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PARTICIPANTS AND THOSE WHO OPTED OUT: AN EXPLORATORY RECIDIVISM STUDY OF THE VANDERBURGH COUNTY (INDIANA) TREATMENT COURT

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Despite the abundance of research on treatment courts, questions remain regarding their ability to reduce recidivism. The Vanderburgh County Treatment Court was examined to determine the effectiveness of the court in terms of recidivism by comparing: (a) a comparison group screened for participation who did not participate; (b) a dropout group who started but did not finish; and (c) a group who started and completed treatment court services. Unlike studies that utilize a binary measure of recidivism, we measure recidivism as the number of days until recidivism and utilize survival analysis. Findings confirm significant recidivism differences among the three groups.

Keywords: Drug court, Recidivism, Treatment court, Substance abuse, Community corrections.

Introduction

Since the formation of the first drug court in Dade County, Florida in 1989, drug treatment courts have proliferated throughout the United States, and globally (Brown, 2011). Drug or Treatment Courts are specifically designed court calendars or dockets that have been established to reduce recidivism and substance abuse among nonviolent, substance abusing offenders. These types of court programs are designed to increase the likelihood of successful rehabilitation through early, continuous, and intense court supervised treatment, mandatory periodic drug testing, community supervision, and the use of appropriate sanctions and other rehabilitation services (Bureau of Justice Assistance, 2011).

In addition, individuals who are drug-addicted may be sent to a treatment court in lieu of traditional justice case processing or in some instances prison. Treatment courts keep individuals in treatment long enough for rehabilitation and intervention services to work, while closely supervising the participants. The Vanderburgh County Treatment Court (VCTC) is an 18-month program for non-violent offenders with felony drug charges and/or related arrests. In correlation with national drug court goals the VCTC offers offenders, both male and female, the opportunity to make their lives more manageable and drug free through court and treatment team support and supervision. The VCTC is a voluntary program that is highly structured and facilitated by a team of substance abuse and addiction specialists that consists of a Deputy Prosecutor, Treatment Court Director, Public Defender, Case Managers, and local substance abuse/addiction service providers. The purpose of the VCTC is to reduce the negative impact of chemical dependency on the community and provide an alternative to sentencing. This is accomplished by integrating drug treatment services with justice system case processing and providing rehabilitative services while maintaining public safety.

The VCTC uses a non-adversarial, treatment-oriented approach for eligible participants who have a desire to stop using drugs and/or alcohol. Each participant is screened for eligibility using the Indiana Risk Assessment Survey (IRAS) and offered an individualized treatment agreement. The IRAS is given at three incremental stages within the program (i.e., initial, middle, and exit). The treatment services are structured into four distinct phases, with each phase having specific requirements for completion. Participants are provided with intensive substance abuse and/or addiction treatment with accountability to the presiding judge. During each phase participants are required to submit to random urinalysis and breathalyzer tests, as well as appear in court for progress reviews. Participants are rewarded for doing well or sanctioned if they renege on their obligations. The personalized treatment, court supervision, and rehabilitative support services of the treatment court model have been recognized as effective tools in slowing the cycle of recidivism due to substance abuse and addiction issues (Miller, 2009).

A wealth of research on drug treatment courts has examined completion rates (Belenko, 2001; Peters, Haas, & Murrin, 1999), characteristics predictive of completing drug treatment court (Broussard, 2012; Brown, 2010; Butzin, Saum, & Scarpitti, 2002; DeVall & Lanier, 2012; Gray & Saum, 2005; Hartley & Phillips, 2001; Hickert, Boyle, & Tollefson, 2009; Hohman, McGaffigan, & Segars, 2000; Mateyoke-Scrivner, Webster, Staton, & Leukefeld, 2004; Rempel & Destefano, 2001; Roll, Prendergast, Richardson, Burdon, & Ramirez, 2005; Schiff & Terry, 1997; Sechrest & Shicor, 2001; Taxman & Bouffard, 2005; Wolf, Sowards, & Wolf, 2003), recidivism rates of drug court completers (Gottfredson, Najaka, & Kearley, 2003; Gottfredson, Najaka, Kearley, & Rocha, 2006; Guydish, Wolfe, Tajima, & Woods, 2001; Johnson & Latessa, 2000; Truitt et al., 2002), and characteristics predictive of recidivism after completion of drug treatment court (Johnson & Latessa, 2000; Peters, Hass, Murrin, 1999; Rempel et al., 2003; Roman, Townsend, & Bhati, 2003; Sung & Belenko, 2005; Truitt et al., 2002). Despite this abundance of research, questions remain regarding recidivism after completion of a treatment court program.

