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Research demonstrates that mental health courts (MHCs) lead to improved outcomes compared to traditional criminal court processes. An underlying premise of MHCs is therapeutic jurisprudence (TJ). However, no research, to our knowledge, has examined whether MHC outcomes are predicted by TJ principles as theorized. In the present study, we examined whether principles measured at the onset of MHC enrollment (knowledge, perceived voluntariness, and procedural justice) predicted MHC completion (graduation). Using structural equation modeling with MHC participants from four courts, a significant, direct relationship between TJ and MHC completion was found, such that higher levels of TJ were associated with higher rates of success. Although this direct effect became nonsignificant when mediator variables were included, a significant indirect path remained, such that increased levels of initial perceived voluntariness and procedural justice, and MHC knowledge, led to decreased rates of new arrests, prison, MHC bench warrants, and increased court compliance, which, in turn, led to a higher likelihood of MHC graduation.

Keywords: mental health courts, therapeutic jurisprudence, procedural justice, structural equation modeling

The emergence of mental health courts (MHCs) in the last 15 years is an important new development in mental health law (Petrila, 2003). MHCs are specialty criminal courts with dockets usually exclusive to individuals with mental illnesses. MHCs, developed as one among many strategies designed to stop the revolving door of repeated cycling through the criminal justice (CJ) system, are recognized as being much less formal than traditional adversarial courts (Casey & Rottman, 2003; Petrila, 2003). In some ways, MHCs adhere to the risk–need–responsivity model (see Andrews & Bonta, 2010) in that the courts typically identify those most in need, develop individualized treatment needs, and ultimately aim to decrease recidivism.

An underlying premise of MHCs is therapeutic jurisprudence (TJ; Lurigio & Snowden, 2009; Wiener, Winick, Georges, & Castro, 2010; Winick, 2002; Winick & Wexler, 2003). TJ is an interdisciplinary approach that is concerned with how the law and legal actors can be therapeutic change agents. Winick (2002) stated that "problem solving courts often use principles of therapeutic jurisprudence to enhance their functioning" (p. 1064), and Johnston (2012) stated that "therapeutic jurisprudence is the most

popular justification for mental health courts" (p. 525). The theory of TJ is specific in outlining that voluntary choice (in this case, into the MHC) and appreciation of requirements are important to promoting behavioral change. For example, in addressing how problem solving court judges can be therapeutic change agents, Winick (2002) emphasizes the TJ principles of avoiding paternalism and respecting autonomy. He states, "If individuals who make their own choices perceive them as noncoerced, they will function more effectively and with greater satisfaction" (p. 1072). Additionally, according to the TJ model of problem solving courts devised by Wiener et al. (2010), clients' perceptions of TJ-relevant concepts, such as procedural and distributive justice, and reintegrative shaming, serve to influence perceptions of the legitimacy of law, which, in turn, leads to improved outcomes (case, mental health, family and academic success, etc.).

Despite the important link between TJ and MHCs, no research, to our knowledge, has examined whether improved court outcomes are predicted by TJ principles. However, there is a smattering of research on this link in other specialty courts. For example, Gottfredson, Kearley, Najaka, and Rocha (2007) examined the impact of drug-court participation on perceptions of procedural justice, and then on recidivism outcomes. They found that "participation in the DTC [drug treatment court] increases the number of judicial hearings attended, which directly reduces the variety of drugs used and also reduces the variety of crimes committed by increasing perceptions of procedural justice" (p. 26). Thus, Gottfredson et al. found an indirect link such that participation in the drug court led to increased feelings of procedural justice (via hearings attended), which, in turn, led to fewer varieties of crimes committed. However, perceptions of procedural justice did not directly influence the outcomes of drug variety and multiple drug use. Similarly, Hepburn and Harvey (2007) did not find the threat of sanction in drug court to influence success in the court. More specifically,

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Hepburn and Harvey studied two drug courts, one that threatened a 120-day jail sentence for noncompliance and one that was prohibited from imposing jail as a sanction. They found clients from these two drug courts did not differ significantly on average length of time in the court, the proportion who remained in the court, or the proportion who successfully completed the program. Thus, insofar as threat of jail as a sanction is an aspect of TJ, Hepburn and Harvey did not find support for the theorized link between TJ and later court outcomes.

Overall, little research has been conducted on the predictive relationship between therapeutic constructs and future court success. This paucity of research is surprising, given that (a) the theory of TJ expects such a relationship, and (b) MHCs (as well as other specialty courts) are premised on TJ (see Lurigio & Snowden, 2009; Winick, 2002). The research on other problem-solving courts, although scant and therefore preliminary, does not show a readily recognizable relationship between TJ and success.

MHC Success

Success in MHC can be defined in a multitude of ways, including not getting rearrested, reducing jail stays, becoming engaged with community treatment, graduating, and generally complying with court orders. The purpose of this article is to address whether knowledge and perceived choice and procedural justice, principles of TJ, measured at the beginning of MHC enrollment is predictive of later MHC successful completion (graduation). There is consistent, if not robust, evidence that MHCs lead to improved outcomes in comparison with traditional criminal court processing. Most of the outcome research on MHCs has focused on recidivism (for an overview, see Sarteschi, Vaughn, & Kim, 2011); this corpus of research has determined that MHC participants have reduced arrests and jail days compared with offenders with mental illness not diverted through such courts (Moore & Hiday, 2006; Steadman, Redlich, Callahan, Robbins, & Vessilinov, 2011). However, within MHCs, not all participants succeed, as some are terminated from the court, some are arrested on new charges, and some abscond. In a four-site study of MHCs, termination rates varied from a low of 17% to a high of 47% (Redlich, Steadman, et al., 2010). Thus, although overall MHCs have shown to be superior compared with treatment as usual, within MHCs, some defendants do not succeed.

