

Exploring Individual- and Court-Level Predictors of Mental Health Court Completion

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Abstract

Between 10 to 20% of jail inmates have a serious mental illness, while 4% of the general public has a serious mental illness. While incarcerated, inmates are required to have access to mental health care, however, access and quality of services provided is uncertain. During incarceration, adults with mental illnesses are more likely to be found in violation of rules and more likely to experience violence. Additionally, incarceration exacerbates symptoms of mental illness. A key nominal goal of incarceration is to reduce crime. Whether adults with mental illness experience prison in a way that reduces their likelihood of committing future crimes is questionable. Indeed, incarcerated adults with mental illness have especially high recidivism rates and experience more disciplinary issues than those without a mental health diagnosis.

Mental health courts (MHCs) are the criminal justice systems response to addressing the revolving door of incarceration experienced by adults with mental illness. This dissertation addresses two questions about MHCs: First, are individual characteristics related to MHC completion?; and second, are court characteristics related to MHC completion rates? To address the first question, a review of court records found that participants with an index offense classified as a crime against another person were just as likely to graduate as those with more minor index offenses, like probation violations. To address the second question, a survey was sent to MHC coordinators nationwide to explore if and how elements of procedural justice influence MHC completion rates. An exploratory factor analysis resulted in a one-factor solution representing “clarity.” Ordinal logistic regressions revealed that clarity did not have a statistically significant relationship to either court completion or termination rates. Survey results are also discussed in further detail to provide a snapshot of how MHCs currently operate in the United States. The sample sizes for both studies were small, therefore replication is necessary. Additionally, a more accurate measure of procedural justice is needed because research has

demonstrated that participants who perceive higher levels of procedural justice tend to have better court outcomes. Despite the limitations, these studies provide a first next step in MHC research.

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Introduction

Adults with mental illness are more likely to interact with police and be incarcerated for minor offenses than adults without mental illness, and they make up a disproportionate number of inmates and state prisoners relative to their numbers in the general population. While incarcerated, adults with mental illness are more likely to be victims of violence and often experience an exacerbation of symptoms. They are more likely to be found in violation of rules as well. There are long-term psychological, social, and cognitive effects on the formerly incarcerated, as well as effects on their children and family members (Umbach, Raine, & Leonard, 2018). Additionally, an estimated 50% of adults with mental illness in the traditional criminal justice system will recidivate within four years of being released from jail or prison (Wilson, Draine, Hadley, Metraux, & Evans, 2011). One response to this issue by the criminal justice system has been the development of problem solving courts. Problem solving courts emphasize the use of interventions meant to address underlying conditions or issues that contribute to criminal behavior. Mental health courts (MHCs) are a type of problem solving court meant to divert adults with mental illness from jails and prisons, allow them to live in the community under court supervision, and connect them to treatment and services. Mental health courts were developed in the mid-1990s, with more than 350 in existence today.

Initially, researchers focused on evaluating the effectiveness of MHCs at reducing recidivism rates of participants, and this research has demonstrated that MHCs are at least moderately effective at reducing recidivism. In addition to research on recidivism reduction, studies have attempted to describe the influence MHCs have in other areas of participants' lives. One qualitative study described the importance of social and peer support to MHC participants' recovery, with participants discussing the significance of having people they could rely on and

relate to as they worked towards behavioral health recovery (Canada & Gunn, 2013). Other quantitative studies focusing on improvement in quality of life and symptom reduction have had more mixed, though generally positive results (Cosden, Ellens, Schnell, & Yamini-Diouf, 2005). Research is shifting focus now to determine for whom are MHCs most effective and what are the underlying mechanisms or processes that contribute to their effectiveness.

This dissertation seeks to advance the knowledge base by addressing the two questions above. Paper 1 is a systematic literature review examining existing literature regarding the relationship between individual- and court-level characteristics and MHC completion status. Paper 2 relies on an examination of court records to determine the relationship between individual characteristics, including length of MHC involvement, and court completion status of MHC participants in a court in Georgia. Finally, for Paper 3, an electronic survey was developed and sent to MHC coordinators nationwide to explore the relationship between court characteristics, specifically those related to procedural justice, and court completion.

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Chapter 1: Individual- and Court-Level Factors Related to Mental Health Court Completion: A
Literature Review

Abstract

Adults with mental illness make up a disproportionate number of the incarcerated population. To address this overrepresentation, mental health courts (MHCs) were developed by the criminal justice system. Research has demonstrated that these specialty courts are at least somewhat effective at reducing recidivism and that participants who successfully complete (i.e., graduate from) MHC show a greater reduction in recidivism than those who do not graduate. This systematic literature review synthesizes existing research on the individual- and court-level factors that are related to MHC completion. In total, there are 15 peer-reviewed articles included: 12 that examine individual-level factors related to MHC completion, and three that examine court-level factors related to completion. Research is somewhat mixed as to which individual factors influence completion, though age, sex, and race all seem related to whether a person graduates from MHC. Additionally, participants who report perceiving higher levels of procedural justice are more likely to graduate than those who experience lower levels. However, there are methodological weaknesses to the research designs that make it difficult to determine a consistent pattern across studies, and little research exists examining how MHCs are attempting to influence the perception of procedural justice.

Introduction

Mental health courts (MHCs) are an alternative to the traditional court system for individuals with a diagnosed mental illness. Mental health courts reside within the criminal justice system, and the main stated goal is to reduce criminal recidivism, namely by deterring future criminal behavior and ensuring accountability. To achieve these goals, diversion courts, like MHCs, use social services, rewards, sanctions, and the legal process to address underlying causes of criminal behavior (Canada & Ray, 2016). In 2005, Fidler conducted a case study with the Brooklyn Mental Health Court and described how the court used collaboration between the judge, clinical staff, defendants, prosecutors, defense attorneys, and service providers to manage the public safety risks and provide individualized services and evidence-based treatments to participants. This team-based approach is common among MHCs as a means of addressing both the accountability and public safety goals of the criminal justice system, as well as the recovery goals of the public health system.

An estimated 50% of adults with mental illness in the traditional criminal justice system will recidivate within four years of being released from jail or prison (Wilson, Draine, Hadley, Metraux, & Evans, 2011). Research has shown that MHC participants recidivate less often than adults with mental illness who are in traditional courts (Burns, Hiday & Ray, 2013; Herinckx, Swart, Ama, Dolezal, & King, 2005; Moore & Hiday, 2006). Long-term outcomes are even more promising for participants who graduate from the MHC program versus participants who drop out or are terminated (Ray, Hood, & Canada, 2015). In addition to recidivism reduction, in a qualitative study of MHC participants' perception of the court process, participants reported the importance that social support of MHC staff and peers played in their mental health recovery (Canada & Gunn, 2013). One participant noted that "it just feels like you have so many outlets

when you are having problems [...] I have a whole bunch of people who want to help me” (Canada & Gunn, 2013, p. 10). Another participant talked about the significance of having others who he or she could “relate” to, saying “it gives me a chance to hear my solution through what other people say” and “people would look forward to seeing me” (Canada & Gunn, 2013, p. 11).

Existing research has examined the impact of individual participant characteristics on court completion status. The characteristics that are most commonly analyzed are sex, age, race, substance use, criminal history, index offense, and mental health diagnosis (Burns, Hiday, & Ray, 2013; Dirks-Linhorst, Kondrat, Linhorst, & Morani, 2013; Hiday, Ray, & Wales, 2014; Ray, Hood, & Canada, 2015; Ray & Dollar, 2013). The transition to using court completion status, rather than recidivism, as the outcome variable is an important one. While reducing recidivism is the main goal of MHCs, we know that individuals who complete or successfully graduate from MHC have more positive long-term outcomes, such as committing less frequent and/or less severe future crimes than those who are terminated from MHC. Additionally, we know that, while recidivism is one measure of MHC effectiveness, it does not consider factors related to recovery that could reduce the likelihood of recidivism (Canada & Ray, 2016).

A second line of research exists exploring the effect of participant perceptions of procedural justice and therapeutic jurisprudence on court completion (Canada & Hiday, 2014; Redlich & Han, 2014; Redlich, Steadman, Callahan, Robbins, Vessilinov, & Ozdogru, 2010). Procedural justice is the idea that if defendants in the criminal justice system perceive the legal process as fair, then they are more likely to comply with and accept the validity of laws and court mandates (Tyler, 2007). This perception of fairness reduces the likelihood of technical violations, such as being held in contempt of court for “talking back” to the judge, and, in MHCs, it increases the likelihood of treatment adherence and court completion. In a case study

of the Brooklyn Mental Health Court, the researcher noted that the judge's individual relationships with each participant was essential to achieving the goals of the MHC (Fisler, 2005).

A related concept frequently discussed in conjunction with procedural justice is therapeutic jurisprudence. Therapeutic jurisprudence is a belief that actors in the legal system can have beneficial influences on the lives of defendants. In existing literature, procedural justice and therapeutic jurisprudence have a large amount of overlap and are often discussed together (Canada & Watson, 2013; Redlich & Han, 2014). Understanding how these concepts work in MHCs will help answer the question "why are MHCs successful at reducing recidivism?" by attempting to pinpoint the elements in the MHC process that increase the likelihood of successful completion, which leads to a greater reduction in recidivism than for those who are terminated.

Other theories and models likely also contribute to explaining why MHCs reduce recidivism as well. It is possible that MHCs are effective in part because these programs also address the criminogenic needs of defendants and match the intensity of services to the risk level of participants as part of the Risk-Need-Responsivity model (Andrews & Bonta, 2010). Mental health courts' use of reintegrative shaming, which is a technique that first expresses disapproval of actions or behaviors, but then seeks to indicate reacceptance, also likely contributes to completion status and overall success (Braithwaite, 1989). A discussion of the implementation of the Risk-Need-Responsivity model in MHCs is beyond the scope of this paper, and reintegrative shaming is considered as a component of procedural justice because it is one technique used by MHC judges and staff that influences how participants perceive the MHC process.

Statement of the Problem

Purpose

The purpose of this literature review is to systematically review and synthesize existing literature related to MHC completion status. This review includes examining studies related to sociodemographic characteristics and their relationships to court completion status, as well as studies related to procedural justice and therapeutic jurisprudence and how these concepts influence compliance and court completion rates.

Objectives

This article provides a systematic examination of the existing literature that uses court completion status as the outcome variable. It offers a critique of the existing research and will serve to develop a framework explaining the relationship between individual and court level factors on MHC completion, graduation, and termination. Finally, this article provides directions for future research by identifying existing gaps and methodological weaknesses in the existing literature.

Methodology

Search Strategy

I conducted a comprehensive search to find journal articles relating to predictors of MHC completion or termination. I used a combination of the following search terms using the Boolean operators AND and OR: “mental health court,” “procedural justice,” “therapeutic jurisprudence,” graduation, completion, and termination. The databases I searched were: Web of Science, Scopus, PsycInfo, Social Work Abstracts, Criminal Justice Abstracts, and Sociological Abstracts. These databases were chosen because they provide a comprehensive search of social work and criminal justice research.

Inclusion and Exclusion Criteria

To be included in this review, the article must appear in a peer-reviewed journal, be published in English, have a sample comprised of adult MHCs in the United States, and use court completion status as the outcome variable. Articles were excluded if they are not peer-reviewed, they exist as a book or book chapter, they are completed as part of a dissertation (to avoid duplicating studies because dissertation chapters often become future article publications), the sample is of a juvenile MHC (due to differences in juveniles and adults and the added relationship of parents or guardians to the court process), the court is not located in the United States (because of variability among MHCs, attempting to make comparisons with MHCs in other countries is too broad for the purpose of this review), the sample is of a diversion court other than a MHC, or the study uses only recidivism as the dependent variable. In an attempt to ensure that all relevant studies were included in this review, I examined the references of each selected article to supplement articles found during the initial search.

The initial search of all the databases listed above yielded 285 articles in total. I reviewed and excluded studies that did not meet eligibility requirements and removed duplicate articles. After this initial review, 62 unique articles remained. Next, I read the abstracts of each article and excluded studies that were not conducted in the United States and dissertations. After this round, 13 unique articles remained, and those are included in this systematic review. Additionally, I found two articles in the reference sections that did not appear in my original search but were applicable. Of the 15 articles, 12 discuss the impact of sociodemographic characteristics on court completion, and three discuss the impact of procedural justice and/or therapeutic jurisprudence on court completion.

Results

All studies discussed below rely primarily on secondary data analysis of administrative records or data collected to answer prior research questions and have sample sizes ranging from 84 to 811. Relying on administrative records is expected given the research questions asked and the time that must pass for a person to complete or be terminated from MHC. Due to the nature of the outcome variable (i.e., MHC completion status), secondary data analysis is an appropriate means of data collection because the goal is to examine factors that influence whether a participant graduates. However, it does raise concerns regarding the accuracy and completeness of the recorded information; researchers are at the mercy of how the variables were operationally defined by the MHC, and these definitions may vary across courts. Because the focus of the research is MHC completion status, none of the studies have comparison or control groups. Three studies supplemented secondary data by either interviewing MHC participants or observing MHC status hearings (Broner, Lang, & Behler, 2009; Canada, Markway, & Albright, 2016; Ray & Dollar, 2013). Three studies also examined records from more than one MHC (Canada et al., 2016; Comartin et al., 2015; Ray, Kubiak, Comartin, & Tillander, 2015). All studies measured completion status as a dichotomous variable, and all but one used logistic regression to analyze data. Ray and Dollar (2013) used competing risk survival analysis, arguing that logistic regression does not appropriately model the time to court outcome. However, competing risk survival analysis is used when censoring (i.e., the subject does not experience the expected event during a specific time frame) is a concern, and in MHCs, a participant will experience either graduation or termination.

