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Prohibitive Factors of Successful Completion in Rural Drug Courts: A Quantitative Study

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This is to certify that the doctoral dissertation by

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Walden University
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Abstract

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Dissertation Submitted in Partial Fulfillment

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Abstract

Drug courts have been heralded as largely successful alternative sentencing programs for criminal drug offenders. While these programs demonstrate their ability to be effective with clients, little insight has been gained into the factors that impact client success and failure. The study utilized data from the Multi-site Adult Drug Court Evaluation (MADCE) to investigate the factors that lead to program failure for participants in drug court. Borrowing from the tenants of generalized strain theorists, the study batched together raw data into four "strain factors," which were then analyzed to discern any corollary effect between the presence of these strains and program failure with participants. The research looked into income, housing, transportation availability, and treatment exposure as potential strain factors. The research analyzed 790 individual drug court cases and measured the effect these factors had on each participant's likelihood of success in Drug Court programs. The regression analysis revealed that income and stable housing, either in their own home or with a relative did have statistically significant impact on program success. Essentially, these results are actionable to promote positive social change in the following ways. For professionals in the drug court filed, they serve to educate professionals on where to focus their programmatic resources, for policy makers they serve to inform policy creation and program adaptation to best practices, and for drug court participants they serve to help participants understand what roadblocks they may encounter throughout programming that can hinder successful completion and societal reentry.

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Dedication

This work is dedicated to all those who helped along the way. This research is the culmination of a long journey and that journey, while difficult at times, was assisted by countless supporters. From my family to my colleagues both past and present, to my friends, I thank you all for your support in making my dream a reality.

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Chapter 1: Introduction to the Study

Background of the Problem

Since the 1980s, little had been done to break the cycle of recidivism among drug abusing offenders (Sevigny, Pollack, et al., 2013). In recent years, a treatment court initiative termed "drug-court" has been implemented in various jurisdictions to both interrupt this cycle and provide for effective court-supervised treatment of these offenders (Sevigny, Fuleihan, et al., 2013). West Virginia has one of the largest prescription drug problems in the country, and although there is a functioning drug court in some jurisdictions, little is known about their effectiveness on breaking the cycle of recidivism (Manchikanti, 2007). Without academic investigation of the effectiveness of these programs or their impact on the drug abuse problem in rural areas, the programs are little more than a legislative response to criminal behavior. The study examined drug court participation in rural populations. The study focused specifically on the extent to which graduation from a rural drug court impacts further recidivism by offenders. The study further investigated any variance in completion rates in programs with rural populations as they compare to urban programs.

The state of West Virginia currently utilizes millions of dollars in both federal and state funding to operate drug courts in their varying circuit court jurisdictions (Maynard, 2014). Understanding how effective these programs are in rural populations would ultimately seek to justify the utilization of these vast funds. Further, results from this study could be utilized as a "best practices" model of implementation for rural jurisdictions without a functional drug court and serve to entice other jurisdictions to

begin the implementation process. This study would also provide insight into the feasibility of utilizing these types of programs in rural areas and in conjunction with the challenges these areas pose. Drug court practitioners in the state of West Virginia have been implementing drug courts for a period of years without any real direct knowledge of success or impact on the West Virginia drug problem (Maynard, 2014). A recent legislative directive in West Virginia requires drug courts in every county of the state by year's end of 2016 (Senate Bill 371, 2015). Without knowledge of whether these programs are effective with regard to rural populations, the state may be diverting resources to a program that is ineffective. The research will serve as a foundational study on the potential effectiveness of West Virginia Drug Courts.

Statement of the Problem

The research literature on drug courts suggests drug courts are largely successful in reducing recidivism (Rossman et al., 2011). While this information could loosely translate to rural drug courts based on the fact that all drug courts rely on similar structure and programming, little is known about the implementation of rural drug courts, specifically West Virginia's drug courts, or the success in meeting the overall goals of reducing recidivism (Maynard, 2014). The current research to date reflects little to no exploration or understanding of the factors influencing the success or failures of urban drug court participants (Rossman et al., 2011; Shaffer, 2011). While the focus on drug court participants has served to demonstrate the overall effectiveness of implemented programs, little is known about drug court programs' impact on in rural area participants' recidivism. Existing literature also illustrates that the drug problem, specifically in rural

Appalachia, is rampant (Young & Havens, 2011). Matusow et al. (2012) indicated that close to half of all drug court programs are in jurisdictions that would be classified as rural, yet there remains no explicit understanding of drug court success.

Merton's (1938) strain theory suggests that certain strains and stressors increase the likelihood of criminal behavior and therefore recidivism. Strains and stressors are identified and will be further extrapolated from the Multi-site Adult Drug Court Evaluation (MADCE). Jang and Johnson (2003) found that the more strained influences present the more apt the individuals were to have anger based criminal decisions. Agnew (2006) postulated emotional strain furthered poor choices and led to further criminal behavior and therefore increased recidivism. Through the evolved strain theory theoretical framework, the study explored the current data from the MADCE to extrapolate insights into rural drug offender recidivism rates. This study provides detailed analysis on the effectiveness of drug court programs in more rural settings. Historically, rural drug users have been found to underutilize treatment services (Oser et al., 2011). However, with the implementation of drug courts, rural treatment services are becoming not only more readily available but also ordered in conjunction with criminal justice supervision in rural areas (Maynard, 2014). Gaining a thorough perspective on the impact of strain on drug program participants will provide practitioners with further deterrent options for decreasing rural substance abuser recidivism rates.

Purpose of the Study

The purpose of the study is to determine if a relationship between strain factors that are prohibitive to drug court success and recidivism exists in rural drug court

services. Extant literature focuses on the offenders' strain factors as having influence in recidivism and more specifically recidivism of these offenders in the rural area. Through the strain theory theoretical lens, this study extrapolated the data to determine if a relationship between offender strains exists in the rural setting as an influence to recidivism. As rural drug users are only recently utilizing rural drug treatment services in the criminal justice field, it is critical to support these programs and offenders in a manner in which to reduce recidivism rates effectively. This information will offer policy implications, practitioner understanding and program modifications or update recommendations

