

ABSTRACT

Mental Health Courts Lower Crime Rates

Taylor E. Le Moal, M.S.Eco.

Mentor: Scott Cunningham, Ph.D.

This paper studies the effect of mental health courts on crime rates for violent and property crimes. Mental health courts are intended to help offenders with mental illnesses treat their illnesses and get them on the right track so they can be law abiding citizens. Uniform Crime Reporting county-level data and Substance Abuse and Mental Health Services Administration data was used in order to run regressions. The regressions showed that rape, assault, motor vehicle theft, and larceny were reduced in counties with mental health courts. This study is one of the first studies to look at the nationwide success of mental health courts.

Mental Health Courts Lower Crime Rates

by

Taylor Le Moal, B.A.

A Thesis

Approved by the Department of Economics

Charles North, Ph.D., Chairperson

Submitted to the Graduate Faculty of
Baylor University in Partial Fulfillment of the
Requirements for the Degree
of
Master of Science in Economics

Approved by the Thesis Committee

Scott Cunningham, Ph.D., Chairperson

John Ssozi, Ph.D.

John Tripp, Ph.D.

Julie King, J.D.

Accepted by the Graduate School
May 2019

J. Larry Lyon, Ph.D., Dean

Copyright © 2019 by Taylor E. Le Moal

All rights reserved

TABLE OF CONTENTS

LIST OF TABLES	v
LIST OF FIGURES	vii
ACKNOWLEDGMENTS	viii
DEDICATION	ix
CHAPTER ONE	1
Introduction	1
CHAPTER TWO	2
Background Information	2
<i>Literature Review</i>	2
<i>History of Mental Healthcare</i>	14
<i>Difference-in-Difference</i>	18
<i>Hypothesis</i>	18
CHAPTER THREE	19
Data	19
CHAPTER FOUR.....	25
Results	25
<i>Coefficient Plots</i>	25
<i>Regression Analysis</i>	27
<i>Policy Implications/ Conclusion</i>	39
BIBLIOGRAPHY.....	42

LIST OF TABLES

Table 1. Outcomes Table	6
Table 2. Location Table	7
Table 3. Research Design Table	9
Table 4. Recidivism Table	11
Table 5. Summary Statistics	23
Table 6: Crime Definitions	20
Table 7. Original Data Crime Categories Regressions	27
Table 8. Original Data Violent Crimes Regressions.....	28
Table 9. Original Data Property Crimes Regressions.....	29
Table 10. Interpolated Data Crime Categories Regressions	30
Table 11. Interpolated Data Violent Crimes Regressions.....	31
Table 12. Interpolated Data Property Crimes Regressions.....	32
Table 13. Treated Interpolated Crime Categories Regressions	33
Table 14. Treated Interpolated Violent Crimes Regressions	34
Table 15. Treated Interpolated Property Crimes Regressions	34
Table 16. Extrapolated Crime Categories Regressions.....	35
Table 17. Extrapolated Violent Crimes Regressions	36
Table 18. Extrapolated Property Crimes Regressions	37
Table 19. Treated Extrapolated Crime Categories Regressions	38

Table 20. Treated Extrapolated Violent Crimes Regressions	38
Table 21. Treated Extrapolated Property Crimes Regressions	39

LIST OF FIGURES

Figure 1: Violent crimes coefficient plot	25
Figure 2. Property crimes coefficient plot	26

ACKNOWLEDGMENTS

Thanks to Dr. Cunningham for being an excellent thesis advisor. Thanks to all of the people who worked at the mental health courts across the country who so graciously answered my questions.

DEDICATION

To Doc C, Dr. Rankin, and Dr. Hoaas for giving me an economics foundation and to my family and friends for encouraging me through this whole process. Sic 'em!

CHAPTER ONE

Introduction

Mental health courts are a type of diversion court which help mentally ill people who have committed a criminal offense get medication, therapy, education, job, housing, and anything else they need instead of being incarcerated and not getting to the root of why they committed the crime. Once the offender has finished their time in the mental health court, they should be less likely to reoffend because the root cause of their offense- the mental illness- is under control. Mental health courts are a fairly recent addition to the criminal justice system. The oldest mental health court is in Broward County, Florida and was established in 1997. The recent addition of these courts means there is not much research on how the courts function nationally, instead focusing on crime rates at the court level. The analysis in this paper focuses on how all of the mental health courts in the nation reduce crime at the county level.

CHAPTER TWO

Background Information

Literature Review

Broward County in Florida has the nation's first mental health court, and therefore many studies have been done to measure its effectiveness in reducing crime compared to the neighboring Hillsborough County, which does not have a mental health court. Boothroyd et al (2003) compared 121 defendants in Broward County's mental health court and 101 defendants in Hillsborough, who would have been eligible for mental health court had there been one, and found the defendants in Broward used more mental health services. Boothroyd et al (2005) compared 116 defendants in Broward and 101 defendants in Hillsborough and found no difference in the defendant's mental health, although they argue this is because of the quality of treatment and not because of the court itself. Christy et al compared 116 defendants in Broward and 101 defendants in Hillsborough and found that defendants in Broward spend four times fewer days in jail and had less rearrests than defendants in Hillsborough.

The literature review is broken up by geographic location because different areas of the country have different political views, which might affect how willing a county would be to implement a mental health court and how effective the court is. The literature review starts with the West Coast. Cosden et al compared 137 defendants in California who chose the mental health court and 98 defendants who chose the regular court system and found that there was an improvement of symptoms for both groups but a larger

increase for the defendants in the mental health court and an increase in receiving psychiatric care and a decrease of days in jail for those in the mental health court. Frailing compared 238 defendants in Washoe County, Nevada who were accepted into mental health court but chose not to enroll and 146 defendants who were either currently enrolled or graduated from the program and found the defendants in the mental health court had fewer positive drug and alcohol drug tests, fewer psychiatric hospital stays, and fewer days in jail than the defendants who did not enroll. Herinckx et al studied 368 defendants in the Clark County, Nevada mental health court and found they were more likely to get psychiatric services, less probation violations, and a lower rearrest rate than before their enrollment. McNeil and Binder compared 170 defendants in San Francisco in mental health court and 8067 defendants in the regular court system and found that the defendants in the mental health court were less likely to reoffend, especially misdemeanors. Sneed et al studied the employment outcomes of 94 defendants who had been in mental health court in the Southwest United States and found unemployment was high because the defendant has the stigma of being an offender and being mentally ill, which causes high barriers to employment.

Dirks-Linhorst and Linhorst compared the recidivism outcomes for 577 cases in St Louis, Missouri and found that the rearrest rates for completers of the mental health court was lower than the rearrest rate for noncompleters and nonparticipants. Hiday and Ray measured outcomes for 99 defendants two years after completing a mental health court program in North Carolina and found that the completers had lower rearrest rates and longer time before rearrest than the people who did not complete the program. Hiday et al measured outcomes for 408 mental health court participants in DC and 687 pretrial

supervision participants and found that defendants in the mental health court were less likely to reoffend than those in regular pretrial supervision and had fewer rearrests. Hoff et al compared 314 defendants in a mental health court program and 124 defendants who were eligible, but not in the program, and found that defendants in the mental health court who were arrested for Class D felonies and Class A misdemeanors spent less days in jail than the defendants not in the program, but defendants in the mental health court who were arrested for less severe misdemeanors spent similar time in jail to the defendants not in the program. Luskin compared 82 mental health court participants and 89 defendants in the regular court system in Marion County, Indiana and found that the mental health court participants received more treatment than the defendants in the regular court system, but the treatment was not specific towards the criminal risk factors that caused them to be arrested. Moore and Hiday compared 82 participants in the mental health court and 183 similar offenders who committed their crime the year before the mental health court was started and found the mental health court participants had a lower rearrest rate.