Because of the similarities in design and analysis among the studies, one method of evaluation is to examine how the researchers defined the variables. Due to limitations in the

sample or the administrative records, several studies do not consider all variables that theoretically contribute to completion status, and some measure variables differently. For example, when mental health diagnosis is included, a number of the studies dummy code this variable and use bipolar disorder or schizophrenia as the reference category that is compared to “other.” Substance use is another predictor variable that is included in eight of the studies, however, some researchers used dichotomous measures of whether the participant had a substance use diagnosis, while others relied on results of drug tests at various points during the MHC process. As a result, there is no clear pattern regarding the relationship of substance use on MHC completion. Measuring jail days and arrests is difficult because most researchers only had data for the county where the MHC was located, meaning that a participant could have been arrested in another county or state, and the MHC would not necessarily have that information recorded. Finally, an important limitation is that several studies do not use length of participation as a control variable. This variable is important because as the length of participation increases, the likelihood of graduation increases, meaning that it could potentially be a confounding variable. It is important to note that the limitations described above do not necessarily invalidate the finding but demonstrate the need for researchers to clearly explain how variables are defined and measured in their studies.

In some instances, the MHC in the study is unique in its eligibility guidelines or procedures. A 2013 study by Dirks-Linhorst, Kondrat, Linhorst, and Morani, and a subsequent 2015 study by Linhorst, Kondrat, and Dirks-Linhorst which used the same data set, is not necessarily generalizable because the MHC where the data were from only accepts ordinance violations, meaning those crimes that are less severe than state misdemeanors and felonies, but that still carry a maximum penalty of one year in jail. The MHC in this study also accepts adults

with “mental retardation” and other developmental disabilities (Dirks-Linhorst et al., 2013, p. 688). As a result, the researchers often had findings that conflicted with other studies. Just as it is important for researchers to describe how variables are defined and measured in their studies, it is also important for them to provide an accurate and detailed description of the MHC where data were collected so that readers can know what the court is like.

The most salient limitation to the existing research on the impacts of therapeutic jurisprudence and procedural justice is simply that it is a new line of questioning, and we do not have a good understanding of how these concepts influence MHC participants or of how to measure them in a reliable and valid way. Additionally, of the three studies that exist, two of them use secondary data from the MacArthur MHC study (Steadman, Redlich, Callahan, Robbins, & Vesselinov, 2011). Research with other samples is needed.

Individual-Level Predictors of Completion

The following predictors have most frequently been studied in the context of recidivism, and, for the purposes of this paper include sociodemographic characteristics (age, sex, race, housing status), clinical characteristics (mental health diagnosis and substance use history), criminal history, and index offense. This research has consistently demonstrated that MHCs reduce recidivism for participants, and results are even stronger for participants who graduate. Shifting focus to understand which factors influence whether participants graduate is the next step in MHC research.

Age. Bonfine, Ritter, and Munetz (2016) found that, when controlling for prior criminal history, type of index offense (i.e., felony vs. misdemeanor), gender, and race, as a participant’s age increased, the likelihood of termination decreased. However, Hiday, Ray, and Wales (2014) found that age was not a significant predictor of MHC graduation, when controlling for other

sociodemographic factors, including the number of arrests two years prior to MHC entry, court processing variables (days from key arrest to MHC entry and number of MHC status hearings), and participant behaviors (failure to appear for MHC hearings, arrests during MHC, and positive drug tests). Both studies analyzed data with logistic regression and coded age as a continuous variable. The key difference between the studies has to do with the MHC. The court in the study conducted by Hiday et al., (2014) is atypical in that it does not accept participants with felonies, is relatively short (six months, rather than one year or longer), and it does not use jail as a sanction. Therefore, although the sample size is smaller in Bonfine et al. (2016), the MHC from which data were analyzed is more representative of a typical MHC.

Sex. Two studies found that sex was not significantly associated with termination (Bonfine et al., 2016; Kothari, Butkiewicz, Williams, Jacobson, Morse, & Cerulli, 2014). One study found that men had increased odds of being terminated, while another study, relying on an interaction term for race and sex and using competing risk analysis, found that nonwhite males were 5.25 times more likely to be terminated than white females (Dirks-Linhorst et al., 2013; Ray & Dollar, 2013). However, more research is needed to explore the influence of sex on completion status because of the unique qualities of the MHC in the Dirks-Linhorst et al. (2013) study and the use of an interaction term and the analysis chosen by Ray and Dollar (2013) led to contradictory findings.

Race/Ethnicity. Existing research is unclear as to whether minority status is related to termination, though it does appear that African Americans, particularly African American males, are more likely to be terminated. A couple of studies found that race was not significantly associated with termination (Bonfine et al., 2016; Burns, Hiday, & Ray, 2013). However, Dirks-Linhorst et al., (2013) found that being African-American increased the odds of termination. As

described above, Ray and Dollar (2013) determined that there was an interaction between gender and race in the prediction of termination. These differences could be related to the MHC in the Dirks-Linhorst et al., (2013) study and either the use of the interaction term or the statistical analysis used by Ray and Dollar (2013). Because the findings have been contradictory, additional research is needed.

Housing status. Broner, Lang, and Behler (2009) found that, while homeless status did not predict re-arrest or graduation from MHC, housing instability, defined as having multiple housing transitions during the study period, had a negative impact on graduation for both homeless and non-homeless participants. Mental health court graduates averaged one housing transition during participation, while participants who dropped out or were terminated averaged two (Broner et al., 2009). One limitation of this study was that the subsample of homeless participants was small. Relying on competing risk analysis rather than logistic regression, Burns, Hiday, and Ray (2013) found that homelessness was negatively associated with graduation. Comartin et al., (2015) found that people living dependently, which the authors broadly defined as living with someone or in an institution, homeless, or “other,” were less likely to complete MHC. Therefore, existing research is quite mixed with regard to the influence of housing status on MHC completion, likely due to the way that the variable is measured. It would be beneficial for future studies to include both a dichotomous homeless variable and a categorical housing type variable.

Mental health diagnosis. There does not appear to be a relationship between mental health diagnosis and MHC termination, unless substance use is being factored in as a co-occurring disorder (Reich, Picard-Fritsche, Lebron, & Hahn, 2015). One study found that having more than one mental health diagnosis increased the odds of termination (Dirks-Linhorst et al.,

2013). Two studies using multiple categories of diagnoses found that there were no significant differences by diagnosis in MHC completion status (Bonfine et al., 2016; Comartin et al., 2015). However, in an exploratory analysis, an interaction term of a schizophrenia diagnosis and prior arrest predicted program failure, such that a diagnosis of schizophrenia doubled the rate of failure of participants with no prior arrest history (Reich et al., 2015).

Substance use. Based on existing research, substance use is the single greatest predictor of noncompliance with MHC mandates and termination (Burns, Hiday, & Ray, 2013; Hiday, Ray, & Wales, 2013). Interestingly, Dirks-Linhorst et al., (2013) found that a history of substance abuse decreased the odds of termination, however, this MHC is unique in its eligibility requirements. Also, it is important to remember that Burns, Hiday, and Ray (2013) used competing risk analysis rather than logistic regression to examine the influence of substance use on termination.

Criminal history. Researchers have used either number of arrests prior to MHC or number of days spent in jail prior to MHC as a proxy variable for criminal history. Ray and Dollar (2013) found that number of prior arrests was a significant predictor of termination, such that for each additional prior arrest, the likelihood of termination increased by eight percent. One study found that as the number of days spent in jail prior to MHC increase, the odds of graduation decrease (Burns, Hiday, & Ray, 2013). No studies have examined the relationship between severity of criminal history and MHC completion, possibly because of limitations in data available to researchers.

Index offense. Index offense is the crime that directly leads to a person's involvement with MHC. The influence of index offense on court completion status is difficult to discern, perhaps because of the ways that jurisdictions define and classify crimes. Individuals with index

crimes of a violent offense or an offense against a person were less likely to be terminated, while individuals with procedural violations, offenses against property, theft offenses, or felonies were more likely to be terminated (Bonfine et al., 2016; Burns, Hiday, & Ray, 2013; Dirks-Linhorst et al., 2013; Ray et al., 2015). Bonfine et al., (2016) found a suppression effect of clinical services on the relationship between procedural violations, which they did not define, and termination, such that as the number of clinical services participants received (as measured by service units) increased, the relationship between procedural violations or offenses against property and termination weakened. Burns, Hiday, and Ray (2013) were unable to include key offense type in the competing risk models due to small cell sizes.

Other Findings of Interest

The longer an individual is enrolled in MHC, the less likely he or she was to be terminated, and length of participation did not significantly differ among mental health diagnoses (Bonfine et al., 2016; Comartin et al., 2015). Hiday, Ray, and Wales (2014) found that arrest, failure to appear at status hearings, positive drug tests, and noncompliance negatively affected graduation more so than sociodemographic factors, suggesting that participants could overcome static sociodemographic factors and succeed in MHC. These findings suggest that length of MHC participation influences court completion status, but research is limited regarding which factors influence length of participation.

Directions for Future Research

The existing literature provides a good foundation for future research. It will be important to clearly define and operationalize variables, and explain how each variable is measured, as this has been a point of confusion up to this point. Prior research has defined completion status in different ways, with most studies using graduation and termination only. However, it is possible

for a MHC participant to complete the program without graduating. For example, if a participant has consistently met expectations, but not completed all the phases of the program before his or her probation period ends, then he or she is said to have completed (rather than graduated from) the program. This is an important distinction because it is possible that a person who had more time in a MHC could pick up a new charge before graduating.

It is also important for future research to clearly describe the MHC where they collected their data due to variation in how courts operate (e.g., phased program, eligibility requirements, use of sanctions and rewards, etc.). Some MHCs are quite different from others and findings are not necessarily generalizable. The use of interaction terms in regression models will add to our understanding of the relationships between sociodemographic factors and their impacts on MHC completion. Finally, future research should incorporate length of court involvement in MHC as both a control variable and an outcome variable. As length of involvement increases, it would logically follow that the likelihood of graduation increases. Additionally, research has shown that MHC participants who remain in MHC longer have reduced recidivism rates, even if they do not graduate (i.e., a “dose effect”). Understanding which variables affect length of involvement would be beneficial for MHC coordinators.

Procedural Justice and Therapeutic Jurisprudence

Three articles assessed the relationship between MHC completion and procedural justice or therapeutic jurisprudence. One article examined the relationship between MHC participants’ perception of procedural justice and court termination in two different MHCs from the same state (Canada & Hiday, 2014). Canada and Hiday (2014) found no significant differences in perception of procedural justice by race, sex, diagnosis, substance use, or index crime, nor was there a significant correlation between procedural justice and length of court involvement, age,

education, symptom severity, or criminal history. Though the researchers were unable to find a statistically significant causal relationship between perception of procedural justice and completion status, they did find an association between perceived procedural justice and graduation, such that those who graduated perceived higher levels of procedural justice than those who did not graduate. These findings suggest that there is an association between perception of procedural justice and program completion status, but this relationship is not a causal one. An important limitation to this study is that one instrument was used to measure procedural justice for interactions with all MHC personnel. Future research might benefit from asking about interactions with individual team members. Also, because participants' perception of procedural justice was only measured at the baseline interview, it might be beneficial to see if perception changes over time by administering the instrument at different times.

Redlich and Han (2014) asked whether principles of therapeutic jurisprudence, defined as knowledge, voluntariness, and procedural justice, predicted MHC completion. To answer this question, they used data from the MacArthur MHC study, which had a large sample size and included participants from four MHCs: two in California, one in Minnesota, and one in Indiana. Results of a structural equation model showed that the significant direct effect of therapeutic jurisprudence on MHC outcome (such that as perception of therapeutic jurisprudence increases, the likelihood of graduation increases) disappeared when measures of recidivism (arrests and prison entry) and performance during MHC (compliance and bench warrants) were included. Therefore, a fully mediated relationship exists, and therapeutic jurisprudence directly influences court performance, which, in turn, directly influences MHC outcome. This finding is difficult to interpret because the authors grouped criminal justice outcomes with performance during MHC because these factors were not independently significantly related to MHC outcome. There are

two notable limitations to this study. First, this study included individuals who were still involved with the MHC and counted them as noncompleters. Second, this study did not consider how other potentially confounding variables, like sociodemographic factors, jail history, and treatment/services, influence perceptions of therapeutic jurisprudence, compliance, and completion.

Redlich, Steadman, Callahan, Robbins, Vessilinov, and Ozdogru (2010) used degree of participation, as measured by compliance rated by the MHC coordinator and number of status hearings attended, in the MHC as a proxy for therapeutic jurisprudence to determine whether participation influenced completion status. The researchers explain that because MHC judges use therapeutic jurisprudence to form an alliance with participants, participants may experience a “dose effect” each time they appear in court, so those who are involved in court longer or have more status hearings might be more likely to graduate (Redlich et al., 2010). This study also relied on data from the MacArthur MHC study discussed above. A multivariate regression demonstrated that increased supervision was predictive of a higher likelihood of being terminated. This finding could be because as the length of participation increases, generally compliance increases, participants are required to attend fewer status hearings, and the likelihood of graduation increases. Therefore, if a participant has a high level of judicial supervision, it could be a fair presumption that he or she is noncompliant with court mandates. One limitation to this study is that the MHCs are not well-described, so it is unknown how often status hearings are held in each court. The authors do note that one court typically required participants to attend status hearings even if they are in jail, whereas another did not. Additionally, this study categorized individuals who were still involved with the MHC as noncompleters.

Limitations

The most noticeable limitation surrounding research regarding the impact of procedural justice and therapeutic jurisprudence on completion status in MHCs is that it is a relatively new line of research, and few studies exist. Of the three that do exist, two are by the same lead author, and two use the same data set for secondary analysis. The three studies each use individuals as the unit of analysis, rather than the court, which is not necessarily a limitation, but focuses on participant perception rather than court functioning. Because we know of steps that courts can take to increase or enhance a participant's perceptions of procedural justice and therapeutic jurisprudence, a new and unique line of research could examine if and how courts are implementing these steps and, if so, the impact these steps have on overall court completion rates.

