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# The South Australian Drug Court

## An Analysis of Participant Retention Rates

GRACE SKRZYPIEC

EDITING: JOY WUNDERSITZ

DATA EXTRACTION: CAROL CASTLE

### EXECUTIVE SUMMARY

A key problem common to virtually all Australian Drug Courts has been the relatively low retention rates. Across other Australian jurisdictions there have been various attempts made to explain these low retention and high termination rates but no comparable study has been conducted in South Australia. This study investigated the level of retention within the Adelaide Drug Court with the aim of identifying any differences between program 'Completers' and 'Terminated' that may help to explain reasons for non-completion.

The study focused on those individuals who participated in the Drug Court program during its first 38 months of operation, from May 2000 to June 2003, and compared 'Completers' and 'Terminated' within this group across a range of variables.

The study found that during the first 38 months of the Drug Court's operation 26.2% of participants had completed the program and 55.9% had been terminated. The remaining 17.9% voluntarily withdrew. The most common reason for being terminated was for non-compliance, with participants not necessarily being terminated for drug use or offending episodes.

The study also found that the rate of retention or termination changed during this period of the Drug Court's operation. The odds of remaining on the Drug Court program for a period of twelve months increased from just over one in four (28.0%) during the first year of operation to nearly two in five (39.2%) in the third year, while the odds of being terminated within twelve months decreased from Year One to Year Three, going from just over two in three (67.9%) to just over one in two (53.7%).

For many variables tested, Completers and Terminated were relatively similar. However, some significant differences were found. Generally, Completers were more likely than Terminated to report that they had started abusing alcohol prior to adulthood, that they felt socially isolated and were having financial difficulties at the point of assessment, while those

who had been terminated were more likely to report that they had limited family support at the time of assessment.

In terms of the type of offending, while these were generally comparable, those who had been Terminated had a greater number of *weapons and explosives* offences listed against them in the five years prior to being accepted onto the program. While the grouped number of charges of *theft and related offences* did not differ significantly between Terminated and Completers, the findings suggest that Terminated individuals each had a greater number of these offences listed against them than Completers.

Terminated individuals were more likely to have been incarcerated at least once before being accepted onto the Drug Court program than Completers and a larger majority of those terminated (over four in five) had a criminal career which spanned seven years or more before being accepted onto the Drug Court program. As would be expected, Terminated individuals were more likely to offend during the program and some of them seriously.

Statistical analysis found three factors which were significant predictors of termination. The most significant predictor was *limited family support*, which increased the odds of termination by a factor of 5.2. Having a *criminal career that spanned seven years or more* before joining the program was another significant predictor and this factor more than doubled (x 2.5) the odds of termination. However, the third factor, *reporting that alcohol abuse began prior to adulthood*, decreased the odds of being terminated (by 60%). The overall strength of association of the predictors with the likelihood of termination, however, was weak (28.5%), suggesting that there must be other predictive factors that were not accounted for in the model.

## Introduction

Drug Courts are now operating in nearly all state jurisdictions around Australia, with New South Wales having initiated the first of these problem solving courts in February 1999. Drug Courts are a part of the current trend in justice towards therapeutic jurisprudence. Other problem solving courts include domestic violence and mental impairment courts. The aim of these courts is to break the cycle of crime by taking account of and responding to the relationship between offending and the offender's condition and circumstances. Drug Courts, for example, consider that a person may be offending because of their drug habit and so offer offenders help to end their drug abuse.

When Drug Courts began operating in Australia there was little evidence that such an approach was successful in stopping or reducing drug-related criminal offending. However, there has been a substantial amount of research conducted since that suggests that Drug Courts are successful in reducing the criminal behaviour and drug use of offenders while they are *participating in Drug Court programs* (Belenko, 2001).

