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Length of Pretrial Detainment for Inmates with Mental Illness

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Walden University
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Abstract

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Maria E. Pereira-Sosa

MA, Marymount University, 2007

BA, Kean University, 2004

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

There has been an increase in the number of individuals with mental illness being housed in correctional facilities over the last 50 years. In this study, the length of pretrial detention was compared for inmates who have a mental illness and are compliant with psychiatric medications, inmates who have a mental illness and are noncompliant or not prescribed psychiatric medication, and inmates with no mental illness. I also examined if inmates who have a mental illness have less severe charges and if there was a difference in the classification of mental health diagnoses for inmates who are and are not compliant with psychiatric medications. The study used the closed charts of 427 male inmates from 1 county jail in New Jersey from the year 2016. The theoretical foundation of this study is Abraham Maslow's hierarchy of needs, as it is believed that the basic physiological and safety needs should be met in order to provide mental health treatment. A combination 1-way analyses of variance (ANOVA) and chi-squared analysis was used to examine the data. It was concluded that inmates with mental illness who are medication compliant are incarcerated significantly longer pretrial than inmates with no mental illness. It was also found that there was a difference in the types of charges received between those with and without a mental illness. Lastly, the study found that there was no significant difference between each of the classifications of mental illness when comparing inmates with mental illness who are and are not compliant with psychiatric medications. The implication for positive social change is the benefits to the inmates with mental illness and the correctional facilities, as it confirms that inmates with a mental illness require more tailored and treatment specific services for a longer period of time.

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Dedication

I would like to dedicate this dissertation to my family who has helped me stay motivated and focused over the years. Thank you to my parents for pushing me to always do my best and try my hardest. Thank you to my sister who reminds me that life needs a balance of responsibility and fun, and that both can be achieved. Thank you to my son who makes me realize that I need to be the best version of myself for him. Lastly, to my husband who was present for all the long nights, revisions, and missed outings because of having to work on my dissertation. Thank you for being my biggest cheerleader since the beginning. Your love and encouragement have carried me to the finish line.

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I would also like to thank Dr. Dennis Sandrock, who has become a mentor over the years and without him, this dissertation would not be possible. In the six years that I have known him, he has helped guide me with work and school decisions, and I am forever indebted to him for helping me secure my research site. Thank you for your support and guidance over the years, and for always being available to help.

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Chapter 1: Introduction to the Study

Background of the Study

In the past, individuals with mental illness were housed in psychiatric hospitals, but as time has progressed there has been a deinstitutionalization of the mentally ill and a steady rise in the number of individuals who are now housed in correctional institutions throughout the United States (Bloom, 2010). For a variety of reasons, including the closing of many of the state hospitals, change in state regulations, and a lack of services in the community, individuals who should be hospitalized are being arrested for misdemeanors and are being held at correctional facilities. Scheyett, Vaughn, and Taylor (2009) stated that this presents challenges to the legal system and correctional facilities, and in turn can cause further harm to the individual if they do not receive the appropriate services. When incarcerated in a jail facility, an individual may be awaiting sentencing or they can be serving a sentence that is less than 1 year (364 days or less). One specific challenge for the individuals who have not yet been sentenced is that they do not know for how long they will be incarcerated, adding stress to the inmates who have a mental illness, especially if they are not receiving the appropriate treatment (Mullins & Paler, 2012). This can also add stress to the correctional facility because they do not know how the inmate with the mental illness will react to their pretrial detainment and if they will decompensate while incarcerated in jail.

Over the years, there have been many studies that have publicized the increase in incarcerated individuals with mental illness (e.g., Bradley-Engen, Cuddeback, Gayman, Morrissey, & Mancuso, 2010; Constantine, Petrila, et al., 2010, Constantine, Robst,

Andel, & Teague, 2012; Lamb, Weinberger, & Gross, 2004; Lurigio & Swartz, 2006; Watson, Hanrahan, Luchins, & Lurigio, 2001), and in turn there have been more studies that have shown that it is important to provide mental health services to these individuals (e.g., Fellner, 2006; Floyd, Scheyett, & Vaughn, 2010; Lamb, Weinberger, & Gross, 2004; Lurigio & Harris, 2007; Lurigio & Swartz, 2006; Robst, Constantine, Andel, Boaz, & Howe, 2011; Scheyett, Vaughn, & Taylor, 2009; Youman, Drapalsi, Stuewig, Bragley, & Tangney, 2010; Young, 2002). One concern that has been noted is that many of the jail systems, just like state prisons, are run in various ways and involve differing approaches to care for individuals with mental illnesses (Floyd, Scheyett, & Vaughn, 2010). This means that someone with a mental illness may receive no treatment when they are incarcerated, or they may receive decent treatment. Lurigio and Swartz (2006) concluded in their study that one of the most important steps that a correctional facility can take is to screen each individual to see if they have any history of mental health services and may require mental health treatment once incarcerated. Mullins and Paler (2012) added that another important component is to have all jail staff, including civilian and correctional officers, trained in identifying basic mental health symptoms and knowing the steps that need to be taken to assist the inmate.

Although there has been extensive research to show the importance of identifying and providing treatment to inmates with a mental health diagnosis (Floyd, Scheyett, & Vaughn, 2010; James & Glaze, 2006; Lurigio & Harris, 2007; Lurigio & Swartz, 2006; Salina, Lesondak, Razzano, & Parenti, 2011; Scheyett, Vaughn, & Taylor, 2009; Spaulding et al., 2011; Wilper et al., 2009; Young, 2002), little research has been done to

show if there is a difference in the length of pretrial detainment for individuals who have a mental health diagnosis and are compliant with their psychiatric medication, those that have a mental health diagnosis and are noncompliant or not prescribed psychiatric medication, and those that are not receiving any mental health services (Christy, Otto, Finch, Ringhoff, & Kimonis, 2010; Constantine, Andel, et al., 2010; Kubiak, Essenmacher, Hanna, & Zeoli, 2011; Metraux, 2008; Young, 2002). Knowing if an inmate who has a mental illness spends more time in jail pretrial is important because it can lead to more stabilization earlier on in the incarceration for the inmate and possibly eliminate barriers to the timely and effective treatment of severe mental illnesses.

Problem Statement

Due to the increased number of individuals with mental illness in correctional settings and the decreased treatment that they are receiving due to deinstitutionalization, there has been a revolving door effect with inmates diagnosed with a mental illness (Rich, Wakeman, & Dickman, 2011). Being diagnosed with a mental illness can also have an impact on the capability of the individual to care for his needs and obtain the needed services to assist their case (Soderstrom, 2007). Not knowing how long an inmate diagnosed with a mental illness will be detained—especially those that are noncompliant with their psychiatric medications—is concerning, and the possibility that they are detained for a longer period of time than inmates with no mental illness can cause added stress (Mullins & Paler, 2012).

Draine, Wilson, Metraux, Hadley, and Evans (2010) studied if individuals with mental illness had different lengths of detainment when compared to individuals without

mental illness but concluded that further research needs to be completed to determine whether there is a connection between mental illness and length of stay. On the other hand, Young (2002) found that in a New York jail, the average length of time that an inmate with a mental illness spent on the special needs tier was only 5 days, but there was no further information on the overall length of pretrial detainment in jail. Axelson and Wahl (1992) concluded that jail was not the appropriate location for individuals who have a serious mental illness because they generally have less significant legal charges and they are more prone to spending more time incarcerated than inmates with no mental illness, but they were not specific in their findings. Floyd, Scheyett, and Vaughn (2010) interviewed family members and jail staff to gauge their views on incarceration and found that the jail personnel reported that on average, inmates with a mental illness were being incarcerated for mostly misdemeanors and that it felt like they were detained pretrial for longer periods of time than the general population. Unfortunately, this study was based on opinions and views and not data.

Some studies have included length of pretrial detainment as a category in their data comparisons, but still not enough is known regarding the possibility of differing lengths of pretrial detainment and how it can be affected by a mental health diagnosis and compliance with psychotropic medications. In this study I compared the length of pretrial detention for inmates who have a mental illness and are taking psychiatric medications, inmates who have a mental illness and are noncompliant or are not prescribed psychiatric medications, and inmates with no mental illness to analyze if there

was a difference, while also studying if inmates who have a mental illness have differing charges and differing classification of the mental illness.

For the purpose of this study, compliance with psychiatric medications means that the inmate took at least 75% of the prescribed doses of psychiatric medications during their pretrial incarceration. The examination of charges included comparing misdemeanor and felony charges. The different classifications of mental illnesses are from the Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5; American Psychiatric Association, 2013) classifications that included the diagnosis under schizophrenia spectrum and other psychotic disorders, bipolar and related disorders, depressive disorders, anxiety disorders, and paraphilic disorder.

Nature of the Study

I conducted a quantitative study with a correlational approach. I had no direct contact with the participants; instead, I gathered data from the inmates' medical and mental health charts at a local county jail in New Jersey. The facility in which the data were gathered provided consent to review their inmates' medical and mental health charts as long as the name and location of the facility was not included in the study. I gathered the data on inmates who left the county jail in 2016, and their charts were selected using random sampling. I assigned each inmate to one of the three corresponding groups that included inmates who have a mental illness and were compliant with psychiatric medication, inmates with a mental illness who were noncompliant or not prescribed psychiatric medications, and inmates with no mental health diagnosis. I also collected other data, such as if inmates were placed on a mental health watch/suicide watch during

pretrial detention, if there were any suicide attempts, housing locations within the jail including administrate segregation, charges, self-report of mental illness/psychiatric medications upon entering facility, reason for discharge, age, and race. I only sampled data for male inmates as they are more representative of the total incarcerated population, making it easier to gather data and easier to compare to previous studies.

In this study, I used a combination of one-way analyses of variances (ANOVA) and chi-squared analysis to examine the data. I used the ANOVA to examine the length of pretrial detainment to see if there was a difference between the three identified groups. I ran a chi-squared analysis to examine if there is a significant difference in the types of crimes between those with a mental illness and those without, and if there is a significant difference between the mental health classifications for inmates who are and are not compliant with their prescribed psychiatric medication.

Research Questions and Hypotheses

Research Question 1a (RQ1a): Is there a difference in the length of pretrial detainment for inmates who have a mental health diagnosis and are compliant with their psychiatric medication and those without a diagnosis or prescribed psychiatric medications?

Null Hypothesis ($H_0$1a): There is no difference in the length of pretrial detainment for inmates with a mental health diagnosis who are compliant with psychiatric medications and those without a diagnosis and are not on psychiatric medications.

Alternative Hypothesis ($H_1$1a): Inmates with a mental health diagnosis who are compliant with medications will have longer lengths of pretrial detainment when

compared to inmates with no mental health diagnosis and no psychiatric medications.

Research Question 1b (RQ1b): Is there a difference in the length of pretrial detainment for inmates with a mental health diagnosis and who are noncompliant with psychotropic medications and those with a mental health diagnosis that are compliant with psychotropic medications?

Null Hypothesis ($H_0$1b): There is no difference in the length of pretrial detainment for inmates with a mental health diagnosis who are noncompliant with psychotropic medications and those that have a mental health diagnosis and are compliant with psychotropic medications.

Alternative Hypothesis ($H_1$1b): Inmates with a mental health diagnosis that are noncompliant with psychotropic medications will be detained pretrial longer than inmates with a mental health diagnosis and compliant with psychotropic medications.

Research Question 1c (RQ1c): Is there a difference in the length of pretrial detainment for inmates with a mental health diagnosis who are noncompliant with psychotropic medication and those without a diagnosis and no prescribed psychiatric medications?

Null Hypothesis ($H_0$1c): There is no difference in the length of pretrial detainments for inmates with a mental health diagnosis that are noncompliant with psychotropic medication and those without a mental health diagnosis and no prescribed medications.

Alternative Hypothesis ($H_1$1c): Inmates with a mental health diagnosis who are noncompliant with psychotropic medication will be detained longer pretrial than inmates with no mental health diagnosis and no psychiatric medications.

Research Question 2 (RQ2): Is there a difference in the types of charges (misdemeanor vs felony) that are received when comparing inmates who have a mental illness and those that have no mental illness?

Null Hypothesis ($H_0$2): There is no difference in the types of charges received when comparing inmates who have a mental illness and those that do not.

Alternative Hypothesis ($H_1$2): Inmates with a mental illness are more likely to receive misdemeanor charges than inmates with no mental illness.

Research Question 3 (RQ3): Is there a difference in the diagnosis of inmates who are mentally ill and are medication compliant and those that are mentally ill but not currently on medications?

Null Hypothesis ($H_0$3): There is no difference in the diagnosis of inmates who have a mental illness and are medication compliant and those that have a mental illness and are not on medication.

Alternative Hypothesis ($H_1$3): There will be a difference in the diagnosis of inmates who have a mental illness and are medication compliant versus those that are not on medications.

Research Objectives

My objective with this study was to determine if there was a difference in the length of pretrial detainment for inmates when comparing those that have a mental health

diagnosis and are compliant with their psychiatric medications, those that have a mental health diagnosis and are noncompliant or not prescribed psychotropic medications, and those with no mental health diagnosis. There is limited research that shows if having a mental health diagnosis and/or being medication compliant can have an effect on inmates when they are in a county jail waiting to be released or sentenced. Although I collected several categories of information, the primary focus was on whether an inmate was given a mental health diagnosis by the mental health staff at the county jail, if the inmate was prescribed psychotropic medications and their compliance with the medication, and the amount of days that the inmate spent in the county jail before they were released or sentenced. I then compared this information to assess if there were any significant results and I shared it with the county jail.

