

The Young Researcher

2023 Volume 7 | Issue 1

Mental Healthcare Provider's Perceptions on the Effectiveness and Viability of Telepsychiatry in Allegheny County Jail

Tiffany Habib

Recommended Citation

Habib, T. (2023). Mental healthcare provider's perceptions on the effectiveness and viability of telepsychiatry in Allegheny County Jail. *The Young Researcher*, 7(1), 94-111. http://www.theyoungresearcher.com/papers/habib.pdf

ISSN: 2560-9815 (Print) 2560-9823 (Online) Journal homepage: http://www.theyoungresearcher.com All articles appearing in *The Young Researcher* are licensed under CC BY-NC-ND 2.5 Canada License.

Mental Healthcare Providers' Perceptions on the Effectiveness and Viability of Telepsychiatry in Allegheny County Jail

Tiffany Habib

Abstract: Prior research has considered the lack of mental healthcare services offered to the inmates in Pennsylvania, Allegheny County Jail. However, there is limited research on how telepsychiatry impacts the mental health services provided in this jail, leading to the question: What are local mental healthcare workers' opinions on the effectiveness and viability of telepsychiatry in Allegheny County jail? The researcher used a convergent parallel, mixed method Google Forms survey to obtain this data. This study found that while most providers preferred in-person care over telepsychiatry, they conceded that this system can be beneficial for the inmates at this local jail. Providers' willingness to work with the jail also increased when using this system. These findings demonstrate that using telepsychiatry within Allegheny County Jail is necessary because it could alleviate the severe understaffing and lack of mental health services in not only this local jail, but jails across the nation.

Keywords: Telepsychiatry, Jails, Mental healthcare services, Understaffing

Literature Review

Introduction

In the United States, the healthcare system in correctional facilities is notorious for being inadequate and unsuitable for the incarcerated. The nationwide incarceration rate is found to be the highest in the world (Statista, 2021). To be specific, as of 2019, 2.1 million people were in jails (Gramlich, 2021). Additionally, over half of the inmates in these jails have been diagnosed with a mental illness (Collier, 2014). Due to the large number of incarcerated people in the United States, the mental healthcare services provided to the inmates are scarce, insufficient, and has led to a lack of available mental healthcare staff (Gonzalez, 2014). Thus, to help prevent this high incarceration rate in the United States, improvements must be made to the mental health services provided to the inmates (Wilper et al., 2009).

The medical field has seen recent technological ad-

vancements that have bridged the gap between health-care providers and the incarcerated. The adoption of a medical system called telepsychiatry can provide jails with access to the necessary mental health services. Telepsychiatry is useful when providing mental health services to patients in isolated areas, where inmates reside (Hubley et al., 2016). However, there is a lack of research on the efficiency and viability of telepsychiatry in jails from the perspective of the provider, and no research done specifically in the Pennsylvania, Allegheny County jail. This leads the researcher to question: What are local mental health care workers' opinions on the effectiveness and viability of telepsychiatry in Allegheny County Jail?

Key Terminology

Telemedicine- A remote medical system used to diagnose and treat patients through different kinds of technology or video calls (Haleem et al., 2021).

Telepsychiatry- A specific branch of telemedicine which provides psychiatric services across long distances using technology (Iris telehealth).

Jail- Houses "pretrial defendants" who are unable to make bail and shorter-term felonies (Schlanger, 2003).

Prison- Houses long term defendants (Schlanger, 2003).

Correctional Facilities- A general term for prisons and jails.

Deinstitutionalization- Deinstitutionalization is a set of new policies and treatments that caused the number of mentally ill people to radically decrease in mental hospitals between 1955 and the present (Raphael et al., 2014).

Telepsychiatry Overview

Telepsychiatry first originated in the very late 1950's. It originated in order to increase access to medical resources for areas with isolated populations (Hyler S.E & Gangure, 2002). In recent years, telepsychiatry has been used in various areas such as schools, clinics, and jails. While telemedicine is not a relatively new medical discipline, it has become a "necessity" after the Covid-19 pandemic (The American Journal of Surgery). The Covid-19 pandemic made this system a necessity due to the social distance needed between the patient and provider. Due to this pandemic, there has been increased research on the effect of this medical system on the patients.

A series of advantages have been cited about the effectiveness of telepsychiatry for patients. For instance, increased access to medical services is the main advantage when using telepsychiatry (Gutske et al., 2004). Other advantages include convenience and cost effectiveness for patients. *The World Journal of Psychiatry* even claims that telehealth care is comparable to in-person care (Hubley et al., 2016). In a study done by the Office Journal of the National Comprehensive Cancer Network, patients demonstrated that they had a high level of satisfaction with telehealth care, but preferred office visits over telehealth care.

Disadvantages are also cited by patients about telehealth. A main disadvantage cited is the effect of the patient-provider relationship when using technology. One study found that there were challenges in building rapport and having therapeutic alliances. The study also cited communication issues and limited provider attention (Andreadis, 2023). This seems to be a common theme found by many patients and studies. Patient-provider relationships are essential for the provider to achieve in order to start treating the patient (Wampold, 2015). This is why technology influencing the relationship between the patient and the provider is a major drawback when using telehealth.

Although there is significant research on the overall effectiveness of telepsychiatry, there is limited research on its potential to address healthcare challenges in jails.

History of Healthcare in Jails

In the 1950's, there was a surge of inmates with mental illnesses in correctional facilities. This can be attributed to the deinstitutionalization of asylums, which caused an influx to the national incarceration rate (Raphael et al., 2014). This surge of inmates with mental illnesses was a huge problem for the American healthcare system. Previously, jails were not equipped for such a massive amount of people. Also, healthcare in jails and prisons was not recognized as a human right until the 1970's. This led to the massive mistreatment of inmates in jails all across the U.S. However in 1976, the U.S Supreme Court acknowledged that improper healthcare in jails violates the Eighth Amendment, which states that no cruel and unusual punishment is warranted in correctional facilities (Cornell Law School). Following the acknowledgement of inadequate healthcare in jails, providers and security guards had to balance between security of the inmates, and proper provision of healthcare (U.S Department of Justice).

