



University of Southern Maine  
USM Digital Commons

---

Substance Use Research & Evaluation

Cutler Institute

---

2001

## Evaluation of the Thirteenth Judicial District Court Sandoval County Juvenile Drug Court: Quasi-Experimental Outcome Study Using Historical Information

Paul Guerin PhD

*University of New Mexico*

Robert Hyde MA

*University of New Mexico*

Mary Lindsey Smith PhD

*University of Southern Maine, Cutler Institute*, m.l.smith@maine.edu

---

Follow this and additional works at: <https://digitalcommons.usm.maine.edu/substance-use-research-and-evaluation>

---

### Recommended Citation

Guerin, P., Hyde, R., & Smith, M. L. (2001). Evaluation of the Thirteenth Judicial District Court Sandoval County Juvenile Drug Court: Quasi-Experimental Outcome Study Using Historical Information. University of New Mexico, Institute for Social Research, Center for Applied Research and Analysis.

This Report is brought to you for free and open access by the Cutler Institute at USM Digital Commons. It has been accepted for inclusion in Substance Use Research & Evaluation by an authorized administrator of USM Digital Commons. For more information, please contact [jessica.c.hovey@maine.edu](mailto:jessica.c.hovey@maine.edu).

**Evaluation of the Thirteenth Judicial District Court Sandoval County Juvenile  
Drug Court:  
Quasi-Experimental Outcome Study Using Historical Information**

**prepared for:**  
**The Thirteenth Judicial District Court, the Children Youth and Families  
Department and the Administrative Office of the Court**

**prepared by:**  
**The Institute for Social Research, University of New Mexico  
Paul Guerin Ph.D.**

**December 2001**

## **Introduction**

The goal in conducting this preliminary outcome study was to better understand the effectiveness of drug courts in terms of whether they “work” in reducing the incidence of crime as measured by new referrals and new petitions for participants after they left the program when compared to a matched comparison group. This study is “preliminary” because this drug court program only began operations in October 1999 and a small number of clients (less than 20) had matriculated through the program in time to be included in this study. This small number of clients and limited exposure time does not allow us to conduct sophisticated analyses regarding recidivism. In the future after more clients have entered and left the drug court program we will be able to conduct more sophisticated analyses. Additionally, we would like to include additional measures of success. Additional measures of success would concentrate on changes in substance use and increases in measures of social stability (i.e. school improvement, family, employment). We were not able to include these types of outcome measures in this study. We are also interested in conducting a cost study.

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, 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. Another matching variable was geographic location (i.e. outside of Rio Rancho and Rio Rancho). Successful drug court graduates and those who do not successfully graduate 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 discussed later. 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 are those who typically were under the supervision of the local probation department. Information collected for the comparison group is, to the extent possible, comparable. This consists of 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 each New Mexico drug court uses 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 which 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. We have chosen to focus on a number of different outcomes. These include:

- recidivism - defined as an official new referral and petition (in-program and post-program) for any offense.
- time to recidivism post-program

Our primary goal is to help answer the broad question, which is not yet answerable, is do drug courts work? Perhaps as importantly, another question is: For which types of clients does drug court work best? Or put another way: What is it about drug courts that work? The second question cannot be answered by this of study.

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 New Mexico Children Youth and Families Department. As part of this contract we were obligated to complete a historical outcome study using a comparison group of individuals who did not participate in the juvenile drug court program. Originally we had hoped to conduct an outcome study using a contemporary comparison group of individuals who did not participate in the juvenile drug court program. Because of the small size of most juvenile drug courts regarding the number of clients who enter, are served and subsequently leave the programs it was not feasible to conduct this type of study within the time of the contract. This was further complicated by the difficulty in collecting a matched comparison group from probation files. This study includes all drug court clients between October 1999 and February 2001 who were clients for any period of time. During this time, 15 clients entered and exited the program. These clients who had been accepted and received services became part of the treatment group.

Based on available data, we attempted to match the drug court graduates to a similar group of probation clients. In principle, we wanted a sample of probation clients who were similar in terms of chronological offense history, ethnicity and gender who also exited probation similarly (i.e. terminated and successfully completed probation). 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 comparison group originated from closed New Mexico Children, Youth and Families Department (CYFD) Juvenile Justice Division (JJD) probation files. Closed files are files of juveniles who are no longer currently on probation and whose files are being stored. In this jurisdiction all the files were at one of two office locations in the town of Bernalillo. We were granted access to these files by the local probation office and JJD.