Significance of the Study

Following a review of more than 80 articles, the conclusion is that drug court programs are no stranger to research. Since their inception in Miami in 1989, drug courts have been scrutinized in terms of both their operational ability as well as their effectiveness. Implementation challenges, legal conundrums, and even graduate success rates have been researched to better enlighten the field on just how these programs are designed and how they work. While most of these studies center around what characteristics of both programming and participants lead to success, such as Colyer's 2007 work and Brown's 2010 study, a smaller body of literature focuses on factors that are prohibitive, or less likely to lead to success for clients (Belenko et al., 2011; Gallagher, Nordberg, et al., 2015). For example, most research on prohibitive factors identifies external logistical issues such as transportations, continuum of care, and availability of residential treatment as primary features which, when decreased lessen the

likelihood of offender success (Matusow et al., 2013; Staton-Tindall, et al., 2015). Other research on prohibitive factors focuses solely on individual characteristics of offenders as they prohibit offender success (Jones & Kemp, 2011). For example, factors such as motivation, readiness to change, and level of involvement are key factors when determining the likelihood of success (D'Sylva et al., 2012). Lastly, there are still other studies which focus on specific program implementation characteristics as they effect participant success. These factors include drug court team make-up, community support for programming, and cohesiveness of the treatment team as central predictors of success or failure for participants (Marlowe et al., 2012). Countless studies have also been completed to either validate or nullify their effectiveness in curbing the recidivism of drug abusing offenders (Sevigny et al., 2013). While much of the extant literature is positive pointing to studies that serve to endorse the drug court approach to alternative sentencing, the studies that focus on factors that are prohibitive to drug court success share the most commonality with this proposed study. Yet, no studies have been identified that connected the drug offenders' outside strain to the rural drug courts' success or failure rates.

Research Questions

The study explored potential prohibitive factors as previously identified from a national level through the strain theory theoretical lens, in order to offer insight into rural drug offender recidivism rates. Utilizing the current data from the MADCE, a detailed analysis on the effectiveness of drug court programs in relationship to drug offender programs and outcomes offers insight into program improvement options for rural drug

court programs. The research further attempted to investigate all potential prohibitive factors previously identified work in unison to form an overall picture of offender success or failure in the rural setting.

This study is guided by the following quantitative research questions:

1) Is there a statistically significant relationship between prohibitive strain factors and drug court success?
2) Is this statistically significant effect influenced by geographic make-up?

Definition of Variables

While this study will function primarily to correlate prohibitive factors and drug courts success, these variables will be derived from an existing data set. That being stated, the variable list below will outline how each variable is derived from the raw data. This analysis will then be correlated with each participants dismissal from drug court in a binomial nominal format.

1. Income- Income information
2. Stable Housing- Housing information
3. Access and Exposure to treatment- Past treatment experience
4. Access to transportation- family support information

These four variables were investigated individually as well as in a total score and compared to the participant's dismissal.

Research Design

This study is framed according to a quantitative non-experimental research design using data collected by the survey method for the purpose of presenting comparative

descriptive data on rural drug court participant strain influences. A survey provides a description of trends by focusing on a specific finite part of a population, a sample (Creswell, 2003). The sample for this study was derived from the overall participants in the MADCE and reflects only the rural offenders. The primary descriptive data has been collected by a nationwide study of drug court programs and their participants conducted by the National Institute of Justice (NIJ; 2011).

The NIJ conducted a 5-year longitudinal impact and cost evaluation of adult treatment drug court programs which employed a hierarchical model and sampled nearly 1,800 drug court and non-drug court probationers from 379 rural, suburban, and urban jurisdictions across the United States (NIJ, 2016). These data are accessible through request by criminal justice professionals with IRB approval for empirical research. Babie (2004), Creswell (2003), and Remler and VanRyzin (2014) all encourage the utilization of major surveys due to recency, validity and availability of data acquisition. Moreover, the speed and economy of this method will allow data collection to be far more efficient than a pilot study and re-collection of said data as the MADCE already provides large amounts of data available from a larger sample than could be reasonably accessed by a student researcher (Creswell, 2003; Remler & VanRyzin, 2014).

Assumptions and Limitations

Although comparative studies cannot establish cause-and-effect relationships because they are not experimental by design, this study was designed only to determine if a relationship between identified strains on the rural drug court offender exists in comparison to the national drug court participant. Shortcomings of a reasonable

representative sample is overcome with the utilization of the MADCE because the study utilized a nationwide sample and identified the smaller population into rural, suburban, and urban jurisdictions but reported findings for all areas (NIJ, 2016). For the MADCE, the final aggregate descriptive report data were derived from a longitudinal study that provides a multi-year comparative analysis (NIJ, 2016). However, the pertinent data for this study, although well documented, was not utilized for relationship comparative analysis by the NIJ. This data analysis will offer further insight into offender recidivism influences should a relationship be identified.

Offender recidivism was the criterion variable in this study and was evaluated for comparison on both the national and rural levels. Further analysis was conducted based on participant identified strains and recidivism characteristics. These findings will serve to offer improvement recommendations and policy implementations for the drug court professional and program advisors.

In terms of limitations for the study, the compilation of variables is potentially limiting, as it requires I "fit" existing variables to an analysis that encompasses the goal of the research; thusly, internal validity may be threatened in a construct validity paradigm. While mitigation is essentially impossible in this regard, I will explain in depth, in the discussion section, the make-up of each constructed variable to enlighten the reader on how these measures were formed.

The age of the data is also questionable. The original raw data were collected in 2011 and are approximately 13 years old or older in some cases. While this is not inherently an issue, it may limit the study's applicability to the current situation in drug

courts as societal change and legal evolution have impacted these programs. Regardless of this limitation, the study's value may inherently prove worthy, as it will give insight into the impact of prohibitive factors, and while they may occur less frequently or more frequently in modern drug courts, they undoubtedly have not changed in their existence.

Organization of the Remainder of the Study

This study will provide detailed analysis on the effectiveness of drug court programs relating to relevant predictors of success and failure. Historically, rural drug users have been found to underutilize treatment services (Oser et al., 2011). However, with the implementation of drug courts, rural treatment services are becoming not only more readily available but also ordered in conjunction with criminal justice supervision in rural areas. Gaining a thorough perspective on the impact of strain on drug program participants will provide practitioners with further deterrent options for decreasing rural substance abuser recidivism rates.

Chapter 2 will review the current empirical literature to offer insight in current drug offender court programs and the history of offender recidivism. Chapter 3 describes the methodology of this study. Chapter 4 presents the data collection and analysis. Chapter 5 will offer findings and recommendations for future research as well as insights into recommendations to the empirical literature regarding drug offenders in rural areas.

Chapter 2: Literature Review

Methods of Searching

Offender recidivism is well documented on the national level for drug court participants. However, rural data is extant on this topic for this population. Analysis was conducted based on participant identified strains and recidivism characteristics as identified and documented by the NIJ's MADCE. The findings served to offer improvement recommendations and policy implementations for the drug court professional and program advisors.

