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# What is the Impact of Mental Health Courts? A Systematic Literature Review

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What is the Impact of Mental Health Courts?

A Systematic Literature Review

By

Rachel Dean, BSW, LSW

MSW Clinical Research Paper

Presented to the Faculty of the

School of Social Work

St. Catherine University and the University of St. Thomas

St. Paul, Minnesota

in Partial Fulfillment of the Requirements of the Degree of

Master of Social Work

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The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University/ University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month timeframe to demonstrate facility in basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the university Institutional Review Board, implement the project, and publicly present the findings of the study. This project is neither a Master's thesis nor a dissertation.

### **Abstract**

Mental health court programs have proliferated in the United States in the past few decades in response to the growth of persons with mental illness involved in the criminal justice system. Research has previously been conducted on the impact of these programs, but few studies have been done to identify themes among the research as a whole in regard to their impact on three main goals: reducing recidivism, improving mental health and connecting participants to treatment and services. This systematic review was designed to explore the question: what is the impact of mental health court programs on recidivism, connection to treatment services, and clinical outcomes for participants? Database searches of SocINDEX, Academic Search Premier, Criminal Justice Abstracts and Social Work Abstracts were conducted in September and October of 2016 using a combination of the following search terms: “mental health court NOT juvenile” AND “outcome” or “effect” or “impact” or “effectiveness” AND “recidivism” or “re-arrest” or “clinical” or “treatment”. The search resulted in 13 articles meeting inclusion criteria, which were subsequently used in the final review. (The three main themes of recidivism, connection to treatment services and clinical outcomes each were evaluated to identify subthemes. These subthemes were: mental health courts have a positive impact on reducing recidivism, the importance of graduation from the program as opposed to being terminated or opting-out, the maintenance of a positive effect on recidivism beyond the supervision period, and finally, that mental health courts reduce the need for crisis services or hospitalization and increase the therapeutic treatment intensity for participants.) The research found conflicting findings regarding mental health courts’ impact on clinical outcomes.

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## Introduction

Mental illnesses are widespread, serious health conditions affecting many people across the world. In the United States, 18.1% of the population, or 43.6 million adults live with a mental illness in any given year (SAMHSA, 2015). While this is a very high percentage, the rate is markedly higher in the criminal justice population, particularly those incarcerated in local jails: 64% of local jail inmates have mental health problems (United States' Bureau of Justice Statistics, 2006). In addition to this alarming rate, of those with mental illness that are convicted of a crime, many will criminally recidivate and will cycle in and out of jails, prisons, and communities. These individuals will likely never receive services or treatment to address their unique needs, since jails are not treatment facilities.

Many types of programs have been created and implemented to address the issue of increasing numbers of people with mental illness in the criminal justice system. Mental health courts are one type that seeks to divert individuals with mental illness from jail into community-based treatment. These programs have grown rapidly since they were first created in the late 1990's and research on their efficacy has not kept pace with these programs' expansion across the United States (Honegger, 2015). This systematic review seeks to analyze the existing research on the ability of mental health courts to achieve their intended outcomes, which include reducing recidivism, increasing participants' connection to mental health treatment and improving participants' psychiatric functioning. Most studies look at these outcomes individually; there are very few published studies that systematically determine the impact of mental health courts on all three outcome domains.

Before looking at the impact of mental health courts, it is important to understand the magnitude of the issues that these programs aim to address. Mental illness is a serious issue in

not only the United States, but across the world; it is obvious that more and more persons with mental illness are becoming involved in the criminal justice system. Jails and prisons are not treatment facilities, so many people are forced into a cycle of recidivism without ever receiving treatment for their underlying mental illness. There are several theories, which will be discussed, as to how this has developed in the United States. The impact of the growth in incarceration in the United States will be explored, as well as a discussion of different jail diversion programs that have been created for offenders with mental illness. Mental health court programs will be explained and finally, a brief review of existing literature on these programs will be included to show broadly what the research is saying about these programs.

### **Mental Illness in the Criminal Justice System**

Studies have shown a wide variation in the percentages of people with mental illness in jails due to variations in the definition of mental illness and differing methods of data collection. The Minnesota Office of the Legislative Auditor's (2016) recent examination of mental illness in Minnesota's jails found some studies have shown rates as high as 63% of male and 75% of female inmates have mental illness (United States Bureau of Justice Statistics, 2006). Other studies have produced rates as low as 6% of male (Teplin, 1990, as cited in Steadman, Osher, Clark Robbins, Case and Samuels, 2009) and 12% of female inmates having a serious mental illness (Abram, Teplin, & McClelland, 2003, as cited in Steadman, Osher, Clark Robbins, Case and Samuels, 2009). Another study conducted to estimate prevalence of mental illness in jails done by Steadman, Osher, Clark Robbins, Case and Samuels (2009) used a smaller sample of 822 jail inmates from five different jails in Maryland and New York and found that 51.4% of jail inmates had a *serious* mental illness. However, in general, studies have shown there is a higher rate of mental illness in jail populations than in the general population. (Minnesota Office of the

Legislative Auditor, 2016). Research literature has widely speculated that jails have become de facto institutions for people with mental illness, and that jails fill this role due to insufficient community services and resources to support those with mental illness (Etter Sr. et al., 2008).

### **Mental Health Treatment in Jails**

The eighth amendment of the United States Constitution prohibits cruel and unusual punishment and protects the right for jail and prison inmates to receive treatment for acute medical problems, including psychiatric conditions (New Freedom Commission on Mental Health, 2004). While jails are not treatment facilities, the Constitution mandates that jails must provide basic medical and psychiatric care for inmates; research has shown that this does not always occur. The United States' Bureau of Justice Statistics (2006) reported that while approximately one-third of state prison inmates reported receiving mental health treatment while incarcerated, only 17.5% of local jail inmates received treatment for their mental health in jail. The care those jail inmates did receive was primarily the provision of medication, while only 7% that received mental health care in jail received professional counseling or therapy (United States Bureau of Justice Statistics, 2006). A study done by the U.S. Department of Justice's Civil Rights division (2006) of 618 inmates with serious psychiatric symptoms in Michigan found that 65% of inmates had not received mental health treatment in the past year. Sarteschi (2013) sought to synthesize the existing research on offenders with mental illness in American jails and prisons through a literature review of government and congressional reports as well as scholarly journals. The research found that mental health services in U.S. prisons and jails are "woefully deficient" and "grossly inadequate" (Sarteschi, 2013).



## Theories

Two major theories have developed regarding why there are so many persons with mental illness involved in the criminal justice system. The first theory relates to the policy and practice of deinstitutionalization, or moving people with serious mental illness out of state hospitals and back into the community, which has caused more people with untreated serious mental illness to be in the community and therefore more people with serious mental illness are in positions to commit crimes and be arrested. Since the deinstitutionalization of persons with mental illness began in the 1960's, more persons with mental illness are arriving in county jails, often for relatively minor crimes that may be due, at least in part, to symptoms of their mental illness (Etter Sr., Birzer, & Fields, 2008). Issac & Armat (as cited in Etter Sr. et al., 2008) reported on two major limitations to deinstitutionalization unknown at the time it was instituted: limited community mental health services funding and the rise of the psychiatric patient rights movement that gave patients the right to accept or reject treatment. These two major limitations continue to this day, and have contributed to the insufficiency of today's mental health treatment system. A more recent study has sought to show the direct connection between deinstitutionalization and the incarceration of people with mental illness. Raphael and Stoll's (2013) research sought to assess the degree to which persons with mental illness who would have been institutionalized in the past have been "trans-institutionalized" to prisons and jails. Their study used data from the Public Use Microdata Samples of the U.S. Census of Population and Housing for the years of 1950-80, and compared data of noninstitutionalized people with characteristics of mental hospital patients and inmates during the same years. They calculated weighted average institutionalization risks and compared the institutionalization risks of someone in 1950, for example, with the institutionalization risk for someone with the same

demographic characteristics in 2000. Their study found that 4-7% of incarcerations that occurred between 1980 and 2000 can be recognized as due to deinstitutionalization. This means that between 40,000 – 72,000 people incarcerated in 2000 would have been in institutional mental health treatment centers in the past (Raphael & Stoll, 2013).