After receiving permission to access closed files of clients we visited each office in Bernalillo to become acquainted with the filing system. Next, we began reviewing individual probation files to determine eligibility for the comparison group. This was accomplished using an ISR designed eligibility criteria form (Appendix A). If an individual met all the criteria they were included in the comparison group and their file was coded using the ISR designed comparison group data collection codebook (Appendix B).

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 Thirteenth Judicial District Court Drug Court clients who entered and exited between October 1999 and February 2001.
- Were matched to the Thirteenth Judicial District Court Drug Court clients by gender, ethnicity, and referring offense.

- Did not have prior violent felony convictions, referring offense was not a first degree felony, and had no prior convictions for a sex crime.
- Had never participated in the Thirteenth Judicial District Court Drug Court program.
- We attempted to match to the Thirteenth Judicial District Court Drug Court clients on status at discharge.
- We attempted to match to the Thirteenth Judicial District Court Drug Court clients on primary drug of choice
- We attempted to match to the Thirteenth Judicial District Court Drug Court clients on where they lived (i.e. Rio Rancho or Bernalillo).

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. As will be shown later we were not able to match drug court clients as well as we would have liked

When possible, we attempted to include as similar a client as possible, although this was not always possible. In the end result, we matched 14 probation clients to the 14 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 offense history report on every study group member 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. In our review of the reports we discovered they were very difficult to read and interpret. In order to better understand the reports a meeting was scheduled with one of the supervising JPO's from the Thirteenth Judicial District to help us. As a result of this meeting we decided to keep our interpretation of the reports as simple as possible to reduce errors. We decided to include in our data collection the incident date of each referral, each charge associated with the incident and whether or not a petition was filed for a given referral. If we were not able to interpret a referral it was omitted from the data analysis.

### **Data Analysis and Discussion**

This study considers drug court clients who entered and exited the program between October 1999 and February 2001, a sixteen-month period. During this time period, as noted earlier, 19 individuals entered and exited the program and 14 of these individuals were included in the study. Five individuals were not included because we were not able to request and acquire a chronological offense history in time for this study. A total of 14 of 14 comparison group individuals were matched to a chronological offense history and included in the study for a total of 28 cases. This small number of cases limits the analyses that can be performed and the findings. The findings, while limited, are useful

for documenting the on-going development of this particular program and serve as a starting point in reporting client level outcomes as they relate to re-arrest.

It would be very beneficial to replicate this study in the next 1-2 years when a larger number of drug court clients have exited the program and more time has elapsed to measure recidivism. For this study we were able to document new referrals and petitions through October 2001. The following tables are an analysis of the 28 matched individuals in the study group.

Table 1 – Referring Offense				
Referring Offense	Drug Court		Comparison	
	N	%	N	%
Drug Possession	9	64.3	3	21.4
Drug Distribution			2	14.3
Other Drug Related Offenses	1	7.1	2	14.3
DWI			2	14.3
Property Crimes	1	7.1	4	28.6
All Other Offenses	2	21.4	1	7.1

Table 1 documents the referring offense for the drug court and comparison group. As this table indicates we were not able to match clients in drug court with individuals on probation by referring offense. The majority of individuals in the drug court group were referred for drug possession. Because we could not find drug possession cases in the probation group we included two drug distribution and two DWI cases.

Table 2 – Disposition at Exit				
Disposition at Exit	Drug Court		Comparison	
	N	%	N	%
Graduate	7	50.0	11	84.6
Absconded/Terminated	7	50.0	2	15.4

Missing – 1 p=.079 df=2

The drug court and the comparison group were not similar in terms of the number of individuals who successfully completed either drug court or probation and those who did not. Almost 85% of the comparison group successfully completed their probation term while only 50% of the drug court completed successfully.

Table 3 – Length of Stay

	Drug Court	Comparison
Average Length of Stay In Months	8.0	9.2

As this table indicates length of stay in months was greater for the probation comparison group by 1.2 months.

Table 4 - Prior Referrals and Petitions

	Drug Court	Comparison
Average Number of Referrals Prior to Entering Program	10.2	3.9
Average Number of Petitions Prior to Entering Program	4.4	2.3

When referrals and petitions prior into entry into the drug court or comparison group were compared we found drug court individuals had more than twice as many referrals when compared to the comparison group and almost twice as many petitions filed.

