

A Users as Agents of Technological Change Analysis of the Brief Jail Mental Health Screener

A Research Paper submitted to the Department of Engineering and Society

Presented to the Faculty of the School of Engineering and Applied Science
University of Virginia • Charlottesville, VA

In Partial Fulfillment of the Requirements for the Degree
Bachelor of Science, School of Engineering

Henry Bramham
Spring, 2020

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.

Signed:

Henry Bramham

Approved:

Date:

Benjamin J. Laugelli, Department of Engineering and Society

Introduction

The United States prison system has long been aware of the linkage between inmates and mental health problems; Department of Justice reports from 2006 explain that 64 percent of jail inmates had a mental health problem, including over 705,600 inmates in state prisons (Department of Justice, n.d.). Additionally, one source states that only 32.5 percent of inmates with a serious mental illness were identified at intake (Teplin, 1990). In an attempt to combat this issue, prisons and jails nationwide now utilize one of many different mental health screening tools, administered upon intake to new inmates.

The brief jail mental health screener (BJMHS) is an example of one such screening tool, used nationwide, but more particularly, at the Albemarle County Regional Jail (ACRJ) in Charlottesville, VA to help identify mental illnesses in incoming inmates. Historically, the screener has been static and only assisted in decision making and care for incarcerated individuals. Upon release, inmates are unable to utilize the care and effort put forth while incarcerated due to the lack of communication and continuity between community service boards in the area. Consequently, by failing to see the multifaceted and dynamic nature of the mental health screener, inmates are failing to receive a full scope of treatment and care for their illness. In actuality, the active relationship that the screener has with users allows it to benefit the inmate far beyond incarceration and through release from ACRJ.

By analyzing the brief mental health screener implemented at ACRJ, I will explore ways in which users create dynamic relationships with the artifact, constantly interacting with it in ways not originally intended by the designer. I propose that the mental health screener is being utilized systematically throughout the inmate's experience in unique ways by each user that comes into contact with it. While originally developed to assist only with inmates' treatment

during their time at ACRJ, the users have found ways to benefit all parties by associating the screener in creative methods both inside ACRJ as well as at Offender Aid and Restoration (OAR).

I believe analyzing the brief jail mental health screener through the lens of users as agents of technological change will provide a clear understanding of how the BJMHS is destabilized as a technology. Specifically, I will demonstrate that the brief jail mental health screener is adapted by the Offender Aid and Restoration and Albemarle County Regional Jail beyond its original intent to better serve the Charlottesville community and those struggling with serious mental illnesses in the area's jails and correction centers.

Background

For the purposes of this paper, a suitable definition of technology must be established in order to make an effective claim that the brief mental health screener (a text) can be viewed of as a form of technology. Thomas Hughes (2004) understood how difficult this process could be as he depicts a definition of technology similar to a definition of politics having, "few experienced practitioners, historians, and social scientists try to inclusively define technology," (p. 2). Woolgar (1990) goes further in depth to break down two major components of technology and display their ties to text by writing, "...begin with the supposition that the nature and capacity of the machine is... interpretative flexibility. This sets the frame for an examination of the processes of construction (writing) and use (reading) of the machine," (p. 60). Woolgar supports the idea that to be considered a technology, you need both creation of form, and a method of use, both of which the BJMHS possess.

Literature Review

A great deal of research exists analyzing the issue of identifying mental illnesses in jails across the country. The brief jail mental health screener is merely one of many technologies that jails can institute to analyze new inmates, however it has been acknowledged as one of the more prominent and well-developed devices in its field. While scholars and psychologists alike agree that the brief jail mental health screener is a valid tool in helping characterize the mentally ill population, little has been done to link the SMI population to other community service boards in the area.

The brief jail mental health screener, created in 2002, has been adopted in at least 30 percent of U.S. jails that screen for mental disorders (Callahan & Noether, 2018). The screener was “developed with the intent of creating a useful and easy tool for jails to screen for mental disorder in detainees at the time of booking,” (Callahan & Noether, 2018) and has been shown to be a valuable screening tool in jails nationwide. Additionally, one survey cites, “nearly two-thirds of responding jails adopted the BJMHS in the first three years from development and are still using it up to 11 years later,” (Callahan & Noether, 2018). It is well established that this technology is revolutionizing mental health awareness in jails across the country. The data collected from this survey has potential to provide initial awareness or added insight and care for inmates. The analysis and findings from the screenings fall short of providing holistic care for the screened in population in life after prison.