Theoretical Orientation for the Study

Merton's (1938) strain theory suggests that certain strains and stressors increase the likelihood of criminal behavior and therefore recidivism. Jang and Johnson (2003) found that the more strained influences present the more apt the individuals were to have anger based criminal decisions. Agnew (2006) postulated emotional strain furthered poor choices and led to further criminal behavior and therefore increased recidivism. Through the evolved strain theory theoretical framework, the study explored the current data from the MADCE to extrapolate insights into rural drug offender recidivism rates. This study provided detailed analysis on the effectiveness of drug court programs in more rural settings. Historically, rural drug users have been found to underutilize treatment services (Oser et al., 2011). However, with the implementation of drug courts, rural treatment services are becoming not only more readily available but also ordered in conjunction with criminal justice supervision in rural areas (Gallagher, Nordberg, et al., 2015). Gaining a thorough perspective on the impact of strain on drug program participants will

provide practitioners with further deterrent options for decreasing rural substance abuser recidivism rates.

Review of the Literature

The following literature review will investigate current research regarding rural drug courts. The chapter will be broken into sections to better allow for a thorough understanding of concepts pertinent to the proposed study. Initially, the review will investigate current literature on drug courts generally. Their success and failure, their impact on recidivism, and their overall incorporation into the current criminal justice spectrum of intervention will be discussed. A review of literature involving specific prohibitive factors to program success will then be completed. This study will focus on economic, cultural, and social factors that prevent an offender from being successful in an alternative sentencing program. Lastly, an investigation of current literature on rural substance abuse will follow, focusing specifically on how drug use is both defined and propagated in rural areas, with a specific focus on Appalacia.

Drug Courts in America

With the fallout of the War on Drugs becoming clearer and clearer as prison populations soared in the late 1980s, some members of the criminal justice community began to look into innovative ways to manage the increasing problem of substance abuse crimes in a way that upheld both the public safety goals and rehabilitative goals of the justice process (Sevigny et al., 2013). In 1989, at the height of Miami's cocaine war, Judge Stanley Goldstein founded the first drug court in the United States and the idea of therapeutic jurisprudence burst onto the scene (Mackinem & Higgins, 2008). Drug courts

were originally set up to allow offenders an alternative to imprisonment while working toward recovery. The idea of Therapeutic Jurisprudence is the court acting as a sort of pseudo-treatment provider (Mackinem & Higgins, 2008). While the traditional role of courts in the justice system is mediating a trial and dispensing a just sentence for law breaking, the drug courts and other therapeutic jurisprudence courts envision a relationship between the offender and the court in which the court provides both oversight and supervision and the provision of rehabilitative services.

While this role is not traditional of most court systems, it is within the purview of court oversight. Probation departments, which are essentially legs of the court system in most jurisdictions also serve dual roles for offenders both in a supervision capacity and a rehabilitative capacity. The novelty to drug court programs is that the court itself holds regular contact with the offender to monitor progress. Traditional court systems rarely engage in intensive follow up with sentenced offenders to ensure rehabilitative efforts are having the desired effect. Drug courts maintain this regular contact in an effort to monitor offender compliance with treatment objectives, monitor offender well-being, and most importantly, celebrate offender success in programming.

Drug court programs also differ from traditional courts in other ways. Traditional courts are public displays of justice dispensed by a judge or jury and handing out a sentence. There is an adversarial nature to criminal proceedings, in that, most offenders face a prosecution by the state and are represented by a defense attorney. Drug courts take a multi-disciplinary approach to treatment supervision. Most drug courts are comprised of a treatment team made up of varying professionals. At the head of most

treatment teams is the drug court judge. The judges in drug courts are not necessarily what one would think of when describing a traditional criminal trial judge. Judges in drug courts weigh compassion for offenders with the needs of offenders all while maintaining their oath to uphold public safety. While some judges in the traditional criminal court illustrate this as well, it is a common hallmark of drug court judges. The remainder of treatment team members is as varied as drug courts themselves. Traditionally, treatment teams are comprised of a court coordinator, a representative from the prosecutorial office, a representative from the defense bar, a representative from the treatment provider, and a representative from the community. While this is not a standard in any case, these individuals are seen as being essential to the multi-disciplinary approach.

Drug courts also differ in function. While I have already discussed how the traditional criminal court differs in their follow-up, the process of a drug court hearing/session is foreign to most trial purists. These hearings are scheduled weekly and are preempted by a treatment team meeting where all members of the treatment team gather to discuss the participants' progress over the last monitoring period.

Hearings are also private, in that the general community is not allowed to view drug court hearings. Since drug courts are recognized as a form of treatment, privacy rules under HIPPA prevent participant information from being generally disclosed as it would be in traditional criminal proceedings. While these hearings are hidden from the public, participants gather together for the hearing process. Each participant is reviewed in front of other participants, the idea being that any consequences levied by the court for

inappropriate behavior would serve a deterrent effect, but also that any positive praise or incentive given by the court for positive progress would also be witnessed communally.

In terms of operation, drug courts also operate differently than traditional criminal courts. The culmination of a traditional trial is a verdict, where defendants are judged as guilty or not guilty. In a therapeutic jurisprudence encounter, progress is measured incrementally and positive behavior is incentivized. Since these courts follow participants through a progression, opportunities exist to not only correct incidents of rule breaking but to also highlight and celebrate positive behavior. This reaffirmation of progress is central to the idea of therapeutic jurisprudence in that, participants are "rewarded" for continued forward progress. The idea of rewarding positive behavioral progress borrows from the behaviorist perspective of psychology and can find criminological roots in the early works of Beccaria and Bentham. This is a shift from the traditional use of deterrent theory, in that the primary utilization of this theory in the criminal justice system has centered on utilizing punishment.

Drug Court Effectiveness

The overarching goal of drug court programs in the United States has been to both assist participants with the maintenance of long term recovery and allow for an alternative to criminal sentencing for offenses committed by those with severe drug problems. The common metrics used to assess the effectiveness of any alternative sentencing program is criminal recidivism while the long-term recovery programs usually depend on substance use relapse as a measure of success or failure.

The majority of extant research on drug courts from an alternative sentencing perspective concludes that these programs are quite successful. When comparing criminal recidivism of drug court graduates to traditional adjudication recidivism, Brown (2011) found that the graduation of a drug court program significantly reduced an individual's recidivism risk when controlled for various demographic variables. Kearly (2017) also conducted a review of research following a 15 year follow up of drug court graduates which indicated similar reductions in recidivism risk. The vast majority of research demonstrates that drug courts, while not completely negating recidivism, do a much better job at preparing graduates for reentry and protecting them from recidivism.

