Evaluation of the Eleventh Judicial District Court San Juan County Juvenile Drug Court: Quasi-Experimental Outcome Study Using Historical Information

> **Prepared for:** The Eleventh Judicial District Court

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Introduction

The Eleventh Judicial District Juvenile Drug Court, located in San Juan County, New Mexico began receiving referrals for juvenile participants in August 2000. Since that time, the court has screened more than 175 juveniles and approved over 100 for intake into the program. The goal in conducting this study was to better understand the effectiveness of the drug court program by determining how the program reduces the incidence of crime as measured by new referrals and new petitions as juveniles and arrests as adults (older than 18 years) for participants after they left the program when compared to a matched comparison group.

Outcome studies are useful for a number of reasons. First, knowledge involving client success and a program can be used in an interactive manner to create a self-correcting system and to improve programs. Second, both funding sources and service providers have a vested interest in utilizing scarce resources in the most effective manner. Programs that are effective in reducing future contact with the criminal justice system should be replicated. Third, outcome evaluation findings, if valid and reliable, can be used to make programs more useful to the target population.

The methodology used in conducting this study follows guidelines suggested by the federal Drug Court Program Office (DCPO) in their publication "Drug Court Monitoring, Evaluation, and Management Information Systems" (June 1998) as well as generally accepted guidelines for impact/outcome evaluations. The design focuses on using a matched historical comparison group. Comparison group members were primarily matched on sex, race/ethnicity, age, type of referring offense, the presence of a substance abuse history, geographical location, and drug court eligibility criteria (i.e. no violent felony convictions and the current offense is not a violent felony). Comparison group members are also matched in time. This means comparison group members are taken from the same time period as the drug court group so that we can control for what might be occurring in the larger community (e.g. a new District Attorney or change in laws) and we can control for exposure time for recidivism. Successful drug court graduates and those who do not successfully complete the program are part of this study. The size of the drug court group and comparison group were approximately the same and were dependent on the number of participants who had left the drug court program based on the time parameters of the study. Information collected in the drug court client management database is used for the drug court treatment group. This includes referral information, demographic data, substance abuse history data, current offense data, school information, all services received, and exit information. Subsequent official chronological offense histories were also collected.

The comparison group is comprised of drug court eligible individuals who for various reasons (e.g. were never referred) did not become drug court clients. These individuals were under the supervision of the local probation department. Information collected for the comparison group includes demographic data, substance abuse history data, chronological offense history data, current offense data, and exit status from probation information. Information for both the drug court group and comparison group consists of what is available from official records and does not consist of any self-report information.

Using historical information only allows us to collect official information that is available for the drug court and comparison group. It is our experience that historical information for the comparison group is much more limited than that which is available for the drug court group. This primarily occurs because many New Mexico drug courts use an Institute for Social Research designed client management database that routinely collects the information necessary to complete this type of study, while information for the comparison group is typically maintained in hard copy files that contain less information and often in different formats. The lack of available comparison group information limits the amount of data available for this study.

Outcome evaluation is typically the comparison of actual program outcomes with desired outcomes (goals). For criminal justice programs outcome evaluation measures typically focus on recidivism rates. Other types of outcomes that can be measured include changes in substance abuse and improvements in social indicators (e.g. employment, family relationships and living arrangements). Studies using historical information are limited to those measures that can be obtained through official sources, which is typically limited to official measures of recidivism. This is a weakness of this type of study. A strength of this type of study is it is relatively inexpensive to complete and requires much less time than other types of studies. In this study, we have chosen to focus on recidivism - defined as an official new referral and petition or arrest (in-program and post-program) for any offense, and time to recidivism post-program.

This report contains several sections including the research design, the data analysis and discussion, and a conclusion with recommendations. This report will be useful for the program in assessing its effectiveness and improving its operations and at the state and national level for further discovering if drug courts work and what it is about drug courts that are most effective.

Research Design

This study was completed as part of a contract with the Eleventh Judicial District Court in San Juan County. As part of this contract we were obligated to complete a historical outcome study using a matched comparison group of individuals who did not participate in the juvenile drug court program. In order to consider recidivism subsequent to drug court participation, this study is based on juvenile offenders who **exited** the juvenile drug court program between the two-year period of January 1, 2001 and December 31, 2002. During this time, 62 juveniles exited the program.