The second theory to explain the high rate of persons with mental illness in the criminal justice system is the criminalization of mental illness. This seeks to explain how more and more people with mental illness have become involved in the criminal justice system. Morabito (2007) describes the criminalization hypothesis as the idea that the deinstitutionalization of people with mental illness has led to the criminal justice system being used to deal with the deviant behavior that sometimes occurs in those with mental illness. This idea is that persons with mental illness are committing crimes because of untreated symptoms of their illness. This notion arose in the United States in the 1970's and 80's, as deinstitutionalization was in progress. The criminalization hypothesis states that shorter inpatient psychiatric hospitalization stays and stricter criteria for civil commitment, particularly the requirement that an individual be dangerous to themselves or others, have also contributed to the increasing numbers of people with mental illness in the criminal justice system (Morabito, 2007).

### **Impact of the Issue**

The reality that many inmates in local jails have mental health concerns affects more than just the inmates themselves. Correctional officers and jail staff often have minimal training in mental health and may have difficulty differentiating between an inmate with mental illness and an inmate who is “acting out” (Sarteschi, 2013). An inmate who goes without mental health treatment while in jail can be a risk to themselves or others including jail staff, other inmates and court personnel. The community is impacted by the cost of incarceration as well as the costs of

crimes committed by those with untreated mental illness. These impacts are multiplied when those with untreated mental illness recidivate and cycle in and out of jails and prisons.

The criminal justice system in the United States is massive and under significant pressure. The most recent national report on the correctional population in the U.S. shows that approximately 2,224,400 were incarcerated in local, state and federal prisons in 2014 (United States' Bureau of Justice Statistics, 2015). Another approximately 4,708,100 were under community-based supervision, such as probation or parole. Combined, this equates to about 6,851,000 people, which is 1 in 36 adults in the United States, or 2.8% of the adult population under correctional supervision (Bureau of Justice Statistics, 2015). The U.S. Government Accountability Office's report to Congressional Requesters (2012) recognizes prison crowding in the United States' Bureau of Prisons as a major concern, as they report the federal prison population has grown by more than 400% since the late 1980's, and by 50% since the year 2000. The state prison population has grown by approximately 700% since the 1970's (Vera Institute of Justice, 2013). System-wide, BOP reports the prison population is 39% over-capacity, meaning there are 39% more prisoners housed in prisons than the buildings were designed to house. Additionally, in the highest security prisons, BOP reports prisons functioning at 55% over-capacity (United States' Government Accountability Office, 2012).

In addition to prison crowding, the United States' criminal justice system is under pressure due to incarceration costs. For fiscal year 2014, the Bureau of Prisons reported that the annual cost to incarcerate one federal prisoner was \$30,619.85 or \$83.89 per day (Bureau of Prisons, 2015). Vera Institute of Justice (2012) reported the average annual cost to incarcerate one state prisoner for the fiscal year of 2010 was \$31,286. Given these costs and the volume of

prisoners in the United States' criminal justice system, it is not surprising that jail diversion programs have developed and continue to grow in this country.

### **Jail Diversion Programs**

Many different efforts and programs have been developed to divert persons with mental illness from incarceration. DeMatteo, LaDuke, Locklair, & Heilbrun (2013) describe several different approaches that are being utilized in the United States and around the world. One such effort includes training law enforcement to recognize and de-escalate mental health crises through training programs such as Crisis Intervention Training or CIT. Another effort aims to help inmates with mental illness successfully re-integrate back into the community through re-entry programs that connect inmates with community-based mental health services. Problem-solving courts including drug courts, mental health courts, and DUI courts, for example, are another type of intervention used to divert individuals from incarceration into community-based services to address underlying issues that may be contributing to their criminal behavior, such as chemical dependency or mental illness. Crisis Intervention Training for police, re-entry programs, and problem-solving courts are all community-based efforts intended to reduce drug relapse, improve mental health function and reduce criminal recidivism (DeMatteo, LaDuke, Locklair, & Heilbrun, 2013).

### **Mental Health Courts**

Mental health courts are a specific type of problem-solving court program that use intensive case management and enhanced court monitoring to divert people away from criminal activity and into mental health treatment and services (Ray, 2014). The first mental health court program started in 1997 and it is estimated that there are now more than 300, with many more being planned (Council of State Governments Justice Center, 2009). The primary goals of mental

health courts are to reduce recidivism and improve mental health functioning (Honegger, 2015). Additional goals are to reduce costs of incarceration and to improve quality of life for people with mental illness by connecting them with services and treatment and to prevent future criminal justice involvement (Council of State Governments Justice Center, 2009).

The working definition of a mental health court is “a court with a specialized docket for certain defendants with mental illnesses” (Council of State Governments Justice Center, 2009, p. 5). There is considerable variation in the design and function of these courts, including the types of offenses and psychiatric diagnoses that are accepted, as well as the use of incentives and sanctions to obtain desired behavior (Council of State Governments Justice Center, 2009). However, the Council of State Governments Justice Center (2009, p. 32) identifies 10 essential elements of mental health courts, which are summarized here:

1. Planning and administration – “a broad-based group of stakeholders... guide the planning and administration of the court”
2. Target population – “eligibility criteria address public safety and consider a community’s treatment capacity,” in addition to taking into account “the relationship between mental illness and a defendant’s offenses”, while also considering “individual circumstances”
3. Timely participation – eligibility, referral and acceptance into mental health courts, as well as the subsequent linkage to community services and treatment is done “as quickly as possible”
4. Terms of participation – are clearly defined, promote public safety, support engagement in treatment, are individualized, and provide for “positive legal outcomes” for program completers

5. Informed choice – “defendants fully understand the program requirements before agreeing to participate”, and are provided legal counsel to assist with this decision. The court addresses issues with defendants’ competency in a “timely fashion”.
6. Treatment supports and services – “mental health courts connect participants to comprehensive and individualized treatment supports and services in the community”
7. Confidentiality – health and legal information is protected in accordance with participants’ rights
8. Court team – “criminal justice and mental health staff and service and treatment providers receive special, ongoing training” to help participants achieve goals
9. Monitoring adherence to court requirements – the court team collaboratively monitors “participants’ adherence to court conditions, offer individualized graduated incentives and sanctions, and modify treatment as necessary”
10. Sustainability – “data are collected and analyzed to demonstrate the impact of the mental health court” (Council of State Governments Justice Center, 2009, p. 32)

### **Research on Mental Health Courts**

There is a significant amount of research showing that mental health courts are effective in reducing recidivism for persons with mental illness (Sarteschi, Vaughn, & Kim, 2011). Fewer studies have looked at *why* and *how* mental health courts are effective (Edgely, 2014). Of the studies completed, several themes have emerged regarding how mental health courts are effective. These include increasing participants’ connection to mental health treatment and services, addressing mental health symptoms, and enhanced judicial monitoring, which includes

the important and therapeutic role of the judge within the mental health court program. Studies have shown that these elements, when combined, can contribute to a successful mental health court program that reduces recidivism (Edgely, 2014).