What predicts MHC success? This has been a driving question of several research projects. As mentioned, most research has examined recidivism as a main measure of success. For example, via meta-analysis, Sarteschi et al. (2011) found a -0.54 effect size in favor of MHCs reducing recidivism over that of comparison samples. Although MHC participants have been found to have lower recidivism rates and fewer jail days than similarly situated offenders processed traditionally, criminogenic factors (such as prior arrest history) tended to be more robust predictors of MHC outcomes in comparison with demographic and clinical factors (Steadman et al., 2011). However, though perhaps less robust, noncriminogenic factors, such as severity of mental health problems (see Andrews & Bonta, 2010), have also been found to influence the likelihood of recidivism and reincarceration among MHC clients (e.g., Herinckx, Swart, Ama, Dolezal, & King, 2005; Steadman et al., 2011).

Another factor found to predict recidivism is length of involvement in the MHC, such that those who receive the full "dose" of

the MHC (i.e., graduate) are less likely to be arrested in comparison with those not in the MHC and those who spent less time in the court (Herinckx et al., 2005; Hiday & Ray, 2010; McNiel & Binder, 2007). But what predicts completion status? In one study of four MHCs, demographic and criminal factors, and data collection site, did not significantly predict MHC completion status (Redlich, Steadman, et al., 2010). Rather, the only factor to significantly predict completion status was perceived compliance with judicial/court orders (as rated by court personnel), although compliance itself was predicted by being White, having less serious arrest charges, and data collection site. Dirks-Linhorst, Kondrat, Linhorst, and Morani (2011) found that being male and African American raised the likelihood of MHC termination.

Less research has been conducted on treatment-related outcomes, but the research, in general, demonstrates that MHC participants receive more treatment than comparison samples (Boothroyd, Poythress, McGaha, & Petrila, 2003; Trupin & Richards, 2003). Luskin (in press) determined that MHC participants in the Marion County, Indiana, court received more outpatient treatment services than a treatment-as-usual matched sample. However, she also found that demographic (age, gender, and race) and criminogenic (prior arrest history and current charge types) factors were not significant predictors of treatment receipt 6 months after enrolling in the court or being arrested; rather, having a diagnosis of major depression (in comparison with diagnoses of schizophrenia or bipolar disorder) was influential.

Overall, the research demonstrates that MHC participants fare better than those offenders in comparison samples who were processed in the traditional CJ system. At the same time, within MHC samples, some succeed and some do not. The factors found to predict MHC "success" have not been always been consistent. On the one hand, demographic factors of the MHC participants themselves generally do not influence MHC success (but see Dirks-Linhorst et al., 2011). On the other hand, other predictive factors are found to be less consistent, often depending upon the outcome measure of success being studied. For example, criminogenic factors, such as extent of prior arrests and severity of current charges, have been found to be quite influential when the outcome under examination is new arrests and perceived compliance in the court, but have not been found to directly influence the outcomes of MHC graduation or receipt of treatment in the community (Dirks-Linhorst et al., 2011; Redlich, Steadman, et al., 2010).

MHC Comprehension

A major component of MHCs is that they are voluntary. Indeed, if entry into the courts was not voluntary, arguably, the courts would violate basic notions of equality under the law (Seltzer, 2005). And although there is no explicit requirement that the decision to enroll in a MHC be knowledgeable per se, there is an explicit requirement that legal decision making in general (including the decision to plead guilty, which most MHCs require) be knowing and intelligent (as well as voluntary). As such, in "The Ten Essential Elements of Mental Health Courts," Thompson, Osher, and Tomasini-Joshi (2008) recommend that defendants provide informed consent (see also Linhorst et al., 2010; Redlich, 2013). Specifically, Element Five states,

> Defendants fully understand the program requirements before agreeing to participate in the MHC. They are provided legal counsel to

inform this decision, and subsequent decisions about program involvement. Procedures exist in the MHC to address, in a timely fashion, concerns about a defendant's competency whenever they arise (p. 5).

Although recommended and legally required, research indicates that significant minorities of MHC defendants are not making informed and voluntary enrollment decisions (Boothroyd et al., 2003; Poythress, Petrila, McGaha, & Boothroyd, 2002).

Recently, Redlich, Hoover, Summers, and Steadman (2010) examined awareness of the voluntary nature (making a voluntary decision, but also knowledge that the choice is voluntary) and the level of understanding of court procedures and requirements among newly enrolled MHC participants in two courts. Most (66 % to 71%) said it was their choice to enroll in the court, but at the same time, about 60% claimed not to have been told the decision to enroll in the court was voluntary or told of the requirements *prior* to enrolling. Indeed, voluntary awareness and perceived voluntariness to enroll were found to be related (see also Poythress et al., 2002). Specifically, MHC clients claiming to be unaware of the voluntary choice perceived more coercion than those who were aware of the choice. In a multivariate analysis, perceptions of voluntariness were not predicted by sociodemographic traits such as gender or criminal charges. Rather, MHC voluntariness was predicted by awareness of the voluntary nature (as mentioned), the number of times participants had been before the MHC judge prior to enrollment, and insight into mental health problems.

