LOCKED AWAY TO LOCKED IN: AN ANALYSIS OF HOME ELECTRONIC INCARCERATION

ASSESSMENT OF THE EFFICACY OF HOME ELECTRONIC INCARCERATION (HEI) AS AN ALTERNATIVE TO CUSTODIAL CONFINEMENT

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By
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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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Introduction

Extremely high incarceration rates are urging reform for criminal justice systems in the United State. The NAACP (2023, p. 1) reports that, "Despite making up close to 5% of the global population, the U.S. has nearly 25% of the world's prison population." Reformation efforts such as Home Electronic Incarceration (HEI) or Monitoring (HEM) have made it possible to decrease prison populations among many other benefits, but there is insufficient analysis that HEI methods are worth retaining.

The Albemarle-Charlottesville Regional Jail (ACRJ) system is comprised of Charlottesville City, Albemarle County, and Nelson County. The jail system also supports the University of Virginia Police Department and Blue Ridge Juvenile Detention Center. The Albemarle-Charlottesville area justice system is experiencing an "overreliance on incarceration, which has exacerbated the spread of COVID-19 behind bars" (Fair and Just Prosecution, 2020). United States jails and prisons were responsible for 661,000 cases of COVID-19 being documented since the pandemic's outset (Samuelson, 2021). Virginia state officials were encouraged to adjust release criteria to enable HEI practices to exist for those inmates at higher risk for disease or nearing the end of their sentence (Clark, 2020). These unusual circumstances enabled by the Covid-19 pandemic encouraged criminal justice communities, such as the ACRJ, to implement HEI methods as a means of lessening disease risk (Dornfeld, et al., 2023). Improvements to the system were greater than originally anticipated with "benefits [extending] to both inmates and to the community" (Cleary, 2021) and now, criminal justice communities are tasked with discerning the efficacy of HEI technology as a means of structural reform. With the electronically confined population only increasing in recent decades (Pew Charitable Trust, 2016), analysis surrounding HEI and its efficacy is crucial. The goal of this research project is to

assess the viability of Home Electronic Incarceration (HEI) as a reformative solution within the criminal justice systems of the Albemarle-Charlottesville area.

Technical Dimensions

The project encompasses providing quantifiable recommendations in support of or against HEI efforts to address high incarceration rates and, in turn, minimize jail operating costs, improve mental health wellbeing for incarcerated individuals, and influence successful reintegration into communities. Data includes reports on mental health screenings, HEI device GPS data, and case studies maintained by the Ivy Secure Environment. In cooperation with the University of Virginia Hospital, Virginia Department of Behavioral Health and Developmental Services, and the Region Ten Community Services, the project has the potential to impact Charlottesville regional communities and the greater central Virginia region. Not only do ACRJ incarcerated individuals comprise those involved: jail staff members, judicial system personnel (CCJB, BJMHS, JACC, R10), civil service workers, incarcerated peoples' families, victims of crime, and the greater Charlottesville/Albemarle community are all significant entities within the scope of this project. Certain technical constraints affect judicial decision-making and data analysis such as regional, state, and federal regulations, case-specific technicalities (acceptability of HEI from the victim), jail budgeting, and the technological capabilities of the HEI devices.

Existing technology in the realm of electronic monitoring is reliant upon varying contextual factors, the individual characteristics of offenders, and the manner in which electronic monitoring (EM) is applied. These dynamic elements collectively determine whether EM operates as a tool for control and punitive measures or if it genuinely provides a viable alternative to traditional incarceration. As highlighted by Richter et al. (2021), the dual potential

of EM to serve as either a punitive measure or an incarceration alternative center on the specific implementation and administration within individual cases.

EM devices utilize advanced technology that relies on GPS and cell tower signals to provide precise location data. Remarkably, some of these devices have the capability to detect blood-alcohol levels through the analysis of an individual's sweat, as detailed by Anderson (2014). This convergence of technology and methodology underscores the adaptability of electronic monitoring in contemporary criminal justice systems. The court systems play a crucial role in determining the extent of restrictions imposed on individuals through electronic monitoring devices. They have the authority to mandate that individuals "reside in a specified place" (US Courts, 2023). These devices pose technical risks primarily associated with the potential malfunction of the GPS system. The data generated by the devices is transmitted, collected, and examined by ACRJ personnel. The primary function of these devices is to continuously pinpoint and monitor individuals placed under house arrest. Notably, there are two distinct analysis groups: one for pre-trial and another for post-trial cases. Hatton (2019) highlights that research has shown variations in the behavior of individuals subject to electronic monitoring in these different settings. While new data points will be compared with historical regional data of these groups through local databases, Virginia state data will be consulted as a means of validating and comparing results. This project aims to enhance data collection capabilities by delving into the factors contributing to device malfunction and conducting a comprehensive cost-benefit analysis of device operation and maintenance expenses.