The main problem with studying a single county's mental health court is that any effects that the mental health court may have caused could be because of other factors in the community and not because of the mental health court itself. Studying multiple mental health courts eliminates this location bias. Keator et al compares 296 mental health court participants and 386 defendants in the regular court system in San Francisco County, Hennepin County, and Marion County and found that the mental health court participants received more treatment than the regular court participants and had a reduction in symptoms. Steadman et al compared 447 mental health court participants

and 600 regular court participants in San Francisco County, CA, Santa Clara County, CA, Hennepin County, MN, and Marion County, IN and found that the mental health court participants had a significant reduction in rearrests than the regular court participants. Steadman and Naples compared 617 mental health court participants and 570 regular court participants in Memphis, TN; Montgomery County, PA; and Multnomah County, OR (all pre-booking programs); Phoenix/Tucson, AZ; Hartford, New Haven, and Bridgeport, CT; and Lane County, OR (all post-booking programs) and found that for the mental health court participants, there was no change in symptoms, an increased use of services, and a significant increase in days spent in the community. Trupin and Richards compared 65 mental health court participants and 82 regular court participants from Seattle and 31 mental health court participants and 42 regular court participants from King County and found the mental health court participants in both counties had increased functioning, decreased symptoms, increased use of services and decreased new bookings and length of sentences. The Texas Indigent Defense Commission studied the 12 mental health defender programs in Texas and found that they reduced recidivism, days spent in jail, saved the community money through reducing the population in jail, and improved defendant outcomes by giving the defendant adequate counsel and by getting them out on a mental health bond. Sarteschi et al conducted a literary review and analysis of 18 studies and found that mental health courts caused an effect size (measurement of the effects of mental health courts) of a-.54 significant decrease in recidivism.

Tables 1-4 discuss the conclusions of each of the papers and what each of the articles' main focus is.

Table 1. Outcomes Table

Article	Psychiatric Symptoms	Connection to Behavioral Health Services
The Broward Mental Health Court: process, outcomes, and service utilization	No data	Significantly increased likelihood and amount of service
Clinical Outcomes of Defendants in Mental Health Court	No significant change	No data
Efficacy of a Mental Health Treatment Court with assertive community treatment	Significant improvement for both MHC and TAU, larger for MHC	Significant increase of receiving psychiatric treatment
Evaluating the efficiency and community safety goals of the Broward County Mental Health Court	No data	No data
Recidivism Outcomes for Suburban Mental Health Court Defendants	No data	No data
How mental health courts function: Outcomes and observations	Significantly fewer positive drug/alcohol tests	Significantly less psychiatric hospitalizations
Rearrest and Linkage to Mental Health Services Among Clients of the Clark County Mental Health Court Program	Significant reduction in symptoms	Significantly more use of mental health services
Arrests Two Years After Exiting a Well-Established Mental Health Court	No data	No data
Effectiveness of a Short-Term Mental Health Court: Criminal Recidivism One Year Postexit	No data	No data
The effects of a jail diversion program on incarceration: a retrospective cohort study	No data	No data
The Impact of Treatment on the Public Safety Outcomes of Mental Health Court Participants	Significant reduction in symptoms	MHC received significantly more treatment
More of the Same? Treatment in Mental Health Courts	No data	MHC received significantly more treatment, treatment doesn't deal with criminal risk factors
Effectiveness of a Mental Health Court in Reducing Criminal Recidivism and Violence	No data	No data

Article	Psychiatric Symptoms	Connection to Behavioral Health Services
Mental Health Court Outcomes: A Comparison of Re-Arrest and Re-Arrest Severity Between Mental Health Court and Traditional Court Participants	No data	No data
Assessing the effectiveness of mental health courts: A quantitative review	No data	No data
Assessing the effectiveness of jail diversion programs for persons with serious mental illness and co-occurring substance use disorders	No significant change in symptoms	Increased use of services
Seattle's mental health courts: early indicators of effectiveness	Decrease in symptoms, improved functioning	Increased use of services

Table 2. Location Table

Article	Location	Years	Sample Size
The Broward Mental Health Court: process, outcomes, and service utilization	Broward County, FL and Hillsborough County, FL	1999-2001	Broward: 121 Hillsborough: 101
Clinical Outcomes of Defendants in Mental Health Court	Broward County, FL and Hillsborough County, FL	1999-2003	Broward: 116 Hillsborough: 101
Efficacy of a Mental Health Treatment Court with assertive community treatment	California	2 years	MTHC: 137 TAU: 98 Total: 235
Evaluating the efficiency and community safety goals of the Broward County Mental Health Court	Broward County, FL and Hillsborough County, FL	Broward: 1999-2001 Hillsborough: 2000-2001	Broward: 116 Hillsborough: 101
Recidivism Outcomes for Suburban Mental Health Court Defendants	St. Louis, MO	2001-2007	Cases: 577
How mental health courts function: Outcomes and observations	Reno, NV	2006-2009	Accepted not enrolled: 238 Enrolled/ graduates: 146

Article	Location	Years	Sample Size
Rearrest and Linkage to Mental Health Services Among Clients of the Clark County Mental Health Court Program	Clark County	2000-2003	Participants: 368
Arrests Two Years After Exiting a Well-Established Mental Health Court	North Carolina	2003-2007 (graduated court in 2005)	Graduates: 99
Effectiveness of a Short-Term Mental Health Court: Criminal Recidivism One Year Postexit	DC	2007-2009	Participants: 408 Treatment as usual: 687 Total: 1095
The effects of a jail diversion program on incarceration: a retrospective cohort study		1994-1997	Enrolled: 314 Eligible not enrolled: 124
The Impact of Treatment on the Public Safety Outcomes of Mental Health Court Participants	San Francisco County, CA, Hennepin County, MN, Marion County, IN	2005-2007	Participants: 296 Treatment as usual: 386
More of the Same? Treatment in Mental Health Courts	Marion County, IN	2006-2007	Participants: 82 Treatment as usual: 89
Effectiveness of a Mental Health Court in Reducing Criminal Recidivism and Violence	San Francisco, CA	2003-2004	Participants: 170 Treatment as usual: 8067
Mental Health Court Outcomes: A Comparison of Re-Arrest and Re-Arrest Severity Between Mental Health Court and Traditional Court Participants	Southeast US	2001-2002	Participants: 82 Similar offenders from the year before MHC established: 183
Assessing the effectiveness of mental health courts: A quantitative review		2009	Studies: 18

Article	Location	Years	Sample Size
Employment and Psychosocial Outcomes for Offenders with Mental Illness	Southwest US	2003-2006	Participants: 94
Effect of Mental Health Courts on Arrests and Jail Days A Multisite Study	San Francisco County, CA, Santa Clara County, CA, Hennepin County (Minneapolis), MN, and Marion County (Indianapolis), IN.		Participants: 447 Treatment as usual: 600
Assessing the effectiveness of jail diversion programs for persons with serious mental illness and co-occurring substance use disorders	Memphis, TN; Montgomery County, PA; and Multnomah County, OR; Phoenix/Tucson, AZ; Hartford, New Haven, and Bridgeport, CT; and Lane County, OR	1998-2000	Participants: 617 Treatment as usual: 570
Seattle's mental health courts: early indicators of effectiveness	Seattle, WA and King County, WA	Seattle: 2000 King County: 1999-2000	Seattle: 158 King County: 246

Table 3. Research Design Table

Article	Causal	Model	Controls
The Broward Mental Health Court: process, outcomes, and service utilization	Yes, matching	2 group ANOVA	Age, gender, race, mental status
Clinical Outcomes of Defendants in Mental Health Court	Yes, matching	ANCOVA	Gender, age, race, psychopathology
Efficacy of a Mental Health Treatment Court with assertive community treatment	Yes, experiment	ANOVA	Gender, race, diagnosis, dual diagnosis, medication 30 days, medication lifetime
Evaluating the efficiency and community safety goals of the Broward County Mental Health Court	Yes, quasi-experimental matching	ANOVA, ANCOVA	Race, gender, age, Brief Psychiatric Rating Scale Total Scores