Redlich, Hoover, et al. (2010) also found generally poor levels of MHC-related knowledge. Whereas most MHC clients were aware of the basics of MHCs (e.g., having to go before the judge periodically, taking medication), many were unaware of more nuanced information. For example, 27% to 45% did not know that pleading guilty was a condition of enrollment, and up to 30% did not know they could stop being in the court if they chose. Redlich, Hoover, et al. (2010) also examined adjudicative competence, which is legally required and presumed present. They found that one fifth to one third had impairments in their knowledge of legal terms and concepts, and in their ability to reason pertinent to legal decision making. MHC knowledge was most robustly predicted by two adjudicative competence scores (understanding and reasoning). However, unlike the results regarding predictors of voluntariness, demographic/criminogenic factors significantly predicted knowledge. Specifically, females, persons employed at the time of MHC enrollment, and persons charged with less serious crimes were more knowledgeable than their counterparts.

In addition to knowledge and voluntariness, a third important principle relevant to TJ is perceptions of procedural justice (see, e.g., Winick, 2002). Procedural justice refers to the degree to which defendants feel respected, feel that they have a voice and are heard, and are treated fairly (Lind & Tyler, 1988). Participants in MHCs have been found to have higher perceptions of procedural justice in comparison with those processed traditionally in the CJ system (Poythress et al., 2002). For example, when asked the degree to which they had sufficient opportunity to talk to the judge about their personal and legal situations, MHC participants had an average score of 5.4 versus participants in the comparison sample in traditional court with an average score of 1.8 (1 = *not at all*; 7 = *very much so*).

In summary, MHCs presume voluntary and informed decision making. Research, however, shows that significant subsets of MHC enrollees are not engaging in such decision making. Further, criminogenic and court-specific (such as compliance and competence), and to a lesser degree, demographic, factors have been found to influence MHC comprehension as well as MHC outcomes. Redlich (2005) argued that "it stands to reason that those who are unaware that entry into this [MHC] agreement is voluntary and thus do not understand this agreement may be less likely to adhere to the agreement" (p. 613). This is an empirical question—one that is addressed in the present study.

The Present Study

Based on the literature reviewed, it is hypothesized that MHC participants who better understood court procedures and requirements, chose to enter the court, and felt more respected (as assessed at the time of enrollment) would be more successful (i.e., more likely to graduate) in the courts than those with lower appreciation of the courts and perceptions of choice and procedural justice. Data collected as part of the MacArthur MHC Project (see Redlich, Steadman, et al., 2010; Steadman et al., 2011) are analyzed. The MacArthur MHC study was a comprehensive undertaking involving participants from four MHCs, comparison samples from each of the four sites, self-report interviews conducted at baseline entry in the court/CJ system and 6 months later, and extensive objective outcome data collection at 12 and 18 months after entering the court. Structural equation modeling (SEM) is used to test our research question. SEM is the ideal method to handle measurement errors with multiples indicators. Further, SEM is useful for mediation analysis (e.g., Cheung & Lau, 2008; Frazier, Tix, & Barron, 2004; Jang & Chiriboga, 2010) and in assessing the role of a mediating variable between the predictor and the outcome. In the present study, CJ and MHC-related factors are investigated as mediators that can potentially explain the relationship between TJ and MHC outcome.

Method

Participants

Participants in the MacArthur MHC study came from four courts: San Francisco County, California (n = 108), Santa Clara County, California (n = 136), Hennepin County, Minnesota (n = 105), and Marion County, Indiana (n = 99). All of the courts accepted persons charged with misdemeanors and felonies, and persons with co-occurring substance use disorders. The courts, which were established between 1997 and 2003, were in larger urban jurisdictions and enrolled between approximately 100 (San Francisco and Hennepin) and 250 (Santa Clara) MHC participants annually. Information about demographics and mental illness was provided by the MHCs. Aggregated descriptive statistics about participants can be found in Table 1. Among the 448 individuals in the study, mean age was 37.45 years and over half (58.2%) were men. Approximately half of participants were White (49.3%). Most (89.4%) individuals had serious mental health problems. Symptomatology was measured at entry into the court using the Colorado Symptoms Index (CSI; Conrad et al., 2001). The average score in the present sample was 24.5 (SD = 13.31), with a range

Table 1
Descriptive Information of the Participants and Study Variables (N = 448)

Variable	Range	% or M (SD)	Skewness (original)	Kurtosis (original)
Demographics				
Age	18–75	37.45 (10.69)	.12	−.61
Gender (male)	0–1	58.2%	.33	−1.90
Ethnicity (White)	0–1	49.3%	.03	−2.01
Colorado Symptom Index	0–60	24.49 (13.31)	.24	−.43
Lifetime arrest since 15-year-old	1–250	14.96 (27.92)	5.02	30.88
Therapeutic jurisprudence (baseline)				
MHC knowledge	0–31	21.31 (6.90)	−1.78	3.10
Procedural justice	5–35	28.51 (7.41)	−1.38	1.23
Perceived voluntariness	0–31	17.19 (6.31)	−.41	−.34
Criminal justice outcomes				
Arrest (0, 1–2, 3+)	0–2	.31 (0.57)	1.67 (4.01)	1.77 (22.94)
Prison (Yes)	0–1	13.6%	2.13	2.54
MHC outcomes				
Bench warrant (0, 1–2, 3+)	0–2	.63 (0.74)	.70 (4.52)	−.85 (38.05)
Average compliance rating	0–4	2.24 (1.15)	−.16	−.86
MHC completion	0–1	47.3%	.10	−1.99

Note. MHC = mental health court.

of 60 points. (We also note here that CSI scores were unrelated to the three TJ principles used here; rs range from −.02 to .04.) Self-reported arrests varied quite a bit, ranging from 1 to 250; participants had an average of 14.96 arrests since the age of 15 years.

