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The Correlation Between Laura's Law and the Incarceration of the Mentally Ill in a Southwestern State

Aaron Alarcon-Bowen
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Walden University

College of Social and Behavioral Sciences

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Aaron Alarcon-Bowen

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Walden University
2022

Abstract

The Correlation Between Laura's Law and the Incarceration of the Mentally Ill in a
Southwestern State

by

Aaron Alarcon-Bowen

MPA, University of North Texas, 2005

BA, University of Texas at El Paso, 1999

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Public Policy and Administration

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Abstract

Assisted outpatient treatment and involuntary outpatient treatment laws refer to the power of the court system to order community-based treatment without hospitalization to individuals with a mental illness diagnosis. Studies have linked these laws to a decrease in the use of incarceration among this population. The effectiveness of the assisted outpatient treatment law in a Southwestern state, known as Laura's Law, has not been studied. With a theoretical foundation based on the social contract and multiple streams analysis theories, a quantitative, casual, comparative study using an independent t test was centered on determining whether the mean numbers of incarcerated individuals with mental illness were significantly statistically different between two counties in this state, one that had implemented Laura's Law and one that had not. The results of this study indicated that the county that had implemented Laura's Law showed a higher use of incarceration among individuals with mental illness. Though these findings suggested that Laura's Law may be ineffective in preventing the use of incarceration among individuals with mental illness, they were supported by the theoretical framework, particularly the multiple streams analysis theory. Future studies could incorporate a wider scope (more counties, a multiyear analysis) and/or more variables (more specific characteristics of the data sample, available beds in mental health facilities). An implication for positive social change of this research includes the revision of Laura's Law to include additional provisions such as court-ordered medications and the expansion of community based mental health and behavioral programs.

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Dedication

This study is dedicated to the following individuals: first, to my courageous and exemplary mother, Alma Rosa. Her discipline, wisdom, faith and commitment to improve the lives of the most vulnerable are unparalleled. As I have said many times: If she were not my mother, I'd secretly wish to have a mother like her. Second, I dedicate this study to the memory of two of my best friends, John Paul and Saul Alejandro, who left this world way too soon. I know that both would be very proud to see me reach this milestone. And finally, I dedicate this study to the millions of Americans that struggle with a mental health diagnosis and who have been victimized by our failed criminal justice system.

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As this laborious and challenging PhD journey comes to a conclusion, I want to show my gratitude to the Higher Power, the Supreme Intelligence, the Divine, Jesus Christ who has surrounded me and showered me with his/her unconditional love, favors and blessings. The words of the mystic Meister Eckart (“If the only prayer that we ever say in our lives is thank you, it would be enough”) are always present in my heart.

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A todos county number two a los que se me olvida mencionar: GRACIAS
TOTALES.

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Chapter 1: Introduction to the Study

It was the morning of January 2001, when Laura Wilcox, a 19-year-old college student attending Haverford College in Pennsylvania, was murdered by 40-year-old Scott. H. Torpe. Thorpe, a man who had been diagnosed with paranoid schizophrenia and who had been refusing medication and treatment (Treatment Advocacy Center, n.d.). Laura died instantly. Her death inspired and encouraged the passing of an assisted outpatient treatment (AOT or involuntary outpatient treatment [IOT]) law in a Southwestern state. When Assemblywoman Helen Thomson introduced this legislation, officially titled Assembly Bill 1421, it became widely known as Laura's Law (Treatment Advocacy Center, n.d.).

This Southwestern state approved Laura's Law in 2002, but it was not enforced across the state. Its discretionary nature resulted in only 16 out of the 58 counties in that state adopting it. The effectiveness of the adoption of the state law is still debatable, primarily because there are not many research studies that focus on providing empirical evidence and comparing the number of individuals with mental illness who are incarcerated between those counties that adopted that law and those that did not.

It has become common practice to study the associations between mental illness and incarceration. Studies have shown there is a disproportionate correlation between people with serious mental illnesses in the criminal justice system compared with the general population (Ballard & Teasdale, 2016; Blevins et al., 2014; Flynn et al., 2014; Veeh et al., 2016). People with mental illness who are incarcerated enter a system designed for criminal offenders, which may not be able to offer the psychiatric care they

need and deserve. The use of mental health courts and involuntary outpatient commitment is a way for researchers and policy experts to improve the social functionality and societal adaptability of those with a mental illness, but this area still needs further examination and understanding (McCabe et al., 2012; Sewell, 2016).

In this chapter, I present the background of the problem, the problem statement, and the purpose of the study. In addition, I discuss the research questions and hypotheses and theoretical framework that guided this study. I also present the nature of the study, definitions of important terminologies, and assumptions, scope, delimitations, and limitations. A summary of the important details about the study will conclude the chapter.

Background of the Study

In this section, I provide background on how incarceration became a way in which both the mental health and criminal justice systems started dealing with individuals with mental illness. I also introduce IOT (or AOT) and its potential correlation with incarceration. Understanding this method of treatment is essential for exploring my research topic: the potential effect of IOT on the incarceration of individuals with mental illness.

Deinstitutionalization

The concept of deinstitutionalization was fundamental to my research. It refers to a process that began in the 1960s when mental illness was reevaluated and mental health facilities were shut down (Zlotnick et al., 2013). Individuals residing at these facilities were either incarcerated, sent to live with family, transferred to foster care or nursing homes, or referred to less comprehensive community services or even to charities

(Dlugacz, 2014; Kim, 2016; Lamb & Weinberger, 2014). Many patients who were displaced because of the deinstitutionalization movement were at a high risk of becoming homeless, which then led to many being arrested for charges that were not crimes against other individuals such as loitering, vagrancy, and so forth. These individuals subsequently ended up in jail. This outcome was largely dependent on the level of personal support and community resources available for these individuals (Kim, 2016). To mitigate the negative implications of deinstitutionalization, mental health institutions needed to operate as full-spectrum care and treatment facilities (Talbot, 2004). Seeing the problems that deinstitutionalization caused to individuals with mental health was one of the reasons why I became interested in the use of incarceration as a treatment tool for this population.

The Community Mental Health Act of 1963 established the legislative foundation for the deinstitutionalization of individuals with mental illness. Instead of serving this population with the proposed community mental health centers, deinstitutionalization produced a phenomenon known as transinstitutionalization, which consisted of transferring patients from mental health institutions to nursing homes, foster homes, and the prison system (Kim, 2016). My study focused on incarcerated individuals with mental illness, comparing whether the total number of individuals with mental illness who were imprisoned between January and December of 2018 is different in those counties which did or did not adopt the Southwestern State Assembly Bill 1421.

Outpatient Treatment and Involuntary Outpatient Treatment

Outpatient treatment for persons with mental illness refers to mental healthcare that is provided without hospitalizing a person with a mental illness. This treatment often entails visiting a mental health clinic or psychologist on a routine basis (Andrade et al., 2014). As of 2019, all states in the United States except for Maryland, Connecticut, and Massachusetts have legislation that grant the courts to power to apply AOT to those who are eligible (Treatment Advocacy Center, n.d.). This includes the District of Colombia.

Phelan et al. (2010) focused on determining the efficacy of outcomes of IOT; however, the difficult nature of gathering data concerning the efficacy of IOT has led to a lack of consensus about its efficacy. Some involuntary outpatient commitment laws in certain states can potentially decrease psychosis symptoms when patients continued being engaged through intensive, postcommitment mental health services; that cannot be said about other state laws (Schneeberger et al., 2017). For instance, this Southwestern state, which approved Laura's Law, an involuntary outpatient commitment law, had a discretionary clause that prompted that only 17 out of the 58 counties in the state adopt the law (Treatment Advocacy Center, n.d.).

Although several studies have explored the effectiveness of IOT laws on reducing incarceration of an individual with mental illness in other states, no existing research has explored the effectiveness of Laura's Law. Thus, in this study I attempted to fill in this gap in the literature by conducting a comparison study between one county in a Southwestern state that has enacted Laura's Law and one county that has not. Empirical

evidence was gathered to determine whether counties that have enacted Laura's Law presented fewer instances of incarceration among individuals with mental illness.

Problem Statement

The problem that I addressed in my doctoral research was whether Laura's Law was effective in reducing the number of incarcerated individuals with mental illness. The prison population, both on the federal and state level, was 1.53 million at the end of the year 2015 (Carson, 2016). The percentage of inmates suffering from mental illness had been estimated to be about 26%, which meant that the number of incarcerated individuals with mental illness was approximately 397,800 (Lamb & Weinberger, 2013). The focus of this study was to look at a Southwestern state specifically regarding Laura's Law because no studies had been performed to measure this law's effectiveness related to incarceration. With a population of over a million patients with schizophrenia or bipolar disease, this Southwestern state has even more dramatic statistics; reportedly, 37% of the inmates suffer from some type of mental illness (Sewell, 2016; Treatment Advocacy Center, n.d.).

The data in the previous paragraph supports the statement that the incarceration of individuals with mental illness represents a problem that must be addressed. More specifically for this study, the problem was that the effectiveness of Laura's Law in reducing the rate of individuals with mental illness who are incarcerated was not yet known. The independent variable was the implementation of Laura's Law, which was or was not implemented. The dependent variable was the number of mentally ill patients who are incarcerated.

Involuntary or assisted outpatient commitment laws granted the courts the authority to compel individuals with mental illness who have met strict criteria, such as having a history of displaying violent tendencies or not being adherent to their treatment, to attend outpatient treatment. Forty-six states implemented a variation of outpatient commitment laws. A Southwestern state approved its involuntary outpatient commitment law, or Laura's Law, in 2002 (Treatment Advocacy Center, n.d.). The state legislature did not make its adoption mandatory but rather discretionary; in other words, it granted counties the discretion to adopt it or not. Currently, only 17 out of the 58 counties in the state have adopted Laura's Law.

Considering that this Southwestern state's prison system shows serious challenges related to mental health, such as the suicide rate among inmates being 48% higher than the national average and the cost of housing being 3 times more expensive in the prison system than in a mental health community centers, the legislative decision of not enacting Laura's Law across the 58 counties could be furthering this problem and causing negative consequences not only to the patients but also to their families and communities, as well as to taxpayers (Gillberti, 2015; Mental Illness in a Southwestern state Prisons, 2013).

Purpose of the Study

The purpose of this quantitative, causal, comparative study was to examine the effectiveness of Laura's Law in reducing the rate of individuals with mental illness who are incarcerated in a state in a Southwestern state. The independent variable was the implementation of Laura's Law, which was or was not implemented. The dependent

variable was the number of mentally ill patients who are incarcerated, which was measured nominally.

Knowing whether the implementation of Laura's Law reduces the number of patients with mental illness who are incarcerated could determine the effectiveness of the law. If the law were shown to be effective in reducing the number of patients with mental illness who are incarcerated, then the insights from this study could be used as evidence to encourage counties that have not implemented the law to do so. This would benefit the field of public administration, as it would hopefully encourage policymakers to allocate funds and resources to the counties that have enacted Laura's Law. It is my plan to share my dissertation with policy makers and organizations involved in this field.

Research Question and Hypotheses for the Study

In this section, I identify the research questions and hypotheses that guided my research. I was prompted to develop these questions while observing how the county where I was working struggled to decide whether to implement Laura's Law, primarily due to the lack of available data corresponding to its effectiveness in the state.

Research Question

The research question that guided this study was as follows:

RQ: Are the mean numbers of individuals with mental illness that are incarcerated statistically significantly different between a county in a Southwestern state that implemented Laura's Law and a county that did not?

Hypotheses

The set of hypotheses for this study were designed to determine whether there was significant difference on the mean number of individuals with mental illness who were incarcerated between two counties, one that implemented Laura's Law and one that did not. The independent variable was the implementation of Laura's Law, while the dependent variable was the number of individuals with mental illness who were incarcerated. The independent variable took a categorical form—either the county did or did not implement Laura's Law—whereas the dependent variable took a nominal form.

H_0 : There is no statistically significant difference in the mean number of individuals with mental illness who are incarcerated between a county in a Southwestern state that implemented Laura's Law and a county that did not.

H_a : There is a statistically significant difference in the mean number of individuals with mental illness who are incarcerated between a county in a Southwestern state that implemented Laura's Law and a county that did not.

Theoretical Framework for the Study

The foundation for the study was the social contract theory (Hobbes, 1958). Social contract theory related to this study as it provided the foundation for the reasons why the government should and must be coercive in assisting individuals who, due to mental illness, have the potential to be a danger to themselves and/or others and who are not able to see and comprehend their situation. Social contract theory justifies coercive behavior if it is for the greater good of society. In the case of Laura's Law, because of

this contract that all members of society are part of, the court system retains the ability to impose mandates that could go against an individual's own will.

Welie (2012) utilized social contract theory to explain the social responsibilities of health professionals. Welie clarified that when physicians were seen from the perspective of the social contract theory, they were initially part of the governed; however, due to the coercive quality of their professions, at times they were on the "other side" (i.e., the side that enforces the law, often the government). Applying this concept to my research, this paradigm is particularly evident in the role that physicians play when outpatient commitment laws are enforced. In all the variations of this law, the opinion of a medical professional is indispensable for a patient to be legally committed to involuntary treatment (Treatment Advocacy Center, n.d.). Thus, this social contract is evident by the interaction between medical professionals and patients with a mental illness diagnosis who are mandated to comply with outpatient treatment even against their will.

Kingdon (as cited in Sabatier & Weible, 2014) devised the multiple streams analysis theory, claiming that policymaking was fostered under a sense of ambiguity. According to Kingdon, there is ambiguity present in all the structural features of government. The multiple streams analysis's conceptualizations of ambiguity, "many ways of thinking about the same circumstance" (Feldman, 1989, p. 5), is illustrated in Laura's Law in how the possible solution to the challenges caused by mental illness are viewed very differently by two counties in a state in the Southwestern part of the United States. Furthermore, the fact that only 16 out of 58 counties in this Southwestern state

had enacted Laura's Law by the time this study was completed suggests that, even though the literature shows that involuntary outpatient treatment has had positive outcomes associated with the stabilization of individual with mental illness, there is not a general consensus on whether Laura's Law is indeed beneficial from a policy and public administration perspective: "many ways of thinking about the same circumstance" (Feldman, 1989, p. 5). Additionally, the multiple streams analysis theory is also displayed in the way involuntary outpatient treatment laws enacted by the different states are not identical to each other: they differ on not only the way they are implemented but also in how they approach issues and concepts related to mental health such as coerciveness and self-determination (Meldrum et al, 2016).

Nature of the Study

The purpose of this study was to determine whether there was a statistical difference in the number of individuals with mental illness who are incarcerated in a county that implemented Laura's Law and a county that did not in a Southwestern state. The research questions are directed towards determining the effects on the number of individuals with mental illness who are incarcerated across identified categorical groups based on a dependent variable. The independent variable—the implementation of Laura's Law—was in categorical form. The dependent variable—the number of incarcerated individuals with mental illness— was measured nominally from secondary data. Moreover, I used a statistical technique, independent samples *t*-test, to test the study hypotheses. Therefore, considering all the before mentioned factors, a quantitative method was appropriate for the study.

Quantitative research requires the use of mathematical techniques to provide statistical inferences about the relationships or differences between numerically measured variables (Camm, 2012; Hancock & Mueller, 2010; Wisniewski, 2016). Quantitative methodology is generally used for studies with research questions trying to determine the answer to the question of how many, how much, or how frequently (Vogt, 2011). In this study, independent samples *t* test was conducted to compare the two groups identified. Therefore, quantitative research was deemed as appropriate.

I employed a causal-comparative design for this study. The basic concept of a causal-comparative study is to identify a difference between groups as a function of an identified dependent variable (Babones, 2014). Moreover, causal-comparative research is used for studies aiming to determine the cause for or consequences of existing differences in groups of individuals (Della Porta & Keating, 2008). Because the purpose of this study was to determine the effectiveness of Laura's Law in reducing the number of individuals with mental illness who were incarcerated in two different counties, the use of a causal-comparative design was appropriate for the study.

I collected the data for this study from the respective government agencies of two counties in a Southwestern state, County Number One and County Number Two. The number of 5150s was used as the data source for this study. The 5150 refers to the penal code under the law in this Southwestern state for the temporary, involuntary commitment of individuals who present a danger to themselves or others due to signs of mental illness. Initially, I selected two counties in the Northern region and two counties in the Southern region to have a broader representation of the entire state. However, after

multiple requests during several months, the two counties in the Northern region were unable to release data on the number of 5150s, primarily because of the recent Covid-19 pandemic.

County Number Two was the county that has not adopted Laura's Law while County Number One was the county that has adopted Laura's Law. These two counties were chosen because they have similar population sizes. County Number One and County Number Two are the third and fourth largest counties in a Southwestern state. They also have similar racial and ethnic compositions, which are comparable to the overall racial and ethnic composition of this Southwestern state. Specifically, the data that was collected denoted the number of individuals with mental illness who were incarcerated. I purposefully retrieved a total of 128 records of inmates who suffered from mental illness and were incarcerated for the study. In terms of how this was reflected for each county, the division of data was 64 records of inmates from County Number Two and 64 records of inmates from County Number One. I conducted descriptive statistics and independent samples *t* test to analyze the data using SPSS. The methods for the study are described in more detail in the methods chapter.

Definitions of Terms

There are several terms that are used frequently in this dissertation.

Assisted outpatient treatment: AOT is also known as IOT. AOT is a court-ordered treatment for individuals with severe mental illness who meet strict legal criteria (Gonzales et al., 2015).

Incarceration: Incarceration refers to the state of being confined in a prison (Wilson & Wood, 2014).

Laura's Law: Laura's Law is a law in a Southwestern state that allows for court-ordered assisted outpatient treatment (Treatment Advocacy Center, n.d.). An individual will only be qualified if they have a serious mental illness and a recent history of psychiatric hospitalizations, jailings, or acts, threats, or attempts of serious violent behavior towards themselves or others (Treatment Advocacy Center, n.d.).

Mental illness: Mental illness, also referred to as a mental or psychological disorder, is a mental or behavioral pattern that causes significant distress or impairment of personal functioning. Some common mental illnesses are dementia, anxiety disorder, bipolar disorder, depression, and schizophrenia (Mental Illness in a Southwestern state Prisons, 2013).

Penal Code 5150: The 5150 refers to the penal code under a Southwestern state law for the temporary, involuntary commitment of individuals who present a danger to themselves or others due to signs of mental illness (Mental Illness in a Southwestern state Prisons, 2013).

Recidivism: Recidivism refers to the cycle of being incarcerated, released, and then incarcerated again (Mears et al., 2015).

Assumptions

I made two assumptions regarding this research. First, I assumed that the data gathered from the respective government agencies of the two counties would be accurate. I sought assistance from the data managers or administrators of the government agencies

that keep the data so that the correct number and figure was gathered about the number of individuals with mental illness who are incarcerated. Secondly, data assumptions regarding the use of independent samples *t*-test was tested. Specifically, I assessed the assumption of normality, linearity, and heterogeneity using the procedures outlined in the methods chapter.

Scope and Delimitations

The scope of this study was individuals with a mental illness diagnosis who were arrested in two counties in a Southwestern state. The participants were selected through purposeful sampling and consisted of a cross-representation of different inmates having different mental illnesses and reasons for being involuntarily committed. Records from the inmates in this study was delimited to those who could be found in the database available for the Fiscal Year 2018. The analysis was delimited to causal-comparative differences in the number of individuals with mental illness who were involuntarily committed between categorical groups by the causal-comparative research design.

Limitations of the Study

There were two definitive limitations for this study. First, dependent variable was secondary data gathered from databases of government agencies. Such a method might have limited the insights that could be gathered from the analysis and may not have reflected the general population. Secondly, the use of a nonprobability sampling procedure such as a purposive sampling reduced the possibility of generalizing the results to a larger population.

Significance of the Study

Most of the quantitative studies regarding the effectiveness of involuntary outpatient commitment in preventing incarceration have utilized Kendra's Law, which is the involuntary outpatient commitment law in the state of New York (Gilbert et al., 2010). There are no studies yet that analyze the success of Laura's Law in improving this issue. This research was an attempt to fill this gap.

If the results had shown that the counties that utilized Laura's Law presented fewer instances of incarceration among individuals with mental illness, then I would hope this research may motivate the counties in the state that opted against enacting Laura's Law to reconsider their position and implement it in their jurisdictions. If the results had shown that Laura's Law did not cause a statistically significant difference in the number of incarcerations among individuals with mental illness, then the research may potentially encourage policymakers to either rewrite the law or look for other legislative alternatives to help solve this problem. Either way, this study would promote positive change in both the field of public administration and among public and nonprofit agencies that serve this population.