Article	Causal	Model	Controls
Recidivism Outcomes for Suburban Mental Health Court Defendants	Yes, post-test only comparison group	cox regression survival analysis	Age, race, gender, substance abuse problems, marital status, county, psychiatric medicine, type of crime, number of admissions, MHC status
How mental health courts function: Outcomes and observations	No	Chi square, t tests	No
Rearrest and Linkage to Mental Health Services Among Clients of the Clark County Mental Health Court Program	Yes, post-test only comparison group	Logistic regressions, chi square	Gender, ethnicity, hospitalization, felony, number of arrests, age
Arrests Two Years After Exiting a Well-Established Mental Health Court	No	Logistic regression	Age, gender, race, number of arrests, felony arrest, completed
Effectiveness of a Short-Term Mental Health Court: Criminal Recidivism One Year Postexit	Yes, quasi-experiment	Logistic regression, Cox proportional hazards model	Age, gender, race, drug use, prior arrests
The effects of a jail diversion program on incarceration: a retrospective cohort study	No	Poisson	Level of charge, diagnosis, gender, race, age
The Impact of Treatment on the Public Safety Outcomes of Mental Health Court Participants	Yes, matching	Regression	Gender, criminal charges, race, age, diagnosis
More of the Same? Treatment in Mental Health Courts	Yes, matching	Regression	Gender, age, race, criminal charge, diagnosis
Effectiveness of a Mental Health Court in Reducing Criminal Recidivism and Violence	Yes, propensity score matching	Cox proportional hazards model	Age, gender, ethnicity, criminal charge, homelessness

Article	Causal	Model	Controls
Mental Health Court Outcomes: A Comparison of Re-Arrest and Re-Arrest Severity Between Mental Health Court and Traditional Court Participants	Yes, nonequivalent comparison group design	Regression	Age, race, gender, prior criminal history, prior jail time, and severity of current charge.
Assessing the effectiveness of mental health courts: A quantitative review	No	Stratified analysis	Age, race, gender, experimental
Employment and Psychosocial Outcomes for Offenders with Mental Illness	No	None	None
Effect of Mental Health Courts on Arrests and Jail Days A Multisite Study	Yes, matching	Poisson, quantile regression model, ZIP regression	Sex, age, criminal charge, race, and diagnosis
Assessing the effectiveness of jail diversion programs for persons with serious mental illness and co-occurring substance use disorders	Yes, quasi-experimental non-equivalent comparison group	Regression	Demographics
Seattle's mental health courts: early indicators of effectiveness	Yes, pre-post and group comparison	Regression	Gender, age, race, diagnosis

Table 4. Recidivism Table

Article	N	Measure Recidivism	Results
The Broward Mental Health Court: process, outcomes, and service utilization	222	No data	No data
Clinical Outcomes of Defendants in Mental Health Court	217	No data	No data
Efficacy of a Mental Health Treatment Court with assertive community treatment	235	Jail days	Significant decrease of days in jail

Article	N	Measure Recidivism	Results
Evaluating the efficiency and community safety goals of the Broward County Mental Health Court	217	Days spent in jail, rearrests	Statistically significant decrease in days in jail and rearrests
Recidivism Outcomes for Suburban Mental Health Court Defendants	577	Rearrest rates	Significantly lower rearrest rates for completers
How mental health courts function: Outcomes and observations	384	Days in jail	Significantly fewer days in jail
Rearrest and Linkage to Mental Health Services Among Clients of the Clark County Mental Health Court Program	368	Rearrests, crime rates	Significantly lower crime rate and fewer rearrests
Arrests Two Years After Exiting a Well-Established Mental Health Court	99	Proportion of sample with rearrests, time to rearrest	Completers had significantly lower rearrest rates, longer time before rearrest
Effectiveness of a Short-Term Mental Health Court: Criminal Recidivism One Year Postexit	1095	Rearrests	Significant reduction in rearrests, most misdemeanors
The effects of a jail diversion program on incarceration: a retrospective cohort study	1338	Days incarcerated	Significantly fewer days incarcerated
The Impact of Treatment on the Public Safety Outcomes of Mental Health Court Participants	682	No data	No data
More of the Same? Treatment in Mental Health Courts	174	No data	No data
Effectiveness of a Mental Health Court in Reducing Criminal Recidivism and Violence	8237	Probability of new charges	Significantly longer time without new charges and new violent charges

Article	N	Measure Recidivism	Results
Mental Health Court Outcomes: A Comparison of Re-Arrest and Re-Arrest Severity Between Mental Health Court and Traditional Court Participants	265	Rearrest rates, rearrest severity	Significant reduction in rearrests, no change in rearrest severity
Assessing the effectiveness of mental health courts: A quantitative review	18	Average recidivism rate	MHC caused -.54 reduction of recidivism effect size
Employment and Psychosocial Outcomes for Offenders with Mental Illness	94	No data	No data
Effect of Mental Health Courts on Arrests and Jail Days A Multisite Study	1047	Rearrest rates	Significant reduction in rearrests
Assessing the effectiveness of jail diversion programs for persons with serious mental illness and co-occurring substance use disorders	1187	Days in community, rearrest rates	Significant increase in days in community
Seattle's mental health courts: early indicators of effectiveness	404	New bookings, length of sentence	MHC significantly decreased new bookings and length of sentence

As seen in Table 1, for the studies that focused on defendant outcomes, mental health courts caused positive results for participants. These results include increased use of mental health treatment options, less psychiatric hospitalizations, and a decrease in symptoms. As shown in Table 3, most of the studies were done by matching the group that received the mental health court treatment to an equivalent group that did not receive the mental health court treatment, whether they were in a county that did not have a

mental health court or were people who chose not to enter the mental health court, and running a regression to compare the groups. In addition, as shown in Table 4, mental health courts reduce recidivism, as shown by the reduction in new bookings, rearrests, and days spent in jail.

History of Mental Healthcare

The way mental health has been treated in the United States has changed over the years. After World War II, there was an increase in psychiatric professionals, including social workers, psychiatric nurses, and counselors. This change was caused by an increase in people going to college and graduate school and a high return on investment in the profession. The increase in professionals in the psychiatric profession caused people to get different options to take care of their mental health needs, but also caused a decrease in psychiatrists' earning potential because there was more competition in the marketplace. In the 1960s, the only option was to go to a state funded mental hospital. These were mostly staffed by custodial staff, had very few psychiatrists and were in poor condition. President Kennedy established community mental health centers in 1963, giving money, building outpatient clinics, and otherwise improving access to mental health care. The *Wyatt vs Stickney* trial in 1974 resulted in minimum requirements for mental hospitals. Although these centers were well intentioned, they did not have enough money to serve the most mentally ill people. Now, people with mental health issues can choose a wide variety of options including inpatient facilities, outpatient facilities, therapy, and medication (Frank and Glied 2006).

The government's involvement in mental healthcare started in the 1950s, when the states received money and power to decide what should be done about mental health.

Private insurance expanded benefits after World War II in order to help jobs recruit candidates, although most insurance policies had harsh restrictions on mental health. Medicare and Medicaid were established in the 1960s and greatly expanded the ability to receive mental health treatment- giving people vouchers which allowed them to choose their own treatments. This caused a decrease in the use of state hospitals, because they were not included in the vouchers. Supplemental Security Income and Supplemental Security Disability Insurance was started in the 1970s and gave money to disabled people, including mentally disabled people. In the 1980s, the government started to take away people's SSDI benefits because they appeared to be healthy, but in 1984, President Reagan signed the Social Security Disability Benefits Reform Act, which only allowed the government to take away a person's benefits if they could prove they were gainfully better with testing. In addition, Section 8 housing was started in 1970, which allowed people on SSI or SSDI to have access to low cost housing (Frank and Glied 2006).