In this exploratory research, the Vanderburgh County Treatment Court was examined to determine the effectiveness of the court in terms of localized recidivism by comparing three groups: (a) a group of individuals screened for participation in the treatment court who chose not to participate; (b) a dropout group of individuals who started the treatment court but did not finish; and (c) a group of individuals who started and completed the treatment court program. Unlike other studies that utilize a binary measure of whether recidivism occurs, this analysis combines the binary measure with the number of days until recidivism occurs and utilizes survival analysis. This study will first present a review of extant research on drug treatment courts; provide an overview of the study, followed by the results and recommendations for future research.

Literature Review

A major issue regarding drug treatment courts is whether participation or completion of such programs reduces recidivism. Research in this area has focused on comparing the recidivism rates of treatment and non-treatment groups or comparison groups using various measures of recidivism and varying lengths of time to follow-up. Scholars have also examined how demographic factors, such as gender, age, and race, impact recidivism of drug treatment court completers.

Several studies found that participating in a drug treatment court lead to a decrease in recidivism rates and reduced substance use/abuse (Banks & Gottfredson, 2004; Belenko, 2001; Brewster, 2001; Conley, Allen-Blakney, & Stoeckel, 2013; Cooper, 2003; Fielding, Tye, Ogawa, Imam, & Long, 2002; Finigan, 1998; Goldkamp & Weiland, 1993; Gottfredson, Najaka, & Kearley, 2003; Gottfredson, Najaka, Kearley, & Roche, 2006; Guydish, Wolfe, Tajima, & Woods, 2001; Johnson & Latessa, 2000; Listwan, Shaffer, & Latessa, 2001; Marchand, Waller, & Carey, 2006; Marlowe et al., 2003; Martinez & Eisenberg, 2003; Patra, Gliksman, Fischer, Newton-Taylor, Belendko, Ferrari, Kersta, & Rehm, 2010; Peters, Haas, & Murrin, 1999; Rempel et al., 2003; Somers, Currie, Moniruzzaman, Eiboff, & Patterson, 2012; Truitt et al., 2002). Additionally, Cooper (2003) and Marchand, Waller, and Carey (2006) noted

that recidivism and drug use were reduced not just for drug court graduates, but for most participants. According to Guydish, and colleagues (2001), re-arrest rates were reduced between 11% and 14% for participants of drug treatment court compared to nonparticipants in California, with graduates of drug treatment court experiencing the largest reduction.

Despite finding that drug treatment court reduced recidivism, Gottfredson, Najaka, and Kearley (2003) found that in a two-year follow-up, nearly two-thirds of drug treatment court participants were re-arrested compared to over 80% for a non-participating control group. This was a finding they later replicated (Gottfredson, Najaka, Kearley, & Roche, 2006). In this later study, participants in the drug treatment court had fewer arrests, fewer charges, and were less likely to be arrested for drug offenses than those in the control group. Johnson and Latessa (2000) reported that while 29% of drug treatment court participants were re-arrested, the re-arrest rate was 39% for the nonparticipants. At 18-month follow-up, only 31% of drug treatment court graduates had been re-arrested, whereas re-arrests were not recorded for non-participants (Johnson & Latessa, 2000). In two drug treatment courts evaluated by Truitt et al. (2002), the introduction of the drug court resulted in a decrease in the felony re-arrest rate. In one county, the felony re-arrest rate was reduced from 40% to around 12% and in another, the felony re-arrest rate decreased from 50% to around 35%. This can be attributed to the combined efforts of the treatment court program and the treatment court participants. Additionally, Finigan (1998) noted that arrests and convictions were lower for those who completed the drug treatment court as compared to those who started it but did not finish. In research on participants of treatment courts that involved a matched comparison group, Brown (2011) found that participants recidivated later than those who did not participate in treatment court. In particular, it was found that reductions in recidivism for those in the treatment courts were greater for people who were older, nonwhite, women, and for those with more serious criminal histories. This suggests an increased benefit of drug treatment court programs for these groups of individuals.

