Assessing the Efficiency of Home Electronic incarceration as an Alternative to Custodial Confinement

(Technical Topic)

Assessing the Impact of Educational Programs on Inmates with Life Sentences (STS Topic)

A Thesis Project Prospectus Submitted to the

Faculty of the School of Engineering and Applied Science University of Virginia - Charlottesville, Virginia

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Laura Phillips Fall, 2023

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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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Overall Topic

The United States has the highest percentage of incarcerated individuals when compared to all other nations (Widra & Herring, 2021). The US criminal justice system also differs from most prisons systems in that it was built around punishing those who have committed crimes with long and harsh sentences. However, the punishment mentality that the US has adopted has been proven to not directly address the root causes of this criminal behavior or provide support that cause individuals to change their life which further perpetuates the cycle of criminal history. In recent years, there has been a growing emphasis on transforming prisons into centers for rehabilitation that facilitate personal and behavioral change, which is seen as effective in many other countries (Cruz, 2022). Rehabilitation in prisons encompasses a range of programs such as education and vocational training, mental health counseling, and substance abuse treatment. All these programs aim to address underlying issues and equip individuals with skills for successful reintegration into society (*Vadoc - programs for offenders*).

One example of a rehabilitation program that focuses on successful reintegration in society are home confinement programs which allow selected inmates to serve their sentences from their homes. These programs allow those who have been incarcerated to maintain employment and keep their support system throughout their sentence. The Albemarle-Charlottesville Regional Jail started their own Home Electronic Incarceration program in response to the pandemic. My capstone group is performing data analysis that will look at factors that correlate strongly with success in the program to refine the selection process of those inmates who may qualify for the program. The aspect of rehabilitation that I will be focusing on throughout my STS thesis and prospectus is educational programs. While I aim to understand the benefits of this program on all inmates, I will focus on researching those inmates facing the death penalty or life sentences.

Technical Topic

Since the start of the COVID-19 pandemic in 2020, the Charlottesville Albemarle Regional Jail has seen a rise in the usage of Home Electronic Incarceration as an alternative to serving time in a prison or jail. Home Electronic Incarceration (HEI), is a program that is similar to house arrest and allows inmates who meet certain criteria to serve their sentence from their homes rather than in jail. While originally the goal of this program was to decrease infection rates, many additional benefits have been discovered by researchers including lowering jail costs and recidivism, also known as return to custody rates (Dornfeld et al., 2023).

While these benefits are recognized, the current process for deciding which inmates qualify for HEI is done manually and is very time consuming. Throughout this semester we will be conducting data analysis to identify factors that correlate with one's success in the HEI program. After determining these, we hope to create either an algorithm or scoring mechanism that will take in information about a possible inmate candidate and report back a recommendation or score to help aid those making this decision. It is important to note that while data analysis will be useful in making decisions, these cases are very situational and those making the decision should be considering other qualitative or situational factors that cannot be represented by a data point. In addition, we will be researching and discussing the morality of including each variable in the algorithm.

We will also be looking at benefits in the use of HEI pre-trial, specifically in comparison to bail bonds which disproportionately impact low-income inmates. We will be working with data collected by the Albemarle Charlottesville Regional Jail, Region 10 services, and the Officer aid and Restoration programs to create relevant data analysis that could be helpful with improving inmate mental health conditions.

This project is a continuation of a near decade long research project focusing on inmate conditions and mental health at ACRJ and may take many different directions as the project continues. While our main goal is to provide this data analysis for ACRJ we are hoping to provide data analysis for both OAR and R10 as they request. This project is multidisciplinary as we are collaborating with a Professor and research student within the data science department at UVa.

Our primary objective is to provide data analysis resources to help with this selection process, however in order to be successful, it is just as important that we try to understand the judicial system and the experiences that inmates are facing in order to propose suggestions that are beneficial to those who the suggestion may impact. This past semester we have met with various mental health and inmate outcome experts who have shared their knowledge with us. Our capstone group has also toured ACRJ and a few group members have participated in Police Officer Ride Alongs to better understand the experiences of those incarcerated.

