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## LAW, CRIMINOLOGY & CRIMINAL JUSTICE | RESEARCH ARTICLE

# Completion rates: An analysis of factors related to drug court program completion

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**Abstract:** Drug courts were proposed as a solution to the increasing numbers of drug involved offenders entering the criminal justice system. This study evaluates 290 Felony Drug Court participants in a large city in Texas to determine factors that are related to drug court completion. The population from which this sample was drawn consists of adults in the Felony Drug Court program from January 2006 to September 2010. The data are analyzed using bivariate analysis and descriptive analysis. This study reveals that employment and marriage are factors associated with drug court completion. The findings demonstrate that married participants who were employed when entering the program were more likely to graduate than participants that were unemployed, single and/or divorced. The analysis showed that 69.1% of the participants who graduated from the program were married and 65.0% of the participants who were employed when entering the program that graduated. Limitations of this study and suggestions for future research are discussed.

**Subjects:** Restorative Justice; Sentencing and Punishment; Criminal Justice

**Keywords:** drug court; felony offenders; substance abuse; employment; drug court completion

### 1. Introduction

The growth of drug-related criminal caseloads in the 1980s in many jurisdictions across the United States has been well documented (DeVall & Lanier, 2012; Goerd, Lomvadias, Gallas, & Mahoney, 1989; Goerd & Martin, 1989; Heck & Roussell, 2007; Reingle et al., 2013). Drug courts have become

### ABOUT THE AUTHOR

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### PUBLIC INTEREST STATEMENT

Drug courts provide individuals facing drug related charges access to treatment and rehabilitation services. Drug court programs are based on teamwork between defense, treatment, prosecution and other court-related agencies. Additionally, the program finds participants appropriate treatment services, holds offenders accountable, and helps manage their behavior both within and outside the treatment setting. The purpose of this research was to examine participants who entered the Felony drug court program of a large city in Texas to examine demographics, prior history of drug use, and prior criminal history. The end goal was to determine which factors make participants successful in drug court programs. The article looks at 290 participants from a Felony drug court program from January 2006 to September 2010.

widespread since their introduction in 1989 in Miami-Dade County, Florida (DeVall & Lanier, 2012; Heck & Roussell, 2007; Wilson, Mitchell, & MacKenzie, 2006). Drug courts are designed to combine therapeutic and criminal justice interventions in the treatment of offenders (Baker, 2013).

After the success of the Miami-Dade County Drug Court, drug courts around the nation began to increase. However, drug courts in Texas took longer to appear in courthouses. In 1993 the first drug court program was established in Texas, in Jefferson County, and the second one was in Travis County. The Texas Legislature mandated drug courts for counties with a population of over 550,000, and by the year 2007 the county population requirement for mandatory drug courts lowered to 200,000 (Thomas, 2009).

Drug courts use a courtroom dynamic that is based on teamwork among defense, prosecution, treatment, and other court-related agencies (Goldkamp, 1994). Their focus is on helping participants stop drug abuse as well as related criminal activity (Drug Strategies, 1999). The drug court is a judge-supervised treatment program based on outpatient treatment in the community (Goldkamp, 1994). It costs approximately \$30,000 to keep one offender in Dade County jail for a year vs. \$700 for each participant in the drug court treatment program (Drug Strategies, 1999). In addition to cost savings, drug court programs are enabling the justice system to allocate resources more efficiently. By taking a drug caseload, the drug court judges have freed up docket time for other criminal matters as well as civil cases. In some jurisdictions where jail space has been freed up, this space is now being used to house more serious offenders (Drug Court Clearinghouse and Technical Assistance Project [DCCTACP], 1998).

## 2. Literature review

Drug courts receive cases where offenders face drug-related charges. After successfully completing drug court, the original charge may be dismissed or reduced, the sentence may be set aside, or the judge may reduce the penalty (Drug Strategies, 1999). The participant has control over their own success in drug court and their performance is based on measurable goals (Drug Strategies, 1999). Drug courts require treatment services which usually include individual or group counseling, relapse counseling, relapse prevention, medical care, and general detoxification (National Association of Drug Court Professionals, [NADCP], 1997). The treatment provider gives a report to the drug court team about the participant's progress so that sanctions and incentives can be provided by the court (Drug Strategies, 1999). Drug courts generally require participants to take additional steps such as obtain a high school or GED certificate, maintain employment, have all aspects of their financial situation under control, have a sponsor in the community, and perform community service hours (DCCTACP, 1998). Most drug courts also offer referrals to family counseling and parenting services. Some drug courts provide aid with housing, food, and clothing. Some even provide child care services for parents attending drug court treatment sessions and hearings (DCCTACP, 1998). As with adult drug courts juvenile drug courts also use judicial supervision, treatment, and community resources (DCCTACP, 1998).

If participants fail to complete treatment, then prosecution and sentencing might proceed immediately (Drug Strategies, 1999). Drug courts either target first offenders or habitual drug criminals. Many drug court participants end their criminal activity leading to a much lower cost to the taxpayer than incarceration (Drug Strategies, 1999). The Drug Court model uses various tools such as sanctions and incentives implemented in the regular judicial hearings. These tools help diagnose addiction severity, find the participant appropriate treatment services, hold offenders accountable, and help manage their behavior within and outside the treatment setting (Heck & Roussell, 2007). These tools make the drug court model a collaborative approach that provides a complete assessment. The drug court team matches locally available resources with the needs of the participant (Heck & Roussell, 2007).

