THE PENNSYLVANIA STATE UNIVERSITY
SCHREYER HONORS COLLEGE

DEPARTMENT OF SOCIOLOGY AND CRIME, LAW, AND JUSTICE

AN ANALYSIS OF FACTORS THAT INFLUENCE THE EFFECTIVENESS OF DRUG TREATMENT COURTS IN THE UNITED STATES

JOSEPH MILES TURO

Spring 2011

A thesis
submitted in partial fulfillment
of the requirements
for baccalaureate degrees
in Crime, Law, and Justice and Philosophy
with honors in Crime, Law, and Justice

Reviewed and approved* by the following

Doris MacKenzie
Professor of Crime, Law, and Justice
Thesis Supervisor

Jeffery Ulmer
Associate Professor of Crime, Law and Justice and Sociology
Honors Adviser

*Signatures are on file in the Schreyer Honors College
Abstract

Drug treatment courts have existed since a revolutionary group of judicial officials in Miami-Dade, Florida created the idea in 1989. Today there are over 2,500 drug treatment courts across every state in the United States. Many studies have been conducted to determine if these drug treatment courts are effective at reducing recidivism among drug offenders. Recent studies suggest that these drug courts are effective at reducing recidivism. In a change of pace, Mitchell and his colleagues also try to use their data to answer why drug courts are effective. They have found that program effectiveness is related to the length of the programs, accepting non-violent offenders, and high program graduation rates. In my evaluation, I take twenty-two of the studies examined by Mitchell et.al.(2011) and attempt to determine if the programs with all three of these characteristics do in fact have lower recidivism rates than their counterparts. After examining the data, I do not believe that having all three characteristics has a different effect on the overall recidivism rates of a program. However, program graduation completion alone did appear to have an effect on participants’ success after the program. My evaluation is limited on multiple levels including the number of studies I obtained and the information provided in them. Further analysis should be done in this area due to the importance of the question.
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Acknowledgements

I would like to thank Dr. Doris MacKenzie for all of the time and help she gave me over the past year. Her support and insight gave me the ideas I needed to succeed. I would also like to thank Dr. Jeffery Ulmer for helping me find my topic and getting me going in the right direction. This thesis would not have been possible without them.
Introduction

In the United States the expansion of the criminal justice system is one of the most important issues of the day. In a time when the U.S. government is trying to cutback and reduce spending; the costs of police, corrections and the courts are at all-time highs. According to the Bureau of Justice Statistics, in 2006 we spent over $200 billion on the criminal justice system. Of that money, the corrections system used well over $60 billion (Bureau of Justice Statistics, 2010a). With more and more money spent on incarcerating people every year, there is less money available for education, social services and other programs that help the average American citizen. Finding new ways beyond imprisonment to deal with criminals is a major goal of the justice system of today. While we will probably always imprison violent offenders, there are over 200,000 drug offenders in prison at any given time (Bureau of Justice Statistics, 2010a). While some of these offenses are serious crimes like manufacturing and distributing drugs, many offenses are less serious such as drug possession and use. Diversionary drug courts were created to deal with these less serious drug crimes and non-violent drug offenders.

Originally drug courts were established to speed up the sentencing process of drug offenders due to the overwhelming influx of drug-related criminals in the 1980s. Drug-related crimes exploded during this time largely due to the stringent laws put in place during President Reagan’s War on Drugs. One of the major law changes occurred in 1986 with the introduction of mandatory minimums for simple drug possession charges (Drug Reform Coordination Effort, 2004). When this law was
introduced crimes that previously would have had offenders simply go on probation or pay fines were now sentencing people to multiple years in prison. This resulted in more and more court time needed to process drug offenders and started the implementation of the drug courts to expedite the process.

To combat this growing population of drug offenders, in 1989, justice officials in Miami-Dade, Florida began to use the drug court to send certain drug offenders to treatment facilities rather than prison. The plan was to rehabilitate offenders and keep them out of the system rather than see the same faces repeatedly over the years (National Association of Drug Court Professionals, 2010). This was a revolutionary idea that gained momentum and popularity over the traditional criminal system. According to the National Association of Drug Court Professionals (NADCP), ten years after the first drug court was established, there were 492 courts in the United States and as of June 2010 there are over 2,500 drug court programs operating in every state in the U.S. (National Association of Drug Court Professionals, 2010). The main purpose of the drug court, or drug treatment court (DTC), is to provide non-violent drug offenders an alternative “punishment” and a way to avoid the traditional prison routine followed by many criminals. The DTCs accomplish this task by providing therapeutic programs and treatment-based court rooms. The drug courts have allowed thousands of drug addicted individuals to get appropriate help outside and stay out of the regular the criminal justice system.