As mental health court programs have rapidly expanded across the country, there is a growing number of studies seeking to show that these programs are an effective intervention. Sarteschi, Vaughn, & Kim (2011) completed a meta-analysis using 18 previous studies to assess the effectiveness of mental health court programs. The study discussed previous research showing that mental health courts link people to mental health treatment at a higher rate than people not involved in the programs. The study also reviewed studies showing a reduction in recidivism, noting that not all studies have found statistically significant reductions (Sarteschi et al., 2011). The results of the meta-analysis did show that mental health courts are moderately effective treatments for reducing recidivism, with an overall effect size of -0.54. The study also showed that mental health courts have the ability to positively impact clinical outcomes and decrease psychiatric emergency room visits, although those findings were limited (Sarteschi et al., 2011).

Mental health courts are a relatively new program within the United States' criminal justice system, therefore there are few studies looking at long-term outcomes of mental health courts in terms of recidivism rates for persons who have completed the programs (Ray, 2014). Ray (2014) completed a quantitative study analyzing court administrative data for mental health court defendants of one program in North Carolina for a minimum of 5-years post-mental health court completion, up to 10 years post-completion. The program required the participant to sign a "voluntary" agreement to participate in individualized treatment and abide by behavioral mandates. The participants had to attend court sessions monthly for compliance checks and

remain in compliance for six consecutive months in order to have criminal charges dropped. The study showed that persons who completed the program were significantly less likely to be rearrested than those who did not: 39.6% of completers were re-arrested during the study period compared to 74.8% of non-completers. Additionally, mental health court completers went a significantly longer period of time before reoffending: 17.15 months, as compared to 12.27 months for non-completers (Ray, 2014).

The findings from Ray's (2014) single-site study are consistent with Steadman, Redlich, Callahan, Robbins, & Vesselinov's (2011) longitudinal, multi-site study which showed that mental health courts lower the post-18-month arrest rate for graduates of the programs, as well as fewer post-18-month incarceration days. This study was significant because it was the first multi-site study done on mental health courts with both treatment and control groups (Steadman, et al., 2011). As stated earlier, there is considerable variation in how mental health court programs are run and who is admitted (Edgely, 2014), so the finding that four different mental health court programs do reduce recidivism is important.

Research has been conducted on what specific mental health court program outcomes contribute to a reduction in recidivism rates. These outcomes include reducing psychiatric symptoms, connecting people with mental health treatment and services and improving overall quality of life for participants. Honegger (2015) utilized a systematic literature review of 20 articles to evaluate the existing research on mental health courts' actual achievement of these outcomes. The review found mixed results in studies showing the impact of mental health court programs on psychiatric symptoms and concluded that more research is needed in this area. Regarding increased connection to mental health treatment and services, several studies reviewed showed support for this claim, however again there was conflicting evidence, and the review



emphasized variability between mental health courts in terms of how they function. The study used only one article on impact on quality of life, which found that a mental health court did in fact increase participants' quality of life, however this program utilized an especially intensive service model using Assertive Community Treatment (ACT), which is not typical for all mental health courts (Honegger, 2015).

Edgely (2014) conducted a study that looked at previous research showing positive outcomes from mental health courts with the intention of understanding *why* mental health courts work. The study again noted a wide variation in design of mental health court programs across the country, but found that programs must have an evidence-based offender rehabilitation model. Edgely (2014) argued that a specific rehabilitation model called the Good Lives Model, which utilizes a holistic approach that focuses on reinforcing and developing offenders' positive strengths, is appropriate for mental health courts. The Good Lives Model is a theory of offender rehabilitation that focuses not only on reducing offenders' risk of reoffending but also on promoting offenders' personal life goals, while incorporating the perspectives of risk, psychiatric treatment and holistic wellness (Barnao, Ward, & Robertson, 2016). In addition to using this theory of offender rehabilitation, Edgely (2014) reported specifically on the important and therapeutic role of the mental health court judge, as these programs utilize therapeutic jurisprudence, or theory of law, to impact psychiatric and behavioral change in participants. The judge is applying motivational psychology using a therapeutic alliance with participants and therefore the judge must have a very different skill-set than traditional criminal court judges (Edgely, 2014). Edgely (2014) argues that mental health courts must have a balance of evidence-based practices, psychosocial supports and skillful, intentional work by the mental health court judge in order to be successful.

As these studies show, there is significant research showing that mental health courts are effective, especially in relation to their ability to reduce recidivism for participants. As mentioned earlier, Sarteschi, Vaughn & Kim's (2011) meta-analysis of 18 studies looking at the effectiveness of mental health courts showed that these programs are "moderately effective treatments for reducing recidivism", with an overall effect size of -0.54 among the studies they analyzed (p.18). There are other studies, however, that have shown that mental health courts are not always successful. A study done by Cosden, Ellens, Schnell and Yamini-Diouf (2005) utilized a true experimental design with 235 participants randomly assigned to either the mental health court program or treatment-as-usual in typical court proceedings for criminal charges. They analyzed data on participants' psychiatric symptoms, level of impairment, and other clinical measures during their participation in the study, as well as criminal activity and incarceration 0-24 months prior to the study and 0-24 months after participants entered the mental health court program. The study found that over a 24-month period, mental health court participants actually had an increase in the number of bookings, and no change in number of convictions or number of jail days, as compared to a treatment-as-usual group. However, their results were skewed as a small number of participants accounted for the majority of the new jail days: the modal response was 0 days and the maximum was 530 days (Cosden et al., 2005), so "averaging jail days across all participants did not portray a typical response pattern" (p. 206).

Another study sought to look at the impact on clinical outcomes for mental health court participants. Boothroyd, Mercado, Poythress, Christy, and Petrilá (2005) conducted a quantitative study comparing 116 mental health court participants and a matched sample of 101 magistrate court defendants with similar demographic and clinical characteristics. The study utilized the Brief Psychiatric Rating Scale- Anchored Version (BPRS) to measure clinical

symptoms of the defendants in terms of frequency and severity on a 7-point scale. The findings were that there was no significant change in defendants' clinical status associated with receiving treatment or involvement in the mental health court program. The authors suggested that this finding "likely speaks more to the adequacy of the mental health service systems in these counties than to the effectiveness of the mental health court" (p. 833). Another explanation offered was that it was possibly that the defendants had chronic illnesses in which substantial changes in their symptomology are infrequent.

There is a substantial amount of mental health court research and these programs continue to grow and develop across the United States. These programs were created in response to the increasing number of persons with mental illness involved in the criminal justice system and prison overcrowding. As mentioned earlier, three primary goals of mental health courts are to reduce recidivism, increase connection to mental health treatment and services and improve psychiatric function. There is very little existing research that compares the outcomes of mental health courts in all three of these areas. This systematic literature review seeks to look at the existing research in these three areas and consolidate the findings to determine the answer to the question: what is the impact of mental health court programs on recidivism, connection to treatment services and clinical outcomes for participants?

## Methods

### Research Purpose

This systematic literature review focused on mental health court programs; specifically their impact on recidivism, connecting participants to treatment services and clinical outcomes of their participants.

For the purpose of this study, mental health court programs are defined as court-based programs using a therapeutic jurisprudence orientation to reduce criminal offending and improve health and psychosocial functioning (Edgely, 2014). There is wide variation among program designs for mental health court programs including offender eligibility, pre-sentence or post-sentence involvement, frequency of court appearances, level of judge involvement, team composition, services offered, and funding, and all variables can ultimately impact the effectiveness of any given program (Edgely, 2014). However, for this study, program type was not distinguished yet will be discussed as an important factor impacting program outcomes in the discussion section.

Although mental health court programs do vary significantly in their design, their program goals consistently can be categorized as aiming to reduce recidivism and improve mental health, and the programs seek to accomplish these goals by diverting individuals from incarceration into behavioral health services (Honegger, 2015). In this study, recidivism was defined as any reoccurrence of arrest, conviction or incarceration, subsequent to the criminal offense that led to mental health court involvement.

