not compatible with each other. Focusing police efforts towards HSP has gained widespread acceptance among researchers and practitioners, although there is little evidence that has been acquired regarding what policing strategies work best for hot spots, including interventions targeted at different spots, such as hot spots of violent crime. Research from the Jersey City POP and the Kansas City Gun Project experiment previously stated did report statistically significant average effects of hot spots policing in reducing citizen calls for service in treatment places relative to control places.⁵⁵ Despite this, research found that the results of these studies provide criminal justice policy makers and practitioners with little insight into what types of policing strategies are most preferable in controlling and decreasing the rise of crime hot spots. Evidence supports that HSP studies do assist in controlling crime hot spots with minimal displacement. The circumstances in which these studies were conducted regarding location, data collection, policing styles, and population, however, make it challenging for a different police department

to replicate these studies with similar positive results.

Furthermore, while Hot Spot Policing has no evidence of directly causing harm to a community, HSP has further broadcast the existing dilemma of racial disparities in policing to a much higher level. In New York City, the top 5% highest arrest block groups account for 48.7% of Black arrests and 45.9% of Hispanic arrests.⁵⁷ These statistics were also prevalent in cities such as Chicago, Los Angeles, Washington, D.C., Colorado Springs, and Tucson throughout 2014 to 2019.⁵⁸ It stands to reason that arrests in response to crime hot spots have the possibility to produce racial disparities⁵⁹. Additionally, a case study from New Orleans found that the increased presence of police officers resulted in the improper arrests of transgender residents, 80% of the residents being Black. The Department of Justice would find that these statistics, as well as testimony that the officers equated being African American and transgendered with being a prostitute, suggested that racial bias was an element in these arrests. The statistics presented show that HSP can highlight existing issues of racial bias and racial disparities within police departments and cities.

This, too, can create the side effect of a lack of positive perceptions from the community. An article recounting the events of a study from Indiana found that after a rise in traffic enforcement strategies, civilians were less likely to support directed patrols and had lower opinions on police professionalism.⁶² The shift in policing came across as more aggressive,⁶³ resulting in people feeling as though they were being harassed by officers. There is a growing concern that police complaints regarding unfair targets may result if suspects are perceived as an occupying force in hot spot neighborhoods.⁶⁴ Ultimately, police officers should ensure that they are providing

public input into police decision making,⁶⁵ as well as considering the racial and ethnic composition of a hot spot⁶⁶ to make sure that HSP is being implemented as effectively as possible. Expansions or revisions of existing theories can be beneficial⁶⁷ to assist in addressing the disconnect between communities. Going forward, police departments that are considering using HSP methods for crime reduction should additionally gather more information on the community's reaction to increased levels of law enforcement action.⁶⁸

It should also be noted that Hot Spot Policing works more efficiently when partnered with other programs as opposed to being solely by itself. A study showed that the implementation of Hot Spot Policing alongside a place-based crime theory, as well as the collective efficacy of the neighborhood, showed that the residual crime rate in East Liberty between 2008 and 2012 had a 49% reduction.⁶⁹ Studies have also shown that another style of policing called problem-oriented policing (POP) can create situation-specific preventative techniques that can reduce social and physical disorder in places where police are focused.⁷⁰ The use of community policing additionally assists in providing a platform that recognizes and captures the synergies that constitute the intervention of criminal activities.⁷¹ Implementing methods such as community policing and problem-oriented policing have been proven effective in assisting HSP in its ultimate goal of crime reduction in a location.

While hot spot policing has gained widespread adoption, the broader use of experimental methods in criminal justice has not been prevalent, partly due to funding costs within the department. One study described how a local police force was able to produce 40 hot spots to receive patrols of 10-15 minutes. This would later be shortened to 20 hot spots due to limited resources from the department.⁷²

Smaller agencies are also more likely to request grant opportunities to secure hot spot funding, or rather are forced to collaborate with neighboring jurisdictions to acquire shared resources to implement their policing.⁷³ With this in mind, departments in larger cities with higher populations are more likely to already have access to resources for hot spot and preventive policing in comparison to smaller departments in smaller cities. Moving forward, the emphasis should be on Intelligence-Led Policing (ILP), which seeks to integrate stronger analytical tools and data to direct operations, requiring top-down management and overcoming organizational resistance to change. Additionally, the implementation of transparent predictive policing models will provide a decrease in cost for police departments to use data sources.⁷⁴ It was discovered that several of the studies previously stated were successful because they were in larger cities, resulting in these studies having a larger budget. Therefore, implementing transparency in the models should result in more concise and broader studies throughout America.

Conclusion

While there are several limitations that can create drawbacks, the body of evidence strongly supports that focusing police efforts at high-activity crime places can be used as an effective strategy for crime prevention. Hot spot policing has consistently resulted in noteworthy crime and disorder reductions, with little evidence of significant crime displacement. HSP can also lower general criminal activity, including drug and property offenses.⁷⁵ It should be noted that the research regarding Hot Spot Policing's implementation must be approached with extreme caution. Challenges have remained in addressing the possibility of mitigating harmful impacts towards the community and their relationship with police, as well as determining whether

Hot Spot Policing can receive positive recognition without the inclusion of other policing methods. Furthermore, the studies produced have outliers and different database collecting methods that may conflict with the data provided in local scenarios. Future advancements involve leveraging more sophisticated and analytical tools such as Risk Terrain Modeling (RTM) to diagnose the underlying criminogenic factors of places and inform more sustainable crime prevention strategies, building upon principles of HSP to produce maps more conducive to crime.⁷⁶ Ultimately, the success that was discovered in our research proves that Hot Spot Policing can provide a promising model for applying experimental methods in criminal justice research that has the potential to flourish within the next few years. Continued research and careful evaluation are essential to refine this evolving method of policing.