The NADCP Standards Committee identified ten key elements of successful drug courts which are as follows: (1) drug courts integrate alcohol and other drug treatment services with the justice system case processing; (2) drug courts use a non-adversarial approach in which prosecution and defense counsel promote public safety while protecting participants' due process rights; (3) eligible participants are identified and placed in the drug court program; (4) drug courts provide access to a continuum of treatment and rehabilitation services; (5) abstinence is frequently monitored by drug testing; (6) sanctions and incentives that participants receive from the court and the treatment programs are organized as personalized contingency contracts; (7) drug court participants have an ongoing judicial interaction; (8) program effectiveness and goals are monitored and evaluated; (9) continuing interdisciplinary education of the drug court team promotes effective drug court planning; and (10) drug court effectiveness partnerships among drug courts, public agencies and community based organizations are established (National Association of Drug Court Professionals, 1997).

Previous literature has found that drug courts reduce recidivism among participants when compared to non-participants across a number of jurisdictions (Alonso, 2009; Belenko, 2001; Gottfredson, Najaka, & Kearley, 2003; Hartman, Listwan, & Shaffer, 2007; Jensen & Mosher, 2006; Peters & Murrin, 2000; Roman, Townsend, & Bhati, 2003; Shaffer, Listwan, Latessa, & Lowenkamp, 2008; Wilson et al., 2006). Graduates of drug courts are less likely to be arrested or convicted when compared to non-participants (Dydia & Sung, 2000; Peters, Haas, & Murrin, 1999; Vito & Tewksbury, 1998). Banks and Gottfredson's (2004) study used an experimental design to assess the impact of a drug treatment court on nonviolent felony offenders. The study showed that drug court clients were significantly more likely to avoid rearrest than the comparison sample, and also had significantly fewer arrests during the follow-up period of two years. However, few studies have failed to show evidence of a reduction in criminal behavior (Belenko, Fagan, & Dumanovsky, 1994; Deschenes & Greenwood, 1994; Granfield, Eby, & Brewster, 1998; Miethe, Lu, & Reese, 2000). Overall, reviews have concluded that drug courts are effective in reducing drug use and rearrest (Lowenkamp, Holsinger, & Latessa, 2005; Wilson et al., 2006).

Baker (2013) conducted a study in order to examine the interactions between decision makers in a drug court program. This study found that the judge in a way represents the authoritarian father figure while the counseling staff is responsible for the emotional well-being of the participants (Baker, 2013). Gallagher (2014) conducted a study in Texas and found that the most predictive variables of not recidivating were graduating from drug court and not having a violation within the first 30 days of the program.

### **2.1. Drug court participants**

Studies suggest men have higher re-arrest rates than women (O'Connell, Nestlerode, & Miller, 1999; Spohn, Piper, Martin, & Frenzel, 2001; Truitt et al., 2002; Wolfe, Gwydish, & Termondt, 2002). On the other hand, Daly's (1992) research provides a framework for considering the needs of female drug offenders. In this study, it was found that drug addicted women are more likely to be victims of sexual and physical abuse and their drug use may be tied to negative experiences associated with living on the streets (Daly, 1992). Holtfreter and Morash's (2003) analysis of female offenders found that women with the highest risk of recidivism were drug addicted, had mental health issues, child issues, employment difficulties, and educational deficits (Holtfreter & Morash, 2003).

Beckerman and Fontana (2001) evaluated drug court services for female participants in Florida. The services consisted of women-only group sessions, assessment, and intensive case management services. The study found that women receiving enhanced services remained in the program for longer periods of time; on average 13 months vs. 5.5 months for those not receiving these services. Women receiving enhanced services also had significantly more negative drug tests, specifically 85% vs. 33% (Beckerman & Fontana, 2001).

The courtroom behavior check list (CRBCL) has been developed in order to measure behavioral compliance in court which might predict future behavior. The study analyzed 127 women from a

St. Louis City Municipal Court using the scores on the courtroom behavior check list. The study found that females in drug court who improved their courtroom behavior check list score over a 4-month period were less likely to be arrested for a new municipal violation 4 months later (Reingle et al., 2013). Green and Rempel (2012) conducted a study composed of 1,781 offenders from 23 drug courts. The study found that drug courts produced positive effects in socioeconomic outcomes as well as family conflict reduction (Green & Rempel, 2012).

Studies that have reviewed the relationship between race/ethnicity and program completion has found that whites were more likely to graduate than non-whites (Butzin, Saum, & Scarpitti, 2002; Gray & Saum, 2005; Miller & Shutt, 2001; Sechrest & Shicor, 2001; Senjo & Leip, 2001; Wolf, Sowards, & Wolf, 2003). DeVall and Lanier (2012) focused on the influence of successful drug court program completion of 526 White and Non-white male participants. The study found that white participants with at least a high school diploma or a GRE were more likely to successfully complete the program (DeVall & Lanier, 2012). On the other hand, several other studies have concluded that race did not influence the likelihood of successful program completion (Evans, Li, & Hser, 2009; Hickert, Boyle, & Tollefson, 2009; Mateyoke-Scriver, Webster, Staton, & Leukefeld, 2004; Rempel & Destefano, 2001; Roll, Prendergast, Richardson, Burdon, & Ramirez, 2005). The previous body of research contributes to further understanding drug court programs, however, it raises a concern to continue to examine the differential impact of individual factors for various racial/ethnic groups (DeVall & Lanier, 2012). While drug court programs seem to be beneficial, research exploring the demographic profile of offenders, criminal history, and program completion rates for those who participate in a treatment-oriented drug court program continues due to conflicting research findings.