Purpose of the Study

The purpose of this quantitative study was twofold. The first part of the study was to see if individuals who are diagnosed with a mental illness are being detained in county jails longer pretrial than those with no mental illness. The second part of the study was to see if individuals who are compliant and noncompliant/not prescribed psychiatric medications also have a different length of pretrial detainment. As stated earlier in this chapter, research has shown that there has been an increase in incarceration for individuals who are diagnosed with a mental illness, mainly due to deinstitutionalization. In this study, I aimed to look further and explore the nature of the inmates' psychiatric medications, their diagnosis, their medication compliance, and their charges so that there is a better understanding of the level of mental illness that is

entering the facility, hopefully leading to more stabilization during their pretrial incarceration.

Theoretical Base

The theoretical framework for this study was Abraham Maslow's hierarchy of needs, first developed in 1943 in his publication *Theory of Human Motivation* and expanded on over the years by Maslow in his other written works. The five stages of needs, from most essential up, are physiological, safety, love/belonging, esteem, and self-actualization. Maslow believed that physiological needs form the foundation and must be met before moving on to the other needs in the hierarchy.

I selected this theory because the first two sections of Maslow's hierarchy of needs, physiological and safety can be applied to inmates who are both mentally ill and non-mentally ill. Inmates who are mentally ill have a higher rate of being homeless when they are not incarcerated and therefore depend on the correctional facility to assist them in meeting their most basic needs. Hickley (1988) argued that without those basic needs being met, then the application of mental health treatment would not be as successful. Maslow's second need applies the most to the research questions posed in this study. Correctional facilities are often run down or overcrowded, placing inmates with mental illness in possibly dangerous conditions, leading to the opposite of Maslow's goal for safety. If the inmate who is mentally ill does not feel safe, then this affects their mental status and as a result, increases the amount of time that they spend incarcerated. By being aware of stressors, such as longer lengths of incarceration pretrial and the effects of

overcrowding, interventions can be implemented earlier in the incarceration process and inmates with mental illness can begin working on attaining self-actualization.

Operational Definitions

There are some terms that were used throughout this study that may require further clarification. Some of those terms are:

Deinstitutionalization: began in the 1960s and 1970s when the state mental hospitals began to close or limit the number of beds they had, leaving many mentally ill individuals with nowhere to go and therefore finding themselves in a correctional setting for various reasons. The correctional setting then becomes the new mental health hospital (Rich, Wakeman, & Dickman, 2011).

DSM-5 Classifications: the 22 classifications used to organize the different diagnosis categories in the DSM-5. For the purpose of this study, only diagnosis from the following five categories were included: sschizophrenia spectrum and other psychotic disorders, bipolar and related disorders, depressive disorders, anxiety disorders, and paraphilic disorder.

Felony: a crime of high seriousness that is punishable by death or imprisonment for more than one year. Some examples of felonies are murder aggravated assault, kidnapping, rape, arson, and burglary.

Length of pretrial detainment: the number of days that an inmate is housed in the jail facility, before they are released, bailed out, or sentenced.

Misdemeanor: a crime of low seriousness that is punishable with incarceration for

one year or less. Some examples of misdemeanors are petty theft, simple assault, disorderly conduct, and trespassing.

Assumptions

Several assumptions were made in regard to the functionality of the study. The first was that the mental health diagnosis that the inmates were given by the mental health staff was correct and aligned with the symptoms that the inmate presented. Along those lines, another assumption was that if the inmate was prescribed a psychotropic medication, then the best available medication was prescribed to treat the presenting symptoms.

Another assumption was that all those who require mental health services and/or psychotropic medications were seen by the mental health department. Therefore, if the inmate required special housing, a court mandated evaluation, or psychotropic medications, the assumption was that they were seen by the mental health department and it was noted in their chart.

Lastly, I assumed that the best methodology was chosen to solve this research problem. A quantitative approach was used because there was no direct contact with the participants and all data were gathered from the inmates' medical and mental health charts at a local county jail. There was no direct contact with the participants to ensure that there were no ethical boundaries that could be crossed. Individuals who are incarcerated may feel that they are obligated to participate in a study or they may be under the impression that the study may benefit their case, so for these reasons it was best to complete a chart review to gather the needed data.

Limitations

This study had several limitations. The first was that I used data from only one local county jail in the state of New Jersey. This can limit the diversity of the inmate population, it can affect the quantity of inmates that have a mental illness, and it can also affect the diversity in the charges received. Another concern was that I used secondary data gathered by the mental health professionals and correctional staff, and therefore it could be subject to errors or incomplete data. If there were too many samples with missing data, it may have affect the overall results of the study. Another concern was that I only looked at male inmates when comparing mental health diagnosis, medication compliance, and length of pretrial detainment. Also, I only gathered data from inmates who left the county jail in 2016. Although there was the potential that this limited the number of inmates included in the sample size, ultimately affecting the end result, this was not the case.

The last limitation was other occurrences that have an impact on the length of pretrial detainment that are not related to an inmate's mental health diagnosis. Many of these events occur in the court and can include the postponement of court dates, holidays or vacation schedules that cause court scheduling delays, or the progress of the trial. Other occurrences are proper working equipment in the jail for video conferencing or proper transportation/staffing to transport the inmate to their scheduled court date.

Scope and Delimitations

This study was delimited to using only inmates who have left the county jail in 2016. I felt that the quantity of data gathered would be too cumbersome for the scope of

this study, and therefore I limited it to those who left in 2016. In regard to generalizability, the data gathered was representative of a full year of inmates who left the facility and therefore the results of the study were applicable to other jail facilities.

Another delimitation was that for an inmate to be considered as having a mental illness, then he must have had a diagnosis provided by the county jail psychologist or psychiatrist, and that diagnosis must fall under the DSM-5 (American Psychiatric Association, 2013) classifications of schizophrenia spectrum and other psychotic disorders, bipolar and related disorders, depressive disorders, anxiety disorders, and paraphilic disorder. The inmate could have a co-occurring disorder or multiple diagnoses, but they must have had a psychiatric diagnosis that falls into those five classifications. Again, this was so that the amount of data gathered did not become too cumbersome for this study. This also served as a separation between inmates whose mental illnesses were severe enough that they required treatment during their incarceration and those that did not seek services. Inmates who identified as having a mental health diagnosis upon entering the facility or having a history of prescribed psychotropic medications were not considered as having a mental illness unless they were seen and diagnosed by the staff from the mental health department. Although this was not a variable of the study, the data were gathered in order to gauge how often self-reported diagnosis were or were not affirmed by the mental health staff. The policy of the county jail in which I gathered the data stated that an inmate cannot receive mental health services without being seen by a mental health professional. Therefore, I

concluded that if the inmate required mental health services while incarcerated, they were seen and provided treatment prior to their release or sentencing.

Significance of the Study

This study contributed to the existing research that shows that there is a difference between the length of pretrial detainment of inmates with and without a mental illness. I intended to show that inmates who are diagnosed with a mental illness and were noncompliant or not prescribed psychiatric medications were detained for longer periods of time pretrial than those who were compliant and those who did not have a mental illness. The number of individuals being diagnosed with a mental illness continues to increase in the state of New Jersey, but there does not appear to be an increase in the number of resources available in the community (NAMI, 2010). Rather, many individuals are being arrested and housed in correctional facilities instead of being taken to hospitals for stabilization (Lamb, Weinberger, & Gross, 2004; Wilper et al., 2009), especially since so many psychiatric hospitals have closed. The correctional facilities have become the new psychiatric hospitals, causing more stress both to the individual and the staff at the correctional center. There was also a concern that when the individual has a mental illness and was prescribed psychotropic medications during their pretrial detainment at the correctional center, this could delay his case because he may not be stable to attend court or he may not be mentally capable of participating in his own defense. By making the county aware of possible differences in length of pretrial detainment, it could encourage them to look at other options in helping individuals with mental illness prior to incarceration. It could also allow them to better prepare

themselves and their staff in assisting the individuals with mental illness if they do indeed spend more time incarcerated in the county jail.

Summary

There has been extensive research completed focusing on the importance of the treatment of clients with mental health needs in correctional settings (Constantine, Robst, Andel, & Teague, 2012; Lamb, Weinberger, & Gross, 2004; Wilper et al., 2009), but few have looked at the impact of mental health treatment and psychotropic medications on the length of pretrial detainment in comparison to those without an identified mental illness (Draine, Wilson, Metraux, Hadley, & Evans, 2010). How correctional facilities have become the new psychiatric hospitals due to deinstitutionalization and therefore have seen an increase in the number of individuals being incarcerated with a mental illness will be explored further in Chapter 2. These individuals often require extra services, such as special housing or psychotropic medications, putting an extra strain on the correctional facility. Understanding if there is a difference in the length of pretrial detainment could assist the correctional facility in making appropriate arrangements and providing those individuals with extra resources. Hence, this study filled this gap by focusing on if having a psychiatric diagnosis and being prescribed a psychotropic medication in a county jail has an impact on the length of pretrial detainment when compared to those without a mental health diagnosis.

Chapter 2: Literature Review

Literature Search Strategy

I conducted a literature review on the length of pretrial detainment for individuals who are incarcerated in county jails using Walden University's online databases. These databases included Thoreau Multi Database, EBSCOhost, ProQuest, PsycINFO, PsycArticles, and the Walden University database of doctoral dissertations. The key words and phrases that I originally searched included l*ength of stay, mental illness, mental disorders, jail, prison,* and a combination of these terms. Primarily, I only searched peer-reviewed literature. The scarcity of data specifically on the topic of pretrial detainment prompted me to expand the literature search. Using the same databases, I also searched the following key words and phrases: *detainment, incarceration rates, deinstitutionalization, psychiatric medications, suicidality,* and *mental health courts.* I also found articles using the reference lists from other articles.

Theoretical Foundation

The theoretical foundation of this study was Abraham Maslow's hierarchy of needs, which he first identified in his 1943 publication *Theory of Human Motivation.* Maslow's original belief was that a person's desire to grow was related to their unmet needs. Maslow believed that the needs that have not yet been met are what influences human behavior and once those needs are met, then they are no longer a reason to keep growing. Maslow assumed that people want to be the best person they can be and will strive to accomplish what they are capable of (Jones, 2004). He demonstrated his theory by identifying five needs that he arranged in a linear fashion and that are often presented

in a pyramid format. Maslow believed that lower level needs must be met before moving up through the pyramid. It is important to note that if progress was made up the pyramid and a higher need was met, but a lower need again becomes a problem, then the focus will return to the lower need again before re-progressing up the pyramid (Jones, 2014).

At the base of Maslow's hierarchy of needs is the physiological need that focuses on water, air, food, sex, and shelter. These all focus on survival and are the strongest and most motivating needs identified by Maslow (Greene & Burke, 2007). After these needs are met, the individual can move on to the next need, which is safety. Maslow identified this as creating an environment that is safe, stable, and secure. This includes being free of fear from both physical and psychological dangers (Hilkey, 1988; Jones, 2014). Once both these needs have been reached, the next level is social needs, which includes relationships with family, friends, and being a member of a group. In prisons this can often mean being a gang member and identifying the gang as family (Bassett, 2016). The fourth need is the esteem need, which Maslow identified as an individual's evaluation of themselves as confident and valuable. If this need is pushed aside, then the individual can have feelings of inferiority and helplessness (Hilkey, 1988). The fifth and final need is self-actualization, when an individual finds peace and satisfaction with whom they are and their capabilities. Maslow used the term *being needs* in reference to the need for self-actualization and the term *deficit needs* to refer to the other four needs below self-actualization (Greene & Burke, 2007).

Maslow's hierarchy of needs is not the most popular theory to use in the field of corrections, but some researchers have identified the potential of this theory with

incarcerated individuals (Bassett, 2016; Greene & Burke, 2007; Hilkey, 1988; Jones, 2004). Jones (2004) identified that correctional and mental health staff in a corrections setting are often in a position of helping inmates achieve the different levels of needs by providing the basic needs, being consistent, and being supportive. Hilkey (1988) also stated that Maslow's theory can be directly applied to the prison environment and once the basic needs are met, this can allow for mental health treatment. Bassett (2016) used Maslow's theory to demonstrate the negative impacts of solitary confinement on mentally ill inmates and how it can be seen as a violation of the 8th Amendment.

I chose Maslow's hierarchy of needs was chosen for this study because of the bottom two needs, physiological and safety needs. These are often two needs that are identified by both inmates and individuals with mental illness. Inmates who are mentally ill have a higher rate of being homeless and providing for their basic needs, which in turn can lead to their incarceration (Constantine et al., 2010; Soderstrom, 2007). Often this can cause them to remain incarcerated longer pretrial because they are unable to pay their bail or are unable to provide an address to be released on their own recognizance. Once they are incarcerated, Hilkey (1988) commented that the individual's physiological needs will now be met, as they will be provided with food, shelter, and water. After this need is the second: the need for safety. This stage is difficult to manage in correctional facilities. The main concern was that correctional facilities are often run down and there continues to be an influx of individuals being arrested, which adds to more unsafe conditions. This adds to a deterioration in the mental health of some individuals while they are incarcerated, leading to the opposite of Maslow's goals. Therefore, I felt this applied to

the research questions identified in this study because the hypothesis was that inmates with a mental illness have a longer length of detention pretrial, possibly causing deterioration in their mental health. Knowing if an inmate who has a mental illness spends more time in jail pretrial is important because it can lead to more stabilization earlier on in the incarceration, and when applying Maslow's hierarchy of needs, it increased their opportunity to achieve self-actualization.

Mental Health and the Correctional Facility

Over the last 50 years, the number of individuals with a mental health diagnosis appearing in the correctional system has increased while the number of individuals in the psychiatric hospitals has decreased (Whitmer, 1980; Bloom, 2010). The county jail and prison setting has become the default treatment location for many individuals with mental illness in the community (Brandt, 2012; Lurigio & Harris, 2007). One concern was that there did not seem to be an accurate reporting of the number of incarcerated individuals who also have a mental illness. The National Alliance on Mental Illness (National Alliance on Mental Illness [NAMI], 2008) reported that in 2008, 14% of the male population incarcerated in a county jail was diagnosed with a serious mental illness while James and Glaze (2006) reported that in 2005, 64% of jail inmates were diagnosed with a mental health problem.