Problems with the Healthcare system in Correctional Facilities

The acknowledgement that the lack of healthcare services within jails violates the U.S constitution somewhat improved access to healthcare services to jails. However, even with this acknowledgement, there are still numerous issues with the healthcare system in the U.S. Jails function as health care providers for a large part of the population, due to the high incarceration rate in the U.S, meaning that the

issues in providing mental health services must be addressed (Butler 2014). While more than half of the inmates in jails have some sort of mental illness, about 10 to 25% of inmates suffer from severe mental illness (Collier, 2014). There are many underlying reasons as to why many incarcerated people have mental health issues. For instance, underlying reasons such as poverty, racism, and substance abuse can all trigger mental health disorders (Johnson, 2020). A large portion of the prison and jail population do not receive mental health services because of the severe understaffing of mental health workers (Gonzalez 2014). A research study by the National Library of Medicine reinforced this notion when interviewing formerly incarcerated adults who stated that they struggled to access mental health services due to "cumbersome procedures" and "inadequate staffing" (Canada et al., 2022). This survey reinforced prior research done on the inadequacy of mental health services in jails all over the country.

Suicide is also a very prevalent issue and the leading cause of death in correctional facilities across the nation (US Department of Justice). The rate of suicide among incarcerated people is known to be higher in jails then it is in prisons (Thornburn). Suicide in jails can again be attributed to a lack of mental healthcare staff. For example, a study done in the New York City Department of Correction reveals that ninetyone percent of inmates who committed suicide, did so when they were alone and without supervision (US Department of Justice). Another study in the Maryland prison system reveals that the suicide rate in the specific correctional facility studied is higher than that in the community as a whole (Thornburn). Therefore, consideration of the mental health staffing is necessary in order to prevent suicide in correctional facilities across the nation.

Problems with the Allegheny County Jail

The official Allegheny County Jail website reports that 40% of its inmates are on some type of medication for mental illnesses (Allegheny County, 2022). However, the amount of people on medication is not an accurate representation of the amount of people experiencing mental health issues. Recently, the University of Pittsburgh published a survey about the Allegheny County Jail inmates which revealed many

existing problems with the healthcare system in this local jail. Through this survey, many respondents disclosed that they had a "high level of dissatisfaction with medical care in the jail" (Farmer, 2022). Other recent articles have made an appearance in the local media about the number of unnecessary deaths due to suicide Allegheny County Jail has experienced. The Pittsburgh National Institute of Journalism confirmed that 13 men have died since the Covid-19 pandemic (Hailer, 2022). These deaths have shocked the Pittsburgh community, with a series of newspapers reporting these deaths in detail, claiming that these deaths are due to mental health staffing shortages. Brittany Hailer, from the Pennsylvania Capitol Star News also reports that severe understaffing has reduced the amount of mental health treatments in the jail, which has made suicide a very prevalent issue (Hailer, 2022). Thus, the suicide rate and the survey published by the University of Pittsburgh show the many existing issues in the healthcare system in the Allegheny County Jail.

Advantages of Telepsychiatry in Correctional Facilities

Telemedicine has been focused on providing healthcare to places that have staffing shortages or are in remote areas (Collins et al., 2019). For example, the U.S Department of Justice states that an experiment in the late 1990s demonstrated the feasibility of telemedicine in correctional facilities (Ashcroft et al., 2002). Telepsychiatry can "positively impact" the quality of mental health care in jails by providing access to medical staff and increasing communication between the doctors and inmates (Office of Justice Programs, 1998). For example, a study by the Ohio State University in 1994 investigated the effects of telemedicine and implemented this system for Ohio prison inmates. The University concluded that physicians and inmates were generally satisfied with health care through telemedicine (Mekhijian et al., 2009). Additionally, a semi-structured interview with a healthcare provider claimed that access to services is one of the main advantages of telepsychiatry (Hubley et al., 2016). A study by Deslich et al (2013) further found that access to services is a definite advantage of telepsychiatry. Already, jails are implementing this new system to provide better access to mental health

services for their inmates. For example, in a study cited by Michelle Amartey, California began using telepsychiatry in its local jails to combat staffing shortages, which proved to be highly effective (Amartey, 2022). The local Pennsylvania, Allegheny County Jail has already begun implementing telepsychiatry in its healthcare system. It provides professional visits with mental health workers through the use of technology, in order to provide access to mental health services (Allegheny County). There has been an increased usage of telepsychiatry in numerous jails throughout the nation, demonstrating that this system may be a viable option for improving healthcare within jails (Batastini et al., 2016).

Disadvantages of Telepsychiatry in Correctional Facilities

While many studies in the field cited advantages to telepsychiatry use in jails, this medical system can pose significant disadvantages. For example, a study on patient and provider perspectives on telehealth revealed that most providers were dissatisfied with telehealth. A possible reason could be the lack of professional relationships between the provider and inmate (Angus et al., 2005). In correctional facilities specifically, a strong patient and provider relationship is essential in order to ensure that the inmates receive the best quality of care (SAMHSA). Already many studies about telehealth in general have proven that the quality of the patient-provider relationship is affected through the use of technology for treatment (Andreadis, 2023; Angus el al., 2005). Thus, these findings pose severe drawbacks to the telepsychiatry system and its use in correctional facilities.

Another study by the American Psychological Association demonstrates that patients largely preferred in-person care over telepsychiatry (Batastini et al., 2016). This could be due to possible concerns over a lack of security for patient data when using technology (Watson, 2020). In a semi-structured interview done by Deslich et al (2013), Thistlewaithe, a mental healthcare provider, cited that one of the main drawbacks of telepsychiatry is technological limitations (Deslich et al., 2013). Thus, while telepsychiatry does provide benefits on correctional facilities, there are also many severe drawbacks in this system.

Assumptions

To effectively continue the study of the impact of telepsychiatry in correctional facilities, the researcher must assume that mental health is a prevalent issue for the inmates in correctional facilities (Collier 2014). The United States has the highest incarceration rate in the world, and the majority of inmates have mental illnesses, validating this assumption (Statista, 2021; Thornburn, 1995).