## **2.2. The present study**

Established in 2006, the “Hill County” Felony Adult Drug Court<sup>1</sup> is based on the Ten Key Components articulated by the NADCP and the Bureau of Justice Assistance. The Drug Court is a post-adjudication program and utilizes a team approach in which the judge, prosecution, defense counsel, treatment providers, probation officers, and other stakeholders advocate on behalf of the participants and oversee community-based treatment. The Drug Court Program requires random drug testing, case management services, judicial monitoring, and drug treatment. When participants start the drug court program, it is very structured; however, as participants progress through the program phases, they slowly obtain more privileges (Spohn et al., 2001). The Drug Court Program has four phases which consist of twelve weeks each. Altogether, the program’s four phases require a minimum of twelve months, the average length to completion is eighteen months, given that some offenders experience relapses and/or need continued judicial supervision (Alonso, 2009).

The total sample of the participants who completed the program or received a Motion to Revoke (MTR) during the program was 290 participants. Success, for the purpose of this study, will be defined as when a participant graduates from the drug court program. Graduating the program comes after completing the four phases. The other requirements to graduate from the drug court program are: passing the GRE exam, six months of drug free tests, and having a stable job.

## **3. Methods**

This study endeavors to accomplish several tasks by examining participants who entered the Felony Drug Court program of a large city in Texas. The study was quantitative in design. Three major areas of the participants’ background were examined: demographic information, prior history of drug use, and prior criminal history. Success is measured by graduation using the original drug court program outcome records from drug court staff. It is hypothesized that successful drug court completion will be more likely associated with the following groups: females, married drug court participants, older drug court participants, drug court participants with higher levels of education, drug court participants with fewer pre-drug court arrests, and employed drug court participants.

### 3.1. Data collection

Participants were 290 individuals, predominately Hispanic men and women. The population from which this sample was drawn consists of adults who voluntarily chose to participate in the Felony Drug Court program from January 2006 to September 2010. This study excludes those offenders who are still active in the program. The researcher obtained the secondary data without any identifiers. The data received from the court did not contain the participant identifiers, thus an exempt form from the university Institutional Review Board of Texas State University was requested and received.

The data for this study was collected from the Felony Drug Court for the first four years of the existence of the program. Upon admission to the drug court program, a form is completed by each participant. The intake form provides demographics, first, second and third drugs-of-choice, marital status, employment status within the last 24 months, a list of various criminal offenses, number of times arrested for each of those offenses, age at the time of first use, and previous treatment exposures. The study will also include whether the participants successfully completed the program or were the subject of a motion to revoke (MTR). This will be used as a measure of failure.

#### 3.1.1. Ethics

Data was obtained from the Felony Drug Court program as a secondary data without any identifiers. The researcher obtain written permission from the Felony drug court team in order to obtain the secondary data. The data had no identifying information of any drug court participant and the researcher did not have any access to any personal information. Prior to conducting this study, approval from the Institutional Review Board (IRB) was obtained. Data was kept in an encrypted file in the researchers' computer.

### 3.2. Data analysis

The sample included 290 cases. Frequencies and *t*-Test analyses were used to compare the characteristics of the participants. Chi-square tests of association for categorical measures and *t*-tests for differences between means were used to compare the groups. Specifically, chi-square tests of association were used to test the relationship between successful and unsuccessful participants by gender, presence of dependents, ethnicity, education, drug of choice, frequency of drug use, employment history, marital status, and abuse history. Differences between successful and unsuccessful participants with regard to age, and number of prior arrests were examined using *t*-tests for differences in means. Data analyses were conducted using SPSS version 20.

### 3.3. Sample

Table 1 provides a description of the entire drug court sample. Characteristics of those who succeed are then compared to those who failed to graduate from the program. The sample of ( $n = 290$ ) was predominately Hispanic men and women. Men accounted for 51% ( $n = 147$ ) of the sample, while 49% ( $n = 143$ ) were women. Participants included: Caucasians 26.9% ( $n = 78$ ), African-Americans 17.9% ( $n = 52$ ), Hispanics 50.0% ( $n = 145$ ), and "Other" 5.2% ( $n = 15$ ). The intake form divided participants into single, married/living together, widowed, and divorced. For the analysis, the groups were then collapsed to include four categories: (1) single, (2) married, (3) divorced and (4) widowed. Only 20 cases were missing this data. Most participants 56.7% ( $n = 153$ ) were single. Remaining categories included: Divorced 21.2% ( $n = 57$ ), Married 20.4% ( $n = 55$ ), and widow(er) 1.9% ( $n = 5$ ).

The intake form noted the highest education grade completed for each participant. For the analysis, education was classified into four groups: "some college," "completed high school," "completed grade from 9 to 11" and "less than grade 9." There were 59 cases missing this variable. The table illustrates that 6.5% ( $n = 15$ ) of participants noted that their highest education was less than grade 9, 30.7% ( $n = 71$ ) noted that their highest education was grade 9 to 11, 28.1% ( $n = 65$ ) noted that high school was their highest education and 34.6% ( $n = 80$ ) indicated some college as their highest education grade completed.