The United States has the highest prison population rate in the world (Weiss & MacKenzie, 2010; Rich, Wakeman, & Dickman, 2011; Freudenberg, Daniels, Crum, Perkins, & Richie, 2008), making treatment and services an important component of incarceration. At the end of December 2013, adults were sentenced and imprisoned at a

rate of 623 per 100,000 in the United States, with Louisiana having the highest rate of 1,114 per 100,000 and Maine having the lowest rate with 185 per 100,000 (Carson, 2014). The most common mental health services provided in county jails are intake evaluations, crisis interventions, suicide evaluations and preventions, and the prescription of psychiatric medications (Bradley-Engen, Cuddeback, Gayman, Morrissey, & Mancuso, 2010; Brandt, 2012; Kupers, 2015; Young, 2002).

A majority of the research has found that deinstitutionalization is one of the primary reasons for the influx of individuals with mental illness in local jails over the last several decades (Hutchins, Frank, & Glied, 2011; Lamb, Weinberger, & Gross, 2004; Lurigio, 2000; Rich, Wakeman, & Dickman, 2011; Whitmer, 1980). On the other hand, some research indicates that it is not an increase in the rate of admissions per se, but that over the years, the number of people who are diagnosed with a mental illness has increased, leading to higher rates of individuals with mental illness in correctional settings (Bradley-Engen, Cuddeback, Gayman, Morrissey, & Mancuso, 2010; Skeem, Manchak, & Peterson, 2011).

The criminal justice system has inherited this problem and they have made adjustments with their policies, but jails continue to be an inappropriate location for individuals who have a serious mental illness (Brandt, 2012; Lurigio & Harris, 2007). The stressful demands and regulations of the correctional facility can cause further harm to the individual if the appropriate services are not received, which in turn presents new challenges to the legal system and correctional facilities (Brandt, 2012; Scheyett, Vaughn, & Taylor, 2009). Lastly, the services that are received within the correctional

facility can be unpredictable and the length of pretrial detainment varies by individual, also adding to the inconsistencies and inappropriateness of having individuals with mental illness being cared for by correctional facilities (Pope, Smith, Wisdom, Easter, & Pollock, 2013).

Deinstitutionalization

The concept of the modern penal incarceration as a form of criminal punishment began in late 1700s, early 1800s in the United States, and throughout the decades, the number of individuals being incarcerated has been steadily increasing. Western (2007) reported that it was during the 1970s when the United States began to see an increase in the number of individuals incarcerated and that in the 1990s, due to political pressures, new laws were passed that increased the length of incarceration for certain offenders. The U.S. Department of Justice reported a slight decline in the number of incarcerations from 2008 to 2011 in county and city jails, with a slight increase from the years 2011 to 2012. The average number of individuals incarcerated in a county or city jail in June 2012 was 735, 983 (Minton, 2013). It is also important to note that between 2011 and 2012 there was an estimated 11.6 million individuals admitted into the county and city jails throughout the United States (Minton, 2013).

As the number of individuals incarcerated, so has the number of individuals incarcerated with a mental illness (Bradley-Engen, Cuddeback, Gayman, Morrissey, & Mancuso, 2010; Lamb, Weinberger, & Gross, 2004; Lurigio & Harris, 2007; Morrissey et al., 2006), especially within the last 50 years with the deinstitutionalization of individuals with mental illness. Deinstitutionalization began in the 1960s and 1970s when the state

mental hospitals began to close or limit the number of beds they had, leaving many mentally ill individuals with nowhere to go. Community mental health programs were supposed to help those being released from psychiatric hospitals receive treatment but because of budget cuts, the programs never functioned as planned (Hutchins, Frank, Glied, 2011; Kupers, 2015; O'Keefe & Schnell, 2007). Over the years, due to the changes, many individuals found themselves in a correctional setting for various reasons, and at times, due to their mental state, they were not aware that they had committed a crime (Morrissey et al., 2006). This phenomenon led correctional facilities to now be primarily responsible for assisting individuals with mental illness in the United States, rather than psychiatric hospitals (Rich, Wakeman, & Dickman, 2011).

The deinstitutionalization of state hospitals is just one of the several reasons why individuals with a mental health diagnosis find themselves involved with the legal system. Others believe the lack of community services available to the individuals with mental illness, such as housing and mental health programs, to be a factor (Lurigio & Harris, 2007; Watson, Hanrahan, Luchins, & Lurigio, 2001) along with the "War on Drugs" and changes in the criteria for the psychiatric defense (Brandt, 2012; Kupers, 2015). The "War on Drugs" had an impact because it called for longer sentencing of low level drug offenders, many of which have a dual diagnosis (Kupers, 2015). The effect that poor housing options and homelessness has on increasing incarceration rates is discussed further in the paper. A concern with the lack of services in the community is that when individuals enter the legal system, they have access to a variety of services, including mental health counseling and psychiatric medications, but possibly only for a

limited time before they return to the community. This causes a vicious circle that keeps the individual coming back to jail and only receiving temporary assistance (Kubiak, Essenmacher, Hanna, & Zeoli, 2011; Watson, Hanrahan, Luchins, & Lurigio, 2001).

The Legal Element and Inmate Rights

The research shows that the number of individuals with mental illness who have been incarcerated has been increasing over the years (Bradley-Engen, Cuddeback, Gayman, Morrissey, & Mancuso, 2010; Morrissey et al., 2006; Western, 2007). As previously mentioned, the idea of penal incarceration has been in existence for several hundred years, but until recently those incarcerated did not have many rights. Today, individuals who are incarcerated pretrial and are serving time have a constitutional right to receive health care, including mental health care, required by the Eighth Amendment of the U.S. Constitution. The Amendment says that the government cannot impose "cruel or unusual" punishment on an individual, therefore ensuring that they have the right to receive some form of treatment while they are incarcerated. Pretrial inmates' rights, like those found in county jails, are based on the 14th Amendment which says they cannot be deprived of liberty and property without due process. There have been several cases that helped in creating these policies, including: *Estelle v. Gamble* (1976) that established the standard for medical services provided to inmates and *Ruiz v. Estelle* (1980) that reinforced the importance of providing mental health services. Scheyett, Vaughn, and Taylor (2009) identified that inmates who are diagnosed with a mental illness are the most vulnerable and should receive proper treatment. Unfortunately, there are still some pretrial incarcerated mentally ill individuals who are incarcerated and are not receiving

the proper treatment, or in a few cases, no treatment at all (Watson, Hanrahan, Luchins, & Lurigio, 2001).

Jail versus Prison System

When discussing the legal system and the different correctional facilities, it is important to distinguish between a jail and a prison, as the inmate population is different, and in most cases the research cannot be generalized to both systems. A jail is a short-term incarceration facility that receives and process many more people than prisons (Marks & Turner, 2014) and the amount of time that an inmate spends in jail is based on external factors, such as the ability to post bail or waiting on a judge to release or sentence them (Dvoskin, Spiers, Metzner, & Pitt, 2004). A prison is larger and tends to be more violent and chaotic (Jung, Spjeldnes, & Yamatani, 2010). Prisons and jails are run differently from each other and there can be little cohesion between the facilities, even within the same states.

Although jails and prisons are different in regard to how long individuals are housed there and how they are run, the need for mental health services is evident in both types of facilities. As mentioned, individuals who are in prison are serving longer sentences and therefore have more opportunities to access treatment, whether it is counseling, psychotropic medications, or simply moving to the mental health unit. Individuals in jail generally have less access to different treatment options in part because of the uncertainty of time they will spend incarcerated pretrial in the jail facility, at times making it harder for an individual in jail to receive the appropriate treatment.

Description of the Incarcerated Population

One way that mental health and correctional staff have been able to identify individuals that are more prone to having a mental health diagnosis is by analyzing the patterns of incarceration for different ethnic groups (Youman, Drapalski, Stuewig, Bagley, & Tangney, 2010) and understanding that individuals with mental illness are more prone to recidivism. Statistical data shows that 87% of individuals incarcerated are male, and of those 46% are White, 37% are African American, and 15% are Hispanic (Minton, 2013).

There is some debate over which ethnicities requests mental health services the most. Some found that once incarcerated, Caucasians and African Americans have the same probability of requesting mental health services, such as counseling and psychotropic medications (Schnittker, Freese, & Powell, 2000; Youman, Drapalski, Stuewig, Bagley, & Tangney, 2010). Others reported that Caucasian inmates are more likely than other ethnicities to receive more services (James & Glaze, 2006; O'Keefe & Schnell, 2007; Soderstrom, 2007, Kaba et al., 2015). Although the research varies on who requests mental health services with more frequency, the important thing to note is that it is affecting all ethnicities that are incarcerated and that these services are needed. It is also important to make correctional and mental health staff aware of the variability so that if they see any concerns, they can help the individuals make the request to be seen by the mental health department.

Other research has found some other identifying markers for individuals who are more likely to be in a county jail and need mental health services, with the most common

being homelessness and a history of prior psychiatric hospitalizations. Constantine et al. (2010) found that males who were homeless and have previous involuntary psychiatric hospitalizations are not only at a higher risk of being incarcerated, but more likely to remain incarcerated for a longer period of time. Soderstrom (2007) found that individuals who are poor and often homeless, and who are educationally and/or cognitively challenged are also more likely to need mental health services when they are incarcerated. Fisher et al. (2002) found that individuals with a mental health diagnosis and history of incarceration are more likely to have been psychiatrically hospitalized in the past than just psychiatric patients with no history of incarceration. That being said, research has also found that when individuals are receiving mental health services they have a lower rate of incarceration and that the following months right after a psychiatric hospitalization there is a modest reduction in the probability of being arrested (Constantine, Robst, Andel, & Teague, 2011; Robst, Constantine, Andel, Boaz, & Howe, 2011).

Another concern is that the likelihood of being incarcerated increases for individuals with a mental health diagnosis as they become older, while it decreases for individuals without a mental illness in the community (Constantine et al., 2010; Cox, Morschauser, Banks, & Stone, 2001). This suggests that individuals with a mental health diagnosis have higher rates of recidivism and a harder time staying out of jail and in the community due to not being able to secure the necessary services as they age. This further demonstrates how it can be possible for individuals with a mental health diagnosis to spend more time incarcerated pretrial than those individuals without a diagnosis.

Along the same lines, there is an increased number of older incarcerated individuals with mental illness because of their frequent arrest rates and of the longer sentences that are being imposed by the courts with each incarceration (Soderstrom, 2007).

The Role of the Police Officer

It can be hard for individuals with mental illness to get adequate services in the community, and many police officers are aware of the gap in mental health services, which has led to an increased involvement of individuals with mental illness with the legal system. Some police officers prefer to bring an individual with a mental illness directly to the correctional facility rather than to attempt to get services in the community at the local hospitals (Kubiak, Essenmacher, Hanna, & Zeoli, 2011; Torrey, 1995; Watson, Hanrahan, Luchins, & Lurigio, 2001). Police officers have become frustrated with the long waits at the hospitals, only to then be turned away when the individual does not meet the criteria for admission. Many officers have chosen to bring the individual directly to the correctional facility in hopes that once admitted, the individual will have access to the needed mental health treatment (Fisher et al., 2002; Lamb, Weinberger, & Gross, 2004; Lamberti & Weisman, 2004; Watson, Hanrahan, Luchins, & Lurigio, 2001). The Cook County Jail in Chicago, Illinois is considered the largest mental health hospital and they report that approximately one out of four individuals that is brought to them has a mental illness (Ford, 2015). The police officers in that county have the choice to either take an individual with a mental illness home, to a hospital, to a shelter, or to jail.

Another concern is that when police officers respond to a call, they may not be aware that an individual has a mental health diagnosis. The individual may be in a

psychotic state, but because the police officers may have not been properly trained, they may think that the individual is trying to give them a hard time or resisting arrest, and they may place themselves and the individual in greater danger (Lamberti & Weisman, 2004). The more familiar police officers become with the symptoms of different mental health diagnosis, the more likely they will be able to assess the situation safely, and make the decision whether the hospital or jail is the better option (Arvanti et al., 2008; Lamb, Weinberger, & Gross, 2004).

Types of Mental Health Services Provided

The most important step in addressing the need for mental health services is ensuring effective screening when an individual enters the correctional facility (Dvoskin, Spiers, Matzner, & Pitt, 2004; Lurigio & Swartz, 2006; Maue, 2006). The second most important step is to ensure that the mental health and criminal justice staff is properly trained (Dvoskin, Spiers, Matzner, & Pitt, 2004; Lurigio, 2000; Maue, 2006). Some of the common services provided in the county jails are intake screenings, mental health evaluations, crisis intervention, short term treatment, and psychiatric medications (Bradley-Engen, Cuddeback, Gayman, Morrissey, & Mancuso, 2010; Brandt, 2012; Kupers, 2015). Treatment can also include suicide prevention, case management, counseling, and discharge planning, as each facility is different. In some facilities, mental health counselors or social workers provide all the services except prescribing psychiatric medications. The psychiatrist is then in charge of prescribing the medications and following up with the individual as needed. The presence of a psychiatrist can also vary from location to location, as some facilities may have a psychiatrist who is

responsible for all the mental health services and in other locations the psychiatrist might only be on site one day a week, or only available via teleconference. Lastly, in smaller jail facilities, the individuals may have to be transported to an outside provider to receive mental health treatment because the facility does not have mental health providers.