Summary

The problem addressed in this study was whether Laura's Law was effective in reducing the number of individuals with mental health diagnoses in jail in a Southwestern state. As such, the purpose of this study was to examine the effectiveness of Laura's Law in reducing the rate of individuals with mental illness who were incarcerated in a

Southwestern state by comparing two counties, one that implemented Laura's Law and one that did not. This study was quantitative in its methodology.

The independent variable in the study was the question of implementation of Laura's Law. The dependent variable was the number of mentally ill patients who were incarcerated; this variable was measured nominally. The theoretical basis of this study was the social contract theory and multiple streams analysis theory. Knowing if the implementation of Laura's Law reduced the number of individuals with mental illness that were involuntarily committed will help to determine the effectiveness of the law.

Chapter 2 presents a synthesis of related literature about mental illness and incarceration, IOT, mandatory outpatient treatment, AOT, outpatient commitment, deinstitutionalization, transinstitutionalization, AOT laws in the United States, and Laura's Law. Chapter 3 presents the details of the research methodology. Chapter 4 presents the results of the analysis of the data. Lastly, Chapter 5 presents the discussion of the results and recommendations for future research.

Chapter 2: Literature Review

According to the Treatment Advocacy Center (2016), more than one third of inmates in a Southwestern state suffer from mental illness. The issue addressed in the study was how this excessive incarceration of individuals with mental illness in this particular state could be potentially affected by an involuntary outpatient law known as Laura's Law, particularly with regard to its discretionary nature, which resulted in the law being adopted in only 17 out of 58 counties. The purpose of the study that formed the foundation for this dissertation was to determine if the number of individuals with mental illness who were incarcerated in a Southwestern state had been reduced by implementation of Laura's Law and to enhance how the field of public administration approached this problem.

This chapter contains a review of the existing literature related to the topic of the study. First, I provide a detailed theoretical framework of the study. Next, I present deinstitutionalization and transinstitutionalization as alternatives to incarceration. Then, mental illness and criminal behavior are discussed. I share concerns related to the incarceration of individuals with mental illness, as well as issues surrounding IOT. Subtopics in this section include IOT laws in different states and treatment outcomes. Finally, I provide an overview of the implementation of Laura's Law in a Southwestern state.

Literature Search Strategy

To find articles relevant to the topic of the study, I conducted extensive searches in the Criminal Justice Database, Political Science Complete, PsycINFO, SocINDEX

with Full Text, Google Scholar, and EBSCO Host databases. The following key search terms were used to find relevant literature on mental illness and incarceration, IOT, mandatory outpatient treatment, AOT, outpatient commitment, deinstitutionalization, transinstitutionalization, and Laura's Law. Most sources included in this literature review were written and published within the last 4 years; this choice was intentional to ensure accuracy and relevance to the research problem. Some seminal works were included, particularly to inform discussion of the history of deinstitutionalization. I also included research literature older than 5 years to provide a history of the development of AOT laws either across the United States or in a Southwestern state.

Theoretical Foundation

The theoretical foundation for this study was derived from the social contract and multiple streams analysis theories.

Social Contract Theory

Regarding social contract, the modern iteration of this theory was first developed by Hobbes in the seventeenth century (Hampton, 1988). Hobbes defined a social contract as a mutual agreement whereby people transferred their natural rights. Such a contract is exemplified by citizens of a country who agree to live by the regulations and laws put in place by the governing bodies of a region in exchange for enjoying infrastructure, relative safety, and other benefits associated with developed societies. Social contract theory also explains the process of establishing law and order in a society and thus could be used to explain criminality and digression from agreed upon social rules (Hampton, 1988). Hobbes believed that most reasonable people preferred to live in a social contract-based

society rather than return to a state of nature before any action was established as immoral or evil. Thus, a person with a mental illness or one who temporarily behaved unreasonably due to extreme emotions would be the most likely to break a law or social contract.

Social contract theory relates to this study as it explains why the government has a responsibility to assist individuals who, due to mental illness, have the potential to be a danger to themselves or others because they do not understand the severity of the consequences of their actions. Welie (2012) utilized the social contract theory to explain the social responsibilities of health professionals. Welie explained that physicians their professional role were initially part of the governed in their social contract; however, at times they were on the other side due to the coercive quality of their professions. This meant that doctors were on the government's side of the social contract that enforced the law (Welie, 2012).

This paradigm is particularly evident in the role that physicians play when enforcing outpatient commitment laws. For example, in the case of any IOT law, the opinion of a medical professional is required for a patient to be legally committed to treatment. I employed social contract theory in my research study to explore digression from established social contracts by those with mental illness that could result in criminality, which activates the responsibilities of the governing power to become involved, depending on whether or not the mentally ill are sentenced to incarceration or some form of mental illness treatment.

Multiple Streams Analysis Theory

Multiple streams analysis theory also informed the theoretical foundation of this research. Multiple streams analysis theory was first proposed by Kingdon (as cited in Sabatier & Weible, 2014) and was based on the notion that policy making was fostered under a sense of ambiguity. According to Kingdon, this ambiguity was present in all the structural features of government, in that any specific policy issue could be framed many different ways (as cited in Sabatier & Weible, 2014). Additionally, Kingdon asserted that policy issues competed for attention and that no two issues were treated with the same degree of importance. This can be attributed to policy decisions being informed by flawed research and contextual information, as well as short timeframes imposed on legislators, which could potentially cut their decision-making processes short. Kingdon determined that the ambiguous nature of policy decision-making makes the process neither linear nor rational at every level of thought (as cited in Cairney & Jones, 2016).

The multiple streams approach conceptualizes ambiguity as “many ways of thinking about the same circumstance” (Feldman, 1989, p. 5). This conception of ambiguity is illustrated by Laura’s Law. The adoption rate of 28% across the counties in a Southwestern state, which is the focus of this research, shows that policy leaders see the solution to challenges associated with mental illness very differently because if IOT was seen as a clear solution, Laura’s Law would be adopted statewide. Multiple streams analysis theory was used in my research study to demystify the ambiguity surrounding IOT and Laura’s Law specifically by addressing potential problems that policymakers might have with these solutions.

Deinstitutionalization and Transinstitutionalization

This section reviews literature related to the deinstitutionalization and subsequent transinstitutionalization movements. These two movements played a significant role in shaping the modern-day mental healthcare system in the United States. Moreover, these movements are linked to the creation and development of involuntary outpatient laws across the United States.

Deinstitutionalization

Deinstitutionalization refers to a process that became a movement in the 1960s (Zlotnick et al., 2013). A societal paradigm shift occurred that caused the very existence of mental illness to become questionable (Torrey, 2015). Critics of modern psychiatry asserted that labeling people who were different as mentally ill was a form of oppression (Isaac & Armat, 1990). In addition, mental health facilities began shutting down, and those individuals who were being treated were either incarcerated, sent to live with family, transferred to foster care or nursing homes, or referred to less comprehensive community services or charities (Dlugacz, 2014; Kim, 2016; Lamb & Weinberger, 2014). The process of transferring patients to other living situations as a result of deinstitutionalization became known as the transinstitutionalization movement (Kim, 2016; Primeau et al., 2013; Reiter & Blair, 2015).

Pow et al. (2015) examined discharge and readmission rates of U.S. mental hospitals in an uninterrupted time-series model. The discharge rates significantly increased in the period before antipsychotics were introduced, which indicated that

deinstitutionalization began before 1954. The increase continued until 1961, when federal policy changed.

Shortly after deinstitutionalization occurred, Doll (1976) explored unintended consequences of deinstitutionalization. Specifically, Doll examined how the deinstitutionalization process affected the families of former mental health patients. In total, 125 families were included in this research. Doll used attitudinal tests and interviews to gather data from the participating families. Doll found that although the participating families were most often able to care for patients in their home without shame or the occurrence of adverse events, there was a heavy emotional burden and stress for the families of patients who experienced severe psychotic episodes. Doll concluded that even when families were able to accept patients in their homes and were able to provide the needed care, the social rejection of mental health patients still affected the families. Doll also discovered that this social rejection could have detrimental consequences for the mental health community even though the original intention of deinstitutionalization had been to strengthen and support this community.

Doll's (1976) findings partially contradicted the premise of the deinstitutionalization movement, which was that mental health patients could be more effectively cared for by means of communal social support rather than in a mental health facility (Kim, 2016). Perry (2016) acknowledged that mental health policy reforms such as deinstitutionalization held great promise but had unintended negative consequences for individuals with mental illness, as well as their families. This added to the negative effects of deinstitutionalization in addition to using incarceration of people with mental

illness as a way to cope with this population. My research explored the potential effect of Laura's Law on the incarceration of people with mental illness in a Southwestern state.

Talbott (2004) explored potential ways to ameliorate negative effects related to past deinstitutionalization efforts. Talbott attributed the sources of the negative consequences of deinstitutionalization to be no significant tests of its philosophic bases, a lack of movement-wide consensus, general inadequacies of mental health service delivery, and poor alternative facility/service planning. Talbott noted that to address the negative implications of deinstitutionalization and effectively care for those with chronic mental illness, mental health institutions needed to be seen as full-spectrum care and treatment facilities rather than a place to "store" those with mental illness. Additionally, Talbott identified discrimination and bias as barriers to effective treatment. The conclusion of Talbott's work highlighted Ten Commandments, or lessons to be learned, from negative effects stemming from deinstitutionalization:

1. There must be adequate community services and facilities available to provide patients with care, treatment, and community support before they are discharged.
2. Barriers to mental health delivery system participation must be removed to avoid the perpetuation of eligibility and reimbursement guidelines that discriminate against the chronically mentally ill.
3. Patients with chronic mental illness need full civil rights and opportunities, including equal access to education, housing, income maintenance, vocational rehabilitation, and community care.

4. Funding must adapt to patient populations, and money must be allocated to address shifts in the locations of care or treatment.
5. Community support funding (i.e., for housing, income support, food, social services, and social and vocational rehabilitation) should be separate from, but coordinated with, medical-psychiatric funding.
6. It is particularly critical to keep this requirement in mind when considering the inclusion of national health insurance benefits.
7. A system that ensures continuity of care must be developed in practice, as opposed to just being discussed as an ideal outcome.
8. A case management system must be established that makes use of existing resources and manpower.
9. Service provision should go to the smallest local entity capable of effective service delivery. These entities must designate a facility or individual as the core provider of that service within the delivery system.
10. All levels of governments should avoid conflicts of interest caused by operating services themselves or contracting for services. Local entities should operate services, city and county governments should develop and monitor them, states should coordinate plans statewide, and federal government efforts can be focused nationwide. (Talbot, 2004)

These Ten Commandments call for an approach that includes a continuity of care, as well as an allocation of resources for full integration of individuals with mental illness to society. The refusal or the failure to apply these Ten Commandments, or at least some

of them, could be one of the reasons why the majority of the counties in a Southwestern state have decided not to enact Laura's Law yet. If this research shows a correlation between the adoption of Laura's Law and the incarceration of individuals with mental illness, perhaps those counties will be more open to the idea.

Kim (2016) examined implications of psychiatric deinstitutionalization by conducting a systematic literature review. Kim predicated this work on the association between the stark decrease in mental health patients following deinstitutionalization in the 1960s and a considerable increase in imprisonment, which began in the 1970s. Kim discovered several implications after reviewing existing literature. Although a direct relationship between deinstitutionalization and prison growth was not confirmed, it became clear that many patients who were displaced as a result of the deinstitutionalization movement were at a higher risk of becoming homeless, which then led many to commit crimes and subsequently end up in jail. This potential outcome was largely dependent on the patients' access to community resources and personal support systems. Additionally, Kim noted that a lack of consistency with regard to how patients who experienced transinstitutionalization were tracked as they moved between facilities and living situations made it difficult to draw conclusions about patient outcomes.

The inconsistencies within existing deinstitutionalization literature help to explain the legislative ambiguity surrounding current involuntary outpatient laws. It may be difficult for policy makers to make the most informed decisions possible when the body of literature on a policy topic is not conclusive. Kim's (2016) finding is particularly

significant for this study since the majority of the counties in a Southwestern state have not adopted Laura's Law.

Schutt (2016) explored the progress that occurred after deinstitutionalization, as well as the paradoxical nature of the deinstitutionalization process. Schutt attributed the paradigm shift which led to deinstitutionalization to an increased belief in the powerful role of social environment in a person's mental health. Another change was that mental health institutions started being seen as therapeutic and then seen as iatrogenic post-deinstitutionalization. Regardless, research from before and after deinstitutionalization found that environments that offered social support to those with mental illness, be it in a mental health facility or community program, could be beneficial to those struggling with their mental health. Schutt concluded that based on the established efficacy of socially supportive solutions, further research should be conducted to determine what specific factors and characteristics of socially supportive environments benefit those with mental illness. IOT could potentially be part of those factors or characteristics of socially supportive environment for individuals with mental illness who are at risk for incarceration.

Lincoln and Adams (2016) explored how individuals who utilized publicly funded community health services as post-deinstitutionalization era resources viewed themselves within their community. They conducted structured interviews with 294 individuals who utilized mental health services at two public, urban, outpatient mental health facilities in the Northeast region of the United States. The participants saw community as being defined by four general definitions: 1) social group; 2) mental health users; 3)

contribution to society; and 4) geography. The majority of participants described their role in one or more of these communities. The participants also spoke about intersectional marginalization when describing their roles within these communities based on their mental illness and on other aspects of their social identity like race and socioeconomic status (Lincoln & Adams, 2016). This was important as it showed that individuals with mental illness had a voice and that the type of service or resource that they participated in had an impact on how they viewed themselves in relationship to their illness.

Lincoln and Adam's (2016) findings reflected a theme identified in many studies including individuals who have a mental illness; individuals who seek mental health services; and/or the families of those with a mental illness facing stigmatization (Doll, 1976; Pescosolido, 2013; Sayed et al., 2016; Wilson & Wood, 2014). Such stigmatization has been identified alongside other forms of bias and discrimination in existing literature as having an effect on how likely individuals are to seek mental health services (Lincoln & Adams, 2016). Overall, Lincoln and Adams highlighted the important role of different communities in supporting those who experience mental health difficulties, as well as how those who experienced mental health challenges perceived their community and the resources available to them. These findings could explain a potential fear of being stigmatized among those who could benefit from IOT.

Deinstitutionalization refers to a process which began in the 1960s when mental illness was questioned, mental health facilities started closing down, and the patients who were receiving treatment at these places were put in jail, moved to nursing or foster facilities, sent to reside with family members, or placed in settings that did not offer

comprehensive services (such as health, dental, case management, etc.; Kim, 2016). The process of transferring patients as a result of deinstitutionalization became known as transinstitutionalization (Kim, 2016). To mitigate the negative implications of deinstitutionalization, mental health institutions needed to operate as full-spectrum care and treatment facilities (Talbot, 2004).

Inconsistent findings within existing deinstitutionalization literature explain the legislative ambiguity surrounding involuntary outpatient laws, in that it may be difficult for policy makers to make informed decisions when the body of literature on a policy topic is not conclusive. Environments that lend social support to those with mental illness, be it in a mental health facility or community program (Frazier et al., 2015), could benefit those struggling with their mental health, although further research should be done to determine what specific factors and characteristics of socially supportive environments benefit those with mental illness (Raitakar et al.; Schutt, 2016). A common theme identified in existing literature is that there is possible stigmatization of individuals who have a mental illness; individuals who seek mental health services; and/or the families of those with a mental illness (Dixon et al., 2016; Doll, 1976). Such stigmatization, which can affect how likely individuals are to seek mental health services, has been identified alongside other forms of bias in existing literature (Lincoln & Adams, 2016). In the next section, I will discuss the connection between mental illness and criminal behavior, according to current literature.

Mental Illness and Criminal Behavior

This section details connections that have been made in existing literature between criminality and mental illness. Although a consensus has not been reached concerning this association, many studies have contributed to a modern, nuanced understanding of how criminal behavior and mental illness are connected. However, the high prevalence of mental illness within incarcerated populations (Kim, 2016) warrants additional investigation. It is important to note that even though my research will not focus on the specific connection between mental illness and criminal behavior, I will explore the connection between mental illness and incarceration.

Many theorists have sought to understand the connection between mental illness and criminality in order to explain why persons with a mental illness have a propensity to commit crimes (Ballard & Teasdale, 2016; Gill & Murphy, 2017; Lancaster, 2016; Veeh et al., 2016). The large majority of individuals with mental illness will have encountered law enforcement at least once in their lives (Kara, 2014; Livingston, 2016). Blevins et al. (2014) analyzed available data regarding the Crisis Intervention Teams, a program that was conceived to offer police officers the necessary training to deal with persons with mental illness. Blevins et al. emphasized how difficult it was to find data, in large part due to the lack of consistency in mental health resources across the 100 counties in North Carolina. However, Blevins et al. noted that whenever the case involved involuntary outpatient commitment, collection of data was more successful. This could be a potential benefit to the counties that have decided to enable Laura's Law in a Southwestern state,

as the fact that they have enacted Laura's Law could translate into these counties having better records of the services that were rendered to individuals with mental illness.

Also, on the issue of the dynamic between police officers and persons with mental illness, Lancaster (2016) studied the creation of mobile crisis teams, a program that was a collaborative effort between police departments in the United Kingdom and mental health professionals. Lancaster concluded that this partnership could not only prevent the unnecessary use of hospitalization or mental health legislations (such as involuntary outpatient commitment), but also could potentially reduce the overall cost of mental health. Applying these findings to Laura's Law in a Southwestern state shows that a strong partnership between mental health authorities and the police departments is essential in order for services to be delivered successfully.

Peterson et al. (2014) explored how consistently and how frequently symptoms of mental illness precede criminal behavior directly among prison inmates with a mental health diagnosis. In total, 143 offenders were interviewed to collect data for this research investigation. Peterson et al. found that crimes committed by the participating inmates were rarely directly connected, or motivated by symptoms of mental illness. More specifically, out of the 429 crimes that were coded as a part of this study, 10% were related to bipolar disorder; 4% were related to psychosis; and 3% were related to depression. Peterson et al. concluded that efforts to reduce recidivism among inmates would be most effective if prisons addressed variables that had a stronger evidence-based connection to criminality than mental illness, such as antisocial behavior and personality. Peterson et al. findings did little to clarify the relationship they sought to understand,

which further reinforced the idea that although a connection was apparent between mental illness and criminal behavior, that relationship was complicated by many factors and thus remained unclear. This study informed my research as it provides evidence that incarceration does not appear to be the best solution for dealing with individuals with mental illness.

Skeem et al. (2015) noted that the relationship between mental illness and criminal behavior was influenced by several factors. Their findings corroborated the findings by Peterson et al. (2014). Skeem et al. (2015) also stressed the importance of not automatically treating the behavior related to mental illness as criminal. Researchers have studied some factors that may facilitate criminality among people with a mental illness (Madole et al., 2019; Stinson et al., 2016).

Stinson et al. (2016) explored how trauma affected criminality, mental health symptoms, and aggression among psychiatric patients. Stinson et al. included 381 inpatients in their sample. They hypothesized that a connection between the studied variables based on assertions in existing literature that adversity experienced during childhood and adolescence could lead to aggressive tendencies and criminal behavior. Stinson et al. (2016) compared the rates of neglect, placement in foster care, trauma, and parental substance abuse among the participants to those from the broader community. Linear and logistic regression was used to analyze the data.

Stinson et al. (2016) found that gender impacted trauma prevalence among the participants. Additionally, cumulative scores which reflected the degree of adversity experienced by participants were directly related to the occurrence of mental health

symptoms, aggressive behavior, and criminality. Stinson et al. also noted that in many cases, the inclusion of foster care experiences helped them to better understand the connection between adverse developmental experiences and negative consequences experienced later in life. These findings helped to clarify how the mechanism of trauma and/or adverse experiences during development can lead to occurrences of mental health problems, criminality, and/or aggression as separate, but related, phenomena.

A similar investigation was conducted by Mundia et al. (2017). They examined how criminality was affected by mental health, psychopathic personality type, and recidivism. Mundia et al. administered a survey to 64 convicts of male and female genders who had committed a crime in one or more of the following categories: violence, stealing, sex, deception, and drugs. Mundia et al. used multinomial logistic regression in order to determine what factors were related to the occurrence of specific types of criminality. Upon analysis, they determined that those who demonstrated psychopathy were more likely to commit drug, sex, violence, and theft-related offenses than those who didn't display psychopathy. Additionally, psychoticism and depression were related to stealing; hostility, depression, and psychoticism were related to drug offenses; and paranoid ideation, depression, and psychoticism were related to violent crimes. Psychoticism was the only mental illness related to sex offenses. Recidivism was shown to be predicted by male gender, primary education status, and having married parents (Mundia et al., 2017). These findings shed light on which specific mental health conditions and illnesses were related to different types of crimes, which brought new understanding to the overall relationship between criminality and mental illness. They

also presented more evidence that using incarceration as a way to address individuals with mental illness, and consequently treating them as criminals, was not the most effective method.