Drug court programs, while differing from program to program, all have similar characteristics. One of the most important characteristics is that drug courts combine the court room processing system with drug and alcohol treatment programs. The
traditional courtroom does not exist for these programs. With drug courts, the most important theme is everyone in the system is more interested in helping the offender rather than just punishing them. Prosecutors and defense attorneys work together with the judges to find the best plan of action for each individual case (National Association of Drug Court Professionals, 1997). One benefit of drug court programs being set up this way is the drug offender stays out of the traditional system and avoids being labeled by the system and community as a criminal. People who use these programs are seen as victims of addiction rather than criminals who are a detriment to society. Due to the fact that every area and culture around the country is different, drug courts offer multiple treatment focuses and programs. By providing a variety of treatment options, success is more likely to be achieved by every person who comes through a drug treatment court program (National Association of Drug Court Professionals, 1997).

While helping drug offenders overcome addiction and avoid the regular court system is a good thing, the effectiveness of these programs is what is truly important in a time when reducing spending is of utmost importance. Recidivism rates of offenders have always been one of the most important statistics when looking at the effectiveness of these drug court programs. According to the latest statistics, about 67.5% of all offenders released from prison end up being re-arrested within 3 years (Bureau of Justice Statistics, 2010b). This is a huge number and the re-arrest rates for drug offenders align with this overall number. Therefore, it is believed an effective drug court program should reduce the recidivism rate if for no other reason than they help control a drug offender’s addiction.
Background Information

Hundreds of studies have been completed since drug courts started to determine whether the therapeutic programs they offer are more effective at reducing recidivism than regular criminal sentences. One of the more recent studies was done by Latimer, Morgan-Bourgon, and Chrétien (2006). They completed a meta-analysis that included sixty-six individual drug court studies, the majority of which are located in the United States. Meta-analysis can be best understood by this quote:

“Meta-analysis can be understood as a form of survey research in which research reports, rather than people, are surveyed. A coding form (survey protocol) is developed, a sample or population of research reports is gathered, and each research study is “interviewed” by a coder who reads it carefully and codes the appropriate information about its characteristics and quantitative findings. The resulting data are then analyzed using special adaptations of conventional statistical techniques to investigate and describe the pattern of findings in the selected set of studies.” (Lipsey and Wilson, 2001).

Overall Latimer et al. (2006) determined these drug courts reduced the overall recidivism rate by 14% (Latimer et al. 2006). In addition, they also drew attention to an important distinction in how the studies reported their recidivism statistics. With these programs, the overall attrition rate, or the percentage of program participants that either voluntarily or involuntarily dropped out of the program, averaged 45.2%. This means with an average drug court program almost half of the participants end up not completing the program. When the drug court programs they studied reported their recidivism statistics, those who did not complete the program were not included and only graduates of the drug court programs are tracked. The problem with only comparing graduates to the comparison group is the creation of a selection effect. This
means that those who complete the programs may have already been less likely to recidivate and matching this group to the entire comparison group creates an uneven assessment. In almost every case the treatment group will do better and therefore this is something that must be addressed. Nevertheless, Latimer and his colleagues did find drug court programs significantly reduced recidivism among drug offenders (Latimer et al. 2006).

Another important study on drug courts was done by Steven Belenko (2001). While it is older than Latimer’s work, it might actually be more important in guiding future studies on drug courts. During the time of Belenko’s study there were less than five hundred drug court programs across the country and detailed studies of these programs were limited. However using the studies that were available, Belenko determined that the majority of programs did report reduced recidivism rates among graduates of the programs. However, he had issues with the various studies due to their short follow-up periods, small sample sizes and non-randomized comparison groups (Belenko, 2001). Even with those constraints, after reviewing the literature Belenko concluded drug courts helped reduce recidivism although it was unclear for how long or how effectively.

Belenko’s more important study observations related to how the programs were designed and how they reported results. To really learn what the effects of the drug court programs were, he believed we need to have more detail about the specific requirements of the programs (Belenko, 2001). One of the first downfalls of the studies he saw, much like Latimer did five years later, was that many of them only used graduates of the programs when comparing their recidivism rates. While this does make sense, he found that of the studies that reported graduation rates found the
average graduation rate was 47%. This means that in the average study half the data is missing because people leave the program without completing it (Belenko 2001). It could be beneficial to follow the individuals who did not graduate from the program as much as those who completed the program to see if the recidivism rates differed between the two groups.

Another important issue raised by Belenko was the lack of clarity of what exactly was going on in these programs that may or may not have made them effective. He felt that understanding the characteristics of programs, such as frequency of drug tests, type of therapeutic methods and patient/caretaker interaction, is just as important as knowing the outcomes. All of these characteristics could provide more information into what specifically increases the effectiveness of the programs. He especially believed it was important to understand the interaction between those participating in the programs and the individuals running them. A few of the studies he reviewed had some qualitative interviews with staff and drug offenders but no concrete statistics. He referred to this lack of information on program characteristics and staff/participant interactions as a need to decipher the “black box” of drug courts (Belenko, 2001). Belenko was one of the first people to recognize it is very important to determine why drug courts are effective and not just that they are effective.