When investigated more deeply, the alternative nature of these programs may account for some of this reduced recidivism risk. Incarceration, and the subsequent institutionalization of incarcerated offenders, has long been empirically linked to problems with reentry and negative outcomes with recidivism (Skinner-Osei & Stepteau-Watson, 2018). The nonresidential nature of alternative sentences that provide supervision in lieu of incarceration obviously avoids the inherent danger of institutionalization.

Another recidivism risk reducer that is unique to drug court programs is the insertion of positive feedback and reinforcement. In most correctional programs, the retributive act of punishment is utilized as a motivator to change offender behavior. While this retributive model is and has been utilized in American corrections with historical exclusivity, changes in correctional treatment and the implementation of certain alternative programs have served to introduce an alternative model based on positive

reinforcement (Kratcoski, 2017). The central idea of most programs utilizing positive reinforcement is that, offenders will want to do better to receive the recognition. Recognition for positive, prosocial behavior is often more foreign to most criminal offenders so the impact is greater than the impact of punishment, which is an experience most offenders are more familiar with (Kratcoski, 2017). In drug courts, this recognition comes from multiple team members and is constantly reinforced with regularity in drug court hearings so long as the participant is achieving.

The alternative sentence also allows participates in drug court to maintain community ties, employment, education, and prosocial family relationships. Research illustrates these factors are often impediments to offenders reentering society following a term of incarceration. Drug courts participants can maintain these characteristics while simultaneously completing the requirements of the court (Jewell et al., 2017).

Most of the effectiveness literature on drug courts to date indicates that these programs have a positive impact on offender recidivism in both a criminal aspect and a substance abuse aspect (Carey et al., 2012). With incarceration recidivism hovering nationally at 60%-80%, any program that can cut those numbers down is a welcome change to both citizens and economically sensitive governments.

Prohibitive Factors

When looking deeper into what exactly complicates reentry, there is a myriad of issues a returning offender faces upon release. These issues are not however specific to returning offenders. Stress manifests itself for anyone who is experiencing these problems. Things like stable housing, stable employment, reliable transportation, and the

availability of assistance can complicate the lives of anyone. Research has demonstrated that these factors and others are most often the cause of recidivism for offenders (Miller & Khey, 2017). However, these factors also impact the success or failure of offenders who are given the opportunity to participate in community programs as well.

Stable housing, while a factor for most people and their success, becomes particularly important when talking about offender success (Listwan et al., 2018). Most drug court programs are tied to a traditional term of probation. Thusly, offenders must adhere to the standard conditions most commonly found in probation supervision. Maintaining stable housing is often one of these conditions. While this may not be an issue for some offenders, the availability of housing is problematic. The US Department of Housing and Urban Development currently prohibits anyone with certain felony convictions from receiving HUD assistance, more specifically Section 8 renters assistance (HUD rules, 2019). While most drug court offenders do not fall into this prohibited category (sexual offenders, violent criminals), some with past convictions for fraud or drug trafficking violations do. Also under the current rules, anyone who receives this assistance, whether they are the offender or not, cannot house someone convicted of a crime on the prohibited list or they run the risk of losing their assistance.

Renting a home is also a subjective process in America. Most rental applications include questions on criminal background. While these are not immediate disqualifiers, the stigma of a felony conviction or even in some cases an arrest is enough to sway a landlord against accepting a drug court participant. There is also no current legislation that protects offenders from rental discrimination, so even if they are able to find a place

to live, if their landlord finds out they are an offender, the landlord can evict the tenant based on this information. Coupling this inherent difficulty with the mandate from probation that offenders maintain housing, the odds are stacked against the offender to maintain the conditions of their probation and thusly stay out of jail for a violation.

Gainful employment can also become a prohibitive factor for both reentry and successful completion of drug court. Like housing, the obtaining and maintaining of stable education and/or employment is also a common standard condition of probation. Probation officers who lean heavier on the casework style of supervision attempt to assist clients with meeting this standard this is not a universal practice.

In drug courts employment and/or education are essential to maintaining the positive progress of a client (Gallagher, Wahler, et al., 2018). Education and employment develop success in clients and allow drug court participants to develop their self-support skills. Monetary stress is often a key predictor of substance abuse relapse; thus, employment lessens the likelihood that an offender will experience this stress and turn to maladaptive coping skills that could jeopardize their successful completion of programming. Research has demonstrated that employment can increase the likelihood of drug court graduation anywhere from 2.5 to 5 times (Gallagher, Wahler et al., 2018). While education is not inherently a direct catalyst to decreasing monetary stress, the involvement of a participant in the prosocial activity of education is likely to increase their graduation potential. Education is often cited as a hallmark of employability in the American economy thus participants who increase their educational capacity often experience greater returns in the job market.

The availability of substance abuse treatment is also a chief predictor of success in drug court participants. While drug courts do provide a level of substance abuse treatment in and of themselves, some participants require more intensive treatment or treatment in an alternative modality to be successful. The utilization of medication assisted treatment (MAT) is a dividing issue in terms of drug courts. While some programs utilize these services, others see them as a substitution of one drug for another (Morris & Bentzley, 2019). However, research on MAT indicates that it is moderately successful in assisting with abstinence (Compton et al., 2015).

The availability of more traditional treatment, such as intensive outpatient, detoxification, and/or residential long-term treatments, also impacts the success of certain drug court participants. While not all participants require these services, having them available in the drug court's jurisdiction can ease placement if an offender needs them. Shannon et al. (2016) cited outpatient referrals as being a catalyst to drug court success. These referrals while not always necessary, can be essential to correcting relapse behaviors and refocusing a client's perspective on sobriety.

Residential services are also often a pivotal service for drug court offenders (Shannon et. al. 2016). Participants requiring more intensive treatment often enroll in periods of residential placement in various inpatient treatment facilities. These facilities may range from short term detoxification programming to long-term residential programs aimed at facilitating recovery. Again, while not every participant will require these services, the availability of these services in a court's jurisdiction impacts the likelihood of successful completion of drug court programming.

Since drug courts are largely nonresidential community correctional programs, participants are maintained in the community. This often involves the participant remaining with family throughout their period of drug court enrollment. The stress of familial life can often be complicated by substance abuse (Loeb et al., 2015). While some might argue that the ability to remain outside of formal correctional environments increases a participants' positive progress, the stress that accompanies the maintenance of a family can be overwhelming. Often drug court participants are involved in familial disputes over custody of children, child support issues, and other relationship issues. This added stress, if not appropriately managed, can impact the likelihood of success.

Overall, the likelihood of participant success in drug court is a complex formula divined from multiple individual offender characteristics. However, there are some shared likenesses among participants that can complicate this success. Certain individual features, if present, compromise successful completion of drug court programming.