Some studies found no differences in recidivism between drug treatment court participants and a comparison groups (Gottfredson, Coblentz, & Harmon, 1997; Granfield, Eby, & Brewster, 1998). Gottfredson, Coblentz, and Harmon (1997) noted that there were some initial differences between the participants and the comparison group that made these groups not equivalent, particularly that the comparison group individuals were higher recidivism risks than the drug treatment court group participants. Granfield, Eby, and Brewster (1998) found that there was no decrease in re-arrest rates among participants in the Denver Drug Court, but that participants in the drug court spent less time in presentence confinement, which saved money, and were placed into treatment more quickly.

The relationship between demographic characteristics and recidivism after completion of drug treatment court programs has been examined. In terms of gender, Roman, Townsend, and Bhati (2003) found that female participants in drug treatment court were less likely to be re-arrested than male participants. Truitt et al. (2002) also found that women were less likely to recidivate than men in one of the two drug treatment courts they evaluated. Further, several studies show that younger graduates were more likely to recidivate than older graduates (Johnson & Latessa, 2000; Peters, Haas, & Murrin, 1999; Rempel et al., 2003; Roman, Townsend, & Bhati, 2003; Sung & Belenko, 2005).

Several studies examined the relationship between race/ethnicity and recidivism after completion of drug treatment court programs, with most finding that Caucasians were less likely to recidivate than African Americans (Johnson & Latessa, 2000; Roman, Townsend, & Bhati, 2003; Truitt et al., 2002). Rempel and colleagues (2003) found that race/ethnicity was related to recidivism in three of five drug treatment courts studied. In two of those courts, African American participants were more likely to recidivate than Caucasian participants, and in the third court, Hispanic/Latino participants were more likely than other groups to recidivate.

Notable findings from other studies of recidivism and drug treatment courts include issues related to education, marital status, employment, and drug of choice. According to Peters, Haas, and Murrin (1999), drug treatment court participants who were arrested during the follow-up period were less likely to have a high school diploma or General Education Diploma (GED) and more likely to be single than participants who were not re-arrested. Sung and Belenko (2005) found that being unemployed was related to higher

recidivism for drug treatment court completers. Participants who were re-arrested were also more likely to report abuse of cocaine (Peters, Haas, & Murrin, 1999). According to Sung and Belenko (2005), graduates of long-term residential treatment who recidivated were more likely to live alone, to view treatment as too long, and to disagree with treatment rules, while those graduates who did not recidivate were more likely to live with spouses or children, to understand why long treatment length is necessary, and to believe in compliance with treatment rules.

Given the varying and conflicting results from previous research, particularly that focusing on recidivism, this exploratory research on the Vanderburgh County Treatment Court examines whether localized recidivism occurs and differences in length of time, measured in days, before localized recidivism occurred for three groups: (a) a comparison group screened for participation in the treatment court who did not participate; (b) a dropout group who started the treatment court but did not complete the program; and (c) a group who started and successfully completed the treatment court requirements. The next section details the treatment court under study and the employed methodology.

Methodology

Data

This exploratory study reflects data collected between June 1, 2001 and June 30, 2013 by the Vanderburgh County Superior Court. As mentioned previously, data were divided into three categories and include (a) a comparison group screened for participation in the treatment court who did not participate; (b) a dropout group who started the treatment court but did not complete the program; and (c) a group who started and successfully completed the treatment court requirements. Of the 1,264 individuals who were included for participation in this particular study, there were 319 individuals who were successful in completing program requirements (the "successful completion group'), 270 unsuccessful program participants (the "unsuccessful completion group"), and 675 individuals who were screened but did not participate in program services (the "comparison group").