Table 5 – Primary Substance of Abuse at Intake

Primary Substance	Drug Court		Comparison	
	N	%	N	%
Alcohol			8	57.2
Marijuana	12	92.3	5	35.7
Other	1	7.7	1	7.1

Missing – 1 p=.004 df=2

Almost all the drug court individual's primary substance of abuse at the time they entered the drug court program was marijuana. In the drug court group the other category consisted of methamphetamine. The majority (57.2%) of the probation comparison group used alcohol as their primary substance of abuse as indicated by the probation files followed by marijuana (35.7%) and one methamphetamine user. We were not able to match individuals on their primary substance of abuse. While this is true it was our observation when collecting this data that many of drug court and probation clients either self-reported or had indicated in their files that they used multiple substances. Multiple substances primarily consisted of alcohol being used in conjunction with marijuana. When reviewing probation files it was more difficult to find information related to substance abuse than in the drug court client management database. While the drug court client management database routinely and consistently collects this information in a systematic way this is not true of probation hard copy files. When coding the probation

comparison group we coded the primary substance based upon what substance appeared to be indicated as the primary problem in the file.

Table 6 - City of Residence				
City of Residence	Drug Court		Comparison	
	N	%	N	%
Rio Rancho	10	71.4	8	57.1
Outside of Rio Rancho	4	28.6	6	42.9

We were able to match the groups on where they resided at the time they entered either probation or the drug court program. The majority of individuals from both groups resided in Rio Rancho.

Table 7 – Gender				
Gender	Drug Court		Comparison	
	N	%	N	%
Male	11	78.6	11	80.0
Female	3	21.4	3	20.0

The vast majority of individuals in both groups were male.

Table 8 – Race/Ethnicity				
Race/Ethnicity	Drug Court		Comparison	
	N	%	N	%
Anglo	7	50.0	9	69.2
Hispanic	5	35.7	3	23.1
Other	2	14.3	1	7.7

Missing – 1 p=.592 df=2

The majority of individuals served in both groups self-identified as Anglo. Hispanics were the next largest group of individuals served in both programs. The “other” group consisted of one African-American and two Native-Americans. There are some differences due to the inability to match clients on a one-to-one basis but these differences are not statistically significant.

Table 9 – Average Age		
	Drug Court	Comparison
Average Age	16.7	16.1

Average age for the entire group was 16.4 years old (range 14-19, std. dev. 1.4). The drug court group had an average age of 16.7 years old (range 14-19, std. dev. 1.5) while

the comparison groups mean age was 16.1 (range 14-18, std. dev. 1.3). The average difference between the groups was .6 years.

Table 10 – Average Grade Completion			
	Drug Court	Comparison	
Average Grade	10.0	9.5	

The average education in years of school completed at intake into either group was different by  $\frac{1}{2}$  a year.

Table 11 - Highest Grade Completed				
Highest Grade	Drug Court	Comparison		
	N	%	N	%
7			1	7.7
8	3	21.4	2	15.4
9	1	7.1	3	23.1
10	5	35.7	4	30.8
11	3	21.4	3	23.1
12	2	14.3		

Missing – 1 p=.510 df=5

The two groups were similar regarding the highest grade completed at intake into either program as indicated by this table and Table 7. Two drug court clients had obtained their GEDs.

Table 12 – Enrolled in School				
Education	Drug Court	Comparison		
	N	%	N	%
Full-Time/Part-Time	7	50.0	12	92.3
Obtained GED	2	14.3		
Not in School	5	35.7	1	7.7

Missing – 3 p=.039 df=2

This table documents school enrollment at the time of entry into either the drug court program or probation. All but one of the comparison group individuals were either in school full-time or part-time while only 50% of the drug court individuals were in school full-time or part-time. Of importance is the large percentage of drug court program individuals who were not in school when compared to the probation individuals. While this difference is not highly statistically significant it is a large difference.

Table 13 – Employment Status				
Employment Status	Drug Court		Comparison	
	N	%	N	%
Employed	7	50.0	8	57.1
Unemployed	7	50.0	6	42.9

p=.588 df=1

A slightly larger percentage of individuals were employed in the comparison group than the drug court group. This difference is not statistically significant.

Table 14 – Living Arrangements				
Living Arrangements	Drug Court		Comparison	
	N	%	N	%
Living with Parent(s)	13	92.9	12	85.7
Not Living with Parent(s) (i.e. alone, other family, boy/girl friend)	1	7.1	2	14.3

p=.316 df=1

This table reports the living arrangements of both groups. Almost 93% of the drug court group lived with one or both of their parents at intake into the drug court program. A smaller percentage (85.7%) of the comparison group comprised of probationers lived with one or both of their parents. Findings from this table indicate a large majority of drug court and probation group individuals lived with one or both parents.

Using the information presented in the above tables a useful profile of the drug court group can be developed and compared to the probation comparison group. This is necessary in order to better understand how comparable the two groups are and to place the recidivism findings in context to both groups.