Measures

Our dependent variable was completion versus noncompletion in the MHC. Completion was defined as graduating within our study time frame ($n = 205$). Noncompletion (total $n = 228$) was defined as those who were removed from the court or had dropped out ($n = 127$) and those still in the court ($n = 101$). The study time frame was approximately 3.75 years. To answer our research question, seven independent measures were utilized, which were grouped into three categories with the following labels: (a) TJ; (b) CJ outcomes; and (c) MHC outcomes.

TJ. TJ principles included three measures: perceived voluntariness to enroll in the court, perceived procedural justice, and MHC knowledge. All were measured at the outset of court enrollment.

Perceived voluntariness was measured with the MacArthur Perceived Coercion Scale (MPCS), adapted for MHCs (see Poythress et al., 2002). This measure includes eight statements concerning the choice to enroll in MHCs (e.g., "I chose to be in the mental health court"; "I had a lot of control over whether I went to the mental health court"). A 5-point Likert scale was used, with 0 = *strongly agree* to 4 = *strongly disagree*. Although the label of the scale is perceived coercion, the inverse is perceived voluntariness. The MPCS has been used with thousands of individuals and in numerous countries and has been found to be sensitive and internally consistent (e.g., Cronbach's alpha = .90; Gardner et al., 1993) and to have obtainable interrater reliability (kappas range from .73 to 1.00; Lidz et al., 1998). In this study, Cronbach's alpha was 0.76.

Perceived procedural justice was measured using responses to five items employed by Poythress et al. (2002). Specifically, participants were asked to rate the degree to which they had a

voice, were treated with respect and treated fairly by the MHC judge, the judge seemed genuinely interested in them, and their satisfaction with the judge (1 = *not at all* to 7 = *definitely*). In the present study, Cronbach's alpha was 0.89.

MHC knowledge was measured with a scale introduced by Redlich, Hoover, et al. (2010). The measure included three series of "true"/"false"/"I don't know" statements with the following opening stems: (a) "To be a mental health court participant, people are agreeing to. . ." (14 statements); (b) "If people do not follow the conditions of mental health court, they can. . ." (12 statements); and (c) "If people follow the conditions of mental health court, they can. . ." (7 statements). The statements consisted of actual MHC procedures, requirements, and consequences (e.g., returning for status review hearings, having to take prescribed medications and go to treatment appointments, not using alcohol or drugs, being sent to jail for noncompliance, and having their original charges or convictions dropped), as well as false statements of non-MHC procedures, requirements, and consequences (having to take lie detector tests, having to do physical exercise, never being arrested again, and being charged again for the same crime). To create one MHC knowledge score, answers on the 33 statements were scored as correct or incorrect ("don't know" answers were scored as incorrect) and then summed. Cronbach's alpha for the present study was 0.90.

CJ outcomes. CJ outcomes included number of new arrests and whether the MHC client had been sent to prison ("yes" or "no"), both measured 12 months after court enrollment. As described in Steadman et al. (2011), arrest data were obtained from the Federal Bureau of Investigation (the National Incident Based Reporting System). Only new arrests were included; warrants and violations were excluded. Prison data were obtained from the Department of Corrections in the study states (California, Indiana, and Minnesota).

MHC outcomes. MHC outcomes included a composite measure of compliance and number of bench warrants issued or stayed by the court. Compliance was an average rating of compliance with keeping treatment appointments in the community, judicial

and court orders, and taking prescribed medications ($rs > .87$). MHC coordinators rated compliance on these three aspects using a scale of 1 = *poor/not so good throughout* to 5 = *excellent/very good throughout*. Coordinators were instructed to consider the entire year (or however long the person remained in the court) and the frequency and severity of positive and negative events. Number of MHC bench warrants stayed or issued at the 12-month point was obtained from MHC records.

Statistical Analyses

Variables with skewness above 2 and kurtosis above 7 were considered abnormally distributed (West, Finch, & Curran, 1995). Among the study variables, arrest and bench warrants were found to be highly skewed (4.01 and 4.52, respectively) and have high kurtosis (22.94 and 38.05, respectively). This is due to the large portion of study participants with no new arrests (74%) and no MHC bench warrants (52%). Arrests and MHC bench warrants were categorized into three groups (0 [0], 1–2 [1], and 3+ [2]; see Table 1). These transformed variables were used in the descriptive and SEM analyses. The SEM model was composed of three latent variables: principles of TJ, CJ, and MHC (L for latent), and one observed variable—MHC completion. TJ had three observed indicators, all measured at the onset of MHC participation: MHC knowledge, procedural justice, and perceived voluntariness.