Psychiatric Medication

Psychiatric medications are prescribed in a large number of jail facilities to help those with a mental health diagnosis to stabilize their symptoms and better adjust to their incarceration. They can also be prescribed to individuals who do not have a mental illness, but are struggling with the stress of incarceration (Dvoskin, Spiers, Matzner, & Pitt, 2004). Pope, Smith, Wisdom, Easter, and Pollock (2013) found that in their study, 70% of the people they interviewed reported receiving psychotropic medication while only 8.8% reported having meaningful therapeutic relationships.

There are several ways in which an individual can be referred for mental health services and psychiatric medication. They include a history of medications in their medical records, the individual indicates they have taken psychiatric medications in the past during their intake, and/or the correctional staff notices that the individual may benefit from a referral due to their behavior during intake or during their pretrial incarceration (Dvoskin & Spiers, 2004). If the individual is only referred for psychiatric medication, the psychiatrist completes an assessment with the individual and makes a determination if the individual would benefit from the available medications. A prescription is then written and the medication is administered by a nurse. It then becomes the individual's responsibility to present themselves during medication times to

take their medication daily. This can become a concern because individuals that are actively psychotic can be in denial that they have a mental illness and can refuse to take their medications. Some other concerns are that the individual may not take their medication every day for a variety of reasons, such as being too tired or out of the tier at the time the nurse comes around with the medication cart or they may take their medication when given by the nurse, but they may not swallow it, hiding it in their mouth to dispose of it later. This becomes a concern because it causes the medications to not have the full effect and prevents the individual from receiving the full benefit of the medication.

A concern within the correctional facilities is that individuals who do not have a mental illness may pretend to have symptoms in order to gain access to psychiatric medications. They may want to sell the medication, abuse it, or in some cases they may want to appear mentally ill in hopes that it will help their legal case (Dvoskin & Spiers, 2004; Dvoskin, Spiers, Matzner, & Pitt, 2004). The psychiatrist must work with the mental health staff and correctional staff to make the appropriate assessment when determining if the individual truly requires psychiatric medications.

Typical Arrest Charges

Research has found that inmates who have a mental illness are primarily incarcerated for minor offenses or misdemeanors (Axelson & Wahl, 1992; Soderstrom, 2007; Constantine et al., 2010) and are sometimes subjected to inappropriate arrests. These offenses can include trespassing, disorderly conduct, and disturbing the peace. Men with a mental illness and a history of being involuntarily placed in a psychiatric

hospital have a higher prevalence of being arrested for a misdemeanor, while younger males with no history of a mental illness or involuntary psychiatric hospitalization are more likely to be arrested for felony charges (Fellner, 2006; Constantine et al., 2010). Once they are arrested, individuals with mental illness may then have a harder time paying their bail, even lower bails for misdemeanor charges, as many of them are homeless.

As indicated earlier, the United States has the highest rate of incarceration when compared to other nations. Weiss and MacKenzie (2010) felt that this is because the United States prefers to punish the individual by sentencing them to a specific amount of time instead of offering them a program or requiring fines like other nations. In the last few years, some States have attempted to make changes to the way they approach individuals with a mental health diagnosis who are involved with the legal system. These States have created mental health courts which are a special court system that attempts to help individuals with a mental health diagnosis by referring them to mental health and substance abuse services in the community or with being given a shorter sentence. These courts have had some success in preventing individuals with mental illness from having unnecessarily long pretrial incarcerations (Christy, Poythress, Boothroyd, Petrils, & Mehra, 2005), but unfortunately, it is still fairly new in the States that have implemented it and therefore it has not yet benefitted a large majority of the individuals with mental illnesses.

Variance in Mental Health Treatment

A mental health diagnosis can have a tremendous impact on an individual when they are not receiving treatment during their pretrial incarceration (Mullins & Paler, 2012). There are many concerning factors that affect individuals every day when they are incarcerated pretrial. When a mental health diagnosis is added to the mix, things become more difficult for the individual and the correctional facility. One of the main concerns is that when individuals are held in jail pretrial, they do not know how long they will remain incarcerated (Mullins & Paler, 2012). This adds to their stressors and anxiety, on top of the incarceration and their diagnosis.

When an inmate is in jail, they have not yet been sentenced, so they can be detained anywhere from a few hours to a few years waiting to be bailed out or for a determination on their case by the courts. Axelson and Wahl (1992) found that an inmate diagnosed with psychotic disorder spent an average of six and a half more time overall in a county jail than an inmate with no mental illness. They also found that the inmates who were referred to the mental health unit, but did not have a diagnosis of psychosis were more likely to be incarcerated an average of four and half times longer than individuals with no mental health diagnosis. Other concerns in relations to a jail setting that affected individuals diagnosed with a mental health disorder are the stressors of being in segregation (Bonner, 2006, Fellner, 2006), the increased and consistent noise, and the confusion (Axelson & Wahl, 1992). These are concerns that have been present since the development of correctional facilities.

Lastly, it is important that the correctional staff is aware of any symptoms that the individual may be exhibiting, so that the appropriate steps can be taken to receive the appropriate treatment. One example is that if the inmate begins to become unaware of their surroundings and who they are, they can pose a risk to themselves or others, including the correctional officers. If the correctional facility can no longer treat them, then it is important that the inmate be transferred to a different setting, such as the local hospital (Mullins & Paler, 2012).

Housing Locations within the Correctional Facility

Floyd, Scheyett, and Vaughn (2010) found that correctional facilities are struggling with identifying where and how to house the increased number of individuals incarcerated pretrial with a mental illness. Some facilities treat the individuals with mental health needs the same as the non-mental health individuals, housing them in the same areas, and expecting them to follow the same rules and procedures (Fellner, 2006; Torrey, 1995). This is concerning for the individuals who are actively psychotic or in a depressive state, as they can appear to be noncompliant with the rules and regulations of the facility. In the correctional facilities that have fewer mental health services and less training on mental health diagnosis, individuals that have a mental health disorder can be punished unnecessarily by spending extra time in lock or losing certain privileges for appearing to be noncompliant. Some research has found that some facilitates are placing individuals with a mental health disorder in segregation more frequently than others because of their noncompliant behaviors (Dvoskin & Spiers, 2004; Fellner, 2006; Lamberti & Weisman, 2004; Metzner, 2007).

Some correctional facilities recognize the need to house individuals with mental illness separately and in the least restrictive environment possible, such as New York and Ohio (Dvoskin & Spiers, 2004) and Florida (McPherson, 2008) where they have mental health units. They have established separate housing units so that they are not placed with the general population (Dvoskin & Spiers, 2004; Metzner, 2007), and therefore can be better monitored. The housing units have a variety of names throughout the country that range from residential treatment unit, to mental health unit, to protective environment. As mentioned before, each jail facility is run differently and each facility has a different definition of what their mental health unit consists of. Some facilities have incorporated the unit to be like general population, where the individuals have a common area and are out of their cells for majority of the day. Others have modeled their unit like the segregation unit and the individuals with mental illness are kept in their cells an average of 23 hours with one hour out of their cells to shower, make phone calls, and interact with others via their cell doors. There are also facilities that have a combination of the two.

Administrative segregation. The use of administrative segregation for inmates with mental illness and those non-mentally ill has received a lot of criticism (Dlugacz, 2014; O'Keefe et al., 2013). Administrative segregation (commonly referred to as Ad Seg) is when an inmate is housed in a separate location, generally alone and locked in their cell for 23 hours. The doors can be made of steel and have electronic sliding features to prevent communication between inmates and to limit the amount of contact with correctional officers. The activities out of cell are generally limited to showering,

yard time, and other needed appointments within the facility. Some of the concerns are if inmates with mental health diagnoses are being inappropriately housed in administrative segregation or if the solitary confinement and sensory deprivation of administrative segregation is causing the inmates to have increased mental health symptoms. Another concern is that many times the facility makes a determination of who is placed in administrative segregation, and they do not confer with the mental health staff (Lanes, 2011).

There are some concerns with the research that has been completed on the impact of administrative segregation on inmates, the first being that there is not enough research done to truly determine if there is a significant impact (Dlugacz, 2014; O'Keefe, 2007; Lanes, 2011; Zinger, Wichmann, & Andrews, 2001). The second concern is that facilities use different terms to define similar services, making it hard to generalize to just administrative segregation populations (Zinger, Wichmann, & Andrews, 2001). Some of the terms used by the facilities are administrative segregations, dissociation isolation, seclusion, protective custody, and solitary confinement. Another concern is that much of the research completed on the impact of administrative segregation is completed at supermax prisons (Lane, 2011; O'Keefe, 2007), again making it harder to generalize to less secure prison facilities and especially to jail settings.

Zinger, Wichmann, and Andrews' study was the most comprehensive empirical review on the impact of administrative segregation on inmates when it was completed in 2001. They found that inmates who were segregated identified as having more internalized and psychiatric symptoms than inmates who were non-segregated over a 60

day stay in administrative segregation. Inmates in administrative segregation also showed more symptoms of depression and anxiety than inmates who were non-segregated. O'Keefe et al. (2013) found similar results with their study, but they also found that those classified as not having a mental health diagnosis in administrative segregation had more mental health symptoms than the inmates with no mental health diagnosis in administrative segregation. Research also shows that inmates with a mental illness were disproportionately represented in administrative segregation and that mental illness was the third strongest predictor of being placed in administrative segregation, the first and second respectively being involvement in a gang type group and being male (O'Keefe, 2007). This raises concern, as it was previously stated; inmates in administrative segregation have less access to resources such as mental health services and experience more sensory deprivation due to their 23-hour confinement, which can lead to deterioration in their condition.

One question that is often raised in administrative segregation research is whether the inmates in administrative segregation already had mental health concerns prior to their placement or if their placement in administrative segregation is the cause for the presence of their mental health concerns (O'Keefe et al., 2013; Zinger, Wichmann, & Andrews, 2001). Zinger, Wichmann, and Andrews (2001) found that there was no deterioration in mental health for inmates in administrative segregation and hypothesized that the inmates were able to adjust well to the confinement or did not perceive the confinement as a stressful situation. O'Keefe (2007) noted that inmates in administrative segregation differed from inmates who were non-segregated from the beginning when

comparing their criminal history and the behaviors that they exhibited during their incarceration. As previously expressed, research also shows that even the inmates who are non-mentally ill in administrative segregation have more symptoms than those in general population (O'Keefe et al., 2013). It would appear that many of the inmates that are placed in administrative segregation, whether previously diagnosed with a mental illness or not appear to have higher rate of mental health symptoms.

Suicidality

Suicide is an important component when discussing mental health and the correctional setting because it is the leading cause of death in the jail system (Cox & Morschauser, 1997; Cummings & Thompson, 2009; Kaba et al., 2014). Although there is also an increased amount of suicide deaths in state prisons, the number in the local county jails is higher for several reasons. Some of the reasons are that when an individual is in jail, they are initially afraid of the incarceration, they are overly concerned with not knowing how long they will be there, and they can be withdrawing from drugs and alcohol (Cox & Morschauser, 1997; Cummings & Thompson, 2009; Dvoskin, Spiers, Matzner, & Pitt, 2004;). Individuals in jail are at the highest rate of attempting suicide within the first 24 hours of their admissions to the jail facility and the most common method of committing suicide is through hanging (Hayes, 1995b; Cox & Morschauser, 1997).

It is important that the correctional staff and the mental health staff in the county jail be educated on the signs and symptoms of suicidality that an individual may exhibit once incarcerated and how to proceed when the ideation has been identified. It is also

beneficial for the correctional staff and mental health staff to work together and make referrals as needed to ensure that both, individuals with and without mental illness are seen if suicidal ideations are suspected. One of the most important steps to help decrease the number of suicides in jail is to screen the incarcerated individual when they are first arrested and brought to the jail (Cox & Morschauser, 1997; Lamberti & Weisman, 2004). Many times, and especially in smaller facilities, this is completed by the correctional staff, and therefore it is beneficial that they have significant training on suicidality and symptoms.

Although suicide is the most prevalent during the first 24 hours of incarceration, it is an important part of the day to day in the jail and individuals can show signs of suicidality at any time during their pretrial incarceration. Bonner (2006) found that inmates in segregation who have a mental illness and view segregation as a highly stressful situation were more likely to report suicide intentions, than those who did not view segregation as stressful. Lanes (2011) and Kaba et al. (2014) found that inmates who were more likely to engage in self-injurious behaviors while incarcerated were more likely to be placed in administrative segregation than those with no self-injurious behaviors, and that they were likely to continue engaging in self-injurious behaviors.

Another time during incarceration that suicidality can become more prevalent is when individuals use suicidality for personal gains such as not wanting to go to court, looking more mentally ill than they are, and/or to gain cell relocation, making it harder for staff in the jail to distinguish an individual with mental illness from a malingerer (Hayes, 1995a; Cummings &Thompson, 2009). In most facilities, it is believed that the

best thing to do is treat all individuals as being suicidal, even if the staff feels that they are malingering (Cummings and Thompson, 2009). Other facilities believe that if they can conclude that there is no real threat, then they do not have to place the individual on suicide watch (Hayes, 1995a). This can be concerning because feigned suicide attempts can end up in real death. It is suggested that when an individual is placed on suicide watch, their belongings should be removed, but above all, they should be under constant supervision and in suicide appropriate cells (Hayes, 1995a).

Psychiatric Hospitalization during Incarceration

One component that has an effect on the average time an inmate with mental illness spends in jail pretrial is hospitalization (Axelson & Wahl, 1992; Mullins & Paler, 2012). From 1999-2007, the rate of forensic commitments to psychiatric hospitals rose by 72% in Florida (Christy, Otto, Finch, Ringhoff, & Kimonis, 2010). With the increasing number of individuals with a mental health disorder being incarcerated, it is likely that the number of individuals committed to a hospital while incarcerated pretrial will also continue to increase.