Rural Substance Abuse

Substance abuse in America is not a new phenomenon. Since the colonial period of American society, certain substances have been utilized to mitigate stress, cure perceived illness, and provide recreational escape from everyday life. In more recent years however, substance abuse has been counted as one of the chief problems facing the advancement of American society. While some see substance abuse as a metropolitan issue, more and more substance abuse is encroaching into Americas small towns and rural areas.

Substance use, particularly in the Appalachian region, has steadily increased since the turn of the 21st century (Moody et al., 2017). Understanding rural substance abuse may best be accomplished by discussing particular substances of recurrence in rural areas and addressing their prevalence. To that end, this review will focus primarily on opiate abuse and methamphetamine abuse. While other drugs are abused in rural areas, these two substances stand out as primary substances of abuse in rural areas (Moody et al., 2017).

Opioid abuse in Appalachia is one of the front page issues in America today. Opioid related deaths are also of major concern. In 2016 for example, more than 7,000 individuals in the Appalachian region died of opioid related issues (Schalkoff et al., 2019). Questions abound, however, as to why this region is so prone to opioid abuse. Most research centers on specific characteristics of the region that serve as a catalyst to opioid abuse such as poverty, blue-collar work, poor medical care, and the rural nature of policing in the region (Maguire et al., 2019; Schalkoff et al., 2019).

The Appalachian region has a long tradition of blue-collar work. From the coal fields of West Virginia to the farmland of Ohio, people have been engaging in labor-oriented work for centuries. This high concentration of labor-intensive jobs leads to a growing number of injuries among workers (Maguire et al., 2019). These injury prone jobs are often tied to opioid prescription to battle the pain associated with the injuries received by workers. However, due to the addictive nature of opioids, workers often find it difficult to wean themselves off opioids once the injury has been effectively treated and

develop a progressive opioid habit. Often, once these patients run out of their prescribed medication, they turn to illicit forms of opioids such as heroin to supplement their use.

Most blue-collar work also involves low pay. The stress of poverty is also a predictive factor of opioid abuse (Schalkoff et al., 2019). Inhabitants of the Appalachian region experience increased levels of abject poverty when compared to the rest of the country. Holmes (2017) attributed much of the region's poverty to their heavy reliance on natural production like timber and coal, lower educational performance, and low economic and social capital. Whatever the reason, Appalachia is notably poorer than the rest of the nation and the population suffers from this phenomenon.

Rural policing is also a catalyst to increased substance abuse in Appalachia. The rural nature of the region spreads police out across large geographic areas and lessens the likelihood that they will be able to intercede on nefarious activity in the more secluded areas of their jurisdiction. Likewise, with drug use being more prevalent with this lack of official supervision, police cooperation suffers in rural environments (Mawby, 2016). The lack of trust between citizens and the police hinders efforts at controlling drug use and informing the police of drug related activity. Appalachian citizens are comparatively more suspicious of government intrusion into their personal affairs than citizens in more urban parts of the country. This increased level of suspicion leads to an increase in clandestine behavior including substance abuse or, in the case of methamphetamine, manufacture (Weisheit & Brownstein, 2016). The geographic isolation in this region also increases the likelihood of the manufacture of methamphetamine. Police cannot effectively patrol every "hill and holler" to ensure no illicit production is taking place.

Much like during the historical moonshine era, Appalachia's rural nature provides concealment for illicit production.

Chapter 3: Research Method

Purpose of the Study

The study will better define strain and stressors that impact recidivism and assist drug court professionals in designing interventions which more aptly address them. By understanding why some offenders are not successful in drug court programs and further understanding the rate at which drug court completion effects recidivism, conclusions can be drawn that an increased effort to more fully address strain factors within individual offenders could in effect increase program efficacy in drug courts.

Research Question and Hypotheses

1) Is there a relationship between prohibitive strain factors and drug court success?

H: There is a statistically significant relationship between prohibitive strain factors and drug court success.

NH: There is not a statistically significant relationship between prohibitive strain factors and drug court success.

Research Design

This study is framed according to a quantitative non-experimental research design using data collected by the survey method for the purpose of presenting comparative descriptive data on drug court participant strain influences. A survey provides a description of trends by focusing on a specific finite part of a population, a sample (Creswell, 2003). The sample for this study will be derived from the overall participants

in the MADCE. The primary descriptive data has been collected by a nationwide study of drug court programs and their participants conducted by the NIJ (2011).

The NIJ conducted a 5-year longitudinal impact and cost evaluation of adult treatment drug court programs which employed a hierarchical model and sampled nearly 1,800 drug court and non-drug court probationers from 29 rural, suburban, and urban jurisdictions across the United States (NIJ, 2016). These data are accessible through request by criminal justice professionals with IRB approval for empirical research. Babie (2004), Creswell (2003), and Remler and VanRyzin (2014) all encourage the utilization of major surveys due to recency, validity and availability of data acquisition. Moreover, the speed and economy of this method will allow data collection to be far more efficient than a pilot study and re-collection of said data as the MADCE already provides large amounts of data available from a larger sample than could be reasonably accessed by a student researcher (Creswell, 2003; Remler & VanRyzin, 2014).

Research philosophy for this study is based on current literature for drug offender treatment in the criminal justice system. The ontological assumption is that drug offenders face well documented strains and stressors that hinder their successful completion of court ordered treatment programs, which is directly correlated with increased recidivism (Mackinem & Higgins, 2012). From an epistemological assumption, this study explored the rural offenders' accounted stressors and strains in an effort to inform treatment providers in order to offer adaptation recommendations for increased program effectiveness and recidivism reduction. The axiological assumptions will coincide with the motivations and purpose of rural drug court programs in their efforts to

reduce recidivism and increase program effectiveness by acknowledging the longitudinal strains and stressors the rural drug offender experiences. Finally, the methodological assumption is that the data the MADCE provides through a longitudinal account of strains and stressors for the rural drug offender can be quantitatively analyzed and synthesized for treatment program implementation so as to improve effectiveness and reduce recidivism in rural drug court treatment programs.

Although comparative studies cannot establish cause-and-effect relationships because they are not experimental by design, I sought only to determine if a relationship between identified strains on the drug court offender exists in comparison to the national drug court participant. Shortcomings of a reasonable representative sample is overcome with the utilization of the MADCE because the study utilized a nationwide sample and identified the smaller population into rural, suburban and urban jurisdictions but reported findings for all areas (NIJ, 2016). For the MADCE, the final aggregate descriptive report data was derived from a longitudinal study which provides a multi-year comparative analysis (NIJ, 2016). However, the pertinent data for this study, although well documented, was not utilized for relationship comparative analysis by the NIJ. This data analysis will offer further insight into rural offender recidivism influences should a relationship be identified.