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Pollution, Policy, and Inequality: Water Justice in the Delaware River and Bushkill Creek Communities

By Reed Collins

Introduction

Located in northeast Pennsylvania, the Bushkill Creek Watershed encompasses 80 square miles of Northampton County, stretching from Blue Mountain to the Delaware River in Easton. Most of the stream and its tributaries are classified as High-Quality Cold-Water Fisheries and provide year-round results for prized gamefish such as brown trout, rainbow trout, and brook trout. Bushkill Creek is considered a significant tributary to the Delaware River Basin where more than 14 million people rely on it for their drinking water. Most of the upper half of the watershed is located in shale and slate geology and is dominated by woodlands, agriculture, and low-density residential development. Making its way from Blue Mountain to Jacobsburg State Park, these riparian corridors absorb rainfall and runoff, keep the streams cool, and provide important habitat for flora and fauna. As the creek flows south it begins to run through more industrialized communities bordering Lafayette College as it flows through downtown Easton and into the Delaware River. Bushkill Creek is an essential part of the ecosystem as it supports much of the wildlife in the area. However, historical factors have hindered the health of the creek for years. Historical injustices, policy failures, socioeconomic disparities, and recent development pressures have altered the

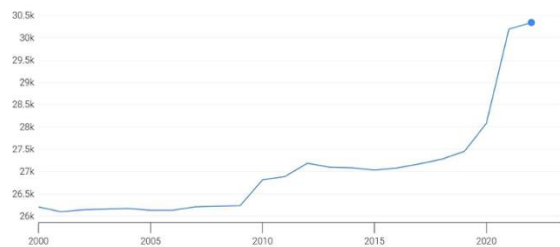
water contaminants, flooding, sinkholes, and a disruption to fish migratory patterns. Many local organizations and environmentalists have been juggling these issues for years but with the threat of climate change looming in the background many of these issues have still plagued communities along the Bushkill and Delaware.

Literature Review

Environmental justice is becoming more important today than ever before. As the world is becoming more industrialized, people lose sight of the effects it has on our ecosystem. Environmental Justice ensures that all people regardless of race, income, or background have access to the resources they need. In today's society many underrepresented groups often bear the brunt of environmental degradation. In northeast Pennsylvania we have seen this dynamic at play, especially in the city of Easton. Easton has seen a major increase in population density over the past few years. This, as well as aging infrastructure, has added increased stress on water systems in the region that has hurt both the stream's health as well as many minority groups living in the Easton area. Data taken from the US Census Bureau shows just how rapidly the city of Easton has grown in recent years. (figure 1).

Easton, PA population from 2000 to 2022

Easton had an official estimated population of 30,341 on July 1, 2022.



Source: U.S. Census Bureau (Population Estimates Program)

Neilsberg

Figure 1: Showing Census data giving insight to rising levels of population in Easton, PA

In addition, data taken from a 2023 study found that many Easton residents were living below the poverty line. Data shows “17.9% of the population for whom poverty status is determined in Easton, PA (4.48k out of 25k people) live below the poverty line, a number that is higher than the national average of 12.4%.” High rates of poverty paired with an increasing population leads to a dangerous dynamic as the streams health continues to be at risk with more people moving to the city. (Figure 2)

Historically, Easton has been popular area to live in the Lehigh Valley with roots stretching back to 1752. The upper portion of the Bushkill Creek watershed was primarily used to power mills during the 19th century. Five low head dams (1-15 feet) were installed along the Bushkill Creek watershed to support these mills. As Lehigh Valley Live describes, “The dams were built to power lumber and grain mills, with the first put in in 1797, according to Lafayette geology Professor Dru Germanoski. Today, they pose a danger to stream users who can get caught in the hydraulics of the water spilling over the dam, build up sediment behind the impounds, stagnate the stream’s flow and cut its oxygen levels, and prevent freshwater fish from seeking out cooler water fed by groundwater seeps.” It was not until 2021 when projects to remove these low head

dams came to fruition. Now, thanks to the Wildlands Conservancy and Princeton Hydro these dams are in the process of being removed completely as they no longer serve a purpose. For the first time in over 200 years the creek is being restored to its natural state. “Funding for the projects has stemmed from various sources, including a settlement following a fly ash spill from the Martins Creek Power Plant in 2005. This settlement, coupled with contributions from organizations like NFWF’s Delaware Watershed Conservation Fund and Northampton County’s Livable Landscapes program, propelled the initiative forward.”

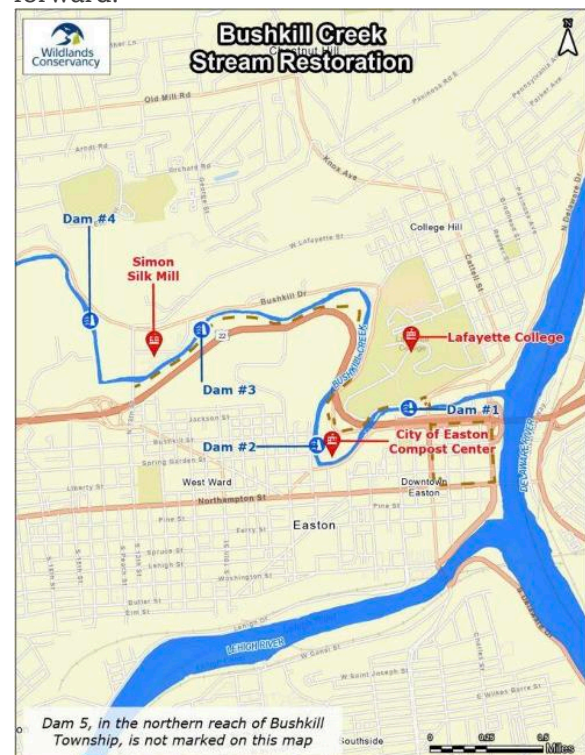


Figure 2: Highlighting the geography of Easton, and shows where Bushkill Creek meets the Delaware River

However, this is just one of the issues Environmentalists have had to deal with regarding the Bushkill. Another looming threat to the stream’s health has been the impact of limestone mining. Bushkill Creek is protected under Pennsylvania’s Special Protection

Waters Program, regulating it against degradation and preserving it as a High-Quality Cold Water Fishery. However, there have been numerous reports of a local Quarry contributing to the pollution and degradation of the stream's health in recent years. The Delaware River Keeper Network highlighted that "Substantial evidence, gathered over several years by various agencies and experts, shows that the Stockertown Quarry (the Quarry) owned and operated by Hercules Cement, doing business as Buzzi Unicem USA, is contributing the repeated dewatering and pollution of the Bushkill Creek and surrounding region, including the formation of sink holes in the creek that remove water that is diverted to the quarry. Reports are that adverse impacts occur in the Little Bushkill Creek and on land as well. The Quarry mines limestone." The Quarry is responsible for pumping over 55 million gallons of water per day into the creek and has been cited for 15 different pump failure events. This has resulted in dewatering of the Bushkill leading to a widespread fish kill. The most recent occurring on June 5, 2020 killing approximately 2,000 fish and an unknown number of other aquatic species. This event had disastrous effects on native brown trout populations who rely on the upper portions of the Bushkill to reproduce according to the article. These are just a few of the cases that illustrate how historical and ongoing development continue to shape environmental inequality.