The researcher must also assume that the health-care system in jails is not efficient, nor provides adequate mental healthcare services. Jails have long received substandard mental healthcare services due to severe understaffing, and this impacts the healthcare system of the jail as a whole (Gonzalez 2014). This may be due to a lack of human health resources which would lead to challenges with local recruitment and retention of mental health staff.

Lastly, the researcher must finally assume that telepsychiatry has already been implemented within the Allegheny County Jail in order to be able to research the effectiveness of this system within the jail.

Justification

Healthcare is a human right and due to the many recent news stories and surveys exposing the healthcare system in Allegheny County Jail, this issue is now receiving new light on mainstream media. Healthcare and specifically mental health services should be provided to all humans regardless of the punishment. If healthcare services are not provided, then this is a violation of the Eighth Amendment which demands that there be no cruel or unusual punishment towards inmates (Cornell Law School). Inmates have a right to care and increasing access to such care should be a priority. Also, telepsychiatry has become a necessity in recent years (The American Journal of Surgery). Telepsychiatry has been found to provide healthcare to otherwise remote areas; however, there is a lack of research on provider comfort levels and willingness to engage with inmates, specifically in the Allegheny County Jail. Therefore, due to the recent inquiries into the healthcare system in Allegheny County Jail, and the recent addition of telepsychiatry in this local jail, this leads the researcher to the question: What are local mental health workers' opinions on the effectiveness and viability of telepsychiatry in Allegheny County Jail?

Method

Purpose

The purpose of this study was to collect data on the perceptions of local mental healthcare providers on the effectiveness and viability of telepsychiatry in Allegheny County Jail. Analyzing these responses aided the researcher to understand the advantages and disadvantages of the implementation of telepsychiatry in this local jail.

The method chosen was to use an online Google Forms survey to collect data. This is a convergent parallel, mixed method. This type of method was chosen to gain access to a large population of mental healthcare providers while also understanding the motives behind each of their answers. Also, both the survey multiple choice questions and the open-ended questions led to analysis in comparing the two sections which made a convergent parallel mixed method the most effective. This method also provided a larger variety of mental health workers who were able to answer the survey. For example, there were responses from mental healthcare providers who worked in Allegheny County Jail and providers who had no affiliation with the jail. This allowed for a wider range of data to be collected and allowed the researcher to gain statistically significant findings (see Appendix A for survey).

Sample Procedure and Characteristics

Participants

In order to participate in this study, respondents must have been a mental healthcare provider that lives or works in the Allegheny County area. Participants were limited to Allegheny County because this study asked questions directly about Allegheny County Jail, and widening the participant pool would not be practical. They were also limited to this area to ensure that the participants were able to answer specific questions related to the Allegheny County Jail. While the use of telepsychiatry is important to the study, the goal of this study was mainly to explore the effectiveness and

viability of telepsychiatry. In order to do this, provider willingness to use this system must be gauged. Thus, the use of telepsychiatry was not an essential requirement for participation. Participants were recruited through the use of texts, emails, word of mouth, QR codes, phone calls, and personal contacts who worked with the jail.

Ethicality and IRB Approval

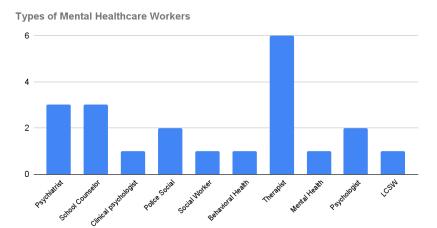
This study was approved by the Institutional Review Board. All personal information-collecting features on the Google Forms survey were turned off, to maintain anonymity. On the survey, a consent and debriefing form was attached. All responses were anonymous and kept in a Google Folder that only the researcher and the project director had access to. After one year, all personal records will be destroyed to ensure participant anonymity.

Survey Design

The survey began with informed consent and demographics for the researcher to gauge the provider's age differences, and what type of mental healthcare worker they are. After this, they were asked about different work habits such as where and when they use telepsychiatry or their knowledge of Allegheny County Jail. After these questions, there was a section provided only to participants who answered that they had affiliation with the Allegheny County Jail. This section was about the specifics of the mental healthcare services provided and the medical system used in the jail. After this, participants were asked about the advantages and disadvantages of implementing telepsychiatry in Allegheny County Jail. They were then debriefed about the survey, and offered a link to send the survey to any others that fit the description (See Appendix A for the survey).

The survey questions were adapted from two different peer reviewed research studies to maintain the validity and credibility of the questions. One of the sources was a study by Deslich et al., (2013). Some of the questions in the survey were adapted from the semi-structured interview provided in this study. Some of the questions were paraphrased and multiple-choice answers were added. Also, some questions were used in the open-ended section; however, they

Figure 1 Types of Mental Healthcare Workers



What type of Mental Health Worker are you?

were used to ask specific questions about Allegheny County Jail. The other study was by the Mayo Clinic in Florida (Malouff et al., 2021). This study researched physician satisfaction with telemedicine in general. While this study has no relation to telepsychiatry in correctional facilities, the questions were adapted from this survey because the structure of this survey was somewhat similar to the survey questions made by the researcher. This furthered the credibility of the questions asked by the researcher. The questions were then reviewed by the Institutional Review in order to ensure that the wording of the questions was unbiased and clear.

Findings and Analysis

General Findings

In total, there were 23 respondents; however, one participant did not consent to participate in the study. Another participant was not a mental health-care worker, which was a requirement to participate in this study. Therefore, only 21 responses could be used for research purposes. Of the 21 responses, only 3 participants worked in the Allegheny County Jail.

The survey contained a section specifically for mental health workers who worked in Allegheny County Jail; however, it was excluded due to the lack of respondents that worked in the Jail. This caused the primary objective of this study to be revised to learning generally about mental health provider attitudes toward telepsychiatry, with a secondary objective of learning perceptions within the jail.

A series of multiple-choice questions were asked to gauge the different perceptions of the mental health workers. The questions primarily consisted of multiple-choice answers to gain a clear understanding of each participant's perceptions.

As shown in Figure 1, therapists were the most common type of mental healthcare worker in this study; six therapists participated. Other types of mental health workers that participated included psychiatrists, school counselors, clinical psychologists, etc. All participants either worked or lived in Allegheny County, which was a requirement of participation.