Offender recidivism is the criterion variable in this study and was evaluated for comparison on both the national and rural levels. Further analysis was conducted based on participant identified strains and recidivism characteristics. Should a relationship between specifically identified strains from the MADCE be identified, these findings will

serve to offer improvement recommendations and policy implementations for the drug court professional and program advisors.

Target Population and Sample

Population

The population for the study includes the overall respondents from the 2013 MADCE. The MADCE was initially undertaken to study 379 drug courts (NIJ, 2016). The data collected from the overarching surveys constituted a valid statistical population to derive a sample of rural participants from.

Sample

The sample for this study will be derived from the overall participants in the MADCE. The primary descriptive data has been collected by a nationwide study of drug court programs and their participants conducted by the NIJ (2011).

Procedures

The MADCE study included 379 drug courts and comparison sites selected from eight states across the country (MADCE, 2013). The data gathered reviewed the recidivism rates from a national perspective, but did not offer direct analysis to the rural offender population alone. The MADCE (2013) questionnaire gathered demographics, supervision status, street time, housing and current offense and program entry information in raw data that were utilized to whittle the participant population and data down to a focused sample data set for this study of rural offenders only. The purpose of the study is to review already validated data in relationship only to drug offenders in

order to discern correlation between the variables of participant failure and strain features within the drug court programs.

The population, rural drug court offenders, is so specific and the limitations of geography would otherwise be hindered if the research only focused on immediate geographical area, this study utilized secondary data. Utilizing the MADCE (2013) raw data allows the correlational research in which no independent variables are manipulated but already validated survey instrumentation is utilized and raw data has already been verified by the NIJ. Two or more variables are measured to identify possible correlational relationships, participant recidivism and strain features, but solely with drug court participants. The intent of this study is to make assumptions that could be generalized within the overall population of drug court offenders to rural offenders. (Creswell, 2014).

Participant Selection

The study utilizes secondary data analysis; with this in mind, each data set of the MADCE (2013) could be further reduced to reflect only non-active offender information. As the purpose of the study is to review already validated data in relationship only to completed drug offenders in order to discern correlation between the variables of participant recidivism and strain features within the drug court programs, it is imperative that the data sets be reduced based solely on the completed participants interviewed.

For the purposes of a rural comparison, the study must make generalizations that could be assumed to be reflective of rural participants as the sample includes both rural and urban participants. The United States Census Bureau's (2015) definition of rural encompasses all population, housing and territory not included in the areas of greater than

50,000 people and or the mixed urban clustered areas of between 2,500-50,000 people in any given five square mile area. Typically, rural areas have a low population density and lack urban resources for treatment and care of drug offenders. For the purposes of this study, rural drug court offenders were identified as geographically located in an area with a mean population of less than 5,000 people in a given region.

The initial data set was collected through a nationwide survey of Adult Drug Courts (MADCE, 2013). Data were also collected by web-based surveys, interviews, comparative analysis of programs in place more than a year and final multi-site impact evaluation of 379 drug courts for final data collection (MADCE, 2013). Further data were collected through offender interviews while "in program" at 6 month and 18 month intervals to allow for a longitudinal evaluation of effectiveness of drug court programs (MADCE, 2013). The MADCE (2013) gathered offenders' criminal records on each participant at 22 months and 30 months to better assess recidivism numbers.

Protection of Participants

All raw data from the MADCE were requested and evaluated to extrapolate only non-active drug court offender data for comparison and possible correlation. As MADCE (2013) will only release redacted information, no personally identifiable information was available, and there is limited potential for participant direct implication or breach of confidentiality. All data will remain secured and analyzed by me.

Raw data from the NIJ's 5-year longitudinal impact and cost evaluation of adult treatment drug court programs study, the MADCE (2013), served as the instrumentation and data for this study. The MADCE employed a hierarchical model and sampled nearly

1,800 drug court probationers from 370 rural, suburban and urban jurisdictions across the United States (NIJ, 2016). The MADCE study included 379 drug courts and comparison sites selected from eight states across the country and 1,578 participants (MADCE, 2013). The MADCE (2013) is further comprised of multiple datasets derived over an 18 month study. The MADCE contains three reduced data sets: Data Set 1: Nationwide Drug Court Survey Data, Data Set 2: Offender Data, and Data set 3: Cost Benefit Analysis Data.

Data Collection

As the purpose of the study is to review already validated data in relationship only to rural drug offenders in order to discern correlation between the variables of participant recidivism and strain features within the rural drug court programs, it is imperative that the data sets be reduced based solely on the geographic demographics of the participants' information before analysis.

Data collection for the study has already been completed by the parent study. The MADCE (2013) data were collected with the appropriate data collection procedures by the NIJ. As secondary data sets from a governmentally funded research program, the data is restricted from general public dissemination (NIJ, 2016). In order to obtain the raw data an approved Institutional Review Board (IRB) application, letter of request and a Restricted Data Use Agreement form that specifies dissertation research as the reasons for the request.

All requested data communications will be forwarded to the Director of the National Archive of Criminal Justice Data, Inter-university Consortium for Political and

Social Research, Institute for Social Research, P.O. Box 1248, University of Michigan, Ann Arbor, MI, 48106-1248. Copies of all requests will be supplied to IRB as well.

Data were delivered in three separate datasets in SPSS format. The codebook for the Offender Data was split into three separate codebooks. Moreover, per request guidelines, "The Offender Data is available as one data file that includes the variables from all three interview timepoints." The data were then reduced per sampling guidelines for proper analysis and coding.

Data Analysis

R1: Is there a relationship between prohibitive strain factors and drug court success?

H: There is a statistically significant relationship between prohibitive strain factors and drug court success.

NH: There is not a statistically significant relationship between prohibitive strain factors and drug court success.

(a) PDF files and .dat files of secondary archival data were emailed, downloaded and then printed for analysis. Raw data were reviewed by me and coded by hand per sampling guidelines and procedures previously described.

(b) Raw data were reduced per sampling protocol previously established. Once data were reduced to reflect only the data directly associated with drug court offenders, data were be organized per demographics, recidivism and longitudinal relevance.

(c) Data were coded by hand and then analyzed through SPSS for correlation through statistical modeling.

(d) Data analysis was be conducted in SPSS.

(e) All data will be stored on a USB storage device in a locked filing cabinet with the paper hard copies for 5 years. After 5 years, all data will be destroyed. No other access will be gained to hard data without IRB request and approval.

