

## **Thesis Project Portfolio**

### **Evaluating Administered Differences of Brief Jail Mental Health Screener and Impacts of Diagnoses & Treatment of Linked Inmates with Severe Mental Illness**

(Technical Report)

### **Context, Culture, and Power: How Systemic Discrimination Effects The Ability For Certain Incarcerated Groups To Be Eligible To Receive Mental Health Treatment**

(STS Research Paper)

An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science  
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In Fulfillment of the Requirements for the Degree  
Bachelor of Science, School of Engineering

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## **Table of Contents**

Sociotechnical Synthesis

Evaluating Administered Differences of Brief Jail Mental Health Screener and Impacts of Diagnoses & Treatment of Linked Inmates with Severe Mental Illness

Context, Culture, and Power: How Systemic Discrimination Effects The Ability For Certain Incarcerated Groups To Be Eligible To Receive Mental Health Treatment

Prospectus

## **Sociotechnical Synthesis**

Severe mental illness (SMI) is often debilitating to the person suffering from it. When those suffering from SMI are then entangled in the criminal justice world, their process of rehabilitation becomes much harder and more complicated. Because the presence of an SMI increases the cost of incarceration (to the person suffering and the institution housing them) identifying and diagnosing those suffering as soon as they enter the system is imperative to personal and systemic success. My technical work looks into how effective the Brief Jail Mental Health Screener (BJMHS) is at referring inmates suffering from SMI to further evaluation and services in the Central Virginia area. It also looks into trends between those who are/ever have been incarcerated at the Albemarle County Regional Jail (ACRJ) and have received services at Region 10 (R10), an organization that provides mental health and addiction services. My STS thesis looks to see how different personal factors (race and gender) affect someone's ability to be screened for mental illness accurately, and then treated for mental illness properly.

The technical portion of my research was a continuation of over a decade of work done to create a holistic overview of the intersection of SMI and incarceration in the Central Virginia Area. To do so, my team partnered with the Jefferson Area Community Criminal Justice Board to receive data spanning roughly 10 years from ACRJ, CVRJ (Central Virginia Regional Jail), R10, and OAR (Office of Offender Aid and Restoration.) From this data, we were able to conclude that an inmate's probability of screening in for further referral services via the BJMHS is influenced by 3 major factors: location, gender, and race. In terms of location, those taking the screener multiple times between either jail and OAR were more likely to acknowledge symptoms at OAR than at the jails. For gender and race: White inmates and women were overrepresented in screened in populations, while Black inmates and men were underrepresented in screened in populations.

My STS research paper looked into how the process of screening for mental health could be improved if the creators and administrators of screening tools were to implement the thoughts and practices of Data Feminism, as described by the book by Catherine D'Ignazio and Lauren Klein. My research specifically looked into how some of the BJMHS's disparities in representation could potentially be solved by pulling from their ideas on examining power, embracing pluralism, and considering context.