Variables

The dependent variable identified for this study is a continuous measure of the total number of days until individuals received a new misdemeanor or felony arrest in Vanderburgh County, referred to as localized recidivism. As mentioned previously, there are several demographic variables of interest when considering the number of days without recidivism. These independent variables include gender, ethnicity, and age. Gender is a dummy variable with 1 = male and 2 = female. Also, race/ethnicity is measured using two dummy variables, 1 = Caucasian and 2 = not Caucasian. Age is measured in years for the analyses, but reported using the following age categories in Table 1: 19 years old and younger; 20-29 years old; 30-39 years old; 40-49 years old; 50+ years old. Education level is measured with the following categories: no high school diploma; high school diploma/GED; and some college.

Results

To begin, this study examined whether differences in demographics exist among the three groups at the bivariate level. Since individuals were not randomly assigned to the comparison or treatment groups, demographic differences could reflect initial differences between these groups. As shown in Table 1, bivariate findings indicate statistically significant demographic differences between the three groups. In terms of ethnicity, a larger percentage of those who completed the VCTC were Caucasian, in contrast to the unsuccessful and comparison groups, which had larger percentages of non-Caucasians than the successful completion group.

Statistically significant differences were found in age ($p < .001$) between the three groups. The successful completion group had a higher percentage of older individuals while the unsuccessful completion and comparison groups had higher percentages of younger individuals. There was no statistically significant gender difference between the groups ($p = 0.242$), with over 60% of each group male and under 40% female. Demographic differences among the groups could be artifacts of the non-random assignment to the comparison or treatment groups, though demographic differences between the successful and unsuccessful treatment groups could reflect treatment effects. Below we first examined whether local recidivism (i.e., a new misdemeanor or felony arrest in Vanderburgh County, Indiana) differs among the groups at the bivariate level, then we investigate whether local recidivism is related to demographics within each of the three groups at the bivariate level, and finally we examine these variables using a Cox proportional hazards model accounting for both whether individuals recidivated and how many days before they recidivated.

There are statistically significant differences in the number of days without recidivism for the three groups at the bivariate level ($\chi^2 = 60.301$, $p < .001$). Only 36.1% of the successful completion group had a new local arrest compared to 55% of the comparison group and over 67% of the unsuccessful group. Independent samples t-tests were also utilized to examine statistical differences between the groups in relation to the number of days with no local recidivism at the bivariate level. Results are shown in Table 2. A statistically significant difference was found between the comparison group and the successful completion group ($p < 0.001$), illustrating that individuals who successfully completed the VCTC program had a greater length of time with no local recidivism at 1,023 days on average, than those comparison individuals who did not participate in the program, who averaged 810 days until recidivism, a difference of 213 days.

Table 1. Cross tabulations and Chi-square

	Independent Variables			
	Comparison Group (%)	*Successful Completion (%)*	*Unsuccessful Completion (%)*	Chi-square values
Demographic Variables				
Gender				**2.835**
Male	61.0	61.1	66.6	
Female	38.9	38.8	33.3	
Ethnicity				**18.37*** **
Caucasian	79.6	87.1	73.3	
African American	18.8	12.2	25.9	
Other	0.8	0.6	0.7	
Missing	0.7	0	0	
Age				**32.03*** **
19 years old or younger	0.2	0.3	0	
20 – 29 years old	27.8	19.7	38.1	
30 – 39 years old	32.4	39.4	35.1	

40 – 49 years old	24.8	26.3	18.1	
50+ years old	14.5	14.1	8.5	
Localized Recidivism				**60.301*** **
Yes	55.0	36.1	67.4	
No	45.0	63.9	32.6	
n =	675	319	270	

*p<.05; **p<.01; ***p<.001

When comparing participants who successfully completed the program and the unsuccessful completion group, results from an independent samples t-test show a statistically significant difference ($p < 0.001$) between the two groups in the number of days until recidivism. These results suggest that successful completion of the program increases the number of days with no recidivism. Specifically, successful completers had an average of 1,023 days with no local recidivism compared to 768 days for the comparison group, a difference of 255 days. When comparing recidivism between the comparison group and those who were unsuccessful, statistical analysis confirmed no statistically significant difference between the two groups ($p = .491$). This suggests that there was no difference in the number of days to recidivism for the comparison group and those who began but did not complete VCTC services.