A SEM is composed of measurement and structural parts. The measurement part is validated from the exploratory factor analysis (EFA): how appropriately each latent variable is measured by its observed indicators (based on the model fit). The structural part is validated from the confirmatory factor analysis (CFA): how well relations among latent variables are hypothesized. Because each data collection site did not satisfy the minimum sample size for SEM ($N > 200$; Garver & Mentzer, 1999; Harris & Schaubroeck, 1990; Hoelter, 1983), site variable was not included in the SEM analyses. From the CFA, the number of factors to be included in the model producing the best fit can be determined. Specifically, we evaluated whether a four-factor model (the three latent constructs and the outcome) had a moderate model fit compared with the direct or three-factor models. The direct model included the outcome and the TJ latent variable (a combination of MHC knowledge, procedural justice, and perceived voluntariness). The three-factor model included the (a) outcome, (b) the TJ latent variable, and (c) a CJ/MHC-L latent variable, which combined arrests, prison, bench warrants, and compliance into one latent variable. Finally, we analyzed a four-factor model with possible paths among the three latent variables (TJ, CJ, and MHC-L) and one observed variable (MHC completion). Mplus 6.0 (Muthén & Muthén, 2010) was used for the SEM.

Although maximum likelihood is the most often-used estimator to analyze data in a SEM, the weighted least squares mean and variance (WLSMV) were used because the dependent variable is binary (completion vs. noncompletion in the MHC; Beauducel & Herzberg, 2006; Flora & Curran, 2004). The WLSMV estimation method has also been found to perform well in testing a model with a dichotomous observed variable and a moderate sample size (West et al., 1995).

There are a number of tests to comprehensively assess model quality. Kline (2005) and Thompson (2004) recommend using a combination of indices when conducting a SEM. Several model fit indices were used on the recommendation of Hu and Bentler (1999): chi-square test of model fit, the comparative fit index (CFI; Bentler, 1990), the Tucker-Lewis index (TLI; Tucker & Lewis, 1973; Bentler & Bonett, 1980), the root mean square error of approximation (RMSEA; Browne & Cudeck, 1992; Steiger, 1990), and the weighted root mean square residual (WRMR; Muthén, 2004). Good model fit was reported by a nonsignificant chi square, CFI and TLI > .95, WRMR < .90, and RMSEA > .06 (Hu & Bentler, 1999; Yu, 2002). Although the chi-square value for WLSMV is not valid (Muthén & Muthén, 2010), other model indices (e.g., the CFI, TLI) provide substantive evidence to determine whether the model fit is sufficient.

Results

First, correlations were computed among the eight study variables (see Table 2). In the latent variables, observed indicators were highly correlated with each other, as expected. Prison and MHC bench warrant were not significantly associated with any of the TJ variables. However, new arrests, and MHC knowledge and perceived voluntariness (but not perceived procedural justice), were significantly (albeit moderately) correlated. Average compliance ratings and MHC outcome were also negatively correlated with 12-month new arrests and prison. MHC outcome was positively associated with MHC knowledge and average compliance ratings.

Measurement Model

An EFA was conducted to examine whether the observed indicators definitively measured the latent variables (Jang & Chiriboga, 2010). A CFA was also run to determine which model (direct, three-, or four-factor model) had the best model fit indices (see Table 3).

In order to find the latent structure among the seven observed (independent) variables, the latent root criterion (Hair, Black, Babin, Anderson, & Tatham, 2006) was used. Only latent structures having eigenvalues greater than 1 are considered significant. There were two factors considered as significant: MHC knowledge, procedural justice, perceived voluntariness (eigenvalues = 1.83, labeled TJ), and arrests, prison, MHC bench warrant, average compliance rating (eigenvalues = 1.43, labeled CJ/MHC-L). However, for conceptual reasons (see Hair et al., 2006), the CJ/MHC-L was divided into two latent variables, one representing CJ (arrests and prison) and the other representing court factors (MHC bench warrants and MHC compliance).

Each latent variable was accurately represented by their observed variables. All factor loadings were statistically significant at $p < .001$. Factor loadings of the three observed variables in the TJ construct—MHC knowledge, procedural justice, and perceived voluntariness—were 0.43, 0.64, and 0.58, respectively. CJ loadings for arrest and prison were 0.67 and 0.74, respectively. MHC-L—bench warrants and compliance—also had reliable loadings of 0.59 and −0.62, respectively.

Structural Equation Models

First, a direct-effect model was tested with only a direct path from TJ to MHC completion (see Figure 1). This direct model

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Table 2
Correlations Matrix of Observed Variables (95% CIs)

	1	2	3	4	5	6	7	8
Therapeutic jurisprudence								
1. MHC knowledge	—							
2. Procedural justice	.25*** (.14, .32)	—						
3. Perceived voluntariness	.20*** (.10, .26)	.41*** (.31, .49)	—					
Criminal justice outcomes								
4. Arrest	−.12* (−.21, −02)	−.07 (−.17, .03)	−.16** (−.26, −.07)	—				
5. Prison	−.06 (−15, .04)	−.05 (−15, .06)	−.03 (−13, −.06)	.23*** (.14, .32)	—			
MHC outcomes								
6. Bench warrant	−.08 (−.17, .01)	.03 (−.07, .13)	−.04 (−14, .06)	27*** (.18, .36)	26*** (.17, .36)	—		
7. Average compliance rating	.14** (.04, .23)	.13* (.03, .23)	.06 (−.04, .16)	−.25*** (−.34, −.16)	−.33*** (−.42, −.24)	−.31*** (−.40, −.22)	—	
8. MHC completion	.15** (.06, .24)	.06 (−.04, .16)	.03 (−.07, .13)	−.30*** (−.40, −.21)	−.37*** (−.46, −.28)	−.33*** (−.42, −.25)	.54*** (.45, .61)	—