As shown in Figure 2, the majority of participants never use telepsychiatry while working, and only two participants always use telepsychiatry. As seen in Figure 3, of the 21 participants, only three (14.3%) work with the Allegheny County Jail. The other 18 participants have no affiliation with the jail. This figure dem-

Figure 2
Demographics/Work Habits of Participants
Note: One participant refrained from answering this particular question

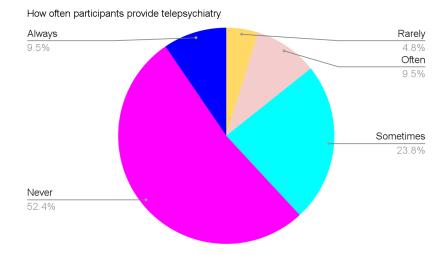
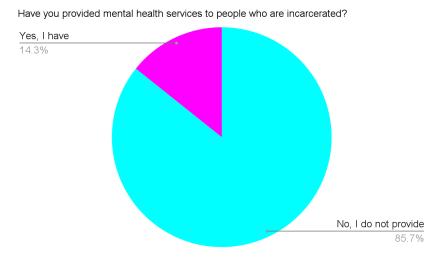


Figure 3
Percentage of Participants who have provided Mental Healthcare Services to Allegheny County Jail
Note: The lack of mental healthcare workers that provide services to inmates is a limitation that will later be addressed in this paper.



onstrates the lack of mental health workers who utilize telepsychiatry and that most mental health workers surveyed have no affiliation with Allegheny County Jail. The lack of mental health workers that use telepsychiatry in Allegheny County limits this study because it may cause unreliable and inaccurate opinions regarding telepsychiatry use in Allegheny County Jail. Also, the majority of mental healthcare workers did

not work with Allegheny County, which also could account for inaccurate data. These inaccurate opinions could take place since the mental healthcare workers who are not affiliated with the jail may base their opinions from word of mouth or the mainstream me-

dia. A section of the survey asking about the specific conditions in Allegheny County Jail was excluded due to this limitation.

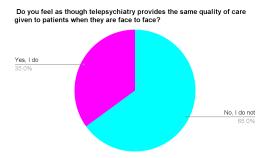
As shown in table 1, around 50% of participants who do not work in Allegheny County Jail know little

Table 1
Participants Knowledge of the Mental Healthcare Services provided in Allegheny County Jail
Note: This Figure does not include responses from participants who worked in Allegheny County Jail.

Knowledge of Mental Healthcare Services	Frequency of Occurrence	Percent of Occurrence	Sample Quote(s)
Participants have an average amount of knowledge	1	5.5%	"Average Amount"
Participants used to be familiar with the services	2	11%	"I used to be familiar with the services, but have not been in that field for many years."
			"A little. I was more familiar 10 years ago."
Participants have a negative perception of the services	2	11%	"I have heard that it is not necessarily their main priority and that services are some- times provided by those not technically working in the mental health field."
			"I do not know a lot, but I do not hear many good remarks about it. I hear that it is poor and limited."
Participants have little to	9	50%	"I don't know anything about it."
no knowledge about the services			"Little to none specific to the Allegheny County Jail."
Participants have "some" knowledge of the services	3	16.6%	"Some"
Participants have specific knowledge of the services provided at Allegheny County Jail	3	16.6%	"I know the intake process for mental health screenings." "I have provided therapy to patients upon release from prison and collaborated with a psychiatrist who provided medication man-
			agement to patients while incarcerated at the Allegheny County Jail"

Figure 4a All Participants' Opinions on the Quality of Patient Care when using Telepsychiatry

Note: This figure showcases all participants' responses.



to nothing about the mental health services provided there. Only 16.6% of participants had specific knowledge regarding the jail and the mental health services provided in this local jail. This demonstrates that there may be a lack of awareness in this population surrounding the mental health treatment of inmates, which is one of the main reasons for increasing mental health disorders in jails (Flegel & Stanbrook, 2010). Also, some mental health care workers remarked on negative perceptions of the mental health services provided in Allegheny County, demonstrating the participants' existing negative biases of the services provided in Allegheny County Jail. These negative perceptions could be due to several things, such as word of mouth and media coverage.

Figure 4a shows that most participants (65%) do not believe that telepsychiatry provides the same quality of care as in-person care. In contrast, the rest of the participants believe that telepsychiatry offers the same level of care. Similarly, in figure 4b, about the same percentage of participants who have used telepsychiatry at least once (66.7%) do not believe that telepsychiatry provides that same quality of care as inperson care. This demonstrates that most participants generally believe that in-person services provide a better quality of care, regardless of whether they have used telepsychiatry or not. These results demonstrate that there could be a lack of willingness to use telepsychiatry by mental health workers which supports the results of a study claiming that many healthcare

Figure 4b

Participants with Experience in Telepsychiatry Opinions on the Quality of Patient Care when using Telepsychiatry

Note: This figure showcases responses only from participants who have experience with telepsychiatry.

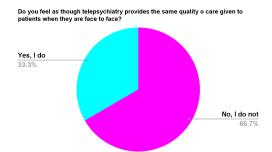
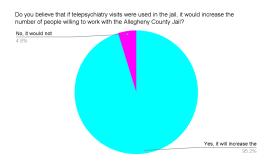


Figure 5 Number of Participants that prefer in-person care over telepsychiatry.

Preference for Face to Face care or Telepsychiatry I prefer 20.0% I do not prefer

Figure 6 Provider Willingness to work with Allegheny County Jail using Telepsychiatry Visits



search done in the field that most physicians seemed primarily satisfied with the usage of telepsychiatry (Hoff & Rim, 2022).

Figure 6 shows that the majority of participants (95.2%) believe using telepsychiatry visits in Allegheny County Jail would increase the willingness of mental health workers to work with the jail. Only one respondent negated this. This chart contrasts the responses shown in Figure 5, where most participants preferred in-person care over telepsychiatry. This demonstrates that while most participants prefer in-

person care over telepsychiatry, they concur that this system may be necessary to use regarding the inmates. The participants' responses show that telepsychiatry may positively affect the willingness of mental health workers to work with the jail.