This revelation by Belenko has become one of the main foci of a new study by Mitchell, Wilson, Eggers, and MacKenzie (2011). In a soon to be published meta-analysis of seventy-nine drug courts, in addition to once again confirming that drug courts reduce recidivism, Mitchell et al.’s study also looks to answer what facet of drug court programs are effective. Taking the Belenko ideas into account was important and
therefore only studies that followed the graduates and the non-graduates of the DTCs made the list of studies. Much like their predecessors, of the seventy-seven drug courts that could be used in the final evaluation of recidivism, 90% of these programs showed a reduction in recidivism by those who participated in the programs (Mitchell et al. 2011). In fact, they found an offender who participated in the DTC programs was 74% less likely to commit more crime than someone who went to prison. In other words, if they assume a 50% recidivism rate for non-participants, those in the treatment program would only have a 36.5% recidivism rate (Mitchell et al. unpublished). While it once again confirms the overall effectiveness of the drug court programs, Mitchell’s analysis includes more studies than the other two I examined, which gives it even more validity.

The most interesting and relevant part of Mitchell et al.’s research relates to why programs are effective. In their research, they held various program characteristics constant and then analyzed the numbers to determine the effectiveness of reducing recidivism. By looking at the characteristics one by one they could easily determine which drug court characteristics allowed programs to have the lowest recidivism. Of all the characteristics examined, “…courts with longer minimum times to graduation (i.e., greater than 15 months), higher graduation rates, and lesser problem severity (i.e., non-violent offenders, minor criminal history) had larger effect sizes than other courts.” (Mitchell et al. 2011).

While I believe the work done by Mitchell et al. is important, more analysis can be done. Because all of their analyses of the characteristics were done one at a time, it does not reveal how well any combination of these three characteristics would work in the real world. If their analysis is accurate, and I believe it is, then one might assume
having more than one of these characteristics would make a program even more effective.

Given this information from their analysis, my hypotheses are as follows:

- Those programs with all three of these characteristics; longer program lengths, non-violent offenders, and higher graduation rates; will have the greatest reduction in recidivism,
- And the recidivism rates from these programs will be lower than those without all three characteristics.

Methods

I was able to find and obtain copies of twenty-two of the drug court studies that Mitchell and his colleagues analyzed in their systematic review. In addition to the actual articles, I was also able to review their original coding and data analysis of the individual studies. This is most likely because the majority of these studies took place before 2000 and the coding was probably finished many years ago. Also most of these studies have been used in more than one review and have been found to be reliable. A majority of the studies had all of the characteristics I was hoping to find. As shown in Table A1, I coded length of the program, criminal history of offenders and graduation rate. Also included in the table are the recidivism rate for the treatment group and the recidivism rate for the comparison group. I kept notes on other common features between the studies as I looked for the needed information and these commonalities are noted the comments section.
The first variable I coded was length of program. Because the number given by Mitchell et al. was 15 months, any program that lasted 15 months in length or less was given a 1 and any program lasting 16 months or longer was given a 2. There were also many programs that listed ranges of months for their program lengths. Therefore, if the range had either number greater than 15 months I gave it a 2 by assuming an offender would follow the program through to the end.

For criminal history of participants, a 1 was given if they were violent offenders, 2 for non-violent and 3 for a mixed group. This is the standard coding for this variable. As can be seen in Table A1, all programs reviewed only accepted non-violent drug offenders and were subsequently given 2s.

Coding the graduation rate was a bit more complex because all Mitchell et al. stated was that “higher graduation rates” had the best results. Because there was no specific number given, I decided for the sake of my analysis I would determine the average graduation rate for programs in the studies I obtained. Then while coding the studies if the rate was lower than the average I coded it a 1 and if it was higher than the average, it received a 2. The average came out to be a graduation rate of 38.2% and there were no studies that fell directly on the average, which simplified the coding.

Once all of the characteristics were coded, I was able to determine which studies had all three of the positive characteristics. My analysis began with separating the studies into three groups: those with high graduation rates and long program lengths, those with high graduation rates or long program lengths, and those with neither high graduation rates nor long program lengths. The reason I used only these two variables is because every study included only non-violent drug offenders making this factor a
constant across the studies. Also, out of the twenty-two studies, there were seven studies that had incomplete data, either missing the program length or the graduation rate, and they were not included in my analysis since I could not determine to which group they would belong.