**Table 1. Descriptive statistics of sample**

Characteristics		n = 290	%
Gender	Male	147	50.70
	Female	143	49.30
Race	Hispanic	145	50.00
	White	78	26.90
	Black	52	17.90
	Other	15	5.20
Marital status <sup>a</sup>	Divorce	57	21.20
	Married	55	20.40
	Single	153	56.70
	Widow(er)	5	1.90
Education <sup>b</sup>	Less than grade 9	15	6.50
	Grade 9–11	71	30.70
	High School	65	28.10
	Some College	80	34.60
Employed	Yes	100	34.50
	No	190	65.50

<sup>a</sup>Missing 20 cases.

<sup>b</sup>Missing 59 cases.

The intake form asked when entering the drug court program whether or not the participant was employed. Responses indicated 65.5% ( $n = 190$ ) of the participants were not employed when entering the program compared to 34.5% ( $n = 100$ ) participants who were employed when entering the drug court program. The age of participants ranged between 17 to 57 years. The mean age of the sample was 32.3. The mean age of the first arrest for the sample was 16.7. Additional demographic data from this sample is presented in Table 1.

#### 4. Results

The sample consisted of 155 drug court participants that graduated the program and 135 drug court participants who were removed from the program. First the study looked at age, gender, race, and marital status, to see if these variables determined differences in those who succeeded and those who failed the drug court program. The mean age for those who failed was 31.7 compare to 33.1 for those who succeeded in completing the drug court program. The mean age for the failed group was younger than the mean age of the successful group. Further Chi-square analyses tested whether there was a significant difference between groups based on the demographic variables of gender and race. These analyses revealed no statistical significance between gender and drug court completion,  $\chi^2(1, n = 290) = 2.293, p = .130$ .

There was also no significant correlation between race/ethnicity and drug court completion,  $\chi^2(3, n = 290) = .344, p = .952$ . Of the 135 participants that did not graduate, 26 were African American, 35 were Caucasian, 67 were Hispanic, and 7 were labeled as other. Of the 155 participants that graduated the drug court program from the year 2006 to 2010; 26 were African-American, 43 were Caucasian, 78 were Hispanic, 8 were labeled as other.

The analysis showed that more drug court participants terminated from treatment are single and/or divorced than those completing the program. The Chi-square analysis,  $\chi^2(3, n = 270) = 7.928, p < .05$ , demonstrated that more drug court participants who reported being married at program entry graduated when compared to drug court participants that were single and/or divorced. The

**Table 2. Marital status and drug completion**

Marital status		Divorced	Married	Single	Widower	Total
Fail	Number	28	17	74	4	123
	%	49.10	30.90	48.40	80.00	45.60
Graduate	Number	29	38	79	1	147
	%	50.90	69.10	51.60	20.00	54.40
Total	Number	57	55	153	5	270
	%	100.00	100.00	100.00	100.00	100.00

Notes: missing 20 participants.  
 $\chi^2 = 7.928, df = 3, p < .05$

analysis showed that 30.9% of the participants that failed the program were married compare to 69.1% who graduated the program (see Table 2).

Table 3 illustrates an independent sample *t*-test which was conducted to analyze differences between age of first arrest of those that failed vs. those participants that did not graduated ( $t = 1.245, df = 287, p = n.s.$ ). A *t*-test analysis demonstrated no significant difference when comparing age of first arrest and drug court completion. However, the results showed that the mean of the drug court participants that failed was 15.6 years of age compared to 17.9 years of age for participants that successfully graduated the drug court program.

A second independent sample *t*-test was performed to further examine if significant correlations existed when comparing the education of drug court participants and their graduation rates. The *t*-test analysis revealed no statistical significance  $t = -1.058, df = 229, p = n.s.$  It appears that education was not related to drug court completion; however, this variable had 55 missing cases, so it is possible that the lack of significance was due to the large number of missing cases. Further *t*-test analysis were used to determine whether there was a correlation between the number of drug arrests 24 months prior to entering the drug court program and drug court completion. The *t*-test analysis ( $t = .253, df = 252, p = n.s.$ ) revealed no statistical significance between drug arrests 24 months prior to entering the drug court program and drug court completion.

This study reveals that employment is a factor that is related to drug court completion. Previous research indicates that there is a correlation between employment and an individual's ability to complete a treatment program (DeVall & Lanier, 2012). A Chi-square analysis,  $\chi^2(1, n = 290) = 8.186, p < .01$ , demonstrated that participants that were employed when entering the drug court program had a higher completion rate than those that were unemployed. Table 4 illustrates 35.0% of the participants that failed were employed compared to 65.0% of participants that graduated from the drug court program. On the other hand, 52.6% of the participants that failed were unemployed compared to 47.4% of the participants that graduated the program. More drug court participants who reported being employed (when entering the program) when compared to participants that were unemployed (see Table 4).

**Table 3. Arrest, age and education**

t-test	t	df	p-value
Drug arrest prior 24 months-	0.253	252	n.s.
Age first arrest	1.245	287	n.s.
Education	1.058	229	n.s.

**Table 4. Employment and drug court completion**

Employed		No	Yes	Total
Fail	Number	100	35	135
	%	52.60	35.00	46.60
Graduate	Number	90	65	155
	%	47.40	65.00	53.40
Total	Number	190	100	290
	%	100.00	100.00	100.00

Notes:  $\chi^2 = 8.186$ ,  $df = 1$ ,  $p < .01$

### 5. Discussion

The purpose of this study was to conduct an exploratory study. This study described the characteristics of 290 participants in a felony drug court program. On the basis of these comparisons, the following conclusions can be drawn. Data from this study suggested employment and marriage were associated with successful completion of the drug court program. The study makes an important contribution to the literature in the sense that previous research has not suggested marriage to be associated with successful completion to the drug court program.