Conclusion

The purpose of this literature review was to provide clarity and synthesize existing findings regarding the impact of both sociodemographic characteristics of participants on MHC completion and how procedural justice and therapeutic jurisprudence in the court influence completion. The most consistent finding in the literature is that substance abuse is the single greatest predictor of MHC termination. Ambiguity exists around the impact that other sociodemographic factors have on MHC completion. Although results are mixed, it seems that being older and being a woman increase the likelihood of graduation, while minorities, particularly African Americans, are more likely to be terminated. Mental health diagnosis does not appear to be related to termination.

Further research is needed that examines the characteristics described above, in addition to housing status, criminal history, and index offense. Additionally, it will be important for

researchers in the future to consider length of MHC involvement and how this both influences completion status and how sociodemographic factors are related to length of involvement. This is an important direction for future research because the longer a person participates in MHC, the lower his or her recidivism rates are in the future, therefore increasing participation will help MHCs achieve their goal of recidivism reduction. Finally, more research is needed that examines the impact of procedural justice and therapeutic jurisprudence on MHC completion. As participant perception of procedural justice and therapeutic jurisprudence increases, compliance with court orders increase. If participants comply with orders, they are less likely to be terminated from MHC, more likely to experience a “full dose” of the program and will experience more prominent and longer-lasting outcomes.

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Chapter 2: Exploring Individual Factors Related to Mental Health Court Completion

Abstract

Mental health court (MHC) participants who successfully complete (i.e., graduate from) the program recidivate less often and commit less severe future crimes than participants who do not graduate. However, if participants do not graduate from MHC, research indicates they still receive benefits from participation, such as a greater length of time between MHC exit and rearrest than those who did not participate. This paper addresses two research questions: 1.) Do individual characteristics of MHC participants predict whether or not they successfully complete the MHC program; and 2.) Do individual characteristics of MHC participants predict length of participation in MHC? To answer these questions, a review of existing MHC records ($n = 68$) was conducted, and a series of regression analyses were run. Results indicate that the seriousness of the index offense (i.e., the crime leading to MHC participation) does not predict termination. Results also demonstrated interaction effect between age and criminal history on graduation, such that as age increases, participants with more extensive criminal histories have increased odds of graduation. Finally, length of participation predicted graduation, but no statistically significant predictors of length of participation were found. There are two prominent limitations to this study. First, it was a review of existing records, which meant that variables of interest were pre-defined. Second, the sample was small and pulled from one court. Future research should continue to examine predictors of both court completion and length of participation and should utilize interaction terms in order to move beyond examining main effects alone.

Introduction

Adults with mental illnesses are three times more likely to interact with police and are nearly twice as likely to be incarcerated for minor offenses than adults without mental illness (Ennis, McLeod, Watt, Campbell, & Adams-Quackenbush, 2016; Hartford, Heslop, Stitt, & Hoch, 2005). An estimated 56% of state prison inmates and 64% of jail inmates have a mental illness (James & Glaze, 2006). When examining rates of serious mental illness (SMI), the numbers remain concerning at 10 to 20% of jail inmates and 25% of prison inmates (Steadman, Osher, Robbins, Case, & Samuels, 2009). Incarceration can lead to an exacerbation of symptoms, a high likelihood of victimization, and deterioration of mental health for inmates with mental illnesses (Costopolous & Wellman, 2017; Binswanger, Nowels, Corsi, Long, Booth, Kutcher, & Steiner, 2011; Mulvey & Schubert, 2016; Blitz, Wolff, & Shi, 2008).

Adults with mental illness sometimes end up in jails because police feel like it is their only option. According to a report published by the Treatment Advocacy Center in 2017 using responses from a national survey of service providers, an estimated 101,351 inpatient psychiatric beds exist in the United States, which is 29.7 beds per 100,000 people (Pinals & Fuller, 2017). Types and quality of services offered in jails and prisons vary, but a recent literature review of programming found that psychotropic medications, individual or group therapy, education, and job training programs are often available (Duwe, 2017). There is also a shortage of qualified professionals to provide these services in jails and prisons (Reingle Gonzalez & Connell, 2014). Finding ways to reduce the number of adults with mental illness who are arrested and providing better services to adults with mental illness are substantial concerns for social workers and policymakers.

Smart decarceration has been articulated by American Academy of Social Work and Social Welfare as a Grand Challenge for the profession (American Academy of Social Work & Social Welfare, 2015). Smart decarceration works to reduce the effects of incarceration through effective, sustainable, and socially just means, which includes improving existing alternatives to incarceration (American Academy of Social Work & Social Welfare, 2015). This Grand Challenge is especially noteworthy for adults with mental illnesses because the traditional criminal justice system is not equipped to adequately address their needs. Mental health courts (MHCs) were developed by judges as a bridge between the criminal justice and mental health systems because a proportion of adults with mental illnesses repeatedly cycle in and out of jails and prisons. Much of the existing research on MHCs examines whether they reduce recidivism and, according to a recent meta-analysis, have been found to be at least somewhat effective at achieving this goal, despite variability between how each court operates (Lowder, Rade, & Desmarais, 2018). The next step for researchers is to determine for whom MHCs work best and what mechanisms make MHCs effective.

This paper addresses two research questions: 1.) Do individual characteristics of MHC participants predict whether or not they successfully complete (i.e., graduate from) the court; and 2.) Do individual characteristics of MHC participants predict length of participation in MHC? First, a review of the literature is provided. Next, an explanation of variables and interaction terms used, and analyses conducted is given. Finally, results, implications, and limitations are discussed. Additionally, this paper furthers the use of intersectional theory in MHC research by examining interaction effects of demographic characteristics, rather than just the main effects of these characteristics. Because MHCs are at least somewhat effective at reducing recidivism rates of participants, particularly for participants who graduate, determining factors that influence

court completion status will help social workers, court personnel, and policymakers improve upon an existing intervention and will help address one of the Grand Challenges (Lowder, Rade, & Desmarais, 2018).

Literature Review

Mental Illness and Crime

The overrepresentation of adults with mental illness in both jails and prisons in the United States is well-documented (Fisher, Silver, & Wolff, 2008; James & Glaze, 2006; Skeem, Manchak, & Peterson, 2011). Using interview data collected through the National Survey on Drug Use and Health in 2016, the National Institute of Mental Health estimates that 4.2 percent of adults in the United States have a serious mental illness that substantially interferes with or limits daily life (“Mental Illness,” n.d.). Yet a survey of inmates by the U.S. Department of Justice’s Bureau of Justice Statistics found that 64 percent of local jail inmates and 56 percent of state prisoners have symptoms of a serious mental illness (James & Glaze, 2006).

This overrepresentation is especially troubling given the tenuous causal relationship between crime and mental illness. At one time, researchers believed that individuals with mental illness committed crimes as a direct result of their illnesses (White, Chafetz, Collins-Bride, & Nickens, 2006). Research has not supported this assertion in most instances (Mulvey & Schubert, 2016; Trestman et al., 2007; Pinta, 2009). In fact, Peterson et al. (2014) found from interviews and record reviews of a non-probability sample of adults with a diagnosed mental illness that not only are specific crimes unpredictably related to the symptoms experienced, but just one fifth of criminal behavior is either mostly or completely associated with symptoms of mental illness. A growing number of researchers have found that people’s environments have a greater influence over whether they commit crimes than mental illness alone, and mental illness is just one factor

among several (Epperson, Wolff, Morgan, Fisher, Frueh, & Huening, 2014; Fisher, Silver, & Wolff, 2008; Monahan & Steadman, 2012; Skeem et al., 2015). Therefore, providing mental health treatment alone, without addressing other criminogenic risk factors found in peoples' environments (e.g., housing, employment, education, substance use, etc.), is unlikely to have a large influence on recidivism (Andrews & Bonta, 2010).

Mental Health Courts

Mental health courts are one way that the criminal justice system tries to connect adults with mental illnesses with wrap-around services and to mandate treatment. Eligibility requirements, day-to-day operations, and services offered by MHCs vary widely from jurisdiction to jurisdiction, and there are no set rules that all MHCs must follow. This variability allows courts to adapt to the needs of the community; on the other hand, however, that same variability makes it difficult to evaluate the overall effectiveness of MHCs because each court uses different tactics and resources. For example, most MHCs rely on set guidelines that are clearly communicated to participants in order to explain court expectations. However, these guidelines vary from court to court, and how participants are notified of court expectations also varies. In 2008, the Council of State Governments identified ten essential elements that most MHCs have in common, but these elements are very broad, and each court may or may not have each element. Briefly, these elements are:

1. A broad-based group of community stakeholders;
2. Eligibility criteria that considers both the defendant's mental illness and his or her crime;
3. Timely acceptance into court and referral to services;
4. Use of least restrictive and individualized methods to promote public safety and ensure positive legal outcome for program graduates;

5. Informed consent to participate;
6. Comprehensive and individualized services;
7. Confidentiality;
8. Interdisciplinary court team;
9. Monitoring adherence to conditions and using individualized incentives and sanctions;
- and
10. Sustainability and evaluation of the court.

This list is not comprehensive, nor are all of the elements a requirement for MHCs. However, the list provides a broad framework of MHCs and how they function. Community stakeholders from the criminal justice, mental health, and judicial systems both help plan the MHC and are involved on the treatment team that assists the judge in making decisions about sanctions, rewards, and advancement through the phases of the MHC program. The eligibility criteria of MHCs varies, but there is a trend toward allowing participants with felony offenses, and, in some jurisdictions, allowing participants with violent offenses (Redlich, 2013). Mental health courts use incentives and sanctions to encourage treatment adherence, although the ratio of incentives to sanctions varies court by court, as do the types of incentives and sanctions used. Finally, MHC coordinators and service providers tailor treatment plans to the individual needs of each participant.

Despite this variability, a number of studies have demonstrated some degree of effectiveness of MHCs at reducing recidivism, though the definition of recidivism is determined by the researchers of each study and most studies rely on a nonexperimental designs (Burns, Hiday, & Ray, 2013; Canada, Markway, & Albright, 2016; Dirks-Linhorst & Linhorst, 2012; Herinckx, Swart, Ama, Dolezal, & King, 2005; Hiday & Ray, 2010; Hiday, Wales, & Ray, 2013;

McNiel & Binder, 2007; Moore & Hiday, 2006; Ray, Kubiak, Comartin & Tillander, 2015; Sarteschi, Vaughn, & Kim, 2011; Steadman, Redlich, Callahan, Robbins, & Vessilinov, 2011). For example, when calculating the number of rearrests as the measure of recidivism, researchers sometimes include new arrests that occurred while the participant was involved in MHC, while others only include arrests that occur post-exit (McNiel & Binder, 2007; Steadman, Redlich, Callahan, Robbins, & Vessilinov, 2011). Additionally, some researchers include any charges in their definition of recidivism, while others include any new arrests (Cosden, Ellens, Schnell, & Yamini-Diouf, 2005; Moore & Hiday, 2006). This variety in operationalization makes it difficult to determine how effective MHCs are in total.

Less research has been done on the ability of MHCs to result in symptom reduction or an improvement in the reported quality of life of participants, though initial results indicate that MHCs may be having a positive influence in these areas (Boothroyd, Mercado, Poythress, Christy, & Petrila, 2005; Cosden, Ellens, Schnell, & Yamini-Diouf, 2005; Keator, Callahan, Steadman, & Vessilinov, 2013; Luskin, 2001; Sarteschi, Vaughn, & Kim, 2011; Steadman, Redlich, Callahan, Robbins, & Vessilinov, 2011). Most studies exploring the effectiveness of MHCs rely on nonequivalent comparison groups due to the inability of researchers to assign participants to control and treatment groups, which limits the generalizability of findings. Cosden et al (2005) included in the study people who were referred to MHCs, then randomly assigned people to a control group and found that MHC participants demonstrated a greater improvement in psychosocial functioning than adults in traditional criminal courts. Recidivism rates and symptoms are reduced and improvements in life quality are greater if participants successfully complete (i.e., graduates from) MHC, though these studies face the same methodological limitations as ones focused on recidivism outcomes (Burns, Hiday, & Ray, 2010; Canada,

Markway, & Albright, 2016; Dirks-Linhorst & Linhorst, 2012; Herinckx, Swart, Ama, Dolezal, & King, 2005; Hiday, Wales, & Ray, 2013; Moore & Hiday, 2006; Ray, Hood, & Canada, 2015).

MHC participants end their participation in the court in one of three ways: graduation, completion, or termination. Graduation means that the participant fulfilled all requirements of MHC before the conclusion of his or her probation period. Completion means that the participant was fulfilling requirements of MHC, but his or her time left on probation was less than time left in MHC. Termination means that the participant failed to meet court requirements and was referred back to traditional criminal court. If participants do not graduate from MHC, research indicates that they still receive benefits from participation. Conducting a review of a non-probability sample of administrative data from one MHC, Burns, Hiday, and Ray (2013) found that a negative correlation between length of participation and number of days spent in jail after MHC; however, once graduation status was accounted for, this relationship became nonsignificant.