Table 2 depicts that the most common advantage cited by participants is that access to services for patients would increase. This seems to be a common advantage in most studies on telepsychiatry within correctional facilities (Hubley et al., 2016; Canada et al., 2022). Following this, in order of most frequent

Table 2
Open- Ended Responses (Notable Advantages of Telepsychiatry in Allegheny County Jail)

Advantages of Telepsychiatry in Allegheny County Jail	Number of Occurrences	Percent of Occurrences	Sample Quote(s)						
Access to care for	9	50%	"More access to care for patients"						
patients would increase			"The main advantage would be the number of inmates able to access services"						
			"Telepsychiatry can help address the need for access. You can have a therapist in Arizona working with a person in Allegheny County."						
Less risk/more	5	27%	"Advantages, mainly access without risk."						
safety is provided for the mental health workers			"Advantages would be less risk to the individuals providing the service physically"						
			"There are also risks associated with an outsider coming into the jail through manipulation by the inmates, threat of harm, potential for abuse."						
Convenience for mental health workers providing	4	22%	"An advantage would be allowing more flexibilit and availability for the therapist to work with th inmates."						
telepsychiatry			"Less travel time to and from appointments for the psychiatrists."						
Lower costs for the services provided at the Jail	2	11%	"Decreases the cost of services to the jail. Through an independent contractor, the jail saves money while being able to provide services to their inmates."						

Note: Three participants refrained from answering this question.

advantage to least would be: (2) telepsychiatry reduces the risk for psychiatrists and provides more safety to them, (3) it provides more convenience for the mental health workers, and (4) it reduces the costs for the services provided in the jail. These findings further support the idea made by mental health practitioners that the usage of telepsychiatry lowers the costs of services and also increases access to the care provided to the inmates (Deslich at el., 2013).

As shown in Table 3, the main disadvantage cited by participants is that it affects the professional relationships able to be made between a doctor and a patient. It also can lead to difficulty and the possibility of misreading body cues. However, the *Journal of Telemedicine and Telecare* contradicts these statements and finds that telehealth usually does not affect doc-

Table 3 Open- Ended Responses (Notable Disadvantages of Telepsychiatry in Allegheny County Jail)

Disadvantages of Telepsychiatry in Allegheny County Jail	Number of Occurrences	Percent of Occurrences	Sample Quote(s)							
Lack of patient-doctor relationships/ possible Misreading of body lan- guage	9	50%	"I do think that for the benefit of the inmates, face to face contact is more beneficial for the rehabilitation and treatment of said inmate."							
			"Not being able to full read and react to body language,"							
			"With this population I think there is so much to be gained from in-person obser- vation that would be missed. That said, less than ideal is better than no treatment!"							
Technological limitations	2	11%	"Technological limitations of a user interface"							
			"Disadvantages also include service inter- ruptions that may occur over Telehealth."							
Misuse of services	2	11%	"Disadvantage, potential misuse of services."							
			"Disadvantages include breaches of confidentiality"							
Inmates are more isolated	3	16.6%	"Disadvantages- lack of human contact, more isolated"							
			"Having an outsider come into the hospital allows the inmates a different break in their monotonous day."							
			"Especially within the jails, I think that safe space with another human is crucial."							

tor-patient relationships (Miller, 2003). Nevertheless, this was one of the main concerns of mental healthcare workers in Allegheny County. Following this, three participants cited that inmates are more isolated, two cited potential misuse of services, and another two cited technological limitations as disadvantages of the telepsychiatry system in Allegheny County Jail. However, as one participant stated, "less than ideal [treatment] is better than no treatment!" Another participant shared this view saying, "Telehealth is better than no mental health support at all." Most participants concur that while telepsychiatry is not an ideal system of medicine, it is a viable and necessary system to use in jail systems. This also relates to Figures 4 and 6. While most participants selected that they have a preference for face-to-face care rather than telepsychiatry, it was almost a consensus in Figure 6 that the use of telepsychiatry would increase the amount of mental health workers willing to work with the jail. Also, out of the 18 participants, eight participants only cited advantages of telepsychiatry, six cited advantages and disadvantages, and four participants only cited disadvantages. This also further demonstrates that while most participants expressed a preference for inperson care, they viewed telepsychiatry as necessary for the inmates and believed that it conveyed more advantages than disadvantages. These statements and the charts suggest that most mental health workers in the Allegheny County area view telepsychiatry as a non-ideal but necessary system.

Limitations

The method chosen by the researcher did pose a few limitations. First, while there was some qualitative data on the Google Forms survey, most questions were multiple choice, which limits the understanding of the mental health workers' motives for choosing each answer. Additionally, many mental health workers working in Allegheny County were not willing to take the time to complete the survey, leading to a mediocre sample size. However, in order to maintain validity, the researcher based the survey questions off of a similar study addressing telemedicine, but not specifically in jails (Malouff et al., 2021). The researcher also based some other questions in the survey off Deslich et al., (2013), which used a semi-structured interview

in order to understand the effects of telepsychiatry in jails. More studies about the usage of telepsychiatry with incarcerated people are needed in order to corroborate these findings nationwide.

Another limitation is the minimal amount of data collected by the researcher for people affiliated with Allegheny County Jail. Although the researcher distributed the survey to contacts at the jail and emailed people who worked with the jail, only three responses were received from participants who work at the jail. This discredited a substantial section of the survey since a representative sample was not surveyed. Also, this limited the understanding of the technology offered, the amount of mental health staffing in the jail, and the types of mental healthcare services provided there. Consequently, the conclusions derived from the data are more general toward the mental health community in Allegheny County as a whole, rather than a specific section geared towards people who work in the jail. This could skew data specifically for questions regarding the Allegheny County jail since participants were answering based on secondary knowledge and not prior experience. In future studies, to avoid this limitation, there must be a representative sample including a greater number of mental health workers who work with the Allegheny County jail.