Based on previous studies, it was hypothesized (hypothesis number 1) that female participants are more likely to graduate than males. However, this study revealed no statistical significance between gender and drug court completion. This finding is consistent with the majority of studies that have examined the relationship between gender and drug court completion (Fetros, 1998; Mateyoke-Scriver et al., 2004; Miller & Shutt, 2001; Roll et al., 2005; Sechrest & Shicor, 2001; Senjo & Leip, 2001). However, other studies have found different findings such as better retention for males at 6 months (Young & Belenko, 2002). Researchers should continue to explore how gender might impact drug court completion.

Additionally, it was hypothesized (hypothesis number 2) that successful drug court completion would more likely be associated with married individuals than with single or divorced drug court participants. Mateyoke-Scriver et al. (2004) found in their study that married drug court participants were 57% less likely to graduate. On the other hand, Fetros (1998) identified that drug court participants' graduation was more likely if they had community ties and children than to participants with one or more ties to the community or with any number of children. Roll et al. (2005) and Miller and Shutt (2001) found no relationship between marital status and drug court completion in their samples. These analyses demonstrated that drug court participants that were married when entering the drug court program were more likely to graduate than drug court participants that were single and/or divorced, thus supporting the hypothesis.

Furthermore, it was hypothesized (hypothesis number 3) that successful drug court completion would more likely be associated with older than with younger drug court participants. It has been found that younger participants are more likely to not graduate successfully from the drug court program (Hickert et al., 2009; Mateyoke-Scriver et al., 2004; Rempel & Destefano, 2001; Wolf et al., 2003; Young & Belenko, 2002). Consistent with previous literature this study found that individuals who were arrested at a younger age were less likely to complete the drug court program, just not significantly.

It was hypothesized (hypothesis number 4) that successful drug court completion will more likely be associated with drug court participants with a higher levels of education than with drug court participants with lower levels of education. Levels of education at the time of program entry have generally been found to increase the likely hood of successful program completion (Brown, 2010;

Mateyoke-Scrivner et al., 2004; Peters et al., 1999; Shaffer, Hartman, Listwan, Howell, & Latessa, 2011). This *t*-test analysis revealed no statistical significance when comparing education and drug court completion. These analyses show that education is not related to drug court completion. Several previous research studies on participants' education levels found no difference between graduates and nongraduates on achieved education level (Fetros, 1998; Gray & Saum, 2005; Rempel & Destefano, 2001; Roll et al., 2005; Sechrest & Shicor, 2001; Senjo & Leip, 2001). These findings are consistent with past research examining participants' education levels and found that education was not related to drug court completion.

It was hypothesized (hypothesis number 5) that successful drug court completion will more likely be associated with drug court participants with fewer pre-drug court arrests than with drug court participants with a greater number of pre-drug court arrests. Previous research has identified criminal history to be a consistent predictor of rearrest following drug court completion or of the drug court individual dropping the program. Young and Belenko (2002) identified that the odds of an individual completing the drug court program decreased if the participant had a more (juvenile arrests) extensive criminal history.

Furthermore, Wolf et al. (2003) stated that drug court participants with prior felony convictions were at a higher odd of failing to graduate the drug court program. Another study found that drug court graduates differed greatly in the number of prior arrests, graduates had an average of 2.5 prior arrests compared to 6.7 for nongraduates. For this study, the *t*-test analysis revealed no statistical significance between the number of drug arrests 24 months prior to entering the drug court program and drug court completion.

It was hypothesized (hypothesis number 6) that successful drug court completion will more likely be associated with employed drug court participants than with unemployed drug court participants. This study makes an important contribution to the literature highlighting unemployment as a stress factor for the drug court participants in this specific program. Unemployment may be considered a stressor because employed participants want to graduate the drug court program in order to continue their job. These findings are consistent with past research examining treatment outcomes. Employment has been suggested to be critical in drug court completion (Butzin et al., 2002; Fetros, 1998; Hartley & Phillips, 2001; Mateyoke-Scrivner et al., 2004; Peters et al., 1999; Roll et al., 2005; Shannon, Jackson, Perkins, & Neal, 2014).

Drug court program is largely dependent on the individual participant. This is consistent with current policy in determining if a participant should be allowed to participate in the drug court program. As long as a defendant attempts to comply with the drug court, usually he or she is permitted to continue the drug court program. In some situations employment is a requirement in order to graduate from the drug court program. If a drug court participant does not have stable employment this might result in a delay of graduation. There might be some reasons that a drug court participant might be able to graduate without stable employment and they are usually medical reasons (Shannon et al., 2014). Clearly, stable employment appears to correlate to success. It may be in the policy makers' best interest to develop additional program components within the drug court program that promote career growth. This will not only help those who enter drug court without outside commitments, but it will also strengthen family and career associations for those who are already married, have children, or are steadily employed.

This information can be useful for planning purposes in terms of better selection of drug court participants, could benefit criminal justice and treatment providers, and improve the types of programming made available in drug courts. This research could help planners better develop or redesign the drug court program to match the needs of their participants. By assessing the types of offenders who are successful in drug court as well as those who fail, we can begin to uncover how the problem-solving approach of therapeutic jurisprudence can be applied to specific offenders with specific needs. The results have implications for future research on drug court programs.