### **Type of Studies**

To answer the question of the impact of mental health court programs on recidivism, connection to treatment services, and clinical outcomes for participants, only empirically-based, quantitative studies were included in the research. This study sought to find concrete, measurable data from research that has evaluated the impact of these programs, and excluded qualitative studies or other studies that included perceptions or experiences of participants themselves, as this was viewed as subjective data. Studies needed to assess the impact of the program on any of the following outcomes: recidivism, connection to treatment services, and/or clinical outcomes for program participants.

### **Search Strategy**

Initially, broad searches of academic, peer-reviewed journals within the databases of SocINDEX, Academic Search Premier, Criminal Justice Abstracts and Social Work Abstracts were conducted to determine the types of research available on mental health court program effectiveness. This included a wide range of research irrelevant to this study, including studies evaluating cost-effectiveness, court process efficiency, and a significant amount of research looking at relationships between particular elements of mental health courts or particular qualities of participants and program outcomes. This study does not seek to evaluate relationships between particular program elements or specific qualities of participants and ultimate program outcomes. This study instead sought to investigate what existing research says about program outcomes as a whole related to recidivism, connection to treatment services and clinical outcomes for participants. In order to narrow research scope, specific inclusion criteria were developed in order to focus the research on only studies relevant to the research question.

**Inclusion Criteria**

In the databases of SocINDEX, Academic Search Premier, Criminal Justice Abstracts and Social Work Abstracts, searches were conducted in September and October of 2016 using a combination of the following search terms: “mental health court NOT juvenile” AND “outcome” or “effect” or “impact” or “effectiveness” AND “recidivism” or “rearrest” or “clinical” or “treatment”. Only scholarly, peer-reviewed and full-text published journal articles were included in the research. Articles that were included assessed the impact of mental health court programs for adults who completed the programs. The Social Work Abstracts database did not yield any articles that were included in this study, but was included initially due to relevance of the research topic to social work.

**Exclusion Criteria**

Of the 91 articles that met initial search criteria, only 13 ultimately met the criteria to be included in this systematic literature review. Articles excluded from the research process included articles that were: qualitative in design; focused on participant perceptions as opposed to concrete, measurable data; studies that looked at the relationship of particular program features or participant qualities to program outcomes; focused solely on distinguishing between completers or non-completers of mental health court programs; studies based on programs outside of the United States; descriptive or unoriginal research articles; being unrelated to the research question.

Decisions regarding whether or not to include particular articles were made based on article title and information within the article abstract. Table 1 includes a complete list of included articles in this systematic literature review.

Table 1: Included Articles

Database	Article Title	Author(s)
Academic Search Premier	More of the same? Treatment in mental health courts	Luskin, M. L. (2013)
	Effectiveness of a mental health court in reducing criminal recidivism and violence	McNiel, D. E. & Binder, R. L. (2007)
	Long-term recidivism of mental health court defendants	Ray, B. (2014)
	How mental health courts function: Outcomes and observations	Frailing, K. (2010)
Criminal Justice Abstracts	Clinical outcomes of defendants in mental health court	Boothroyd, R. A., Mercado, C. C., Poythress, N. G., Christy, A., & Petrila, J. (2005)
	Assessing the effectiveness of mental health courts: A quantitative review	Sarteschi, C. M., Vaughn, M. G., & Kim, K. (2011)
	Recidivism following mental health court exit: Between and within-group comparisons	Lowder, E. M., Desmarais, S. L., & Baucom, D. J. (2016)
	Rearrest and linkage to mental health services among clients of the Clark County Mental Health Court program	Herinckz, H. A., Swart, S. C., Ama, S. M., Dolezal, C. D., & King, S. (2005)
	Effectiveness of a short-term mental health court: Criminal recidivism one year postexit	Hiday, V. A., Wales, H. W., & Ray, B. (2013)
SocINDEX	The impact of treatment on the public safety outcomes of mental health court participants	Keator, K. J., Callahan, L., Steadman, H. J., & Vesselinov, R. (2013)
	Recidivism outcomes for suburban mental health court defendants	Dirks-Linhorst, P. A., & Linhorst, D. M. (2012)
	Mental health court outcomes: A comparison of re-arrest and re-arrest severity between mental health court and traditional court participants	Moore, M., & Hiday, V. A. (2006)
	Effectiveness two years postexit of a recently established mental health court	Burns, P. J., Hiday, V. A., & Ray, B. (2013)

### **Research Synthesis**

This systematic literature review was conducted to explore the question: what is the impact of mental health court programs on recidivism, connection to treatment services and clinical outcomes for participants? Research was conducted within the databases of SocINDEX, Academic Search Premier, Criminal Justice Abstracts and Social Work Abstracts, using the inclusion and exclusion criteria mentioned above. Thirteen articles met criteria for this systematic review, all of which (100%) were quantitative research articles. Eleven articles (84.6%) focused on evaluating the impact of mental health courts on recidivism, five (38.5%) focused on treatment services and two (15.4%) focused on clinical outcomes for participants. Of the thirteen articles, eleven were single-site research studies, while one was a multi-site study and one was a meta-analysis of 18 articles. Seven articles were of quasi-experimental studies, with a treatment-as-usual or control group. The thirteen articles in this systematic review will be briefly discussed here before an assessment of the article quality and finally, a thematic analysis. Table 2 very briefly describes all thirteen studies, including the article title, author, focus, method and conclusions.



**Table 2: Brief Article Descriptions**

Article Title	Author(s)	Focus	Method	Conclusion
More of the same? Treatment in mental health courts	Luskin, M. L. (2013)	Treatment (tx)– context, amount, types, for MHC compared to TAU	Self-report data on tx at baseline and 6 months into program, administrative data, multivariate analyses to estimate effect of MHC on tx	MHC does not change kind of treatment, except for increase in substance/alcohol abuse tx. MHC did increase the level of tx they had been receiving prior to MHC. At 6 months, MHC increased tx, TAU decreased tx. MHC participation is associated with longer time without new criminal charges. Graduation associated with maintenance of effect after MHC completion.
Effectiveness of a mental health court in reducing criminal recidivism and violence	McNiel, D. E. & Binder, R. L. (2007)	MHC compared to TAU – recidivism and violence. At least 6 months follow-up	Administrative data, time-to-event analysis using cox proportional hazards model, controlling for confounding variables and nonrandom assignment, survival analyses	MHC reduces recidivism, completers have significantly lower recidivism rate than non-completers and went longer before recidivating
Long-term recidivism of mental health court defendants	Ray, B. (2014)	Recidivism 5 years post-exit– MHC completers vs non-completers	Administrative data, cox regression survival analysis to predict recidivism	MHC participants and graduates have fewer jail days and psychiatric hospitalizations than control group. Positive drug/alcohol tests decreased throughout participation in MHC.
How mental health courts function: Outcomes and observations	Frailing, K. (2010)	Treatment, service and jail days, MHC vs control group and non-completers. 1 year before enrollment, during and 1 year after graduation	Jail database to track jail days, MHC database for drug/alcohol tests, psychiatric hospitalization days. Chi squares and t-tests	MHC participants and graduates have fewer jail days and psychiatric hospitalizations than control group. Positive drug/alcohol tests decreased throughout participation in MHC.
Clinical outcomes of defendants in mental health court	Boothroyd, R. A., Mercado, C. C., Poythress, N. G., Christy, A., & Pettila, J. (2005)	Clinical outcomes (symptoms) and receipt of treatment – MHC vs TAU, up to 8 months after first court appearance	BPRS 1, 4, 8 months after 1 <sup>st</sup> court appearance. ANCOVA to determine association	No reduction in symptoms associated w/ MHC or receipt of treatment
Assessing the effectiveness of mental health courts: A quantitative review	Sarteschi, C. M., Vaughn, M. G., & Kim, K. (2011)	Clinical and recidivism outcomes	Meta-analysis of 18 articles with recidivism or mental health/clinical outcome findings	MHC’s are moderately effective (-0.54 effect size) for reducing recidivism. Limited findings that MHC can positively impact clinical outcomes and decrease psychiatric ER visits.
Recidivism following mental health court exit: Between and within-group comparisons	Lowder, E. M., Desmarais, S. L., & Baucom, D. J. (2016)	Recidivism 1-year post-exit for MHC vs TAU	Administrative data, propensity score analysis, negative binomial regressions, generalized estimating equation, descriptive statistics	MHC had significantly fewer jail days but not charges or convictions. Graduation, co-occurring substance use and longer length of MHC participation associated with greater reduction in jail days. MHC reduced re-arrest rates for new offenses and probation violations, increased connection to several types of MH services. Graduates 3.7 times less likely to reoffend than non-graduates.
Rearrest and linkage to mental health services among clients of the Clark County Mental Health Court program	Herinckx, H. A., Swart, S. C., Ama, S. M., Dolezal, C. D., & King, S. (2005)	Recidivism and connection to mental health services	12-month pre-post comparison of administrative data, t-tests and multivariate prediction models with logistic regression, effect size	MHC reduced re-arrest rates for new offenses and probation violations, increased connection to several types of MH services. Graduates 3.7 times less likely to reoffend than non-graduates.