With each group I created a table showing their recidivism rates for the treatment group and whether or not the study was statistically significant. The statistical significance was gathered from Mitchell et al.’s meta-analysis and the recidivism rates from the studies themselves. In order to make the analysis more efficient, I differentiated between the studies that demonstrated a statistically significant difference between the comparison and treatment groups. It should be noted that these DTC programs are for many different types of drug offenders. Whether it is heroin, marijuana, cocaine, etc. the type of drug effects the recidivism outcomes. Comparing one program to another is difficult because the differences are not standardized from one study to another and this can create very different recidivism rates.

**Findings**

The first group examined was the drug treatment court (DTC) programs with low graduation rates and short program lengths. There were three studies that fell into this category from the original twenty-two studies I reviewed. According to the research from Mitchell and his associates I should find the highest rates of recidivism among these programs. However what can be seen from Table 1 is that two of these studies were actually statistically significant toward the treatment group and had low recidivism rates. The study with the worst recidivism rate was not found to be statistically
significant and is more in line with my expectations for this group. Overall this group of studies did not turn out how I hypothesized. I expected high recidivism rates and a weak or nonexistent reduction in recidivism. However two of the three studies were statistically significant toward the treatment group and had low recidivism rates.

Table 1: DTC programs with lower graduation rates and shorter programs.

<table>
<thead>
<tr>
<th>Name</th>
<th>Time to graduation (1= 15 months or less)</th>
<th>Graduation Rate (1= lower than 38.2%)</th>
<th>% recidivated treatment</th>
<th>Statistically significant, favor treatment</th>
<th>Statistically significant, favor comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deschenes et. al. (1999)</td>
<td>1</td>
<td>1</td>
<td>21.6%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>M.M.Bell (1998)</td>
<td>1</td>
<td>1</td>
<td>18%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Vito &amp; Tewksbury (1998)</td>
<td>1</td>
<td>1</td>
<td>48.1%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Average Recidivism Rate</td>
<td></td>
<td></td>
<td>29.2%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To try and understand why these recidivism rates may have been lower even for programs with low graduation rates and short programs, I looked at the specific background information in the studies. In the M. M. Bell study, a few different things stood out. First, the participants were not highly educated which led to an employment disparity. Sixty six percent of participants were unemployed when they began the program and this was a combination of those seeking work, those not seeking work, disabled, and institutionalized. According to the authors, “Graduates were much more likely to be working when they entered treatment,” (M. M. Bell, 1998). Along with graduates being in a better position, those who failed out of the program had actually started the program with longer criminal records and therefore had higher risks of
recidivism. This indicates those who failed the program were already on track to fail from the start and is a perfect example of the selection effects I discussed earlier.

Yet, the most important possible reason this study seemed to do well was that the comparison group was followed for a longer period of time outside of the program. They only looked for recidivism in the treatment group once they left the program but were looking for recidivism in the comparison group from the very first day of the study. This means that someone who was in the drug court for twelve months was only followed after he or she was done but someone in the comparison group was followed that entire twelve months. This gave the comparison group much more time to get re-arrested which could explain the success of the program.

The Deschenes study was the other positive program with a shorter length and lower graduation rate. One of the possible reasons this program was positive is that even though their graduation rate was low, so was their failure rate. At the time of their analysis, there was a high retention rate of people who were still in the program but had not yet graduated, which could lead to the unexpected result. Another explanation for the positive outcome, which I believe to be more relevant, is the disparity between the treatment group and the comparison group. While both groups had committed the same types of crimes, 74.9% of the treatment group had no prior felony convictions. This was much higher than the comparison group that had only 62.0% with no prior felony convictions (Deschenes et. al. 1999). In fact, in almost every category of risk to recommit a crime, the comparison group did worse than the treatment group. This could easily have led to the positive results for the DTC program.
The next group of studies I examined was those with either a high graduation rate or a long program length.

Table 2: DTC programs with either long program lengths or high graduation rates.

<table>
<thead>
<tr>
<th>Name</th>
<th>Time to graduation (1= 15 months or less, 2= 16 months or more)</th>
<th>Graduation Rate (1= lower than 38.2%, 2= higher than 38.2%)</th>
<th>% recidivated treatment</th>
<th>Statistically significant, favor treatment</th>
<th>Statistically significant, favor comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cosden et. al. (1999)</td>
<td>1</td>
<td>2</td>
<td>51%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Deschenes et. al. (1995)</td>
<td>1</td>
<td>2</td>
<td>31.3%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Godley et. al. (1998)</td>
<td>2</td>
<td>1</td>
<td>No concrete numbers*</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Listwan et. al. (Erie 2001)</td>
<td>2</td>
<td>1</td>
<td>39.5%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Roehl (1998)</td>
<td>2</td>
<td>1</td>
<td>11%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Tauber (1993)</td>
<td>1</td>
<td>2</td>
<td>31%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Average Recidivism Rate (for all but Roehl)</strong></td>
<td><strong>38.2%</strong></td>
<td><strong>38.2%</strong></td>
<td><strong>38.2%</strong></td>
<td><strong>38.2%</strong></td>
<td><strong>38.2%</strong></td>
</tr>
</tbody>
</table>