There are two different types of hospitalization that can impact the individual's length of detention pretrial. The first is when the individual becomes unstable and has to be sent out to a local hospital for a short period of time or a psychiatric hospital for a longer period of time for stabilization. Although the correctional facility tries to prevent these types of hospitalizations by trying to treat the individual at the correctional facility, if the individual's symptoms worsen, then they must be provided with the appropriate treatment.

The second type of hospitalization is when the judge mandates that the inmate be admitted to a psychiatric hospital for a certain amount of time for further evaluation for their case, especially in the case of Not Guilty by Reason of Insanity (Not Guilty by Reason of Insanity [NGRI]; Mullins & Paler, 2012). This is known as a forensic commitment. The concern with this is the extra time the inmate spends waiting for paperwork to be processed and transportation arranged before they can even start their time at the psychiatric hospital. Christy, Otto, Finch, Ringhoff, and Kimonis (2010) found that in certain Florida county jails, it took anywhere from 4 to 23 days for the court ordered paper work to get to the jails. This did not include the time it took the jail to order transportation nor did it take into consideration if there was a wait time for the psychiatric hospital that the inmate was mandated to. It also did not take into consideration the amount of time that the individual was required to stay in the hospital for the evaluation, which can extend anywhere from a month to several months, depending on their psychosis.

Competency

Another concern is that an inmate with a mental illness is more likely to be ordered by a judge to go through an evaluation to determine if they meet the competency requirements to stand trial, a legal standard established by *Dusky v. United States* (1960). This case acknowledged that a defendant must understand the criminal process, including the different roles each member of the criminal system plays and have the ability to help themselves by working with their legal representation when in court. The judge orders the competency to be completed based on a request from the defendant or due to

observed behavior in the court room. In New Jersey, when a competency evaluation is requested, a psychologist from the state forensics hospital meets with the individual at the jail to complete a series of assessments and questions. The psychologist then completes a report and sends it to the judge with the final determination. The judge then makes the final ruling if the individual is competent or incompetent to stand trial. If the individual is found to be incompetent to stand trial at this time, but the report indicates that the individual may become competent at a later time, then a future court date will be made to determine if another evaluation is needed. The U.S. Supreme Court ruled in *Jackson v. Indiana* (1972) that an individual cannot be held longer than needed when determining if they will attain competency in the future. This was to protect the individual having to remain incarcerated pretrial longer in order to proceed with their court processing.

There also appears to be some similar characteristics between the individuals that are found to be incompetent and those that are competent. Those most often found to be incompetent are male, African American, have previous criminal histories, have previous psychiatric hospitalizations, and are more likely to be charged with a miscellaneous offense (Hubbard, Zapf, & Ronan, 2003). This criterion is similar to the criterion previously presented that describes the individuals who remain incarcerated longest pretrial and have a mental health disorder.

Length of Pretrial Detainment

The quantity of research completed on individuals with mental illness who are in a county jail and that have taken into consideration their length of detention pretrial is limited. Many times, the length of incarceration or length of detention pretrial is just a

factor that has been included in a study that was researching a different topic. The research that has been completed has been inconclusive with some studies reporting that mental illness does not have an impact on length of pretrial detention (Kubiak, Essenmacher, Hanna, & Zeoli, 2011) and others reporting that that individuals with mental illness do stay in jail longer pretrial (Axelson & Wahl, 1992; Cox, Morschauser, Banks, & Stone, 2001; Floyd, Scheyett, & Vaughn, 2010; McPherson, 2008, Kaba et al., 2015). None have examined how psychiatric medications may impact the length of incarceration pretrial.

In this study, I first considered the length of detention pretrial for individuals without mental illness in order to have a better understanding of the length of detention pretrial for those with a mental health disorder. Spaulding et al. (2010) found that of the 100,000 individuals incarcerated that they studied over a 14-year period, the mean length of stay before bail was 38 days. They also found that median length of stay after the first 25% of individuals was released was only one day, but that the median when 75% of individuals were released was 43 days. They determined that as the number of days the individuals were incarcerated pretrial grew, the individuals released per day slowed down. The factors that most affected the length of pretrial detention were being male, having a previous arrest, and having a violent charge. Freudenberg, Daniels, Crum, Perkins, and Richie (2008) shared that in their research they found that three quarters of jail inmates are released within a few months and that only a quarter are sentenced to prison. It is important to remember that each jail is different and that this does not apply to all jails, but it provides a glimpse into what the average length of pretrial detention can

be in the local county jail for individuals. It also shows that with a majority of the incarcerated population leaving within the first few days, it can be difficult to provide certain medical and mental health services (Lamberti & Weisman, 2004; Spaulding et al., 2010; Young, 2002). Lastly, Kaba et al. (2015) examined if there were any disparities in the referral time period of inmates to the mental health department and found that inmates with mental illness were incarcerated 120 days versus inmates with no mental illness at 48 days. When looking at inmates who were referred to mental health services within 7 days of incarceration versus after those referred after 7 days, Kaba et al. (2015) found the average length of stay to be 84 and 210 days.

An individual's mental illness also affects length of pretrial detention because it can have an impact on the judge's decision to release the individual while they are awaiting trial. If the judge feels that the individual may not return for their schedule court date because of the impact of their mental illness, then they are more likely to keep the individual incarcerated throughout the proceedings to ensure that they are present for court dates (Lamberti & Weisman, 2004), therefore they are less likely to be released on bail (Torrey, 1995) or released on their own recognition.

In one study, it was found that one in three adult males with a mental health diagnosis are more likely to be detained for at least one night while only one in nine young males with no history of mental illness were detained for at least one night (Cox, Morschauser, Banks, & Stone, 2001). It appears that there is at least one factor that can shorten the length of pretrial detainment for individuals with mental illness, such as their involvement in a mental health court, instead of the regular court system. Christy,

Poythress, Boothroyd, Petrils, and Mehra (2005) found that individuals with mental illness spent less time in jail pretrial when they were sentenced through the mental health court, and that those with a mental illness but not involved with the mental health court also spent less days incarcerated in general before the existence of the court in that area. The county in which I gathered data for this study does not have a mental health court.

McPherson (2008) studied the North Broward Bureau, which is one of the housing units in the Broward County jail in Florida and which is part of the 12th largest local jail system in 2008 within the United States, and found that the average length of incarceration pretrial for individuals with mental illness was 76.28 days, while the remainder of the population had an average length of incarceration of 29.02 days. That is a difference of 47 days where individuals with mental illness were incarcerated longer pretrial. Thanks to the research, the North Broward Bureau designated separate housing units for inmates with a mental illness. The open mental health units housed inmates with general mentally illness while the closed mental health units house the inmates who are psychiatrically unstable to ensure the safety of everyone.

Conclusion

The progression of correctional facilities into the new mental health hospitals has been established in the research above, along with the importance of providing individuals who incarcerated adequate mental health treatment. There is a strong possibility that the length of time that an individual can spend incarcerated pretrial can also be impacted by their mental illness, making the need for appropriate treatment even more important. Individuals with mental illness often require extra services, such as

special housing, psychotropic medications, special evaluations, or even a postponement in their court dates because they are not mentally stable to appear before the court.

There are a variety of factors that can have an impact on the amount of time that an individual is incarcerated pretrial, which may or may not include a mental illness or a noncompliance with psychotropic medications. There have been conflicting studies with some stating that there is no difference in pretrial detainment between individuals who are mentally ill and those that are not, and others that have found some significant difference in the number of days incarcerated. The concern I had, was that none of these studies studied the length of pretrial detainment specifically. My purpose in this study was to examine the amount of time that individuals with mental illness spent in jail pretrial and if there was a significant difference, while also looking at if being compliant with psychiatric medications had an impact on that length of time. I found that previous research did not address studying mental illness, length of pretrial detention, and medication compliance. Chapter 3 provides a more in-depth explanation of the data collection, methodology, and ethical considerations taken to complete this research.

Chapter 3: Research Method

Introduction

The number of individuals with mental illness who are incarcerated in correctional facilities rather than psychiatric hospitals or community mental health programs has steadily increased over the years (Bradley-Engen, Cuddeback, Gayman, Morrissey, & Mancuso, 2010; Morrissey et al., 2006; Western, 2007). Some of the reasons found throughout the research are that deinstitutionalization (Hutchins, Frank, & Glied, 2011; Lamb, Weinberger, & Gross, 2004; Rich, Wakeman, & Dickman, 2011) and changes in state regulations have made it harder to be hospitalized and remain hospitalized (Brandt, 2012; Lurigio & Harris, 2007), leaving individuals with mental illness with very few options. The increased number of incarcerated individuals with mental illness poses a concern for both the correctional facilities and inmates (Scheyett, Vaughn, and Taylor, 2009). The increase poses a hardship on the correctional facilities because they have had to adapt to not only being a place for restitution, but also a place that can manage and treat inmates who have serious mental illnesses. Some of the concerns for the individuals with mental illness are that there is no consistency for the mental health services provided throughout different correctional facilities and they may be exposed to greater stressors that can escalate their mental health symptoms. In county jails, one of those stressors for inmates is the inability to know how long they will be incarcerated (Mullins & Paler, 2012).

The purpose of this study was to determine whether there was a difference in the pretrial detainment of inmates diagnosed with a mental health diagnosis versus those with

no mental health diagnosis. Therefore, in this study, I compared the length of pretrial detention for inmates who have a mental illness and are compliant with psychiatric medications, inmates who have a mental illness and are noncompliant or are not prescribed psychiatric medication, and inmates with no mental illness to examine if there was a difference, while also looking at if inmates who had a mental illness had less severe charges and if there was a difference in the classification of their diagnoses. In this study I intended to narrow down some of the contributing factors that could have an impact on the pretrial detention of these groups. By collecting and analyzing a variety of factors such as the charges, housing locations within the jail, and the outcome of the legal case, I discovered more information as to why there may or may not be a difference in the length of pretrial detainment.

My reason for completing this study was that although there were significant increases in the research of individuals with mental illness, no extant research has specifically examined at if having a mental illness impacts the amount of time spent in jail pretrial, or if being noncompliant with psychotropic medications had an impact on incarceration duration. In this study I helped get a better description of whom the mentally ill are that are being held in jail pretrial, especially since detainment can magnify already existing symptoms. By exploring the nature of their psychiatric medications, their diagnosis, and their medication compliance, there can be a better understanding of the level of mental illness that is entering the facility. This can then lead to more stabilization for the inmate and possibly eliminating barriers to the timely and effective treatment of severe mental illnesses.

Before completing the research, I expected that the inmates who were diagnosed with mental illness would be detained in jail longer presentencing than the inmates who did not have a mental illness because the inmates with mental illness would require further evaluations or would not have been able to advocate as well for themselves, causing their cases to be in the courts longer and causing their length of pretrial detainment at the county jail to be more extensive. Before completing the research, I also expected that inmates who were diagnosed with a mental illness but were not medication compliant or prescribed medications would be detained longer pretrial than those who have a mental illness and are medication compliant.

Research Design

In this quantitative study, I used archival data gathered from the medical and mental health charts of inmates from a local county jail in New Jersey whose cases were closed in the jail, thus ensuring that no current inmates were included in the study. No current inmate was included as in this study, I was gathering data for the length of time that inmates spent prior to their sentencing in jail and was also looking at how they left the facility (i.e. bail, time served, prison time).

In this study, I used a systematic sampling method of selecting every third closed inmate's chart from 2016 to gather data, as this was the most recent available complete data sets. This was facilitated by the fact that inmates' medical and mental health charts that have been closed are organized alphabetically. The charts have been organized in alphabetical order within the year that the inmate was released. By my using a systematic sampling method, it allowed each inmate an equal opportunity to be selected, thus

providing a more accurate representation of the reported 8,500 inmates that are processed into the correctional facility per year. Systematic sampling also reduces data bias for gathered data when the sample size is appropriate for the population being measured. As I reviewed the inmate's charts, each inmate was assigned to one of the three corresponding groups that included inmates who have a mental illness and where compliant with psychiatric medication, inmates with a mental illness who were noncompliant or not prescribed psychiatric medications, and inmates with no diagnosis of a mental illness. The only controlled variable was gender with only male inmates being used in this study because there are a larger proportion of incarcerated pretrial men than women, making it easier to gather data and for future replication.

In this study, I used a combination of one-way analyses of variances (ANOVA) and chi-squared analysis to examine the data. The ANOVA examined the length of pretrial detainment, the dependent variable, to see if there was a difference between the three independent variables, inmates who have a mental illness and are compliant with psychiatric medications, inmates with a mental illness who are noncompliant or not prescribed psychiatric medications, and inmates with no mental illness. I used the chi-squared analysis to examine if inmates with mental illness versus inmates with no mental illness have different types of crimes (misdemeanors vs felonies) and to examine if inmates within the five different DSM-5 classifications (schizophrenia spectrum and other psychotic disorders, bipolar and related disorders, depressive disorders, anxiety disorders, and paraphilic disorders) have a different compliance level with their psychiatric medications. ANOVA is an appropriate statistical analysis when the purpose

of the study is to measure if there is a difference in the means of the dependent variable by an independent variable. ANOVA is commonly used to examine if there are differences between outcomes of a specific treatment or criteria, such as this study analyzing if the time incarcerated pretrial is different between the three independent variables (Constantine et.al, 2010; O'Keefe, 2007; Soenksen et.al, 2016; Young, 2002).

Methodology

Population

I gathered the data from one specific county jail in New Jersey, which is among the top five most populated county jails in New Jersey (State of NJ, Department of Corrections, 2003-2016). As per the agreement made with the warden of the facility, the name and specific location are not included in the study. There are 21 county jails for the 21 counties in New Jersey, all under the control of the New Jersey County Jail System (NJCJS). There is some disagreement on the percentage of individuals with mental illness in a county jail, with one Bureau of Justice Statistics report (Maruschak, 2006) indicating that about 8% of inmates have reported a mental illness, while the NAMI (National Alliance on Mental Illness [NAMI], 2013) reports an average of 20% of local jail inmates having a recent diagnoses and another Bureau of Justice Statistics report (James and Glaze, 2006) indicating that 64% of jail inmates are diagnosed with a mental illness.