### **5.1. Limitations**

The results of the research can aid in developing specific programs for specific groups of drug court participants such as those who are unemployed. However, the study had some limitations. One limitation of this study was that the data gathered from the Felony Drug Court database was entered by someone other than the researcher, and, therefore, the researcher had no control over the accuracy of the assessment provided.

Also, the data was not collected for the purpose of this study. As a result, some variables, such as those related to treatment, were not able to be included in the analyses. For example, differences in treatment programs, such as program intensity in regards to addressing drug use, may affect recidivism rates. The availability and accessibility of services for drug court participants were not assessed.

The major advantage of using agency data is that it is readily available with only minor potential ethical problems and harm to human subjects. Although there are clear advantages in using agency data, there are also some disadvantages that created limitations in this study. Although efforts were made to obtain a complete data-set, there was a moderate amount of missing information for a number of the test variables, one of them being education. Missing data are an expected aspect of secondary and agency data; however, incomplete data can affect data reliability.

Another limitation is that the data were drawn from a single database and for this reason the results may only be relevant to adults in drug court programs with similar demographics. The findings may not be generalized to other geographic areas. Also, the participants in this study entered the program when the drug court program started. At these early stages of implementation, there are often procedural and substantive changes that may occur. Also, modifications continue to occur over the course of any program including availability of treatment services, personnel changes and changes in supervision approaches, which can all affect drug court outcomes.

Any application of a statistical technique requires that certain assumptions be made about the data. When conducting hypothesis tests, it must be assumed that the sample has been randomly selected. The major problem with this study was the fact that subject selection was not random. Randomness allows inferences about population characteristics based on sample characteristics. Without random selection, it is difficult to generalize any of the study's findings. For this reason, the results of the statistical analysis should be viewed with caution. On the other hand, the study includes all participants in the drug court that either failed or graduated.

The study group only contained participants who either graduated from the drug court program or were terminated from the drug court program. The study did not employ the use of a true experimental design because there was no control or comparison group. Thus, it is not possible to determine whether the results are attributable to participant characteristics rather than some other variable. The limitations of this study are important and should be addressed; however, these limitations are relatively minor. While the findings should be viewed with some caution, a number of interesting and potentially useful differences were found among those who graduated and those who were terminated.

### **6. Future research**

Some of our findings are not consistent with the findings of previous studies, such as, married individuals are more likely to successfully graduate the drug court program. In other research they found drug court graduation had a connection with community ties (Fetros, 1998). The significance of these findings emphasize the cumulative impact different factors have on the lives of the drug court participants. This issue of collective factors adds to the elaboration of the drug court program, future research should utilize a qualitative method which may lead to a better understanding for the findings of this study.

Future research should utilize semi-structured interviews with drug court participants. This study is limited in that it did not have access to demographic information such as, socioeconomic status of the participants or variables related to treatment during the drug court program. Future research should include open-ended research questions about treatment and the influence of drugs and/or alcohol on the rationality of the individual.

Other significant influences on and offender's drug court outcomes could be examined in future drug court studies. Furthermore, future studies should more closely examine the relationship of the participants with the treatment providers and probation officers. The relationship of the participants and treatment providers are important, and influence the client's overall drug court experiences. The same is true for the quality of the offenders' relationship with judges.