We then matched the 62 drug court participants to a similar group of juveniles on juvenile probation. The probation group, which we refer to as the comparison group, was matched based on gender, ethnicity, referring offense, drug of choice, criminal history, geographical location, and release date from probation supervision. We also were careful to exclude any individual from the comparison group who had ever been referred to the juvenile drug court. Our goal was to draw a sample of probation clients who were similar in terms of chronological offense history, substance abuse, ethnicity and gender. In other

words, we wanted a comparison group of people who were otherwise eligible for drug court but for whatever reason did not participate in the program.

The NM Children, Youth, and Families Department provided us with an automated list of all juveniles in San Juan County whose probation period ended during the two-year study period. We then obtained permission from the San Juan County Juvenile Probation Office to pull closed and active files for those individuals identified for inclusion in the comparison group. While we were working from an automated list of juveniles released from probation in 2001 or 2002, it was still necessary to review cases by hand to determine eligibility for the comparison group. If an individual met all the matching criteria for the study they were included in the comparison group and their file was coded using the ISR designed comparison group data collection codebook (Appendix XXX).

The following criteria were followed in the selection of the comparison group. A number of independent factors could exclude an offender from being included in the comparison group.

All comparison group members:

- Were matched to the Eleventh Judicial District Court Drug Court clients who entered exited during the two-year period between January 2001 and December 2002.
- Were matched to the Eleventh Judicial District Court Drug Court clients by gender, ethnicity, and referring offense.
- Did not have prior violent felony convictions, referring offense was not a firstdegree felony, and had no prior convictions for a sex crime.
- Had never participated in the Eleventh Judicial District Court Drug Court program.
- We attempted to match to the Eleventh Judicial District Court Drug Court clients on status at discharge.
- We attempted to match to the Eleventh Judicial District Court Drug Court clients on primary drug of choice.
- We attempted to match to the Eleventh Judicial District Court Drug Court clients on geographical location.

We excluded any potential comparison group member who had an indicated history of mental health problems or medical problems. We were not able to match participants on employment at intake into probation or years of education. We were also not able to completely match on length of stay because the average length of stay in the drug court program and probation vary. We could not match on geographic location either. This occurred because potentially eligible clients who live too distant from the offices of the program are not accepted because of possible transportation issues that might impede their participation. When possible, we attempted to include as similar a client as possible, although this was not always possible. In the end result, we matched 61 probation clients to the 62 drug court clients. This process of matching clients greatly improves the reliability of the data and hence the findings.

Once the two comparison groups were chosen, we requested a chronological juvenile criminal history report on both the treatment and the comparison group from the New Mexico Children Youth and Families Department (CYFD) Juvenile Justice Division (JJD) local probation office. These reports contain information pertaining to each referral to the JJD including incident date and charges, referral date to the local probation office, whether the incident was handled formally or informally and disposition information. An enhancement in this research design, compared to other similar studies we have completed, was the inclusion to adult criminal history information for both groups from the New Mexico Department of Public Safety. This is particularly important because many study group members were near 18 years of age when the left the program or probation. This report considers both juvenile and adult criminal activity, which is a considerable improvement in terms of methodological rigor and reliability.

Data Analysis and Discussion

This study considers drug court clients who exited the juvenile drug court between January 2001 and December 2002, a two-period. The criminal history information was gathered in May 2004 and thus, the recidivism measures shown here reflect a minimum of sixteen months of exposure time (the possible window where a new offense could be committed). In this section, we review the basic matching criteria and summarize some of the data collected.

According to the data provided by the Children, Youth and Families Department, there were more than 450 juveniles released from juvenile probation in 2001 and 2002. The actual number eligible for participation in the comparison group was much smaller due to substance abuse and criminal history, drug court participation, etc. It is important to understand that an exact one-to-one match was not always possible and there are subsequently slight variations in the matches. We began drawing the comparison group by considering gender. See Table 1.

Ta	Table 1 – Gender						
		Drug Court Cor			nparison		
Ge	ender	Ν	%	Ν	%		
	Male	50	80.6	48	78.7		
	Female	12	19.4	13	21.3		
	Total	62	100.0	61	100.0		

The sample is well matched according to ethnicity factors as shown in table two and there is no statistically significant variation between the treatment and comparison groups. This study is unique to other similar studies in that San Juan County has larger minority populations (particularly Native American and Hispanic). See Table 2.