However, recidivism studies that have examined offending behaviour after Drug Court participation have produced less conclusive results. Several studies have found a significant reduction in reoffending, as well as a longer time lapse before re-offending occurs, amongst offenders who successfully complete the program (Makkai and Veraar, 2003; Payne, 2005; Lind et al, 2002). Similar results have been obtained in South Australia. Despite some methodological constraints brought about by the absence of a suitable control group, a study of those individuals who completed the 12 month program offered by the Adelaide Magistrates Drug Court (Corlett, Skrzypiec and Hunter, 2004) indicated a significant lower rate of post-program offending amongst this group, with nearly two-thirds of those who completed the program either not offending or being charged with a smaller number, as well as less serious, offences.

Contrary to these findings, evaluators of the Perth Drug Court Pilot Project (CRC, 2003) found no substantial evidence that any reductions in recidivism amongst Drug Court participants and comparison groups could be attributed to the Drug Court program. They concluded that differences found between graduates and those who were terminated from the program were more likely to have been due to the lower risk of re-arrest that existed amongst graduates before they entered the programme.

In addition to these mixed findings on recidivism, a key problem common to virtually all Australian Drug Courts has been the relatively low retention rates when compared to completion rates. Less than one in three people referred to the Perth Drug Court went on to complete the program (CRC, 2003) and over 60% of offenders referred to the New South Wales Drug Court were terminated within the first year of treatment (Freeman, 2003). Low retention rates have also been a feature of the South Australian Drug Court. Nearly three in four (73.9% or 34 out of 46) Drug Court offenders accepted into the program between May 2000 and August 2001 were terminated from the program (McRostie and Harrison, 2002).

There have been various attempts made to explain these low retention and high termination rates. For example, in the evaluation of the South East Queensland Drug Court, Makkai and Veraar (2003) examined several variables in the Drug Court data base to determine if they could discriminate between graduation (completion) and termination. They found five factors which impacted the likelihood of graduation, including family and community ties, commitment to the program, the frequency of drug testing, drug use history and the length of prior imprisonment sentence. Cohabiting with a partner on entry to the program was found to increase the odds of graduation by a factor of 10.86, while having a prison sentence

with a minimum duration of six months increased the odds by 5.67. Being older and having more urine tests were also found to increase the odds of completion.

The evaluation of the Drug Court in Western Australia (CRC, 2003), which also compared those who completed with those who were terminated from the program, found that the only predictor of “success” or “failure” was the number of previous self-reported arrests. The higher the number of previous arrests, the less likely an individual was to complete the program. Other factors, however, such as drug use, offending history, readiness to change, social variables (eg family, work, housing etc) and demographic variables (age, gender, indigenous status, employment status) failed to discriminate between the two groups.

Because, no comparable study had been conducted in South Australia, OCSAR undertook to use a similar approach to that applied in other states to investigate the level of retention within the Adelaide Drug Court, and to attempt to identify any differences between program ‘Completers’ and ‘Terminated’ at the point of acceptance onto the program that may help to explain reasons for non-completion.

This study focused on those individuals who participated in the Drug Court program during its first 38 months of operation, from May 2000 to June 2003, and compared ‘Completers’ and ‘Terminated’ within this group across a range of variables including demographic factors, officially recorded offending profiles, drug use history and other personal and lifestyle characteristics. Those variables on which the two groups did differ significantly were then tested using regression procedures in an attempt to identify predictors of completion.

A secondary aim was to determine whether the rate of retention or termination changed during the first three years of the Drug Court’s operation. All Drug Courts, once established, are required to “hit the ground running” (Makkai and Veraar, 2003). Inevitably, then, in South Australia, the Drug Court process has evolved since its inception (see Skrzypiec, 2006).

On the basis of these distinctive ‘stages’ in the operation of the Drug Court, in the ensuing analysis participants who were accepted onto the Drug Court program during its first three years of operation were isolated into three separate groups and examined for differences. The aim was to establish if changes in the operation of the Drug Court had any significant effect on retention or withdrawal rates.