Al-Rousan et al. (2017) explored the occurrence of certain mental illnesses, as well as associated factors, within a sample that represented an entire state prison population. They conducted a cross-sectional study with health record data from the Iowa Corrections Offender Network. They found that inmates were 36.7 years old on average, primarily male (91%), and White (65%). A history of smoking (51%) and obesity (38%) were common. Additionally, nearly half (48%) of the studied inmates had been diagnosed with some type of mental illness. Out of those inmates, 29% had a mental illness that was considered serious, and 26% had abused controlled substances at some point in their life. Most inmates' mental illnesses were first diagnosed during their incarceration (90%). These findings highlighted the high prevalence of mental illness among a sample of 8,574 inmates, as well as the high prevalence of substance abuse among inmates who have diagnosed mental illnesses (Al-Rousan et al., 2017). They also motivated my desire to find out the correlation between IOT laws and using incarceration to address the behaviors presented by individuals with mental illness.

Researchers have sought to better understand the connection between mental illness and criminality so that intensive efforts can be made to help inmates if they experience mental health challenges, which can then reduce recidivism (Lamberti, 2016). Lamberti explored collaborative efforts between the criminal justice system and mental healthcare providers intended to prevent recidivism and deal with the root cause of

criminality rather than just jailing offenders in order to punish behavior. The various approaches Lambert uncovered, which were used with this intent, were specialty probation conditions, mental health courts, and conditional release programs. Lamberti noted that these approaches most often involved some form of legal leverage being used to push current or former inmates to seek mental health treatment from certain approved entities.

In response to unmet needs and current practices identified in the literature, Lamberti (2016) proposed a six-step framework for effective collaborations between the criminal justice system and mental healthcare professionals. The steps were outlined as follows:

1. Engagement: Both mental health professionals and staff serving the criminal justice system should have the shared goal of helping their clients be healthy and happy law-abiding citizens.
2. Assessment: Assessing a client's risk factors for criminal recidivism, as well as assessing their mental health, is key to understanding why criminality occurred in the past and how it can be prevented in the future. The eight risk factors associated with criminal recidivism are generally referred to as antisocial behavior history, lack of healthy leisure or recreation pursuits, antisocial personality pattern, antisocial cognition, having criminal companions, work or school problems, family or marital problems, and drug abuse.

3. **Planning and Treatment:** Planning should be enacted so that risk factors for criminal recidivism can be addressed in tandem with mental health treatment.
4. **Monitoring:** Monitoring must be thorough to ensure treatment adherence and measure the progress of treatment measures that are taken. Effective communication, particularly face-to-face meetings between representatives from the criminal justice and mental health sectors, can help to facilitate effective monitoring.
5. **Problem Solving:** The expectation should be that problems that will be occurring during the collaborative process must be solved efficiently.

Lamberti proposed the following principles to address non-adherence and other client-based problems during the process:

- *Shared problem solving:* major decisions are made with input from both mental health and criminal justice professionals.
 - *Therapeutic punishment alternatives:* support-based interventions and treatment should be considered as punishment alternatives based on the perceived cause of behavioral problems.
 - *Rewards and graduated sanctions:* a system of rewards and sanctions should be enacted to encourage good behavior and punish unfavorable behavior frequently, even for small actions.
6. **Transition:** Collaboration between criminal justice and mental health professionals can be particularly crucial during the process where patients or incarcerated individuals transition back into society. Additional support

meetings, resources, and services should be offered to ease the transition.

(Lamberti, 2016)

Lamberti (2016) suggested the creation of a bridge between the criminal justice system and the mental healthcare professions. IOT could potentially be an alternative to the model proposed by Lamberti. Finding whether Laura's Law is a good example of a collaboration between the criminal justice system and mental health professionals is one of the goals of this research.

Broad consideration of the literature concerning mental health and criminality reveals that certain predisposing factors seem to affect the likelihood that a person will commit a crime more than the presence of certain mental health conditions, such as depression or psychoticism (Lamberti, 2016). In addition, when associations have been discovered between mental illnesses and criminal actions (Mundina et al., 2017), it remains unclear whether those mental illnesses directly led to criminality, or if past adverse experiences or traumas lead to both mental health problems and criminality (Stinson et al., 2016). These findings highlight the nuanced connection between mental illness and criminality that has yet to be fully understood.

Many theorists have sought to understand the connection between mental illness and criminality to explain the high incidence of crime by individuals with a mental illness (Blevins et al., 2014; Lancaster, 2016). The degree of adversity experienced by individuals has been determined to be connected to the occurrence of mental health symptoms, aggressive behavior, and criminality (Stinson et al., 2016). Recidivism may be especially prevalent among males with a primary education status who have married

parents (Mundia et al., 2017). Specific mental illnesses such as schizophrenia and bipolar disorder are related to specific types of criminality. Among a sample of 8,574 inmates, nearly half (48%) had been diagnosed with some type of mental illness; 29% had a serious mental illness; and 26% had abused controlled substances at some point in their life (Al-Rousan et al., 2017).

Efforts to reduce recidivism among inmates may be more effective if variables are addressed that have a stronger evidence-based connection to criminality than mental illness, such as antisocial behavior (Peterson et al., 2014). Lamberti's (2016) six-step framework for effective collaborations between the criminal justice system and mental healthcare professionals entails engagement, assessment, planning and treatment, monitoring, problem solving, and transition. Collaboration between police departments and mental health professionals has been shown to prevent unnecessary hospitalization or IOT and to potentially reduce the overall cost of mental health treatment. Consideration of the full breadth of literature concerning mental health and criminality reveals that predisposing factors seem to affect the likelihood that a person will commit a crime more than the presence of certain mental health conditions (Lamberti, 2016).

Concerns Associated With Incarcerating Those With Mental Illness

This section explores concerns and controversy surrounding the incarceration of the mentally ill. While people in the prison system may argue that incarceration can be necessary for the safety of the greater community, researchers tend to disagree with this theory. Many studies have revealed poor outcomes associated with incarcerating people with a known, serious, mental health condition (Bagaric, 2016; Hirschtritt & Binder,

2017; Kennedy-Hendricks et al., 2016). Evidence-based concerns about the use of incarceration to address criminality associated with mental illness have led researchers and policy experts to develop alternative solutions to incarcerating the mentally ill (Cowell et al., 2014; Steadman et al., 2015; Sugie & Turney, 2017), including IOT (Ben-Moshe, 2017; Lamb & Weinberger, 2016; Moore & Weisman, 2016; Segal & Sisti, 2017; Sewell, 2016).

Concerned with the fact that 14.5% of male inmates and 31% of female inmates showed signs of serious mental illness, McCabe et al. (2012) completed a quantitative study to determine which diagnosis was associated with each specific crime. The sample was comprised of individuals over the age of 18 who had an axis I psychiatric disorder and who had been arrested and incarcerated. Results showed that regardless of the patient's diagnosis, the utilization of mental health courts and involuntary outpatient commitment had a very positive effect on that individual's functionality and adaptation to society.

Similarly, Bouffard et al. (2016) performed a quantitative study, which focused on legal counsel and case management services targeting mentally ill indigent offenders, showed that these services could assist them in coping with their diagnosis and shorten their sentences by 17 days. However, the effect concerning preventing their future incarceration was not statistically significant. My research about Laura's Law will hopefully produce statistically significant data to determine if the law has an influence in preventing the incarceration of individuals with mental illness.

Beseda (2011) asserted that incarceration is one of the worst environments for the mentally ill because prisons are not generally equipped to handle their treatment needs. The author highlighted a detrimental cycle that started during deinstitutionalization, which led to the mass incarceration of individuals with mental illness. As mentioned previously in this chapter, deinstitutionalization led to many mental health patients being placed with their families or otherwise displaced out on the street in an effort to keep them out of mental hospitals. Those who became homeless as a result were then exposed to addictive substances sold on the street and forced to interact with the public far more than in the sheltered environment of a mental hospital. This in turn led to the social demonization of those with mental illnesses and criminal prosecution of their actions (Beseda, 2011). In order to combat this shift, which led to the criminalization of mental illness, Beseda asserted that the dialogue surrounding this social issue must change. Thus, museums, textbook creators, and other providers of historical information and knowledge should reframe mental illness as a medical condition and use language, which decriminalized mental illness when addressing public discourse. Haney (2017) agreed with Beseda (2011), noting that there were negative effects of imprisonment for individuals with mental illness and that prison could exacerbate the psychological vulnerability of this population.

Taking these findings into account, it was important for me as a researcher to find out if Laura's Law had the faculty to reduce the incarceration of individuals with mental illness. If that was the case, the overall wellbeing of these individuals would be improved. This shift in the framing of mental health problems from something people

cannot help that requires treatment to a societal nuisance that should be hidden from public view by means of incarceration highlights the reason a large number of people with a mental illness who are incarcerated do not improve during the span of their sentence.

The Impact of Lack of Mental Health Facilities

Equally concerned about the incarceration of individuals with mental illness, Torrey et al. (2015) explored a different cause of the mass incarceration of individuals with mental illness. Their report detailed a wide shortage of hospital beds at mental health facilities across the United States. The states that were surveyed included the following: Nevada (5.1 per 100,000); Arizona (5.9); Arkansas (6.7); Iowa (8.1); Vermont (8.9); and Michigan (9.9). The study found these states to have the least number of hospital beds available per 100,000 citizens. Conversely, the states that had the most beds available were South Dakota (40.3) and Mississippi (49.7). Torrey et al. (2015) polled a panel of mental health experts and determined that at least 50 psychiatric beds should be available per 100,000 citizens in order to effectively address statewide mental health needs. Shockingly, 42 out of 50 states had less than half of the minimum recommended number of psychiatric beds available at the time of the study (Torrey et al., 2015).

The consequence of a lack of psychiatric hospital beds is a lack of available mental health services for those who need them. However, this problem also brings about additional unintended negative consequences, including increased homelessness (Ecker et al., 2018; Fox et al., 2016); incarceration of individuals with mental illness (Mulvey & Schubert, 2017); increased violent behavior and violent crimes, including homicides, in

communities across the nation (Ulrich et al., 2018); and emergency rooms being flooded with patients who need psychiatric services (Torrey et al., 2015). These consequences seem to go beyond negative outcomes experienced by individuals with mental illness to the detriment of entire communities (Torrey et al., 2015). Torrey et al. concluded that the utilization of AOT and Programs of Assertive Community Treatment (PACT) could effectively address the countrywide shortage of psychiatric beds to the benefit of both patients and communities alike.

Hoke (2015) raised concerns about the healthcare available to individuals with mental illness in prison. Hoke's work was predicated by the disproportionate representation of mental illness in prisons. Hoke found that nearly 50% of inmates had a mental illness compared to 11% of individuals in the general population. Hoke related the combined influence of multiple social factors related to recidivism to the compounding social factors, which could lead individuals with mental illness to be more likely to go to prison. For example, homelessness and drug use were more likely to influence someone to commit another crime and return to jail; those same conditions could also cause a mentally ill individual to become more likely to commit a crime. In this way, incarceration could provide circumstances to facilitate some degree of rehabilitation, such as clean water and shelter, which would not be available to some individuals with mental illness, depending on their pre-incarceration context.

At the same time, Hoke (2015) raised concerns about the United States prison system's poor quality of healthcare, which could be detrimental to inmates with mental illnesses. The author partially attributed this shortcoming to the absence of a good role

model, which underpins many prison systems around the world. Some countries such as the United Kingdom view it as a human right that the healthcare provided to prison inmates was comparable to what they would have access to if they were living in their community rather than being incarcerated. Hoke (2015) outlined several barriers to mental healthcare in prison, which included suicide prior to effective treatment, inmate segregation, and abuse of drugs (Hoke, 2015). These findings highlighted the complex social context surrounding the incarceration of inmates with mental illnesses, as well as the relative nature of the quality of mental healthcare and treatment for mental illness within the United States prison system.

In a similar study, Ireland et al. (2018) conducted a mixed methods study with a pre- and post-intervention design. Ireland et al. aimed to determine whether an exercise referral scheme could be an effective health promotion tool for male prisoners who exhibit mental health symptoms. The results revealed that there were significant levels of improvement in the depression, anxiety, stress, anger, and self-esteem of the prisoners.

Concerns about the use of incarceration to address criminality associated with mental illness have led researchers and policy experts to develop alternative solutions (McCabe et al., 2012; Sewell, 2016). The utilization of mental health courts and involuntary outpatient commitment could improve the social functionality and societal adaptability of those with a mental illness. Legal counsel and case management services could assist mentally ill indigent offenders in coping with their diagnosis and shortening their sentences.

In order to combat the existing pattern, which contributes to the criminalization of mental illness, the dialogue surrounding mental illness and criminality must change (Beseda, 2011). Only 8 out of 50 states in the United States have more than half of the minimum recommended number of psychiatric beds available (Torrey et al., 2015). Consequences of a lack of psychiatric hospital beds include a lack of available mental health services; increased homelessness; individuals with mental illness being incarcerated in prisons and jails; increased violent behavior and violent crimes, including homicides, in communities across the nation; and emergency rooms being flooded with patients who need psychiatric services.

Overall, this section of literature review revealed the complex social context surrounding the incarceration of inmates with mental illnesses, as well as the relative nature of the quality of mental healthcare and treatment for mental illness within the United States prison system. This relates to my research as Laura's Law could not only represent a way to decrease the incarceration of individuals with mental illness, but could also possibly a channel to improve the social context surrounding this population. In the next section, I will review the literature related to AOT, which is directly related to my research.

Court-Ordered Outpatient Mental Health Treatment

In this section, I review literature related to AOT and IOT. While these are the most commonly referenced names for outpatient treatment that is required by law, the terms outpatient commitment and mandatory outpatient treatment, as well as AOT and

community treatment order have also been used in the literature. These terms will be used synonymously for the remainder of the paper.

Outpatient treatment is defined as mental health treatment offered to the patient without hospitalization. Outpatient treatment often entails visiting a mental health clinic or psychologist on a routine basis (Andrade et al., 2014; Schneeberger et al., 2017). The proper form of outpatient treatment is chosen based on the needs of the patient and whether treatment was sought by the patient or required by law (Dus, 2016; Kisely & Campbell, 2005).

Pridham et al. (2014) explored coercion as perceived by patients undergoing IOT. Pridham et al. conducted a systematic literature review in order to explore this topic. Fourteen studies were included in the review after determining their relevance to the topic. Pridham et al. found that the involuntary nature of IOT may cause some patients to feel coerced. However, some of this effect was attributed to their personal understandings of what alternatives are available aside from IOT. Additionally, factors such as the way IOT was initiated and enforced could influence patients' perceptions of (IOT). In this way, mental health professionals responsible for IOT could potentially improve patient perceptions and patient outcomes by extension, by adjusting elements of the IOT process. Pridham et al. concluded that increasing patients' access to information, as well as improving accessibility, fairness, and working relationships with service providers, could lead patients to see IOT as a more favorable process and reduce elements of coercion.

Involuntary outpatient commitment has been studied in different capacities for decades (Cripps & Swartz, 2018; Morrissey et al., 2013). Swanson and Swartz (2014)

noted that there was a lack of research-based consensus on many aspects of this form of treatment. Swanson assessed existing evidence and research concerning the implications of IOT and argued that although consensus on the topic was rare, there was more than enough evidence to justify the implementation of IOT on a more widespread basis.

Swanson noted that while many have sought to understand the effectiveness of IOT, a better question might be to ask under what conditions, and for whom, could outpatient commitment orders be effective?

According to Swanson and Swartz (2014), the hesitation of some decision makers from certain states to fully enforce IOT laws even after they have been passed could be due to a quest for evidence resulting from a randomized outpatient commitment trial. Instead, Swanson and Swartz suggested that the results of large, high-quality, quasi-experimental and naturalistic studies should be considered to be generalizable as well. According to Swanson and Swartz these findings helped to explain why there was still a lack of randomized control trial research on IOT, as well as why results from many non-randomized large-scale studies should be considered valid and generalizable.

Munetz et al. (2014) explored various facets of IOT, including procedural justice, perceived coercion, and overall program impact. They collected data through interviews with individuals who previously completed IOT programs (17) and graduates from a mental health court program (35). In total, 52 individuals took part in this research. Munetz et al. also employed the MacArthur Admission Experience Survey to better understand participants' perceptions. Upon analysis of the data, the researchers determined that the court program graduates perceived significantly greater procedural

justice and significantly less coercion when interacting with the judge than IOT participants. Interactions with case managers were perceived similarly by both groups of participants. Additionally, the mental health court program graduates felt significantly more positive and respected after program completion than the IOT participants (Munetz et al., 2014).

The findings from Munetz et al. (2014) highlighted the differences in perception, which could occur, depending on who was providing their opinion of IOT. Some of the findings, such as greater perceived coercion by IOT participants than court program graduates, were easily explained by the contextual condition that IOT participants had no choice but to participate and court program graduates did. However, the latter finding concerning positivity and respect associated with the IOT experience raised new questions about actions that former IOT participants believe would have improved their experience in comparison to the aspects of the program that non-participants saw as needing improvement (Munetz et al., 2014).

Because IOT has characteristically been assigned by a governing power such as a judge, it is imperative that bias and discrimination do not play a role in how it is assigned. Thus, Galon et al. (2012) conducted a mixed-method study with 154 participants who were also patients on the racial demographics of people who are subject to involuntary outpatient commitment. Out of all the participants of this study, 64 had completed an outpatient commitment. Galon et al. found that there was no statistically significant difference in the number of White people who received outpatient commitment services as opposed to Black people. Additionally, the researchers found that Black participants

did not express any feeling of being treated differently than the White patients (Galon et al., 2012). These findings provided promising evidence that race, and potentially other social identity characteristics, do not impact judges' decisions concerning IOT. A larger sample and further research would be needed to strengthen this finding.

Outpatient treatment refers to mental healthcare, which is provided without hospitalizing a person with a mental illness (Andrade et al., 2014). AOT may lead to fewer arrests and reduced recidivism (Gilbert et al., 2010). Outpatient treatment may reduce the risk of arrest among patients with SMI, while ER and inpatient services can increase it (Robst et al., 2012). It is imperative that bias and discrimination do not play a role in how IOT is assigned, as it is imperative with the delivery of any mental health service (Galon et al., 2012). The following section will explore how AOT laws have been enacted in the statutes across the United States.

Assisted Outpatient Treatment Laws in Different States

At the time of this research, 46 states had IOT laws in place. The inception of these laws has inspired experts in the field to conduct independent research and evaluations on the success or failure rates of these laws (Berger et al., 2018; Danzer & Wilkus-Stone, 2015; Esposito et al., 2008; Gilbert et al., 2010; Hotzy et al., 2018; Hotzy & Jaeger, 2016; Lay et al., 2015; Meldrum et al., 2016; Saya et al., 2019; Swanson et al., 2001; Swartz et al., 2009; Swartz et al., 2016). Such explorations have observed the reduction of 20 days for hospitalization of schizophrenia patients in North Carolina, along with a 72% reduction in hospital admissions for patients with psychotic disorders after the implementation of IOT laws (Swartz et al., 2009). The application of IOT laws

in Washington, D.C. and Ohio showed a decrease in hospital admissions, as well as costs (Gudio & deVeau, 1986; Munetz et al., 1996). In the Washington D.C. study, Guido and Stavis (2007) took Guido and DeVeau's (1986) study and expanded upon it, using a sample population of 115 patients with various mental illnesses and observed their behaviors both before and after provisions for IOT were ordered. Findings showed that of the total patient sample, 30% had decreased length of stay in a hospital when ordered outpatient therapy services. The use of IOT has decreased hospital stays, with many studies providing acknowledgement that from a medical perspective, mentally ill patients were offered treatment that decreased their propensity for hospitalization. Consider the responsiveness as a signifier of this successful endeavor in assisting those persons with mental illness (Guido & Stavis, 2007). In other words, those states that have court systems that recognize IOT and that utilize such a system and program show signs of a decrease in prison stays, as well as an increase in the improved health and welfare of such mentally ill persons (Saya et al., 2019).

In 2010, however, lawmakers were curious if IOT provided a decrease in other areas, including homelessness, caregiver stress, and arrests or incarcerations. Gilbert et al. (2010) examined New York State Kendra's Law program which, like Laura's Law, grants the courts authority to order outpatient psychiatric treatment. They found a decrease in incarcerations during the late 1990s for males ages 25-40 who suffered from severe mental illnesses. The state of Florida also reported that IOT reduced time spent in jail for mentally ill inmates with changes ranging from 16.1 to 4.5 days less (Esposito et al., 2008). In North Carolina, mentally ill persons with a long history of incarceration

were observed in a cross-sectional, longitudinal study that found a reduced risk of arrest for those persons who were ordered IOT (Swartz et al., 2001, 2009).