Conclusions and Real-World Implications

This study sought to explore the effectiveness and viability of telepsychiatry in Allegheny County Jail. Overall, the findings suggest that while the majority of mental health providers prefer in-person care over telepsychiatry, they mostly concur that using telepsychiatry is necessary within the jail. Also, participants demonstrated that willingness to work in the jail may increase if telepsychiatry was generally used in jails.

From a societal standpoint, this implication is beneficial for the incarcerated. If mental health providers have increased willingness to work with jails, this may be able to alleviate the severe understaffing of mental health providers in jails. With more mental health providers willing to work with the incarcerated, telepsychiatry may allow the healthcare systems in the jails across the nation to improve. It may also allow for more access to healthcare services for inmates, which

is one of the main advantages mental health care providers cited.

However, more research is needed in order to gain an effective understanding of the efficiency of telepsychiatry, not only in Allegheny County, but across the nation. Along with mental health workers' perceptions of telepsychiatry, it would be beneficial to examine the effectiveness of telepsychiatry within the jail system with providers who specifically work with the local jail, rather than general mental health providers. The perspective of the inmates themselves is also critical to understanding the effectiveness and viability of this system within jails across the nation. Also, with a larger sample size, researchers could take into account how the age of the provider or the location of the jail impacts the willingness of the provider to use telepsychiatry.

Overall, these suggestions aim to further research in the field and to help grow the understanding of the factors that allows telepsychiatry to be an efficient and viable system in jails. These suggestions also offer explanations on what factors contribute to a provider's willingness to use this system as a whole. Using this information could help to alleviate the grave issues in this nation's mental health policies for inmates and contribute to the improvement of mental health services in correctional facilities across the nation.

Works Cited

- Allegheny County. (2022, January 13). First 100 Correctional Staff Have Completed Mental Health First Aid Training.
 Allegheny County. Retrieved November 11, 2022, from https://www.alleghenycounty.us/News/2022/6442476769.
 aspx
- Allegheny County. (n.d.). ACJ Professional Video Visits | Jail.

 Allegheny County. Retrieved November 4, 2022, from https://www.alleghenycounty.us/jail/contact/profession-al-visits.aspx
- Amartey, M. (2019, February 7). Deinstitutionalizing the "New Asylums": Telepsychiatry in the
- United States Correctional System. eRepository @ Seton Hall. Retrieved April 18, 2023, from https://scholarship. shu.edu/cgi/viewcontent.cgi?article=2212&context=stud ent_scholarship
- Andreadis, K. (2023, March 9). Telemedicine Impact on the Patient-Provider Relationship in Primary Care During the COVID-19 Pandemic. NCBI. Retrieved June 4, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC9994565/
- Ashcroft, J., Daniels, D. J., & Harts, S. V. (2002, May).
 Implementing Telemedicine in Correctional Facilities.
 Office of Justice Programs. Retrieved April 19, 2023, from https://www.ojp.gov/pdffiles1/nij/190310.pdf
- Batastini, A. B., & Morgan, R. D. (2016). Connecting the disconnected: Preliminary results and lessons learned from a telepsychology initiative with special management inmates. *Psychological Services*, 13(3), 283–291
- Butler, B. (2014, January 1). Health Information Exchange between Jails and Their Communities: A Bridge That Is Needed under Healthcare Reform. NCBI. Retrieved October 7, 2022, from https://www.ncbi.nlm.nih.gov/ pmc/articles/PMC3995481/
- Canada, K., Barrenger, S., Bohrman, C., Banks, A., & Puketi, P. (2022, June 3). Multi-Level Barriers to Prison Mental Health and Physical Health Care for Individuals With Mental illnesses. NCBI. Retrieved November 1, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC9203858/
- Collier, L. (2014, October 1). Incarceration nation. Monitor on Psychology, 45(9). https://www.apa.org/monitor/2014/10/incarceration
- Collins, K., Nicholson, P., & Brown, I. (2019, January 17). Patient satisfaction in telemedicine. *Health Informatics Journal* 6(2), 81-5. Retrieved November 11, 2022, from https://journals.sagepub.com/doi/10.1177/146045820000600205
- Cornell Law School. (n.d.). W. J. ESTELLE, Jr., Director, Texas Department of Corrections, et al., Petitioners, v. J.

- W. GAMBLE. Law.Cornell.Edu. Retrieved November 9, 2022, from https://www.law.cornell.edu/supremecourt/text/429/97
- Deslich, S., Thistlethwaite, T., & Coustasse, A. (2013).

 Telepsychiatry in correctional facilities: Using technology to improve access and decrease costs of mental health care in underserved populations. *Perm J* 17(3), 80-6.

 Retrieved October 5, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3783076/
- Farmer, E. M. (2022, July). Allegheny County Jail Survey: Responses from Individuals who were Incarcerated, Fall 2021. Pitt School of Social Work. Retrieved November 11, 2022, from https://www.socialwork.pitt.edu/sites/default/files/allegheny_county_jail_needs_assessment_july_2022.pdf
- Flegel, K., & Stanbrook, M. B. (2010). The crime of mental illness - PMC. CMAJ 182(13), 1399. Retrieved April 18, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC2942908/
- F S Mair 1, P Goldstein, C May, R AngusJ O'Connor, S Capewell
- A Boland, A Haycox, C May, C Roberts, C Shiels, D Hibbert, F S Mair, J O'Connor, P Goldstein, S Capewell (2005). Patient and provider perspectives on home telecare: preliminary results from a randomized controlled trial. *J Telemed Telecare* 11 suppl 1, 95-7. Retrieved April 18, 2023, from https://pubmed.ncbi.nlm.nih. gov/16036011/
- Gonzalez, J., & Conell, N. (2014, December). Mental health of prisoners: Identifying barriers to mental health treatment and medication continuity. *Am J Public Health* 104(12), 2328-33. Retrieved November 10, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4232131/
- Gramlich, J. (2021, August 16). America's incarceration rate falls to its lowest level since 1995. Pew Research Center. Retrieved October 27, 2022, from https://www.pewresearch.org/fact-tank/2021/08/16/americas-incarceration-rate-lowest-since-1995/
- Hoff, T., & Rim, L. D. (2022, July 29). Physician satisfaction with telehealth: A systematic review and agenda for future research. *Quality Management in Healthcare* 31(3), 160-9. Retrieved April 21, 2023, from https://www.ingentaconnect.com/content/wk/qmh/2022/00000031/00000003/art00009
- Hailer, B. (2022, March 15). "Thirteen men died after going to the Allegheny County Jail. Here are their stories." Pennsylvania Capital-Star. Retrieved October 10, 2022, from https://www.penncapital-star.com/criminal-justice/ thirteen-men-died-after-going-to-the-allegheny-countyjail-here-are-their-stories/