Note. CI = confidence interval; MHC = mental health court.
* $p < .05$. ** $p < .01$. *** $p < .001$.

showed acceptable fit indices: CFI = 0.93, TLI = 0.79, WRMR = 0.67, RMSEA = 0.08 (95% CI [0.03, 0.15]). The direct effect of TJ on MHC outcome was significant ($p < .05$). Next, we examined the model fit indices for the three- and four-factor models. The three-factor model provided the most reliable indices of model fit: CFI = 0.97, TLI = 0.95, WRMR = 0.79, RMSEA = 0.05 (95% CI [0.02, 0.07]). This model fit demonstrated the three-factor model as the most developed, compared with the four-factor model that included TJ, two latent variables (CJ and MHC-L, separately), and one outcome variable: CFI = 0.97, TLI = 0.94, WRMR = 0.75, RMSEA = 0.05 (95% CI [0.03, 0.08]). However, both the three-and four-factor models satisfied the good model fit indices based on the CFI, TLI, WRMR, and RMSEA (see Table 3), and thus both models are described.

The mediation model, with all predictive paths among latent and observed variables, was tested to determine the potential relationships between TJ and MHC completion within the context of an indirect effect mediated by CJ/MHC-L. As shown in Figure 2, CJ/MHC-L was predicted by TJ ($p < .01$), which, in turn, predicted MHC outcome ($p < .001$). In contrast to the direct model (see Figure 1), a significant, direct effect from the TJ to MHC outcome was not found in the full model (see Figure 2). Thus, CJ/MHC-L mediated the relationship between the TJ and MHC outcome (total effect, $p = .04$; indirect effect, $p = .06$). Finally, the four-factor model was run, which included the three latent variables (TJ, CJ, MHC-L) and MHC completion (see Figure 3). In contrast to the three-factor model, none of three latent variables significantly predicted MHC outcome. However, there were significant relationships between TJ, CJ, and MHC-L, such that decreased perceptions of procedural justice and voluntariness, and lower levels of MHC comprehension (measured at baseline), led to increased arrests and prison, and to MHC bench warrants and lower ratings of perceived compliance. Finally, CJ was positively related to MHC-L ($p < .001$).

Discussion

The present study examined mechanisms by which principles of TJ, measured at the time of MHC enrollment, can affect eventual MHC completion. Initial measures of MHC knowledge, perceived voluntariness, and perceived procedural justice were expected to positively impact future MHC success. Based on previous research, CJ- and MHC-related factors were also expected to impact MHC completion, and thus were included here as mediating variables when examining the TJ–MHC link. The relationship between TJ and MHC outcome was found to be positive and significant, but only in the direct effect model. Thus, at first blush, it appeared that newly enrolled MHC clients with higher perceptions of procedural justice and voluntariness, and MHC knowledge, were more likely to succeed in the court. However, this relationship, which was weak to start with ($B = .17$), became nonsignificant after the introduction of the mediating variables. Nonetheless, a significant indirect path was found in the three-factor model (the model with the best fit). Specifically, the TJ latent variable was negatively related to the combined CJ/MHC-L variable, which, in turn, was negatively related to MHC completion. In essence, initial perceptions of MHC procedural justice and voluntariness, and initial levels of MHC knowledge, predicted higher likelihood of arrests, bench warrants, and prison, and lower ratings of perceived com-

Table 3
Measurement Model Comparison

	CFI	TLI	WRMR	RMSEA (95% CIs)
CFA				
Good model fit indices	> .95	> .95	< .90	< .06
Direct model (TJ → MHC outcome)	0.93	0.79	0.67	0.08 (0.03, 0.15)
Three-factor model (CJ/MHC-L, combined)	0.97	0.95	0.79	0.05 (0.02, 0.07)
Four-factor model (CJ and MHC-L, separated)	0.97	0.94	0.75	0.05 (0.03, 0.08)

Note. CFA = confirmatory factor analysis; CFI = comparative fit index; CI = confidence interval; CJ = criminal justice; MHC = mental health court; MHC-L = mental health court–latent; RMSEA = root mean square error of approximation; TJ = therapeutic jurisprudence; TLI = Tucker-Lewis index; WRMR = weighted root mean square residual.

pliance within the court, which then predicted MHC graduation. Finally, in the four-factor model, which demonstrated sufficient, but not as good, model fit compared with the three-factor model, significant pathways leading to MHC outcome were not found. Thus, although it made conceptual sense to break apart the CJ and MHC-L factors, on their own, these factors were not significantly related to MHC outcome (although the significant paths from TJ to CJ and MHC-L remained).