Human and Social Dimensions

Much of the controversy against the practice of HEI on a larger scale can be attributed to a threat to the public and financial costs. Common positions are that “spending even significant

amounts of money to incarcerate offenders who pose an ongoing threat to public safety is almost always justified, and saving money is never a sufficient justification for otherwise unjustified releases from prison" (Newburn, 2023). Other arguments in favor of HEI due to lessened recidivism, or the likeliness that an offender will 'reoffend, which is called recidivism rate. Recidivism rates are "measured by criminal acts that result in rearrest", and are often coincided with incapacitation rates, specific deterrence, and rehabilitation (NIJ, 2023). Many studies acknowledge that "recidivism and escape rates" are lower for those in HEI programs as opposed to standard jail time (Esteves, 1990). In addition to these facets of financial concerns, recidivism, and escape rates, the humanitarian perspective tends to learn towards HEI where offenders can be better integrated into their communities.

One approach to understanding the connections between humans and technology is Thomas Hughes's theory of technological momentum. As defined by Hughes (1987, p. 76), technological momentum occurs when "technological systems acquire momentum" and starts to "possess direction, or goals." A significant aspect of technological momentum is the concept of technology transfer, which can be defined as the system being transferred to another environment to adapt to that setting's factors. During the Covid-19 pandemic, significant steps were taken to decrease the number of individuals in jail systems such that the spread of the disease was contained. One of the adjustments made to the ACRJ system by Superintendent was "to place any non-violent inmate with an active sentence of thirty (30) days or less remaining on Home Electronic Incarceration (at no cost to the inmates)" (CBS19news, 2020). The challenge of transferring the HEI system to a more inclusive, Covid-19 mitigating approach illustrates the concept of technology transfer. Another approach connecting humans and technology is Hughes's concept of limits of control on a technological system. Limits of control occur when

technology is limited by factors set forth by humans as the technological system develops. System responses, according to Fair and Just Prosecution, are "grounded in empirically validated public health approaches" (2020). The challenge of responding to crises such as public health situations with respect to criminal justice incarceration illustrates the notion of limits of control because health regulations and limits are restraining development of justice reform.

Glerup and Horst (2014) describe the concept of social responsibility within the realm of science and innovation. Their primary argument centers around the critical need to map and comprehend the multifaceted dimensions and practices of social responsibility with respect to the notion of 'political rationality' and it being a "particular form of governance of science". They indicate that a uniform approach is inadequate for addressing this multifaceted concept and support this argument through four kinds of responsibility: reflexivity, contribution, demarcation, and integration. The most relevant of the four rationalities is the notion of the contribution rationality. This rationality is centered on the belief that "science should be innovative and contribute with knowledge and technologies" to promote growth, and "scientists' activities should be in line with expresses public preferences" (Glerup & Horst, 2014, p. 40). HEI can sustain these values through its contributions and adherence to public preferences of criminal justice. Quinn & Holman support HEC as a contribution to the public because it serves as an alternative to revocation, potentially alleviating correctional facility overcrowding. Evidence cited from a study depicting electronically monitored home confinement used almost exclusively as a sanction for offenders describes these systems as "viable case management device[s]" and that they "ameliorate[s] anti-social behavior" (Quinn & Holman, 1991). This supports the argument that electronic forms of incarceration have the potential to act as managers of rehabilitating offenders and alleviate concerns of correctional facilities becoming overcrowded.

Research Question and Methods

Granted the undeniable technical and social concerns related to this topic, I feel prompted to ask the following: Does HEI improve or exacerbate problems within the criminal justice system? Addressing this question will result in the following steps: stakeholder involvement, data collection, data analysis, impact assessment, ethical considerations, and reporting recommendations. The research project team will engage various stakeholders including the jail staff members, judicial system personnel (CCJB, BJMS, JACC, R10), and police officers through interviews, ride-alongs, and surveys to draw qualitative insights. Afterwards, data will be collected from stakeholders with collaboration and guidance from the University of Virginia Hospital, ACRJ, R10, and Virginia departmental services. Data will include mental health screenings, GPS data, and case studies. Additional data will be collected from government regulation findings, jail budgeting analyses, and yearly crime trend reports (OAR JACC, 2023). Resulting data analysis and impact assessment will be implemented through the IVY Secure Environment and statistical modeling techniques to measure effectiveness of HEI devices. As discussed by Rappert and fellow authors, the use of digital forensics requires a balance between investigative efficiency and maintaining individual rights and privacy (2022). Therefore, data analysis and eventual system recommendations will be treated with the utmost respect and sincerity due to privacy considerations and large amounts of digital data being converted into legitimate evidence for law enforcement. The research steps will be framed according to Thomas Hughes' theory of technological momentum and Glerup and Horst's notion of political rationality. In doing so, the research will demonstrate that HEI can be adapted to various prison environments, and it can contribute and sustain public preferences and values.

CONCLUSION

As United States' incarceration rates remain at a worldwide high, it is vital that criminal justice communities continue to implement techniques like home electronic incarceration. The goal of this research is to inform and prove to communities like the ACRJ that an alternative approach to incarceration exists and is effective. The social, technological, and societal frameworks outlined in this prospectus highlight HEI's potential to reduce recidivism and integrate offenders. Technological transfer and limits of control were evident in pandemic-driven justice system adjustments, and social responsibility principles align with HEI to meet public preferences by offering an alternative to traditional incarceration and reducing overcrowding.

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