Tε	able 2 – Race/Ethnicity				
		Drug Court Comparison			
Ra	ace/Ethnicity	Ν	%	Ν	%
	Anglo	18	29.0	16	26.2
	Hispanic	19	30.7	20	32.8

Native American	24	38.7	25	41.0
Other	1	1.6	0	
Total	62	100.0	61	100.0

After matching the treatment group to the comparison group based on gender and ethnicity, we next considered referring offense. Our main objective was to make certain that the comparison group closely mirrored the treatment group and that we avoided including individuals who were more or less serious than the treatment group. Table 3 shows some slight differences between the referring offenses. Most notable are the higher percentage of drug possession and distribution charges in the treatment group and the number of DWI offenders in the comparison group. Even with these differences, the resulting match is highly comparable. See Table 3.

Ta	ble 3 – Referring Offense			-	
		Drug Court		Compa	rison
Re	ferring Offense	Ν	%	Ν	%
	Drug Possession/Distribution	18	29.0	15	24.6
	Liquor Laws	13	21.0	10	16.4
	DWI	7	11.2	14	23.0
	Property Crimes	12	19.4	13	21.3
	All Other Offenses	12	19.4	9	14.7
	Total	62	100.0	61	100.0

Primary substance of abuse was also considered. In the drug court database, there is a specific field that stores this information. In the hard copy juvenile probation records, it is often necessary to read and in some cases interpret and decide what is the primary substance of abuse. We worked diligently to ensure a consistent match across the two groups to increase reliability. See Table 4.

Table 4 – Primary Substance of Abuse							
		Drug Court		Comparison			
Primary Substance		N	%	Ν	%		
	Alcohol	18	29.0	28	45.9		
	Marijuana	42	67.8	33	54.1		
	Other	2	3.2	0			
	Total	62	100.0	61	100.0		

Once the comparison group was identified, we gathered additional case information in order to further describe the two groups. The data on the drug court group was obtained from the standardized database in use by the court. The probation data was obtained from official sources included in the case file. We specifically avoided uncorroborated and/or self-reported information.

San Juan County covers a large geographical area. The drug court office is located in Farmington and participation in the drug court program requires juveniles to consistently

have access to reliable transportation to treatment interventions, court hearings and other meetings. Indeed, transportation is one of the largest obstacles that affects whether a person is referred to the drug court program or not. Table 5 shows the primary city of residence for the two groups. While the majority of both groups are from Farmington, Bloomfield or Aztec, many of the individuals included in the comparison group are from more remote areas. See Table 5.

Table 5 - City of Res	sidence			
	Drug Court		Comp	arison
City of Residence	Ν	%	Ν	%
Aztec	5	8.1	5	8.2
Bloomfield	11	17.7	8	13.1
Farmington	35	56.5	27	44.3
Flora Vista	3	4.8	1	1.6
Fruitland	5	8.1	0	
Kirtland	3	4.8	8	13.1
Shiprock	0		5	8.2
Other*	0		7	11.5
Total	62	100.0	61	100.0

*Blanco, La Plata, Newcomb, Sanostee, Waterflow

Final disposition from drug court and probation supervision are not exactly the same since all drug court participants are also on probation. In other words, successful discharge from the juvenile drug court may not necessarily mean the juvenile will be successfully discharged from probation and vice versa. Still as a proxy measure, it is informative to see how the two groups measures up. In the two-year period studied, 40% of the drug court participants discharged graduated successfully. In the same period, slightly more than half of the comparison group completed their term of supervision successfully. Again, while these two measures are not exactly comparable, Table 6 does show that the two groups are quite similar. See Table 6.

Table 6 – Disposition at Exit						
Disposition at	Drug Court		Comparison			
Exit	Ν	%	Ν	%		
Graduate/Terminated Positively	25	40.3	32	52.5		
Absconded/Terminated Negatively	37	59.7	29	47.5		
Total	62	100.0	61	100.0		

p<.18; df= 1

As mentioned previously, many drug court participants continue on supervision following their release from drug court. Table 7 shows the average length or stay in drug court for the treatment group and the average term of supervision for the comparison group. Drug court graduates spent an average of 10.1 months in the program whereas unsuccessful participants spent an average of 6.0 months in the program. By contrast, unsuccessful comparison group subjects spent an average of 9.7 months under

supervision while those who were successfully released from supervision spent 9.4 months. This is not surprising since the court determines probation supervision terms. See Table 7.