Methodology

This paper uses a mixed-methods case study approach: an exhaustive review of prior research pertaining to the Bushkill Creek and Delaware River Basin was used to analyze different issues communities along these two waterways face. Data was collected from various academic research/studies around the topic as well as conservancy data and recent publications. Data from the U.S. Census

Bureau was used to show populations trends in the Easton area. Water quality data from the Bushkill Stream Conservancy was used to analyze different chemical traces found in the stream from various test sites. Recent articles from Princeton Hydro were used to assess the progress of the removal of low head dams along the Bushkill. Articles from the Delaware River Keeper Network were also used to examine the ongoing issues with local Limestone mining businesses polluting the waterway.

Historical Roots of Environmental Inequality

The Lehigh Valley has a long history of being one of the major industrial forces in the United States. Bethlehem Steel was one of the largest factories in the U.S. from 1857-1995 supplying weapons to the U.S. Navy during the first and second World War. The area also has a deep history of coal and limestone mining. As for the Bushkill, mills used during the 18th century were powered by the creek and required the construction of low head dams. In total there were 6 different low-headed dams installed along the Bushkill that stayed around long after the mills were no longer in operation. This altered the natural hydrology of the creek and resulted in long-term impacts of sediment build-up and a deterioration of water quality. Communities in downtown Easton felt the impacts of these dams for years as trout migratory patterns were altered. Thankfully, these dams are in the process of being completely removed to restore the creek to its natural state. While the removal of the 5 low head dams was a huge success for local environmentalists, mining operations still pose a huge issue. Extractive activities such as limestone mining pose one of the greatest threats today to the creek's health along with the communities who border it. The mines are largely responsible for the creation of

sinkholes and fishkills in the creek. The major contributor is the Stockerton Quarry which has had a long history of negatively impacting the creek's health. In 2021 a hearing took place by the Pennsylvania Department of Environmental Protection on local quarries. Residents as well as community stakeholders had a chance to voice their concerns about the Quarry's operations as they planned to continue digging an additional 50 feet. "It is the obligation of the state to protect its natural resources," said Tracy Carluccio, deputy director of the Delaware Riverkeeper Network. "It is an additional layer of protection that the state is required to act upon." Carluccio said she is concerned about the impact of millions of gallons of water that will be pumped back into Bushkill Creek each day. The proposed deepening, she said, would "expand the flow zone, increasing the flow rate and draw down on the water table, and the quarry's consequences would be significant and severe and likely cause the formation of sinkholes." Sinkholes have been a major problem in the Stockerton area for years. They can form naturally over time, but when mining operations disrupt the natural flow of water and the aquifer they occur much more frequently. When underground water levels decrease, it can destabilize the ground above. Limestone is very susceptible to erosion and with increased mining operations, this poses a higher risk for sinkhole formations. The Bushkill Stream Conservancy lists sinkholes as one of the most concerning issues to both the creeks health as well as communities alongside the creek. Figure 3 shows a diagram of how sinkholes form and figure 4 shows a sinkhole formation in Stockerton.

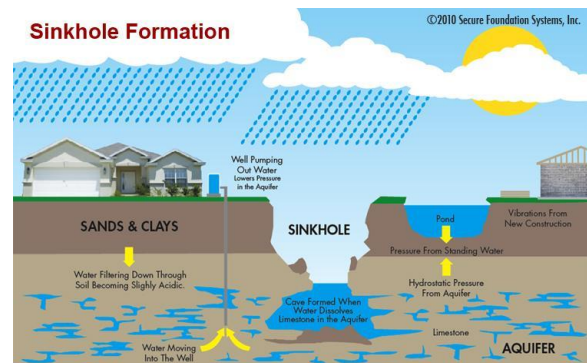


Figure 3: Showing sinkhole formation. Note: this process is exacerbated by large amounts of water being pumped by the Quarry



Figure 4: Photograph by the Bushkill Stream Conservancy showing a sinkhole formation along the creek

Water Disparities Between Communities

In addition to contributing to the formation of sinkholes, limestone mining can also cause harmful chemicals to pollute the stream. Major highways, and densely populated areas also have effects on stream health. When analyzing water quality data taken from the Bushkill Stream Conservancy in June 2024 and 2025, we find some significant contrasts in water quality across communities (figure 5). It's important to note that any nitrate levels above 3mg/L indicate an unhealthy stream.