Instruments

Variables for this quantitative non-experimental design as outlined in 5.1 are drug court effectiveness and prohibitive factors. The drug court effectiveness is variable in participant recidivism and the prohibitive factors are variable in strain features that would increase recidivism in rural drug court offenders. The MADCE (2013) provides raw data that initial evaluation was nationally evaluated; however, rural focus was not particularly outlined and leaves room for recidivism evaluation and correlation to identified strain factors within the rural offender population already evaluated.

Ethical Considerations

This study is a non-human participant secondary archival quantitative data analysis from both the national and state level drug court reports. However, there remains ethical considerations in sampling population, raw data access, data analysis and with regard to drug court treatment program data considerations for this study. The ethical considerations arise from the longitudinal data collection and analysis of the MADCE itself. As the primary data source for this study, I needed to be cognizant that ethical issues surrounding the forced, mandated and coerced nature of the treatment subjects themselves are evident as the original sampled participants in the MADCE were mandated to treatment due to criminal infractions. However, the participants identifying

information, consent forms and actual criminal charges are redacted from the available data source that will be analyzed. It is unknown if the sample population from the initial MADCE would object to utilization of their response and compounded data for further study. However, the MADCE reports that all IRB protocols regarding freewill and voluntary consent were followed.

Ethical consideration is also given to permission to use the MADCE raw data. I assumed that the MADCE raw data would be made available for evaluation and analysis based on the fact the study itself is public data, accessible by educators and researchers with the intent of furthering knowledge and based on public funding utilized to conduct the MADCE. There are permission protocols in place that do limit access to the raw data that required Walden University IRB application approval to gain access to this data.

Another ethical consideration for this study is the secondary data analysis of the MADCE raw data. I assumed that the provided data are accurate, valid, and reliable based on the fundamental research source and that all raw data will be provided. The limitations of the MADCE include the longitudinal history of the offenders, outlying drug court recidivism and federal drug law changes during this longitudinal study. The MADCE was conducted from 2003-2012. However, federal and state drug laws had some significant changes including the addition of more illegal and controlled substances that would impact the study participant population in both urban and rural areas.

Finally, the overall data analysis process for this study faces the ethical consideration of researcher error. I used longitudinal secondary raw data for analysis. These data were assumed to be accurate, valid and complete. The reliability and

replicability were also assumed to be applicable in a smaller venue such as rural drug courts. However, there is limited comparative analysis available in current empirical knowledge.

Summary

Drug court offender recidivism is well documented on the national level. However, drug court participant success has finite empirical data. The analysis of the MADCE raw data garnered insight into a potential correlation between the successful completion of drug court programs and offender recidivism. The data analysis gleamed insight into strain factors that can suggest predictors for failure or success for the rural offender. As the literature is consistent on the impact of particular strain factors limiting success and increasing recidivism, reviewing the data in relationship to rural offenders also offered insight for program improvements. The literature is consistent in identifying the relationship between identified strains such as housing, treatment access, transportation access, and income as predictors for success or failure during drug court. I anticipated that these same stressors will be amplified in their correlation to recidivism in the rural offender. By utilizing the MADCE (2013), should a correlation be identified, these findings would serve to offer improvement recommendations and policy implementations for the drug court professional and program advisors.

Chapter 4: Results

Background

Following acquisition of the data from ICPSR in raw form, the data were cleaned and recoded into the appropriate format for analysis in accordance with both the secure data agreement and the IRB approved design of the study. The original data set contained 11,198 variables and was scrutinized to identify and extract the appropriate variables for analysis to answer the research question.

Variables were listed/coded as follows:

DV: GRADSTAT: this variable was recoded from the original variable EPEC10 as a simple binomial nominal measure of successful completion or unsuccessful completion. Active participants at the time of the interview were removed.

IV1: EINCOME: this variable was cleaned for missing cases and utilized directly as a scale level variable indicating income.

IV2: EADDSV20: This variable was used directly as an indicator of treatment exposure prior to drug court.

IV3: HOUSING: This variable was recoded into a nominal measure dummy coded into the following values: HOUSINGUN= unstable housing, HOUSINGOWN= participant lives in their own home, HOUSINGOTH= participant lives with a relative. HOUSINGUN was used as a control variable in the analysis.

IV4: EFAM51C: This variable was used directly as an indicator of transportation access for participants.

Confidence intervals for statistical significance were set at standard 95% confidence.

Description of the Sample

The final sample was comprised of the following frequencies per variable:

Table 1

Sample Frequency Distribution IV

		GRADSTAT	Income	Treatment exposure	Housing stability	Transportation access
N	Valid	790	1474	1474	1426	1467
	Missing	991*	307	307	355	314

*these cases include active drug court participants at the time of the interview

The individual case data could not be separated into rural versus urban however the courts themselves were divided as follows:

Table 2

Frequency Distribution Drug Court Population

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1 1: Urban	150	39.6	40.5	40.5
	2 2: Rural	152	40.1	41.1	81.6
	3 3: Suburban	68	17.9	18.4	100.0
	Total	370	97.6	100.0	
Missing	-9 Blank	9	2.4		
Total		379	100.0		

Hypothesis Testing

The following research question was posed for the study:

1) Is there a relationship between prohibitive strain factors and drug court success?

H: There is a statistically significant relationship between prohibitive strain factors and drug court success.

NH: There is not a statistically significant relationship between prohibitive strain factors and drug court success.

The following indicates the logistic regression analysis conducted with the variables named:

Table 3

Logistic Regression IV

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Income	.000	.000	36.751	1	.000	1.000
	Participant lives in their own home	1.072	.282	14.478	1	.000	2.921
	Participant lives with a relative	.657	.280	5.527	1	.019	1.930
	Treatment exposure	-.003	.167	.000	1	.983	.997
	Transportation access	.091	.072	1.572	1	.210	1.095
	Constant	-1.153	.425	7.369	1	.007	.316

a. Variable(s) entered on step 1: EINCOME, HOUSINGOWN, HOUSINGOTH, Treatment Exposure, Transportation Access.

Summary

As illustrated above (Table 2), the two variables with significant impact are income (ExpB)=1.000) and housing (own ExpB=2.921, relative ExpB=1.930). What the

analysis describes are predictive relationships between income and successful completion of drug court and a predictive relationship between both living in their own home and a participant staying with a relative and its impact on their successful completion of drug court. In simple terms as income rises, a participant's likelihood to complete drug court rises in kind. Moreover, participants who live in their own homes are almost three times more likely to graduate the program while those staying with a relative are almost two times more likely to graduate successfully. There was no identified significant effect regarding treatment exposure (ExpB=.997) or transportation access (ExpB=1.095) with the available data as indicated above (Table 2),

With regard to the research question and hypotheses specifically, the above data confirms the hypothesis that some prohibitive strain factors do have a significant effect on successful completion of drug courts. While the factors studied did not show significant results overall, the two factors identified in Table 2 as significant do indicate that, according to this data set, income and housing appear to have some impact on successful completion of drug courts.