The amount of mental health treatment received over time has increased, with bigger spikes from 1957 to 1976 and 1987 to 2000. The quality of treatment has increased over time as well, especially for people with more severe mental health issues. Medicines have become more effective and have less side effects. People have more protection from the costs of mental illness now, because of insurance, government benefits that help people get the treatment they need and more treatment options. Mentally ill people have more rights than they used to and have a higher quality of life (Frank and Glied 2006). There are still issues with the way mentally ill people are treated; the labor force participation for mentally ill people is poor because they are less likely to be able to keep a job and because there is a stigma against mentally ill people, there are

still mentally ill people who are homeless or institutionalized, people are not as likely to want to be friends with mentally ill people, and people still think that mentally ill people are more likely to be violent than average people, even though mentally ill people are more likely to be the victim of the attack than the perpetrator (Frank and Glied 2006).

The first mental health court was established in Broward County, Florida in 1997 as a tool to get mentally ill people the help they need in order to break free from the cycle of crime. Mental health courts operate under a principle of therapeutic jurisprudence, meaning the law can be used to help people and fix their lives instead of being punitive. In the current court system, mentally ill people are affected by their time in the justice system which hurts them, and the government has to spend money to arrest and try these people who would not have committed their crimes without their mental illness, which harms society. The mental health courts give mentally ill people another option (Schneider, Bloom and Heerema 2007).

Different mental health courts run differently and accept different levels of offenses, but most of the mental health courts in the United States run in a similar way. In most courts, the defendant takes a plea deal for their offense and works with a group of officials including the prosecuting and defending attorney, the judge, psychologists, community liaisons that help the person get connected with resources in their community, and a court support worker in order to get treatment for their mental illness, housing, education, rehabilitation for drug abuse and job security in order to get them stable. If the defendant does not comply with their program and gets expelled from the program or if the defendant chooses to leave the program, their case goes back to the regular court system and they serve the sentence they would have served if they had never started the

program. If the defendant complies with their program and graduates successfully, they do not have to serve jail time and their plea deal is expunged. In Canada, the mental health court is run similarly, except for the defendant does not have to plead guilty to enter the court.

The number of mental health courts in the United States has increased substantially since the Broward County Mental Health Court was established, due in part to the Federal Mental Health Court Program which helps fund these courts. Although there are many benefits to these courts, there are some drawbacks. One problem is that the courts can be seen as coercive; in order to avoid jail, a defendant must take the plea deal and go into treatment. However, a defendant is mentally fit to stand trial, so they can aid in their own defense, and they can choose to exit the program at any time. Another problem with these courts is that they are giving the criminal sector more and better mental healthcare than the regular public receives. It is true that the entire mental health care system needs reform, however, it is quicker and easier to establish a mental health court than it is to revamp the mental health care system, so politicians will choose to create the mental health court in order to save money (Schneider, Bloom and Heerema 2007).

Previous studies of mental health courts have mostly been site-specific, focusing on a single court. The results of these studies are hard to analyze because each court's benchmark for success is different and because the success of the mental health court could be caused by an exogenous factor in the community. However, the site-specific studies have found that participants in the mental health courts are more likely to receive treatment are less likely to reoffend than similar defendants who are not in the mental

health courts. Global studies which study multiple mental health courts are less effective because the courts are different in different areas. Mental health courts need more funding and better data collection in order to have more effective studies.

Mental health courts are not the only reform that is necessary in order to improve the mental health care system. The entire mental health care system should be reformed so mentally ill people do not have to wait until they are arrested in order to get help.

Difference-in-Difference

Most policies get adapted in different places at different times, so the goal of an analysis is to determine what effect the policy had by comparing what happened before and after the policy. For example, the first mental health court was established in Broward County, Florida in 1997 and there are many mental health courts which have been established since then in different years. This study aims to study the effects of mental health courts on crime, and requires measuring crime before and after the mental health courts were established.

Hypothesis

The main hypothesis of this paper is that having a mental health court in the county reduces the violent and property crime rates in a county. However, the effectiveness of a mental health court to the community depends on the amount of resources it has and how the mental health courts cause change in the patients.

CHAPTER THREE

Data

The data source for the mental health courts, the independent variable, is the Substance Abuse and Mental Health Services Administration, which has a database of all of the mental health courts in the United States. Then, demographic data including year established, location, and number of people served was compiled by reviewing each mental health court's website and by calling them if the information was not available on their website.

The data source for the crime data, which is the dependent variable, is the Uniform Crime Reporting Program Data's County-Level Detailed Arrest and Offense Data from 1990 to 2012 (not including 1993), because those were the years with data available. The Uniform Crime Report data is from the Federal Bureau of Investigations. This crime data includes arrest and offense data for all counties in the United States. Data for the violent and property categories of crimes and for all Part 1 offenses (murder, rape, robbery, assault, burglary, larceny, motor vehicle theft, and arson). Murder, rape, robbery, and assault are considered violent crimes and burglary, larceny, motor vehicle theft, and arson are considered property crimes. The definitions and classifications of each of these crimes is shown in Table 6.

Table 5: Crime Definitions

Crime	Definition	Classification
Murder	“intentionally or knowingly causes the death of an individual; intends to cause serious bodily injury and commits an act clearly dangerous to human life that causes the death of an individual; or commits or attempts to commit a felony, other than manslaughter, and in the course of and in furtherance of the commission or attempt, or in immediate flight from the commission or attempt, he commits or attempts to commit an act clearly dangerous to human life that causes the death of an individual”	Felony, first or second degree
Rape	“if the person: intentionally or knowingly: causes the penetration of the anus or sexual organ of another person by any means, without that person's consent; causes the penetration of the mouth of another person by the sexual organ of the actor, without that person's consent; or causes the sexual organ of another person, without that person's consent, to contact or penetrate the mouth, anus, or sexual organ of another person, including the actor”	First degree felony
Robbery	“A person commits an offense if, in the course of committing theft as defined in Chapter 31 and with intent to obtain or maintain control of the property, he: intentionally, knowingly, or recklessly causes bodily injury to another; or intentionally or knowingly threatens or places another in fear of imminent bodily injury or death.”	Second degree felony

Crime	Definition	Classification
Assault	<p>“A person commits an offense if the person: intentionally, knowingly, or recklessly causes bodily injury to another, including the person's spouse; intentionally or knowingly threatens another with imminent bodily injury, including the person's spouse; or intentionally or knowingly causes physical contact with another when the person knows or should reasonably believe that the other will regard the contact as offensive or provocative.</p>	<p>Class A misdemeanor regularly; third degree felony if they assault public servant (government worker, emergency services, prison employee), family member, block someone’s breathing, or assault a pregnant person to make them have an abortion</p>
Burglary	<p>“A person commits an offense if, without the effective consent of the owner, the person: enters a habitation, or a building (or any portion of a building) not then open to the public, with intent to commit a felony, theft, or an assault; or remains concealed, with intent to commit a felony, theft, or an assault, in a building or habitation; or enters a building or habitation and commits or attempts to commit a felony, theft, or an assault.”</p>	<p>State jail felony if not committed in a home, second degree felony if committed in a home</p>
Larceny	<p>“A person subject to this chapter who wrongfully takes, obtains, or withholds, by any means, from the possession of the owner or any other person any money, personal property, or article of value of any kind: with intent permanently to deprive or defraud another person of the use and benefit of property, or to appropriate it to his own use or the use of any person other than the owner, steals that property and is guilty of larceny; or with intent temporarily to deprive or defraud another person of the use and benefit of property or to appropriate it to his own use or the use of any person other than the owner, is guilty of wrongful appropriation.”</p>	<p>Court martial (Code of Military Justice)</p>

Crime	Definition	Classification
Motor vehicle theft	<p>“A person commits an offense if he unlawfully appropriates property with intent to deprive the owner of property. Appropriation of property is unlawful if: it is without the owner's effective consent; the property is stolen and the actor appropriates the property knowing it was stolen by another; or property in the custody of any law enforcement agency was explicitly represented by any law enforcement agent to the actor as being stolen and the actor appropriates the property believing it was stolen by another.”</p>	<p>Classification of crime depends on value of good stolen</p>
Arson	<p>“A person commits an offense if the person starts a fire, regardless of whether the fire continues after ignition, or causes an explosion with intent to destroy or damage: any vegetation, fence, or structure on open-space land; or any building, habitation, or vehicle: knowing that it is within the limits of an incorporated city or town; knowing that it is insured against damage or destruction; knowing that it is subject to a mortgage or other security interest knowing that it is located on property belonging to another; knowing that it has located within it property belonging to another; or when the person is reckless about whether the burning or explosion will endanger the life of some individual or the safety of the property of another.”</p>	<p>Second degree felony, first degree if caused bodily harm or occurred at habitation or a place of assembly or worship</p>

These definitions of crimes are from the Texas Statutes, but should be very similar, if not identical across the country. As seen in Table 6, most of the crimes studied are felonies, even though most of the crimes committed in by mental health court defendants are misdemeanors. This is a limitation of the data, as the data is only divided by types of crimes, not by severity of crimes.