*Explanation below*

The first thing I noticed about these six studies was they all have recidivism rates higher than 30%, except the Roehl (1998) study. Also, only two of the six studies were found to be statistically significant. Based on my hypothesis I would have expected this group to be better than the last group but this was not the case. With most of the recidivism rates above 30% and only two of six statistically favoring the treatment group, this group seems worse than first. While four of the studies followed the pattern I was expecting, two had some interesting differences: the Godley et al. study and Roehl study.
The first study with key differences is the Godley et al. (1998) study, but I encountered an issue when reviewing this one. The author did not provide any total numbers of the different groups he was comparing and instead used only reduction of re-arrests as a comparison. As I detailed in Table A1, early dropouts from the program (<3 months) had an insignificant reduction in re-arrests, but late dropouts (3-12 months) reduced re-arrests by 58% and graduates reduced re-arrests by 92% (Godley et al. 1998). Godley’s research seems to suggest that the longer a person stayed in the program the more likely they were to not be re-arrested. However, it is difficult to compare rates of reduction to actual numbers of participants arrested and not arrested. But based on their re-arrest rate statistics, it would appear the program that Godley et al. studied did have some success in reducing recidivism.

The other study that acted more as an outlier was the Roehl study. One of the major problems with this study is the small size of the sample. The treatment group had only eighty subjects and the comparison group had even fewer subjects (Roehl, 1998). This small sample probably accounts for why the study was not statistically significant, but does not explain why there was such a low rate of recidivism. However, the low recidivism may be partially explained by the structure of the two groups. The drug treatment court group consisted of only those people with charges of simple possession or being under the influence of a controlled substance. Conversely, the comparison group was comprised of those with misdemeanor or felony drug possession convictions or under the influence. This unequal structure of participants could account for the extremely small recidivism rates for the treatment group.
Finally I looked at the group believed to be most relevant to program effectiveness, those studies with higher graduation rates and long program lengths. Based on the research by Mitchell and his colleagues, this group should have the lowest recidivism rates of all the groups. The results in the majority of these studies were statistically significant and only one of the studies, the Terry (1995) study, favored the comparison group and appeared to be an outlier.

Table 3: DTC programs with both longer program lengths and higher graduation rates.

<table>
<thead>
<tr>
<th>Name</th>
<th>Time to graduation (2= 16 months or more)</th>
<th>Graduation Rate (2= higher than 38.2%)</th>
<th>% recidivated treatment</th>
<th>Statistically significant, favor treatment</th>
<th>Statistically significant, favor comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deschenes et. al. (2001)</td>
<td>2</td>
<td>2</td>
<td>Low/Med. risk 22.8%  High risk 32.1%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Ericson et. al. (1999)</td>
<td>2</td>
<td>2</td>
<td>21.5%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Listwan et. al. (Akron 2001)</td>
<td>2</td>
<td>2</td>
<td>39.4%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Peters &amp; Murrin (1998)</td>
<td>2</td>
<td>2</td>
<td>20%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Tauber (1995)</td>
<td>2</td>
<td>2</td>
<td>40.9%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Terry (1995)</td>
<td>2</td>
<td>2</td>
<td>38.7% *</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Average Recidivism Rate (for all but Terry) 29.5%

While the Terry study did not give much detail on the participants of the program or the basic program setup, there was some good information on the program outcomes. The recidivism rate, like all of the studies I examined, was comprised of everyone who participated in the study including dropouts. When I looked at only the graduates of the program, the recidivism rate decreased to 25% (Terry, 1995). Terry also separately
analyzed the program graduates and the comparison group. He found in the first six months after completing the program the comparison group was much more likely to be re-arrested. After that time, the comparison group’s re-arrests seemed to drop off, while around 18 months the graduate’s re-arrests rose. This seems to suggest the DTC has an immediate effect on behavior but may not have the desired permanent impact.

Another factor potentially influencing Terry’s study was the comparison group was less than half the size of the treatment group. However it is difficult to determine what, if any, effect this had on the results. Overall the lack of information and the low recidivism rate of the Terry (1995) study make it an outlier.

Based on my hypothesis I expected this group to have the lowest recidivism rate of all the groups and have the greatest reduction in recidivism. While the overall recidivism rate was low it was not lower than the first group with short programs and low graduation rates. However four of six programs were statistically significant toward the treatment group which is more than any of the groups.