In prior studies, MHC graduation and new arrests have been found to be related. However, in these studies, MHC completion status was used to predict receipt of new arrest. For example, Herinckx et al. (2005) found that participants who graduated from the MHC were 3.7 times less likely to be rearrested than those who did not graduate (see Hiday & Ray, 2010, and McNiel & Binder, 2007, for similar results). In the present study, arrests within the first year of the MHC were examined for their potential to influence MHC completion status up to almost 4 years later. In previous studies examining predictors of MHC completion, the findings are mixed regarding links between CJ factors and MHC completion. Redlich, Steadman, et al. (2010) found that severity of the target arrest charge (i.e., the arrest that led to the MHC) did not significantly predict MHC completion status. Dirks-Linhorst et al. (2011), in studying a MHC handling ordinance violations, found that the target arrest charges of stealing and "other" crimes (a catch-all category, e.g., harassment, property maintenance, and weapon offenses) increased the likelihood of MHC termination, though more serious crimes (such as assault) did not. Dirks-Linhorst et al. also found that number of MHC appearances was negatively related to termination, such that those who were termi-

nated had significantly fewer court appearances than those not terminated. However, unlike the present study results, Dirks-Linhorst et al. were able to demonstrate separate contributions of crime-related factors (though they only included original target arrest charge, not new arrests) and court-related factors in predicting MHC completion status.

To our knowledge, previous studies have not examined the link between TJ and later MHC success. However, researchers have studied the individual TJ principles (i.e., procedural justice, perceived voluntariness, and MHC knowledge). Perceptions of procedural justice have been found to be relatively high among MHC clients (O'Keefe, 2006; Poythress et al., 2002). Wales, Hiday, and Ray (2010) reported that MHC clients' perceptions of procedural justice ($M = 3.68$) were higher than a separately studied sample of persons with mental illness who had been involuntarily committed ($M = 2.09$). Two-thirds or more of the MHC clients interviewed by Wales et al. (2010) "definitely" felt that they had enough opportunity to tell the judge about their situation, and that the MHC judge treated them respectfully and fairly, and seemed genuinely interested.

Perceived voluntariness has also been found to be high in MHC clients (O'Keefe, 2006; Poythress et al., 2002), with a majority of clients claiming that it was their choice to enroll in the court. Although it is less clear whether all clients are aware that they indeed had a choice to enter the court, most MHC clients perceive the MHC decision to be their choice (Redlich, Hoover, et al., 2010). MHC knowledge has been examined to a lesser extent (than perceived procedural justice or voluntariness). Redlich, Hoover, et al. (2010) found mixed knowledge levels at entry into the court.
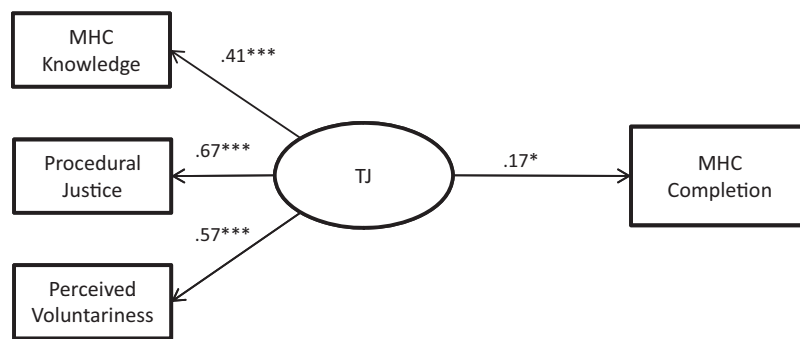

Figure 1. Direct effect model of the relationship of TJ and MHC outcome. TJ: combination of MHC knowledge, perceived procedural justice, and perceived voluntariness. * $p < .05$. ** $p < .01$. *** $p < .001$.
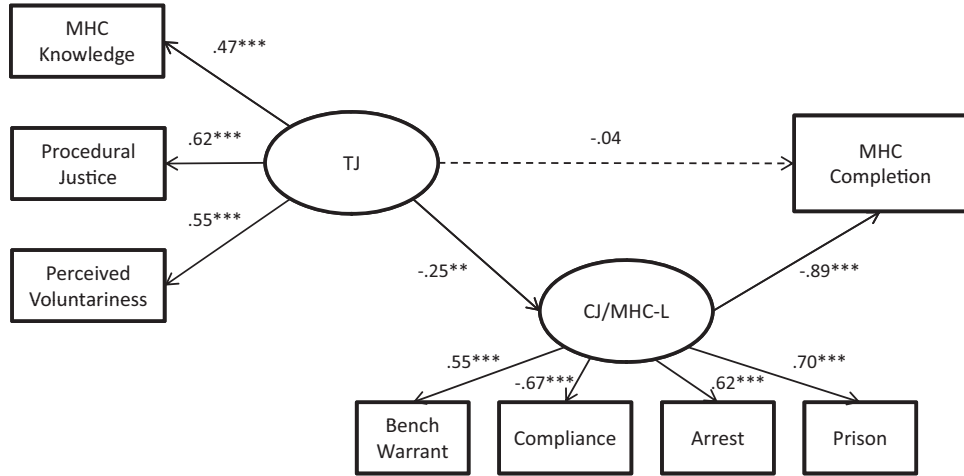
Figure 2. Mediation model of the relationship between TJ and MHC outcome showing the CJ/MHC-L as a mediator. Dashed lines are not significant. CJ/MHC-L: combination of CJ outcomes (number of new arrests and sent to prison) and MHC outcomes (MHC compliance and number of bench warrants); TJ (therapeutic jurisprudence): MHC knowledge, perceived procedural justice, and perceived voluntariness. * $p < .05$. ** $p < .01$. *** $p < .001$.