JUNE 2024																									
Description	Co pell a @ Bu sh kill Ce me ter Rd Bri dge #25	Ha hn & Cle arfi eld Rd Bri dge #26	Ma in Ste m Do ug lass vill e #23	So ber Ru n We st #14	So ber Ru n No rth #15	Ma in Ste m No Jac obs bur g Bri dge #16	En gle Ru n No rth #15	Ma in Ste m Fi le w n Rd #6	Ma in Ste m Uhl er Bri dge #12	Ma in Ste m We st at Rt. 512 #10	Litt le Bu sh kill We st at Rt. 512 #10	Litt le Bu sh kill Gra nd Ce ntral Rd. #17	Litt le Bu sh kill Gra nd Ce ntral Rd. #17	Litt le Bu sh kill Gra nd Ce ntral Rd. #17	Litt le Bu sh kill Gra nd Ce ntral Rd. #17	Litt le Bu sh kill Gra nd Ce ntral Rd. #17	Litt le Bu sh kill Gra nd Ce ntral Rd. #17	Litt le Bu sh kill Gra nd Ce ntral Rd. #17	Sch oen eck Cree k at Na zar eth Rd. #27	Sch oen eck Cree k at Na zar eth Rd. #27	Ma in Ste m Pen n S Ap art ment Bri dge #21	Ma in Ste m Pen n S Ap art ment Bri dge #21	Pen n S Ap art ment Bri dge #21		
	pH	7	7	7	7	7.2	7	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	
	Nitrates	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Phosphates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dissolved Oxygen	8.4	8.0	8.2	8.6	8.8	8.1	8.5	8.6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	Alkalinity	26	36	36	28	24	X	X	68	44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Test Date	17	17	15	16	16	14	14	15	15	16	16	15	15	15	16	16	16	16	16	16	16	16	16	16
	Air temp	28.5	27.0	23.9	25.8	23.0	21.5	22	24.4	24.2	23.9	23.9	25.5	26.0	24.5	22.5	23	19	23	23	23	23	23	23	23
	Water temp	28.6	28.2	19.7	18.4	18.3	17.6	17	20.2	20.7	18	17.4	18.4	17.7	18.3	12.9	16.6	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
	Conductivity uS	94	148	180	119	117	160	210	177	188	376	422	367	299	277	462	472	493	493	493	493	493	493	493	493
% Oxygen Saturation	97	92	94	106	83	97	90	97	93	106	104	101	99	103	85	110	105	105	105	105	105	105	105	105	

Figure 5: Showing June 2024 water quality data by Bushkill Stream Conservancy

In site 27B (Shoeneck Creek) we see very high levels of nitrate (18mg/L). Shoeneck Creek runs just south of Stockerton Quarry and directly borders New Enterprise Stone and Lime Co, another limestone quarry in the area. Overall, the data suggests that many sites required reagents (eg. Phosphate acid, nitrate tablets) to determine water quality. 2024 data also showed higher dissolved oxygen levels compared to 2025 data (Figure 6). Higher dissolved oxygen levels indicate a healthier stream.

2025 Stream data shows elevated nitrate levels (8mg/L) at sites 11 (Easton Cemetery Bridge) and 21 (B&S Apartments bridge). These two test sites border route 22, a major highway in the Lehigh Valley. The most significant concern was site 17 (Central Rd) which had a very low oxygen saturation percentage (73%). Site 17 is located right below a waste management landfill in West Argyl, PA. This area is very rural and was the northernmost test site included in the Bushkill Stream Conservancy data. This warrants a bit of concern because of its location being at the foothills of Blue Mountain where the watershed begins. In 2025, water temperatures increased slightly, this could be due to weather changes and flow changes of

the stream. Some readings were missing (not tested) due to lack of reagents.

June 2025 Bushkill Stream Conservancy Water Test Data												
Test Site	Test Date	pH (4.0-9.0)	Nitrate (0-100mg/L)	Phosphate (0-10mg/L)	Alkalinity (20-400mg/L)	Air Temp (°C)	Water Temp (°C)	Conductivity (20-800µS/cm)	D.O. Sat. (80%-120%)	Notes, Issues, or Concerns		
25 - Capital at Bushkill Center Bridge	Not Tested											
26 - Valley at Chandler Rd Bridge	Not Tested											
3 - Bridge at E. Doughertyville Rd	6/21/2025	7	0	0	7	86	30	223	208.4	80	Test Phosphate Acid Reagent	
10 - Buffalo Rd at Jacobusburg Rd Bridge	6/22	7	0	0	7.4	86	31	221.2	197.3	80	Water was low	
8 - Main Street Pasture Rd	6/21	7.5	0	0	6.8	86	30	222	198.4	80		
12 - Quarry	6/21	7.5	0	0	7.4	84	29.4	222	202.4	80		
12A - Quarry	Not Tested											
14A - Solter Run West	6/21	7.5	4.4	0	7	40	27.4	225	173.4	80		
15 - Solter Run North at Corner Rd Bridge	6/21	7.5	8.0	0	9	80	28.3	213	172.2	80		
16 - Engle Run Bridge	6/22	7	0	0	7.4	84	28.5	188	238	80	Water was low	
27A - Shoeneck Creek at Napaeth Rd	Not Tested											
27B - Shoeneck Creek at Napaeth Rd	Not Tested											
27 - Shoeneck Creek at Bushkill Creek	Not Tested											
10 - Little Bushkill West at Rt 512	6/22	7.2	0	0	7.8	84	28.9	204	405	87		
6 - Little Bushkill at Glen Rd	6/22	7.5	4.4	0	7.6	80	29.1	188	452.1	80		
17 - Central Rd	6/22	7.2	0	0	7.4	84	28.7	183	471	73		
16 - Little Bushkill at Bushkillville Rd	6/22	7.5	4.4	0	7.6	80	29.3	183	217.7	87		
18 - Little Bushkill at James Hill	6/22	7.5	8.0	0	7.6	80	29.3	183	380.1	80		
4 - Little Bushkill Main Street at Eastman	Not Tested											
20 - Little Bushkill at Engle Rd Bridge	6/21	7.75	4.4	0	8.0	75	31	30	358.4	102		
20 - Little Bushkill Main Street Saw Mill	6/21	7.75	4.4	0	8.0	75	30.5	303	334.5	102		
17 - Main Street at Pine Run	Not Tested											
21 - Main Street B&S Apartments Bridge	6/22	8	8.0	0	9	180	23.1	182	419.3	80		
11 - Main Street at Easton Cemetery Bridge	6/22	8	Not Tested	0	9	184	23.3	187	448.3	80	Test both nitrate tablets	
22 - Main Street at Bushkill Dr Bridge	6/22	7.5	8.0	0	9	180	24	172	407.9	80		
21 - Main Street at S&W Potomac Bridge	6/21	7.5	4.4	0	9	124	20.8	174	448.5	87		

Figure 6: 2025 Stream data from the Bushkill Stream Conservancy in June 2025

Socioeconomic Differences in Water Access

Clean water access isn't just about natural purity-it is also about infrastructure, maintenance, and affordability. Data from FEMA's National Risk Index showed Northampton County ranks high when it comes to social vulnerability. This means that the community is more susceptible to adverse impacts of natural hazards due to lower median income, older housing stock, and higher minority populations.