## **The South Australian Drug Court – a Description**

A detailed description of the South Australian Drug Court has been provided in other reports and will not be repeated here (see Corlett, Skrzypiec and Hunter, 2004; and Skrzypiec, 2006).

## **Methodology**

Data collected at the point of assessment formed the basis for profiling Completers and those terminated from the program. These data were then merged with official offending data available from data bases within OCSAR.

Thus, in comparing those participants who completed the program with those who were terminated, a range of variables were available for analysis. These included:

- Demographic variables such as gender, age, Indigenous status, education attainment, marital and employment status, extracted from the Drug Court data base;

- Details on the participants' official offending records extracted from operational data bases maintained by criminal justice agencies in South Australia;
- Information on drug use and drug history collected during the initial assessment interview by Drug Court personnel, including age when drug use began; and
- Data on a range of other aspects of the participants' lives, also collected at the point of assessment for the program. This information covered a wide range of issues such as social and family support, health and accommodation issues.

Each is described in more detail below.

### *Demographic details*

Information on gender, age, Indigenous status, marital status, educational attainment and employment status were obtained from the Drug Court data base and these variables were considered to be reliable.

### *Official offending records*

Drug Court participants' criminal histories were examined using three sets of data, namely Police Apprehension Records, the Offender History Data Base and the Corrections Data Base.

#### **Police apprehension records<sup>1</sup>**

The South Australian Police (SAPOL) apprehensions data base incorporates statistics on all persons reported or arrested by SAPOL from 1991 onwards. This means that for Drug Court participants aged 23 years or younger in 2004 this study had access to their full apprehension record (except for any interstate or federal offences). However, for older Drug Court participants any juvenile and young adult offending that pre-dated 1991 would not have been recorded in this data base. Hence, to ensure consistency when determining the number of criminal events and the type of offences committed prior to entry onto the program, it was decided that only the last five years before joining the Drug Court program would be used. This took the form of considering all the recorded 'criminal events' charged against an offender during a five year period preceding acceptance into the Drug Court.

Information taken from each apprehension report was used to determine the level of offending by considering discrete incidents for which the individual was apprehended. Each time a person is formally apprehended by police, a police apprehension report is lodged. Each apprehension report may contain charges arising from one or more criminal incidents

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<sup>1</sup> In using apprehension data, two points need to be stressed. First, not all those apprehended by police are subsequently found guilty or admit guilt. Second, criminal events listed on apprehensions do not necessarily constitute a valid measure of actual levels of offending, for several reasons:

- First, people may commit offences which go undetected by police;
- Second, even if detected, not all offenders are dealt with via a formal apprehension. For example, since 1987 persons aged 17 and over detected in possession of cannabis receive a Cannabis Expiation Notice (CEN). Since late 2001, under the Police Drug Diversion Initiative (PDDI), police may refer young persons and adults detected in possession of any type of drug to a brief intervention/assessment, again without the need to lodge an apprehension report. For individuals aged 16 and over detected for certain traffic violations, there is also the option of Traffic Infringement Notices (TIN).

or ‘events’. For the purposes of this analysis a ‘criminal event’ was viewed as that combination of charges listed on the apprehension report that occurred on the same day. When more than one ‘criminal event’ was included on the same apprehension report, each was counted separately. To illustrate, if an apprehension report contained a charge of *break/enter* that occurred on 15 September and charges of *disorderly behaviour* and *assault police* that occurred on the 21 September, this would be counted as two discrete criminal events.