Abbreviations: MHC = mental health court; tx = treatment; TAU = treatment as usual;

**Table 2: Brief Article Descriptions**

Article Title	Author(s)	Focus	Method	Conclusion
Effectiveness of a short-term mental health court: Criminal recidivism one year postexit	Hiday, V. A., Wales, H. W., & Ray, B. (2013)	Recidivism 1 year post-exit for MHC vs TAU	Administrative data, multivariate analyses, controlling for potentially confounding variables, logistic regression, Cox proportional hazards model (survival analysis)	MHC had significantly fewer arrests than TAU at 1 year post-exit, longer time to re-arrest. Graduates had lowest rate of recidivism.
The impact of treatment on the public safety outcomes of mental health court participants	Keator, K. J., Callahan, L., Steadman, H. J., & Vesselinov, R. (2013)	Treatment participation and recidivism	3 MHCs (multisite), baseline and 6-month interviews, administrative data	MHC accessed tx quicker, received more therapeutic and intensive tx, lower re-arrest rates and fewer jail days than TAU, little support for relationship between tx and public safety. Graduates had lower re-arrest rates.
Recidivism outcomes for suburban mental health court defendants	Dirks-Linhorst, P. A., & Linhorst, D. M. (2012)	Recidivism 1-year post-exit for graduates, negatively terminated, and opt-outs	Post-test only comparison group design, administrative data, chi square and cox regression survival analysis	MHC graduates had lowest re-arrest rates, then opt-outs and those negatively terminated had highest rate. MHC's can reduce recidivism.
Mental health court outcomes: A comparison of re-arrest and re-arrest severity between mental health court and traditional court participants	Moore, M., & Hiday, V. A. (2006)	Recidivism and severity 1 year pre- and 1-year post-entry to MHC, compared to TAU	Descriptive bivariate summation of variables, descriptive statistics, multivariate analyses	MHC reduces new arrests and severity of arrests, graduates have lowest recidivism
Effectiveness two years postexit of a recently established mental health court	Burns, P. J., Hiday, V. A., & Ray, B. (2013)	Recidivism 2-years post-exit of MHC	Pre-enrollment/post-exit design, administrative data, multivariate analyses, logistic regression model, negative binomial models	MHC can reduce recidivism post-exit, criminal history, time in MHC, graduation greatest influence on recidivism

### **Studies on Recidivism**

McNiel and Binder (2007) sought to evaluate whether mental health courts can reduce the risk of recidivism and violence for offenders with mental illness. Their study utilized a retrospective, observational design of persons with a mental illness who were arrested and booked into the San Francisco jail during a set time-period. They analyzed data on 170 mental health court participants and 8,067 adults who went through the traditional court process. Baseline data was obtained 12 months prior to entry into mental health court or 12 months before their first arrest during the same interval of time for the treatment-as-usual group, as well as at least 6 months of follow-up data. The study concluded that mental health court participation can lead to a longer period without new criminal charges, including violent crime. Particularly, graduation from the mental health court program was associated with less recidivism and violence for participants.

Ray (2010) conducted a study examining recidivism 5-years post-exit from a mental health court program in North Carolina, particularly looking at the effect of graduation from the program compared to those who did not graduate, termed “non-completers”. The study included 449 participants, 265 of whom graduated from the program and 184 who either opted out of the program or were non-completers. Administrative data was obtained on re-arrests for participants a minimum of 5 years after exiting the program or after the date the key arrest was disposed of in traditional court for non-completers. Cox regression survival analysis was used to predict criminal recidivism and found that mental health courts can reduce the rate of rearrests for participants, and that this effect is sustained for several years after supervision by the court has ended. The study found that 60.4% of completers had still not recidivated 5 or more years after their participation in the mental health court. Further, completers had a significantly reduced rate

of recidivism compared to non-completers: 39.6% of completers recidivated compared to 74.8% of non-completers. Additionally, completers went a longer period of time before recidivating than did non-completers, 17.15 months as compared to 12.27 months.

Lowder, Desmarais and Baucom (2016) conducted a study on recidivism one year post-exit for 58 mental health court participants in Ramsey County, Minnesota, compared to 40 defendants who went through traditional court processing. Analyses were conducted to determine differences between the two groups, finding that mental health court participants had fewer jail days, but not charges or convictions in the one year following their exit from the program. The research determined that graduation from the program, co-occurring substance use, and longer length of participation in the program were all factors associated with a greater reduction in jail days. The research found a positive correlation between the length of participation in the program and the reduced degree of recidivism. It concluded that mental health courts may be particularly effective for populations determined to be at a high risk to reoffend.

Hiday, Wales and Ray (2013) researched recidivism for 408 mental health court participants in the District of Columbia compared to 687 defendants in a treatment-as-usual group that received comparable services and supervision, but did not participate in the mental health court program. The study used multivariate analyses and controlled for possible confounding variables. The research found that mental health court participants had significantly fewer arrests compared to 1 year prior to their entry into the court and significantly fewer arrests compared to the control group. Mental health court participants also went a longer time before a new offense compared to the control group. The study found that graduation from the mental health court was the biggest factor in reducing recidivism.

Moore and Hiday (2006) examined arrests and arrest severity for 82 mental health court participants in a single program in the Southeastern United States and a control group of 183 defendants in the same county prior to the mental health court's existence. The study looked at arrests for participants 1 year pre- and 1 year post-enrollment in the mental health court program and analyzed differences among the participants, and between the participants and the control group. The research found that the mental health court reduced the number of new arrests and arrest severity for participants, and that graduates from the program had the greatest reduction in rearrests.

Burns, Hiday and Ray (2013) looked at recidivism and factors predicting recidivism of 99 mental health court participants in Hall County, Georgia utilizing a pre-enrollment, post-exit comparison design looking at administrative data from 2 years prior to court entry, during program participation, and 2 years post-exit. The data analysis found that mental health courts can reduce recidivism after court supervision ends, and that participants' criminal histories, time in the mental health court program, and whether or not they graduate are the main factors predicting future recidivism. The study found that 24.6% of graduates were rearrested during the 2-year period following their exit from the court program. Further, the majority of all defendants had a decrease in the number of jail days pre-entry to the mental health court compared to post-exit.