While each group provides interesting insights separately, the more important insights are realized when the groups are compared to each other. When I grouped the studies together, I calculated the average recidivism rates of the each group. I excluded the Roehl study from the long program or high graduation group and the Terry study from the high graduation and long program group because I considered them outliers. The average recidivism rate for the short program and low graduation rate group is 29.2%, for the long program or high graduation rate group is 38.2%, and for the long program and high graduation rate group is 29.5%. Compared to the national recidivism rate of 67.5% all of these rates are quite good. However, I expected the long program
and high graduation rate group to have the lowest recidivism rate of all three groups, but this was not the case. Surprisingly, the short program and low graduation rate programs had the lowest average recidivism rate of all three groupings.

While the average recidivism rates of the groups did not follow the pattern I was expecting, the number of studies that were statistically significant in favor of the treatment group did follow more closely to my hypothesis. The group with either long programs or high graduation rates had the lowest percentage, two of six programs or thirty-three percent. The group with short programs and low graduation rates had two of three or sixty-six percent. The group with high graduation rates and long programs also had sixty-six percent of programs statistically significant toward the treatment group with four of six studies. My hypothesis would suggest that the last group would have the highest percentage and it does. While the first group does as well, it had half as many studies and as I discuss in the limitations section the small number of studies creates some issues. All of these results would suggest that while the three characteristics of program length, graduation rate, and non-violent participants has some impact, there are other factors that influence a good drug treatment court program.

My analysis leads me to believe it is not just the factors of long program lengths, non-violent offenders, and high graduation rates that explain why DTCs are effective at reducing recidivism. These factors are of course relevant to a good program, but I cannot say it is these factors alone that make a drug court effective at reducing recidivism. It is obvious that more analysis should be done to answer this question.
Limitations

Given that the results of my analysis came out completely opposite of my expectations, it is necessary to examine the reasons this may have occurred. First, one major limitation of my analysis was the small number of studies I was able to obtain. This created a very small pool in which to find the studies that met the necessary qualifications. This small number of studies created a limited group of studies (only 3) with short program lengths and low graduation rates potentially contributing to the low average recidivism rate. Second, most of the studies I used were from before the year 2000 meaning most of the drug treatment courts that the researchers were studying were relatively new. In fact, many of the studies were even looking at brand new programs and the first class of offenders through them. Over time some of these DTC programs may have changed their methods and improved their treatment options. Lastly, another important limitation was that seven of the twenty-two studies I examined were missing large amounts of information about the programs being evaluating. This missing information included the program length and the actual program graduation rate, which was information I could have used to complete a more thorough analysis.

Another important issue that limits my analysis is, as I discussed briefly in the methods section, the comparison of recidivism rates across studies. Every study is designed differently, in a different area of the country, and they vary in who they allow in the study. If there is a program that is designed for marijuana offenders in a suburb and a program designed for heroin offenders in the inner city, then there is a good chance that the marijuana offenders were going to have lower recidivism rates anyway. In other
words it may not be the DTC that makes those offenders recidivate less than the heroin offenders. This non-standardized setup of programs makes it difficult to compare one to another and draw conclusions.

Overall any of these factors could have contributed in some way to my findings being the opposite of what I was expecting. It is important to recognize these limitations so future studies can be adjusted. Also I feel more can be learned if this kind of research is done with more statistical analysis and includes more studies to avoid the limitations of my analysis.

Discussion

Even though my findings were not what I was expecting there is other data I uncovered that is important to enumerate. For instance, most of the DTC programs only allow those with one drug conviction, or at the most a few possession charges, into their programs. By restricting the programs to these less severe offenders, they are already selecting those offenders who are least likely to reoffend. While of course, it is important to help these particular offenders, there are many higher risk people likely to reoffend who are not getting the treatment they need. One way to truly test the effectiveness of the DTC programs would be to allow offenders who are at a high risk to reoffend into the programs.

Another thing that could help future evaluations of drug court programs would be to insure all studies provide the same background information. As I discussed in the limitations section, many studies were lacking basic information about the program itself.
including program length and graduation rates, although those are not the only pieces of information missing from studies. Some studies give major detailed demographics of the offenders involved in the program, while others give almost no description of offenders in the program. Therefore it is difficult to know if studies are including very different participants. If disparities like these were fixed, future systematic reviews and evaluations would be easier.