Each state that passes an IOT (or AOT) law has shown a considerable decrease for incarcerations of mentally ill persons (Hotzy & Jaeger, 2016). North Carolina's preventative IOT law was the first to implement and became a prototype for other states to establish similar laws. With New York, Kendra's Law was established: in a Southwestern state, Laura's Law was passed: and in Michigan, the advent of Kevin's Law prompted considerable initiatives for further preventative IOT programs to be established throughout the states (Swartz et al., 2016). While not necessarily the leader in this shift, New York has since become the country's best-funded program for establishing protections of their community's mental health treatment regime (Swartz, 2010).

Even though many states have laws that institute IOT, not many make use of these laws. Many experts believe there are provisions in each set of laws that could be improved upon, which would make their usefulness much more viable with both the courts and for those mentally ill persons affected by such (Danzon & Wilkus-Stone, 2015; Hotzy & Jaeger, 2016). The states that adhere to their implemented laws have experienced decreased numbers for overcrowding in prisons, mental institutes, and medical facilities (Saya et al., 2019).

Analysis of State Involuntary Outpatient Treatment Laws

Forty-seven of the 50 states have implemented some type of IOT; the exceptions are Maryland, Massachusetts, and Tennessee. The substantial body of literature published by experts conducting research on the use of IOT in diverse jurisdictions over the past 20

years has shown that these laws have been effective in improving the overall lives of individuals with mental illness. Specific research that has focused on IOT for individuals with mental illness has exhibited such results of reduced risk of hospitalization, incarceration, violence and violent tendencies, as well as victimization, arrest, and self-harm (Lay et al., 2015). Such court ordered IOT, especially when it includes assistance with medication, has been shown to be successful in most states where it has been implemented (Berger et al., 2018; Hotzy et al., 2018; Meldrum et al., 2016).

While the concept for IOT remains similar in its construct and context, each state has varied qualifications and rules that follow the state's respective law. Alaska's statute, § 47.30.795, is aimed at providing IOT and care for committed persons but only temporarily, while Florida's statute, §394.4655, claims a "person may be ordered to involuntary outpatient placement upon a finding of the court that by clear and convincing evidence" (XXIX FL. §394.4655). Arkansas's law, § 20-47-207, requires that in order for people to be eligible they need to be a danger to themselves or others. Colorado's law, § 27-10-111, is similar, claiming that the court must first find the person in question to have severe mental illness and to be considered a danger to self or society.

In Kansas's § 59-2967, the order for IOT comes not from the diagnosis of mental illness, but from a person with a known mental illness refusing to comply with outpatient treatment. Georgia explains in § 37-3-1(12.1) that in order to be eligible, a person does not only need to be mentally ill but, "based on the person's treatment history or current mental status, will require outpatient treatment in order to avoid predictably and imminently becoming an inpatient" (GA. CODE ANN. § 37-3-1 {12.1}). Michigan's state

law, § 330.1401, emphasizes eligibility, stating that in order for a person to be subjected to IOT they must not be able to understand their respective need for such treatment.

Virginia's IOT law, or code § 37.2-817, requires strong and unquestionable evidence to be presented to a judge before the court decides to apply IOT on a person with mental illness. Washington state, similar to Colorado, determines that those who are candidates to receive IOT must be at risk to perform serious harm upon themselves or others. The Washington state law, § 71.05.240, expects the courts to differentiate between those patients who are able to maintain success with an IOT program versus those patients needing fully committed treatment within an institutional environment. As with most other IOT laws, Texas statute §574.034 requires convincing evidence that shows that the proposed patient is likely to cause harm to themselves or others. However, going further than most states, Texas law stipulates that in order for the judge to order IOT, the proposed patient's mental and/or physical state must be at risk for seriously deteriorating if outpatient treatment is not mandated.

Meldrum et al. (2016) explored the implementation status of all of the IOT laws, which have been enabled across the United States. They conducted a national survey to gather data and found that many existing IOT statutes were rarely used. In fact, the researchers determined that only 20 existing statutes were highly active. There were three primary implementation models identified: hospital transition, surveillance, and community gateway. Frequently occurring problems to many of the implemented statutes included lack of power to enforce the law, lack of resources, poor interagency collaboration, and inconsistent monitoring. Meldrum et al. (2016) concluded that there

was a general ambivalence across the country on the part of both mental health clinicians and judges concerning the scope, intended role, and implementation challenges associated with IOT. Even though these findings highlighted the state of IOT law implementation across the country, there is a parallelism between the state of the IOT law known as Laura's Law and all the variables that contribute to either the success or the failure of similar laws in other states.

Even though no known comparison research has been conducted recently whereby the IOT laws in two states within the United States were compared, my research will do something similar by comparing two counties within a Southwestern state. Hotzy et al. (2018) recently conducted a cross-cultural comparison of IOT laws in a state in the United States with those in a foreign country. Hotzy et al. compared the laws and processes associated with IOT in New York, New York in the United States with those in place in Zurich, Switzerland. They focused on comparing the IOT laws, socioeconomic conditions, and political climate in both cities. Both cities were largely high-income, liberal, and democratic. However, differences still persisted in terms of how mental health and IOT have been addressed in each region.

When discussing New York, Hotzy et al. (2018) expressed concerns with regard to how elected officials and decision makers determined that a person should be involuntarily committed based on the danger they pose. The criterion in New York may reinforced the stigmatization of mental health and resulted in those who may have felt comfortable seeking psychiatric care avoiding voluntary treatment. Further, Hotzy et al. recommended that the importance of the danger criterion be weighed more equally with

the importance of treating psychiatric symptoms that are presented. Conversely, Hotzy et al. asserted that the broader criterion for IOT in Zurich could lead to decreased stigmatization surrounding mental health treatment. However, broader criterion could also contribute to unnecessary hospitalizations and undue power in the hands of healthcare providers in terms of IOT decision-making (Hotzy et al., 2018).

In 2018, the Treatment Advocacy Center published an analysis of IOT laws across the United States (Berger et al., 2018). Each state was analyzed in relation to the following criteria: “If an individual in that state needs involuntary evaluation or treatment, does the law allow this to occur in a timely fashion, for sufficient duration, and in a manner that enables and promotes long-term stabilization?” (Berger et al., 2018, p. 1). A more detailed list with two parts, containing 16 criteria and three “extra credit” criteria, were then considered for each state with involuntary commitment laws. The first part addressed inpatient commitment laws, while the second part addressed outpatient commitment laws. A “report card” rating was given to each state on the basis of which criterion were, or were not, fulfilled.

Berger et al. (2018) rated 22 states at B- or better, while 10 states were considered to be failing. The highest score (96/100) went to Wisconsin, while the lowest (18/100) went to Maryland. Berger et al. (2018) noted that five states did not incorporate the criteria of grave disability for treatment decisions: Delaware, Maryland, Alabama, District of Columbia, and New York. Further, seven states abided by the standard that a person must pose imminent harm to others or themselves for inpatient commitment to occur: Delaware, Pennsylvania, Georgia, Oklahoma, Alabama, Hawaii, and Tennessee.

West Virginia and Alabama did not require initial outpatient treatment orders of at least 90 days, while 7 other states—Mississippi, Kansas, Florida, Alabama, Minnesota, Indiana, and Delaware—did not require renewal orders of at least 180 days. Statutory authority concerning IOT was upheld in all states, excluding Massachusetts, Connecticut, and Maryland. Local legislation for the purpose of adopting an IOT program was only required in New Mexico and a Southwestern state. These findings lent insight into the significant differences between states concerning IOT laws and how they were implemented (Berger et al., 2018).

Though the vast majority of states have implemented some sort of IOT law, they vary significantly on the basis of factors such as the criterion used to enforce the laws (Berger et al., 2018). Often, the way criteria are weighed when determining whether to enforce IOT laws can be just as influential as the criteria used to determine the applicability of IOT laws (Hotzy et al., 2018). Further, though all states with IOT laws have outlined specified criteria to designate when IOT laws are applicable, many states do not implement IOT laws as described due to lack of resources and other challenges (Meldrum et al., 2016). Distinct benefits and consequences are associated with both broad and highly specific criterion for enforcing IOT laws; thus, the local community and context is an important consideration when developing criterion (Hotzy et al., 2018).

Outcomes Associated with Involuntary Outpatient Treatment

The body of literature concerning outcomes associated with IOT has continued to grow in recent years (Compton et al., 2016; Dus, 2015; Phelan et al., 2010; Swartz & Swanson, 2013). Like Gilbert et al. (2010), Phelan et al. (2010) explored the outcomes

and effectiveness of AOT in New York State. The researchers noted the importance of understanding the implications of IOT on its utilization in 42 states and how much it can impact the well-being of individuals with mental illness. They also noted how difficult it could be to gather data concerning the efficacy of IOT and thus took great care in choosing their research design.

Phelan et al. (2010) collected data from 184 participants between the ages of 18 and 65 who received outpatient treatment in Queens or the Bronx in New York City. Out of those who participated, 76 were ordered by a judge to receive mental health treatment and 108 were recently released from being hospitalized at a psychiatric hospital. As for the breakdown of mental health disorders among the participants, they included the following: 1) 35% schizophrenia; 2) 31% schizoaffective disorder; 3) 18% bipolar disorder; 4) 7% clinical depression; and 5) 9% other mental health diagnoses.

Phelan et al. (2010) interviewed participants to assess their mental health, behavior, and perceived degree of stigma and coercion. They found no significant negative consequences regarding outpatient commitment outcomes. Positive outcomes from AOT that were discovered included decreased violence and risk of suicide, as well as increased social functionality. Those who took part in AOT also noted that they did not feel “different” than the people in their surrounding community, which was one concern that the researchers initially expected to find evidence of (Phelan et al., 2010). These findings have provided significant empirical evidence of potential positive outcomes associated with IOT.

Segal et al. (2017) explored the utility of IOT as a solution to a need for psychiatric treatment that was less restrictive than psychiatric hospitalization. Specifically, they explored whether patients who were assigned to IOT presented a greater treatment need than patients who underwent outpatient treatment voluntarily. The researchers included data from 11,424 patients; treatment need was assessed using the Nation Outcomes Scales (HoNOS) upon admission to the hospital and discharge. After analyzing the data, the researchers determined that the participants who were required to undergo treatment had treatment needs, which exceeded those of the voluntary participants at admission and discharge. Additionally, the patients who were required to undergo treatment experienced inpatient stays, which were shorter than those of the voluntary participants by 4.6 days, although the researchers were not able to explain this finding (Segal et al., 2017).

AOT may lead to fewer arrests and reduced recidivism, according to a study conducted by Gilbert et al. (2010). They based their study on the AOT program currently operating in New York State. New York's AOT program was specifically designed to apply to people who were not likely to voluntarily take part in mental health treatment and who were also potentially dangerous to their immediate community. Case management services were a required aspect of New York's AOT program. The researchers gathered interview data from 211 consumers of mental health services in six counties in New York. Out of those who participated, 42 participated in voluntary treatment and 139 took part in court-ordered treatment.

Gilbert et al. (2010) found that regardless of whether participants were treated voluntarily or involuntarily, arrest rates were low during their treatment. Additionally, participants saw avoiding problems within their personal life and involuntary hospitalization as far more concerning than outpatient treatment. Gilbert et al. concluded that AOT programs could reduce the probability of an individual being arrested, which could then mean reduced incarceration rates for those with mental illnesses that are often associated with criminality.

Findings from Gilbert et al. (2010) lend support to the utilization of AOT to help individuals with mental illness avoid arrest and incarceration. However, the lack of randomized study groups needs to be considered in tandem with the results. This finding is particularly important for my research, as I am seeking a correlation between AOT in CA and the reduction of incarceration of individuals with mental illness.

Constantine et al. (2012) found support for AOT as an alternative to incarceration or involuntary hospitalization for those with serious mental illnesses. They conducted a quantitative study among 3,769 offenders in the state of Florida to analyze which correctional approach was more successful in improving the arrest of individuals with serious mental illness (SMI): the utilization of emergency room/inpatient services or outpatient treatment. Constantine et al. found that outpatient treatment reduced the risks of arrest among patients with SMI, while ER/inpatient services increased it.

The findings from Constantine et al. (2012) have become a part of the growing body of research. These findings demonstrate that the value of involuntary hospitalization as a correctional solution for the mentally ill is outweighed by involuntary outpatient

commitment, particularly from the perspectives of those who undergo court-ordered mental health treatment. This connects to my research as the purpose of my study is to find a correlation between IOT and the utilization of the correctional system as way to cope with individuals with mental illness.

Recently, Dus (2015) compared the outcomes of voluntary outpatient commitment to those of involuntary outpatient commitment. Dus performed a comparison analysis of involuntary civil commitment versus voluntary outpatient commitment among individuals over the age of 65. According to Dus, voluntary civil commitment presented more challenges than involuntary outpatient commitment, such as mistaking mental illness related behavior with conduct that was normally associated with the general process of aging and providing more opportunities for legal guardians to voluntarily commit an elderly person. In one of her three conclusions, Dus advocated for a wider utilization of AOT, as she considered it to be a superior option not only to families and law enforcement but to the public health system as well.

With the goal of measuring the effect of involuntary outpatient commitment on specific psychotic symptoms such as delusions or hallucinations, Schneeberger et al. (2017) performed a study involving 184 participants in the state of New York. Forty-two percent of the participants of the study received involuntary outpatient commitment, whereas 58% received non-compulsory treatment. Schneeberger et al. found that involuntary outpatient commitment laws were effective in decreasing symptoms of psychosis for the participating patients. This effect was predicated by the condition that the patients continued being engaged through intensive, post-commitment mental health

services (Schneeberger et al., 2017). This study confirmed the need for a robust infrastructure to follow up on those patients that are subjected to involuntary outpatient commitment.

As I did with my own study, Strang (2009) sought to understand the implications of a specific AOT law. The specific law that was researched was Jason's Law, the Ohio AOT law passed in response to a police officer who was killed in 2007 by a schizophrenic individual with a history of violence. Strang sought to understand if the law was helpful and beneficial to those with mental illnesses or if it was legislated as a hasty reaction to the officer-involved shooting. Strang determined that while passing an AOT law was beneficial for Ohio residents, funding challenges could potentially jeopardize the effectiveness of the law. This finding echoed funding sentiments asserted in Talbott's (2004) Ten Commandments for avoiding the negative consequences of deinstitutionalization, in that mental health solutions that were developed and planned can only be as effective as the adequacy of their funding.

Gonzales et al. (2014) sought to better understand the decision-making processes related to eligibility determinations for New York State's IOT. Kendra's Law, the IOT law which is currently in place in New York State, is likely the most frequently-researched state-specific IOT law (Eide, 2017). Gonzales et al. (2014) compared the eligibility traits of participants receiving AOT and non-AOT referrals. Gonzales et al. reviewed a total of 131 medical charts from a New York treatment agency. Upon coding and data analysis, Gonzales et al. found that there were no measurable differences between the two study groups, concerning eligibility criteria for AOT. They found that

the participants who were referred to treatment by court order were more likely to commit future violence, according to scores obtained using the Historical Clinical Risk Management–20, version 3 (HCR-20V3). Regardless, both study groups were rated as low-risk (Gonzalez et al., 2014).

Barnes and Badre (2015) also explored existing evidence about IOT; however, they sought to evaluate whether existing research warranted the long-term use of antipsychotics during IOT. Barnes and Badre noted that examinations of the principles and ethics involved in IOT have often focused on the process as a whole, rather than focusing on justification of a singular element of IOT. Upon review of existing literature, Barnes and Badre determined that although the use of antipsychotics was strongly supported by existing research during the initial phase of diagnosis, the growing number of potential side effects associated with long-term use made involuntary long-term prescription of anti-psychotics less justifiable. One reason for this conclusion was the subjective nature of long-term antipsychotic use; some research has demonstrated significant and continued improvement with long-term use, while other patients have improved after discontinuing long-term antipsychotic use (Barnes & Badre, 2015). These findings demonstrated why determining the applicability of specific elements of IOT could prove to be very difficult.

Swartz et al. (2016) reviewed contextual and background information concerning IOT as a solution for the prevention of violence. They reviewed existing literature on four databases, as well as general Internet searches. Upon review, Swartz et al. noted that the majority of IOT research has centered on specific outcomes that are not related to

interpersonal violence and found no evidence that IOT reduced major violence that resulted from the use of a weapon; however, they did find evidence that minor acts of interpersonal violence could be reduced through IOT. Swarts et al. concluded that although IOT could lead to improved patient outcomes and treatment adherence, it was still unclear the degree to which IOT could be applied to reduce violent behavior that causes injury.

The difficult nature of gathering data concerning the efficacy of IOT has led to a lack of consensus about its efficacy (Phelan et al., 2010). Positive outcomes from AOT that have been discovered include decreased violence and risk of suicide, as well as increased social functionality (Phelan et al.). Voluntary civil commitment may present more challenges than involuntary outpatient commitment, such as potentially mistaking mental illness related behavior with conduct that is normally associated with aging (Dus, 2015). IOT laws have been shown to be effective in decreasing psychosis symptoms when patients continued being engaged through intensive, post-commitment mental health services (Schneeberger et al., 2017). Funding challenges could jeopardize the effectiveness of the law, as mental health solutions that are developed and planned can only be as efficient as the satisfactoriness of their funding (Talbot, 2004).

Controversy and Concerns Associated With Involuntary Outpatient Treatment

As with any proposed or enacted mental health solution, concerns and consequences associated with IOT must be addressed. This will facilitate that the true effectiveness of this treatment method can be considered (Light et al., 2015; Light et al., 2016). This section will analyze some of these concerns, which were important for my

research considering that some of these concerns could be part of the reason Laura's Law has not been implemented in more counties in a Southwestern state.

Geller et al. (2006) explored concerns that IOT was a form of deinstitutionalized coercion. They established that two main reasons have been used through the course of history to justify socially controlling the mentally ill: 1) police power when one or more citizens are potentially in danger; and 2) *Parens patriae*, a phrase which referred to governance that protects individuals who cannot protect themselves. Although Geller et al. explored many potential downsides of IOT; the most urgently and frequently mentioned consequence was identified as the "net-widening" effect.

According to Geller et al. (2016), the "net-widening" effect referred to the fear that as IOT was progressively enacted in more jurisdictions, the number of individuals that it is assigned to may become progressively larger. IOT could be relied upon as a solution to treat people whose mental illnesses were not nearly as severe as was intended originally when the law was written. This could lead to potential ethics problems, concerning bodily autonomy for those who may not even be effective candidates for IOT. Upon investigating current applications of IOT laws, Geller et al. concluded that the net-widening effect was not presently happening in Massachusetts, one of the 42 states that have enacted an IOT law. Geller et al. concluded that while the net-widening effect was a real and logical concern, it should not be seen as a reason to discourage the adoption of IOT laws until empirical evidence of its influence was uncovered.

Similarly, Rowe (2013) explored the controversies and critiques associated with IOT. Through a systematic review of the literature, the author highlighted both the

benefits and consequences of IOT. Some of the negative implications of IOT laws that the author discovered included the following:

- Unfairly targeting individuals with mental illnesses
- Wrongful assessment of whether individuals are at an imminent risk of being violent toward others
- Driving people away from treatment for fear of being committed
- Drawing attention and resources away from the major issues of lack of access to care due to the stigmatization of mental health service and underfunded systems of care
- Targeting minorities, such as African Americans, who were overrepresented in New York State among those who received IOT. This finding should be considered alongside African Americans' overrepresentation in U.S. jails and prisons. (Rowe, 2013)

Rowe (2013) raised many concerns, which have been discussed or addressed by other IOT researchers. The unfair targeting and poor assessment of individuals, for instance, echoed the “net-widening” concern discussed by Geller et al. (2006). Rowe (2013) concluded that the controversy surrounding IOT would likely continue for years to come, as both proponents and critics pose valid arguments. Empirical evidence of the true outcomes of existing IOT laws will be essential for lawmakers and researchers to eventually and hopefully reach a consensus regarding the effectiveness and potential consequences of IOT.

The assignment of IOT for individuals who were determined to not be competent to stand trial involves additional considerations and concerns (Rowe, 2017). Rowe explored state and federal rulings, cases, and existing research, which involved defendants who took part in IOT after being found not to be competent to stand trial. Upon review of landmark cases on the topic, Rowe determined that judges had a wide latitude when deciding how competent a defendant was and the length of time they were held for restoration; their decisions were also largely based on state and local guidelines, further complicating policy implementation. Rowe recommended outpatient restoration treatment as a viable solution that would be more cost and time-effective than inpatient treatment.

To summarize the controversy and criticism surrounding IOT, it is accurate that the net-widening effect is a real and logical concern. At the same time, it should not be seen as a reason to discourage the adoption of IOT laws until empirical evidence of its influence is uncovered (Geller et al., 2006). Empirical evidence of the true outcomes of existing IOT laws will be essential for lawmakers and researchers to reach a consensus regarding the effectiveness and potential consequences of IOT (Rowe, 2006).