If you visit downtown Easton today you will notice the aging infrastructure that still exists. The city has had a history of housing issues as many people can no longer afford to live in the city with rising prices accompanied by population increases. This has led to overcrowded areas in many low-income areas throughout the city. (Figure 7)

The data suggests that more households in downtown Easton rely on aging plumbing sources compared to those located in the upper portion of the watershed who have a higher household income. Contaminants in the water can spread very easily downstream and can affect the health of many who rely on it

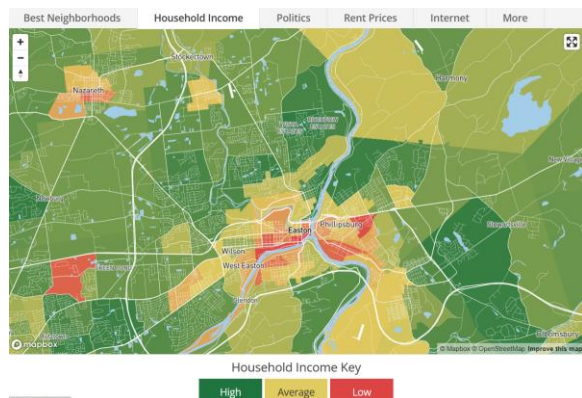


Figure 7: Showing household income data in Easton and surrounding areas along the Bushkill and Delaware waterways

every day for basic needs. While higher income areas in the north can use their resources to monitor or upgrade their plumbing systems as needed. Those living in the city cannot afford those same luxuries which demonstrates how economic power can buy environmental security. This also highlights how important it is to have strong policies put in place to protect everyone who relies on Bushkill for daily needs. Decisions made by Stockerton Quarry may not affect wealthier communities living in the north as much as families living in low-income areas in the city. Policies that address this disparity become even more important as the city grows each year.

Policy Analysis: Successes and Gaps

Pennsylvania's classification of Bushkill Creek as a High-Quality Cold Water Fishery provides a degree of regulatory protection, particularly under the Special Protection Waters Program. The recent dam removals highlight a policy success story, partly from a settlement from a 2005 fly ash spill and various other instances of dewatering events and fish kills. The Wildlands Conservancy, Princeton Hydro and others were responsible for this success story.

The Delaware Riverkeeper Network is also responsible for calling out Stockerton Quarry on a 2020 dewatering event that resulted in a widespread fish-kill of many native Brown trout species. These highlight some of the recent success stories in regard to protecting the Bushkill Creek.

However, regulatory gaps remain. Enforcement of water discharge permits is inconsistent, and stormwater runoff remains largely under-regulated (DEP.Gov). Furthermore, the voices of impacted communities—particularly low-income residents in Easton—are often underrepresented in environmental decision-making. The Clean Water Act's tools are strong, but only if enforced equitably and with community engagement.

Discussion

Overall, there have been many different instances of environmental injustice pertaining to Bushkill Creek. There have been historical factors that have affected the streams' health for years with the creation of low head dams. These dams were originally used to support mills along the creek but even long after they were out of commission, these dams were left behind, resulting in a disruption of the streams' natural flow. In addition, quarry mining has resulted in contaminated waterways, dewatering events, and fishkills as well as the formation of sinkholes that threaten the livelihood of thousands in the area. All these factors have an even larger effect on the residents living in low-income areas in Easton who rely on the health of the creek for basic sanitation needs. That is why it is so important to ensure that policies are enacted that protect not just the health of the stream but also those who are most vulnerable.

Conclusion

Protecting our waterways is critical to ensuring the health and safety of millions across the globe. When the community bonds together to enact change is when we see the greatest victories for environmental justice. As the world becomes more populated it puts increased pressure on many different parts of our environment. The Bushkill Creek and Delaware River Basin are essential components of life in the Lehigh Valley and protecting them should be a high priority. There is still a lot of research that needs to be done to address all of the issues these waterways face. However, local environmentalist groups and non-profits have made a real impact in restoring the health of these two waterways. With the threat of global warming on the rise the importance of this matter increases. We must make decisions today that will positively affect future generations living in the Easton area. This can be done in cooperation with local officials as well as community members. Easton is a place characterized by its natural beauty as well as its engaging and thoughtful community. In recent years we have come a long way in restoring the health of our Creek but there are still looming threats that can set back progress made at any time. That is why it is important to address issues as soon as they come up so we can protect our most cherished waterways.

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Sundown Towns: An Analysis of Racial Experiences in the Lehigh Valley

By Lillian Hercik

Abstract

This study investigates the historical legacy and contemporary relevance of sundown towns in the Lehigh Valley of Pennsylvania, with a focus on Bethlehem, Allentown, Nazareth, Northampton, and Hellertown. Sundown towns, which are historically all-white communities that excluded non-white residents through formal policies, intimidation, and violence, continue to shape racial dynamics in residential patterns and community experiences. Through a mixed-methods approach combining interviews from the Lehigh Valley Engaged Humanities Consortium and qualitative survey data collected by Lehigh Valley News as well as original survey data, this research explores how racism persists in modern day local structures and perceptions. The study reveals that while some municipalities have grown more diverse, others maintain disproportionately white populations and have histories of racial exclusion. Survey findings also show disparities in perceived race relations and quality of life, particularly between lifelong residents and those who have just moved to the region. These findings highlight the continuing impact of structural racism in shaping both community identity and lived experiences in the Lehigh Valley. Ultimately, this research aims to fill a gap in the existing literature by localizing the discussion of sundown towns and racial exclusion— and

offering a better understanding of racial exclusion in a modern regional context.