Finally I found that graduation success in the drug treatment courts seemed to be very important. Ten of the twenty-two studies I reviewed compared graduates and non-graduates in their data analysis. In all ten of the studies the graduates had much lower recidivism rates than their non-graduate counterparts. In one of the studies, the graduates of the program had a recidivism rate of 20% and the non-graduates a rate of 79% (Peters, 1998). This is a substantial difference and is important when looking at how the structure of drug treatment courts affect outcomes. While it would be difficult to force people to graduate, keeping people in the programs as long as possible appears to have positive effects. It is also difficult to understand how important this data is because it may just be a difference in the personalities of those who graduate versus those who do not. Offenders who graduate from a drug treatment court may have been less likely to be re-arrested anyway. Most likely the graduates differed from the dropouts prior to the drug court program and, thus, we cannot tell if the DTC had any impact on later behavior. Whether they are just more willing to change their lifestyle or have the ability to get through rehabilitation, it appears that graduating from the drug treatment courts has a positive effect on an offender’s life.
Conclusion

Drug treatment courts have been around since 1989 and research studies attempting to determine their effectiveness have been around almost as long. Given the many years of research, it is widely accepted as fact that DTCs are effective at keeping people out of the traditional court system and reducing the recidivism of drug offenders. This alone makes drug treatment courts an important part of our criminal justice system. To make them even more valuable we can attempt to understand what it is that makes them so effective. Mitchell and his colleagues attempt to offer some of the first answers to this question by suggesting higher graduation rates, non-violent offenders, and long program lengths as critical factors impacting effectiveness. My evaluation however suggests that having all three of these factors together in a DTC does not necessarily make it any better than programs with only one or two of the factors. However the limitations of my analysis make it necessary to revisit this question at a later date because understanding why they work is just as important as knowing that they do work.
References


# Appendix

Table A1: Collection and coding of all variables of 22 DTC studies.