To remedy this problem, scholars and psychologists have long tried to bridge the gap between the inmate’s time at the jail and their life beyond release. One source recommended “that the local jails should evolve into a community correctional center which would coordinate all community correctional services.” The same source even adds, “it would serve as a focal

point for referrals to diversionary mental health, alcohol, drug, and other community services”. The research’s pitfall is made clear in the following paragraph where the same source finally concludes, “the coordinated community correctional center is at best a dream in most jurisdictions,” (Dunn & Steadman, 1982, p. 101) citing a general lack of mental health awareness and increase in costs for staff, maintenance, and logistics. Research today has fallen short in efforts to relate the awareness the BJMHS brings and what it provides the screened-in individual following their release. The initial diagnoses have the ability to drastically change an individual’s life if paired with the proper community service boards.

The analysis performed in this paper will advance the understanding of how interacting community service boards are utilizing the brief jail mental health screener in ways beyond its original intent.

Conceptual Framework

The adaptive nature of the brief mental health screener can be effectively and methodically analyzed with the users as agents of technological change framework. The users as agents framework originated from the social construction of technology (SCOT). This framework makes use of the notions of relevant social groups, interpretative flexibility, stabilization, and closure of a technology as different user groups interact with an artifact in its design phase. (Kline and Pinch, 1999). Introduced as a counter to SCOT, users as agents of technological change works to argue that users impact development of an artifact beyond the stabilization of a technology. Oudshoorn (2003) supports this by writing “The SCOT approach was rightly criticized for its rather cavalier attitude toward users—it closed down the problem of users too early, and it did not show how users could actively modify stable technologies,” (p. 3-4).

In response to SCOT, the overarching users framework emerged as a means to analyze society and technology through the lens of “...how users consume, modify, domesticate, design, reconfigure, and resist technologies. In short, our interest is in whatever users do with technology,” (Oudshoorn, p. 4). This sets the standard for the framework in establishing users’ significance not only in the design phase, but also in the production, selling, and stabilization of technologies as well.

Users as agents specifically refers to the framework which analyzes how users engage with a technology in ways that extend beyond its original or intended purpose. The framework hinges on the principle that “users precisely as users can embed new meanings into technology,” (Kline and Pinch, p. 775). The two authors go on to demonstrate this with the Ford Model T writing, “...farm families started to define the car as more than a transportation device... running a corn sheller, an ensilage cutter, or doing light grinding,” (p. 775). Using this framework will allow for effective analysis beyond the stabilization of the brief mental health screener, allowing for analysis instead to be centered around how today’s users are interacting with and changing the artifact’s original intent.

Analysis

The brief jail mental health screener (BJMHS) is one of many solutions adopted in prison systems nationwide in an attempt to combat the issue of serious mental illnesses in jails. The screener is an 8-question exam designed to provide a recommendation for whether or not an incoming inmate is in need of further evaluation. Pictured below is the brief jail mental health

BRIEF JAIL MENTAL HEALTH SCREEN

Section 1

Name: _____ <small>First MI Last</small>	Detainee #: _____	Date: ___/___/____	Time: _____ AM PM
---	-------------------	--------------------	----------------------

Section 2

Questions	No	Yes	General Comments
1. Do you <i>currently</i> believe that someone can control your mind by putting thoughts into your head or taking thoughts out of your head?			
2. Do you <i>currently</i> feel that other people know your thoughts and can read your mind?			
3. Have you <i>currently</i> lost or gained as much as two pounds a week for several weeks without even trying?			
4. Have you or your family or friends noticed that you are <i>currently</i> much more active than you usually are?			
5. Do you <i>currently</i> feel like you have to talk or move more slowly than you usually do?			
6. Have there <i>currently</i> been a few weeks when you felt like you were useless or sinful?			
7. Are you <i>currently</i> taking any medication prescribed for you by a physician for any emotional or mental health problems?			
8. Have you <u>ever</u> been in a hospital for emotional or mental health problems?			