In this study, I only sampled the charts of male inmates as they are more representative of the total incarcerated population and because it allowed for easier comparison to previous studies. The chart review examined if the inmate was seen by the

mental health department and given a mental health diagnosis. For those that were diagnosed with a mental illness, I further evaluated their charts to see if they were prescribed psychiatric medications and if they were compliant with them.

Sampling

It is important to have an appropriate sample size in order to minimize coincidental relationships and to limit the amount of potential sampling inaccuracies. I calculated the sample size with a sample size calculator (National Statistical Service) and using a confidence level of 95%. The population size in the county jail where the data were gathered was estimated at an average 8,500 inmates per year, with a daily inmate population of 1,500. The yearly number of committed inmates was used to calculate the sample size as it best represents the population of inmates at the county jail. The probability value is 0.50% and the confidence level is 0.05% for calculating the sample size. This resulted in a sample size of 368 charts needing review for the sample size to be representative of the population, breaking down to at least 123 charts for each of the three groups included in this study. I gathered data until the requirement for each group was met, with some data being more abundant than others, so that became possible to sample more than 368 charts in total. It was not possible to gather data from previous years due to the location of the stored charts.

Procedures

In this study, I only used archival data; therefore, there was no direct contact with any inmates. Upon arrival at the correctional facility, each inmate was seen by the medical department where a chart was automatically created with their medical and

mental health information. This included the initial intake completed by the medical department that relies on the inmates' responses, any follow-up appointments with the medical department, any medications, and any referrals to the mental health department. If the inmate had any contact with the mental health department, this was documented via a progress note, and therefore reviewed when the data were gathered.

The medical/mental health chart does not have the charges for each individual and if they were released or sentenced; therefore, I also used the county program County Corrections Information System (CCIS) to gather the information needed for each inmate included in the study. The room where the 2016 closed medical and mental health records were located had computer access to CCIS, thus allowing the simultaneous review of the chart and computer system, allowing for continued anonymity. The CCIS program provided exact dates for intake and discharge, housing locations within the jail for each individual, the exact charges, and the result of those charges (i.e. bail, sentenced to time served, sentenced to prison, etc.). Access to documents and the CCIS program were facilitated for me, as I am employed, in a different county facility, by Center for Family Guidance (CFG), who provides the medical and mental health services for most of the New Jersey County Jails. CFG provides a variety of mental health service, including medical and mental health services to several correctional facilities in the state of New Jersey. I first proposed the study to the Mental Health Director and then the Warden who both approved.

As I gathered the data, they were placed into three specific groups. The first group included the inmates that were given a diagnosis by the psychiatrist/psychologist

while in jail and were compliant with their prescribed psychiatric medications at least 75% of the time during their incarceration. The frequency of their medication compliance was found in the medical/mental health chart with their Medication Administration Records (MAR), which was filled out daily by the nurse to identify if the medication was taken or declined. The number of missed dosages was counted and calculated by me during data gathering to see if the 75% threshold was met, as the MARs do not calculate this information.

The second group included inmates that were given a diagnosis by the psychiatrist/ psychologist while in jail but were not compliant with their prescribed psychiatric medications or were never prescribed medications. Again, this was done by looking at the MARs and calculating to see if there was a 75% threshold, and also by reviewing progress notes that may indicate why medications were not prescribed. The last group included individuals who were never diagnosed by the psychiatrist/ psychologist while being held at the county jail. If an inmate was seen by the mental health department but was not diagnosed with a mental illness, then they were included in this group.

Data Collection and Analysis

The inmates' charts that I reviewed were held in the secure correctional facility, so bringing electronic devices posed a challenge. For that reason, I transcribed the data onto a printed Excel spreadsheet with previously designated categories, such as intake date, discharge date, charges, mental health diagnosis, etc. I assigned a number to each individual so that no identifiable information was used, such as 1A, 1B, and 1C for each

of the three groups. I used SPSS used to analyze the data and I will store the data for 5 years in accordance with university requirements.

Additionally, I collected data from the following variables: length of time spent in jail pretrial, if placed on a mental health watch/suicide watch during pretrial detention, housing locations within the jail including administrative segregation, mental health diagnosis, self-report of mental illness/psychiatric medications upon entering facility, psychiatric medication, compliance with psychiatric medication, charges, reason for discharge, age, marital status, education, and race. I coded the data, as this allowed the data to be labeled, compiled, and organized so that it can be easily summarize and analyzed. One example of how I coded the data was that for the variable of mental health diagnosis, the five identified categories were assigned a number from one to five. Once the different levels of measurements were identified and the data were entered into SPSS, I then analyzed the data. First, I tabulated the results to ensure that the data were entered properly and that there was enough in each category. Second, I ran the descriptives of the variables to look at the mean, median, and minimum and maximum values. Third, I disaggregated the data across different variables and subcategories. An example is age and medication compliance, to see if there was an age group that was more or less compliant with medications. Then I ran the ANOVA analysis to determine if there was any significance in the length of pretrial incarceration for the three independent variables. Lastly, I completed the chi-squared analysis to examine if there was a difference in the types of crimes between the inmates with and without a mental illness and also to see if

there was a difference between the inmates' mental health classifications for those who are and are not compliant with their prescribed medications.

Threats to Validity

There were several components that could have threatened the outcome of the study, such as internal validity, external validity, and construct validity. Internal validity is the ability of the study to provide a reliable answer to the research question or hypothesis that was presented (Garattini et al., 2016). External validity is the ability of the study to generalize to the population, other settings, or other versions of the same treatment (Hudson & Llosa, 2015). Construct validity addresses if the intervention used in study can be applied to real practice (Rankupalli & Tandon, 2010), and therefore did not apply to this study. Rankupalli and Tandon (2010) emphasized that it is important to understand if there are any threats to the validity of the study, as it provides a better perspective to understanding the study's findings.

Internal Validity

Hudson and Llosa (2015) listed several specific threats that can impact the internal validity of a study. These included attrition, history, instability, maturation, selection, and testing effects. Attrition was not a concern to this study as it did not involve studying participants over an extended period of time with the possibility of them dropping out of the study and affecting the sample size. History includes things that may have occurred during the course of the study that can have an impact on the variables, which again was not applicable to this study. Instability refers to the reliability of the measurements that are being used. This can affect the internal validity of studies as there

is always a concern that there was an error in measurement. This was addressed by having an adequate sample size of 368 inmates that was calculated using a probability value of 0.50% and a confidence level of 0.05%. Maturation is the change in interest or motivation of a group and is something that generally happens naturally. Selection was concerning for me in this study because of the possible biases introduced during the sampling procedure. I addressed this in this study by using a systematic sampling method. Lastly, testing effects is if there is an influence from the information on a pre-test on an aspect of treatment, which again was not a concern for this study.

External Validity

Hudson and Llosa (2015) listed several specific threats that can impact the external validity of a study. These included sample selection, interaction of selection and the experimental treatment, irrelevant replicability of treatments, multiple treatment interference, and reactive effects of experimental arrangements. Sample selection is also important for the external validity of a study because it impacts how well the participants represent the population. This was a possible concern in this study, as I only gathered data from one New Jersey correctional facility, which might not be generalizable to other correctional facilities throughout the United States. The remaining four threats did not directly impact this study. Interaction of selection and the experimental treatment involves a participant possibly reacting to treatment in a different way than another may, because of how he was selected. Irrelevant replicability of treatments is when the methodology of a study has so many issues that too many changes would be required to the methodology to replicate the study. Multiple treatment interference is when treatment

is provided over time and the participants learn the pattern of the treatment, ultimately affecting the data. Lastly, reactive effects of experimental arrangements are when the superficiality of the study has an impact on the data.

Ethical Procedures

The Walden University Institutional Review Board (IRB) approved this study as it was found to pose minimal risk to the participants. This was in part because there was no direct contact with the inmates at the correctional facility. Once the study was approved by the IRB, then the data were gathered and analyzed.

Archival data at the correctional facility was located in the mental health department, organized by year, and the charts of the inmates who had left were organized in alphabetical order. The charts had identifiable information, but the required data were transcribed, by me, onto a printed Excel spreadsheet with previously designated categories, such as intake date, discharge date, charges, mental health diagnosis, etc. I assigned each individual to a number so that no identifiable information would be used, such as 1A, 1B, and 1C. The data will be stored for 5 years in accordance with university requirements.

Summary

In this study, I explored the amount of time that inmates were detained pretrial to see if there was a significant difference between the three independent groups. I expected that there would be a statistically significant difference between inmates who have a mental illness and the amount of time they are detained before being sentenced, as it is believed that they await sentencing longer on average than inmates with no mental

illness. I collected data from inmates' charts that were closed in 2016 at a local county jail. In this quantitative study, I used archival data gathered from the medical and mental health charts of inmates. I used a one-way analysis of variance (ANOVA) and a chi-squared analysis to answer the research questions identified in chapter 1. Chapter 4, the following chapter, will provide a detail explanation of the results that were produced using the information presented in this chapter.

Chapter 4: Results

Introduction

The purpose of this quantitative study was to compare the length of pretrial detention for inmates who have a mental illness and were compliant with psychiatric medications, inmates who have a mental illness and were noncompliant with psychiatric medication, and inmates with no mental illness to examine if there was a difference in their length of pretrial detainment. In this study, I also examined if inmates who have a mental illness have less severe charges and if there was a difference in the classification of mental health diagnoses for inmates who were and were not compliant with psychiatric medications.

The research questions and hypothesis were:

Research Question 1a (RQ1a): Is there a difference in the length of pretrial detainment for inmates who have a mental health diagnosis and are compliant with their psychiatric medication and those without a diagnosis or prescribed psychiatric medications?

Null Hypothesis ($H_0$1a): There is no difference in the length of pretrial detainment for inmates with a mental health diagnosis who are compliant with psychiatric medications and those without a diagnosis and are not on psychiatric medications.

Alternative Hypothesis ($H_1$1a): Inmates with a mental health diagnosis who are compliant with medications will have longer lengths of pretrial detainment when compared to inmates with no mental health diagnosis and no psychiatric medications.

Research Question 1b (RQ1b): Is there a difference in the length of pretrial detainment for inmates with a mental health diagnosis and who are noncompliant with psychotropic medications and those with a mental health diagnosis that are compliant with psychotropic medications?

Null Hypothesis ($H_0$1b): There is no difference in the length of pretrial detainment for inmates with a mental health diagnosis who are noncompliant with psychotropic medications and those that have a mental health diagnosis and are compliant with psychotropic medications.

Alternative Hypothesis ($H_1$1b): Inmates with a mental health diagnosis that are noncompliant with psychotropic medications will be detained pretrial longer than inmates with a mental health diagnosis and compliant with psychotropic medications.

Research Question 1c (RQ1c): Is there a difference in the length of pretrial detainment for inmates with a mental health diagnosis who are noncompliant with psychotropic medication and those without a diagnosis and no prescribed psychiatric medications?

Null Hypothesis ($H_0$1c): There is no difference in the length of pretrial detainments for inmates with a mental health diagnosis that are noncompliant with psychotropic medication and those without a mental health diagnosis and no prescribed medications.

Alternative Hypothesis ($H_1$1c): Inmates with a mental health diagnosis who are noncompliant with psychotropic medication will be detained longer pretrial than inmates with no mental health diagnosis and no psychiatric medications.

Research Question 2 (RQ2): Is there a difference in the types of charges (misdemeanor vs felony) that are received when comparing inmates who have a mental illness and those that have no mental illness?

Null Hypothesis ($H_0$2): There is no difference in the types of charges received when comparing inmates who have a mental illness and those that do not.

Alternative Hypothesis ($H_1$2): Inmates with a mental illness are more likely to receive misdemeanor charges than inmates with no mental illness.

Research Question 3 (RQ3): Is there a difference in the diagnosis of inmates who are mentally ill and are medication compliant and those that are mentally ill but not currently on medications?

Null Hypothesis ($H_0$3): There is no difference in the diagnosis of inmates who have a mental illness and are medication compliant and those that have a mental illness and are not on medication.

Alternative Hypothesis ($H_1$3): There will be a difference in the diagnosis of inmates who have a mental illness and are medication compliant versus those that are not on medications.

This chapter covers the data collection procedures that were followed, ensuring that the methodology plan that was outlined in chapter 3 was followed to the best of abilities, and the results of the research study are presented and explained.

Data Collection

Time Frame

The time frame for the data collection was longer than I originally predicted. I assumed that there would be full access to the archived 2016 inmates' charts, that they could be reviewed, and that the data could be gathered within a 2-week time frame. Unfortunately, this was not the case and for approximately 2 weeks, specific charts had to be requested from the jail staff, with only 20-30 charts being requested per day. This was a limitation set by the facility. The data gathering took a little over 1 month.

Procedure and Discrepancies

On the first day of data gathering, a list was generated from CCIS where the inmate's released per each day of 2016 was printed. I then reviewed the list and any female inmates were automatically removed. I did this by checking the inmates' gender in CCIS. After this was done, I then highlighted every third inmate from the printed list, as previously identified in this study, working backwards from the end of the year 2016 until the beginning of the year 2016. The jail staff requested that charts from the end of the year be requested first as they were easier to access in the chart room. The request for charts was faxed to the staff in the chart room by another staff member in the jail, and the charts were ready for review when I arrived later in the day. I then reviewed the charts, assigned each to one of the three groups, and gathered the needed data from the medical/mental health charts and CCIS. After approximately 2 weeks, the captain and mental health director inquired about the data gathering progress, seeing that it was progressing slower than all had intended, the captain arranged for me to have full access

to all the archived 2016 charts. It was not made clear to me why this was not allowed from the beginning, as that was what was originally agreed upon.