Mental Health Court Completion and Length of Participation

In addition to the reduction in recidivism and symptoms discussed above, Costopoulos and Wellman (2017) found in a review of records in a representative sample of both graduates and nongraduates of a MHC program, that 54% of those who graduated were still offense-free 3 years after release, as compared with 17% of those who did not graduate. Research has also demonstrated as length of participation in MHC increases, the chance that the participant will be terminated from or drop out of MHC decreases, and number of days spent in jail after participation also decreases (Burns, Hiday, & Ray, 2013; Lowder, Desmarais, & Baucom, 2016). In 2016, Lowder, Desmarais, and Baucom reviewed administrative records of MHC participants

and individuals receiving treatment as usual. In this study researchers found a significant relationship between length of participation and a decrease in recidivism, regardless of whether participants graduated (Lowder, Desmarais, & Baucom, 2016). Therefore, understanding why MHCs are effective, for whom they are most effective, and what factors contribute to length of participation are important for MHC personnel and researchers to know as a means of efficiently allocating limited resources and leading to more desirable long-term outcomes. Additionally, it is important for researchers to examine the interaction effects between different characteristics on both completion status and length of participation because the experiences of an African-American man with a shorter criminal history is likely different than that of a white woman with a longer criminal history, for example. Because increased length of participation in and graduation from MHC is related to a reduction in recidivism, understanding what factors predict both length of involvement and completion status is important.

Predictor and outcome variables are defined in a variety of ways in existing research, making it difficult to identify trends across studies. This variability contributes to confusion over the effectiveness of MHCs. Using a variety of methods and representative samples, research suggests that being younger, African-American, or male is individually associated with termination, as are substance use, prior jail days, and housing instability (Broner, Lang, & Behler, 2009; Burns, Hiday, & Ray, 2013; Dirks-Linhorst, Kondrat, Linhorst, & Morani, 2013; Hiday & Ray, 2013; Hiday, Ray, & Wales, 2014; Ray & Dollar, 2013). Burns, Hiday, and Ray (2013) found that time spent in MHC was negatively associated with termination. Surprisingly few studies have examined the interaction effects of participant characteristics on MHC completion or length of participation, though one study did demonstrate that a significant interaction between race and sex in terms of MHC completion when using a competing risk

analysis (Ray & Dollar, 2013). The purpose of this study is to examine whether individual characteristics predict both if a participant graduates from MHC and how long he or she participates in MHC.

Methodology

Study Setting

The MHC in this study is located in a small Southeastern city and began accepting participants in 2008. Its stated purpose is “to improve the provision of services to offenders with serious mental illness, with the ultimate goal of reducing the rate of criminalization and recidivism in this population” (MHC Coordinator, personal communication, 2016). Like other MHCs, this court attempts to blend supervision by the criminal justice system with behavioral health services. The MHC in this study is designed to take approximately 17 to 24 months for participants to complete and is organized into four progressive phases that culminate in graduation (MHC Coordinator, personal communication, 2016). It accepts participants both pre- and post-adjudication, with the majority of cases being post-plea agreement (MHC Coordinator, personal communication, 2016). The treatment team uses both incentives and sanctions, including jail time in some cases, to encourage compliance with court mandates (MHC Coordinator, personal communication, 2016). The treatment team is comprised of a court coordinator, a case manager, a representative from the behavioral health provider, a representative from probation services, a community member, a prosecutor, a defense attorney, and the judge.

To be eligible for this MHC, individuals must be 18 years of age or older and diagnosed with serious mental illness, as described in the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (MHC Coordinator, personal communication, 2016). Individuals

with co-occurring substance use disorders are eligible as long as their primary diagnoses are mental illness. The court accepts both misdemeanor and felony offenses. The treatment team considers prior criminal history and may exclude current or prior violent offenses, sexual offenses, and crimes against children, though eligibility is evaluated on a case-by-case basis.

The MHC holds weekly court sessions that participants attend, with frequency of attendance depending on which phase the participant is in (i.e., those further along in the program attend court less frequently). Before court sessions, the treatment team meets to review each case and make recommendations regarding incentives and sanctions. Court sessions are more informal than traditional criminal court hearings. Participants sit in the gallery, the treatment team sits around the room, and the judge, who does not wear a robe, stands behind a lectern in front of the gallery. The judge calls each participant up to the front and asks about his or her week. Depending on the situation, the participant is given a reward (incentive) or a punishment (sanction). Examples of incentives include verbal praise, a gift card to a local business, or toiletries; examples of sanctions include verbal reprimands, being required to attend extra court sessions, or jail time. The judge shakes the participant's hand at the end of each conversation, then the participant returns to the gallery and watches the remainder of the session.

Data Collection

The MHC coordinator granted the researcher temporary access to the court records, which are maintained in a cloud-based program. In addition to reviewing the MHC records, I was also granted temporary access to the clerk's docket to obtain index offense (i.e., the crime that led to MHC participation) and criminal histories of MHC participants. Before accessing court records, I obtained IRB approval and signed a confidentiality agreement with the MHC.

I collected participant data in the following categories: age, sex, race, index offense, number of criminal charges four years prior to MHC involvement, mental health diagnosis, substance use, housing status, length of court involvement (months), and court completion status. Because participation in this MHC can last for 24 months, no information for participants who entered MHC after 2014 was recorded to ensure that the individual was no longer involved in MHC. The total sample size was 68. The analysis reported in this paper relied on administrative data previously collected by the MHC. The variables of interest are defined in Table 2.1. Because of discrepancies in how housing type was coded, I did not use this variable in any analysis.

Missing Data and Outliers

I did not have a large amount of missing data once data collection was completed. One case was missing a value for length of participation. Four cases did not have values for substance use. Fifteen cases were missing information on housing, and two cases were missing diagnoses. Although these missing values did not comprise a large percentage of my data, because my sample size was small, I used multiple imputation to impute the missing values. First, I ran a missing values analysis, and Little's MCAR indicated that data were missing completely at random ($p = .997$). I used age, sex, race, criminal history, index offense, substance use, housing type, diagnosis, graduation, completion, reason for termination, and length of participation as both predictor variables and values to be imputed. I ran 100 iterations with 50 maximum case draws and five parameter draws.

After multiple imputation, I checked for influential outliers by examining scatterplots of residuals and Cook's D in both the multiple and logistic regressions. For the binomial logistic

regression, there were four influential outliers that I excluded from analysis. For the multiple regression, I identified one as an influential outlier and excluded it from the analysis.

Data Analysis

Binomial logistic regression. A binomial logistic regression was conducted with graduation (0 = no, 1 = yes) as the outcome variable (see Table 2.4). Binomial logistic regression is the appropriate analysis to use with a dichotomous dependent variable because it does not assume a linear relationship between independent and dependent variables but rather a linear relationship between independent variables and the logit of the dependent variable (Field, 2009). The data met the assumptions of binomial logistic regression. Multicollinearity between predictor variables was high in both the logistic and linear regressions due to the use of interaction terms, which was expected and does not influence the significance values (Allison, 2012). After removing influential outliers, the sample size was 64 for the logistic regression.

Due to the small sample size, I had to be selective in choosing the predictor variables to include in my binomial logistic regression. I included age, sex, and race because they are theoretically relevant and prior research has provided mixed results on the relationship between these demographic variables and court completion status (Dirks-Linhorst, Kondrat, Linhorst, & Morani, 2013; Ray & Dollar, 2013). Existing research indicates no clear relationship between mental health diagnosis and court completion, and I did not find a significant correlation between the two in my data, therefore I did not include diagnosis in my final regression model (Callahan, Steadman, Tillman, & Vessilinov, 2013; Comartin, Kubiak, Ray, Tillander, & Hanna, 2015). I included substance use in my model because existing research on the relationship between it and court completion is limited. Criminal history was included because it is a theoretically relevant variable since a person with a more extensive criminal history might be facing a longer sentence

if terminated from MHC, thereby increasing the likelihood that he or she will comply with court mandates. Index offenses of crime against another person and crime against property were also included because there is current movement towards allowing participants with more severe index offenses into MHC, while excluding those with low-level offenses (Fisler, 2015). I attempted to include the index offense of probation violation, but small sample size prevented the model from running correctly when it was included. Additionally, I included an interaction term for age and criminal history to see if the positive relationship between increased age and graduation was moderated by criminal history.

Linear multiple regression. I used linear multiple regression to determine predictors of length of participation (see Table 2.5). The data met the assumptions of multiple regression. Because of outliers, the sample size for the linear regression was 67. I entered the following variables sequentially into four blocks: age, sex, race, criminal history, index offense, substance use, Sex x Race, and Age x Criminal History. I included an interaction term for sex and race because Ray and Dollar (2013) found that it was a significant predictor of court completion, and I hypothesized that it could be a predictor of length of participation as well. Additionally, I tested for an interaction effect between age and criminal history on length of participation because age has consistently been shown to increase the likelihood of graduation, and I hypothesized that criminal history could be a moderator on both court completion and length of participation.

Results

Descriptive Statistics

The total sample size for this project was 68, and descriptive statistics were calculated before imputing data to deal with missingness (see Tables 2.2 and 2.3 for descriptive statistics). The sample was predominantly male (64.7%). All participants in this MHC during the specified

time period identified as either white (41.2%) or African-American (58.8%). The average age of participants was 36.03 years ($SD = 10.783$), and ages ranged from 19 to 67. The most common index offense was probation violation (33.8%), followed by crimes against another person (25%), and crimes against property (20.6%). The average number of charges prior to entering MHC was 9.71 ($SD = 7.844$), however the median was 7.50, and due to outliers, this is a better representation of the sample. The most common diagnosis was bipolar disorder (32.4%), and schizophrenia was the second most common (25%). Just over two-thirds of the sample had substance use issues (67.2%). Thirty participants in this sample graduated or completed the MHC program, while 38 did not.

Logistic Regression

I used a sequential entry method resulting in four blocks (see Table 2.4). Age, sex, and race were entered into Block 1. Only age was a significant predictor of graduation ($OR = 1.13$, $CI = 1.06, 1.22$). In Block 2, I added criminal history, crime against a person, crime against property, and substance use. Age remained a significant predictor, such that as age increased, the likelihood of graduation increased ($OR = 1.13$, $CI = 1.05, 1.22$). None of the other variables were statistically significant. In Block 3, I added the interaction term for age and criminal history. Age was no longer significant, but criminal history was, indicating a decrease in the likelihood of graduation as criminal history increases ($OR = .55$, $CI = .31, .95$). Additionally, the interaction term was also significant, indicating that as age increases, participants with a higher number of past charges were more likely to graduate ($OR = 1.02$, $CI = 1.00, 1.03$). In Block 4, I added length of participation. Criminal history, Age x Criminal History, and length of participation were all significant. A higher number of past charges decreased the likelihood of graduation ($OR = .39$, $CI = .16, .97$). The interaction term was also significant ($OR = 1.02$, $CI = 1.00, 1.05$).

Finally, the more months that a person participated in MHC, the more likely he or she was to graduate ($OR = 1.35$, $CI = 1.14, 1.60$).

Linear Multiple Regression

In Block 1, I included age, sex, and race, and only age was a significant predictor ($B = .33$, $CI = .117, .532$) (see Table 2.5). In Block 2, I added criminal history, probation violation, crime against a person, and crime against property, but only age was a significant predictor ($B = .28$, $CI = .07, .50$). In Block 3, I added substance use to the model, and still, only age remained significant ($B = .28$, $CI = .06, .50$). In Block 4, I added the two interaction terms Age x Criminal History and Sex x Race. With the inclusion of the interaction terms, no variables were statistically significant predictors of court completion.

Discussion

The majority of existing research on MHC outcomes focuses solely on recidivism, though a shift towards understanding how and for whom MHCs reduce recidivism is occurring (Edgely, 2014). Examining predictors of court completion is a next step for researchers because prior research has demonstrated that participants who graduate from MHC have more meaningful, positive, long-term outcomes than those who do not (Cosden, Ellens, Schnell, Yamini-Diouf, 2005; Ray, Hood, & Canada, 2015; Steadman, Redlich, Callahan, Robbins, & Vessilinov, 2011). This paper makes a unique contribution because it also examines interaction effects and predictors that contribute to increasing length of court participation. Although some may argue that we should not be increasing the time spent in the court system, research has demonstrated that the longer a person is involved in MHC, the more positive his or her outcomes, as measured in various ways – a longer time until next arrest, fewer severe future crimes, improvement in quality of life, etc. (Bonfine, Ritter, & Munetz, 2016; Burns, Hiday, &

Ray, 2013). While the larger goal is that people with mental illness should not be funneled into the justice system because of a lack of better options, we have not achieved that goal yet. Finding ways to improve the current system, while simultaneously working to keep adults with mental illnesses out of the system in the first place, is a more immediately attainable goal.

Findings from this project indicate that older participants are more likely to participate longer and graduate from MHC than younger participants. However, a few caveats exist to these findings. First, there appears to be an interaction between age and criminal history, such that, as age increases, having a higher number of charges increases the likelihood of graduation. Length of participation is also a significant predictor of court completion status, in that for each additional month that a person is involved in MHC, his or her odds of graduating increase by 1.35. Finding that longer participation increases the likelihood of graduation seems obvious, but it also indicates that MHC personnel and service providers should focus on how to increase length of participation as a means of increasing graduation rates. When length of participation and the interaction term for age and criminal history are added to the model, age alone is no longer a significant predictor of graduation. These findings are in line with a 2014 study conducted by Hiday, Ray, and Wales, which found that age was not a significant predictor of graduation when controlling for other sociodemographic factors. Sex was not a statistically significant predictor of court completion, nor was race. In the final model, as criminal history, measured by the number of charges prior to MHC entry, increased, the likelihood of graduation decreased. Other researchers found that a more extensive criminal history increased the likelihood of graduation, however in this study, it only became significant when the interaction term Age x Criminal History was included in the model. This difference could be due to low statistical power.

Prior research indicates that substance use is a significant predictor of court completion, though there are discrepancies in how the variable is defined (Burns, Hiday, & Ray, 2013; Dirks-Linhorst, Kondrat, Linhorst, and Morani, 2013; Hiday, Ray, & Wales, 2013). For example, substance use is a dichotomous variable in existing research (e.g., substance use = 1, no substance use = 0), but some researchers operationalized this as a diagnosis, while others operationalized it as positive drug screens. This discrepancy could explain why some studies found that substance use increased the likelihood of termination, while others found that substance use increased the likelihood of graduation. In the current study, when substance use is defined as “yes” or “no,” was not a significant predictor of court completion, again perhaps due to low statistical power.