Section 3 (Optional)

Officer's Comments/Impressions (check <i>all</i> that apply):		
<input type="checkbox"/> Language barrier	<input type="checkbox"/> Under the influence of drugs/alcohol	<input type="checkbox"/> Non-cooperative
<input type="checkbox"/> Difficulty understanding questions <input type="checkbox"/> Other, specify: _____		

Referral Instructions: This detainee should be referred for further mental health evaluation if he/she answered:

- YES to item 7; OR
- YES to item 8; OR
- YES to at least 2 of items 1 through 6; OR
- If you feel it is necessary for any other reason

Not Referred

Referred on ___/___/____ to _____

Person completing screen _____

INSTRUCTIONS ON REVERSE

©2005 Policy Research Associates, Inc.

screeener, as well as the scoring criteria used to determine if an individual meets the requirements for further evaluation. One important thing to note from this primary source is the length of the document. It emphasizes that this screener is not meant to provide a complete diagnosis. Instead, the screener is meant to provide expedited and efficient results that enable users with a serious mental illness (SMI) to receive further evaluation. This serves as a small introduction to the nature of the screener and how it evaluates individuals and what follows will be a thorough

analysis of how two Charlottesville community agencies, Offender Aid and Restoration (OAR) and Albemarle County Regional Jail (ACRJ), are adopting this screener in ways beyond its original intended use.

Albemarle County Regional Jail (ACRJ)

In order to completely understand how the brief jail mental health screener is destabilized as a technology, it is necessary to first examine the location in which it is intended to be used. Although initially designed for jails, the screener had no intention upon design to draw connections from the jail to other agencies in the area. This inherently leads to the first way that ACRJ adapts the BJMHS's intended use.

Albemarle County Regional Jail's explicit domain is restricted to the housing and managing of offenders of the law. The jail has no obligation for the institution to serve any further beyond that, and Superintendent of ACRJ Martin Kumer goes as far as to state, "Most times, there is absolutely no communication between post-release services and the jail services themselves," (Kumer, 2020). Typically, the BJMHS is no different and rarely sees any contact with neighboring institutions. However, under Kumer's leadership, ACRJ has disrupted the status quo, in part due to the adoption of the BJMHS. Kumer goes on record to say, "I talk to the superintendent of other jails, and far and away, I have the best relationship with our community service providers compared to others in the state," (Kumer, 2020). He later describes the communication for a common screener, encouraging other community service boards in the Charlottesville area to adopt the BJMHS. "This effectively allows us to compare apples to apples with our other local community service boards," (Kumer, 2020).

The implications of this connection are vast. Although intended for use strictly in jails, Kumer engineered a method that allows for consistent initial screenings across the community.

With the Region Ten substance abuse program and Offender Aid and Restoration both using the BJMHS as a measure of mental health, they have eliminated discrepancy in brief screenings and enabled a link that benefits inmates following their release from jails. ACRJ as a user has changed the initial intent of the BJMHS and enabled exterior relationships that work to benefit the area as a whole. The brief jail mental health screener, although stabilizing as a one-use technology, can now be thought of as a dynamic exam that an individual sees consistently through their path between jail, probation, and substance abuse services.

The Albemarle County Regional Jail effectively destabilizes the brief jail mental health screener further through the methods in which they administer the exam. While initially intended to be administered by correction officers working at the facilities, ACRJ Superintendent Martin Kumer describes a different process. Kumer states, “We initially discovered that when police officers were administering the brief jail mental health screener, people were deterred from answering honestly and effectively because of the officer’s general intimidation factor” (Kumer, 2020). Kumer goes on to add, “Our nurses administer the screener instead. Their calm and relaxed demeanor, combined with their associated separation from the law, makes them a much more trustworthy figure,” (Kumer, 2020). What Kumer is describing is a new approach to administering the BJMHS. Rather than having an officer, associated with negative connotations by the examinee, administer the screener ACRJ has increased the effectiveness by using nurses trained in mental health. Their personal and relaxed approach is far more conducive to honest and informative answers when compared to police officers who often cause the individual to shy away and shelter true mental health conditions out of fear. While not originally conducted by such tailored personnel (perhaps due to resource allocation at jails nationwide), ACRJ has altered

the stabilization of the screener to better fit its needs and help get more accurate, and more actionable information from their end users.