The data gathering process was slightly different from this point on as there was no access to CCIS in the two chart rooms, where the remainder of the charts were located. I used the printout with the inmates' names and CCIS numbers as a guide to mark which inmate was assigned to which group, so that when I finished gathering all the data and shredded the sheets with the inmates' names and numbers, there was no identifiable information on the sheets where the data were being gathered. For example, if Joe Smith's chart was reviewed and he was assigned to the non-mental health group, he was given a number with the letter C (e.g., 23C) and the same number was written on the data gathering sheet. This way when there was access to CCIS, it was clear that 23C was Joe Smith. It is also important to note, that during the data gathering process, I never removed the printout sheets with the inmates' names and numbers from the jail, and when not in use, the printout sheets were locked in the mental health office. On the last day of data gathering, I shredded all those sheets in order to protect the identity of the inmates.

Demographic Characteristics

A total of 5,277 inmates' charts were closed in 2016. Of those, 781 inmates were women, leaving a total of 4,496 male inmates. Following the procedure of reviewing every third chart, a total of 1,498 charts were left for review. A total of 22 charts were not found or had insufficient data and were not included in the study. In the end, I reviewed a total of 1,476 charts that were viable for the study, with a total 427 participant

used. I did not use the remaining 1,049 sampled charts as they all met the criteria for group C (individuals with no mental illness) and therefore would have over saturated that participant group. After enough charts were sampled for group C based on the sample size calculations in Chapter 3, the remaining charts were not included. As I indicated in the previous chapter, it was estimated that a minimum sample size of 368 participants would be required, but due to the higher number of charts given to review, the overall sample size was larger. This resulted in 112 participants in group A, mentally ill and medications compliant; 76 participants in group B, mentally ill and non-medication compliant; and 239 participants in group C, no mental illness.

It is important to note that based on how the data were gathered, it is possible that some individuals were incarcerated and released more than once in 2016, and therefore could have been included in this study more than once. Each incarceration is separate and therefore for this study, I allowed it.

This study consisted of only male inmates with a mean age of 35. The total sample was 21% Caucasian, 60% African American, 18% Hispanic, and less than 1% other. Their mean education level was 12^{th} grade. Data for education was only available for 343 of the inmate participants, with the remaining 84 being unknown or left blank. Regarding marital status, 65% were single, 9% were married, 4% were divorced, 1% were separated, less than 1% were widowed, and 19% did not respond. Their mean length of stay pretrial was 51 days, but the median was 8 days, and the amount of days with the highest percentage was 1 day with 13%. Of the inmates who were incarcerated only 1 day, they all fell into the non-mental illness category. The mean for total number

of charges was two, with 25% being misdemeanors, 62% being felonies, and 13% being family court charges. The end results for the charges were that 21% were out on bail, 16% received state prison, 9% were RORed (released on own recognizance), 37% were RBCed (released by the court), 13% received county jail time, 2% were transferred as fugitives to other states, and about 2% are unknown.

When reviewing the data based on the three groups, there are some things that are worth noting. The first is that the majority of younger inmates (ages 18–29) were in the non-mentally ill group and the majority of older inmates (60+) were in the two mental health groups. With regard to the outcome of the charges, inmates in the non–mentally ill group were able to bail out (14%) at a much higher rate than inmates from either of the mentally ill groups (both 3%). Another is that the nine inmates who were found to be fugitives were from sample group A and B (the two groups were inmates who were diagnosed with a mental illness), and none where from the non-mentally ill group. Lastly, it appears that the rate of mental health diagnosis was similar between both mental illness groups, even though one group was prescribed medication and the other was not prescribed or was noncompliant with the medication. For example, schizophrenia was diagnosed in 4.5% of the inmates in sample group A and 3.3% in sample group B, and anxiety was diagnosed in 5.4% of inmates in sample group A and 3.7% in sample group B.

The results per group and the total results can be found in Table 1.

Table 1

Demographic Data

	n	MH & meds	MH no meds	no MH	Total
Age:	427				
18-21		7 (1.6%)	5 (1.2%)	21 (4.9%)	33 (7.7%)
22-29		28 (6.6%)	23 (5.4%)	78 (18.3%)	129(30.3%)
3039		38 (9%)	22 (5%)	64 (15%)	124 (29%)
40-49		23 (5.4%)	7 (1.6%)	48 (11.2%)	78(18.2%)
50-59		11 (2.6%)	13 (3%)	26 (6.1%)	50(11.7%)
60-69		4 (0.9%)	6 (1.4%)	2 (0.5%)	12 (2.8%)
70+		1 (0.3%)	0	0	1 (0.3%)
Race:	427				
White		35 (8.2%)	15 (3.5%)	39 (9.1%)	89(20.8%)
African American		57 (13.3%)	44 (10.3%)	157(36.8%)	258(60.4%)
Hispanic		19 (4.4%)	15 (3.5%)	43(10.1%)	77(18%)
Other		1 (0.2%)	2 (0.5%)	0	3(0.7%)
Education	353				
6th		0	0	1 (0.3%)	1(0.3%)
7th		0	1 (0.3%)	1 (0.3%)	2(0.6%)
8th		3 (0.8%)	2 (0.6%)	2 (0.6%)	7(2%)
9th		4 (1.1%)	1 (0.3%)	6 (1.7%)	11(3.1%)
10th		3 (0.8%)	4 (1.1%)	8 (2.3%)	15(4.2%)
11th		14 (4%)	4 (1.1%)	21 (5.9%)	39(11%)
12th		48 (13.6%)	32 (9.2%)	109 (30.9%)	189(53.7%)
1 yr. college		9 (2.5%)	8 (2.3%)	17 (4.8%)	34(9.6%)
2 yrs. college		10 (2.8%)	6 (1.7%)	17 (4.8%)	33(9.3%)
3 yrs. college		0	2 (0.6%)	3 (0.8%)	5(1.4%)
Undergraduate degree		7 (2%)	4 (1.1%)	5 (1.4%)	16(4.5%)
Master's degree		0	1 (0.3%)	0	1(0.3%)
Marital Status	427				
Single		74 (17.3%)	44 (10.3%)	160 (37.5%)	278(65.1%)
Married		14 (3.3%)	8 (1.9%)	18 (4.2%)	40(9.4%)
Divorced		6 (1.4%)	8 (1.9%)	4 (0.9%)	18(4.2%)
Separated		3 (0.7%)	3 (0.7%)	0	6(1.4%)
Widower		0	1 (0.2%)	3 (0.7%)	4(0.9%)
Unknown		15 (3.5%)	12 (2.8%)	54 (12.7%)	81(19%)

Table 1 (continued).

Charge Type	427				
Misdemeanor		27 (6.3%)	20 (4.7%)	60 (14.1%)	107(25.1%)
Felony		78 (18.3%)	55 (12.8%)	131 (30.7%)	264(61.8%)
Family		7 (1.6%)	1 (0.2%)	48 (11.3%)	56(13.1%)
Discharge/Outcome	427				
Bail		13 (3%)	15 (3.5%)	61 (14.3%)	89(20.8%)
Prison		21 (4.9%)	14 (3.3%)	35 (8.2%)	70(16.4%)
ROR		15 (3.5%)	7 (1.6%)	17 (4%)	39(9.1%)
RBC		37 (8.7%)	25 (5.9%)	95 (22.3%)	157(36.9%)
County time		17 (4%)	11 (2.6%)	28 (6.5%)	56(13.1%)
Charges dropped		0	0	0	0
Fugitive		5 (1.2%)	4 (0.9%)	0	9(2.1%)
Unknown		4 (0.9%)	0	3 (0.7%)	7(1.6%)
Mental Illness	427				
Schizophrenia		19 (4.5%)	14 (3.3%)	0	33(7.8%)
Bipolar		33 (7.7%)	19 (4.4%)	0	52(12.1%)
Depression		37 (8.7%)	27 (6.3%)	0	64(15%)
Anxiety		23 (5.4%)	16 (3.7%)	0	39(9.1%)
No MI					239(56%)

Research Questions and Hypotheses

For the first hypothesis, I analyzed the data using a one-way analysis of variance (ANOVA). The independent variable was the three different groups, which consisted of inmates who have a mental illness and are medication compliant (n = 112), inmates with a mental illness and no medication (n = 76), and inmates with no mental illness (n = 239). The dependent variable was the total length of stay for inmates pretrial.

The data analysis showed that the groups were heterogeneous, therefore the homogeneity of variance through the Levene's test showed that there was a violation in the assumption of equality of variance F (2, 424) = 15.45, p < .001. Therefore, the Welch test was also conducted to test for the equality of the means. The result of the Welch test

was F (2, 145.06) = 3.66, p = .03, therefore it can be concluded that the adjusted F ratio was significant.

Given that the ANOVA showed that there was an unequal variance across all three groups, the Tamhane post hoc analysis was run to identify where the significance in the three groups was identified. The post hoc comparison indicated that the mean score for the length of stay for the inmates with a mental illness and medication compliant (M = 100.77, SD = 281.99) was significantly different than the length of stay for the inmates with no mental health diagnosis (M = 30.37, SD = 76.32). However, there was no significant difference between the length of stay for inmates with a mental illness who were medication compliant (M = 100.77, SD = 281.99) and the length of stay for inmates with a mental illness and not medication compliant (M = 42.57, SD = 102.87), and there was no significant difference in the length of stay for inmates who have a mental illness and are not on medication (M = 42.57, SD = 102.87) and those who did not have a mental illness (M = 30.37, SD = 76.32).

After reviewing the results, I concluded that for research question 1a, the null hypothesis was rejected as there was a significant difference between the lengths of pretrial incarceration of inmates. For research question 1b and 1c, I failed to reject the null hypothesis as there was no significant difference in the pretrial length of incarceration for those inmates.

For the second hypothesis, I performed a 2x3 chi-squared test of independence to examine the relation between mental health diagnosis/no mental health diagnosis and the three different charge classifications, misdemeanor, felony, and family court charges.

Although in the hypothesis there were only two categories that would be considered, there were several inmates who also had family court charges, and therefore that was added to the statistics. Some examples of the charges inmates received in family court are contempt of court, child support non-payment, and harassment. The results showed that there was a significant difference between having/not having a mental health diagnosis and the three charge categories, X^2 (2, N = 427) = 24.42, p < .001. After review, I rejected the null hypothesis, as there was significance in the relation between mental health diagnosis/no diagnosis and the three categories of charges.

For the third hypothesis, I also performed a 2x4 chi-squared test of independence to examine the relation between medication compliance and the different mental health diagnosis. The relationship was not significant between the two groups, X^2 (3, N = 188) = .47, p = .93). There was no diagnosis of paraphilia given to this sample of inmates and therefore no measures of association were computed. Although substance abuse was not included in the hypothesis, I gathered this data as a secondary statistic for those inmates who had other mental health diagnosis and therefore I analyzed it separately, also using a chi-square test to see if there was a relation between substance abuse and medication compliance. As previously mentioned, the substance abuse criterion was for dual diagnosis, and no inmate with only a substance abuse disorder was included in this study. The chi-squared showed that there was no significant relationship X^2 (1, N = 188) = .03, p = .86. After review, I failed to reject the null hypothesis for research question 3 as there was no significant relation. I also analyzed some of the other gathered data to see if any

other significant trend emerged, especially in relations to race, age, and mental health diagnosis.

Additional Findings

I performed chi-squared tests to examine the relation between race and the different mental health diagnosis, charge type, and self-report of a mental illness upon arrest. After reviewing the data, I concluded that there was a relationship between race and mental health diagnosis, $X^2(12, N = 427) = 29.32$, $p = .004$. There was no relation between race and the different charges received, $X^2(6, N = 427) = 9.30$, $p = .16$. Lastly, there was a significant relation between race and the self-report of a mental illness upon arrest $X^2(6, N = 427) = 17.81$, $p = .007$.

I also performed chi-squared tests to examine the relation between the different mental health diagnosis and placement on psychiatric observation, charge type, and self-report of a mental illness upon arrest. After reviewing the data, I concluded that there was a relationship between mental health diagnosis and being on psychiatric observation, $X^2(6, N = 188) = 14.88$, $p = .02$. There was no relation between mental health diagnosis and the different charges, $X^2(6, N = 188) = 8.34$, $p = .21$. There was a significant relation between mental health diagnosis and the self-report of a mental illness upon arrest, $X^2(3, N = 188) = 10.06$, $p = .02$.

Summary

In conclusion, I gathered the archived data over a four-week period from one of the local county jails by reviewing every third chart for male inmates who were released from the jail in 2016. The result from the ANOVA showed that there was a significant

difference between the length of pretrial for inmates who have a mental illness and are medication compliant when compared to inmates with no mental illness. It also showed that there is no difference in the length of pretrial detainment for inmates with a mental illness and who are not on medications and those with no mental illness and also for inmates who have a mental illness and are not compliant with their medications versus those that are compliant.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

In this study, I focused on if mental illness and medication compliance have an impact on the length of pretrial detainment for inmates whose charts were closed in a county jail in 2016. The quantity of research completed on individuals with mental illness who are in a county jail and that have taken into consideration their length of detention pretrial is limited. Many times, the length of incarceration or length of detention pretrial is just a factor that has been included in a study that was researching a different topic. The research that has been completed has been inconclusive with some studies reporting that mental illness does not have an impact on length of pretrial detention (Kubiak, Essenmacher, Hanna, & Zeoli, 2011) and others reporting that individuals with mental illness do stay in jail longer pretrial (Axelson & Wahl, 1992; Cox, Morschauser, Banks, & Stone, 2001; Floyd, Scheyett, & Vaughn, 2010; McPherson, 2008). This research was completed because none of the studies included how psychiatric medications may impact the length of incarceration pretrial.