Introduction

A ‘Sundown Town’ is a town that can be described as “all-white municipalities or neighborhoods in the United States. They were towns that practiced a form of racial segregation by excluding non-whites via some combination of discriminatory local laws, intimidation or violence. They were most prevalent before the 1950s. The term came into use because of signs that directed “colored people” to leave town by sundown.”¹ To the current day municipalities throughout the Lehigh Valley have faced allegations of being racially exclusive. Through many instances these allegations can be found to hold true and are supported through personal feelings displayed by people of color living in or avoiding these areas.

Racism historically and to the current day continues to plague America. Racism can be defined as “prejudice, discrimination, or antagonism by an individual, community, or institution against a person or people on the basis of their membership in a particular racial or ethnic group, typically one that is a minority or marginalized.”² Through speech, action, law, mandates, regulations, and others African Americans as well as people of color are affected in many areas of life.

African Americans, for instance, are disproportionately impacted by mass incarceration, police violence, and barriers to quality healthcare. Racial disparities in maternal mortality, income levels, home ownership, and access to education reflect the enduring legacy of structural racism throughout the U.S. Additionally, bias in the workplace and schools often leads to unequal opportunities and treatment. These effects are not only the result of individual prejudice but are reinforced by long-standing institutional practices and policies that continue to disadvantage marginalized communities. The effects of racism through residential structures are far-reaching and enduring. Redlining, discriminatory lending practices, and racially restrictive covenants historically prevented Black families from purchasing homes in certain neighborhoods, limiting wealth accumulation and intergenerational economic mobility. Even after these practices were outlawed, their impacts remain evident. Predominantly marginalized neighborhoods often face underinvestment, lower property values, and reduced access to quality schools, healthcare, and public services. Meanwhile, white flight and exclusionary zoning continue to reinforce racial segregation. These disparities in residential conditions perpetuate cycles of poverty and social inequality, illustrating how racism is embedded in American life.

Understanding this information is essential to understand when applying it to local populations. However, within existing literature there is a gap that exists when looking at the Lehigh Valley which is where my research will expand to.

Historical Analysis of Sundown Towns Throughout the US

Sundown towns, whether directly shaped by the legacy of slavery and Jim Crow in the South or independently established through prevailing antiblack ideologies, shared the common goal of enforcing racial exclusion. These towns were essential in upholding white dominance by systematically preventing Black individuals from residing within their town. “Black disadvantage as well as white advantage—because both are implicated in the development of sundown towns. Specifically, antiblack attitudes have been connected to places with a sundown history (Crowe and Ceresola 2014; Loewen 2005), which suggests that any connection to contemporary inequality would operate through increased black disadvantage.”⁵ At their peak, approximately 10,000 sundown towns existed across the United States.¹ Despite the progress of the civil rights movement and the growth of the United States since then, it is estimated that about 2,400 still remain today.³

During the 1890 to 1960s ‘Sundown Towns’ were most prevalent in their existence particularly across the West and Midwest during the Great Migration, when millions of African Americans sought refuge from the racial violence and economic oppression of the South. In response, many municipalities implemented both formal and informal mechanisms of exclusion. These included restrictive housing covenants, employment discrimination, and advertising campaigns that highlighted their all-white populations. For example, postcards from Edmond, Oklahoma in the 1940s read, “A Good Place to Live...No Negroes,” while promotional material from Mena, Arkansas listed among its advantages: “Cool Summers, Mild Winters, No Blizzards, No Negroes.”⁴ Cities across the United States often times marking the city limits with signage that read “‘Nigger, Don’t Let The Sun Go Down On You In ____’”⁴ or “Whites only after dark”⁵ as after dusk

expelled populations faced the largest threat. When these tactics failed to deter Black settlement, some communities resorted to racial violence. In Marion, Indiana, for instance, the 1930 lynching of two Black teenagers was followed by the mass exodus of approximately 200 Black residents.

However, not only did these towns intend to keep out African Americans they also intended to keep out Native Americans, Mexican Americans, as well as Jewish citizens. With that in mind the result would be a primarily, if not entirely, white population—intentionally created. “In Illinois, for example, 502 towns were all white or almost so, decade after decade; many still are. Research confirms the formal and informal racial policies of 219 of them. Of those, 218, or 99.5%, kept out African Americans.”³ However, a town does not need to be all white to be considered a ‘Sundown Town’ but rather “places that excluded people based on ideas about race”⁶.

Although explicit racial bans are no longer legal, the legacy of sundown towns remains deeply embedded in residential patterns today. Subtle yet potent practices such as exclusionary zoning laws, discriminatory mortgage lending, and real estate steering continue to discourage Black families from moving into these areas. As a result, many former sundown towns maintain unintentional segregation, perpetuating the racial hierarchies they were originally built to enforce.

Lehigh Valley Under a Microscope

When looking at the Lehigh Valley as a whole you would see a rather diverse community of people coming from many different ethnicities, backgrounds, levels of education, and economic statuses. However, when you begin

to zoom in these different demographics are a lot more concentrated by area than the big picture would lead you to believe. In this research I will be specifically focusing on the Bethlehem, Allentown, Northampton, Hellertown, and Nazareth boroughs of the Lehigh Valley.

According to data from the U.S. Census, Nazareth (82.4%), Northampton (86.8%), and Hellertown (86.4%) exhibit the highest concentrations of white residents among the cities examined, indicating relatively low levels of racial and ethnic diversity. Notably, Northampton (1.4%) and Hellertown (1.3%) report the lowest percentages of Black residents, alongside similarly low representations of Hispanic, Asian, and multiracial individuals. In contrast, Bethlehem and Allentown present significantly more diverse demographic compositions. Bethlehem’s population is 62.3% White, 9.1% Black, 3.3% Asian, 29.4% Hispanic, and 13.7% identifying as two or more races. Allentown demonstrates even greater diversity, with a population that is 42.3% White, 13% Black, 0.5% American Indian, 2.5% Asian, 53.8% Hispanic, and 20.5% identifying as two or more races. Even when accounting for population size, Nazareth, Northampton, and Hellertown maintain disproportionately higher percentages of white residents relative to Bethlehem and Allentown.