Few studies have used interaction terms, which is a missed opportunity as membership in one category alone does not define a person’s experience. Ray and Dollar (2013) created an interaction term for race and sex and, using competing risk analysis, found that nonwhite men were 5.25 times more likely to be terminated from MHC than white women. Due to a small sample size and cell counts, I was unable to replicate this finding in the binomial logistic regression, although I did include Sex x Race as a predictor in the linear regression. In an attempt to advance the research, I created interaction terms for age and criminal history, because prior researchers have found criminal history and age to independently be significant predictors of completion. The finding in this study, that as age increases, participants with more significant criminal histories have better odds of graduating, is an important one. It supports the idea that MHCs should continue to accept participants with extensive criminal histories. In the same vein, I did not find a statistically significant relationship between index offenses of crimes against a person or crimes against property. There has been some debate over allowing people with more

severe index offenses or criminal histories to participate in MHC (Fisler, 2015). While I was unable to classify offense types into felonies or misdemeanors, this study adds some support to the idea that a person who commits a more severe index offense is no less likely to graduate.

As age increased, length of participation also increased, and age was the only significant predictor of length of participation. This finding could be because older participants are more likely to follow the MHC rules than are younger participants. However, when interaction terms for Age x Criminal History and Sex x Race were included, this relationship dissipated. This is likely due to the small sample size, which limits my ability to find statistically significant relationships. I expected to find that substance use was a predictor because, theoretically, it would seem that if a person has been identified as a substance user, then he or she would have several positive drug screens and could be terminated from MHC. However, that theory was not supported by these data.

Finding no significant predictors of length of participation when controlling for other characteristics is interesting. If the lack of significant predictors is not solely a result of the small sample size, it could mean that something other than individual characteristics contributes to how long a person is involved in MHC. An idea that I will be exploring in the next part of my dissertation is the influence that elements of procedural justice have on court completion and length of participation. Procedural justice is the belief that how a person perceives he or she is being treated throughout the court process will influence the outcome. When people believe that the process itself is fair, then they are more likely to comply with court orders. In MHCs, when a person feels that they are being treated with dignity and respect, like they have a voice in the process, and like the process is neutral, then he or she tends to be more willing to adhere to the

rules. By following the MHC rules, the participant is more likely to continue participating in MHC and ultimately graduate from the court.

Limitations

Small sample size is a significant limitation in this study. The sample is representative of this particular mental health court, but a larger sample size from more than one court would have been infinitely helpful because I would have had more statistical power, used more sophisticated models, and included more control variables. I had to be rather selective when deciding which variables to include in my final model, basing my decisions on prior research and which variables were significant at the bivariate level. Limited statistical power could be one reason for inconsistencies between my findings and previous research.

The MHC in this study appears to be representative of other courts in terms of eligibility requirements and general structure. Participants are accepted either pre- or post-adjudication, the court operates in phases, incentives and sanctions (including jail time) are used to encourage compliance with court mandates, the program typically last 17 to 24 months, participants with co-occurring substance use issues are allowed, and MHC hearings are less formal than traditional criminal court trials. Because this MHC is located in a small city, the resources available to participants are likely fewer than those available to participants in a court located in a larger city. This difference is sure to influence the outcomes for participants in the MHC and should be considered when interpreting the results of this study. Additionally, the day-to-day interactions between participants and MHC personnel may be different than those interactions in other jurisdictions. These differences are beyond the scope of this paper, but how and how often court personnel work and interact with participants also likely influences outcomes.

As with all existing research on MHCs, attention must be given to how variables are defined in this study when attempting to apply these findings to other courts. A limitation of this study is that, because this was an analysis of previously recorded court data, the variables were already operationalized, which may influence the applicability of results from this study to other courts. For example, I used a dichotomous variable for court completion status, rather than a categorical variable, because the sample did not have enough participants who completed (versus graduated from) the MHC. There may be differences among groups of participants who complete the program but don't graduate because their probation time runs out before they move through all of the phases. Additionally, the way variables were collapsed also effects how results should be interpreted and applied to other MHCs.

Future Research and Practice Implications

It is important for researchers to effectively describe the MHC they studied and clearly explain how they operationalized the variables so that readers can determine how the research applies to "their" courts. Researchers should continue to examine the relationships between sociodemographic variables and length of participation to see if there are ways that MHC staff can encourage participants to remain in MHC, thereby increasing the likelihood of graduation. Future researchers should also test for interaction effects in their models to see if the findings from this study hold across other MHCs, particularly if they have a larger sample size. A larger sample size will allow researchers to detect smaller effects, while controlling for potentially confounding variables. More interaction effects could be tested for if the sample size is larger as well.

Mental health courts have limited resources; therefore, court personnel would benefit from knowing the relationship between individual characteristics and court completion. This

knowledge would allow MHC staff to be better prepared for working with participants who, based on unchangeable characteristics, might struggle to comply with court mandates. Additionally, although MHCs are a criminal justice response to the high rates of incarcerated adults with mental illness, social workers who work in MHCs should advocate for the inclusion of benchmarks of program success beyond recidivism, such as symptom reduction or quality of life measures. The Essential Elements of a Mental Health Court discusses the need to use evidence-based approaches within the MHC, but the need exists for holistic services, integrative mental health and substance use treatment, and building up protective factors (rather than addressing risk factors of committing crimes) (Edgely, 2014). Doing so could help participants improve social skills, develop coping skills, and reinforce existing supportive networks, which aligns with social work's emphasis on identifying and promoting strengths of clients.

Conclusion

Existing research is fairly consistent in finding that MHCs reduce recidivism, to varying degrees. Because these courts are effective, but have limited resources, it is critical for court personnel to know which individual-level factors make a person more or less likely to graduate. This knowledge will allow for court coordinators and service providers to adapt treatment plans to increase the likelihood that participants will graduate, conserving and allocating limited resources in a more effective manner. In line with existing research that found participants with more serious index offenses are no less likely to graduate than those with minor index offenses, this study found that participants with index offenses of crimes against another person were just as likely to graduate as those with more minor index crimes. Results of the current study indicate that length of participation is a significant predictor of graduation, therefore it is important for future studies to consider which factors predict length of participation. This study found an

interaction effect between age and criminal history on court completion, and future studies should also consider interaction effects, rather than simply main effects.

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Appendix

Table 2.1
Operationalization of Variables

Variable	Operationalization
Age	Continuous variable recorded upon court entry
Race	Dichotomous variable recorded as white or African-American (0 = white, 1 = African-American)
Sex	Dichotomous variable (0 = male, 1 = female)
Substance Use	Dichotomous variable determined by court coordinator or service providers (0 = no, 1 = yes)
Mental Health Diagnosis	Categorical variable determined by service provider (1 = schizophrenia, 2 = schizoaffective disorder, 3 = bipolar disorder, 4 = other - major depression, post-traumatic stress disorder, and individuals with multiple diagnoses)
Index Offense	Categorical variable (1 = probation violation, 2 = crime against a person, 3 = crime against property, and 4 = other – fraud, forgery, etc.)
Criminal History	Continuous variable determined by number of charges participants had in the 10 years prior to MHC enrollment (which included the index crime)
Length of Participation	Continuous variable measured as the number of months a participant was enrolled in MHC
Completion Status	Dichotomous “graduation” (0 = no, 1 = yes)

Table 2.2
Descriptive Statistics for Categorical Variables

Variable	N	Frequency	Valid Percent
Sex	68		
Male		44	64.7
Female		24	35.3
Race	68		
White		28	41.2
African-American		40	58.8
Index Offense	68		
Probation Violation		23	33.8
Crime Against Person		17	25.0
Crime Against Property		14	20.6
Other		14	20.6
Diagnosis	66		
Schizophrenia		17	25.8
Schizoaffective		12	18.2
Bipolar Disorder		22	33.3
Other		15	22.1
Housing	53		
Homeless		3	5.7

Table 2.2 Continued

Variable	N	Frequency	Valid Percent
Alone		13	24.5
Family		27	50.9
Roommate		4	7.5
Other		6	11.3
Substance Use	64		
Yes		43	67.2
No		21	32.8
Graduate	68		
Yes		30	44.1
No		38	55.9

Table 2.3

Descriptive Statistics for Continuous Variables

Variable	<i>N</i>	<i>M</i>	Range	<i>SD</i>
Age (in years)	68	36.03	19 to 67	10.78
Criminal History (number of charges)	68	9.71	1 to 37	7.84
Length of Participation (in months)	67	16.93	2 to 49	9.81

Table 2.4
Binomial Logistic Regression (n = 64) – Predictors of Court Completion

	Model 1			Model 2			Model 3			Model 4		
	95% CI			95% CI			95% CI			95% CI		
	OR	Lower	Upper	OR	Lower	Upper	OR	Lower	Upper	OR	Lower	Upper
Age	1.13**	1.06	1.22	1.13**	1.05	1.22	1.02	.92	1.13	.96	.84	1.10
Sex	.54	.15	1.96	.53	.14	2.05	.50	.13	1.96	.42	.05	3.49
Race	1.92	.52	7.17	2.11	.50	8.85	2.76	.62	12.26	1.06	.12	9.08
Criminal History				.95	.87	1.04	.55*	.31	.95	.39*	.16	.97
Crime - Person				.54	.128	2.27	.65	.14	2.95	.70	.08	6.36
Crime - Property				1.38	.28	6.88	1.41	.26	7.61	3.75	.23	61.65
Substance Use				.73	.18	2.92	.67	.16	2.85	.57	.05	6.15
Age x Criminal History							1.02*	1.00	1.03	1.02*	1.00	1.05
Length of Participation										1.35*	1.14	1.60

* $p \leq .05$ ** $p \leq .001$

Table 2.5
Multiple Linear Regression (n = 67) – Length of Court Participation (in months)

	Model 1			Model 2			Model 3			Model 4		
	95% CI			95% CI			95% CI			95% CI		
	<i>B</i>	<i>Lower</i>	<i>Upper</i>	<i>B</i>	<i>Lower</i>	<i>Upper</i>	<i>B</i>	<i>Lower</i>	<i>Upper</i>	<i>B</i>	<i>Lower</i>	<i>Upper</i>
Age	.33**	.117	.532	.28*	.07	.50	.28*	.06	.50	.14	-.17	.45
Sex	-1.82	-6.29	2.65	-1.61	-6.18	2.95	-1.57	-6.17	3.03	.70	-6.07	7.47
Race	3.75	-.86	8.35	3.77	-1.17	8.71	3.59	-1.52	8.71	5.13	-1.05	11.31
Criminal History				-.075	-.37	.22	-.06	-.36	.24	-.59	-1.53	.35
Probation Violation				-3.86	-9.43	1.72	-3.98	-9.84	1.90	-4.00	-9.98	1.97
Crime - Person				-4.78	-10.96	1.40	-4.71	-11.07	1.66	-4.64	-11.09	1.80
Crime - Property				-3.06	-9.75	3.63	-3.27	-10.06	3.53	-2.63	-9.51	4.24
Substance Use							-1.25	-5.97	3.47	-1.38	-6.14	3.38
Age x Criminal History										-.02	-.01	.04
Sex x Race										-4.24	-13.74	5.27

* $p \leq .05$ ** $p \leq .001$

Chapter 3: Exploring the Relationship Between Procedural Justice and Mental Health Court

Completion

Abstract

Mental health courts (MHCs) have been shown to be moderately effective at reducing recidivism of participants. The next wave of research needed is to determine the underlying mechanisms to explain what makes MHCs more effective than traditional criminal courts. Although it is likely that there are several contributing components, the focus of this paper is on elements of procedural justice, as identified by Tyler (2007). An electronic survey was developed and distributed nationwide that included questions about trust, neutrality, voice, and respect in MHC interactions. An exploratory factor analysis was conducted, resulting in a one-factor solution (“clarity”). Clarity was then used in two regression analyses; however, it did not predict MHC outcomes. This survey also provided a snapshot of how MHCs currently operate. A limitation to this study is the small sample size ($n = 72$) and the inability, due to time and resources, to pre-test the survey. Future research should further explore the relationship between procedural justice and MHC outcomes, as well as how perceptions of procedural justice differ between MHC coordinators and participants. This knowledge could help court personnel take steps designed to increase participant perception of procedural justice, and participants with a higher perception of procedural justice tend to have better outcomes than participants with lower perception.

Introduction

The percentage of adults with mental illness in jails and prisons is substantially higher than in the general population (Ditton, 1999; James & Glaze, 1996). The Bureau of Justice Statistics estimates that 14% of prisoners and 26% of jail inmates self-reported that they met the threshold for serious psychological distress in the month leading up to being interviewed compared to five percent of the general population (Bronson & Berzofsky, 2017). It is important to note that accurately measuring the rate of mental illness in the incarcerated population is difficult due to differences in diagnostic criteria used in prevalence studies, differences between rates of mental illness between men and women, and differences between inmates in jails and prisons (Fazel, Hayes, Bartellas, Clerici, & Trestman, 2016). Because incarcerated adults with mental illnesses are more likely to recidivate than incarcerated adults without a diagnosis, the court system often sees the same defendants multiple times (i.e., the “revolving door”) (Reingle Gonzalez & Connell, 2014). These defendants often reappear in court because they received inadequate treatment (both medication and therapeutic interventions) while incarcerated and limited services upon reentry into the community (Reingle Gonzalez & Connell, 2014).