Almost two-thirds of all drug court clients had either a drug possession, drug distribution or burglary offense that resulted in their becoming a drug court client while more than 50% of the comparison group had a drug possession, burglary or DWI offense. These differences were not statistically significant. Drug court clients spent in the drug court program on average 40% fewer days under supervision when compared to the probationers. Drug court clients also had considerably more referrals and petitions when compared to the probation group upon entry into the drug court program. When primary substance of abuse is reviewed drug court clients were statistically different and were more likely to use more serious drugs (marijuana) than comparison group members (alcohol). This finding is tempered by the fact many juveniles abuse both alcohol and marijuana. The majority of individuals in both groups were male with a slightly larger percentage of females in the drug court group. The majority of individuals in both group's self-identified as Hispanic. A larger percentage of the clients in the probation

comparison group identified as Anglo when compared to the drug court group. The drug court and comparison group were very similar when age was considered. Both groups on average were similar in age. The majority of individuals in both groups were employed, single/never married and had few dependents. Both groups lived with one or both parents.

The above tables and discussion point to a more serious drug court group when compared to the probation comparison group. This is indicated by primary substance of abuse at intake into the drug court, referring offense, average number of referrals and petitions upon entry into drug court, school enrollment at intake, and disposition at exit. We were not able to create a better matched comparison group based upon the limited time frame (14 months) on which the comparison group had to be created. It may be that more serious offenders who do not get referred and accepted into the drug court program receive longer terms of probation.

### **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 define recidivism two ways. First, as an official referral, as indicated by chronological offense reports, for any offense following an individual's exit from the drug court program or comparison group of probationers. Second, we consider petitions filed in court following an individual's exit from either group. We also include a table that documents new referrals and petitions while in the drug court program or under probation supervision.

It is important to note exposure time for recidivism varied for the study group from between approximately seven months to twenty-two months. This occurs because individuals from both groups exited from either the drug court program or probation comparison group on different dates between January 2000 and March 2001. In order to control for exposure time for re-arrest it was necessary to exclude probation comparison group individuals who had discharge dates from probation earlier than the earliest drug court individual.

Table 15 – New Referrals				
New Referral	Drug Court		Comparison	
	N	%	N	%
Yes	2	15.4	4	28.6
No	11	84.6	10	71.4

Missing – 1 p=.410 df=1

Differences in new referrals following exit between the drug court and probation comparison group were not statistically significant. While not statistically significant a larger number and percentage of comparison group members had new referrals when compared to the drug court group. This finding is very preliminary considering the small study group and short exposure time.

This finding is made even more important considering the fact the drug court group was comprised of a more serious group of offenders when number of referrals and petitions prior to entry into drug court, primary substance of abuse, referring offense, school enrollment at intake, and disposition at exit were considered.

Table 16 – New Petitions				
New Petition	Drug Court			
	N	%	N	%
Yes	0		0	
No	13	100.0	14	100.0

Missing - 2

As indicated by this table, there were no new petitions filed for either the drug court or comparison group during the time study group members were exposed.

Table 17 – New Referrals and New Petitions While in Program		
	Drug Court	Comparison
Average Number of Referrals While in Program	1.4	1.1
Average Number of Petitions While in Program	0.5	0.3

This table documents the average number of referrals and petitions while in either the drug court or comparison group. On average drug court group members had a slightly higher number of referrals and petitions than the comparison group while in the drug court program.

### Conclusion

In conclusion, this study has shown that drug court individuals recidivated at a lower rate when compared to the comparison group of probation clients. Of great importance is the fact this occurred even though the drug court group was a more serious group of offenders. This finding is counter-intuitive and serves to begin answering the question regarding the success of this drug court program in particular and drug court programs in general. Despite the small sample size this study has established an important baseline for the Thirteenth Judicial District Court Sandoval County Juvenile Drug Court Program.

This preliminary outcome study also provides a starting point for further study regarding the effectiveness of drug courts. Further time and attention should focus on “what about drug courts work”, more detailed and complete analyses and a cost study.

More detailed analyses would focus on collecting more complete data on both drug court clients and a comparable group of probationers. This could include treatment

information and self-report information regarding drug use after exit from drug court and probation/prison as well as improvements in living arrangements, education, employment, medical health and mental health. It would also be worthwhile to look at longer time periods post-program than what was included this report. Benefits may increase with longer time periods. Additionally, a larger sample would allow more sophisticated analyses and increase the significance of the findings.

The findings in this report provide some interesting information on cost issues. While it is our opinion that short term in-program average costs per client for drug court are greater than comparable probation costs due to increased supervision and treatment some or all of this cost may be offset by longer lengths of stay in probation and higher recidivism rates.

## Appendix A

### Comparison Group Eligibility Criteria Form

## Appendix B

### Juvenile Historical Comparison Group Data Collection Codebook