Table 2. Independent Samples T-Tests, Days without Recidivism by Group

Dependent Variable	***Independent Variable***	***Mean***	**T-test**
Number of Days ***without*** *Recidivism*	*Comparison Group*	810.0	-3.572***
	Successful Completion	1022.5	
	Successful Completion	1022.5	3.747***
	Unsuccessful Completion	767.6	
	Comparison Group	810.0	0.689
	Unsuccessful Completion	767.6	

*p<.05; **p<.01; ***p<.001

A bivariate examination of whether demographic characteristics were related to the number of days with no local recidivism within each group utilizing independent samples t-tests revealed no statistically significant differences within any of the three groups for gender and ethnicity in terms of the number of days with no local recidivism, as shown in Table 3. However, age was significantly correlated with the number of days with no recidivism for two of the three groups. As shown in Table 4, being older is associated with having a greater number of days before the occurrence of local recidivism for the comparison group and the successful completion group. Age and the number of days without local recidivism were not statistically significant correlated for the unsuccessful completion group.

Table 3. Independent Samples T-Tests, Days without Recidivism by Group and Demographics

	*Number of Days **without** Recidivism by Status*					
	Comparison Group	t-test	*Successful Completion*	t-test	*Unsuccessful Completion*	t-test
Gender						
Male	759.9		973.3		771.0	
Female	888.6	-1.850	1100.0	-1.285	761.1	.098
Ethnicity						
Caucasian	833.7		1031.1		719.0	
Not Caucasian	709.4	1.459	964.4	.463	901.5	-1.714

*p<.05; **p<.01; ***p<.001

Given the limitations of bivariate analyses and in order to examine the impact of the demographic characteristics and the groups on recidivism on a multivariate level, survival analysis, specifically a Cox proportional hazards model, was performed. This model allowed us to account for whether or not someone was re-arrested, as well as the number of days until that arrest occurred. As noted by Banks and Gottfredson (2004), an arrest on the first day after completing a treatment court is not the same as an arrest on the last day of observation. Additionally, survival analyses such as proportional hazards models take into account different exposure times, as individuals enter and leave the treatment court at different times. Failure was defined as a new arrest in Vanderburgh County, also referred to as localized recidivism, while the dependent variable was the number of days until that new arrest occurred. Due to data limitations, broader arrest data were not available. The successful completion category was the reference group, with dummy variables for comparison group and unsuccessful completion.

Table 4. Correlations, Days without Recidivism and Age by Group

		Days No Recidivism	
Comparison Group	Age	.187**	n = 675
Successful Completion	Age	.266**	n = 319
Unsuccessful Completion	Age	.112	n = 270

*p<.05; **p<.01; ***p<.001

In Table 5, the hazard ratios for the Cox proportional hazards model are shown. Hazard ratios less than 1 indicate a longer survivor time. For these results, this means that hazard ratios less than 1 indicate the group will have more days before re-arrest. Hazard ratios greater than 1 indicate a shorter survivor time, and for our data this means a group will have fewer days before re-arrest. Examining the control variables indicates that age and ethnicity both had statistically significant impacts on the model, but sex was not significant. Younger people had fewer days until re-arrest while older people had more days until re-arrest. For each additional year of age, individuals had a 1.9% lower incidence of re-arrest (HR=.981, p<.001). For ethnicity, individuals who were not Caucasian had a 7.7% greater incidence of re-arrest (HR=1.077, p<.05) in comparison to Caucasians.

Table 5. Cox Proportional Hazards Model

Variable	Hazard Ratio	Standard Error	Sig
Age (in years)	.981	.004	.000
Sex (Female)	.68	.077	.688
Ethnicity (Other)	1.077	.033	.016
Group[a]			
Comparison Group	1.770	.188	.000
Unsuccessful Completion	1.982	.240	.000

N=1,249

[a] Successful completion is the reference category.