- Haleem, A., Javaid, M., Singh, R. P., & Suman, R. (2021, July 27). Telemedicine for healthcare: Capabilities, features, barriers, and applications. Sensors International 2, 100117. Retrieved September 15, 2022, from https://www.sciencedirect.com/science/article/pii/S2666351121000383
- Hubley, S., Lynch, S., Schneck, C., Thomas, M., & Shore, J. (2016, June 22). Review of key telepsychiatry outcomes. World J Psychiatry 6(2), 269-82. Retrieved October 6, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC4919267/
- Hyler, S. E., & Gangure, D. P. (2002). Technological advances in telepsychiatry. Primary Psychiatry, 9(9), 24-28.
- Iris telehealth. (n.d.). What is Telepsychiatry? Iris Telehealth. Retrieved November 23, 2022, from https://iristelehealth.com/resources/what-is-telepsychiatry/
- Johnson, D. (2020, May). Connections Among Poverty, Incarceration, and Inequality – INSTITUTE FOR RESEARCH ON POVERTY – UW–Madison. Institute for Research on Poverty. Retrieved June 5, 2023, from https://www.irp.wisc.edu/resource/connections-amongpoverty-incarceration-and-inequality/
- Malouff, T., Terkanda, S., & Mayo Clinic. (2021, August). Physician satisfaction with telemedicine during the COVID-19 pandemic: The Mayo Clinic Florida experience. Mayo Clinic Proc 5(4), 771-82. https://www.sciencedirect.com/science/article/pii/S2542454821001028
- Mekhjian, H., Warisse, J., Gailiun, M., & McCain, T. (1996). An Ohio telemedicine system for prison inmates: a case report. Telemedicine J 2(1), 17–24. https://doi. org/10.1089/tmj.1.1996.2.17
- Miller, E. (2003, February). The technical and interpersonal aspects of telemedicine: effects on doctor–patient communication. The Journal of Telemedicine and Telecare, 9(1). https://journals.sagepub.com/doi/abs/10.1258/1357 63303321159611?journalCode=jtta
- Office of Justice Programs. (1998). Telemedicine: It's Not Just for Rural Jails. Office of Justice Programs. Retrieved April 18, 2023, from https:// www.ojp.gov/ncjrs/virtual-library/abstracts/ telemedicine-its-not-just-rural-jails
- Raphael, S., Stoll, M., & Sage, R. (2014, June 25). Assessing the Contribution of the Deinstitutionalization of the Mentally Ill to Growth in the U.S. Incarceration Rate. Goldman School of Public Policy. Retrieved November 9, 2022, from https://gspp.berkeley.edu/assets/uploads/ research/pdf/p71.pdf
- Schlanger, M. (2003). Prisons Reading Part A Page 42. University of Michigan Law School. Retrieved October 30, 2022, from https://www.law.umich.edu/ facultyhome/margoschlanger/Documents/Resources/

The_Difference_Between_Jails_and_Prisons%20.pdf Statista. (2021, August 5). Countries with the most prisoners 2021. Statista. Retrieved November 8, 2022, from https://www.statista.com/statistics/262961/ countries-with-the-most-prisoners/

SAMHSA. (n.d.). Medication-assisted Treatment Inside Correctional Facilities. Medication-assisted Treatment Inside Correctional Facilities: Addressing Medication Diversion. Retrieved June 5, 2023, from https://store. samhsa.gov/sites/default/files/d7/priv/pep19-mat-corrections.pdfm

The American Journal Of Surgery. (2020, April 21). Implications for the use of telehealth in surgical patients during the COVID-19 pandemic. *Am J Surg* 220(1), 48-9. Retrieved November 5, 2022, from https://www.americanjournalofsurgery.com/article/S0002-9610(20)30231-2/fulltext

Thorburn, K. (1995). Health Care in Correctional Facilities.
WestJMed. Retrieved October 10, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1303263/pdf/westjmed00363-0052.pdf

US Department of Justice. (n.d.). *Mortality in Local Jails*, 2000-2016 - *Statistical Tables*. Bureau of Justice Statistics. Retrieved November 11, 2022, from https://bjs.ojp.gov/content/pub/pdf/mlj0016st.pdf

Wampold, B. E. (2015, September 25). How important are the common factors in psychotherapy? An update. *World Psychiatry* 14(3), 270-7. Retrieved June 4, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4592639/

Watson, S. (2020, October 12). *Telehealth: The advantages and disadvantages*. Harvard Health. Retrieved April 25, 2023, from https://www.health.harvard.edu/staying-healthy/telehealth-the-advantages-and-disadvantages

Wilper, A., Woolhandler, S., Boyd, J., Lasser, K., McCormick, D., Bor, D., & Himmelstein, D. (2009, April). The health and health care of US prisoners: results of a nationwide survey. Am J Public Health 99(4), 666-72. Retrieved November 8, 2022, from https://pubmed.ncbi.nlm.nih.gov/19150898/

Appendix A: Survey

Opinions on Telepsychiatry in the Allegheny County Jail

Opinions on Telepsychiatry in Allegheny County Jail Consent Form

You are being asked to take part in a research study of the opinions of local mental health workers on telepsychiatry in Allegheny County Jail. We are asking you to take part because you provide psychological service in the Allegheny County area. Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

What the study is about: The purpose of this study is to learn the opinions of local mental health workers on telepsychiatry in Allegheny County Jail. You must be a mental health worker who has lived or worked in the Allegheny County area, in order to complete this survey.