The Apprehension data base provided information on the following:

- ***Age of first recorded criminal event.*** This was the age of the first criminal event recorded for each individual in the Apprehensions data base. This was therefore limited to events which occurred post 1991.
- ***Number of criminal ‘events’.*** Information taken from each apprehension report was used to determine the level of participants’ offending by considering the total number of criminal events recorded five years pre-acceptance.
- ***The type of offences committed*** by offenders was based on the major charge for each criminal event. If there was more than one charge listed per criminal event, the major charge was defined as the one which attracted the greatest statutory penalty
- ***The seriousness level of each major charge*** was then determined using the ABS National Offence Index (NOI). This index *ranks* all offence classifications contained within the Australian Standard Offence Classification (ASOC) system in order of seriousness. The index starts with the most serious offence of *murder*, which is given an index value of one, and then continues through 157 ranked offences. The index is organised so that a low index score represents a very serious offence and a high score indicates a minor offence. All major charges were grouped into three ‘seriousness’ categories<sup>2</sup>:
  - Scores ranging from 97-157 formed Category 1 and consisted of minor offences. Charges in this category included driving and registration offences, shop lifting, disorderly conduct, offensive behaviour, possession and use of illicit drugs.
  - Scores ranging from 65-96 were classified as moderately serious and formed Category 2 offences. Charges in this category included graffiti, property damage, dangerous and negligent driving, receiving proceeds of crime, theft of a motor vehicle and fraud.
  - Scores ranging from 1-64 were the most serious offences and formed Category 3. Charges in this category included weapons/explosives offences, sexual offences, threatening behaviour, dealing/manufacturing illicit drugs, serious assault and murder.

The NOI was also used in this study to determine the single, most serious charge laid against an offender during the five year period prior to being accepted into the Drug Court.

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<sup>2</sup> It is serendipitous that the top and bottom groups were equally sized – a subjective evaluation of offences in each group was well matched with the seriousness ranking “cut-off” of offences.

### **Offender History Data Base**

The Offender History data base maintained by SAPOL provides a full history of an offender's interaction with the court system. It differs from the Apprehension Data base in two respects:

- first, it is not restricted to information is dated post 1991. Rather it has an individual's *full* criminal history and dates back to 1926.
- second, it contains information derived from court appearances not apprehensions. From this data base it was possible to determine the age of an offender's first court hearing where there was a conviction/finding of guilt. This provided an approximate age of offending initiation for those offenders whose criminal histories were dated prior to 1991.

### **Corrections Data Base**

The Corrections data base is an operational data base held by South Australian Department of Correctional Services. It contains information about people being housed in correctional facilities across South Australia, both in remand or as sentenced prisoners. This data base provided information about Drug Court participants' time spent in custody (both on remand and as a sentenced prisoner, and as a juvenile and/or adult). Once again, only time spent incarcerated five years prior to program acceptance was considered.

Time spent in custody is an important factor for consideration when comparing individuals' offending as this represents time during which an offender is not free to commit crimes. To make adjustments for this, the total time spent in custody was subtracted from the five year period and a measure of "exposure time" (ie time free in which to offend) was calculated. This exposure time was used to standardise measures of offending so that a comparison of participants who were at different points in their criminal career<sup>3</sup> could be made<sup>4</sup>.

### *Drug use details*

Information about the type and amount of drugs used by clients was collected at assessment. Unfortunately this information was not consistently recorded for all Drug Court clients. Additionally, in instances where the amount of drug used was reported, information indicating the units involved (eg a cone, points, caps etc) was not. Inconsistencies with these variables rendered information about the types of drugs used, as well as the amount used and spent on drugs daily, unreliable and not suitable for analysis.

However, other (more reliable) details on participants' drug use history were collected by Drug Court personnel at the time of the assessment interview. As detailed in Table 1, information on seven variables were recorded, including two that related to alcohol abuse.

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<sup>3</sup> For example, those who have been offending for ten years compared with those who have only been involved in the criminal justice system for two years.

<sup>4</sup> However, analysis found that time spent incarcerated five years pre-acceptance of Terminated and Completers, was not significantly different, suggesting that time available in which to offend was also similar. This meant that it was not necessary to undertake complex analyses of specific exposure times when comparing Terminated with Completers.