When comparing the successful completion, unsuccessful completion, and comparison groups, the successful completion group was the reference category. When comparing the comparison group to the successful completion group, the comparison group had a 77% greater incidence of re-arrest (HR=1.770, p<.001), indicating a shorter time until re-arrest for the comparison group. When comparing the unsuccessful completion group to the successful completion group, the unsuccessful completion group had a 98.2% greater incidence of re-arrest (HR=1.982, p<.001), indicating that the unsuccessful completion group also had a shorter time until re-arrest than the successful completion group.

To view this graphically, Figure 1 displays the plotted hazard ratios for each of the three groups (comparison, successful, and unsuccessful) with the control variables held at their means. The survival curves for each group are quite similar, indicating that as time goes on a greater proportion of each group is re-arrested. However, the successful completion group had a much larger proportion that "survive" and are not re-arrested. The curves for the unsuccessful completion and comparison groups are steeper, indicating that a larger proportion of individuals in these two groups were re-arrested more quickly than those in the successful completion group, illustrating the results described above from Table 5. For both groups, the curve flattens out over time, indicating that the most likely time to be re-arrested is at the beginning of the observation period. Past research on recidivism has illustrated that the first months after release from prison are when re-arrest is most likely (Langan & Levin, 2002; Nelson, Deess, & Allen, 2011).

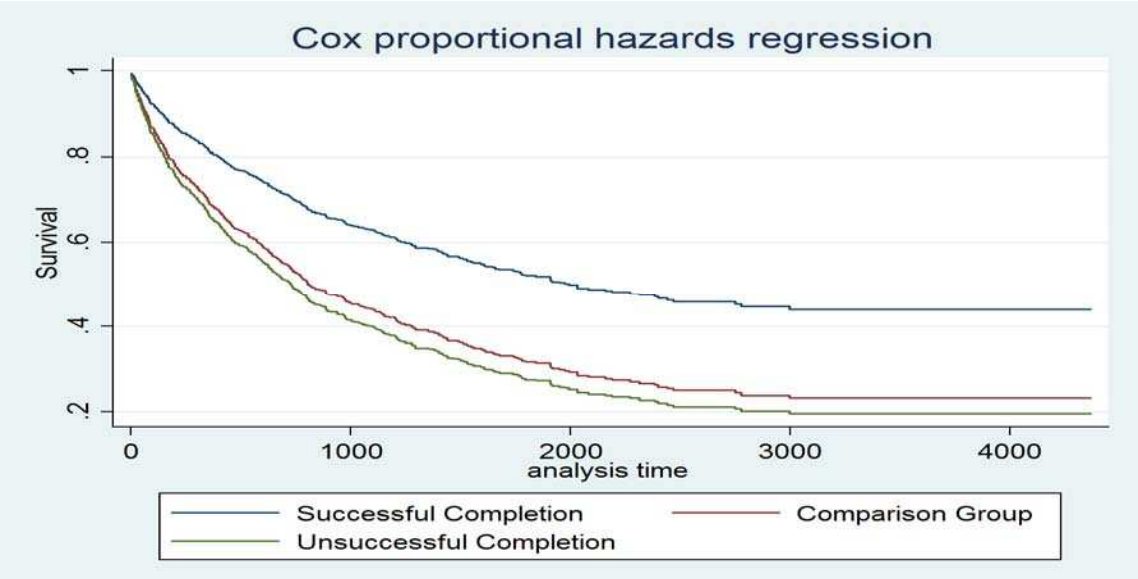

Figure 1. Cox Proportional Hazards Regression

Discussion and Conclusions

Treatment courts have proliferated in the United States since their advent in the late 1980s, and research has focused on a number of issues related to completion and efficacy. In this exploratory research, three groups of offenders and the number of days until local recidivism were examined. One group successfully completed Vanderburgh County Treatment Court services, another group began services but did not successfully complete them, and a third comparison group of individuals who were screened but did not participate in program services. A major strength of this research is the use of survival analysis that takes into account both the binary failure measure of whether an individual was re-arrested or not as well as a continuous measure of how many days to re-arrest. The results indicate that completion of VCTC services is related to both a lower likelihood of re-arrest as well as a longer period of time before a new local arrest. This is in comparison to individuals who were unsuccessful in the program or did not participate in VCTC services. Additionally, there were no differences between those who were unsuccessful and those who did not participate. These findings strengthen the conclusion that participation in the treatment court reduces recidivism and increases the length of time until re-arrest should re-arrest occur.