Moreover, while the factors of treatment exposure and transportation access didn't result in significant impacts with this data, information from the field suggests that these factors may still have an impact. In example, many drug court program participants experience transportation related issues with getting to treatment or court appearances, thus resulting in program failure. The same could be said for treatment exposure as well. While myriad programs exist for drug and alcohol treatment, these programs are limited in capacity and can only serve so many clients, resulting in treatment availability

problems for the substance abusing population. While the data did not reflect a significant impact for these two factors, these issues still exist for some drug court participants and result in program failure for some.

The insignificance of treatment exposure and transportation access essentially divide the original hypothesis and would essentially support the null hypothesis with the given data set. In simpler terms, the research expected the access to treatment and the access to transportation to be more impactful on success.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The following chapter discusses the actionability of the research findings in promoting social change in drug courts. Results will be summarized; limitations of the research will be presented and practical applications of the findings will be further extrapolated upon. The goal of this chapter is to provide readers with actionable points that demonstrate the value and usefulness of the study.

Summary of the Results

While a significant impact was illustrated (Table 2) for the prohibitive strain factors of Income and Housing, no statistically significant impact was noted for Treatment Exposure or Transportation Access. These results are comparable to other recidivism studies looking at institutional correctional programs and other community supervision programs.

Discussion of the Results

The results indicate that income and stable housing are two key features of drug court success. This should not be surprising as income and stable housing are directly related to overall success in society. Moreover, the profound impact housing has on success was interesting. The strength of this predictor with regard to the data and its order in predicting success on a level higher than income was unexpected. Most extant literature cites income and education as primary drivers for success, the latter leading to increases in the former; however, when we factor in stable housing, particularly with these cases, it appears to be a stronger predictor (Marlowe, 2011). The variance in

predictability between the participant living in their own home versus living with a relative is also intriguing. It illustrates that living in your own stable home is best for successful drug court outcomes. However, living with a stable relative is still more predictive than overall income.

The non-significant results, while not statistically important to the research question, do illustrate a gap in colloquial thinking regarding drug court success. Most rural drug court practitioners encounter problems with participants in these areas (Maynard, 2014). It could perhaps indicate that while these factors undoubtedly complicate success in drug courts, their statistically significant impact is not present in this data set. Understanding the nuance between research and practice and investigating the effect these factors have on specifically rural drug courts may enlighten this issue.

Conclusions Based on the Results

Based solely on this data analysis, the research is conclusive that income and housing do have a statistically significant effect on drug court success. Moreover, housing appears to be the strongest predictor of successful completion of drug court. Income is also a predictor of success and is colloquially, likely to be a pivotal factor in housing as well; however, running the variables through a correlation analysis produced a non-significant result.

With regard to non-significant results, this particular data set did not indicate a relationship between prior treatment exposure or transportation access and success. While these factors did have anecdotal relevance in the literature review, the statistical analysis did not indicate a significant impact on participant graduation.

Limitations

Analyzing the results, it is important to realize the age of the data available. As a general rule, data should not be considered valid for statistical relevance if it is over 15 years old. The available data to conduct the analysis was collected in 2013; however, no dataset has been collected since that date that was available for analysis. Reproducing the study with current data would provide for a comparative analysis on any changes since that date.

Another limitation of the data and analysis was the inability to separate individual case data by demographic rural versus urban cases. This prohibited the researcher from answering his research question regarding the effect of strain fundamentally on rural drug courts. The macro level data indicated that the case data was comprised of 379 drug courts of which, 152 were rural, 150 were urban, and 68 considered suburban, with nine missing (Table 2). While it can be assumed that over half of all drug court programs are non-urban, it does not decisively indicate that case level data shares this distribution.

This limitation makes generalizations of the significant data to strictly rural drug courts impossible. While this complicates the overall scope of the research question, it does not discount the significance of the findings, in that, we can safely infer that problems with housing and problems with income will inevitably lead to less successful outcomes for all drug court participants. With this inference, one could also then deduce that, while the data is not specifically delineated along urban and rural lines, rural cases are included in the overall data set making these findings hold true for rural participants. However, this does lead us to the question of whether this distinction may impact the

significance of the findings as they are in this study. Simply put, would a clear delineation of rural participants and urban participants lead us to the same findings?

Moreover, this limitation may also lead to different results for nonsignificant findings as well. While transportation and treatment exposure were not significant for the overall population of drug court participants studied, perhaps these factors are more impactful for a rural participant than they are for an urban participant.

Implications for Practice

In regard to practical applications of this research, drug court practitioners are faced with myriad issues effecting participant success. The goal of successful completion for a participant is influenced by multiple factors as well. Streamlining efforts into assisting participants with issues known to statistically effect success would be beneficial in increasing drug court efficacy. While there may be no "magic key" to unlocking every participant's potential, the understanding of known influential factors of success would assist practitioners in designing interventions and assistance programs aimed at increasing participant performance.

Developing the drug court's programming to assist participants with employment, income stability, and housing most importantly could realize a major increase in successful graduation rates. Improving graduation rates would theoretically increase reentry success and enable graduates to more effectively navigate recovery from substance abuse.

Recommendations for Further Research

Future research on drug court effectiveness would benefit from a recollection of this data and a follow-up analysis with current drug court participants to gauge the scope of the effect currently. Researchers should also include demographic information about where the participant is attending drug court programming to see if socio-environmental influences like geographic region factor into success. Income and Housing are not national figures and vary greatly between regions. While extant literature indicates poverty and addiction are fundamentally linked as are poverty and criminal offending, the available data does not discern region on a case by case data. Therefore, what might be considered low income for survival in an urban environment may be above the poverty threshold in a rural environment.

Conclusion

Helping courts are nothing new, drug courts are constantly evolving as is the overall criminal justice system. The system utilizes massive resources to assist individuals in aligning their behavior with societal norms. Most criminal justice initiatives are retributive in nature in terms of correcting behavior. Drug courts strike a different path. By utilizing the court as a part of the treatment process and keeping offenders from entering institutional corrections, both the monetary and humanistic cost to society is lessened. These programs have also been shown to be effective in long term addiction recovery and reducing criminal recidivism.

When we consider, a sizable portion of the population either using or abusing substances, the trend of addiction and criminality is bound to increase, and while our

criminal justice system has grown accustomed to dealing with this fallout, we have been more reactive than proactive. Utilizing scientific research into best practices and aligning program operations with those practices that are more likely to bring about successful outcomes, everybody comes out ahead.

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