

Thesis Portfolio

Linkages Between Community Mental Health Services, Homelessness, and Inmates and Probationers with Severe Mental Illness: An Evidence-Based Assessment
(Technical Report)

A Users as Agents of Technological Change Analysis of the Brief Jail Mental Health Screener
(STS Research Paper)

An Undergraduate Thesis
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Thesis Prospectus

My technical work and my STS research are connected primarily through the implementation of the brief jail mental health screener (BJMHS) in the greater Charlottesville area. The BJMHS is an eight-question exam administered to new inmates at the Albemarle County Regional Jail to provide an initial reading on their mental state and any additional treatment that may be necessary during their incarceration. The two works are unique in how they examine the brief jail mental health screener. The technical project focuses on analyzing and modeling data retrieved from the exam to better understand the high linkage rates between the incarcerated and mentally ill. The STS portion on the other hand details how various user groups alter the application of the BJMHS as a technology from its original intended use. While the two works use different means of analysis, both center their focus on the brief jail mental health screener and its impact on the incarcerated and mentally ill.

The technical portion of this project centers around the community service boards in Charlottesville and the data they gather regarding inmates and the seriously mentally ill population. The work uses data analysis and visualization to uncover new findings about the population and how to help them succeed. By implementing various statistical modeling languages and user-friendly visualization programs, our capstone team was able to put together in-depth prediction models and front-end dashboards for the client so that they could truly understand their cohort and the factors that influence the linkage between the seriously mentally ill population and high incarceration rates. One of the most critical data owners in the scope of the project pertained to the BJMHS results as it gave strict classification of mental illnesses and made for easier analysis.

My STS research paper also explores the BJMHS and its results, but from a different perspective. The paper argues that the brief jail mental health screener, as a technology, is

continually developed in its usage, beyond stabilization, to better serve its wide user groups. Users as agents of technological change allows research to be framed around the community (nurses, mental health practitioners, and police officers) adopting the screener, rather than those getting screened and the results they see. In turn, the research uncovers that each user group is implementing the BJMHS in unique and creative ways to best help the mentally ill and incarcerated, many of which weren't imagined during inception the screener.

The ability to complete these two works simultaneously was advantageous for a number of reasons. My technical project enhanced my in depth understanding of both data acquisition and application. I was able to see how realizations from the data can impact policy-making in real time and was motivated by the transparency of legislative progress taking place based on our results. Similarly, the STS research project gave a greater meaning to our findings from the technical project by demonstrating the wide scope of the BJMHS and its user groups. In summary, progressing on both the technical and STS projects over the last two semesters has given a greater meaning to mental health among the incarcerated and increased my patience for finding the overlap and synergy between unrelated academic works.