### **Studies on Recidivism and Treatment Services**

Frailing's (2010) study sought to examine legal, service use and substance abuse outcomes for mental health court participants in Washoe County, Nevada. Arrests, jail days, emergency room visits, and inpatient psychiatric hospitalization days were tracked for 146 mental health court participants and a control group of 248 defendants who would have been

accepted to the program but had an alternate case disposition or chose not to participate.

Statistical tests demonstrated that the mental health court program was associated with fewer jail days for participants and graduates, as well as decreased psychiatric hospitalizations.

Herinckx, Swart, Ama, Dolezal and King (2005) sought to look at re-arrest and connection to mental health services for 368 mental health court participants in Clark County, Washington. The study utilized a 12-month pre-post comparison design to determine if there were any changes in arrests, probation violations and connection to mental health services for court program participants. Administrative data was analyzed and found that there was a reduction in re-arrest rates for new offenses and fewer probation violations for participants. The overall crime rate for mental health court participants was reduced by 400% at 12-months post-enrollment in the program compared to the 12 months prior to entering the program. The study found that the factor most associated with the reduction in new arrests was graduation from the program.

Keator, Callahan, Steadman and Vesselinov (2013) utilized a multisite, longitudinal study to evaluate whether participants in mental health courts have higher rates of participation in treatment than similar defendants in traditional court, and whether that treatment is related to any future rearrests. The study utilized 296 mental health court participants from three different court programs and 386 defendants in a control group and analyzed the types and amount of mental health services, mental health court outcome, and annualized arrest rates. The research found that mental health court participants accessed community treatment sooner than the control group, and further, the services they received were more therapeutic and intensive than those received by the treatment-as-usual group. Graduates from the program had lower re-arrest rates than did non-completers, while all mental health court participants had lower re-arrest rates and fewer jail

days than the control group. The study found that there was little support for a relationship between connection to treatment and re-arrest.

### **Studies on Recidivism and Clinical Outcomes**

Sarteschi, Vaughn and Kim (2011) conducted the first meta-analysis of mental health court research literature to comprehensively examine the effectiveness of mental health court programs. Eighteen studies were assessed for quality and analyzed, finding that mental health courts are moderately effective at reducing recidivism, with an overall effect size of -0.54. The study also found limited support for mental health courts positively impacting clinical outcomes for participants and decreasing their psychiatric hospital visits. It was noted that while there are many differences between individual mental health courts, it appears that these programs are an effective intervention for individuals with mental illness in the criminal justice system

### **Studies on Treatment Services**

Luskin (2013) focused on treatment in mental health courts, and compared the context, amount and types of treatment for 82 mental health court defendants with 89 defendants who went through the typical criminal court process. The research used longitudinal interview data and compared treatment received 6 months prior to entering the mental health court with treatment at a 6-month follow-up. The study found that at the 6-month follow-up, mental health court participants had significantly less inpatient treatment, significantly more outpatient treatment, and more varied and individualized treatment than the treatment-as-usual group. While the mental health court group increased their treatment services, the treatment-as-usual group decreased the amount of treatment they received, in general. The article concluded that mental health court participants do not receive different types of treatment than those in

traditional court (except for alcohol and drug treatment programs), however they do receive *more* treatment.

### **Studies on Clinical Outcomes and Treatment Services**

Boothroyd, Mercado, Poythress, Christy and Petrilá (2005) looked at the clinical outcomes of 97 mental health court participants in Broward County, Florida compared to a control group of 77 defendants in traditional court in Hillsborough County, Florida. The Brief Psychiatric Rating Scale (BPRS) was conducted to assess and monitor the psychiatric symptoms of both groups at one, four, and eight months after their initial court appearance, and then an analysis of covariance (ANCOVA) was utilized to assess any association between BPRS score with the type of court, receipt of treatment services or the interaction between the type of court and receipt of treatment. The study found no significant change in symptoms for either the mental health court participants or traditional court participants, despite their receipt of treatment services. It was suggested by the authors that the chronic nature of psychiatric disorders and inadequacies in the mental health service system may be factors that impacted the findings.

### **Quality Assessment**

For the purpose of evaluating the quality of the research articles included in this systematic review, four criteria were considered for each article. The generalizability of the research findings, the study size, sample or selection bias, and the adequacy of the description of the study subjects. Table 3 summarizes the results of this quality assessment for the 13 articles in this systematic review.



### **Generalizability**

The majority of the studies (11 of 13, or 84.6%) included in this research were single-site studies, which limits the generalizability of the research findings for those individual studies. One mental health court can look very different from another, and although most mental health courts do have similar processes and procedures, there are many unique differences that can make it difficult to make comparisons or generalizations from studies involving single mental health court programs (Honegger, 2015). Only two of the studies (15.4%) included in this systematic review involved research from more than one mental health court program. Keator et al. (2013) was multi-site study of three different mental health courts, and Sarteschi et al. (2011) was a meta-analysis of 18 articles on mental health courts, including a multitude of mental health court programs.

### **Study Size**

(The size of the studies were compared, using the commonly considered sample size of 30 participants as the minimum for statistically significant findings.) In this systematic review, none of the articles had sample sizes fewer than 30 participants, with the majority of articles (n=10) having between 30-400 participants. Three studies had more than 400 participants. The concern with sample size is that if a study has too few participants, the findings cannot be generalized and if the study has too many participants, the study could be considered unethical, as it exposes more participants to any potential risks of being involved in the research. Ray (2014) utilized a sample size of 449 participants and Hiday et al. (2013) utilized a sample size of 1095 participants. Sarteschi et al. (2011) conducted a meta-analysis of 18 articles, which did not involve direct research with participants, but used secondary data that included the research findings involving significantly more than 400 original research participants.

### **Sample/Selection Bias**

The articles were analyzed for the potential for sample or selection bias in determining the research participants. The concept of “cherry-picking” in mental health courts is certainly a possibility, meaning that lower-risk offenders or those who are assumed to have a higher likelihood of succeeding are selected to participate in the programs. Judges and prosecutors generally have an influence in the referral process to determine who ultimately is accepted into the programs, which does ultimately impact the ability to evaluate the effectiveness of the program (Wolff & Pogorzelski, 2005). The Sarteschi et al. (2011) meta-analysis study likely has some of the same selection bias issues for the individual mental health courts included in the research, however for the meta-analysis, there did not appear to be significant selection bias for the studies that were included. Herinckz et al. (2005) studied one particular mental health court that appeared to offer mental health court participation for all misdemeanor offenders who met criteria for the program, thereby reducing the likelihood of selection bias. This process of offering participation to all eligible offenders seems to not necessarily be the process for other mental health courts. Other programs have procedures that allow for more discretion in offering the program as an option for selected offenders, as cited in Wolff & Pogorzelski (2005).

### **Description of Study Subjects**

Descriptions of study subjects varied widely among the articles that were included in this systematic review. Some articles included charts with many details on both mental health court participants and control groups, while other articles included very limited information on who was in each group. As was noted above, there are significant differences between individual mental health court programs, not only in how they function, but also in the types of participants accepted. For example, some programs only accept non-violent misdemeanor offenders, while

others accept only felony-level offenders; some require a diagnosis of a severe and persistent mental illness, while others do not (Honegger, 2015). Due to these important differences, it is important that there is an adequate description of the participants included in the research studies on mental health courts.