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#### Note

1. The name of the Drug Court program will be confidential.

#### References

- Alonso, A. J. (2009). *Best practices for drug courts* (Master's Thesis). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 1466830).
- Baker, K. M. (2013). Decision making in a hybrid organization: A case study of a southwestern drug court treatment program. *Law & Social Inquiry*, 38, 27–54. <http://dx.doi.org/10.1111/lsi.2013.38.issue-1>
- Banks, D., & Gottfredson, D. C. (2004). Participation in drug treatment court and time to rearrest. *Justice Quarterly*, 21, 637–658. <http://dx.doi.org/10.1080/07418820400095931>
- Beckerman, A., & Fontana, L. (2001). Issues of race and gender in court-ordered substance abuse treatment. *Journal of Offender Rehabilitation*, 33, 45–61.
- Belenko, S. (2001). *Research on drug courts: A critical review 2001 update*. New York, NY: Columbia University, The National Center on Addiction and Substance Abuse.
- Belenko, S., Fagan, J. A., & Dumanovsky, T. (1994). The effects of legal sanctions on recidivism in special drug courts. *Justice System Journal*, 17, 53–81. <http://dx.doi.org/10.1080/23277556.1994.10871193>
- Brown, R. (2010). Associations with substance abuse treatment completion among drug court participants. *Substance Use and Misuse*, 45, 1874–1891. <http://dx.doi.org/10.3109/10826081003682099>
- Butzin, C. A., Saum, C. A., & Scarpitti, F. R. (2002). Factors associated with completion of a drug treatment court diversion program. *Substance Use & Misuse*, 37, 1615–1633. <http://dx.doi.org/10.1081/JA-120014424>
- Daly, K. (1992). Women's pathway to felony court: Feminist theories of law breaking and problems of representation. *Southern California Review of Law and Women's Studies*, 2, 11–52.
- Deschenes, E. P., & Greenwood, P. W. (1994). Maricopa County's drug court: An innovative program for first-time drug offenders on probation. *Justice System Journal*, 17, 99–115. <http://dx.doi.org/10.1080/23277556.1994.10871195>
- DeVall, K. E., & Lanier, C. L. (2012). Successful completion: An examination of factors influencing drug court completion for white and non-white male participants. *Substance Use & Misuse*, 47, 1106–1116. <http://dx.doi.org/10.3109/10826084.2012.680171>
- Drug Court Clearinghouse and Technical Assistance Project. (1998). *Looking at a decade of drug courts*. Retrieved from <http://www.spa.american.edu/justice/documents/2049.pdf>
- Drug Strategies. (1999). *Drug courts: A revolution in criminal justice*. (NCJ Publication No. 177227). Retrieved from <http://www.ncjrs.gov>
- Dynia, P., & Sung, H. (2000). The safety and effectiveness of diverting felony drug offenders to residential treatment as measured by recidivism. *Criminal Justice Policy Review*, 11, 299–311. <http://dx.doi.org/10.1177/0887403400011004002>
- Evans, E., Li, L., & Hser, Y. (2009). Client and program factors associated with dropout from court-mandated drug treatment. *Evaluation and Program Planning*, 32, 204–212. <http://dx.doi.org/10.1016/j.evalprogplan.2008.12.003>
- Fetros, C. M. (1998). *The Los Angeles county drug courts: Correlates of success*. Long Beach, CA: California State University.
- Gallagher, J. R. (2014). Predicting criminal recidivism following drug court: Implications for drug court practice and policy advocacy. *Journal of Addictions & Offender Counseling*, 35, 15–29. <http://dx.doi.org/10.1002/jaac.2014.35.issue-1>
- Goerd, J. A., Lovmadias, C., Gallas, G., & Mahoney, B. (1989). *Examining court delay: The pace of litigation in 26 urban trial courts, 1987*. Williamsburh, VA: Bureau of Justice Assistance and the National Center for State Courts, U.S. Department of Justice.
- Goerd, J. A., & Martin, J. A. (1989). The impact of drug cases on case processing in urban trial courts. *State Court Journal*, 13, 4–12.
- Goldkamp, J. S. (1994, June). Miami's treatment drug court for felony defendants: Some implications of assessment findings. *The Prison Journal*, 74, 110–166. <http://dx.doi.org/10.1177/003285594074002002>
- Gottfredson, D. C., Najaka, S. S., & Kearley, B. (2003). Effectiveness of drug treatment courts: Evidence from a randomized trial. *Criminology & Public Policy*, 2, 171–196. <http://dx.doi.org/10.1111/cpp.2003.2.issue-2>