When controlling for economic disparities in the housing market, it is noteworthy that the median home values across these boroughs remain relatively consistent. Nazareth reports the highest median value at \$236,900, followed closely by Northampton and Hellertown, while Allentown is a clear outlier, with a significantly lower median home value of \$188,900. This suggests that differences in racial demographics are not solely explained by economic barriers in housing.

Allentown

Allentown, originally a predominantly white city, has evolved over the decades into one of the most diverse communities in the Lehigh Valley. Between 1930 and 1960, the city's Black population remained relatively small but experienced steady growth doubling to 745 by 1960 and reaching approximately 1,000 by 1965. During this period, many white residents resisted the rise of Black families, particularly in response to the new urban renewal projects that threatened to disrupt the racial makeup of the city.

The Hanover Acres housing project, which began in 1937, marked a significant shift in Allentown's residential makeup. Although intended to provide affordable housing, the project contributed to the displacement of numerous families and unintentionally reinforced patterns of de facto segregation. As a result, most Black residents in Allentown were primarily living on the streets of Union, Willow, Levan, and Hill. Black citizens at the time stated they "knew their place," as far as what they could and couldn't do including where they could live and where they could apply for work.⁷

However in 2023, Allentown launched a \$27 million redevelopment project aimed at rebuilding public housing in the Little Lehigh community. The initiative includes the demolition and reconstruction of 50 new mixed-income homes, signaling a shift toward more inclusive and equitable housing solutions⁸.

Nazareth

Historically, Black residents in the Lehigh Valley have faced various forms of racial exclusion, including both overt and covert segregation, targeted policing, the presence of hate groups, and limited access to equitable

opportunities. For example, a 1992 article from *The Morning Call* reported that members of the Ku Klux Klan distributed pamphlets in Nazareth protesting the observance of Martin Luther King Jr. Day.⁹ Later, in August 1924, a large-scale Klan gathering took place at the Nazareth fairgrounds, drawing thousands of members. These events illustrate the historical presence of organized racism in the region and underscore the enduring impact such legacies may have on present-day patterns of racial exclusion.

One of the earliest and most prominent displays of racial intolerance particularly in Nazareth was a Ku Klux Klan event held in 1924, which featured a public picnic, the initiation of 500 new members, and several baptisms. Later that evening, the event was opened to the general public as a "celebration." This gathering was not an isolated incident. In 1930, another large-scale Klan event was hosted at the Nazareth fairgrounds, featuring a parade, fireworks, and even an air show, all intended to publicly showcase and celebrate the group's perceived successes.

Through the survey I conducted, one respondent provided insight into the current racial climate in Nazareth. The respondent, who identifies as Asian or Pacific Islander, reported being refused service at a local business while her white husband was provided service. The place of business was not disclosed. Additionally, the respondent expressed concern about the overall atmosphere in Nazareth both during the day and especially after dark, stating that the community offers a threatening, unwelcoming, or unsafe environment for people of color.

Reviews written on the Nazareth Area School District are also to be considered as quite a few reviews criticized the fact the school lacked diversity. Although this may be a given with

Nazareth's predominantly white population the reviews stating the lack of bullying prevention programs, action by administration, lack of accurately taught Black history, and care for the minority groups by teachers is not a given. One reviewer, who herself was a past student at Nazareth High School stated she was one of three black girls in her grade stating that many others transferred out of the school due to racism. She also stated that African American history courses were taught incorrectly with incorrect information, and missing key historical points.¹⁰

Bethlehem

More recent accounts of Black experience in the Lehigh Valley have been documented through interviews conducted by the Lehigh Valley Engaged Humanities Consortium as part of the *Black Bethlehem Project*¹¹. These interviews reflect Black residents' experiences from the 1930s through the present, including stories of being one of only a handful of African American students in local schools, serving as the first Black teacher or police officer, and establishing Black-owned businesses in a predominantly white community. While many interviewees recalled Bethlehem as initially lacking diversity, they also noted its gradual demographic growth and described relatively few instances of overt racism within city limits.

However, the narratives shift when considering experiences outside of Bethlehem. Several interviewees reported increased exposure to racial targeting and discrimination when venturing into surrounding municipalities. One participant, for example, recounted how their sons were subjected to targeted policing while driving through a predominantly white, upper-class neighborhood in Hanover Township after dark. These firsthand accounts highlight how localized diversity and inclusion may not

always extend beyond municipal boundaries, revealing persistent racial barriers across the broader Lehigh Valley region.

Northampton

Understanding Northampton's historical ties to the Ku Klux Klan is essential in examining how certain institutional symbols and practices persist into the modern day. In 1928, the "Konkrete Klan" was established in Northampton, followed by the formation of another unnamed KKK chapter in 1938. These developments reflect the presence of active white supremacist organizations in the area's past.

Today, controversy surrounds the mascot of Northampton High School — the "Konkrete Kids." While school officials maintain that the name is rooted in the community's German heritage and its history of cement production, many community members remain unconvinced. The term "Konkrete Kids" emerged in the 1920s, and the establishment of the "Konkrete Klan" shortly after, in 1928, raises serious questions about potential connections. The linguistic similarities and timing are too significant to ignore. Whether or not the Klan chapter directly borrowed the name from the school or vice versa, the overlap makes it difficult to accept the claim that the mascot's origin is entirely innocent or culturally neutral.

Hellertown

Dating back to 1926 Hellertown experienced its largest attended funeral as the burial of the deceased took place with about 100 active 'Klansmen' working to assist the services in their full regalia. They sang hymns, gave remarks, worked as escorts, and provided prayers. It can be assumed that the deceased was associated with the KKK whether being an

active member or a person of influence to the group.¹²

More recently in 2017 at a playground located in Hellertown a nazi swastika symbol was found carved into the side of the sliding board along with carvings stating 'White Power' and 'KKK.' This incident was reported to the police.¹³

Later in 2018 and most recently, the Saucon Valley School District reached an \$100,000 settlement which included the school district implementing anti-racism and anti-bullying programs as a result allegations stating "black schoolchildren were subjected to rampant discrimination and a hostile environment because of their race."^{14,15}

Overall, while historical accounts—particularly those predating the Civil Rights Movement—cannot fully capture the dynamics of the present-day Lehigh Valley, they remain critical in contextualizing current social attitudes. These past experiences help inform our understanding of the region's racial climate today and serve as important reference points in evaluating progress and ongoing challenges related to diversity, inclusion, and equity.