Table 3: Quality Assessment

Author(s)	Generalizability	Study Size	Sample/ Selection Bias	Subject Description
Luskin, M. L. (2013)	1	2	1	2
McNiel, D. E. & Binder, R. L. (2007)	1	2	1	1
Ray, B. (2014)	1	3	1	2
Frailing, K. (2010)	1	2	1	1
Boothroyd, R. A., Mercado, C. C., Poythress, N. G., Christy, A., & Petrila, J. (2005)	1	2	1	1
Sarteschi, C. M., Vaughn, M. G., & Kim, K. (2011)	3	3	3	3
Lowder, E. M., Desmarais, S. L., & Baucom, D. J. (2016)	1	2	1	2
Herinckz, H. A., Swart, S. C., Ama, S. M., Dolezal, C. D., & King, S. (2005)	1	2	2	2
Hiday, V. A., Wales, H. W., & Ray, B. (2013)	1	3	1	1
Keator, K. J., Callahan, L., Steadman, H. J., & Vesselinov, R. (2013)	2	2	1	2
Dirks-Linhorst, P. A., & Linhorst, D. M. (2012)	1	2	1	1
Moore, M., & Hiday, V. A. (2006)	1	2	1	1
Burns, P. J., Hiday, V. A., & Ray, B. (2013)	1	2	1	2

1 = poor or inadequate; 2 = adequate, average or acceptable; 3 = exceptional or above-average

### Thematic Analysis

This systematic review aims to focus on three areas of research commonly identified as goals for mental health court programs: recidivism, connection to mental health treatment and services, and psychiatric functioning or clinical outcomes. (Through the course of analyzing the thirteen articles that were included in this review, it has been shown that the research has investigated the extent to which mental health court programs accomplish these three goals to

different degrees.) Table 4 shows the foci of the thirteen articles included in this study, with the most articles focusing on recidivism (n = 9), fewer focusing on the connection to treatment or services (n = 5), and the fewest articles focusing on clinical outcomes for participants (n = 2).

Table 4: Focus of Research

Focus of Study	Recidivism	Connection to Treatment or Services	Clinical Outcomes
Author(s)			
Luskin, M. L. (2013)		X	
McNiell, D. E. & Binder, R. L. (2007)	X		
Ray, B. (2014)	X		
Frailing, K. (2010)	X	X	
Boothroyd, R. A., Mercado, C. C., Poythress, N. G., Christy, A., & Petrila, J. (2005)		X	X
Sarteschi, C. M., Vaughn, M. G., & Kim, K. (2011)	X		X
Lowder, E. M., Desmarais, S. L., & Baucom, D. J. (2016)	X		
Herinckz, H. A., Swart, S. C., Ama, S. M., Dolezal, C. D., & King, S. (2005)	X	X	
Hiday, V. A., Wales, H. W., & Ray, B. (2013)	X		
Keator, K. J., Callahan, L., Steadman, H. J., & Vesselinov, R. (2013)	X	X	
Dirks-Linhorst, P. A., & Linhorst, D. M. (2012)	X		
Moore, M., & Hiday, V. A. (2006)	X		
Burns, P. J., Hiday, V. A., & Ray, B. (2013)	X		

## Recidivism

The research included in this systematic review that included a focus on recidivism (n = 11) all concluded that mental health courts had a positive impact on reducing recidivism (Burns, Hiday & Ray, 2013; Dirks-Linhorst & Linhorst, 2012; Frailing, 2010; Herinckz, Swart, Ama, Dolezal, & King, 2005; Hiday, Wales & Ray, 2013; Keator, Callahan, Steadman & Vesselinov, 2013; Lowder, Desmarais & Baucom, 2016; McNiel & Binder, 2007; Moore & Hiday, 2006; Ray, 2014; Sarteschi, Vaughn & Kim, 2011). Burns, Hiday & Ray (2013) found that only 24.6% of mental health court graduates were rearrested during a 24-month post-exit period, as compared to 76.9% of people who opted out of the program and 90.7% of people who were terminated. Dirks-Linhorst and Linhorst (2012) found lower rearrest rates for all three groups: 14.5% for graduates, 25.8% for opt-outs and 38% for those who were terminated.

Nine studies identified the importance of graduation in reducing recidivism. They concluded that those who received the “full dose” of the mental health court program were less likely to recidivate (Burns et al., 2013; Dirks-Linhorst & Linhorst, 2012; Herinckz, et al., 2005; Hiday et al., 2013; Keator et al., 2013; Lowder et al., 2016; Moore & Hiday, 2006; Ray, 2014; Sarteschi et al., 2011). Hiday et al. (2013) noted that mental health court “graduates made the greatest gains and accounted for the recidivism differences between [mental health court] participants and the comparison group” (p. 401). Ray (2014) also found similar results, noting that mental health court graduates “are less likely to recidivate than those who do not [graduate] and ... have a longer time in the community before reoffending” (p. 451).

Another subtheme that emerged in seven of the studies ( %) focusing on recidivism was that mental health courts are able to maintain this positive effect of reduced recidivism beyond the period of supervision by the court (Burns, Hiday & Ray, 2013; Dirks-Linhorst & Linhorst,

2012; Frailing, 2010; Hiday, Wales & Ray, 2013; Lowder, Desmarais & Baucom, 2016; McNiel & Binder, 2007; Ray, 2014). The study done by Ray (2014) had the longest follow-up period of a minimum of five years and maximum of ten-years post-exit of a mental health court program, and found that 46.1% of all mental health court defendants did not recidivate in this period, while citing a 3-year recidivism rate of 67.5% for all inmates. McNiel and Binder's 2007 study had a two-year post-exit design, and found a rearrest rate of 36% for mental health court graduates.

(An important consideration when assessing a mental health court's impact on recidivism is how the term "recidivism" is defined. Seven studies operationalized recidivism as being an arrest (Dirks-Linhorst & Linhorst (2009), Herinckx et al., 2005; Hiday et al., 2013; Keator et al., 2013; McNiel & Binder, 2007; Moore & Hiday, 2006; Ray, 2014). Two other studies included re-arrest and jail days as measures of recidivism (Burns et al., 2013; Frailing, 2010), while Lowder et al. (2016) broke down their definition to include criminal charges, convictions and jail days. )

### **Connection to Treatment/Services**

As shown in Table 4, five articles (38.5% ) in this systematic review included a focus on the impact of mental health courts on the connection to treatment or services for participants in these programs. (The subthemes that developed in this area include that mental health courts have been shown to reduce the need for crisis services, such as psychiatric emergency room visits and hospitalizations (Frailing, 2010; Keator et al., 2013, Sarteschi et al., 2011; Herinckx et al., 2005).) Two studies also identified the ability of mental health courts to increase the "therapeutic treatment intensity" that participants received (Luskin, 2013; Keator et al., 2013). Keator et al. (2013) defined this term to include community-based treatment and support services, such as day treatment, therapy, and medication management, among other services.

Keator et al. (2013) found that mental health court participants decreased their crisis treatment episodes from 1.9 episodes 12-months pre-enrollment to 0.78 12-month post-enrollment. At the same time, participants increased therapeutic treatment episodes from 77.7 12-months pre-enrollment to 111.8 12-months post-enrollment, resulting in an increase of 77.3 hours of therapeutic treatment services. Luskin (2013) found that at a 6-month follow-up period after admission to a mental health court, 86.5% of participants reported receiving all of their treatment in outpatient settings, which was an increase of 28 percentage points over their baseline measure pre-admission. Further, the mean number of outpatient visits for this group was three times that of a treatment-as-usual group, not involved in the mental health court. Keator et al. (2013) offers an explanation for how these results are obtained by these programs: mental health courts use the “power of the gavel” to compel treatment providers and mental health court participants into a “legally binding, yet voluntary relationship” for participants to receive treatment (p. 232).