- Granfield, R., Eby, C., & Brewster, T. (1998). An examination of the denver drug court: The impact of a treatment-oriented drug-offender system. *Law & Policy*, 20, 183–202. <http://dx.doi.org/10.1111/lapo.1998.20.issue-2>
- Gray, A. R., & Saum, C. A. (2005). Mental health, gender, and drug court completion. *American Journal of Criminal Justice*, 30, 55–69. <http://dx.doi.org/10.1007/BF02885881>
- Green, M., & Rempel, M. (2012). Beyond crime and drug use: Do adult drug courts produce other psychosocial benefits? *Journal of Drug Issues*, 42, 156–177. <http://dx.doi.org/10.1177/0022042612446592>
- Hartley, R. E., & Phillips, R. C. (2001). Who graduates from drug courts? Correlates of client success. *American Journal of Criminal Justice*, 26, 107–119. <http://dx.doi.org/10.1007/BF02886860>
- Hartman, J. L., Listwan, S. J., & Shaffer, D. K. (2007). Methamphetamine users in a community-based drug court: Does gender matter? *Journal of Offender Rehabilitation*, 45, 109–130. [http://dx.doi.org/10.1300/J076v45n03\\_05](http://dx.doi.org/10.1300/J076v45n03_05)
- Heck, C., & Roussel, A. (2007). State Administration of Drug Courts: Exploring Issues of Authority, Funding, and Legitimacy. *Criminal Justice Policy Review*, 18, 418–433. <http://dx.doi.org/10.1177/0887403407305693>
- Hickert, A. O., Boyle, S. W., & Tollefson, D. R. (2009). Factors that predict drug court completion and drop out: Findings from an evaluation of Salt Lake County's adult felony court. *Journal of Social Science Research*, 35, 149–162.
- Holtfreter, K., & Morash, M. (2003). The needs of women offenders: Implications for correctional programming. *Women & Criminal Justice*, 14, 137–160. [http://dx.doi.org/10.1300/J012v14n02\\_07](http://dx.doi.org/10.1300/J012v14n02_07)
- Jensen, E., & Mosher, C. (2006). Adult drug courts: Emergence, growth, outcome evaluations, and the need for a continuum of care. *Idaho Law Review*, 42, 443–470.
- Lowenkamp, C. T., Holsinger, A. M., & Latessa, E. J. (2005). Are drug courts effective: A meta-analytic review. *Journal of Community Corrections*, 28, 5–10.
- Mateyoke-Scriver, A., Webster, J. M., Staton, M., & Leukefeld, C. (2004). Treatment retention predictors of drug court participants in a rural state. *The American Journal of Drug Alcohol Abuse*, 30, 605–625. <http://dx.doi.org/10.1081/ADA-200032304>
- Miethe, T. D., Lu, H., & Reese, E. (2000). Reintegrative shaming and recidivism risks in drug court: Explanations for some unexpected findings. *Crime & Delinquency*, 46, 522–541. <http://dx.doi.org/10.1177/0011128700046004006>
- Miller, J. M., & Shutt, J. E. (2001). Considering the need for empirically grounded drug court screening mechanisms. *Journal of Drug Issues*, 31, 91–106. <http://dx.doi.org/10.1177/002204260103100106>
- National Association of Drug Court Professionals. (1997). *Defining drug courts: The key components*. Washington, DC: Bureau of Justice Assistance, U.S. Department of Justice.
- O'Connell, J. R., Nestlerode, E., & Miller, M. L. (1999). *Evaluation of the Delaware juvenile drug court diversion program*. Dover, DE: Statistical Analysis Center.
- Peters, R. H., Haas, A. L., & Murrin, M. R. (1999). Predictors of retention and arrest in drug courts. *National Drug Court Institute Review*, 2, 33–60.
- Peters, R. H., & Murrin, M. R. (2000). Effectiveness of treatment-based drug courts in reducing criminal recidivism. *Criminal Justice and Behavior*, 27, 72–96. <http://dx.doi.org/10.1177/0093854800027001005>
- Reingle, J. M., Striley, C. W., Small, E., Crecelius, R., O'Leary, C. C., & Cottler, L. B. (2013). Can courtroom behavior predict recidivism? An assessment of the courtroom behavior check list for women presenting in drug court. *American Journal of Criminal Justice*, 38, 520–534. <http://dx.doi.org/10.1007/s12103-012-9190-2>
- Rempel, M., & Destefano, C. D. (2001). Predictors of engagement in court-mandated treatment: Findings at the Brooklyn treatment court 1996–2000. *Journal of Offender Rehabilitation*, 33, 87–124. [http://dx.doi.org/10.1300/J076v33n04\\_06](http://dx.doi.org/10.1300/J076v33n04_06)
- Roll, J. M., Prendergast, M., Richardson, K., Burdon, W., & Ramirez, A. (2005). Identifying predictors of treatment outcome in a drug court program. *The American Journal of Drug and Alcohol Abuse*, 31, 642–656.
- Roman, J., Townsend, W., & Bhati, S. A. (2003). *Recidivism rates for drug court graduates; nationally based estimates* (Master's Thesis). Retrieved from ProQuest Dissertations and Theses database. OJP-99- C-010.
- Sechrest, D. K., & Shicor, D. (2001). Determinants of graduation from a day treatment drug court in California: A preliminary study. *Journal of Drug Issues*, 31, 129–147. <http://dx.doi.org/10.1177/002204260103100108>
- Senjo, S. R., & Leip, L. A. (2001). Testing and developing theory in drug court: A four-part logit model to predict program completion. *Criminal Justice Policy Review*, 12, 66–87. <http://dx.doi.org/10.1177/0887403401012001004>
- Shaffer, D. K., Hartman, J. L., Listwan, S. J., Howell, T., & Latessa, E. J. (2011). Outcomes among drug court participants: Does drug of choice matter? *International Journal of Offender Therapy and Comparative Criminology*, 55, 155–174. <http://dx.doi.org/10.1177/0306624X09359648>
- Shaffer, D. K., Listwan, S. J., Latessa, E. J., & Lowenkamp, C. T. (2008). The drug court phenomenon: Findings from Ohio. *Drug Court Review*, 6, 33–68.
- Shannon, L. M., Jackson, A., Perkins, E., & Neal, C. (2014). Examining gender differences in substance use, participant characteristics, and treatment outcomes among individuals in drug court. *Journal of Offender Rehabilitation*, 53, 455–477. <http://dx.doi.org/10.1080/10590674.2014.931747>
- Spohn, C., Piper, R. K., Martin, T., & Frenzel, E. D. (2001). Drug courts and recidivism: The results of an evaluation using two comparison groups and multiple indicators of recidivism. *Journal of Drug Issues*, 31, 149–176. <http://dx.doi.org/10.1177/002204260103100109>
- Thomas, M. S. (2009). *Texas drug courts: Are the ten key components being utilized?* (Master's Thesis). Retrieved from ProQuest Dissertations and Theses Database
- Truitt, L., Rhodes, W. M., Hoffmann, N. G., Seeherman, A. M., Jalbert, S. K., Kane, M., ... Finn, P. (2002). *Evaluating treatment drug courts in Kansas City, Missouri and Pensacola, Florida executive summary*. Cambridge, MA: Abt Associates. Retrieved September 7, 2005, from [http://www.abtassociates.com/reports/es-eval\\_treatment.pdf](http://www.abtassociates.com/reports/es-eval_treatment.pdf)
- Vito, G., & Tewksbury, R. A. (1998). The impact of treatment: The Jefferson County (Kentucky) drug court program. *Federal Probation*, 62, 46–52.
- Wilson, D. B., Mitchell, O., & MacKenzie, D. L. (2006). A systematic review of drug court effects on recidivism. *Journal of Experimental Criminology*, 2, 459–487.
- Wolfe, E., Guydish, J., & Termond, J. (2002). A drug court outcome evaluation comparing arrests in a two year follow-up period. *Journal of Drug Issues*, 32, 1155–1172. <http://dx.doi.org/10.1177/002204260203200410>
- Wolf, E. M., Sowards, K. A., & Wolf, D. A. (2003). Predicting retention of drug court participants using event history analysis. *Journal of Offender Rehabilitation*, 37, 139–162. [http://dx.doi.org/10.1300/J076v37n03\\_08](http://dx.doi.org/10.1300/J076v37n03_08)
- Young, D., & Belenko, S. (2002). Program retention and perceived coercion in three models of mandatory drug treatment. *Journal of Drug Issues*, 32, 297–328. <http://dx.doi.org/10.1177/002204260203200112>



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