Laura's Law

This section provides a history and an analysis of a Southwestern state's IOT law, also known as Laura's Law, which was approved in 2003 (Treatment Advocacy Center, n.d.). The law was named after one of the victims of a tragic incident, where an enraged psychiatric patient killed three people in Nevada City (Applebaum et al., 2003). Although this incident spurred legislator to act quickly, adoption of an IOT statute had been

discussed previously. The state Assembly had previously passed a bill that would have effectively widened the scope of commitment laws in the state to include IOT. The state Senate created the Rand Corporation in response to review existing data concerning the effectiveness of IOT. Local organizations of mental health professionals, as well as The National Alliance for the Mentally Ill, supported the adoption of an IOT law prior to the murders in Nevada City. However, renaming the bill in honor of one of the victims, as well as the testimony of her parents, led to a surge of support that led to the passage of Laura's Law. The state legislature made its adoption discretionary; in other words, the counties were granted discretion for their decision of whether or not to adopt the law.

Laura's Law grants the courts the authority to compel individuals with mental illness that have met strict criteria, such as having a history of displaying violent behavior or not being adherent to their treatment, to attend outpatient treatment instead of being incarcerated (Canady, 2019; Lee, 2012; Treatment Advocacy Center, n.d.). The legislative decision to not make adoption of Laura's Law mandatory across all 58 counties could be negatively affecting the mental health of many whose mental illnesses could worsen during incarceration but could be improved by outpatient treatment (Canady, 2019; Gillberti, 2015; Mental Illness in a Southwestern state Prisons, 2013).

Castro (2015) presented arguments both for and against the implementation of Laura's Law; the constitutionality and effectiveness of the law; and challenges associated with its implementation. Castro included a wide variety of sources to present the overall social dialogue surrounding Laura's Law. Castro noted that at the time of writing, Nevada County was the only county that had fully implemented procedures to evaluate

the efficacy of Lauren's Law. Upon examination of data from 12 months pre- and post-treatment, there was a decrease in the number of days incarcerated (65.1%); days spent in a psychiatric hospital (46.7%); emergency interventions (44.1%); and days spent homeless (61.9%). These findings demonstrated promising implications directly related to the implementation of Laura's Law in Nevada County, although data from other counties and larger-scale research would need to be conducted in order to determine the efficacy of the law more definitively.

Currently, only 16 out of the 58 counties in the state have adopted Laura's Law. Challenges presented within the state's prison system, such as suicide rates 48% higher than the national average and the cost of housing individuals being three times more expensive in the prison system than in mental health community centers, could be exacerbated by the legislative decision to make adoption of Laura's Law discretionary (Gilberti, 2015; Mental Illness in a Southwestern state Prisons, 2013). Although several studies have explored the effectiveness of IOT laws, no existing research has explored the effectiveness of Laura's Law. Thus, my research goal was to fill in this gap in the literature by conducting a comparison study between the two counties in the state that have enacted Laura's Law and two counties that have not. Secondary data was gathered to determine whether counties that utilize Laura's Law presented fewer instance of incarceration among individuals with mental illness.

Summary

The topics analyzed in this literature review were pertinent to my study of whether a Southwestern state's IOT had an impact on the incarceration of individuals

with mental illness. The phenomenon known as deinstitutionalization stimulated the use of the correctional system to cope with individuals with mental illness. However, there was no data that showed that mental health and criminal behavior are intrinsically linked. If anything, research has shown that certain diagnoses were connected to specific types of criminal activity when there were certain predisposing factors.

The literature also showed how the criminal justice system and the mental health field have partnered, successfully at times, to address the needs of individuals with mental illness. The use of mental health courts and IOT could not only decrease arrests that lead to incarceration but also the social adaptability of those that suffer from mental illness. According to research, it was necessary that these procedures be accompanied by resources such as case management, legal counsel, etc.

Literature revealed that AOT could have positive outcomes such as fewer arrests among individuals with mental illness, as well as the decrease of violent episodes and the increase of social adaptability. In a Southwestern state, the implementation of Laura's Law has had positive effects, specifically in the first county that approved the law, by decreasing the number of days incarcerated and the number of days spend in psychiatric hospitals. However, there was no data from other counties or state-wide. Thus, my study attempted to fill in this gap in the literature by conducting a comparison study between two counties in a Southwestern state, one of which had enacted Laura's Law and the other which had not, in order to determine whether counties that have utilized Laura's Law presented fewer instances of incarceration among individuals with mental illness.

Chapter 3 details the research methods, which were employed in my research study. The chapter begins with a discussion regarding the research design and rationale. Then, I examine the methodology, including target population, sample, and sampling methods. The data analysis plan is then explained. Finally, I review the challenges to validity of the research.

Chapter 3: Research Method

The purpose of this quantitative study was to determine whether the number of individuals with mental illness who were incarcerated in a Southwestern state (dependent variable) was reduced depending on implementation of Laura's Law (independent variable). In this chapter, I introduce the component segments of research design and methodology. I describe the methodology, including the population, sampling procedures, research procedures, and instrumentation. The validity of the study is also presented, followed by ethical procedures. I discuss participants concerning data collection, instrumentation, data analysis, validity and reliability, and the protection of human subjects.

Research Design and Rationale

A research design is typically a comprehensive outline of how an exploration will take place. A research design typically includes (a) how data are to be collected, (b) what instruments will be engaged, (c) how the instruments will be used, and (d) the intended means for evaluating data collected (Business dictionary, 2016). Creswell (2009) described a research design as involving the connection of philosophical assumptions, strategies of examination, and explicit methods. According to Creswell, research methods involve the different types of data collections, examinations, and interpretations that researchers offer for their studies.

My research study utilized quantitative data in its design. For this immediate investigation, which examined the relationship between the number of individuals with mental illness who were incarcerated in a Southwestern state and the implementation of

Laura's Law, I employed quantitative methods. Quantitative research methods were appropriate for my research because I was trying to determine if there was a statistical difference between the number of individuals with mental illness who were arrested between two counties in the state (Mahoney, 2012).

Furthermore, quantitative research methods are appropriate when the goal of a study is to test whether one variable is related to another variable and how that relationship can be represented quantitatively through statistical analysis. By contrast, the qualitative approach is suited to gathering exploratory, descriptive data (Lee, 2014). Additionally, qualitative data deal with perceptions and opinions (Turner, 2010); therefore, a qualitative approach would not yield the appropriate data for this study. Given the focus on examining whether the number of incarcerations varied, I chose a causal comparative study using secondary data for the current study. This design aligned with the purpose and problem.

Research Question and Hypotheses

The following research question formed the foundation for my research:

RQ: Are the mean numbers of individuals with mental illness that are incarcerated statistically significantly different between a county in a Southwestern state that implemented Laura's Law and a county that did not?

There were two hypotheses:

H_0 : There is no statistically significant difference in mean number of individuals with mental illness that are incarcerated between a county in a Southwestern state that implemented Laura's Law and a county that did not.

H_a: There is a statistically significant difference in mean number of individuals with mental illness that are incarcerated between a county in a Southwestern state that implemented Laura's Law and a county that did not.

Methodology

For this research I used quantitative research methods. I chose a quantitative methodology because the nature of this study was to determine if there is a statistical difference between the number of individuals with mental illness who were incarcerated in two different counties in a Southwestern state. It was a quantitative casual comparative study. In this section, I provide an overview of the methodology that I used.

Target Population for Participants

The overall target population in this study were inmates who suffered from mental illness. The population was estimated to be about 16% in a Southwestern state, which meant that the number of individuals with mental illness who were incarcerated was approximately 244,800 (Lamb & Weinberger, 2013). Based on data gathered from Fiscal Year 2017-2018, the number of 5150s from County Number Two was 4,848, while the number of 5150s from County Number One was 8,165. All individuals listed in the 5150s were adults. More specifically, this study focused on the number of individuals with mental illness who had contact with law enforcement in two counties in the state. I explain the sample of data and sampling method in the following section.

Sample and Sampling

The sample of data was gathered from two counties in a Southwestern state. Initially, four counties were considered in the study. However, because of the Covid-19

pandemic, two of the four counties were unable to release their number of 5150s. Therefore, only two counties were included in the study. One county had employed Laura's Law; the other one had not. It was my hope that gathering data from these two counties would help me to develop a thorough understanding of the level of success of Laura's Law in preventing incarceration among individuals with mental illness. I utilized secondary data gathered from these two participating counties. For both counties, I conducted purposive sampling was conducted to collect data from government agencies on the number of individuals with mental illness who were arrested or incarcerated after having contact with law enforcement. I conducted a public information request from these counties to access this secondary data. I made sure that this data was available.

Purposive Sampling

I chose a purpose sampling method for this study. Purposive sampling is a nonprobability sampling technique in which the researcher relies on their own judgment when choosing members of population to participate in the study based on characteristics of a population and the objective of the study (Yang & Banamah, 2014). Purposive sampling was used because it had certain advantages for this study. These included greater accessibility, faster speed, and fewer costs associated with recruiting samples for the study (Sharma, 2017). For one of the counties, data was collected from the County Number One Behavioral Health Services. For the other county, data was collected from the Riverside University Health System – Behavioral Health Department. A public records request was prepared and sent to all counties to have access to the data.

A minimum sample size was determined with G*Power 3.1.9.2 (see Figure 1). A minimum sample size of 128 was required to detect a difference of medium effect size of $d = 0.50$ at 5% confidence with 80% power to conduct an independent t test (Figure 2 below provides a G*Power plot that determines the critical t value of $t = 1.97897$ to detect statistical significance).

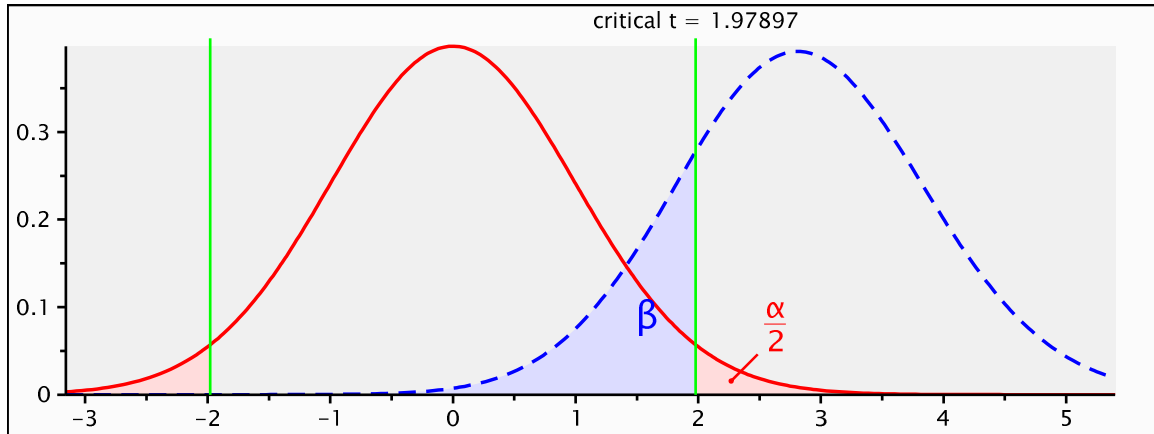
Figure 1

*G*Power Minimum Sample Calculation to Perform an Independent t Test to Detect a Minimum Effect Size of $d = .50$ at 5% Significance With 80% Power*

<i>t</i> tests - Means: Difference between two independent means (two groups)		
Analysis: A priori: Compute required sample size		
Input:	Tail(s)	= Two
	Effect size d	= 0.5
	α err prob	= 0.05
	Power (1- β err prob)	= .80
	Allocation ratio $N2/N1$	= 1
Output:	Noncentrality parameter δ	= 2.8284271
	Critical t	= 1.9789706
	Df	= 126
	Sample size group 1	= 64
	Sample size group 2	= 64
	Total sample size	= 128
	Actual power	= 0.8014596

Figure 2

*G*Power Plot of Critical t Value Required to Conduct an Independent t Test to Detect a Medium Effect Size of $d = 0.50$ at 5% Confidence With 80% Power*



Instrumentation and Operationalization of Constructs

Data for the study was drawn from existing historical records. These data included the number of incarcerations, which was the number of individuals with mental illness who had been incarcerated. This was measured on the ratio level of measurement. The independent variable, implementation of Laura’s Law, was a categorical variable, which denoted whether the county implemented Laura’s law. This was a dichotomous variable, where 0 = “Laura’s Law not implemented” and 1 = “Laura’s Law implemented.”

Data Analysis Plan

To complete the analysis, SPSS was used to conduct an independent t test. This allowed me to compare the mean number of incarcerations between the county that had adopted Laura’s Law and the county that had not. Given the methodology used in this

study, which was the independent samples t test, there were assumptions associated with this approach. First, it was assumed that samples of each group were drawn from a population that was normally distributed. As such, the populations and samples were assumed to have a common variance, with samples being drawn independently from one another.

Another assumption was that all sample sizes were to comply with the minimum sample size as calculated with G*Power. I also assumed that the samples were drawn randomly from the population. These assumptions were necessary to carry out the quantitative methodologies of focus in this study. The assumption of normality was assessed by inspection of histograms, as well as skewness and kurtosis statistics. Distributions with kurtosis and skewness statistics between ± 3 were considered normally distributed. The assumption of equality of variances between the two groups was assessed with Levene's test of homogeneity of variances.

The Mann-Whitney U test (also called the Wilcoxon-Mann-Whitney test) is a rank-based nonparametric test that can be used to determine if there are differences between two groups on a continuous or ordinal dependent variable. There was no violation of the normality assumption so the nonparametric Mann-Whitney U test was not used. All statistical significance was measured at the 5% level.

Bootstrapping Heading

I designed my research in such a way that should the minimum sample size of 128 not be achieved, I would employ bootstrapping. The bootstrap gives an analyst the opportunity to use statistics to draw a conclusion about a population from a small sample

(Mooney & Duval, 1993). Bootstrapping is a resampling technique that was validated for use in nonparametric studies back to the 1930s (Chernick, 2011). Among the most common resampling techniques introduced during eras of limited computing power are the jackknife, permutation methods, and cross-validation. Their use for nonparametric studies is validated by statistical studies and research projects numbering in the thousands (Chernick, 2011). The bootstrap came to prominence during the 1970s and was considered computation intensive hence limiting its use in research studies. Ultimately, as computer power increased and computations by hand became less necessary, use of the bootstrap as a resampling tool in nonparametric studies increased.

According to Chernick (2011), the bootstrap operates under the assumption that a sample is random from a population. Therefore, the sample size is the sampling distribution under assumptions running a bootstrap. Sample size of the bootstrap does not need to represent the population; it only needs to represent essential properties of the population. I decided to choose this technique because it was unclear how many cases of incarceration I would find in the counties I would be analyzing.

Challenges to Validity

Internal validity refers to the ability of the experiment to correctly identify causal relationships. This study was observational and did not attempt to explore causal relationships; therefore, challenges to internal validity were generally not applicable. There were, however, challenges to statistical conclusion validity. These challenges had three components: reliability of the instrument, data assumptions, and sample size. Data used in this study came from pre-existing quantitative records, meaning that an

appropriate quantitative instrument for data collection already existed. Thus, the reliability and validity of the instrument used in this analysis was considered appropriate for use in this analysis. Data assumptions were checked during the data analysis stage. Finally, an appropriate sample size was calculated using power analysis to ensure there were no statistical concerns regarding small samples. Therefore, there were no anticipated risks to statistical validity.

External validity refers to the extent that study findings can be generalized to the larger population and applied to different settings. The study was limited to two counties in a Southwestern state. The study was also limited to the United States and did not make any attempt to include other countries. As such, care was taken when generalizing the findings of this study to different locations, populations, and subjects.

Ethical Concerns

This research adhered to the guidelines of the Belmont Report, as well as guidance from the Institution Review Board (IRB). Accordingly, the Belmont Report discusses three principles, which include: 1) respect for persons; 2) beneficence; and 3) justice. These three principles ensure that the research preserves human dignity at all times (Gabriele, 2003). This study did not place any of the participants in harm's way or embarrass them in any way and maintained the three guiding principles of the Belmont Report.

To ensure ethicality in the study, several measures were taken. De-identifying any identifiable information and assigning identification numbers maintained the confidentiality of the participants. In addition, the IRB reviewed the study. The study did

not commence until it was approved by the IRB and academic advisors and any concerns were addressed (IRB approval number 12-22-20-0604700). Care was taken to accurately interpret and represent the findings of the study.

Summary

The purpose of this quantitative study, which used data from a secondary source, was to examine if the number of individuals with mental illness incarcerated in a Southwestern state was affected by two counties' choices for or against implementation of Laura's Law. In this chapter, I analyzed the research design and rationale, including the research questions and hypotheses. I also examined the target population, sample and sampling method. The data analysis plan was also covered. Finally, I addressed the challenges to validity. In Chapter 4, the results of the study will be described.

Chapter 4: Results

The purpose of this quantitative, causal, comparative study was to examine the effectiveness of Laura's Law in reducing the rate of individuals with mental illness who were incarcerated in a Southwestern state. The independent variable was the implementation of Laura's Law, which either was or was not implemented in two specific counties in the state. The dependent variable was the number of ill patients who were incarcerated, which was measured in continuous form. Data were collected from historical records that I accessed. Specifically, the number of individuals with mental illness who were incarcerated from Fiscal Year 2017-2018 for both County Number One and County Number Two were collected. Monthly data were collected; therefore, there were only 12 data points for each county (or 24 data points in total for both counties). I conducted an independent samples *t* test via SPSS to address the research question and test the hypothesis.

This chapter consists of four parts. The first part presents the descriptive analysis of the sample. The second part presents the detailed data analysis procedures that were conducted. The third part presents the results of the data analysis. The fourth part offers a summary of the key findings from the data analysis to conclude the chapter.

Descriptive Analysis of the Sample

The final sample size for data analysis was 24, which was below than the minimum required sample size of 128 derived from the a priori power analysis using G*Power (see Figure 2). However, the post hoc analysis revealed that for a sample of 24 and an effect size of (Cohen's $d = 1.2$), a power of test of 80.2% was achieved (see

Appendix), which was high for causal comparative studies (Tyrrell et al., 2013). Despite achieving a high power of test, bootstrapping was still conducted due to the sample size.

Table 1 presents the descriptive statistics of the dependent variable based on county. The average number of incarcerated individuals in County Number One was 680.42 (SD = 240.33). On the other hand, the average number of incarcerated individuals in County Number Two was 404.00 (SD = 215.91). This indicated that on average, County Number One has reported higher numbers of incarcerated individuals than County Number Two.

Table 1

Descriptive of the Variables

	Minimum	Maximum	M	SD
County Number One	388.00	1,245.00	680.42	240.33
County Number Two	125.00	857.00	404.00	215.91

Assumptions Testing

The use of independent samples *t* test required data to meet six assumptions. These six assumptions were: (a) the dependent variable should be measured at the continuous level, (b) the independent variable should consist of two categorical groups, (c) independence of observations, (d) no significant outliers, (e) homoscedasticity, and (f) normality. Each of these assumptions was tested before conducting the regression analysis, and the results are shown in the ensuing discussion. In this section, I elucidate these six assumptions, beginning with Assumption 1.

Assumption 1: Dependent Variable Measured at the Continuous Level

The dependent variable for this study was the number of patients with mental illness who were arrested. The collected data from the records were measured in continuous form. Therefore, the assumption that the dependent variable should be measured at a constant level was met.

Assumption 2: Independent Variables Should Consist of Two Categorical Groups

This study's independent variable was the implementation of Laura's Law. This divided the samples into two groups: (a) a county that implemented the Laura's Law (County Number One), and (b) a county that did not implemented the Laura's Law (County Number Two). Therefore, the assumption that the independent variable should consist of categorical groups was met.

Assumption 3: Independence of Observations

The two counties that considered for the study were geographically apart and did not share the same individuals much so those who were incarcerated. One county has an autonomous decision with regards to incarceration, as evidence of the choice to adopt or not adopt the Laura's Law. As such, it was safe to conclude that the assumption of independent observations was met.

Assumption 4: No Significant Outliers

Outliers are single data points within the data set that do not follow the usual pattern. The problem with outliers is that they can have a negative effect on the independent samples t test, reducing the validity of the results. However, it must be noted

that not all outliers are problematic, only those that are significantly different from other data.