<table>
<thead>
<tr>
<th>Name</th>
<th>Time to graduation</th>
<th>Criminal History of offenders</th>
<th>Graduation Rate</th>
<th>% recidivated treatment</th>
<th>% recidivated comparison</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cosden et. al. (1999)</td>
<td>1=15 months or less</td>
<td>1= violent offenders</td>
<td>1= lower than 38.2%</td>
<td>51%</td>
<td>66%</td>
<td>Comparison group met the criteria for the drug court but did not participate. Major support for graduation success given that only 17% of graduates were re-arrested and 82% of non-graduates. However follow-up period was only 12 months.</td>
</tr>
<tr>
<td>Deschenes et. al. (2001)</td>
<td>2</td>
<td>2= non-violent offenders</td>
<td>2= higher than 38.2%</td>
<td>Low/Med. risk 22.8%</td>
<td>Low/Med. risk 24.8%</td>
<td>Attempted to match comparison group to treatment group in age, gender and race. Those that were terminated or rejected from the program are much more likely to be re-arrested. Graduation success is important.</td>
</tr>
<tr>
<td>Deschenes et. al. (2000)</td>
<td>1</td>
<td>N/A</td>
<td></td>
<td>20%</td>
<td>37%</td>
<td>Comparison group participated in a diversion program. “Drug Court graduates had lower rates of re-arrest (20%) than those who were terminated from the program (33%).” Graduation success was important in this case.</td>
</tr>
<tr>
<td>Deschenes et. al. (1999)</td>
<td>1</td>
<td></td>
<td></td>
<td>21.6%</td>
<td>33.8%</td>
<td>Comparison group in this case were drug offenders on formal probation. When removing rejects and dismissals from program, recidivism rates decreased only slightly. Graduation success not a factor in this case.</td>
</tr>
<tr>
<td>Study</td>
<td>Comparison Group</td>
<td>Recidivism Rates</td>
<td>Time</td>
<td>Notes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
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</tr>
<tr>
<td>Deschenes et. al. (1995)</td>
<td>Drug offenders on probation</td>
<td>31.3%</td>
<td>2</td>
<td>Comparison group is made up of drug offenders on probation. Seemed to be re-arrested at higher rates due to harsher penalties for bad urine tests. Comparison also sentenced to prison at a higher rate (24% to 9% for DTC). No information on non-graduates versus graduates.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ericson et. al. (1999)</td>
<td>Drug offenders on probation</td>
<td>21.5%</td>
<td>2</td>
<td>Comparison group is from one year prior to the establishment of the drug court. Follow-up period is only 9 months therefore possible many more arrests occurred after that time. Also no data on non-graduates versus graduates.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Godley et. al. (1998)</td>
<td>Drug offenders on probation</td>
<td>No concrete numbers</td>
<td>1</td>
<td>While the total number of people re-arrested was not available there were some interesting points. Early dropouts from the program (&lt;3 months) had an insignificant reduction in re-arrests. But late dropouts (3-12 months) reduced by 58% and graduates reduced by 92%. Time spent in the program is important.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goldkamp (1994)</td>
<td>Drug court group</td>
<td>33%</td>
<td>N/A</td>
<td>Compared the 1990 drug court to previous years of probation data which causes variation in the recidivism data for comparison group. No data on graduates versus non-graduates but did rank risk of re-offending and low risk had lowest rates of re-arrest.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gottfriedson et. al. (1996)</td>
<td>Drug court group</td>
<td>18%</td>
<td>N/A</td>
<td>Comparison group was similar to drug court group but assigned regular probation. Only followed offenders for 180 days. Very short time, seems unreliable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harrison et. al.(No Date)</td>
<td>Drug court group</td>
<td>38.9%</td>
<td>N/A</td>
<td>Comparison group was screened and approved from the drug court but did not participate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Comparison Group</td>
<td>Graduates</td>
<td>Non-graduates</td>
<td>Percentage</td>
<td>Recidivism</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
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<td></td>
</tr>
<tr>
<td>Listwan et. al. (Akron 2001)</td>
<td>Eligible but denied entry</td>
<td>39.4%</td>
<td>51.5%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Listwan et. al. (Erie 2001)</td>
<td>Eligible but denied entry</td>
<td>35.9%</td>
<td>68.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Martin et. al. (1999)</td>
<td>Similar to drug court</td>
<td>42.1%</td>
<td>Diversion 28.9% Probation 60.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.M.Bell (1998)</td>
<td>Only rearrested at 9%</td>
<td>18%</td>
<td>33%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peters &amp; Murrin (1998)</td>
<td>Non-violent drug offenders on probation</td>
<td>20%</td>
<td>43%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Year</td>
<td>Graduates</td>
<td>Non-graduates</td>
<td>Misdemeanor Arrests</td>
<td>Felony Arrests</td>
<td></td>
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<td>---------------</td>
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<td>-----------</td>
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<td>---------------------</td>
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<td></td>
</tr>
<tr>
<td>Roehl (1998)</td>
<td>1998</td>
<td>2</td>
<td>2</td>
<td>11%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>37%</td>
<td>47%</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Percentages may seem dramatic due to a small sample size. However graduates once again fared much better than non-graduates. In misdemeanor re-arrests rates were 11% and 64% respectively and in felony re-arrests rates were 6% and 55% respectively.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tauber (1993)</td>
<td>1993</td>
<td>1</td>
<td>2</td>
<td>31%</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Comparison group was the previous year before the drug court was established. DTC followed offenders up to 24 months after the 6 month program. No data on graduates versus non-graduates.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tauber (1995)</td>
<td>1995</td>
<td>2</td>
<td>2</td>
<td>40.9%</td>
<td>54.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Comparison group was comprised of participants in original diversion program in the year prior to the drug court. No data available that separates non-graduates from graduates of the drug court program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terry (1995)</td>
<td>1995</td>
<td>2</td>
<td>2</td>
<td>38.7%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>While comparison group actually did better only 25% of graduates of the program were rearrested and 47.2% of non-graduates were. Graduation success is important.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terry (1999)</td>
<td>1999</td>
<td>N/A</td>
<td>2</td>
<td>19%</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Both treatment and comparison group were first time crack and cocaine offenders. Reduction in recidivism looks successful but only used data from graduates of the program. No information on non-graduates.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utah (2001)</td>
<td>2001</td>
<td>N/A</td>
<td>2</td>
<td>39.2%</td>
<td>78%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>While the overall graduation rate was not available in this study they did compare a group of non-graduates to a group of graduates. 39.2% of graduates were re-arrested and 55.4% of non-graduates. Supports completion of the program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vito &amp; Tewksbury (1998)</td>
<td></td>
<td></td>
<td>48.1%</td>
<td>55.4%</td>
<td>Treatment group was 1st time drug offenders and comparison group was again screened for drug court but did not participate. Graduation success again found to be important. Reconviction rate for graduates only 13.2% but for non-graduates 59.5%.</td>
<td></td>
</tr>
</tbody>
</table>
Education:

Bachelor of Arts Degree in Crime, Law, and Justice
Bachelor of Arts Degree in Philosophy
Minor in Sociology
Honors in Crime, Law, and Justice
Dean’s List 7/7 semesters

Work Experience:

Penn State Auxiliary Police Officer
December 2009 – March 2011
• Helped maintain campus security and increase public safety
• Worked closely with the University Police

Other Experience:

Teaching Assistant for Dr. Michael Massoglia
Soc 005, Social Problems   Spring 2011
• Maintained grades and answered questions for students
• Helped proctor and grade exams
Teaching Assistant for Brian Baker
Crim 012, Criminology   Fall 2010
• Same as above

Leadership Experience:

Lieutenant Captain for THON OPP committee
• Was second in command to our committee captain
• Gave instruction and kept team on task
• Helped to keep up the morale of my committee during a 46 hour dance marathon

Vice President for Justice Association
• Collect dues from members and help organize and run meetings
• Contact professionals in the Criminal Justice field to come as guest speakers