Racial Experience Done Right by Lehigh Valley

A recent survey conducted by Lehigh Valley News examined residents' perceptions of quality of life in the region, including attitudes toward race relations. When asked to evaluate race relations in the Lehigh Valley, 66% of respondents rated them as "Good," while 21% rated them as "Not so Good." The survey also revealed a notable distinction in outlook based on residency history. Lifelong residents were more likely to believe that the overall direction of life in the Lehigh Valley is "Getting Worse,"

whereas individuals who spent the majority of their lives outside the region were more likely to perceive it as "Getting Better."

Among those who completed the survey, the reported ratings of quality of life in the Lehigh Valley were fairly comparable between White participants and participants who identified as People of Color. Specifically, 58% of White respondents rated the quality of life as "good," compared to 56% of People of Color. However, when looking at the less favorable ratings—"not so good" and "poor"—a clear disparity emerges. A higher percentage of People of Color selected these negative categories compared to the White group, which suggests that while surface-level satisfaction may appear similar, deeper dissatisfaction and challenges are more prevalent within communities of color.

Methodology

This research utilizes qualitative methods to gather first-person accounts of individual experiences related to race in today's Lehigh Valley. Historical context is provided through interviews collected by the Lehigh Valley Engaged Humanities Consortium, which offer valuable insights into the lived experiences of Black residents throughout the region's past. A recent Quality of Life survey distributed by LehighValleyNews proved useful in gathering modern day perceptions of race in the Lehigh Valley. To further link these accounts with modern perspectives, a survey was developed and distributed to current residents across select boroughs in the Lehigh Valley, including Bethlehem, Allentown, Northampton, Nazareth, and Hellertown.

The survey consisted of 19 questions designed to capture information across four primary categories: community practices and norms, individual and collective experiences with race, demographic awareness and

perceptions, and basic demographic data. Although distributed through various channels to ensure a degree of randomness, participation was limited to individuals who are currently living or have lived in the specified boroughs. This mixed methods approach aims to bridge past and present narratives, providing a more complete picture of racial experience and perception in the Lehigh Valley today.

Analysis

Through the findings of this research, it is clear that while communities across the Lehigh Valley have experienced demographic change and increasing diversity, the historical legacies of racial exclusion remain visible. Boroughs such as Nazareth, Northampton, and Hellertown continue to report disproportionately high percentages of white residents when compared to Bethlehem and Allentown, suggesting that population distribution patterns have been shaped by histories of exclusionary practices. This imbalance cannot be explained by economic differences alone, as median home values across the boroughs remain relatively consistent, pointing instead to deeper structural and social factors.

The survey data further highlights these disparities. While a majority of respondents rated quality of life and race relations as “good,” people of color were significantly more likely to select “not so good” or “poor.” This indicates that although general perceptions appear positive on the surface, negative experiences are concentrated within marginalized groups. Accounts from individuals who described being refused service, targeted by police, or excluded in educational spaces reinforce how these disparities continue to affect daily life.

Differences also emerge when comparing lifelong residents to newer arrivals in the region. Lifelong residents were more likely to view the quality of life as “getting worse,” while newer residents tended to see it as “getting better.” This suggests that long-standing racial attitudes, tied to the history of exclusionary practices in certain boroughs, continue to shape community perceptions even as new populations bring in different perspectives.

Local institutions also reflect these divisions. For example, controversies surrounding the Northampton High School mascot and critiques of diversity within Nazareth schools demonstrate how historic ties to racial exclusion still influence present-day culture. At the same time, initiatives such as Allentown’s redevelopment of the Little Lehigh community and Saucon Valley School District’s implementation of anti-racism programs reveal that institutional change is possible when histories of exclusion are acknowledged and addressed.

Taken together, these findings show that the Lehigh Valley is not uniform in its racial climate. Allentown and Bethlehem demonstrate higher levels of diversity and inclusion, while Nazareth, Northampton, and Hellertown reflect stronger legacies of exclusion. These contrasts illustrate that the shadow of sundown towns continues to shape community identity, residential patterns, and lived experiences today.

Implications

The persistence of racial disparities across the Lehigh Valley carries important implications for how communities understand and address their own histories. While explicit sundown practices no longer exist, their legacies remain embedded in residential segregation, cultural attitudes, and institutional structures.

Recognizing this history is essential not only for understanding present-day inequalities but also for creating pathways toward greater equity.

First, these findings highlight the need for intentional community engagement around race. Differences in perception between White residents and residents of color reveal that many inequities remain unseen by those who do not experience them directly. Public forums, inclusive school curricula, and accurate representation of local history can help bridge this gap by fostering a shared understanding of the region's past and present.

Second, the data underscores the role of institutions in either perpetuating or addressing racial exclusion. Schools, in particular, stand at the center of this challenge. When mascots, curricula, or disciplinary practices reflect racial bias, they reinforce exclusionary attitudes for future generations. Conversely, when institutions adopt anti-racism policies, diversify their teaching materials, or invest in equitable housing projects, they demonstrate the potential to undo entrenched patterns of inequality.

Finally, the contrasts between municipalities show that progress is possible but uneven. Allentown and Bethlehem provide examples of growing diversity and policy efforts aimed at inclusion, while Nazareth, Northampton, and Hellertown illustrate the continued weight of exclusionary histories. Moving forward, municipalities across the Lehigh Valley must recognize that diversity alone does not guarantee equity. Sustained efforts—through policy reform, education, and community dialogue—are necessary to ensure that all residents, regardless of race or background, feel welcome, represented, and safe.

Ultimately, the implication of this research is that the Lehigh Valley stands at a crossroads. The region can choose either to allow the

remnants of sundown town legacies to persist in shaping community life or to actively confront these histories and commit to creating more inclusive futures.

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LEHIGH VALLEY
JUSTICE INSTITUTE

1110 American Parkway NE, Suite F-120
Allentown, PA 18109
www.LVJI.org