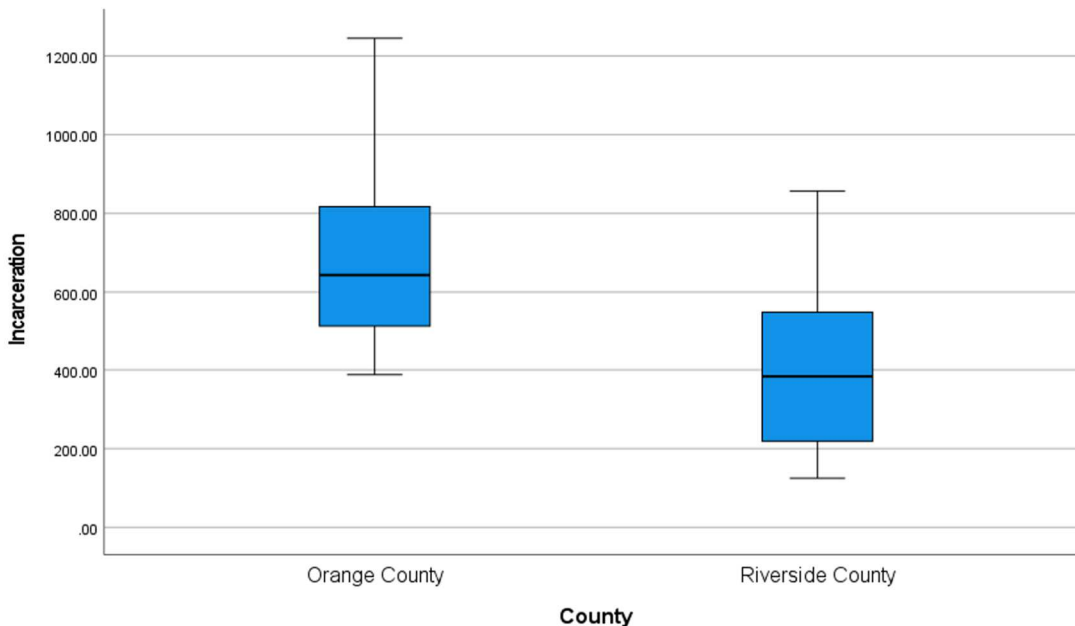
I generated box plots to test for any significant outliers. Figure 2 shows the boxplot that was generated, and it can be observed that all data points were well within the bulk of the data, and there were no significant outliers. Therefore, the assumption that there were no significant outliers was met.

Assumption 5: Homoscedasticity

Homoscedasticity refers to whether these residuals are equally distributed, or whether they tend to bunch together at some values, and at other values spread far apart. The residuals are simply the error terms, or the differences between the dependent variable are the observed value and the predicted value. To determine this, I conducted a Levene's test. The test showed that the variances for the number of incarcerated individuals between the two groups was insignificant, $F = .009, p = .93$. Therefore, it was concluded that the assumption of homoscedasticity has been met.

Figure 3

Boxplot of Incarceration in County Number One and County Number Two



Assumption 6: Normality

To make valid inferences from the comparison, the data should follow a normal distribution. Histograms were developed to visually see if the data followed the bell-shaped curve of the normal distribution. Figures 4 and 5 show that the data for both counties followed a normal distribution; that is, not heavily tailed on either side. To further ascertain the normality of data, skewness and kurtosis were computed. Skewness should be within ± 2 range while Kurtosis should be within ± 3 range (Field, 2017). The skewness and kurtosis of the data from County Number One were 1.12 and 1.56, respectively. The skewness and kurtosis of the data from County Number Two were 1.66 and -0.01 , respectively. Therefore, the assumption of normality was met.

Figure 4

Histogram for County Number One

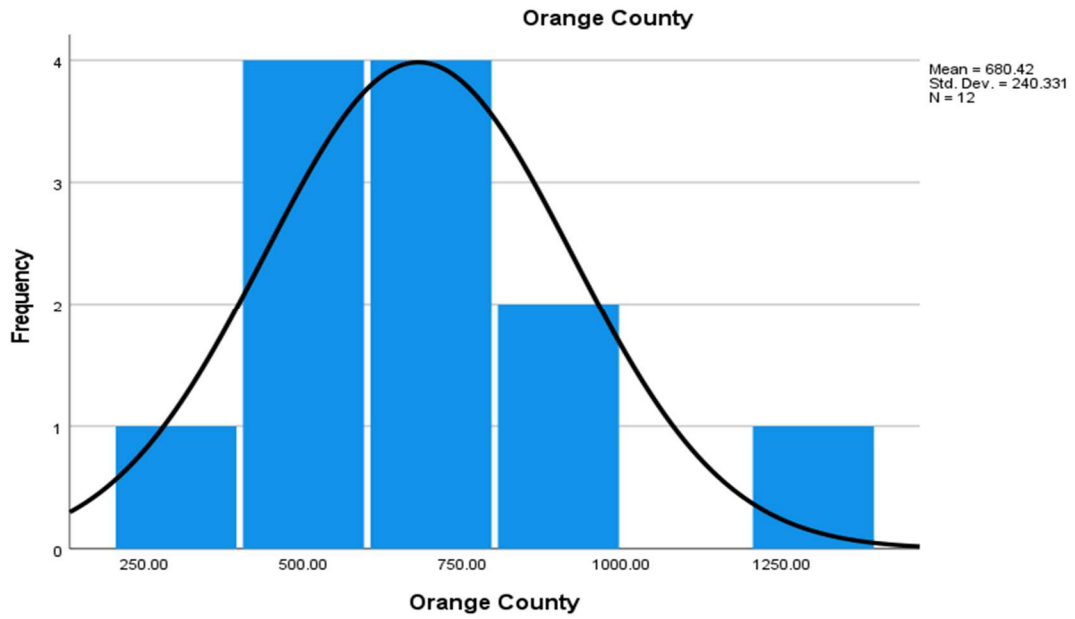
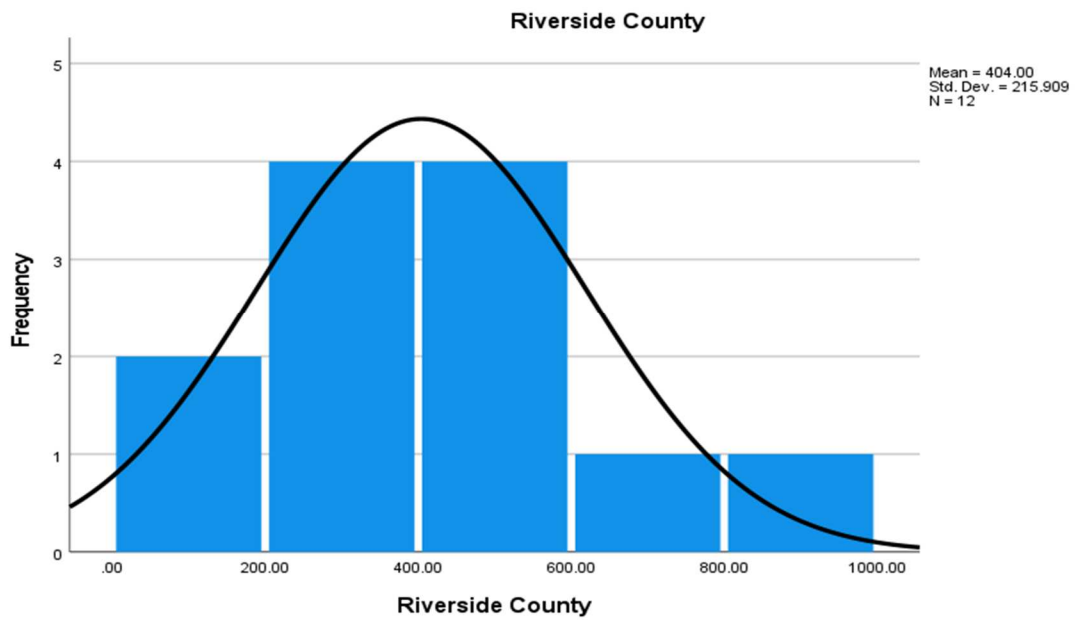


Figure 5

Histogram for County Number Two



Results

The hypotheses were tested using independent samples t test. SPSS was used to conduct the independent samples t test. A confidence level of 95% was used in the test and to identify significant difference in the dependent variable's means across the groupings of the independent variable. The research question was the following:

RQ: Are the mean numbers of individuals with mental illness that are incarcerated statistically significantly different between a county in a Southwestern state that implemented Laura's Law and a county that did not?

The corresponding hypotheses were:

H_0 : There was no statistically significant difference in the mean number of individuals with mental illness who were incarcerated between a county in a Southwestern state that implemented Laura's Law and a county that did not.

H_a : There was a statistically significant difference in the mean number of individuals with mental illness who were incarcerated between a Southwestern state that implemented Laura's Law and a county that did not.

The independent variable was the implementation of the Laura's Law in two counties in a Southwestern state. The county that implemented the Laura's Law was County Number One, while the county that did not implement was County Number Two. The dependent variable was the number of mentally ill patients who were incarcerated.

Table 2 shows the output of the nonbootstrapped independent samples t test. It shows that the significance value was $p < .05$. Therefore, the null hypothesis should be rejected, and it can be concluded that there was a statistically significant difference in the

mean number of individuals with mental illness who were incarcerated between the two counties: $t(22) = 2.96, p < .05$. However, such significance might not hold true if large samples were to be considered.

Table 2

Independent Samples t Test Results (Without Bootstrapping)

	t	df	Sig.	t test for equality of means	95% confidence interval of the difference		
				Mean difference	Std. error difference	Lower	Upper
Equal variances assumed	2.96	22	.01	276.42	93.26	83.00	469.83

Provided that the final sample size ($n = 24$) was below the required minimum sample size ($n = 128$), a bootstrapping analysis was necessary. A total of 2,000 were considered for the bootstrapping analysis and followed a bias corrected accelerated (BCa) confidence interval. Table 3 shows the output of the bootstrapped independent samples t test. It shows that the significance value was still $p < .05$. Therefore, the null hypothesis should be still rejected, and it can be concluded that there was a statistically significant difference in the mean number of individuals with mental illness who were incarcerated between a county a Southwestern state that implemented Laura's Law and a county that did not. Specifically, the number of patients with mental illness who were incarcerated in County Number One ($M = 680.42, SD = 240.33$) was significantly higher compared to County Number Two ($M = 404.00, SD = 215.91$).

Table 3*Independent Samples t Test Results (Without Bootstrapping)*

	Mean	Bias	Std. error	Bootstrap		
	Difference			Sig.	Lower CI	Upper CI
Equal variances assumed	276.42	2.90	90.89	.01	99.73	455.69

Summary

The purpose of this quantitative, causal, comparative study was to examine the effectiveness of Laura's Law in reducing the rate of individuals with mental illness who were incarcerated in a state in a Southwestern state. The independent variable was the implementation of Laura's Law, which was or was not implemented. The dependent variable was the number of mentally ill patients who were incarcerated, which was measured in continuous form.

A total of 24 records were included in the data analysis. Independent samples *t* test was conducted. The results showed that the null hypothesis should be rejected and that there was a statistically significant difference in the mean number of individuals with mental illness who were incarcerated between a county in a Southwestern state that implemented Laura's Law and a county that did not. Specifically, the number of patients with mental illness who were incarcerated in County Number One ($M = 680.42$, $SD = 240.33$) was significantly higher compared to County Number Two ($M = 404.00$, $SD = 215.91$). Chapter 5 presents the conclusions and recommendations for future research.

Chapter 5: Discussion, Conclusions, and Recommendations

Assembly Bill 1421 is commonly known as Laura's Law. This bill was approved in a Southwestern state in 2002, a year after college student Laura Wilcox was murdered by a paranoid schizophrenia patient, Scott H. Thorpe, who rejected treatment or medication leading up to the crime (Treatment Advocacy Center, n.d.). The law was designed to bolster AOT or IOT for individuals with mental illness, but only 17 out of a Southwestern state's 58 counties have properly adopted it (Mental Illness in a Southwestern state Prisons, 2013). Hence, there are few empirical studies focusing on the number of individuals with mental illness taken into custody in counties that adopted Laura's Law versus those that did not. The purpose of this quantitative, casual-comparative study was to examine the effectiveness of Laura's Law in reducing the rate of individuals with mental illness who were incarcerated in a Southwestern state.

Through this study, I examined the relationships between IOT and the incarceration rates of mentally ill individuals. In the study, Laura's Law was an independent variable, while the dependent variable was the number of individuals who were taken into custody against their will. The research also considered the Community Mental Health Act of 1963. This act laid the foundation for the deinstitutionalization of mentally ill individuals, which entailed the transfer of patients from mental health institutions to the prison systems, nursing homes, or the homes of family members (Kim, 2016). With these implications in mind, I used a quantitative casual comparative design to measure the successes or failures of Laura's Law.

The key finding from this study was that there was a significant difference between the mean number of individuals with mental illness who were incarcerated in two different counties, one of which implemented Laura's Law and the other which did not. I rejected the null hypothesis, which posited no significant statistical difference. Specifically, County Number One, which had implemented Laura's Law, saw a higher number of mentally ill incarceration rates than County Number Two, which did not have it in place. I used a 95% confidence level test as a means of designating tangible differences in the dependent variable (individuals with mental illness who were taken into custody) means across categorizations of the independent variable (Laura's Law).

I collected data from government records from County Number One and County Number Two of individuals with mental illness who were taken into custody by law enforcement during the Fiscal Year 2017-2018. The null hypothesis was rejected. The alternative hypothesis was supported by the quantitative findings. However, despite the second hypothesis being supported by the statistical findings, its more theoretical and qualitative implications suggested Laura's Law was ineffective in preventing the arrest and incarceration of individuals with mental illness I discuss this further in the next section.

Interpretation of the Findings

The key finding in this study was a result of the quantitative casual-comparative methodology. The study found that the mean of individuals with mental illness who were taken into custody in a county that had Laura's Law adopted (County Number One) was much higher than one that did not have it in place (County Number Two). These findings

pointed to the conclusion that Laura's Law has not demonstrated effective results in keeping the use of incarceration among individuals with mental illness low, partly due to the way in which the law was written when it passed in 2002. As Laura's Law was the study's independent variable, there was a greater need than ever to fully evaluate not only the scope of the law or its wording but also how it compared to both the various theoretical frameworks, as well as academic literature used in the study, examining it from both a qualitative and quantitative framework.

Findings Versus the Theoretical Framework

The research's theoretical framework was comprised of two elements. The first was the social contract theory (Hobbes, 1958), in which Welie (2012) explained the social responsibilities of the government and health professionals. This refers in particular to the coercive nature of the social contract: the court system, along with the health professionals, can impose a mandate on individuals with mental illness that might even go against their will. If the patient does not comply, the "contract" between the state and individual allows for consequences that could include incarceration. The second was the multiple streams analysis theory in which Kingdon (as cited in Sabatier & Weible, 2014) defined policymaking being fostered under a sense of political ambiguity. Multiple streams analysis has also been described as "many ways of thinking about the same circumstance" (Feldman, 1989, p. 5). The multiple streams analysis theory fits in with Laura's Law and this research in the sense that, since only 16 counties in a Southwestern state have adopted Laura's Law, there is no consistency in how Laura's Law is perceived

across this Southwestern state. The same issue or problem is viewed differently from one county to another.

The main findings of the study supported the theoretical frameworks used for the overall research. According to the social contract theory, the state possesses a responsibility for the welfare of its people and has the authority to utilize a coercive approach. Both counties utilized, with different degrees and frequency, the involuntary commitment for individuals with mental illness, or 5150, granting the court system and the health professionals the ability to impose a mandate that could even go against the will of the individual. As previously stated, the use of IOT is a prime example of the social contract explained by Welie (2012). On the other hand, the findings with County Number One's high mean number of incarceration rates among individuals with mental illness aligned with the nature of the multiple streams theory, which describes the ambiguous nature of policymaking. Based on the literature, there was an expectation that County Number One was going to present a lower use of incarceration among patients with mental illness (Hotzy & Jaeger, 2016). However, that did not happen. County Number One presented a higher use of incarceration among individuals with mental illness. This aligns with the multiple streams theory's trait of "many ways of thinking about the same circumstances" (Feldman, 1989, p. 5). The wording of Laura's Law also falls under the uncertainty suggested by the multiple streams theory, considering that the courts were given the authority to order IOT but it did not necessarily allow for the order of forced medication (Treatment Advocacy Center, n.d.). Some, especially those that advocate for individual rights and freedoms, might view this as a win, while others might

view it as a failure of the law to guarantee the well-being of those that cannot protect themselves. This aspect, coupled with the also ambiguous nature of other IOT Laws across other states, demonstrated the multidimensional nature of the field of IOT research, as well as the extent to which these regulations are effective in reducing the number of incarcerations of people with mental illness. In the next section, I discuss the role of deinstitutionalization and how the study's key results supported, complimented, or contradicted it.

Deinstitutionalization

The findings of study showed that there was a higher number of arrests among individuals with mental illness in the county that adopted Laura's Law (County Number One) than the one that did not (County Number Two). In this section, I analyze the results of the research and determine whether they complement, contradict, or extend the literature focusing on deinstitutionalization. Common themes found in the literature covering deinstitutionalization criticized its role in bringing about not only a stronger stigmatization against individuals with mental illness but also the resulting consequences that included the closures of mental health facilities where patients were either incarcerated or sent to nursing homes or to the homes of family members (Dkugacz, 2014; Kim, 2016; Lamb & Weinberger, 2014). However, one aspect that must be considered in the literature covering this topic were the effects of deinstitutionalization in closing down mental facilities. Other studies have pointed to a lack of hospital beds at U.S. mental health facilities as one of the leading causes in the incarcerations of mentally ill individuals (Torrey et al., 2015).

The findings in County Number One and County Number Two supported the reports published by Torrey et al. (2015). While County Number One did have Laura's Law implemented, little information in the current research outlined how many mental health facilities were actually open in either counties, how many hospital beds were available in those same facilities, or which one of these counties has more resources for individuals with mental illness. Only 17 out of the 58 counties in a Southwestern state have implemented Laura's Law (Mental Illness in a Southwestern state Prisons, 2013). The implication is that there were not enough resources to begin with in helping enforce the law's ordinances (e.g., not enough hospital beds, available mental health facilities, or case management offered to this population).

Furthermore, Ecker et al. (2018) and Fox et al. (2016) observed increased rates of homelessness because of a lack of mental health facilities. While this did not reveal specific insights involving the shortcomings of Laura's Law, what it did exhibit was a potential weakness not only in the way California has been handling the problem of homelessness among individuals with mental illness, but also another potential weakness in the way Laura's Law was written, which reinforced the results in County Number One's high use of involuntary commitment rates. To further understand the nuances between the way other IOT laws were written in comparison with Laura's Law, a reevaluation of the related literature in conjunction with the research's findings was necessary.

Kendra's Law and Other State Involuntary Outpatient Treatment Laws

Despite the implementation of Laura's Law, incarceration of individuals with mental illness rates in County Number One were higher than in County Number Two, which did not have an IOT law in effect. In contrast, research has shown that the New York based Kendra's Law was effective in curbing incarceration among individuals with mental illness (Gilbert et al., 2010). Next, I discuss the potential reasons for the differences between my findings and the literature on Kendra's Law.

Like Laura's Law, Kendra's Law enables New York State courts to order IOT (Gonzales et al., 2014). Despite these similarities, Kendra's Law is the most researched state-specific IOT law (Eide, 2017). It has demonstrated more positive results. Gilbert et al. (2010) observed lower incarcerations during the late 1990s for mentally ill men between the ages of 25 to 40. The gap between the amount of research for this study and previous studies focusing on Kendra's Law may be one reason for the apparent ineffectiveness of Laura's Law in County Number One, as Laura's Law has not been extensively scrutinized.

Although this does not mean that Kendra's Law is better worded than Laura's Law or is somehow more powerful in scope, what might be considered is the period in which this study and my research took place. The findings in this study were based on inmate records in the two counties selected for study (County Number One and County Number Two) from 2017 and 2018. While this study's data provided a more up-to-date examination on the incarcerations of persons with mental illness, the data may not properly replicate the effectiveness of Kendra's Law from the late 1990s (Gilbert et al., 2010) To summarize, there was little difference between the wording of both the New

York based Kendra's Law and the Southwestern state's Laura's Law despite the different degrees of success in their findings. A potential explanation for the differences between the findings of this study and previous ones covering Kendra's Law may tie to demographic and diagnosis differences.

From one standpoint, County Number One's higher mean number of persons with mental illness taken into custody despite Laura's Law being put into place may support the view that stigma surrounding mentally ill individuals could potentially discourage mentally vulnerable individuals from seeking the appropriate mental health treatment. These implications tie back to the common themes found in the works of Dixon et al. (2016) and Doll (1976), which covered areas of mental health and stigmatization in a post deinstitutionalized American society. In support of this narrative, Lincoln and Adam (2016) found that members of a community that suffered from mental illness spoke out about intersectional marginalization after interviewing a sample of 294 people from a region in Northeastern United States. As previously mentioned, while Laura's Law allowed the court to order individuals with mental illness to comply with IOT (Treatment Advocacy Center, n.d.), there was not enough data to show how well-enforced these measures were (or if they were enforced at all) or what role medications may or may not have had.