What we will ask you to do: If you agree to be in this study, a Google Form will be utilized. This Google Form will include questions about the effectiveness and viability of telepsychiatry, your work habits, and your personal experiences with telepsychiatry and the Allegheny County Jail. This interview will take about 10 minutes to complete. With your permission, we would like to keep your responses on a Google Folder only accessible by the researcher and the advisor.

Risks and benefits:

There is a risk that you may find some of the questions about your work conditions and the healthcare of inmates to be sensitive. There are no benefits to you other than understanding the newer technologies in medicine. The researcher hopes to gain insight on your opinions about the viability and effectiveness of telepsychiatry in Allegheny County Jail. Overall, this research may be used to understand mental health workers opinions on this topic and possibly finding improvements that can be made based on these opinions.

Compensation: There will be no compensation provided upon the completion of this survey.

Your answers will be confidential. The records of this study will be kept private. In any sort of report, we

make public we will not include any information that will make it possible to identify you. Research records will be kept in a Google Folder, accessible only by the researcher and the advisor. After one year, any records will be deleted.

Taking part is voluntary: Taking part in this study is completely voluntary. You may skip any questions that you do not want to answer. None of the questions are mandatory to answer, and you are allowed to skip any questions you do not wish to answer. If you decide to take part in this survey, you are free to withdraw at any time.

If you have questions: The researcher conducting this study is Tiffany Habib. If you have questions upon completion of this survey, you may contact Tiffany Habib at hti075@hamptontalbots.org. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) at Roos@ht-sd.org

You may return to this page at any time while taking this survey.

Have you understood the above information and consent to participate in this study?

Yes, I do consent to participate in this study. No, I do not consent to participate in this study.

Demographics

What is your age?

18-29

30-49

50-64

65 and above

What type of Mental Health Worker are you?

Psychologist

Psychiatrist

Clinical psychologist

Mental Health Counselor

Therapist

Other...

Definitions

For the Purpose of this study:

Telemedicine is the remote treatment of patients usually through different kinds of technology or video calls (Haleem et al., 2021).

Telepsychiatry is a more specific branch of telemedicine which provides psychiatric services across long distances through the use of technology (Iris Health).

Work Habits

The following should be based on your own personal experiences in treating patients.

Do you provide telepsychiatry during work?

Yes, I do utilize telepsychiatry during work.

No, I do not utilize telepsychiatry during work.

How often do you provide telepsychiatry while working?

Never

Rarely

Sometimes

Often

Always

Where do you work when providing telepsychiatry?

At home

At the clinic

In the office

I do not use telepsychiatry.

Other...

Have you provided mental health services to people who are incarcerated?

Yes, I have provided mental health services to people who are incarcerated.

No, I have not provided mental health services to people who are incarcerated.

If you answered no to the previous question, how
much do you know about the mental health services
in Allegheny County Jail?

	•	•		•	•								
		 	 			 	-						
 		 	 			 	-						

If you answered yes to the previous question, what kind of work do you do with people who are incarcerated?

| |
 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
|
 |

Have you worked with the Allegheny County jail? Yes. I have.

No, I have not.

Mental Health Services provided in Allegheny County Jail

These questions should be answered based on experience.

What types of mental health services are provided at Allegheny County Jail?

Telehealth visits

Counseling

Prescribing Medication

Medical supervision

Other...

Do most inmates have access to technology in order to do telepsychiatry?

Yes, they do have access to the technology needed to do telepsychiatry.

No, they do not have access to the technology needed to do telepsychiatry.

Are there enough mental health workers staffed at Allegheny County Jail?

Yes, there are enough mental health workers staffed at this jail.

No, there are not enough mental health workers staffed at this jail.

Since its implementation, has telepsychiatry increased the number of mental health services provided at Allegheny County Jail?

Yes, it has increased the mental health services at the jail.

No, it has not increased the mental health services at the jail.

There were no notable differences in the mental health services provided at the jail.

I do not know.

Usage of Telepsychiatry

Has telepsychiatry saved time when meeting with your patients?

Yes, it has.

No, it has not.

Do you feel as though telepsychiatry provides the same quality of care given to patients when they are face to face?

Yes, I do.

No, I do not.

Do you prefer telepsychiatry or traditional face to face care?

I prefer telepsychiatry over face-to-face care.

I do not prefer telepsychiatry over face-to-face care

Telepsychiatry in Allegheny County Jail

Do you feel as though there are enough mental health services provided to the inmates?

Yes, I do feel like there are enough mental health services provided.

No, I do not feel like there is enough mental health services provided.

Do you feel as though there are enough mental

health services provided to the inmates?

Yes, I do feel like there are enough mental health services provided.

No, I do not feel like there is enough mental health services provided.

Do you believe that if telepsychiatry visits were used in the jail, it would increase the number of people willing to work with the Allegheny County Iail?

Yes, it will increase the number of people willing to work with Allegheny County Jail.

No, it would not increase the number of people willing to work with Allegheny County Jail.

Are there any notable advantages or disadvantages of using telepsychiatry in Allegheny County Jail?

Debriefing

Project Title: Opinions on Telepsychiatry in Allegheny County Jail

Principal Investigator: Tiffany Habib Department/Course: AP Research

Contact Information: hti075@hamptontalbots.org

Thank you for participating in this study.

Taking part is voluntary.

Although you have already completed this Google Form survey, your involvement is still voluntary, and you may choose to withdraw the data you provided prior to debriefing, without any penalty. Withdrawing your submission will not adversely affect your relationship with Hampton High School, the researchers, or any of our affiliates.

Privacy/Confidentiality

If you agree to allow us to use your data, here is how we will maintain confidentiality of the information. Your response will be kept in a Google Folder accessible only by the researcher and the advisor.

The main researcher conducting this study is Tiffany Habib at Hampton High School. If you have questions later or would like to know about the results of the study, you may contact Tiffany Habib at hti075@ hamptontalbots.org. Or contact their faculty advisor Shannon Roos at Roos@ht-sd.

If you have any questions or concerns regarding your rights as a subject in this study, you may contact

the Institutional Review Board (IRB) for Human Participants at Hampton High School.

I understand the purpose of my participation in this study, and I give consent that my responses may be used in this study.

Yes, I do give you permission. No, I do not give you permission.