As reported in Chapter 4, I used a one-way ANOVA to analyze the data, and it showed unequal variance across all three groups; therefore, I also conducted a Welch test. The results indicated a significant difference between at least two of the three groups. The Tamhane post hoc analysis showed a significant difference in the pretrial length of stay for individuals who had a mental illness and were medication compliant when compared to those with no mental illness. Based on the data it can be concluded that

individuals who have a mental illness and are medication compliant spend significantly more time incarcerated than those who are not mentally ill.

Interpretation of the Findings

Research Question 1

The first research question was divided into three separate, but related, questions regarding the pretrial incarceration. Research question 1a dealt with determining if there was a difference in the length of pretrial detainment for individuals who have a mental health diagnosis and are compliant with their psychiatric medication and those without a diagnosis. The research thus far reached conflicting answers with some studies reporting that mental illness does not have an impact on length of pretrial detention (Kubiak, Essenmacher, Hanna, & Zeoli, 2011) and others reporting that that individuals with mental illness do stay in jail longer (Axelson & Wahl, 1992; Cox, Morschauser, Banks, & Stone, 2001; Floyd, Scheyett, & Vaughn, 2010; McPherson, 2008, Kaba et al., 2015). The results of this study side with the latter as there were significant findings that, on average, inmates with a mental illness do spend more time incarcerated than those without a mental illness. This can be for a variety of reasons, including needing more time for stabilization while incarcerated to appropriately proceed with their case, inability to pay bail or be given a bail (Torrey, 1995), less likely to be released by the judge because of the frequency of previous arrests, and less of a likelihood of being released by the judge because of the mental illness diagnosis to ensure that they will be present for court dates (Lamberti & Weisman, 2004). As mentioned above, not being given a bail or being able to afford bail may have an impact on the inmates included in the study as only

3% of the inmates in the mental health and medication compliant group were released through bail, while 14% of the non-mentally ill inmates were released through bail. In regard to inmates released by the court (RBCed) as a charge outcome, 9% were in the mental health and medication compliant group while 22% were in the non-mental health group. These statistics show how differently inmates who have a mental health diagnosis are treated by the court and why they would be in jail longer than inmates with no mental illness.

In this study, I used research question 1b to compare the length of pretrial incarceration for the two mentally ill groups. The difference was that one group was compliant with their psychiatric medications and the other group was not on medications, whether it was because they were noncompliant, they declined them, or they were not prescribed. This question addressed a gap in the research, as no studies have compared the possible impact of medication compliance with the length of pretrial detainment. The primary focus of previous studies is on individuals with mental illness, regardless of their medication regiment (Axelson & Wahl, 1992; Cox, Morschauser, Banks, & Stone, 2001; Floyd, Scheyett, & Vaughn, 2010; Kubiak, Essenmacher, Hanna, & Zeoli, 2011; McPherson, 2008, Kaba et al., 2015). Although the average length of incarceration for the group that was not medication compliant was slightly smaller than the medication compliant group, it was not significant. Prior to conducting the present study, I believed that there would have been a difference in the amount of time the inmates from these two groups were incarcerated. I assumed that the inmates from the noncompliant group would have been incarcerated longer because if the inmate was refusing medications, he

would be unstable and therefore incarcerated longer pretrial. Although this study cannot interpret why inmates with mental illness who were not medication compliant were not incarcerated on average as long, this could be because the inmates' symptoms were not as severe as the medication compliant group, therefore not requiring medications. They may have also been diagnosed based on the situation, and not based on a history of having a mental illness; therefore, they are less likely to be prescribed and/or compliant with medications. Dvoskin, Spiers, Matzner, and Pitt (2004) found that at times individuals were prescribed medications because they were struggling with the stress of incarceration but did not have a mental illness. Perhaps, in this study, there were several of these individuals, but rather than prescribed medications, they were provided brief counseling, which is provided in this facility. Lastly, another assumption I made was that if the severely mentally ill truly required medications but were initially refusing, they could have been sent to a psychiatric hospital for stabilization.

Finally, research question 1c examined the length of pretrial detainment for inmates with a mental health diagnosis who were noncompliant with psychotropic medication and those without a diagnosis. This question addressed a gap in the research, as no studies have compared the possible impact of medication compliance with the length of pretrial detainment. Prior to the current study, I believed that there would be a significant difference in the length of pretrial detainment, with the inmates who were not compliant with psychiatric medication being incarcerated longer than those without a mental illness in general. Many of the reasons mentioned above can explain why there was no difference between these two groups of inmates, especially the idea that inmates

have been diagnosed for the first time during their incarceration because of stressors dealing with the incarceration and therefore declined medications, rather focusing on counseling.

Research Question 2

In this study, I used the second research question to examine if there was a difference in the type of charges received (misdemeanor vs felony) between the inmates with mental illness and the inmates without mental illness. While gathering the data, I found that inmates in this county jail were arrested for misdemeanors, felonies, and family court, so that I added that criteria to the data. In this study, I found that there was a significant difference between the inmates in the mental illness groups and the inmates in the non-mentally ill group, when comparing the type of charges received. Research has found that inmates who have a mental illness are primarily incarcerated for minor offenses or misdemeanors (Axelson & Wahl, 1992; Soderstrom, 2007; Constantine et al., 2010) and are often arrested more frequently for less offensive crimes. Fellner (2006) and Constantine et al. (2010) found that younger men with no history of a mental illness or involuntary psychiatric hospitalization are more likely to be arrested for felony charges. The results showed that there was a close distribution between the inmates that were mentally ill and those that are not when comparing the quantity of felony charges (31.1% to 30.7%). When looking at misdemeanors, inmates with mental illness received these charges 11% of the time compared to 14.1% of inmates with no mental illness. Lastly, 11.3% of the inmates with no mental illness received family court charges, while only 1.8% of the family court charges belonged to mentally ill inmates. The results of

this study contradict with the studies mentioned above, as previous studies have found that individuals with mental illness are incarcerated at higher rates for misdemeanors and individuals without mental illness are incarcerated more frequently for felony charges. Although further research would have to be done, one assumption as to why there is a difference can be the geographical location the jail is in and therefore the type of criminal activity in that area, such as high rates of rape, murder, motor vehicle theft, and drug abuse violations, and average rates of disorderly conduct and larceny when compared to the other 21 counties in New Jersey (Uniform Crime Report State of New Jersey, 2014.

Research Question 3

Lastly, research question 3 compared the types of diagnosis given to the mentally-ill inmates, when comparing their medication compliance. This study found that of the 188 inmate participants that had a mental health diagnoses, 76 were not compliant and/or not prescribed medications. Using the gathered data, I concluded that when comparing the different classification of diagnosis, there was no significant difference between the two mental health groups. Inmates diagnosed with schizophrenia spectrum and other psychotic disorders were medication complaint 17% of the time, inmates with bipolar and other related disorders were medication compliant 29.5% of the time, inmates with depressive disorders were compliant 33% of the time, and inmates with anxiety disorders were compliant 20.5% of the time. In this study, I also included paraphilic disorders, but no one received this diagnosis. Prior to this study, it was believed that inmates who had diagnoses in the schizophrenic spectrum category would be less likely to be medication compliant due to symptoms such as hallucinations and paranoia. This appears to fall in

line with the research by Jin, Sklar, Min Sen Oh, and Chuen (2008) who reviewed 102 articles to explore medication compliance. They concluded that there are a great number of factors that impact medication compliance, which includes age, ethnicity, gender, educational level, and the patients' belief about the medication and therapy to name a few, and not just a specific mental health disorder. Worth noting is that the data showed that the inmates who were diagnosed with bipolar and other related disorders were the only inmates who were more compliant with taking their prescribed medications when compared to the other inmates with other diagnoses.

Additional Findings

I ran additional tests with the gathered data based on some of the findings from previous research. Studies often compare the ethnicity of inmates, and Minton (2013) found that overall, Caucasians are incarcerated more frequently, followed by African Americans, and then Hispanics. For this study, 60% of the inmate participants were African American, 21% were Caucasian, and 18% were Hispanic. This is disproportionate to the county census that says 61% of the residents are Caucasian, 27% are Hispanic, and 22% are African American. When reviewing the different diagnoses, African Americans were diagnosed significantly more (53.7%) when compared with Caucasians (26.6%), Hispanics (18.1%), and other races (1.6%). When looking specifically at the mental health diagnoses, African Americans were most often diagnosed with schizophrenia spectrum, other psychotic disorders, and anxiety disorder. Lastly, African Americans (53%) were also more likely to self-report having a mental illness when compared to Caucasians (27%) and Hispanics (18%). Previous research has

found some contradiction with these statistics, with some concluding that African Americans and Caucasians received services at the same rate (Schnittker, Freese, & Powell, 2000; Youman, Drapalski, Stuewig, Bagley, & Tangney, 2010) and others reported that Caucasian inmates are more likely than other ethnicities to receive more services (James & Glaze, 2006; O'Keefe & Schnell, 2007; Soderstrom, 2007, Kaba et al., 2015).

Lastly, each mental illness was also compared to see if there was significance between them, again with the assumption that inmates within the schizophrenia spectrum and other psychotic disorders might look different than those with a diagnosis within the depressive disorders or within the anxiety disorders when incarcerated. The most significant results were that of the 33 inmates diagnosed with schizophrenia spectrum and other psychotic disorders, 93.9%, or 31 inmates self-reported having a mental illness when incarcerated. For the 52 inmates with bipolar disorder, about 98.1% or 51 inmates self-reported having a mental illness. For the 64 inmates with depressive disorder, 84.4% or 54 inmates self-reported. Lastly, of the 39 inmates with anxiety disorder, 79.5% or 31 inmates self-reported having a mental illness. This is an important statistic because one of the first criteria that jails have implemented to help in treating mental illness in jails is to effectively screen individuals when they are first arrested (Dvoskin, Spiers, Matzner, & Pitt, 2004; Lurigio & Swartz, 2006; Maue, 2006). This high percentage of inmates reporting their mental illness at intake supports the effectiveness of completing the intakes upon arrival at the jail. This could be part of a future study, in seeing how many inmates self-report having a mental illness, and at what stage of their incarceration they

see someone in the mental health department. Another future study could be interviewing the inmates who don't self-report to see why they did not, especially if they eventually end up receiving mental health services.

Limitations of the Study

Chapter 1 highlighted some of the limitations that were present during this study. The first limitation was that in this study I only used sampled data from one local county jail in the state of New Jersey for inmates who left the county jail in 2016. This may have limited the diversity of the inmate population, the quantity of inmates that had a mental illness, and the diversity in the charges received. Another limitation was that in this study I used secondary data gathered by the mental health professionals and correctional staff, and therefore could have been subject to errors and at times had incomplete data. Another limitation was that in this study I only included male inmates, possibly hindering the generalizability of the data gathered. Lastly, another limitation was that the interpretation of data was completed by one researcher limiting the results of the study.

Recommendations

There are several areas where this research could be improved upon, including expanding the years for which the inmates were released, including other county jails from other parts of New Jersey, so that there is the possibility of more diversity in the sample size, and include female inmates in the study. If time was no obstacle, then a long-term study that followed each inmate throughout their incarceration would also be recommended as it would provide a more in-depth analysis as to the true impact, if any,

their mental illness has on their incarceration. Having access to the released inmates' court records would be helpful as to see if there is a direct impact on the amount of time they are incarcerated.

Lastly, there were some other recommendations for future studies that emerged from the data, such as examining specifically how many inmates self-report having a mental illness upon their arrest and at what stage of their incarceration they see someone in the mental health department, and looking more in detail at inmates who declined/refused psychiatric medications to breaking them up into separate groups to see if that changes the outcome of the data.

Implications for Positive Social Change

The results of this study created opportunities for positive social change for inmates with mental illnesses and for the correctional facilities that house them. Past research focused primarily on the length of incarceration for inmate with and without a mental illness, and in this study I looked at that, plus I explored if being on psychiatric medications had an impact on the length of pretrial detainment.

Prior to the study, I believed that when an individual has a mental illness and is prescribed psychotropic medications during their pretrial detainment at the correctional center, this would delay his case because he may not be stable to attend court or he may not be mentally capable of participating in his own defense. I also believed that being in jail an undetermined amount of time could have certain repercussions, such as increased mental health symptoms or stress on the individual. By my concluding that there is a difference in the length of pretrial detainment, then this can encourage the increase in

services provided in order to increase the inmates' quality of life. Knowing that the amount of time they spend incarcerated is important for the implication for positive social change because it includes the importance of stability for inmates with mental illness by providing psychiatric medications and mental health services in a timely manner. It can also encourage facilities to implement services earlier on in the inmates' incarceration and can possibly eliminate barriers to the timely and effective treatment of severe mental illnesses.

By knowing that there is a difference in the length of pretrial detainment for inmates with and without a mental illness, this can encourage the courts and attorneys to look at other options in helping individuals with mental illness prior to incarceration. It can also better prepare the correctional facility and their staff in assisting the individuals with mental illness, by housing them in separate units, by having specific, and perhaps more correctional officers on a mental health tier, and by having more and better access to mental health services for the individuals while incarcerated.

Conclusion

In this study I found that there was indeed a significant difference in the amount of time that inmates who are medication compliant spend incarcerated pretrial, but I failed to find a significant difference between the length of pretrial detainment for inmates who are not on medication or are not compliant with those who are compliant with their psychiatric medications and those that are not mentally ill. In this study I also found that individuals with mental illness and no mental illness are charged with felonies at the same frequency, while those with no mental illness receive more misdemeanor

charges, which is contrary to previous research. Lastly, in this study I also concluded that the different categories of diagnoses did not have an impact on medication compliance.

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