The ineffectiveness of Laura's Law demonstrated in the qualitative findings implied a need for further research and understanding as to how IOT laws have been implemented and enforced across on top of the existing literature on the topic. Guido and Stavis (2007) found that the use of IOTs decreased the amount of hospital stays. Saya et al. (2019)

found that state courts with IOT systems have led to shorter prison stays in addition to augmented welfare and health for persons with mental illness.

Given the previous results found in the literature, the results of the study between the two counties in a Southwestern state were not expected. Arguably, it would be much more suitable in the future to compare the findings of my research study with the literature or research which focus on a more in depth look of how IOT laws vary from state to state and what it might tell us about the lack of “teeth” in Laura’s Law.

Hozty et al. (2018) discussed the dangers of broad IOT laws in New York and how such a criterion would lead not only to stigmatization. They argued that there were unneeded hospitalizations, as well as an overreach of power at the hands of healthcare providers. While Laura’s Law allowed the courts to order IOT to individuals with mental illness, it did not force those individuals to take medications (Treatment Advocacy Center, n.d.).

Berger et al. (2018) deduced from their findings that the varied nature of IOT laws across different states have led to varied results. This could potentially explain the difference in the effectiveness of Kendra’s Law in comparison with Laura’s Law. It could also be argued that Laura’s Law represented an example of what happened when there was a lack of standardization across different IOT laws. Also, as the literature discussed, hospitalizations alone were insufficient. This could pose for dangerous criteria and overreaching IOT, which may do more harm than good.

Involuntary Outpatient Treatment Outcomes

To further understand what appeared to be ineffective results of Laura's Law in keeping the use of involuntary commitment low in County Number One, outcomes associated with IOT laws across other states need to be further evaluated. In contrast with this study's findings, Phelan et al. (2010) came to the conclusion that there were mostly positive outcomes with IOT, which lowered the risks of suicide and augmented social functionality. However, other studies suggested a need for less restrictive psychiatric treatment (Segal et al., 2017). These contrasts in the existing literature, analyzing IOT outcomes in conjunction with stigmatization of IOT or hospitalization, may provide a deeper insight into the shortcomings of Laura's Law.

Strang (2009) questioned whether the Ohio-based Jason's Law was passed to assist individuals with mental illness to curb both crime and incarcerations or if it was an arbitrary response to an incident very similar to the one involving Laura Wilcox. Some parallels may be drawn to the circumstances behind the passing of Laura's Law, which was passed in the backdrop of Laura Wilcox's murder in 2001. While these laws have been shown to be beneficial according to findings in the literature, elements such as context, state-based demographics, and diagnosis of the individual need to be considered alongside the varying differences between IOT Laws and the extent of their reach, as well as whether they are capable of truly helping curb incarcerations among individuals with mental illness or making the problem much more complicated. To summarize, the findings in the study do not support or contradict the literature focusing on IOT Outcomes. Rather, what it did was reinforce the idea that there is no "standardized"

nature in determining the effects of IOT Laws and that state or county specific circumstances must be considered. This conclusion was also linked to the Multiple Streams Analysis, one of the theoretical frameworks of this study.

Court Ordered Outpatient Mental Health Treatment

Literature surrounding this field has suggested that AOT has led to fewer arrests and reduced recidivism (Gilbert et al., 2010), which contradicts the results in County Number One. However, the main focal point of the study leaned more towards the incarceration rates of mentally ill individuals and less on the specifics of the county's IOT or AOT laws. Pridham et al. (2014) conducted a qualitative literature review study and found that the involuntary nature of IOTs was coercive. They proposed that improvements in accessibility, as well as a more productive relationship with IOT service providers, would lead to the process being seen as favorable by patients with mental illness. This tied back to the theoretical framework of the social contract, which was used by Welie (2012) to outline the social responsibilities of government health workers to those in need. As for how this tied connected to the findings involving County Number One, it could be argued that many of the mentally ill individuals who were taken into custody found the IOT process behind Laura's Law coercive. These elements may have deterred them from seeking help or obeying the IOT orders by the courts.

Limitations of the Study

The study that formed the foundation of my research focused primarily on the incarceration rates in a Southwestern state between two counties: one which implemented Laura's Law (County Number One) and another which did not (County Number Two).

The study focused on an empirical set of results to determine the number of incarcerations of individuals with mental illness in either county. While from an empirical basis, the study provided a glimpse as to how effective Laura's Law was in keeping the use of involuntary commitment among individuals with mental illness low, what the execution of the study did not reveal were the specific details in the IOT treatment programs or the number of accessible mental health centers and resources in either County Number One or County Number Two. It also did not take into consideration either the diagnosis of the individuals or the severity and disruptive nature of their behavior.

Methodology Limitations

Challenges to validity were acknowledged in Chapter 3 with three key tenets: 1) reliability of the instrument; 2) data assumptions; and 3) sample size. As previously stated, the sample size was limited to only two counties in the entirety of the sample state. Therefore, the findings from this research may not have reflected or replicated those from other state IOT laws such as Kendra's Law.

It was my intention to study more than two counties. Unfortunately, the COVID-19 pandemic took place and the other counties that had agreed to furnish data were not able to follow through. Furthermore, the narrative that Laura's Law was ineffective in curbing the use of involuntary commitment among individuals with mental illness could be generalized beyond those two counties in a Southwestern state but with certain limitations, as previously mentioned. Hence, the study's external validity could potentially face challenges regarding creating an overall generalization for the

effectiveness of Laura's Law. The procedure of the study involved an inmate database, covering the Fiscal Year of 2017-2018 from government agency databases; hence, this may not be reflective of the time periods for other studies involving other IOT laws.

The measurement was mostly directed to incarceration rates of individuals with mental illness in both counties, and it did not take into consideration other aspects such as specifics of the mental health programs in either county; the mental health services offered; or the number of available beds in mental health hospitals. Other measurable elements presented in the literature, which were not considered during the data collection, were whether there was a history of substance abuse among the inmates or recidivism rates among repeat offenders with mental illnesses. The study also consisted of heterogeneous groups, consisting of inmates from two counties in a Southwestern state. As previously stated, the use of a nonprobability sampling procedure, namely purposive sampling, reduced the scope for being able to generalize the gathered results for a much larger population or sample size. Therefore, discrepancies between the results of this study and the results of other IOT of broader scope were present throughout the analysis.

Recommendations

The findings from this study suggested a lack of effective results with Laura's Law in County Number One due to its high incarceration rate of individuals with mental illness. The wording of the law allows for state courts to order IOTs but does not hold the authority to enact court ordered medications to mental health patients. Further research could be conducted to determine the effectiveness of court ordered medication in stabilizing mentally ill individuals to reduce the rate of incarceration. This is further

reinforced by studies from Berger et al. (2018) and Hotzy et al. (2018), who found that court ordered IOTs which were accompanied with medication regimens were demonstrated to be successful in other states. Further study into this field in conjunction with other counties in a Southwestern state is recommended.

In addition, it may be helpful to conduct research into links regarding the use of guardianship or conservatorship to help the stabilization of individuals with mental illness, and consequently, to reduce the use of involuntary commitment among this population. One of the literature review findings in this study was that of the deinstitutionalization process, which began as a paradigm shift in the 1960s. Further research into this field may open newer insights into alternatives to incarceration for individuals with mental illness. However, such a study would require a broader and more varied sample size.

A third proposed recommendation is to assess additional variables for future studies. Dependent variables would include the number of available beds in mental health facilities, more specific demographics in a county, recidivism rates, repeat offense statistics, and the extent to which Laura's Law or any other IOT law is enforced on a local level. Regarding other independent variables, further study, and research into the wording of not only Laura's Law but other state based IOT laws in future research endeavors. These additional variables would help us better understand what determines an augmenting or declining rate of the use of incarceration among individuals with mental illness and how effectively IOT regulations such as Laura's Law can play a part in making a positive difference.

Also, future research into Laura's Law could potentially expand its scope to other counties in a Southwestern state. This study was limited by only being able to include two counties and set fiscal year scope. A much wider sample size could prove useful for future research as it would allow for a better understanding of the relationship between Laura's Law and the involuntary commitment of individuals with mental illness. Most vital, however, is that the findings in this study were quantitative and pointed to the direction of a more overarching research towards a standardized IOT regulation on a federal level. The literature which focused on IOT laws from other states entailed state-based regulations with varying means of implementation, enforcement, and success, depending on the area or demographic. In short, research into the effectiveness of current or proposed mental health laws on a broader, federal level would be beneficial in the long term.

The final recommendation has to do with how government agencies keep track of data. Currently, policies and procedures involving the timely and accurate tracking and maintenance of this type of data do not exist in a Southwestern state, or are very fractured. I experienced a lot of delay and governmental "red tape" when I requested access to data sets that should be easily available to the public. As I have mentioned previously, two counties ended up not furnishing data after many failed requests. It is important that counties and the Southwestern state overall develop a standardized and successful process to track data and make it accessible to the general population.

Implications

Overall, the findings of the research study involving the incarceration rates of the Laura's Law brought about a new understanding about the extent to which IOT laws can be effective. While the results of this study did not reinforce the narrative that IOT laws are effective in curbing or lowering the incarceration rates of individuals with mental illness, they did not rule out the potential for further studies in the field and positive social change. The findings of this study show that there is potential for change, which can create a more positive impact at the individual, family, organizational, and county level within this Southwestern state. The theoretical framework of the social contract theory and the multiple streams theory may support these changes.

This study may prompt policymakers to reexamine whether Laura's Law needs revisions. The expansion of programs such as In-Home Supportive Services, specifically to arm caregivers with the appropriate training on how to work with individuals with mental illness could help individuals with mental illness that reside in their own home remain medically stable. Also, reviewing guardianship and conservatorship laws in this Southwestern state in order to make them easier to apply for could potentially assist individuals with mental illness that have diminished capacity to also become more stable. It is well known that this Southwestern state struggles with high indexes of homelessness: the use of adult guardianship for those homeless individuals that have mental illness and that lack mental capacity could be explored as a possible solution to this problem. In addition, a budget increase among behavioral programs across the state, as well as case management, could be beneficial. In line with the social contract theory, it would grant

both state and county level governments the accountability in ensuring the social and mental wellbeing of persons with mental illnesses to lower both crime and incarceration rates. On a theoretical level, the proposals for In-Home Supportive Services supports several elements from deinstitutionalization, which draw on social or environmental support for individuals with mental illness.

On the topic of deinstitutionalization, one of the positive social changes that this study could propose is a shift in how mental institutions are perceived.

Deinstitutionalization brought negative consequences: Torrey (2015) points out that starting in 1970, there was a significant increase in the crimes committed by individuals with untreated mental illness, which coincides with the peak of the phenomenon of deinstitutionalization. Consequently, considering that one of the reasons why deinstitutionalization began was the deplorable state of most mental institutions (Torrey, 2015), a positive social change could be exploring the formation of new mental institutions that are well-managed and that offer comprehensive services aiming towards rehabilitation and reincorporation into society, when appropriate.

Another potential positive change that could emerge based on the findings of this study is to remove the discretionary trait of Laura's Law and to make it mandatory across all the counties of the Southwestern state. This state is the only one in the United States that did not enact the IOT law throughout (Castro, 2015). This uniqueness of Laura's Law makes the assessment of it difficult, since an individual with a diagnosis of mental illness might live in a county that has enacted Laura's Law but receive treatment in a county that has not, creating hurdles in the service delivery and data tracking. If policy

makers decide to take a close look at Laura's Law, not only its provisions but also its implementation, it would be beneficial to consider providing financial incentives to those counties that decide to enact Laura's Law, since at this time there is no budgetary assistance attached to the adoption of the law.

On a research level, the study opened room for further improvement regarding the inclusion of more variables in future county level studies. Researchers specializing in the field of IOT laws and their correlation with incarceration rates will find this data useful. Attention should be given to the findings of this study because it demonstrates how effective or ineffective an IOT law can be on a smaller scale, local level. In this case, the findings in County Number One's high incarceration rates among individuals with mental illness despite the implementations placed by Laura's Law may open up further debates on how IOT regulations should be implemented and whether elements of deinstitutionalization can prove helpful in contrast to the literary works which have criticized the latter implementations.

Conclusion

This research was an empirical based study that focused on determining the impact of a presence or absence of Laura's Law between two counties in a Southwestern state. Given the theoretical and conceptual frameworks in place, it was expected that Laura's Law would have helped curb the use of involuntary commitment among individuals with mental illness in County Number One, which had put the law in place. The expectations regarding the literature were that Laura's Law would have produced more positive results than County Number Two, which did not have it in place, as the

studies presented in the literature provided evidence in favor of IOT laws having a positive impact on mentally ill offenders. The actual findings of the study were compared to the theoretical framework and the literature used. To this end, findings demonstrated a need for further research to investigate the specific dynamics of IOT laws (e.g., court ordered medication, enforcement scope, and more dependent variables of a sample size such as geography, demographics, time, and implementation methods). The nature of IOT laws on a state or county level are dependent on numerous dependent variables. A key conclusion to this study was a need to make stronger regulations, which would ensure that state or county level courts perform their responsibilities regarding mental health and crime properly, as well as ensuring that the agencies that deal with individuals with mental illness are adequately funded. Future studies would do well to consider the significance of the multiple streams theory in understanding how legislative ambiguity can be tackled in the field of mental health and incarceration.

References

- Al-Rousan, T., Rubenstein, L., Sieleni, B., Deol, H., & Wallace, R. B. (2017). Inside the nation's largest mental health institution: A prevalence study in a state prison system. *BMC Public Health, 17*(1), 342. <https://doi.org/10.1186/s12889-017-4257-0>
- Andrade, L.H., Alonso, J., Mneimneh, Z., Wells, J. E., Al-Hamzawi, A., Borges, G., Bromet, E., Bruffaerts, R., de Girolamo, G. & de Graaf, R. (2014). Barriers to mental health treatment: Results from the WHO World Mental Health surveys. *Psychological Medicine, 44*(6), 1303-1317. <https://doi.org/10.1017/S0033291713001943>
- Babones, S. J. (2014). *Methods for quantitative macro-comparative research*. Sage.
- Bagaric, M. (2016). A rational (unapologetically pragmatic) approach to dealing with the irrational-the sentencing of offenders with mental disorders. *Harvard Human Rights Journal, 29*(1). <https://harvardhrj.com/wp-content/uploads/sites/14/2016/09/Bararic-Sentencing-Offenders-with-Mental-Disorders.pdf>
- Ballard, E., & Teasdale, B. (2016). Reconsidering the criminalization debate: An examination of the predictors of arrest among people with major mental disorders. *Criminal Justice Policy Review, 27*(1), 22-45. <https://doi.org/10.1177/0887403414561255>

- Barnes, S. S., & Badre, N. (2016). Is the evidence strong enough to warrant long-term antipsychotic use in compulsory outpatient treatment? *Psychiatric Services*, 67(7), 784-786. <https://doi.org/10.1176/appi.ps.201500408>
- Ben-Moshe, L. (2017). Why prisons are not “The New Asylums.” *Punishment & Society*, 19(3), 272-289. <https://doi.org/10.1177/1462474517704852>
- Berger, F., Dailey, L., Johnson, B., Sinclair, E., Snook, J., & Stettin, B. (2018). *Grading the states: An analysis of involuntary psychiatric treatment laws*. Treatment Advocacy Center.
- Beseda, M. (2011). Incarceration of mentally ill. *Museums & Social Issues*, 6(2), 204-208. <https://doi.org/20123307898>
- Blevins, R., Lord, K., V., & Bjerregaard, B. (2014). Evaluating crisis intervention teams: Possible impediments and recommendations. *Policing: An International Journal of Police Strategies & Management*, 37(3), 484-500. <https://doi.org/10.1108/PIJPSM-08-2012-0083>
- Bouffard, J., Berger, E., & Armstrong, G. S. (2016). The effectiveness of specialized legal counsel and case management services for indigent offenders with mental illness. *Health & Justice*, 4(1), 7. <https://doi.org/10.1186/s40352-016-0038-6>
- Cairney, P., & Jones, M. D. (2016). Kingdon's multiple streams approach: What is the empirical impact of this universal theory? *Policy Studies Journal*, 44(1), 37-58. <https://doi.org/10.1111/psj.12111>
- Camm, J. D. (2012). *Quantitative methods for business* (12th International ed.). South-Western.

- Canady, V. A. (2019). Orange, Yolo counties find positive outcomes with Laura's Law. *Mental Health Weekly*, 29(6), 5. <https://doi.org/10.1002/mhw.31771>
- Carson, A. E., & Anderson, E. (2016). Prisoners in 2016. *Bureau of Justice Statistics*.
<https://www.bjs.gov/index.cfm?ty=pbdetail&iid=5869>
- Castro, J. (2015). Laura's Law: Concerns, effectiveness, and implementation. *a Southwestern state Legal History Journal*, 10, 175.
- Community Mental Health Act of 1963, Pub. L. 88-164, 77 Stat. 282, 42 U.S.C. (1963).
- Compton, M. T., Broussard, B., Kelley, M. E., Druss, B. G., Pope, A., Smith, K., , Reed, T. A., Li, C., & Haynes, N. L. (2016). Opening doors to recovery: Recidivism and recovery among persons with serious mental illnesses and repeated hospitalizations. *Psychiatric Services*, 67(2), 169-175.
<https://doi.org/10.1176/appi.ps.201300482>
- Constantine, R. J., Robst, J., Andel, R., & Teague, G. (2012). The impact of mental health services on arrests of offenders with a serious mental illness. *Law & Human Behavior (American Psychological Association)*, 36(3), 170-176.
<https://doi.org/10.1037/h0093952>
- Cripps, S. N., & Swartz, M. S. (2018). Update on assisted outpatient treatment. *Current Psychiatry Reports*, 20(12), 112. <https://doi.org/10.1007/s11920-018-0982-z>
- Dixon, L. B., Holoshitz, Y., & Nossel, I. (2016). Treatment engagement of individuals experiencing mental illness: Review and update. *World Psychiatry*, 15(1), 13-20.
<https://doi.org/10.1002/wps.20306>

- Dlugacz, H. (2014). Correctional mental health in the USA. *International Journal of Prisoner Health*, 10(1), 3-26. <https://doi.org/10.1108/IJPH-06-2013-0028>
- Doll, W. (1976). Family coping with the mentally ill: An unanticipated problem of deinstitutionalization. *Psychiatric Services*, 27(3), 183-185.
<https://doi.org/10.1176/ps.27.3.183>
- Dus, A. (2016). "But I'm not dangerous, judge, I promise!": Evaluating the implications of involuntary civil commitment criteria and outpatient treatment methods on the elderly. *Elder Law Journal*, 1-42.
- Ecker, J., Cherner, R., Rae, J., & Czechowski, K. (2018). Sexual intimacy, mental illness, and homelessness. *American Journal of Community Psychology*, 61(1-2), 131-140.
<https://doi.org/10.1002/ajcp.12213>
- Eide, S. (2017). *Assisted outpatient treatment in New York State*. Manhattan Institute.
<https://media4.manhattan-institute.org/sites/default/files/R-SE-0417.pdf>
- Flynn, S., Rodway, C., Appleby, L., & Shaw, J. (2014). Serious violence by people with mental illness: National clinical survey. *Journal of Interpersonal Violence*, 29(8), 1438-1458. <https://doi.org/10.1177/0886260513507133>
- Fox, A. M., Mulvey, P., Katz, C. M., & Shafer, M. S. (2016). Untangling the relationship between mental health and homelessness among a sample of arrestees. *Crime & Delinquency*, 62(5), 592-613.