Albemarle County Regional Jail has adopted the brief jail mental health screener in typical fashion, but altered its application beyond the original intent. By changing the way in which the screener is administered and creating a network of community service boards bound by their use of the BJMHS, the screener takes on new meaning. Not only is the Charlottesville area better suited to fit the needs of individuals with serious mental illnesses in jails, but it is also primed to positively impact the population upon their release.

Offender Aid and Restoration (OAR)

The second user accountable for the destabilization of the brief jail mental health screener is the Offender Aid and Restoration (OAR) program, responsible for both probationary and reentry services for previous offenders, whether it be mandated by the court or entirely voluntary. Their mission statement reads, “Where every client has the opportunity for success,” (Carew, 2020) emphasizing the idea that this community program centers around the concept of helping those with previous mistakes right their wrongs and get on the right track. A significant tool to OAR being able to achieve their mission statement is the brief jail mental health screener.

While the BJMHS was originally created because “no valid, practical, standardized tools (were) available for brief, initial screenings,” (Steadman, Scott, Osher, Agnese, & Robbins, 2005), OAR uses the screener in new and innovative ways by adopting the screener in a post incarceration setting. Administered upon intake at OAR, the BJMHS offers a second glance at mental health for those who are referred to OAR from ACRJ. Although individuals referred from the jail have already taken the screener while incarcerated, OAR administers the exam again. Ross Carew, executive director of OAR states, “The brief jail mental health screener helps give

our offices a better understanding of where our folks stand in terms of the mental stability and health when they first walk through the door” (Carew, 2020). The screener at OAR is used to help give the agency a fast, yet efficient reading so that they can provide a custom experience to each individual that seeks help, voluntarily or involuntarily. Carew also adds, “Each person has their own tailored solution that works best for them. We don’t all have the same risks and the brief jail mental health screener gives a crucial initial indication of what that tailored solution may be,” (Carew, 2020). Carew’s quotes support the idea that although originally intended to be only administered at jails, the brief jail mental health screener has applications and benefits in other parts of the community. Using the screener at the agency has allowed OAR to better understand their cohort and provide more effective services.

In addition to aiding in the characterization of the mentally ill population at OAR, the BJMHS is further adapted in the way it helps those screened. While the BJMHS was initially intended to “assist jail staff in identifying detainees who need referral to mental health service for assessment and treatment,” (Callahan & Noether, 2018), OAR’s adoption of the screener has allowed individuals examined to benefit beyond treatment while incarcerated. OAR Reentry specialist Gary Spry supports this by stating, “we see the screener as a chance to greatly improve someone’s life in many ways... (it) can positively impact their ability to find work, permanent housing arrangements, and set them up in a better environment for success,” (Spry, 2020). This is in stark contrast to the benefits of the brief jail mental health screener’s intended applications at the jail. Originally intended to benefit staff with quick and efficient screening, OAR has found that the BJMHS benefits the end user in facets that extend far beyond their incarceration. Not only does this reassure that the community is receiving a more holistic treatment service, but it also further separates OAR’s use of the BJMHS from its original purpose.

Although I have shown that OAR as a user destabilizes the brief jail mental health screener through its beneficial impacts on the Charlottesville community outside the jail, some might think that an initial screener is not in depth enough to truly provide increased treatment. This view fails to consider however the power of an initial diagnosis. On the topic of first hand diagnoses with the BJMHS, Superintendent Kumer stated, “Yes, absolutely. They may know something is going on, but they may never have been diagnosed... Sometimes it’s the first time they’ve had good honest care in their lives,” (Kumer, 2020). Kumer’s quote supports the idea that although the screener only provides an initial diagnosis, the mere identification of a serious mental illness is enough to call for increased treatment. Examinees indicating a mental illness for the first time, whether being examined at OAR or ACRJ, launch care and attention that would otherwise be neglected. Thus, the adoption of the BJMHS in any fashion is the first step in a chain of events that ultimately provides medication and care for the Charlottesville community.