The Uniform Crime Reporting data also includes population data for each county. The regressions controlled for population, since population size could bias the results. It is expected that there is a positive relationship between population and crime rates; a lower population would have a lower crime rate, since there are less people to commit crimes. However, it could be that counties with larger population have lower crime rates, since they have more resources and larger police forces which are necessary to reduce crime.

Although some counties have multiple mental health courts due to their size, the analysis only used the first instance of a mental health court in a county, since that is when the county went from being untreated to treated.

Table 6. Summary Statistics

Variables	Mean	Standard Deviation	Min	Max
year	2001.386	6.559	1990	2012
population	89499.56	294000	0	1.00e+07
violent	185.333	1061.771	0	63266
property	522.129	1985.333	0	93783
murder	4.711	32.953	0	1862
rape	8.23	34.211	0	1668
robbery	39.297	287.934	0	18189
assault	496.919	1802.167	0	65398
burglary	94.612	432.386	0	28882
larceny	380.885	1334.966	0	55693
motor vehicle theft	41.86	303.453	0	20925
arson	4.712	16.992	0	622

Rape, murder and arson are the least committed crimes; possibly due to the severe nature of these crimes. Assault and larceny were the most committed crimes in the sample. It is expected that there is a negative relationship between having a mental health court and crime rates; once defendants are treated for their mental illness and have the

resources necessary to live a law-abiding life, they do not have the reason for committing crimes that they did before.

It is important to note that these variables represent crime rates, not recidivism rates. This is because the data is by county, so individual outcomes cannot be measured because the data is too broad. This is a strength of earlier studies like Hiday and Ray, which was able to look at 99 mental health court participants' booking data in order to determine if people were rearrested and how long it took before they were rearrested.

CHAPTER FOUR

Results

Coefficient Plots

The coefficient plots show the regression coefficient and standard errors for the crime rates for each type of crime for each year before and after the mental health court was established in a county. Leads are the number of years before the mental health court was established in a county and lags are the number of years after the mental health court was established in a county.

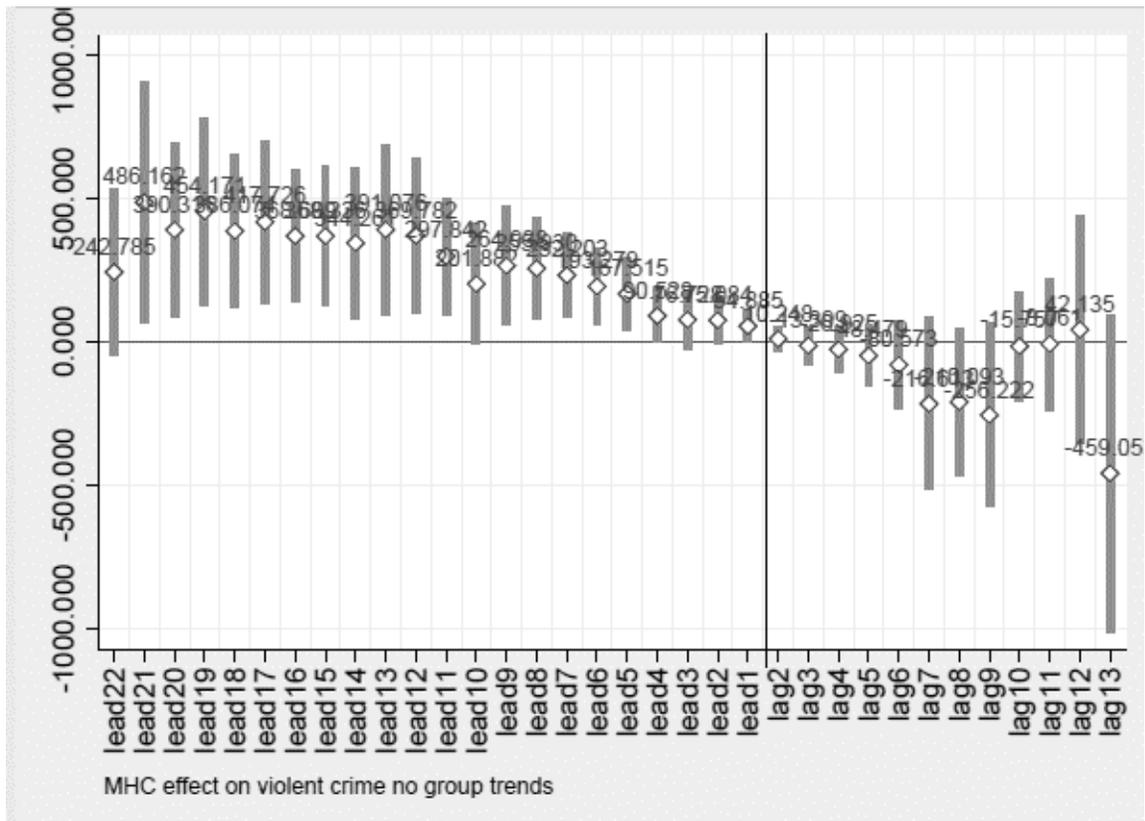


Figure 1: Violent crimes coefficient plot

Figure 1 shows there is not a significant relationship between having a mental health court and crime rates. The values at either extreme are noisy because there is not as many values for these years, but even with the values that are closer to the implementation of the mental health court, the crime trends are not significant.