Mental health courts (MHCs), a type of problem solving court, were developed as a criminal justice response to this issue and based on prior successes of drug courts. Problem solving courts rely on *therapeutic jurisprudence* as their theoretical foundation, which “recognizes that the law and legal actors, as well as legal rules and procedures, can all have therapeutic or anti-therapeutic consequences” (Lurigio, Staton, Raman, & Roque, 2015, p 9). One way that this theoretical orientation is applied in all courts, including MHCs, on a day-to-day basis is through *procedural justice*. The theory of procedural justice “posits that the subjective experience of being heard by a decision-maker, being treated with dignity and respect,

and perceiving concern by authority figures is influential in the assessment of fairness” (Canada & Hiday, 2014, p. 323). Court participants who report experiencing higher levels of procedural justice are more likely to comply with court rules and orders (Lind & Tyler, 1998). Because a lack of compliance with court rules has been found to be correlated with termination in MHCs, it is important for court personnel to encourage compliance, thereby increasing length of participation and likelihood of successfully completing the MHC program (i.e., graduation) (Redlich & Han, 2014; Reich, Picard-Fritsche, Lebron, & Hahn, 2015).

Mental health courts vary in their eligibility requirements and operations, though key elements have been identified, such as regular court sessions (i.e., status hearings) with the judge, a team-based approach to decision-making and monitoring, encouraging compliance through the use of rewards and sanctions, and the decision to participate in the court is an informed choice made solely by the eligible participant (Council of State Governments, 2008). While these elements are present in most MHCs, the manner in which they are implemented or carried out differs among jurisdictions. To illustrate this point, MHC researchers have a saying, “If you’ve seen one mental health court, you’ve seen one mental health court” (Council of State Governments, 2008, p. 7). How these elements are implemented in day-to-day interactions with participants form the foundation of participants’ perception of procedural justice.

Studies examining the effectiveness of MHCs have demonstrated, typically through a review of past records or nonequivalent groups designs, that MHCs are at least somewhat effective at reducing recidivism (Dirks-Linhorst & Linhorst, 2012; Herinckx, Swart, Ama, Dolezal, & King, 2005; Hiday & Ray, 2010; Hiday, Wales, & Ray, 2013; McNiel & Binder, 2007; Moore & Hiday, 2006; Steadman, Redlich, Callahan, Robbins, & Vessilinov, 2011). In a study relying on participant interviews and administrative records, Canada, Markway, and

Albright (2016) found that participants who successfully met all requirements of (i.e., graduate from) MHC experienced greater reductions in future arrests than participants who did not graduate (i.e., were terminated for noncompliance or dropped out). Therefore, determining which procedures are highly correlated with or predict court completion status is important. Successful MHCs, as measured by graduation rate, demonstrate that less successful courts could improve their outcomes by emphasizing elements that are highly correlated with graduation. A better understanding of underlying mechanisms that are related to MHC success would allow court staff to better tailor court operations to improve the odds of participants graduating.

The purpose of this study is two-fold: first, to provide a description of how MHCs nationwide currently function; and second, to use survey responses to determine whether a relationship exists between court characteristics, specifically those representative of procedural justice, and MHC completion. First, I provide a review of the literature surrounding procedural justice in MHCs, then I discuss the methods, analysis, and results of the current study. I end with a discussion of the results and their application and implications for social work. This study can help social workers address one of the Grand Challenges articulated by American Academy of Social Work and Social Welfare: to promote smart decarceration strategies because it furthers the understanding of the underlying mechanisms at work in MHCs (American Academy of Social Work & Social Welfare, 2015).

Literature Review

Procedural justice theory is the idea that if defendants in the criminal justice system perceive the legal process as fair, then they are more likely to comply with and accept the validity of laws and court mandates (Tyler, 2007). A perception of fairness could reduce the likelihood of technical violations, such as being held in contempt of court for “talking back” to

the judge, and in MHCs, it increases the likelihood of treatment adherence and court completion (Canada & Watson, 2013). Often, procedural justice is discussed in terms of how the MHC judge interacts with court participants. In a case study of the Brooklyn Mental Health Court, the researcher noted that the judge's individual relationships with each participant were essential to achieving the goals of the MHC (Fisler, 2005). *Therapeutic jurisprudence* is a related term that is often discussed in conjunction with procedural justice. It is the belief that legal actors can have a positive influence on the lives of court participants. Procedural justice can be seen as one way that therapeutic jurisprudence is carried out in MHCs. It should be noted that interactions with MHC personnel, other than the judge, can also influence a participant's perception of procedural justice (Canada & Hiday, 2014).

Little research exists on the influence of procedural justice and therapeutic jurisprudence on MHC completion. Three peer-reviewed articles were identified that assessed the relationship between MHC completion and procedural justice. Canada and Hiday (2014) asked 80 MHC participants from two different courts in the same state to complete a questionnaire regarding their perception of procedural justice, based on their interactions with MHC staff, at one point in time. They found an association between perceived procedural justice and termination and that perception of procedural justice was higher among participants who graduated than those who did not (Canada & Hiday, 2014). A limitation of this study is that the same instrument was used to measure procedural justice for interactions with all MHC personnel at a baseline interview, rather than asking about interactions with individual team members or at multiple points in time to determine whether perceptions change.

Redlich and Han (2014) used secondary data from the MacArthur MHC study ($n = 448$) to determine if therapeutic jurisprudence, which they defined as incorporating procedural justice,

predicted MHC completion. Using structural equation modeling, they determined that therapeutic jurisprudence directly influenced recidivism during MHC participation and MHC performance, which in turn, influenced MHC completion, which was documented in court records. While this study is notable for its large sample size, this study included participants who were still involved with the MHC and classified them as noncompleters.

The final study, conducted by Redlich, Steadman, Callahan, Robbins, Vessilnov, and Ozdogru (2010), only discusses therapeutic jurisprudence tangentially. The researchers explain that MHC judges use therapeutic jurisprudence to form an alliance with participants, participants interact with judges each time they attend court sessions (i.e., status hearings), and there appears to be a “dose effect” that occurs, such that participants who are involved in court longer have fewer future arrests (Redlich et al., 2010). The MacArthur MHC study data were used once again, and a regression demonstrated that participants who were terminated experienced more judicial supervision (i.e., number of court hearings divided by number of days in MHC) than those who graduated ($p < .0001$) (Redlich et al., 2010). This finding may seem counter-intuitive if more supervision was supposed to represent more doses of therapeutic jurisprudence. However, participants who struggle to follow court rules are sometimes required to attend more court sessions or meet with court staff more frequently. Discrepancies in the current literature clearly demonstrate a need for future research on the topic.

The current study focuses on procedural justice, specifically from the court coordinator’s point of view to explore the ways that MHCs are implementing the four elements of procedural justice identified by Tyler: voice, neutrality, respect, and trust (2007). However, it is worth noting that procedural justice is likely only one possible explanation for why MHCs appear effective at reducing recidivism of participants. For example, MHCs address criminogenic needs

and some may be loosely following the Risk-Needs-Responsivity model, which states that the responses (i.e., services, interventions, etc.) used need to match the individual's risk level and specific needs (Andrews & Bonta, 2010). There is also overlap between Braithwaite's 1989 theory of reintegrative shaming and elements of procedural justice, specifically in that both emphasize the significance of respect. Reintegrative shaming puts forth that when community members and authority figures express disapproval and follow-up with gestures signaling reacceptance, a sort of productive shame may follow and curb reoffending (Braithwaite, 1989). Reintegrative shaming is more frequently used in MHCs than traditional criminal courts, and its use likely contributes to an increased perception of procedural justice among participants, according to findings from an observational study of 91 MHC cases and 87 traditional court cases (Ray, Dollar, & Thames, 2011). Reintegrative shaming captures the way that MHC staff respectfully convey disapproval for violations of court mandates. Because of the shared characteristics between reintegrative shaming and procedural justice, Braithwaite's theory will be encompassed in how it contributes to inducing participants' perception of procedural justice. Examining the influence of these other theories and models on completion status is beyond the scope of this paper but should be incorporated into future research once more is known about the relationship between procedural justice and MHC completion.

Methodology

Design

An electronic survey was developed using Qualtrics (2018, February) for MHC coordinators to complete. Questions were based on an examination of existing literature surrounding MHCs and procedural justice. Earlier MHC surveys were reviewed and questions were adapted for the purposes of this study (Lurigio, Staton, Raman, & Roque, 2015; Redlich,

Steadman, Monahan, Robbins, & Petrila, 2006). The majority of responses were measured on a 5-point Likert scale with answers ranging from “always” to “never,” and there were a few open-ended items to allow coordinators to provide more detailed responses. The survey consisted of 37 questions and took approximately 15 minutes or less to complete. Eleven questions addressed procedural justice, while the others asked about day-to-day court operations and court characteristics. The MHC coordinators were instructed to provide information about: program statistics regarding completion and termination rates, how the judge and coordinator interact with participants, how informed the participant is about rules prior to enrolling in MHC, and how much of a voice participants have in the court process. The purpose of the questions was to both explore how MHCs nationwide are currently operating and to determine if and how elements of procedural justice are implemented in MHCs.

A team of scholars reviewed the survey to check for potential bias in the wording of questions to address face validity. To assess content validity, a professor in the social work department at the University of North Carolina with experience in the area of criminal justice and mental illness and a professor in the social work department at the University of Tennessee who worked as a MHC coordinator also reviewed the survey.

Subjects

The GAINS (Gather, Assess, Integrate, Network, and Stimulate) Center for Behavioral Health and Justice, a division of the Substance Abuse and Mental Health Services Administration, provides a list of active MHCs in the United States, and it currently lists approximately 350 courts. The list has email addresses and phone numbers for coordinators of half of the courts. I used this list as a starting point for locating MHCs, searched jurisdictions’

court websites, and other problem-solving court listservs, and I found 265 email addresses for MHC coordinators.

I emailed the survey to every coordinator for whom I had an email address. I chose to send it to everyone because I anticipated a low response rate due to the nature of electronic surveys. I only asked the MHC coordinator to complete the survey because he or she should have the most in-depth knowledge as to how the court operates and would be more likely to complete the survey than the judge, who would be the only other person involved with the court with enough information to answer all of the questions.

Constructs Measured

Four key procedural justice principles have been identified – voice, neutrality, respect, and trust – and this survey asked questions in an attempt to get at the heart of these principles (Tyler, 2007). When participants believe that they have been given an opportunity to share their stories and have been treated fairly and respectfully, then they are more likely to comply with court orders (Tyler, 2007). This belief reduces the likelihood of technical violations, and, in MHCs, increases the likelihood of treatment compliance, and graduation. Graduation, in turn, contributes to a reduction in recidivism for MHC participants. Because of this connection, understanding if and how MHCs are operating in a way that fosters procedural justice is important, and this survey sought to ask MHC coordinators about these efforts.

Because existing research emphasizes variability among MHCs in terms of how they operate, I asked a number of questions to explore how courts function day-to-day. These questions asked about the use of incentives and sanctions to encourage participant compliance with court mandates, eligibility requirements of the court (i.e., whether the court accepts felonies or misdemeanors, if there are certain types of crimes that prohibits a person from participating,

etc.), whether the court uses phases of participation, the average number of participants, and how many years the court has been in operation.

Finally, I asked respondents to estimate the percentage of participants who successfully completed (i.e., graduated from) the MHC since it started, as well as to estimate the percentage of participants who had been dismissed (i.e., terminated) from the court. For graduation rates, participants had the option of selecting the following from a drop-down menu: 0 to 5%, 6 to 15%, 16 to 25%, 26 to 35%, 36 to 50%, 51 to 74%, or 75% or more. For termination rates, participants could select: 0 to 5%, 6 to 15%, 16 to 25%, 26 to 35%, 36 to 50%, 51 to 74%, or 75% or more. While these are imperfect measures of graduation and termination rates because of the potential for human error or bias, asking court coordinators directly for these data was the best way for me to get the information for MHCs nationwide due to limited time and financial resources. Distributions of these variables are discussed below.

Description of Mental Health Courts

The response rate was 29.4%, with 78 MHC coordinators responding to the survey. The average response rate for electronic surveys is around 10% (Dillman, Smyth, & Christian, 2014). Any response that had less than 50% of questions answered was excluded from the analyses. This resulted in a sample size of 72. Because very little missing data remained, values were imputed using mode replacement because the questions were on an ordinal scale.

Nearly 40% of MHC coordinators reported that they meet with participants weekly, although 34.7% said that participants meet regularly with other court staff (case manager, probation officer, judge) and only meet with the coordinator if an issue arises because the coordinator takes on a more administrative role. The vast majority (90%) reported that the status hearings in their MHC are less formal than traditional criminal court sessions. Most MHCs

(80.6%) offer participants a way to provide anonymous feedback regarding their experiences in the court. Thirty-seven percent of MHCs have been in operation for more than ten years, while 32% are fairly new, being in operation for one to five years.

Ninety-seven percent of coordinators reported using incentives, such as verbal praise, certificates, reduced supervision, and gift cards, to encourage participant compliance at least some of the time. Almost 97% of respondents reported using sanctions, such as verbal reprimand, essays, or increased supervision, at least some of the time. However, one coordinator stated, “We don’t sanction mental illness.” Ninety-three percent reported that their court uses jail time as a sanction. While using jail as a sanction is common, research suggests that it may not encourage participants to comply with court mandates in the future and that incarceration could exacerbate symptoms and disrupt continuity of care (Edgely, 2014).

Forty-two percent accept cases both pre- and post-adjudication. Ninety percent of respondents said that their MHC accepts index offenses (i.e., the crime leading to MHC involvement) that are classified as nonviolent felonies, 50% said their court allows violent felonies. Only 12.5% of respondents reported that people with an index offense of a sexual-related crime were eligible. Eighty-seven percent of respondents reported that an individual’s criminal history does influence his or her eligibility for MHC. Several courts exclude people with past sex offenses, violent crimes, or gang-related crimes. A few respondents noted that people’s pasts were evaluated on a case-by-case basis, and index offense and criminal history were considered in conjunction with treatment history and the context of the crimes committed (see Table 3.1).