More specifically, whereas most newly enrolled MHC clients were aware of the basics of the court (e.g., come back and see the judge; could be sent back to jail for noncompliance), more nuanced information about the courts was less likely to be known or understood, including that pleading guilty was a condition of enrollment or whether they could be kicked out.

The present study, in addition to expanding our understanding of TJ theory, also has implications for MHC programs—programs that now exist in at least 43 states (Johnston, 2012). Although a direct path between TJ and MHC success was not found when mediators were included, we did find an indirect path. It was also found that TJ directly affected likelihood of recidivism (new
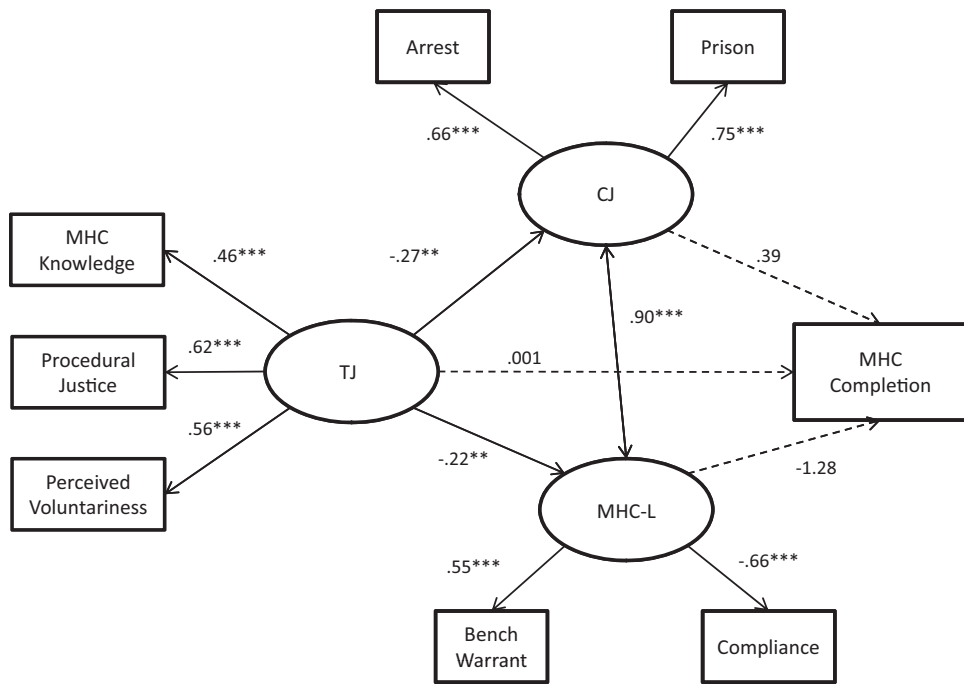

Figure 3. Mediation model of the relationship between TJ and MHC outcome showing the MHC-L and CJ as mediators. Dashed lines are not significant. CJ (CJ outcomes): number of new arrests and sent to prison (yes, no); MHC-L (MHC outcomes): MHC compliance and number of bench warrants; TJ: MHC knowledge, perceived procedural justice, and perceived voluntariness. * $p < .05$. ** $p < .01$. *** $p < .001$.

arrests and prison entry) and performance within the court (as measured by perceived compliance and bench warrants). Thus, it is important to note that the present study results should not be taken to indicate that MHCs need not work toward promoting voluntary and knowledgeable MHC entry decisions. Rather, such entry decision making, in addition to being legally required and recommended by expert consensus (Thompson et al., 2008), is influential in affecting performance while in the court, which, in turn, affects graduation rates. In MHCs and other problem-solving courts, it is readily apparent that not all who enter are successful. Therefore, it is important for scholars to continue to determine the factors that affect success.

Conclusions and Limitations

To our knowledge, the present study is the first to incorporate TJ, CJ, and MHC factors into the same model. By constructing and testing the mediating models, we were able to provide a more comprehensive understanding of the underlying mechanisms influencing MHC success. But as the first empirical examination of the link between principles of TJ and MHC success, study results are only suggestive and in need of further investigation. Generalizations to all MHCs in the United States may also not be warranted, given that our study sample included only four courts. And although our study aimed to investigate the mechanisms among three constructs (TJ, CJ, and MHC-L) with MHC completion, there are other variables of importance, such as treatment and jail history, and demographic factors that future investigations should explore.

The theory of TJ is one that views the law (and the legal actors who practice it) as a vehicle that can be therapeutic (promote personal change and improvement) or antitherapeutic. MHCs and other specialty courts are said to have TJ at their base (e.g., Johnston, 2012; Winick, 2002). In the present study, TJ principles of perceived voluntariness, perceived procedural justice, and MHC-relevant knowledge measured at entry into the courts were found to directly influence recidivism and performance in the court 12 months later, and indirectly influence MHC graduation rates up to almost four years later. As such, findings highlight the need for the courts to ensure that the persons entering the courts, ones who are oftentimes marginalized, are making voluntary and knowing decisions, and feeling respected when doing so. MHC enrollment decisions made in this manner can help play a role in decreasing the revolving-door phenomenon of persons with mental health problems that the courts were originally designed to combat.

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