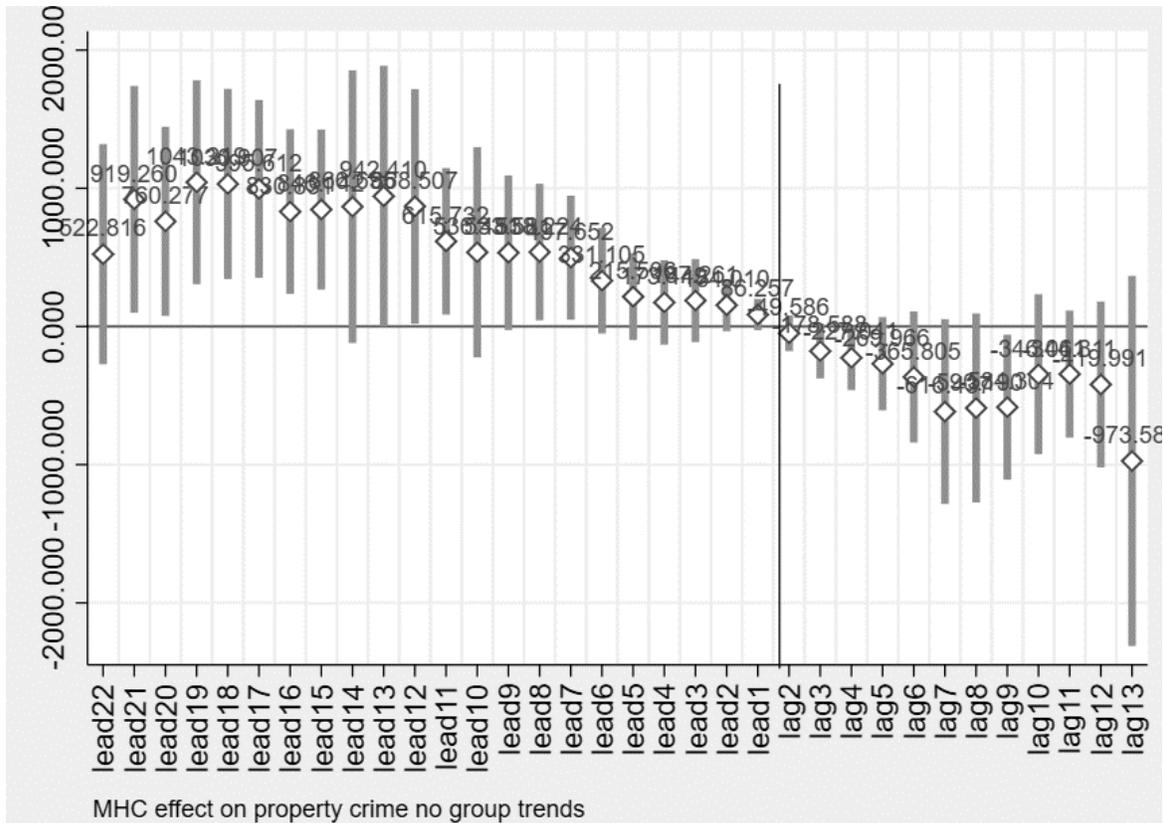


Figure 2. Property crimes coefficient plot

Although this graph has a similar noisiness on the extremes, it does show a joint significance for property crimes and shows a negative relationship between length of time having a mental health court and property crime rates.

Regression Analysis

The first regressions included all of the observations in the sample. Two regressions were run for each category. The first one was run with county-level fixed effects, which controls for the inherent differences between counties. The second one was run with county-level fixed effects and state-year fixed effects, which compares all of the counties in a particular state in a particular year.

Table 7. Original Data Crime Categories Regressions

Variables	Violent Crimes	Violent Crimes with State-Year FE	Property Crimes	Property Crimes with State-Year FE
MHC	-232.6** (95.06)	-201.2** (88.96)	-620.6** (315.4)	-556.0* (299.9)
Observations	69,350	69,350	69,350	69,350
Number of ID	3,180	3,180	3,180	3,180
County-Level Fixed Effects	Yes	Yes	Yes	Yes
State-year Fixed Effects	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

This regression found that adding a mental health court to a county caused a significant decrease in crime rates for violent crime at the 5% level and a significant decrease in property crime rates at the 5% level. Once state-year fixed effects were introduced, violent crimes were negatively significant at the 5% level, meaning that having a mental health court in a county causes 201 violent crimes to not occur and

property crimes were significant at the 10% level, meaning that having a mental health court in a county caused 556 property crimes to not occur.

Table 8. Original Data Violent Crimes Regressions

Variables	Murders	Murders with State-Year FE	Assaults	Assaults with State-Year FE	Rapes	Rapes with State-Year FE	Robberies	Robberies with State-Year FE
MHC	- 11.89** (5.476)	- 10.74** (5.364)	-368.9 (229.3)	-365.2* (220)	- 18.49*** (4.953)	- 16.67*** (4.732)	-60.85* (32.26)	-47.66 (30.09)
Observations	69,350	69,350	69,350	69,350	69,350	69,350	69,350	69,350
Number of ID	3,180	3,180	3,180	3,180	3,180	3,180	3,180	3,180
County-Level Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-year Fixed Effects	No	Yes	No	Yes	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

For violent crimes, murders were negatively significant at the 5% level, rapes were negatively significant at the 1% level, and robberies were negatively significant at the 10% level. Once state-year fixed effects were added, murders were significant at the 5% level, meaning that having a mental health court stops 11 murders from happening, assaults were significant at the 10% level, meaning that having a mental health court stops 365 assaults from happening, and rapes were significant at the 1% level, meaning that having a mental health court stops 17 rapes from happening.

Table 9. Original Data Property Crimes Regressions

Variables	Burglaries	Burglaries with State-Year FE	Larcenies	Larcenies with State-Year FE	Motor Vehicle Thefts	Motor Vehicle Thefts with State-Year FE	Arsons	Arsons with State-Year FE
MHC	-0.0684 (2.95)	4.743* (2.662)	- 48.31*** (14.17)	- 36.63*** (12.99)	- 8.645*** (2.094)	- 6.381*** (2.021)	- 0.508* (0.271)	- -0.134 (0.256)
Observations	68,820	68,820	68,820	68,820	68,820	68,820	68,820	68,820
Number of ID	3,143	3,143	3,143	3,143	3,143	3,143	3,143	3,143
County-Level Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-year Fixed Effects	No	Yes	No	Yes	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

For property crimes, larceny was negatively significant at the 1% level, motor vehicle thefts were negatively significant at the 1% level, and arsons were negatively significant at the 10% level. Once state-year fixed effects were included, burglaries were positively significant at the 10% level, meaning that having a mental health court causes 5 burglaries to occur, larcenies were negatively significant at the 1% level, meaning that having a mental health court stops 37 larcenies from occurring, and motor vehicle thefts were significant at the 1% level, meaning that having a mental health court stops 6 motor vehicle thefts from occurring.

The data was then linearly interpolated in order to add missing values to each variable by averaging the 2 nearest values. However, some of the values could have been

truly 0 – for example, a county could have had 0 arsons in a given year, but because the values in the year before and year after were not zero, it could cause the observation to have an occurrence when it did not actually happen, so these results are a little more fragile.

Table 10. Interpolated Data Crime Categories Regressions

Variables	Violent Crimes	Violent Crimes with State-Year FE	Property Crimes	Property Crimes with State-Year FE
MHC	-218.2** (85.55)	-165.6*** (61.64)	-559.9** (280.3)	-388.6** (173.3)
Observations	64,219	64,219	64,848	64,848
Number of ID	3,147	3,147	3,148	3,148
County-Level Fixed Effects	Yes	Yes	Yes	Yes
State-Year Fixed Effects	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

With county-level fixed effects, violent crimes were negatively significant at the 5% level and property crimes were significant at the 5% level. Once state-year fixed effects were added, violent crimes were significant at the 1% level, meaning that having a mental health court stopped 166 violent crimes from occurring, and property crimes were significant at the 5% level, meaning that having a mental health court stopped 387 property crimes from occurring.

Table 11. Interpolated Data Violent Crimes Regressions

Variables	Murders	Murders with State-Year FE	Assaults	Assaults with State-Year FE	Rapes	Rapes with State-Year FE	Robberies	Robberies with State-Year FE
MHC	-11.46** (5.422)	- 8.942** (4.388)	-261.9 (192.8)	-215 (139)	- 17.56*** (4.139)	- 14.98*** (3.651)	-55.40* (29.8)	-35.44 (24.14)
Observations	46,812	46,812	64,856	64,856	55,049	55,049	51,401	51,401
Number of ID	2,849	2,849	3,150	3,150	3,023	3,023	2,875	2,875
County-Level Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Year Fixed Effects	No	Yes	No	Yes	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

With county-level fixed effects, murders were negatively significant at the 5% level, rapes were negatively significant at the 1% level, and robberies were significant at the 10% level. Once state-year fixed effects were added, murders were negatively significant at the 5% level, meaning that having a mental health court stopped 9 murders from occurring and rapes were negatively significant at the 1% level, meaning that having a mental health courts stopped 15 rapes from occurring.