The results of this research confirm previous research findings on drug treatment courts and recidivism. Similar to previous research indicating that participation in drug treatment court leads to a decrease in recidivism rates (Banks & Gottfredson, 2004; Belenko, 2001; Brewster, 2001; Carey & Marchand, 2005a; Conley, Allen-Blakney, & Stoeckel, 2013; Cooper, 2003; Fielding, Tye, Ogawa, Imam, & Long, 2002; Finigan, 1998; Goldkamp & Weiland, 1993; Gottfredson, Najaka, & Kearley, 2003; Gottfredson, et al., 2006; Guydish, et al., 2001; Johnson & Latessa, 2000; Listwan, Shaffer, & Latessa, 2001; Marchand, Waller, & Carey, 2006; Marlowe, et al., 2003; Martinez & Eisenberg, 2003; Patra, Gliksman, Fischer, Newton-Taylor, Belendko, Ferrari, Kersta, & Rehm, 2010; Peters, Haas, & Murrin, 1999; Rempel, et al., 2003; Somers, Currie, Moniruzzaman, Eiboff, & Patterson, 2012; Truitt, et al., 2002), this study found that completion of Vanderburgh County Treatment Court services was associated with a longer time to local recidivism. In the survival analysis controlling for several demographic variables and group (comparison, successful completion and unsuccessful completion), individuals who were not successful in completing treatment court had fewer days with no recidivism as compared to individuals who did successfully complete the program.

In terms of demographic characteristics, this study both supports and questions previous research. Similar to other research findings (Johnson & Latessa, 2000; Peters, Haas, & Murrin, 1999; Rempel, et al., 2003; Roman, Townsend, & Bhati, 2003; Sung & Belenko, 2005), this study indicates that older individuals have more days with no recidivism than younger individuals. Several studies found ethnic differences in recidivism after completion of treatment court programs (Johnson & Latessa, 2000; Roman et al., 2003; Truitt et al., 2002), and this study also found significant differences in the number of days with no recidivism for Caucasians and non-Caucasians. Although two previous studies found that female participants in treatment court were less likely to be re-arrested or recidivate compared to male participants (Roman et al., 2003; Truitt et al., 2002), no differences in the number of days without recidivism were found in this study between males and females in any of the three groups studied, nor in a multivariate analyses.

There are several limitations of this research that should be noted, particularly since they lead to suggestions for future research. First, this was an exploratory analysis of one treatment court. Future research should utilize larger sample sizes, possibly by utilizing data from multiple treatment courts, so more complex statistical methodology can be employed. Second, since the comparison group did not have sustained contact with the treatment court, limited data were available for this group, which limited analyses involving this group. In particular, the variables for education and income level had such extensive missing data that it was not possible to utilize these in the analyses since the sample size would have dropped considerably. Future studies should include more extensive follow-up with the comparison group so that additional variables could be utilized to examine differences between the comparison group and the other groups. This exploratory study was a quasi-experimental design where random assignment was not possible. In part, this was due to the nature of the data being secondary and that collection had

occurred in previous years. Ideally, future studies could include random assignment to comparison and treatment groups in order to reduce initial differences between these groups. However, this could raise ethical considerations in that treatment might be denied to those seeking it in the treatment court context. Finally, in this study recidivism was measured utilizing a local arrest variable in which *local* referred to a new misdemeanor or felony arrest within Vanderburgh County. Arrests made outside of the county were not available. Because localized recidivism is a limited measure, future research should utilize a more inclusive measurement of recidivism. Additionally, future studies should consider the different types of programming that occurs within the various treatment courts. Given the increase in treatment courts of various types around the country, continued evaluation of these programs is necessary to assess their efficacy. The present study indicates that, regardless of gender, age, and ethnicity, individuals who successfully completed the treatment court program were less likely to recidivate and had more days without recidivism compared to those who were unsuccessful in the program or who did not enter the program.

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