Data Analysis

An exploratory factor analysis (EFA) was conducted using Mplus (Muthén & Muthén, 2017) to see if the 11 questions regarding procedural justice could be reduced and to explore latent constructs. After determining the items to use, a composite score was created for the factor resulting from the EFA and internal consistency was measured using Cronbach's alpha using SPSS 25. This factor was used as the independent variable in two ordinal logistic regressions. The first regression examined whether this factor predicted graduation rate; the second regression examined whether this factor predicted termination rate. A series of correlations was examined to see if a relationship existed between items and graduation and termination rates.

Results

Seventy-five percent of respondents reported graduation rates of 36% or more, with almost 60% reporting graduation rates between 51 to 74%. Thirty-six percent of respondents reported termination rates of 16 to 25%, with 18% selecting the second most common category, 6 to 15%. To run the ordinal regressions, both graduation and termination variables were collapsed into four categories.

The EFA revealed a one-factor solution as the best fit, based on the chi-square statistics and an examination of the scree plot. The literature on appropriate cutoff values for factor loadings is mixed, with some statisticians arguing that sample size should be considered and others arguing that sample size is irrelevant (Hair et al., 1998; Field, 2005). Based on Tabachnick and Fidell (2007), I set 0.5 or greater as the cutoff value for factor loadings. Using a conservative cutoff value for factor loadings reduced the number of items to six. Conceptually, five of the items fit together to encompass a composite measure of "clarity" (Table 3.2). I then used SPSS to

determine Cronbach's alpha, and the final one factor solution with five items had a Cronbach's alpha of .68.

The five items that comprised the clarity factor are:

During status hearings, how frequently does the judge:

1. Use plain language (i.e., he or she avoids legal jargon and uses terms that most people would understand) when talking to participants?
2. Explain why a sanction was given?

How frequently do the following situations occur in your MHC:

3. Eligible participants are given printed brochures or materials explaining MHC.
4. Participants are notified of courtroom rules prior to their first status hearing.
5. Participants are told how decisions are made regarding the application of incentives and sanctions.

Each of the above items were measured on a 5-point Likert scale, ranging from "always" to "never". The possible scores of the clarity factor ranged from 5 to 25, with a mean of 22.71 ($SD = 3.11$). The interquartile range was 21 to 25, and the median was 24. Thirty-six percent of respondents had a score of 25.

The first ordinal logistic regression asked whether MHC coordinators' perception of procedural justice, as measured by the clarity factor, predicted graduation rates, and results indicated that clarity was not a statistically significant predictor of graduation (Table 3.3). The second ordinal logistic regression asked whether the MHC coordinators' perception of procedural justice, as measured by the clarity factor, predicted termination rates, and results indicated that clarity was not a statistically significant predictor of termination (Table 3.4). I also ran the above regressions with years in operation as a control variable. Again, neither model was

a good fit, nor were clarity or years in operation statistically significant predictors of graduation or termination rates (Tables 3.5 and 3.6).

Knowing that clarity was not a statistically significant predictor of either graduation or termination rates, I ran a series of correlations to see if there was a relationship between court characteristics and both graduation and termination rates. Using Spearman's rho, the only statistically significant correlation was between how frequently the MHC coordinator uses plain language when speaking with participants and termination rate (Spearman's rho = -.300, $p = .01$). Respondents who reported that they "always" use plain language also reported that a lower percentage of participants had been terminated from their MHC than respondents who said they used plain language "most of the time."

Discussion

Mental health courts are a creation of the criminal justice system. Existing research demonstrates that MHCs are at least moderately effective at their primary goal, which is to reduce recidivism of adults with serious mental illnesses, and is based on evaluations of single courts, multi-site studies, longitudinal studies (some of which match treatment and control samples), and at least one meta-analysis (Almquist & Dodd, 2009; Burns, Hiday, & Ray, 2013; Cosden, Ellens, Schnell, Yamini-Diouf, Wolfe, Petrila, & Monahan, 2003; Frailing, 2010; Moore & Hiday, 2006; McNeil & Binder, 2007; Sarteschi, Vaughn, & Kim, 2011; Steadman, Redlich, Callahan, Robbins, & Vessilinov, 2011). The evidence indicates that MHCs reduce recidivism, and the focus of current research, including the present study, has shifted to explaining how and why MHCs are effective and for whom are they most effective.

Procedural Justice

The purpose of this survey of MHC coordinators was two-fold: to provide a snapshot of how MHCs are operating nationwide and to examine whether MHC coordinators' perception of procedural justice influences or predicts graduation and termination rates. The exploratory factor analysis reduced the number of items measuring procedural justice to one single factor that included questions about whether the judge uses plain language when speaking with participants, whether participants were given written material about the court prior to agreeing to participate, whether participants were told of courtroom rules before the first court session, whether participants were told how decisions were made regarding the use of incentives and sanctions, and whether the judge explains why a sanction is being given to a participant during status hearings. Grouped together, these items appear to measure clarity, which is not an element of procedural justice previously identified in the literature. However, the items included in this clarity factor encompass both fairness and communication, which, although not specifically identified by Tyler as elements of procedural justice, are related to neutrality in that the items ask whether court personnel explain rules and court expectations in a way that participants will be more likely to understand. The exploratory factor analysis did not indicate that other items hung together to form other factors. When a composite score was created for the items measuring clarity, the scores did not predict or correlate with the percentage of participants that graduated or were terminated from the MHC.

At first glance, finding that the clarity subscale of the survey was not related to graduation or termination percentages was surprising. I expected to find that coordinators who indicated that their courts promoted elements of procedural justice would have higher rates of graduation. However, other components of MHCs could be influencing court completion rates,

for example, maybe MHCs are improving the social functioning skills of participants, which influences completion. Edgely (2014) pointed out that “variation in MHC design and a confluence of legal, medical, psychosocial, and psychological elements would make isolation of elements responsible for positive outcomes a challenging task” (p. 3). As such, there could be several reasons, both statistical and conceptual, for the statistically nonsignificant results in the current study.

First, it could be that survey responses do not vary enough. Most respondents provided positive reports about how their court is operating, resulting in skewed data. This could be an example of social desirability bias, even though the survey is anonymous. No one wants to say they are not doing it “right,” and this led to little variation in the answers. It could be that the differences between responses are too small to detect. An inherent shortfall of Likert scale responses is the inability to know how much different responses are from one another; what one person might consider “most of the time,” another might call “always.” Due to the nature of electronic surveys, probing follow-up questions could not be asked to gain a deeper understanding of actual differences between responses. Having low variability among observations decreases the correlations between variables (Goodwin & Leech, 2006).

Second, perhaps the statistical power to detect significant relationships is too low because of the small sample. There are approximately 350 MHCs in the United States. I found contact information for 265 of these courts and sent the survey to all of the court coordinators. I received 78 responses, which is a 29.4% response rate. The average response rate for an electronic survey is around 10% (Dillman, et al., 2014). Although mail and telephone surveys have higher response rates, due to limited time and resources, neither was a viable option for this study.

A central concern is that why some coordinators chose to respond while others did not is unknown, and if these groups differ in meaningful ways, it could bias survey results. One possible way that respondents and nonrespondents differ here is that respondents were more likely to perceive their MHC as encouraging voice, neutrality, respect, and trust, therefore they felt more comfortable answering survey questions than a coordinator who feels his or her MHC is not emphasizing these elements. A less insidious reason for nonresponse could simply be that the survey went into the coordinator's spam folder, and he or she never saw it. Finally, who responded could be influenced by how engaged or conscientious the coordinator is in the first place or even how busy the coordinator is (e.g., if the coordinator is the only staff member for the MHC, then he or she might not have time to respond). Given that response rates tend to be low for electronic surveys, nonresponse bias is a common concern. While it is likely that non-response bias is a limitation here, I took steps to reduce this by sending reminder emails, making the survey available for several weeks, allowing respondents to start and come back to the survey, ensuring it took 15 minutes or less to complete, and making it anonymous. Additionally, when I interpreted the results of the EFA, I used 0.5 as the cutoff for the factor loading in an attempt to mitigate the effects of the small sample size.

Third, the survey could lack construct validity, meaning the items on the survey do not really measure procedural justice. Although the current factor analysis indicated that a one-factor solution was the best fit for this data, the items did not appear to measure any of the characteristics of procedural justice as identified by Tyler (2007). This could be because the questions were not written in a way that gets at the heart of the elements of procedural justice. It could also be that I asked the coordinators to distinguish between how they themselves communicate with participants, as well as how the judges in their MHC communicate. Perhaps

coordinators were unable to distinguish between their interactions with participants and the judge's interactions. Additionally, a one factor measure of procedural justice alone might not be enough to influence graduation or termination rates. Future studies should conduct a pretest of items thought to measure trust, neutrality, voluntariness, and voice to mitigate or avoid this problem.

Finally, it could be that procedural justice only influences outcomes when it is measured in terms of participant perception, not how court coordinators think they are doing in terms of building trust, conveying neutrality and voluntariness, and providing participants with a voice. The possibility exists that factors other than direct measures taken by the MHC influence participants' perception of procedural justice, like individual characteristics or social supports of participants. A study conducted by Canada and Watson (2013) used quantitative and qualitative measures of participant perception of procedural justice and noted that, although quantitative scores were similar among participants, qualitative responses given during a semi-structured interview differed. It is possible that a similar difference would be found between the quantitative scores on the present survey and interviews with MHC coordinators. An interesting future project would be to measure both participant and coordinator perceptions of procedural justice to see if a correlation exists.

Current State of Mental Health Courts

Beyond whether this measure of procedural justice predicted graduation, this survey provided a snapshot of how MHCs are currently operating. Mental health court literature often indicates that there is vast variability in MHCs from jurisdiction to jurisdiction, however responses to this survey did not indicate that. Thirty-five percent of respondents said that, as the MHC coordinator, they did not have much face-to-face contact with court participants. Eighty-

eight percent of respondents reported that their MHC uses phases of participation. Ninety-seven percent also said that their court uses incentives to encourage compliance, while almost 98% of respondents said their court uses sanctions. Specific types of incentives and sanctions used were similar among MHCs, and 93% of respondents reported that their court uses jail time as a sanction. Ninety percent of courts accept participants with index crimes of nonviolent felonies, which is a characteristic of newer MHCs. It was hypothesized by Redlich et al. in 2005 that third- and fourth-generation MHCs might exclusively accept participants with felonies. However, based on the way the question was asked in this survey, it is impossible to know if these courts exclusively accept participants with felony charges. Eighty-seven percent of respondents said that a person's criminal history influences whether he or she is eligible for MHC, with 63% reporting that those with past sexual offenses were ineligible to participate. Sixty percent of respondents reported that, since their MHC began, at least 51% of participants successfully completed (i.e., graduated from) their court, and 64% said that the termination rate for their court was 25% or less.

A key underlying theory of MHCs is therapeutic jurisprudence. Findings from this survey indicate that MHCs are still more focused on criminal justice outcomes than rehabilitative or recovery outcomes, such as symptom reduction or quality of life improvements. If the goal of MHCs is to increase public safety, rather than only decreasing recidivism, then MHCs might better achieve this goal by also focusing on recovery outcomes. The task of assessing compliance still falls heavily on the criminal justice system: most coordinators rely on reports from probation officers and drug screens to determine whether a participant is complying with his or her treatment plan and court orders. Eighty-nine percent reported that attending a majority of appointments was a requirement for graduation. Seventy-nine percent said that participants must

have a certain number of negative drug screens before they could graduate. More than half of respondents reported that participants must have no new crimes in order to graduate, while 44% said that participants could not have any new probation violations. Interestingly, 81% of respondents reported that participants must have achieved previously identified quality of life goals in order to graduate, some of which include finding employment, earning a high school diploma or GED, and obtaining housing stability.

It is not surprising that the emphasis is still placed on criminal justice outcomes, given that MHCs are a criminal justice system response to a social problem that is the result of several interrelated systems. However, if rehabilitation, leading to reduced future recidivism, is the long-term goal, then MHCs would benefit from incorporating a more recovery-based approach. Mental health courts could still work toward achieving criminal justice outcomes, but they could incorporate recovery or rehabilitation into their stated goals. To evaluate these goals, court personnel could use the Connectedness, Hope, Identity, Meaning, and Empowerment (CHIME) guidelines, laid out by Leamy, et al. (2012). These guidelines provide a framework to assess recovery-oriented practices (Ferrazzi & Krupa, 2016). The five measurable recovery processes are: Connectedness to friends, family, and community; Hope and optimism about the future; Sense of identity that is capable of overcoming obstacles; Meaning and purpose to life; and Empowerment (Leamy et al., 2012). Mental health courts coordinators could explicitly include these areas in their processes for evaluating whether a person moves on to the next phase of the program, as well as whether he or she ultimately graduates in order to apply a rehabilitative approach in conjunction with a criminal justice approach.

Limitations and Future Research

A limitation to this project was the small sample size, which reduced statistical power and, therefore, the ability to detect statistically significant relationships. To improve response rates of future surveys and reduce nonresponse bias, researchers should offer an incentive for participation and use multiple modes of surveying (both mail and electronic options, for example), if they have financial resources and time available to do so. A second limitation to this survey was that it was not pre-tested due both to time limitations and concerns about reducing sample size. If future researchers can take steps to increase response rates, then they should also pre-test the survey.

Given the existing literature and the results from this survey, a reliable and valid measure of procedural justice is needed, particularly for measuring how courts are implementing elements related to this concept. An intriguing future line of research would be to examine the correlation between MHC participants' and coordinators' perception of procedural justice and the relationship to MHC completion. Findings from the current study indicate that, broadly speaking, MHCs are emphasizing similar elements. It is likely that there is a difference in how the courts are carrying out these elements, as well as what wraparound services are available in the community. A second line of research would be to follow-up on survey responses with qualitative interviews of respondents. Interviews could help uncover more meaningful differences between MHCs and control for what appears to be a social desirability bias in this project. The interviewer could ask coordinators why they ranked their courts highly and ask for more detailed explanations than were possible in the current survey, providing a richer description of MHCs. Interviews could also shed light as to whether MHCs are as similar as the

responses to this survey indicate, or whether there remains significant variability, as indicated in the earlier literature.