Table 12. Interpolated Data Property Crimes Regressions

Variables	Burglaries	Burglaries with State-Year FE	Larcenies	Larcenies with State-Year FE	Motor Vehicle Thefts	Motor Vehicle Thefts with State-Year FE	Arsons	Arsons with State-Year FE
MHC	-54.32	-30.95	-340.3*	-239.5**	156.6**	113.4***	5.493**	4.706**
	(41.19)	(27.38)	(181.7)	(116)	(61.14)	(37.53)	(2.268)	(1.842)
Observations	63,826	63,826	64,280	64,280	61,571	61,571	50,845	50,845
Number of ID	3,139	3,139	3,147	3,147	3,126	3,126	2,933	2,933
County Level Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Year Fixed Effects	No	Yes	No	Yes	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

With county level fixed effects, larcenies were negatively significant at the 1% level, motor vehicle thefts were significant at the 1% level, and arsons were negatively significant at the 5% level. Once state-year fixed effects were added, larcenies were negatively significant at the 5% level, meaning that having a mental health court stops 240 larcenies from happening, motor vehicle thefts were negatively significant at the 5% level, meaning that having a mental health court stopped 113 motor vehicle thefts from happening, and arsons were significant at the 5% level, meaning that having a mental health court stops 5 arsons from occurring.

Then the observations that either did not have a complete time sample or were never treated in the sample date were removed from the sample, making it so the regressions were only testing the effect of the treatment on the treated.

Table 13. Treated Interpolated Crime Categories Regressions

Variables	Violent Crime	Violent Crime with State-Year FE	Property Crimes	Property Crimes with State-Year FE
MHC	6.452 (109.7)	-106.2 (131.1)	-373.9* (222.9)	-581.9 (354.2)
Observations	3,300	3,300	3,300	3,300
Number of ID	150	150	150	150
County Level Fixed Effects	Yes	Yes	Yes	Yes
State-Year Fixed Effects	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The only significant result for the treated interpolated data is for property crimes with county-level fixed effects, which was significant at the 10% level.

Table 14. Treated Interpolated Violent Crimes Regressions

Variables	Murders	Murders with State-Year FE	Assaults	Assaults with State-Year FE	Rapes	Rapes with State-Year FE	Robberies	Robberies with State-Year FE
MHC	7.325 (9.331)	0.41 (9.812)	-257 (209)	-363 (318.3)	-0.173 (7.011)	-3.844 (7.544)	30.43 (47.98)	-9.736 (67.07)
Observations	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300
Number of ID	150	150	150	150	150	150	150	150
County Level Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Year Fixed Effects	No	Yes	No	Yes	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 15. Treated Interpolated Property Crimes Regressions

Variables	Burglaries	Burglaries with State-Year FE	Larcenies	Larcenies with State-Year FE	Motor Vehicle Thefts	Motor Vehicle Thefts with State-Year FE	Arsons	Arsons with State-Year FE
MHC	-10.12 (37.91)	-32.92 (53.04)	-302.7* (162.1)	-443.9* (261)	-57.63 (39.82)	-101.3* (57.62)	-2.604 (3.167)	-3.899 (4.042)
Observations	3,300	3,300	3,300	3,300	3,300	3,300	3,300	3,300
Number of ID	150	150	150	150	150	150	150	150
County Level Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Year Fixed Effects	No	Yes	No	Yes	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

In these regressions, the only variable that is significant is motor vehicle theft with state-year fixed effects at the 10% level, which means that having a mental health court stops 101 motor vehicle thefts from occurring.

Then the data was rerun and then linearly extrapolated, meaning that any two points of the variable were averaged in order to create a new value for the observation. Again, this method of creating data could cause a creation of values where there is a legitimate zero value.

Table 16. Extrapolated Crime Categories Regressions

Variables	Violent Crime	Violent Crime with State-Year FE	Property Crimes	Property Crimes with State-Year FE
MHC	-10.99 (8.323)	-14.11* (8.435)	- 41.46** (19.76)	-32.20* (17.1)
Observations	40,282	40,282	40,282	40,282
Number of ID	1,831	1,831	1,831	1,831
County-Level Fixed Effects	Yes	Yes	Yes	Yes
State-year Fixed Effects	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

With county-level fixed effects, only property crimes were significant at the 10% level. Once state-year fixed effects were added, violent crimes were negatively significant at the 10% level, meaning that having a mental health court caused 41 violent crimes to not occur, and property crimes were significant at the 10% level, meaning that having a mental health court caused 32 property crimes to not occur.

Table 17. Extrapolated Violent Crimes Regressions

Variables	Murders	Murders with State-Year FE	Assaults	Assaults with State-Year FE	Rapes	Rapes with State-Year FE	Robberies	Robberies with State-Year FE
MHC	0.243 (0.406)	0.481 (0.444)	-16.49 (18.1)	-19.44 (18.5)	- 1.315*** (0.456)	- 1.180** (0.541)	-2.286 (1.527)	-2.109 (1.47)
Observations	40,282	40,282	40,282	40,282	40,282	40,282	40,282	40,282
Number of ID	1,831	1,831	1,831	1,831	1,831	1,831	1,831	1,831
County-Level Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Year Fixed Effects	No	Yes	No	Yes	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The only crime that was significant in these regressions were rapes, which were negatively significant at the 1% with just county-level fixed effects and with state-year fixed effects. This means that having a mental health court causes 1 rape to not occur.

Table 18. Extrapolated Property Crimes Regressions

Variables	Burglaries	Burglaries with State-Year Fe	Larcenies	Larcenies with State-Year FE	Motor Vehicle Thefts	Motor Vehicle Thefts with State-Year FE	Arsons	Arsons with State-Year FE
MHC	5.813*	6.164**	-38.96**	-32.79**	7.939***	5.220***	-0.487	-0.161
	(3.055)	(2.953)	(15.71)	(13.87)	(2.365)	(1.997)	(0.492)	(0.639)
Observations	40,282	40,282	40,282	40,282	40,282	40,282	40,282	40,282
Number of ID	1,831	1,831	1,831	1,831	1,831	1,831	1,831	1,831
County-Level Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Year Fixed Effects	No	Yes	No	Yes	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

With county-level fixed effects, burglaries were positively significant at the 10% level, larcenies were negatively significant at the 5% level, and motor vehicle thefts were negatively significant at the 1% level. Once state-year fixed effect were added, burglaries were positively significant at the 5% level, which means that having a mental health court causes 6 burglaries to occur, larcenies were negatively significant at the 5% level, meaning that having a mental health court stops 33 larcenies from occurring, and motor vehicle thefts were negatively significant at the 1% level, which means that having a mental health court stops 5 motor vehicle thefts from occurring.

Then observations that did not have a complete time sample or were never treated in the sample data were removed, so the regressions were testing the treatment's effect on the treated.

Table 19. Treated Extrapolated Crime Categories Regressions

Variables	Violent Crimes	Violent Crime with State-Year FE	Property Crimes	Property Crimes with State-Year FE
MHC	54.15 (81.54)	-29.05 (98.69)	-337.6 (206.7)	-456.6 (361.8)
Observations	5,192	5,192	5,192	5,192
Number of ID	236	236	236	236
County-Level Fixed Effects	Yes	Yes	Yes	Yes
State-year Fixed Effects	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

There are no significant outcomes in these regressions.

Table 20. Treated Extrapolated Violent Crimes Regressions

Variables	Murders	Murders with State-Year FE	Assaults	Assaults with State-Year FE	Rapes	Rapes with State-Year FE	Robberies	Robberies with State-Year FE
MHC	7.411 (5.969)	3.885 (7.629)	-102.7 (213.7)	-353.9 (278.8)	1.609 (5.304)	0.934 (6.344)	34.40 (35.74)	20.40 (48.32)
Observations	5,192	5,192	5,192	5,192	5,192	5,192	5,192	5,192
Number of ID	236	236	236	236	236	236	236	236
County-Level Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-year Fixed Effects	No	Yes	No	Yes	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

No variables were significant with just county-level fixed effects or with state-year fixed effects.