Table 7 – Length of Stay In Months					
	Drug Court	Comparison			
Mean Length of Stay	7.7 months	9.6 months			

The mean age for both groups at the time of intake into the drug court or beginning of the supervision term is quite similar. There is no reason to suspect any differences between the two groups on the basis of age. See Table 9.

Table 9 – Average Age in Years					
	Drug Court	Comparison			
Average Age	15.8 years old	16.3 years old			

Similarly, subjects from both groups had precisely the same mean years of education (9.1 years) and there are no indications that differences in education would affect recidivism. See Table 10 for a summary of the highest grade completed by groups. See Table 10.

Table 10 - Hi	ghest Gra	de Completed		
	D	Drug Court		Comparison
Highest Grade	e N	Cumulative %	Ν	Cumulative %
6	3	4.8	2	3.4
7	6	14.8	3	8.5
8	11	32.8	18	39.0
9	18	62.3	13	61.0
10	13	82.3	13	83.1
11	7	95.1	8	86.4
12	3	100.0	2	100.0
Total	61		59	

Missing =3; p<.686; df= 6

While there is no statistical difference between the groups in terms of years of education completed, there is a significant difference between the groups in reference to whether they were enrolled in school or not at the time of intake/assignment to probation. More than 90% of the treatment group were in school upon their intake into the drug court program compared to only about half of the comparison group who were enrolled. Although not an eligibility criteria, drug court participants are expected to either be working towards their high school diploma or to have their GED. It is important to note that most drug court participants also participate in the grade court as a condition of their participation. See Table 11.

Table 11 – Enrolled in School					
	Drug Court		Comparison		
Education	Ν	%	Ν	%	

Full-Time/Part-Time	57	91.9	31	50.8
Obtained GED	1	1.6	3	4.9
Not in School	4	6.5	27	44.3
Total	62	100.0	61	100.0

p<.000; df= 2

As might be expected, employment status is related to school involvement and is similarly significant between the two groups. The vast majority of drug court participants were enrolled in school at the time of intake and most were not working. Table 12 summarizes the employment status of the study subjects. See Table 12.

Ta	Table 12 – Employment Status						
		Drug Court		Comparison			
En	Employment Status		%	Ν	%		
	Employed Full-time	1	1.6	1	1.7		
	Employed Part-time	3	4.8	12	20.0		
	Unemployed	4	6.5	14	23.3		
	In School Only	54	87.1	32	53.3		
	Job Training/Intern	0		1	1.7		
	Total	62	100.0	60	100.0		

Missing=1; p<.002; df=4

Most treatment group and comparison group subjects were living with one or both parents at the time of intake. However, there was a statistically significant difference between the two groups stemming from a fairly large percentage in the comparison group who were not living with a parent at the time of their assignment to probation. The available data did not allow us to consistently gather specific living arrangements, although we believe that the majority of participants were in single-parent situations. A future study should seek to further investigate the living arrangement dynamics. See Table 13.

Table 13 – Living Arrangements						
	Drug Court		Comparison			
Living Arrangements	Ν	%	Ν	%		
Living with One or both	58	93.5	46	75.4		
Parent(s)						
Other Arrangement	4	6.5	15	24.6		
Total	62	100.0	61	100.0		

p<.005; df=1

Recidivism

Recidivism can be defined in numerous ways, including a referral for any new offense, a referral for a similar offense or the same offense (i.e. drug possession), a conviction, or a new petition. For this study we have chosen to consider juvenile recidivism measured as any subsequent referral to the Juvenile Justice Division of the Children, Youth and

Families Department. Additionally, we also measure any new arrests as an adult as reflected in the data maintained by the NM Department of Public Safety.