Policy and Practice Implications

Because of the value that social work places on the dignity and worth of each individual person and the right of clients to self-determination, continued opportunities for MHC participants to voice their opinions about the court process and their needs is key. Participants have identified that they feel as though they are being supported, both by MHC staff and service providers, as well as by other participants (Canada & Gunn, 2014). This support aids in the recovery of participants, and progress towards recovery should be highlighted more and recovery outcomes should be measured.

One way of further emphasizing the significance of recovery is for MHCs to formalize a peer support network for participants. This recommendation is based on a qualitative study conducted in 2014 by Canada and Gunn, during which they found that supportive services, including peer support, were important for motivating client change. Peer support in MHCs could take the form of hosting an informal “coffee hour” before regular status hearings so that participants could interact with one another or incorporating the use of self-help or social skills groups in MHC treatment plans. These suggestions would provide participants with new support systems, which could be especially important for this population because the likelihood of recidivism is influenced by a person’s environment and peers.

Additionally, given the importance that participants’ perception of procedural justice plays in MHC success, it would be helpful to increase MHC personnel’s understanding of procedural justice. For example, MHC staff could work to increase the involvement of participants in the decision-making surrounding treatment options, and judges should continue to

explain how decisions are made in a clear and easy-to-understand way and work towards establishing a therapeutic alliance with participants.

Recovery-based outcomes could be measured before, during, and at the end of MHC participation. After interviewing MHC participants, Canada and Ray (2016) identified four areas that participants said influenced their program success and recovery: psychiatric stability, sobriety, improved relationships, and engagement in life and mental health. A plethora of symptom severity measures exist that could be utilized by MHC personnel, with the acknowledgement that service engagement and quality will play a large role. Canada and Ray (2016) suggested that taking a harm reduction perspective (i.e., length of time a person before relapse), rather than an abstinence-based approach to substance use, as a measure of success for sobriety is more nuanced and helps participants celebrate individualized successes. A quality of life scale could be used to measure how a person's engagement in life and mental health changes as they participate in MHC. Finally, measuring improved relationships would likely involve a more individualized, and perhaps, qualitative measurement. These suggestions would provide MHCs with a more meaningful description of outcomes, beyond public safety alone.

Conclusion

The incarceration of adults with mental illness is an identified problem in the US. One of the Grand Challenges of Social Work is to promote smart decarceration strategies as a means of reducing incarceration rates and redressing social disparities among the incarcerated. MHCs can be one facet to a multi-faceted approach by diverting people who do not need to be apart from society and who would be better served in the community. Existing research has demonstrated that MHCs are at least moderately effective at reducing recidivism, and the next wave of research needed is to identify for whom are MHCs most effective and what are the underlying

mechanisms that explain why they reduce recidivism. The present study examined how the relationship between procedural justice and MHC completion and provided a snapshot of how MHCs nationwide currently operate. These questions are directly applicable for social workers because MHC coordinators often have a background in social work, and MHC staff sometimes includes case managers with social work degrees.

The current paper provides an overview of existing research on procedural justice and demonstrates a need for further research on the relationship between procedural justice and MHC outcomes. The survey used in this study asked MHC coordinators to answer questions about how four previously identified elements of procedural justice (voice, respect, neutrality, and voluntariness) are implemented in their MHCs. An exploratory factor analysis found a one factor solution for this data, resulting in a factor comprised of items that represented “clarity.” However, this clarity factor did not predict MHC outcomes. The lack of statistically significant findings could be due to several reasons, both statistical and conceptual. Future research should use a multi-modal approach to increase the response rate and measures should be pre-tested, if possible.

The results of this survey did offer a more current description of MHCs, which is was needed. Just over one-third of respondents reported that participants meet regularly with MHC personnel other than the coordinator. Almost 81% provide participants with the opportunity to give anonymous feedback regarding their experiences during their time in the MHC. While 37% of respondents reported that their court had been in operation for more than ten years, 32% said their court had been operating for five years or less, indicating that the number of MHCs continue to grow. The majority (93%) of MHCs continue to use jail as a sanction, even though the possible harm might outweigh the benefits. The trend toward allowing participants with

index offenses of nonviolent felonies has continued, and 50% said their court allows index offenses of violent felonies. Eighty-seven percent of respondents said their court bases eligibility decisions in part on a person's criminal history.

The relationship between procedural justice and MHC completion is an area that needs more research. Procedural justice has been posited as one mechanism contributing to the reduction in recidivism for MHC graduates, but many questions still exist about the relationship. To my knowledge, no prior studies have examined to what extent MHCs implement elements of procedural justice. While this study did not find a statistically significant relationship, more research is needed to determine if this finding is accurate due to study limitations. It is important for MHC personnel to know if they are able to influence how a participant perceives the MHC process, particularly if the participant's perception influences whether he or she graduates from MHC. This would be one step in understanding how and why MHCs reduce recidivism.

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Appendix

Table 3.1
Descriptive Statistics of Mental Health Courts (n=72)

Variable	N	Frequency	Valid Percent
Graduated	72		
0-25%		10	13.9
26-50%		19	26.4
51-54%		27	37.5
> 75%		16	22.2
Terminated	72		
0-15%		20	27.8
16-25%		26	36.1
26-50%		20	27.8
> 51%		6	8.3
On average, how frequently do you meet with participants?	72		
Monthly		5	6.9
Once a week		28	38.9
Two to three times a week		11	15.3
Daily		3	4.2
Other		25	34.7
As compared to traditional criminal court sessions, how formal are status hearings in your MHC?	72		
Significantly less formal		32	44.4
Less formal		33	45.8
About the same		7	9.7
Does your MHC use phases of participation?	72		
Never		8	11.1

Table 3.1 Continued

Variable	N	Frequency	Valid Percent
Sometimes		1	1.4
Most of the time		8	11.1
Always		55	76.4
To what extent do participants have the opportunity to provide anonymous feedback regarding their experiences in your MHC?	72		
Never		14	19.4
Sometimes		13	18.1
About half the time		1	1.4
Most of the time		12	16.7
Always		32	44.4
Is your MHC pre- or post-adjudication?	71		
Pre-adjudication		10	14.1
Post-adjudication		26	36.6
Both		30	41.7
Other		5	6.9
How many years has your MHC been in operation?	69		
Less than 1 year		1	1.4
1-5 years		22	31.9
6-10 years		20	29.0
> 10 years		26	37.7
Does your MHC use incentives?	71		
Never		2	2.8
Sometimes		3	4.2
About half the time		3	4.2

Table 3.1 Continued

Variable	N	Frequency	Valid Percent
Most of the time		14	19.7
Always		49	69.0
Does your MHC use sanctions	71		
Never		1	1.4
Sometimes		7	9.9
About half the time		4	5.6
Most of the time		15	21.1
Always		44	62.0
Does an individual's criminal history influence his or her eligibility for MHC?	71		
No		9	12.7
Yes		62	87.3

Table 3.2
Exploratory Factor Analysis and Frequency Distributions

Item Name	Item	Factor Loading	Distribution
Q3_Quest	During status hearings, how frequently does the judge ask participants open-ended questions?	0.459	Never = 0 Sometimes = 4.2% About half the time = 1.4% Most of the time = 26.4% Always = 68.1%
Q3_Lang	During status hearings, how frequently does the judge use plain language when talking to participants?	0.542*	Never = 0 Sometimes = 0 About half the time = 0 Most of the time = 27.8% Always = 72.2%

Table 3.2 Continued

Item Name	Item	Factor Loading	Distribution
Explain	During status hearings, how frequently does the judge explain why a sanction was given?	0.760*	My court does not use sanctions = 2.8% Never = 0 Sometimes = 1.4% About half the time = 0 Most of the time = 8.3% Always = 87.5%
Q6_CLang	Thinking about your interactions with participants, to what extent do you use plain language in conversations?	0.324	Never = 0 Sometimes = 0 About half the time = 0 Most of the time = 26.4% Always = 73.6%
Q6_CCom	Thinking about your interactions with participants, to what extent do you tailor how you communicate to a participant's needs or symptoms?	0.485	Never = 0 Sometimes = 0 About half the time = 0 Most of the time = 19.4% Always = 80.6%
Q6_TxPlan	Thinking about your interactions with participants, to what extent do you involve participants in developing their MHC treatment plans?	0.338	Never = 9.7% Sometimes = 5.6% About half the time = 4.2% Most of the time = 23.6% Always = 56.9%
Q8_Mater	How frequently are eligible participants given printed materials explaining the MHC?	0.524*	Never = 6.9% Sometimes = 2.8% About half the time = 0 Most of the time = 11.1% Always = 79.2%

Table 3.2 Continued

Item Name	Item	Factor Loading	Distribution
Q8_Rules	How frequently are participants notified of courtroom rules prior to their first status hearing?	0.806*	Never = 2.8% Sometimes = 9.7% About half the time = 2.8% Most of the time = 25.0% Always = 59.7%
Q8_Decis	How frequently are participants told how decisions are made regarding the application of incentives and sanctions?	0.659*	Never = 1.4% Sometimes = 6.9% About half the time = 4.2% Most of the time = 22.2% Always = 65.3%
Q14_Feed	In your court, to what extent do participants have the opportunity to provide anonymous feedback regarding their experiences in your MHC?	0.520	Never = 19.4% Sometimes = 18.1% About half the time = 1.4% Most of the time = 16.7% Always = 44.4%
Q14_Bail	In your court, to what extent do bailiffs receive training about how to work with adults with mental illness?	0.421	Never = 18.1% Sometimes = 36.1% About half the time = 12.5% Most of the time = 20.8% Always = 12.5%

* indicates item that was included in composite score for “Clarity” factor

Table 3.3

Ordinal Logistic Regression – Graduation Rate by Clarity

							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	[0-25%]	-2.189	1.613	1.842	1	.175	-5.351	.973
	[26-50%]	-.757	1.592	.226	1	.634	-3.876	2.362
	[51-74%]	.891	1.593	.313	1	.576	-2.231	4.013
Location	Clarity	-.016	.069	.054	1	.817	-.152	.120

Link function: Logit.

Table 3.4

Ordinal Logistic Regression – Termination Rate by Clarity

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[0-15%]	-1.659	1.602	1.072	1	.300	-4.799	1.481
	[16-25%]	-.130	1.589	.007	1	.935	-3.245	2.986
	[26-50%]	1.702	1.618	1.106	1	.293	-1.470	4.874
Location	Clarity	-.031	.069	.198	1	.657	-.167	.105

Link function: Logit.

Table 3.5

Ordinal Logistic Regression – Clarity and Years in Operation Predicting Graduation

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[0-25%]	-1.608	1.678	.918	1	.338	-4.897	1.682
	[26-50%]	-.129	1.661	.006	1	.938	-3.385	3.128
	[51-74%]	1.542	1.674	.849	1	.357	-1.739	4.823
Location	Clarity	.015	.077	.039	1	.843	-.135	.165
	[Less than 1 year]	.374	1.861	.040	1	.841	-3.274	4.022
	[1-5 years]	-.873	.575	2.304	1	.129	-2.001	.254
	[6-10 years]	.638	.577	1.221	1	.269	-.493	1.769
	[More than 10 years]	0 ^a	.	.	0	.	.	.

Link function: Logit.

a. This parameter is set to zero because it is redundant.

Table 3.6

Ordinal Logistic Regression – Clarity and Years in Operation Predicting Termination

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[0-15%]	-.939	1.668	.317	1	.573	-4.208	2.330
	[16-25%]	.627	1.665	.142	1	.707	-2.637	3.891
	[26-50%]	2.442	1.704	2.054	1	.152	-.897	5.781
Location	Neutrality	.014	.077	.033	1	.855	-.136	.164
	[Less than 1 year]	1.227	1.878	.427	1	.514	-2.454	4.908
	[1-5 years]	-.506	.572	.782	1	.376	-1.626	.615
	[6-10 years]	-.469	.572	.671	1	.413	-1.591	.653
	[More than 10 years]	0 ^a	.	.	0	.	.	.

Link function: Logit.

a. This parameter is set to zero because it is redundant.

Conclusion

The purpose of this dissertation was to examine the relationship between mental health court (MHC) completion and individual and court characteristics. Paper 1 provided an overview of the literature on MHC completion, length of participation, individual characteristics, and procedural justice, and addressed limitations of the studies. In Paper 2, the relationship between participant characteristics and court completion was examined through a review of records from a MHC in a Southeastern city. Results indicate that seriousness of the index offense leading to MHC participation does not predict termination, and an interaction effect exists between age and criminal history. Age was a statistically significant predictor of length of court participation, until interaction terms were added to the model, then no statistically significant predictors remained. Finally, in Paper 3, MHC coordinators were asked to respond to a survey to both obtain a snapshot of how MHCs currently operate and to explore if elements of procedural justice (voice, trust, respect, and neutrality) are being implemented, and how those elements relate to MHC completion rates. Survey results provided an updated description of MHCs, however, after conducting an exploratory factor analysis, a statistically significant relationship was not found between the one-factor solution (“clarity”) and MHC graduation or termination rates. Although limitations exist in both studies, largely due to small sample sizes reducing statistical power, this dissertation advances the research by moving beyond asking if courts are effective and focusing on for whom and why are they more effective than traditional criminal courts. These questions are particularly important for social workers, who work in and with MHCs. By better understanding how MHCs work, court personnel can more effectively allocate limited resources. Future studies would benefit from the use of multilevel modeling to determine how much influence both individual- and court-level factors have on MHC completion.

Vita

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