Table 21. Treated Extrapolated Property Crimes Regressions

Variables	Burglaries	Burglaries with State-Year FE	Larcenies	Larcenies with State-Year FE	Motor Vehicle Thefts	Motor Vehicle Thefts with State-Year FE	Arsons	Arsons with State-Year FE
MHC	-4.761 (65.59)	3.423 (92.27)	-292.7** (134.7)	-382.0 (249.2)	-36.15 (29.38)	-73.02 (50.99)	-3.585 (2.440)	-5.062 (3.144)
Observations	5,192	5,192	5,192	5,192	5,192	5,192	5,192	5,192
Number of ID	236	236	236	236	236	236	236	236
County-Level Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Year Fixed Effects	No	Yes	No	Yes	No	Yes	No	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

In these regressions, the only significant outcome was larcenies, which were negatively significant at the 5% level with county level fixed effects. The lack of significance in the majority of the treated variables shows that the untreated counties act as a control because they have a similar mentally ill population as the counties with mental health courts and should be included in the regressions.

Policy Implications/ Conclusion

Throughout the different regressions which were run, assaults, rapes, motor vehicle theft, and larceny were consistently negatively significant, meaning that the

mental health courts did reduce these types of crimes. For the two violent crimes which were reduced- assaults and rapes- it could be that the treatment the patients undergo reduce the number of violent outbursts that happen because of their mental illness. For the two property crimes which were reduced- motor vehicle theft and larceny- it could be that because of the treatment they are getting and because most of the mental health courts require the patient get an education and a job, it is easier for the patients to get a job so they do not have to resort to theft to make money. The property crimes category was also consistently negatively significant. This could be because the patients are able to get employment and earn money, so they do not need to commit crimes to get by. Burglaries were the only crime to ever be positively significant. This could be because they feel burglaries are more likely be to more profitable, so if they feel they have to commit a crime, they will commit a crime that gives them a better payoff.

Population was negatively significant in most of the regressions, meaning that counties with larger populations have less crime. This makes sense because larger counties normally have more resources to fight crime.

The main limitation to this study is that it focused on major crimes, but most of the mental health courts are for people who have committed misdemeanor offenses and only rarely take people who have committed felony offenses. Mental health courts never take in people who have committed violent felony offenses. It would be interesting to study how mental health courts would affect crime rates for misdemeanor offenses, since this is the type of crime most people who are in the mental health court system are likely to commit. Additionally, it would be interesting to run cost-benefit analyses for mental

health courts; however, these would vary based on the size and resources of the mental health court.

Mental health courts are still relatively new in the United States court system and new mental health courts are being established in counties across the country. The results of this study show that mental health courts are having the intended effects for reducing certain types of crime.

BIBLIOGRAPHY

- Boothroyd, Roger A., Cynthia Calkins Mercado, Norman G. Poythress, Annette Christy, and John Petrila. "Clinical Outcomes of Defendants in Mental Health Court." *Psychiatric Services* 56, no. 7 (July 2005): 829-8345.
- Boothroyd, Roger A., Norman G. Poythress, Annette McGaha, and John Petrila. "The Broward Mental Health Court: process, outcomes, and service utilization." *International Journal of Law and Psychiatry* Volume 26, no. 1 (2003): 55-71.
- Christy, Annette, Norman G., Boothroyd, Roger A. Poythress, John Petrila, and Shabnam Mehra. "Evaluating the efficiency and community safety goals of the Broward County Mental Health Court." *Behavioral Sciences and the Law* 23 (2005): 227-243.
- Cosden, Merith, Jeffrey Ellens, Jeffrey Schnell, and Yasmeeen Yamini-Diouf. "Efficacy of a Mental Health Treatment Court with assertive community treatment." *Behavioral Sciences and the Law*, no. 23 (April 2005): 199-214.
- Dirks-Linhorst, P. Ann, and Donald M. Linhorst. "Recidivism Outcomes for Suburban Mental Health Court Defendants." *American Journal of Criminal Justice* 37 (2012): 76-91.
- Frailing, Kelly. "How mental health courts function: Outcomes and observations." *International Journal of Law and Psychiatry* 33, no. 4 (2010): 207-213.
- Frank, Richard G., and Sherry A. Glied. *Better But Not Well: Mental Health Policy in the United States since 1950*. Johns Hopkins University Press, 2006.
- Herinckx, Heidi A., Sandra C. Swart, Shane M. Ama, Cheri D. Dolezal, and Steve King. "Rearrest and Linkage to Mental Health Services Among Clients of the Clark County Mental Health Court Program." *Psychiatric Services* 56, no. 7 (2005): 853-857.
- Hiday, Virginia A., and Bradley Ray. "Arrests Two Years After Exiting a Well-Established Mental Health Court." *Psychiatric Services* 61, no. 5 (May 2010): 463-468.
- Hiday, Virginia Aldigé, Heathcote W. Wales, and Bradley Ray. "Effectiveness of a Short-Term Mental Health Court: Criminal Recidivism One Year Postexit." *Law and Human Behavior* 37, no. 6 (December 2013): 401-411.

- Hoff, RA, MV Baranosky, J Buchanan, H Zonana, and RA Rosenheck. "The effects of a jail diversion program on incarceration: a retrospective cohort study." *The Journal of the American Academy of Psychiatry and the Law* 27, no. 3 (1999): 377-386.
- Honegger, Laura N. "Does the Evidence Support the Case for Mental Health Courts? A Review of the Literature." *Law and Human Behavior* 39, no. 5 (2015): 478-488.
- Keator, Karli J., Lisa Callahan, Henry J. Steadman, and Roumen Vesselinov. "The Impact of Treatment on the Public Safety Outcomes of Mental Health Court Participants." *American Behavioral Scientist* 57, no. 2 (February 2013): 231-243.
- Luskin, Mary Lee. "More of the Same? Treatment in Mental Health Courts." *Law and Human Behavior* 37, no. 4 (2012): 255-266.
- McNiel, Dale E., and Renée L. Binder. "Effectiveness of a Mental Health Court in Reducing Criminal Recidivism and Violence." *American Journal of Psychiatry* 164, no. 9 (September 2007): 1395-1403.
- Moore, Marlee E., and Virginia Aldigé Hiday. "Mental Health Court Outcomes: A Comparison of Re-Arrest and Re-Arrest Severity Between Mental Health Court and Traditional Court Participants." *Law and Human Behavior* 30 (2007): 659-674.
- Sarteschi, Christine M., Michael G. Vaughn, and Kevin Kim. "Assessing the effectiveness of mental health courts: A quantitative review." *Journal of Criminal Justice* 39, no. 1 (2011): 12-20.
- Schneider, Richard D, Hy Bloom, and Mark Heerema. *Mental Health Courts: Decriminalizing the Mentally Ill*. Irwin Law, 2007.
- Sneed, Z., D. S. Koch, H. Estes, and J. Quinn. "Employment and Psychosocial Outcomes for Offenders with Mental Illness." *The International Journal of Psychosocial Rehabilitation* 10, no. 2 (2006): 103-112.
- Steadman, Henry J., Allison Redlich, Lisa Callahan, Pamela Clark Robbins, and Roumen Vesselinov. "Effect of Mental Health Courts on Arrests and Jail Days: A Multisite Study." *Archives of General Psychology* 68, no. 2 (2011): 167-172.
- Steadman, Henry J., and Michelle Naples. "Assessing the effectiveness of jail diversion programs for persons with serious mental illness and co-occurring substance use disorders." *Behavioral Sciences and the Law* 23 (2005): 163-170.
- Texas Indigent Defense Commission. "Texas Mental Health Defender Programs." Austin, 2018.

Texas State Legislature. "Texas Code Of Military Justice." Austin, Texas, November 2017.

—. "Texas Penal Code." Austin, Texas, November 2017.

Trupin, Eric, and Henry Richards. "Seattle's mental health courts: early indicators of effectiveness." *International Journal of Law and Psychiatry* 26, no. 1 (2003): 33-53.