It is important to note exposure time for recidivism varied for the study group from between approximately sixteen months to forty months. This occurs because individuals from both groups exited from either the drug court program or probation comparison group on different dates between January 2001 and December 2002. In both groups, we find that the majority of subjects did not receive a subsequent referral to the JJD following their release from the drug court or probation. Among the treatment group participants, 22.6% received a new referral compared to 29.5% among the comparison group. While a lower percentage of the drug court participants received new referrals, there is no statistical significant difference between the two groups. Age is a consideration here since many subjects in both groups were at or near their 18th birthday upon their release from drug court or probation and would not have been eligible to have a subsequent juvenile referral. See Table 14.

Ta	Table 14 – New Juvenile Referrals						
		Drug Court		Comparison			
Ne	New Referral		%	Ν	%		
	Yes	14	22.6	18	29.5		
	No	48	77.4	43	70.5		
	Total	62	100.0	61	100.0		

p<.381; df=1

As previously discussed, this study also includes adult criminal activity subsequent to the participant's release from drug court or juvenile probation. This fact coupled with the increased length of exposure time considered in this study increases the reliability of the results. Based on the adult arrest data, we again found that a lower percentage of drug court participants had new arrests than their comparison group counterparts. While the relative difference was statistically insignificant, the effect of the drug court intervention is apparent. It is important to note here that drug court participants are considered here as a whole, regardless of whether they graduated or not, and both juvenile and adult measures of recidivism are lower than a comparable, drug-court-eligible comparison group. See Table 15.

Table 15 – New Arrests as an Adult						
Drug	Drug Court		Comparison			
N	%	N	%			
11	17.7	18	29.5			
51	82.3	43	70.5			
62	100.0	61	100.0			
		Drug Court N % 11 17.7 51 82.3	Drug Court Comp N % N 11 17.7 18 51 82.3 43			

p=.124 df=1

Next, we combined the two measures to consider overall recidivism. Table 16 shows the recidivism rates for both groups for any subsequent juvenile referral *or* new arrest as an adult. We find that drug court participants are significantly less likely to recidivate than

similar subjects who do not receive drug court programming. The data also reveal significant differences based on whether or not the participants were successfully or unsuccessfully discharged. More than two-thirds of comparison group subjects (69.0%) who were discharge unsatisfactorily from probation supervision went on to have a subsequent arrest. Among the drug court group, 43.2% of those who did not graduate from the program received new charges subsequent to their release. See Table 16

Table 16 – Overall Recidivism						
	Drug	Drug Court		Comparison		
New Offense	Ν	%	Ν	%		
Yes	23	37.1	33	54.1		
No	39	62.9	28	45.9		
Total	62	100.0	61	100.0		

p<.05; df=1

Conclusions and Recommendations

With the most rigorous research design of a juvenile drug court program in New Mexico to date, this study shows support for the effectiveness of Eleventh Judicial District Juvenile Drug Court Program in reducing criminal recidivism. Through a meticulous matching process, we identified a well-suited comparison group based on gender, ethnicity, substance abuse history, primary abuse substance, criminal history, and other exclusionary criteria. While the comparison group participants were never referred to the drug court program, all were technically eligible for participation. We make the distinction "technically eligible" since some of the comparison group subjects may not have had the necessary transportation and/or parental support to go to drug court. Indeed, the bivariate analyses presented here show statistically significant differences in living arrangements that could be relevant to drug court participation.

We are particularly intrigued by the finding that drug court participants recidivate less often than the comparison group subjects whether they graduate or not. While non-graduates stay in the program on average six months, the gap between the mean length of stay of graduates and non-graduates is only four months. This would seem to suggest that there is some residual benefit of drug court participation even among non-graduates. A future study should do a survival analysis to determine at what point in time drug court participants have a noticeable reduction in recidivism. Similarly, it would be informative to know if the point of diminishing returns among graduates. In other words, is there an added benefit of keeping drug court participants in longer? Would a nine-month average length of stay produce the same result or would a twelve-month stay produce better outcomes?

The significant differences in educational attainment and concurrent school enrollment are important to consider further. We found that the comparison group subjects were far more likely to not be enrolled in school. The unique emphasis on education in San Juan County resulting from the prominent grade court initiative should be considered more fully. Although this study does not include specific data or analyses of the grade court program, the inter-relationships between the drug court and the grade court may be a significant factor in the lower overall recidivism rate.

We would also suggest that a future study should include additional measures of success in addition to criminal recidivism. Additional measures of success would concentrate on changes in substance use and increases in measures of social stability (i.e. school improvement, family, employment).