OAR has effectively incorporated two methods which completely alter the original application of the brief jail mental health screener. By simply choosing to administer the exam in a post-incarceration environment, OAR has shown that the screener is not merely confined to the walls of a jail. While the use of the BJMHS outside the jail certainly alters the intended use of the technology, OAR has been shown to go one step further by providing care and solutions to an environment lacking an initial mental health diagnosis tool.

Conclusion

Although effective as a standalone and stabilized technology, the greater Charlottesville community is proof that adapting the brief jail mental health screener beyond its intended use is an effective way to aid in treatment for the community. Using the framework of users as agents of technological change, Albemarle County Regional Jail and Offender Aid and Restoration are

examples of users that finds innovative methods for adopting a technology to best suit their purposes.

The closure of psychiatric hospitals in favor of community-based treatment methods (Torrey, 1997), resulted in jails and prisons becoming the “new asylums” of the United States (National Institute of Corrections, 2014). To help combat this issue, the rise of brief mental health examinations is assuredly an effective way to measure cohorts quickly, however research regarding the Charlottesville area has demonstrated that screeners have profound impacts beyond their sole intent. Although brief mental health screeners are only the tip of the iceberg as it pertains to effective treatment for the mentally ill in jails and prisons, communities continuing to innovate and connect with available resources will assuredly aid in the remedy of this dire problem.

Word Count: 3272

References

- Callahan, L. A., & Noether, C. D. (2018). Brief Jail Mental Health Screen Utilization in U.S. Jails. *Journal of Forensic Medicine Forecast*, 1(1), 1. Retrieved from <https://scienceforecastoa.com/Articles/JFMF-V1-E1-1006.pdf>
- Carew, R., Bramham, H. (2020, February 17). *Offender Aid and Restoration*. Charlottesville, Virginia.
- Department of Justice. (n.d.). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=1BCD798A2632C67CE65B9B5068ACC685?doi=10.1.1.694.3355&rep=rep1&type=pdf>
- Dunn, C. S., & Steadman, H. J. (1982). The Role of Diagnosis and Assessment in a Jail Setting. In *Mental health services in local jails: report of a special national workshop* (pp. 100–101). Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, National Institute of Mental Health.
- Hughes, T. P. (2004). Defining Technology. In *Human-built world: how to think about technology and culture* (pp. 1–2). The University Chicago Press.
- Kline, R., & Pinch, T. (1996, October 1). Users as agents of technological change: the social construction of the automobile in the rural united states. Retrieved from <http://www.jstor.org/stable/3107097>.
- Kline, R., & Pinch, T. (1999). *The social construction of technology*. Buckingham: Open University Press.
- Kumer, M., Bramham, H. (2020, February 18). *Albemarle County Regional Jail*. Charlottesville, Virginia.

- NIC. (2014). National Institute of Corrections. The Treatment of Persons with Mental Illness in Prisons and Jails: A State Survey <https://nicic.gov/treatment-persons-mental-illness-prisons-and-jails-state-survey>
- Oudshoorn, N., Pinch, T. (2003). How users and non-users matter. In *How users matter: co construction of users and technologies* (pp. 3–4). Massachusetts Institute of Technology.
- Spry, G., Bramham, H. (2020, February 17). *Offender Aid and Restoration*. Charlottesville, Virginia.
- Steadman, H. J., Scott, J. E., Osher, F., Agnese, T. K., & Robbins, P. C. (2005). Validation of the Brief Jail Mental Health Screen. *Psychiatric Services*, 56(7), 816–822. doi: 10.1176/appi.ps.56.7.816
- Teplin, L. A. (1990). Detecting disorder: the treatment of mental illness among jail detainees. *Journal of Consulting and Clinical Psychology*, 58(2), 233–236. doi: 10.1037/0022-006x.58.2.233
- Torrey, E.F. (1997). *Out of the shadows: Confronting America's mental illness crisis*. New York, NY: John Wiley & Sons.
- Woolgar, S. (1991). Configuring the user: the case of usability trials. In J. Law (Ed.), *Sociology of Monsters: Essays on Power, Technology and Domination* (pp. 60). London: Routledge.