### **Clinical Outcomes**

Only two articles, (15.4%) included a focus on clinical outcomes for participants in mental health courts. The studies had conflicting findings, with Boothroyd et al. (2005) finding no significant reductions in mental health symptoms associated with participation in a mental health court or with receipt of treatment or services. This study attributed this finding to the chronic nature of the mental illnesses addressed by the particular mental health court studied and questioned the adequacy of the public mental health system (Boothroyd, et al., 2005). The meta-analysis conducted by Sarteschi et al. (2011) found limited findings showing that mental health courts can positively impact clinical outcomes for their participants. Due to the study requiring homogeneity to compute effect sizes, the authors were unable to produce an aggregate mean effect size for the eight studies included in the meta-analysis that contributed mental health

outcomes, as the studies mostly used different measures of outcomes. Three of the included studies in the meta-analysis did indicate increases in Global Assessment of Functioning (GAF) scores and decreases in inpatient treatment days for mental health court participants, however (Sarteschi et al., 2011). With these conflicting findings, no subthemes emerged in this systematic review regarding clinical outcomes for mental health court participants.

### **Discussion**

This systematic review was developed to explore the impact of mental health court programs on recidivism, connection to mental health services and clinical outcomes for participants. Through the course of examining the research obtained through systematic methods, several themes emerged, showing that mental health courts do have positive outcomes in their efforts to reduce recidivism and increase connections to treatment services for the participants they serve. There were limited findings showing these programs improve mental functioning for participants. The studies used in this review show that the research has focused on public safety outcomes, as the majority of studies focus on recidivism outcomes. There are fewer studies on connection to treatment services, and fewer yet look at the clinical outcomes for participants.

Several important concepts relating to research on mental health courts need to be noted. First, mental health courts vary widely in their procedures, and as such, comparisons between courts are difficult. Herinckx et al. (2005) notes that there is a significant need for a common, structured mental health court program model to be implemented across the country. While some programs admit only low-level criminal offenders and have loose mental health diagnostic eligibility criteria, other programs focus on felony offenders deemed higher risk to re-offend, and may have much more specific diagnostic eligibility criteria, such as accepting only individuals



with severe and persistent mental illness. Programs also vary in their length of participation and frequency of court appearances.

The relationships between treatment services, clinical outcomes and public safety are important to consider. Mental health courts are expected to reduce recidivism through increasing access and utilization of mental health services, however the connection between receipt of mental health treatment, or untreated mental illness, and recidivism is not proven (Keator et al., 2013). Both Luskin (2013) and Keator et al. (2013) noted that treatment provided to mental health court participants is not necessarily specifically focused on criminogenic risk factors such as criminal thinking, which is necessary if public safety is to be addressed. Vogel (2014) notes that while there are a disproportionate number of persons with mental illness involved in the criminal justice system, simply having a mental illness does not make a person violent or prone to criminal behavior. Mental illness is one criminogenic risk factor that interacts with many other individual factors that contribute to a person's behavior (Vogel, 2014). Luskin (2013) notes that "a long chain of assumptions justifies the use of the coercive power of the criminal sanction" in mental health courts to obtain the outcomes these programs desire, and thus much more research needs to be done.

### **Importance to Clinical Social Work Practice**

The findings of this systematic review are important to clinical social work practice, as several ethical issues are present. The National Association of Social Workers' Code of Ethics (2008) prescribes the values and ethical principles that social workers must follow, many directly related to the issues both addressed and created by mental health courts. Social workers value the concept of service: helping people in need and addressing social problems. One such social problem addressed by mental health courts is the high number of persons with mental illness

involved in the criminal justice system. This population is in great need of resources, treatment and advocacy. Social workers also focus on issues of social justice, issues that are very present in the population served by mental health courts, and also created by these programs themselves. Persons with mental illness are inherently vulnerable, by nature of their illnesses. The criminal justice system creates legalized oppression and discrimination, as the constitutional rights of criminal offenders are limited, especially during their period of judicial supervision. Felons are discriminated against in employment, housing and other areas, and are unable to vote. (As noted earlier, mental health courts use the “coercive power of the criminal sanction” to force participants into treatment (Luskin, 2013), which creates an issue that can and should be addressed by social workers: are persons with mental illness being unfairly coerced into treatment?) Are the perceived rewards of this treatment justified, when mental health court treatment has possibly not proven positive clinical outcomes for participants in the existing scholarly research?

### **Limitations**

This systematic review does have several limitations. First, the studies included came from only three databases, and included only empirically-based, quantitative studies of mental health court programs exclusively in the United States. It is likely that there is additional research in other research databases, as well as research on mental health court programs outside of the United States. This review was limited to articles and research that were peer-reviewed and published in online databases, thereby excluding grey literature, which is not scholarly, but this can certainly still contain valuable information written by experienced researchers. Qualitative research would also provide valuable information on the subjective experiences and perceptions of mental health court participants, however this was not included in this review.

Further, this research focused on the three main foci of mental health courts, which are recidivism, connection to treatment services and clinical outcomes. There may be other outcomes of these programs that were not included. As mentioned earlier, very few articles included a focus on clinical outcomes, and this may in part be due to the search strategy utilized. The search terms used in this study limited the results, in that the only search term used to retrieve clinical outcomes was in fact the term “clinical”. In future research, additional search terms should be used to hopefully broaden the search results and include additional research on the impact of these programs on the mental health outcomes for participants.

### **Future Research**

While there has been substantial research on mental health courts, especially that focused on the ability of these programs to reduce recidivism rates for participants, there is a dearth of research focusing on how and why these programs accomplish that outcome (Frailing, 2010). Mental health courts assume a connection between the receipt of mental health treatment and services and public safety outcomes, such as recidivism, however the effect on recidivism could be due to other factors, such as the enhanced judicial supervision and monitoring provided by mental health courts. As Frailing (2010) suggests, and as this research indicates, more research should be conducted on what particular aspects of mental health courts are most effective and for whom these courts work best for.

As mentioned earlier, this review included limited research on clinical outcomes for participants of mental health courts. The search protocol used in this study resulted in very little research in this area, possibly indicating a lack of published research on whether these programs result in a positive impact on participants’ mental health. While a couple studies on treatment or services provided through mental health court involvement have shown a reduction in emergency

room or hospital admissions, it seems that there is little research to support actual symptom reduction or change for participants. Future research should explore clinical outcomes for participants, including standardized measures of mental health to compare outcomes between court programs.

Also mentioned earlier, there is a lack of a common, structured mental health court model in the United States, and as such, comparisons between court programs are difficult. Further research should compare outcomes between different mental health court models to determine which models have the best outcomes. Additionally, existing research varies in its operationalization of outcomes: recidivism is defined differently across studies and measures of mental health functioning are also different. Future research should incorporate and analyze these differences to explore the effect of differing definitions.

### **Conclusion**

Mental health courts have proliferated in recent years in the United States to address the high rate of persons with mental illness involved in the criminal justice system. These programs aim to connect justice-involved persons with mental illness to community-based mental health treatment and services to prevent them from committing new crimes. Several assumptions are inherent in the purpose and goals of mental health courts, one being that there is a connection between the receipt of treatment services and recidivism, and also that the receipt of treatment leads to a reduction in mental health symptoms. The research included in this systematic review clearly shows that mental health courts are effective at reducing recidivism for participants, but does not indicate how or why this is the case. The research also showed that mental health courts reduce the need for crisis services including hospitalization, and increase the therapeutic, community-based treatment intensity for participants. Two studies included in this review had

conflicting results on the impact of mental health courts on clinical outcomes. More research will hopefully be conducted in these areas to either support or negate the assumptions underlying the purpose of mental health courts. Significant ethical considerations exist for social workers in relation to mental health courts that also need to be explored further, both in practice and research.

This study, and numerous previous studies, have shown that mental health courts vary widely in their policies and procedures, which makes research and comparisons between courts challenging. Hopefully, a common, standardized and structured mental health court model will be implemented in the United States so that all programs function in a similar matter. By implementing a standard model among the court programs, future research will be much more conclusive in regard to the impact of mental health courts across the country.

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