- Frazier, B. D., Sung, H. E., Gideon, L., & Alfaro, K. S. (2015). The impact of prison deinstitutionalization on community treatment services. *Health & Justice*, 3(1), 9. <https://doi.org/10.1186/s40352-015-0021-7>
- Galon, P. A., Wineman, N. M., & Grande, T. (2012). Influence of race on outpatient commitment and assertive community treatment for persons with severe and persistent mental illness. *Archives of Psychiatric Nursing*, 26(3), 202-213. <https://doi.org/10.1016/j.apnu.2011.07.001>
- Geller, J. L. (2006). The evolution of outpatient commitment in the USA: From conundrum to quagmire. *International Journal of Law and Psychiatry*, 29(3), 234-248. <https://doi.org/10.1016/j.ijlp.2005.09.003>
- Geller, J. L., Fisher, W. H., Grudzinskas, A. J., Clayfield, J. C., & Lawlor, T. (2006). Involuntary outpatient treatment as “deinstitutionalized coercion”: The net-widening concerns. *International Journal of Law and Psychiatry*, 29(6), 551-562. <https://doi.org/10.1016/j.ijlp.2006.08.003>
- Gilbert, A. R., Moser, L. L., Van Dorn, R. A., Swanson, J. W., Wilder, C. M., Robbins, P. C., Keator, K. J., Steadman, H. J., & Swartz, M. S. (2010). Reductions in arrest under assisted outpatient treatment in New York. *Psychiatric Services*, 61(10), 996-999. <https://doi.org/10.1176/ps.2010.61.10.996>
- Gill, K. J., & Murphy, A. A. (2017). Jail diversion for persons with serious mental illness coordinated by a prosecutor’s office. *Biomed Research International*, 2017, 1-7.
- Gillberti, M. (2015). Treatment, not jail: It’s time to step up. *National Alliance on Mental Illness*. <https://nami.org>

- Gonzales, L., Nesi, D., & Yanos, P. T. (2015). An examination of eligibility decisions in New York State's assisted outpatient treatment. *Psychiatric Services*, 66(12), 1373-1376. <https://doi.org/10.1176/appi.ps.201400437>
- Hancock, G. R., & Mueller, R. O. (2010). *The reviewer's guide to quantitative methods in the social sciences*. Routledge.
- Haney, C. (2017). "Madness" and penal confinement: Some observations on mental illness and prison pain. *Punishment & Society*, 19(3), 310-326. <https://doi.org/10.1177/1462474517705389>
- Hirschtritt, M. E., & Binder, R. L. (2017). Interrupting the mental illness–incarceration–recidivism cycle. *Jama*, 317(7), 695-696. <https://doi.org/10.1001/jama.2016.20992>
- Hnatow, D. (2015). Working with law enforcement to provide health care for the acutely mentally ill. *Psychiatric Times*, 32(11), 11-14. <http://www.psychiatrictimes.com/journal>
- Hobbes, T. 1588-1679. (1968). *Leviathan*. Penguin Books
- Hoke, S. (2015). Mental illness and prisoners: Concerns for communities and healthcare providers. *Online Journal of Issues in Nursing*, 20(1), 3. <https://doi.org/10.3912/OJIN.Vol20No01Man03>
- Hotzy, F., Kerner, J., Maatz, A., Jaeger, M., & Schneeberger, A. R. (2018). Cross-cultural notions of risk and liberty: A comparison of involuntary psychiatric hospitalization and outpatient treatment in New York, United States and Zurich,

Switzerland. *Frontiers in Psychiatry*, 9, 267.

<https://doi.org/10.3389/fpsy.2018.00267>

Kara, F. B. (2014). Police interactions with the mentally ill: The role of procedural justice. *Canadian Graduate Journal of Sociology and Criminology*, 3(1), 79.

Kennedy-Hendricks, A., Huskamp, H. A., Rutkow, L., & Barry, C. L. (2016). Improving access to care and reducing involvement in the criminal justice system for people with mental illness. *Health Affairs*, 35(6), 1076-1083.

<https://doi.org/10.1377/hlthaff.2016.0006>

Kim, D. Y. (2016). Psychiatric deinstitutionalization and prison population growth: A critical literature review and its implications. *Criminal Justice Policy Review*, 27(1), 3-21. <https://doi.org/10.1177/0887403414547043>

Kisely, S. R., Campbell, L. A., & Preston, N. J. (2005). Compulsory community and involuntary outpatient treatment for people with severe mental disorders. *Cochrane Database of Systematic Reviews*, (3 Article No: CD004408), 1-25.

<https://doi.org/10.1002/14651858.CD004408.pub2>

Lamb, H. R., & Weinberger, L. E. (2013). Some perspectives on criminalization. *The Journal of the American Academy of Psychiatry and the Law*, 41(2), 287-93.

<http://jaapl.org/content/41/2/287>

Lamb, H. R., & Weinberger, L. E. (2014). Decarceration of US jails and prisons: Where will persons with serious mental illness go. *Journal of the American Academy of Psychiatry and the Law*, 42(4), 489-494. <https://www.researchgate.net/>

- Lancaster, A. (2016). Evidence for joint police and mental health responses for people in mental health crisis. *Mental Health Practice, 19*(10), 20-26.
<https://doi.org/10.7748/mhp.2016.e1067>
- Lee, D. (2012). Mental health policy in a Southwestern state: The “millionaire's tax” and the mental health services oversight and accountability commission. *Mental Health Review Journal, 17*(4), 211-220.
<https://doi.org/10.1108/13619321211289281>
- Lera-Calatayud, G., Hernandez-Viadel, M., Bellido-Rodriguez, C., Canete-Nicolas, C., Asensio-Pascual, P., Calabuig-Crespo, R., & Leal-Cercos, C. (2014). Involuntary outpatient treatment in patients with severe mental illness: A one-year follow-up study. *International Journal of Law and Psychiatry, 37*(3), 267-271.
<https://doi.org/10.1016/j.ijlp.2013.11.021>
- Light, E. M., Robertson, M. D., Boyce, P., Carney, T., Rosen, A., Cleary, M., Hunt, G. E., O'Connor, N., Ryan, C., & Kerridge, I. (2016). The many faces of risk: A qualitative study of risk in outpatient involuntary treatment. *Psychiatric Services, 66*(6), 649-652. <https://doi.org/10.1176/appi.ps.201400109>
- Light, E. M., Robertson, M. D., Kerridge, I. H., Boyce, P., Carney, T., Rosen, A., Cleary, M., Hunt, G. E., & O'Connor, N. (2016). Reconceptualizing involuntary outpatient psychiatric treatment: From “capacity” to “capability.” *Philosophy, Psychiatry, & Psychology, 23*(1), 33-45. <https://doi.org/10.1353/ppp.2016.0005>
- Lincoln, A. K., & Adams, W. E. (2016). Understandings of community among people using publicly funded community mental health services. In A. Lincoln & W.

Adams (Eds.), *50 years after deinstitutionalization: Mental illness in contemporary communities* (pp. 147-174). Emerald Group.

<https://doi.org/10.1108/S1057629020160000017006>

Livingston, J. D. (2016). Contact between police and people with mental disorders: A review of rates. *Psychiatric Services, 67*(8), 850-857.

<https://doi.org/10.1176/appi.ps.201500312>

Matejkowski, J., Lee, S., & Han, W. (2014). The association between criminal history and mental health service use among people with serious mental illness.

Psychiatric Quarterly, 85(1), 9-24. <https://doi.org/10.1007/s11126-013-9266-2>

McCabe, P. J., Christopher, P. P., Druhn, N., Roy-Bujnowski, K. M., Grudzinskas, A. J., & Fisher, W. H. (2012). Arrest types and co-occurring disorders in persons with schizophrenia or related psychoses. *The Journal of Behavioral Health Services & Research, 39*(3), 271-284. <https://doi.org/10.1007/s11414-011-9269-4>

Mears, D. P., Cochran, J. C., & Cullen, F. T. (2015). Incarceration heterogeneity and its implications for assessing the effectiveness of imprisonment on recidivism.

Criminal Justice Policy Review, 26(7), 691-712.

Mears, D. P., Cochran, J. C., & Cullen, F. T. (2015). Incarceration heterogeneity and its implications for assessing the effectiveness of imprisonment on recidivism.

Criminal Justice Policy Review, 26(7), 691-712.

Meldrum, M. L., Kelly, E. L., Calderon, R., Brekke, J. S., & Braslow, J. T. (2016). Implementation status of assisted outpatient treatment programs: A national

Survey. *Psychiatric Services*, 67(6), 630-635.

<https://doi.org/10.1176/appi.ps.201500073>

Moore, B. G., & Weisman, R. L. (2016). Involuntary Outpatient Treatment. *Journal of the American Academy of Psychiatry and the Law Online*, 44(2), 272-274.

Morrissey, J. P., Desmarais, S. L., & Domino, M. E. (2013). Involuntary Outpatient Commitment: Current Evidence and Options. *Prepared for the Continuity of Care Panel, Maryland Department of Health and Mental Hygiene.*

Mulvey, E. P., & Schubert, C. A. (2017). Mentally ill individuals in jails and prisons. *Crime and Justice*, 46(1), 231-277.

Mulvey, P., & White, M. (2014). The potential for violence in arrests of persons with mental illness. *Policing: An International Journal of Police Strategies & Management*, 37(2), 404-419. <https://doi.org/10.1108/PIJPSM-07-2013-0076>

Mundia, L., Matzin, R., Mahalle, S., Hamid, M. H. S., & Osman, R. S. (2017). Roles of psychopathic personality, mental health, and recidivism in criminal behavior: Survey of Brunei inmates. *Asian Journal of Criminology*, 12(4), 255-280.

Munetz, M. R., Ritter, C., Teller, J. L., & Bonfine, N. (2014). Mental health court and assisted outpatient treatment: Perceived coercion, procedural justice, and program impact. *Psychiatric Services*, 65(3), 352-358.

<https://doi.org/10.1176/appi.ps.002642012>

Munson, M. R., Jaccard, J., Smalling, S. E., Kim, H., Werner, J. J., & Scott, J. D. (2012). Static, dynamic, integrated, and contextualized: A framework for understanding

mental health service utilization among young adults. *Social Science & Medicine*, 75(8), 1441-1449. <https://doi.org/10.1016/j.socscimed.2012.05.039>

New York Times editorial board (2013, April 10). Mental illness in California prisons.

The New York Times. <http://www.nytimes.com/2013/04/11/opinion/mental-illness-in-california-prisons.html>

O'Toole, S., Maguire, J., & Murphy, P. (2018). The efficacy of exercise referral as an intervention for Irish male prisoners presenting with mental health symptoms.

International Journal of Prisoner Health, 14(2), 109-123.

<https://doi.org/10.1108/ijph-12-2016-0073>

Perry, B. L. (Ed.). (2016). Introduction: Legacies of deinstitutionalization through the

lens of medical sociology. In B. L. Perry (Ed.), *50 years after*

deinstitutionalization: Mental illness in contemporary communities (pp. xiii-xxiv).

Emerald Group.

Pescosolido, B. A. (2013). The public stigma of mental illness: What do we think; what

do we know; what can we prove? *Journal of Health and Social Behavior*, 54(1),

1-21. <https://doi.org/10.1177/0022146512471197>

Peterson, J. K., Skeem, J., Kennealy, P., Bray, B., & Zvonkovic, A. (2014). How often

and how consistently do symptoms directly precede criminal behavior among

offenders with mental illness? *Law and Human Behavior*, 38(5), 439.

<https://doi.org/10.1037/lhb0000075>

- Phelan, J. C., Sinkewicz, M., Castille, D. M., Huz, S., & Link, B. G. (2010). Effectiveness and outcomes of assisted outpatient treatment in New York State. *Psychiatric Services, 61*(2), 137–143. <https://doi.org/10.1176/ps.2010.61.2.137>
- Phillips, M. R., Wolf, A. S., & Coons, D. J. (1988). Psychiatry and the criminal justice system: Testing the myths. *American Journal of Psychiatry, 145*(5), 605-610. <https://doi.org/10.1176/ajp.145.5.605>
- Pow, J. L., Baumeister, A. A., Hawkins, M. F., Cohen, A. S., & Garand, J. C. (2015). Deinstitutionalization of American public hospitals for the mentally ill before and after the introduction of antipsychotic medications. *Harvard Review of Psychiatry, 23*(3), 176-187. <https://doi.org/10.1097/HRP.0000000000000046>
- Pridham, K. M. F., Berntson, A., Simpson, A. I., Law, S. F., Stergiopoulos, V., & Nakhost, A. (2015). Perception of coercion among patients with a psychiatric community treatment order: A literature review. *Psychiatric Services, 67*(1), 16-28. <https://doi.org/10.1176/appi.ps.201400538>
- Primeau, A., Bowers, T. G., Harrison, M. A., & XuXu. (2013). Deinstitutionalization of the mentally ill: Evidence for transinstitutionalization from psychiatric hospitals to penal institutions. *Comprehensive Psychology, 2*(1), 16-20 <https://doi.org/10.2466/16.02.13.CP.2.2>
- Raitakari, S., Haahtela, R., & Juhila, K. (2016). Tackling community integration in mental health home visit integration in Finland. *Health & Social Care in the Community, 24*(5), e53-e62.

- Reiter, K., & Blair, T. (2015). Punishing mental illness: Trans-institutionalization and solitary confinement in the United States. In K. Reiter & A. Koenig (Eds.), *Extreme punishment* (pp. 177-196). Palgrave Macmillan.
- Reynoso, A. (2014). Is a Southwestern state committed: Why a Southwestern state should take action to address the shortcomings of its assisted outpatient commitment statute. *S. Cal. L. Rev.*, 88, 1021. <http://heinonline.org/>
- Rosenberg, L. (2014). Assisted outpatient treatment: We can do better. *The Journal of Behavioral Health Services & Research*, 41(3), 251-253.
- Rowe, M. (2013). Alternatives to outpatient commitment. *Journal of the American Academy of Psychiatry and the Law Online*, 41(3), 332-336. <http://jaapl.org/>
- Rowe, M. C. (2017). "Lock 'em up and throw away the key": The involuntary treatment and commitment of incompetent criminal defendants.
- Rubinow, D. R. (2014). Out of sight, out of mind: Mental illness behind bars. *American Journal of Psychiatry*, 171(10), 1041-1044.
<https://doi.org/10.1176/appi.ajp.2014.14060712>
- Sabatier, P. A., & Weible, C. M. (Eds.). (2014). *Theories of the policy process* (3rd ed.). Westview Press.
- Sayed, S. E., Piquero, A. R., Schubert, C. A., Mulvey, E. P., Pitzer, L., & Piquero, N. L. (2016). Assessing the mental health/offending relationship across race/ethnicity in a sample of serious adolescent offenders. *Criminal Justice Policy Review*, 27(3), 265-301.

- Schneeberger, A. R., Huber, C. G., Lang, U. E., Muenzenmaier, K. H., Castille, D., Jaeger, M., Sexias, A., Sowislo, J., & Link, B. G. (2017). Effects of assisted outpatient treatment and health care services on psychotic symptoms. *Social Science & Medicine*, 175, 152-160.
<https://doi.org/10.1016/j.socscimed.2017.01.007>
- Schutt, R. K. (2016). Social environment and mental illness: The progress and paradox of deinstitutionalization. In B. L. Perry (Ed.), *50 years after deinstitutionalization: Mental illness in contemporary communities* (pp. 91-118). Emerald Group.
- Segal, A. G., & Sisti, D. A. (2016). "Restricted community members": Research protections and opportunities for individuals committed to assisted outpatient treatment. *Psychiatric Services*, 68(2), 189-191.
<https://doi.org/10.1176/appi.ps.201600194>
- Segal, S. P., Hayes, S. L., & Rimes, L. (2017). The utility of outpatient commitment: I. A need for treatment and a least restrictive alternative to psychiatric hospitalization. *Psychiatric Services*, 68(12), 1247-1254.
<https://doi.org/10.1176/appi.ps.201600161>
- Sewell, A. (2016, June 19). Mentally ill inmates are swamping the state's prisons and jails: Here's one man's story. *The Los Angeles Times*. [https://county number two.latimes.com/local/california/la-me-mentally-ill-inmate-snap-story.html](https://county.number.two.latimes.com/local/california/la-me-mentally-ill-inmate-snap-story.html)
- Sharma, G. (2017). Pros and cons of different sampling techniques. *International journal of applied research*, 3(7), 749-752.

- Skeem, J. L., Steadman, H. J., & Manchak, S. M. (2015). Applicability of the risk-need-responsivity model to persons with mental illness involved in the criminal justice system. *Psychiatric Services, 66*(9), 916-922.
- Steadman, H. J., Morrissey, J. P., & Parker, T. W. (2014). When political will is not enough: Jails, communities and persons with mental health disorders. *Criminal Justice Reform Initiative: Reducing the Overuse and Misuse of Jails in America Initiative*. <http://www.safetyandjusticechallenge.org>
- Stettin, B. (2014). An advocate's observations on research concerning assisted outpatient treatment. *Current Psychiatry Reports, 16*(3), 435.
- Stinson, J. D., Quinn, M. A., & Levenson, J. S. (2016). The impact of trauma on the onset of mental health symptoms, aggression, and criminal behavior in an inpatient psychiatric sample. *Child Abuse & Neglect, 61*, 13-22.
<https://doi.org/10.1016/j.chiabu.2016.09.005>
- Strang, S. (2009). Assisted outpatient treatment in Ohio: Is Jason's Law life-saving legislation or a rash response. *Health Matrix, 19*, 247. <https://health-matrix.scholasticahq.com/>
- Sugie, N. F., & Turney, K. (2017). Beyond incarceration: criminal justice contact and mental health. *American Sociological Review, 82*(4), 719-743.
- Swanson, J. W., & Swartz, M. S. (January 01, 2014). Why the evidence for outpatient commitment is good enough. *Psychiatric Services (Washington, D.C.), 65*(6), 808-811.

- Swartz, M. S., Bhattacharya, S., Robertson, A. G., & Swanson, J. W. (2017). Involuntary outpatient commitment and the elusive pursuit of violence prevention: A view from the United States. *The Canadian Journal of Psychiatry*, *62*(2), 102-108.
<https://doi.org/10.1177/0706743716675857>
- Talbott, J. A. (2004). Deinstitutionalization: Avoiding the disasters of the past. *Psychiatric Services*, *55*(10), 1112-1115.
<https://doi.org/10.1176/appi.ps.55.10.1112>
- Tamburello, A. C., & Selhi, Z. (2013). Commentary: Bridging the gaps for former inmates with serious mental illness. *Journal of the American Academy of Psychiatry and the Law Online*, *41*(4), 510-513. [http://county number two.antoniocasella.eu/](http://county_number_two.antoniocasella.eu/)
- Torrey, E. F. (2015). Deinstitutionalization and the rise of violence. *CNS Spectrums*, *20*(3), 207-214. <https://doi.org/10.1017/S1092852914000753>
- Torrey, E. F., Entsminger, K., Geller, J., Stanley, J., & Jaffe, D. J. (2015). The shortage of public hospital beds for mentally ill persons. *Montana*, *303*(20.9), 6-9.
<https://mentalillnesspolicy.org>
- Treatment Advocacy Center. (n.d.). *Eliminating barriers to the treatment of mental illness*. <http://www.treatmentadvocacycenter.org/california>
- Ulrich, R. S., Bogren, L., Gardiner, S. K., & Lundin, S. (2018). Psychiatric ward design can reduce aggressive behavior. *Journal of Environmental Psychology*, *57*, 53-66.
<https://doi.org/10.1016/j.jenvp.2018.05.002>

- Van Dorn, R. A., Desmarais, S. L., Petrila, J., Haynes, D., & Singh, J. P. (2013). Effects of outpatient treatment on risk of arrest of adults with serious mental illness and associated costs. *Psychiatric Services, 64*(9), 856-862.
<https://doi.org/10.1176/appi.ps.201200406>
- Veeh, C. A., Tripodi, S. J., Pettus-Davis, C., & Scheyett, A. M. (2016, August 15). The interaction of serious mental disorder and race on time to reincarceration. *American Journal of Orthopsychiatry*. <https://doi.org/10.1037/ort0000183>
- Wales, H. W., & Hiday, V. A. (2006). PLC or TLC: Is outpatient commitment the/answer? *International Journal of Law and Psychiatry, 29*(6), 451-468.
<https://doi.org/10.1016/j.ijlp.2006.08.001>
- Welie, J. V. (2012). Social contract theory as a foundation of the social responsibilities of health professionals. *Medicine, Health Care and Philosophy, 15*(3), 347-355.
<https://doi.org/10.1007/s11019-011-9355-7>
- Wildeman, C. (2014). How the criminal justice system shapes social inequality and the capacity of citizens: Parental incarceration, child homelessness, and the invisible consequences of mass imprisonment. *Annals of the American Academy of Political and Social Sciences, 651*(1), 74-296.
- Wilson, A. B., Draine, J., Barrenger, S., Hadley, T., & Evans, A. (2014). Examining the impact of mental illness and substance use on time till re-incarceration in a county jail. *Administration and Policy in Mental Health and Mental Health Services Research, 41*(3), 293-301. <https://doi.org/10.1007/s10488-013-0467-7>

Wilson, J. A., & Wood, P. B. (2014). Dissecting the relationship between mental illness and return to incarceration. *Journal of Criminal Justice*, 42(6), 527-537.

<https://doi.org/10.1016/j.jcrimjus.2014.09.005>

Wisniewski, M. (2016). *Quantitative methods for decision makers* (6th ed.). Pearson.

Yang, K., & Banamah, A. (2014). Quota sampling as an alternative to probability sampling? An experimental study. *Sociological Research Online*, 19(1), 56-66.

Zlotnick, C., Zerger, S., & Wolfe, P. B. (2013). Health care for the homeless: What we have learned in the past 30 years and what's next. *American Journal of Public Health*, 103(S2), S199-S205. <https://doi.org/10.2105/ajph.2013.301586>

Appendix : Post Hoc Power Analysis