STS Topic:

There are significant differences in education level when looking at those who are incarcerated compared to the general population. In 2004, about 81% of all Americans had obtained either a high school degree or GED equivalency. However, about 64% of the inmate population have less than a high school degree or equivalent (Davis, 2013). Education is proven to increase job opportunities, increase salary and improve cognitive and communication skills and therefore it is important to decrease this gap to provide these benefits to as many

incarcerated individuals as possible (Suttle, 2020). It is also important to note that these numbers do not represent a direct correlation but rather show the other social issues correlated with the criminal justice system some including biases, poverty, substance abuse (*Why aren't we spending more on prisoner education?* 2023). Throughout my work I will be focusing on this educational gap and the importance of taking action to reduce this gap.

As one attempt to decrease this gap, the Office of Justice programs signed the Second Chance Act in April of 2008 with the goal of helping inmates succeed upon being released back into the public. This act increased funding for both implementing educational programs and for research studying different methods of education programs within the prison system (Davis, 2013). Through the funds allocated by this act, RAND corporation, a Research and Development organization oriented at improving policy making through research, performed multiple studies and literature reviews that discovered that educational programs within the prison system have many benefits. The study found that there was a 43% lower chance of recidivism for inmates who participated in educational programs compared to inmates who did not. In addition, inmates participating in the program had a 13% increase in odds of obtaining employment upon release from the facility; however, those participating in a vocational program also had a higher chance of employment compared to those inmates participating in educational programs. This study followed up with a cost analysis report discovering that the decrease in cost caused by the lower recidivism rates as a result of the educational programs benefits would outweigh the cost of the educational programs themself leading to lower facility costs (Davis, 2013). Lastly, a study performed by South Florida reported that education, including a GED and above can compensate for criminal history. According to this study, individuals with criminal history but a GED level education or above actually were more likely to be hired when compared to an applicant with no

criminal history or education (Santos et al., 2023). While it is important to focus on these quantitative post release factors, my work will build on this research by focusing on the internal benefits of these programs such as self-worth, perception, attitude and over well-being that can be applied to inmates serving sentences of any length.

Like shown above, many studies highlight the importance of educational and vocational programs on inmate outcome upon release from jails, however, few discuss the impacts of providing these programs for those who are facing the death penalty or who are serving life-long sentences. In my STS thesis, I plan to investigate the potential motivation behind the involvement of incarcerated individuals, who are not expected to return to society, in educational programs. I plan to approach this question by viewing the impacts through the lens of consequentialism and deontology. Consequentialism is an ethical theory that evaluates actions based solely on the overall result (Sinnott-Armstrong, 2023). On the other hand, the theory of deontology focuses on the action itself and if that action adheres to moral principles (Alexander & Moore, 2020). I will be examining the morality of the results of life-long inmates as well as the mortality of the action itself to compare the framework and draw relevant conclusions with the goal of improving conditions for those incarcerated. I plan to explore my topic through reading studies and interviews using UVa's library database as well as talking to experts in the field. I will be looking at the feasibility of these programs and ways these programs should be implemented to ensure the programs are being built around those who are directly involved.

Conclusion:

Studies have shown that educational and vocational programs for inmates have led to lower return to custody and higher employment rates (Davis, 2013). However, there is a gap of research looking at these impacts on prisoners who will not be released from prison. To perform this research, I will focus on the internal motivation and self-benefits of education in the criminal justice setting.

By the end of our technical capstone project, we hope to provide accessible data analysis to stakeholders at the Albemarle Charlottesville Regional Jail. Our final solution most likely will include various data visualizations, statistics or even algorithms. If our deliverables are successful, we hope that the administrators at the jail are able to make well-informed, data driven solutions on the policies impacting the welfare of inmates in the local area.

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