Table 1 Information Recorded at the Point of Assessment re Drug Abuse history

<b>Substance Abuse</b>	<ul style="list-style-type: none"> <li>Periods of drug abstinence greater than six months</li> <li>Drug abuse prior to adulthood</li> <li>Age regular drug use</li> <li>Alcohol abuse prior to adulthood</li> <li>Age Alcohol abuse started</li> <li>Experienced overdoses</li> <li>History of poor compliance with treatment</li> <li>Previous failed drug treatment</li> <li>Lack of insight into their drug use behaviour</li> </ul>
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Again, though, extreme caution must be exercised in using these data. Because no standardised measures of drug dependency were administered during the assessment process, the information was not elicited in any uniform way. It seems that assessors did not specifically ask each participant for a response to the variables listed above but only recorded pertinent details if the information emerged during the course of the assessment discussion. As a result, the lack of reference to, for example, any drug use prior to adulthood may simply have meant that the issue was not raised by the participant during the assessment, not that no such record existed for this individual.

This data collection process also produced some major ambiguities for interpretation. For example, while the assessor may have noted that a participant had a poor record of compliance with treatment, the converse cannot be assumed – ie that those for whom poor attendance was not recorded had a good record of treatment compliance. Instead, the absence of any notation could simply mean that the individual in question had never received drug treatment and therefore the issue was moot.

The lack of accurate information on levels of drug dependency is an obvious problem in terms of comparisons between Completers and those terminated. It means that it is not possible to determine whether the likelihood of completion of the program was due to variations in the level of dependency rather than the Drug Court program. It may be that those who did not have a high level of drug dependency may have found it easier to exercise abstinence from further drug use, and therefore may have been more likely to complete the program successfully than those who were more heavily dependent. Similarly, different levels of motivation to change may have existed between individuals and this too, may have had a significant influence on the likelihood of completion.

Another potential source of information on drug use which was explored for inclusion in this study was the cumulative results from the regular urinalysis tests conducted for each participant during their period on the program. However, further investigation indicated that for approximately 50% of participants there was missing data. Hence, this information was considered unhelpful and so was not used.

*Personal details*

Thirty one dichotomous variables were collected by assessors for each participant at the Drug Court assessment. These are listed in Table 2 and they included factors such as family relationships and support, health and accommodation issues, as well as questions about finances, gambling and employment.



Again, in using the variables outlined below, the same limitations observed for the drug use variables apply here. Notably, no systematic data collection process was used during the assessment process to ensure that information on each of these variables was specifically elicited from participants. Instead, it was recorded only if the issue happened to arise during discussions. The absence of any reference to, for example, a gambling problem, does not mean that the individual did not have such an issue, but that information about it simply did not emerge during the interview or, if it did, was not considered sufficiently relevant for the assessor to record.

The lack of a systematic data recording process during assessment placed serious limitations on the analyses documented in this report.

### *Defining the three Drug Court Cohorts*

For the purposes of comparing whether there had been any changes in retention/termination rates during the first three years of operation, participants were grouped into three cohorts.

- *Cohort 1* comprised people who were accepted into the Drug Court program during its first year or so of operation, from May 2000 to the end of May 2001 - a period of 13 months. It included people who were accepted into the Drug Court during the moratorium period<sup>5</sup>.
- *Cohort 2* included people accepted into the Drug Court during the second year of operation, from June 2001 to the end of June 2002, also a period of 13 months.
- *Cohort 3* comprised clients accepted into the Drug Court during the third year of operation from July 2002 to the end of June 2003, a period of 12 months. (Five people were outside the 12 month cut-off for this cohort and they were not included in most analyses as the total number accepted during this 13th month was incomplete. They are included in other analyses where the effect of the cohort is not critical.)

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<sup>5</sup> A six month moratorium on referrals began on November 15, 2000 and ended on May 21, 2001. During this period no new clients were referred to the Drug Court. The few who were accepted into the Drug Court in this period were those who had been referred before the moratorium began.

Table 2 Information Recorded at the Point of Assessment: personal characteristics

<b>Physical Health</b>	Ongoing physical health problems Hepatitis C HIV
<b>Social/Family</b>	Social Isolation Undefined social/family issues Victim of past abusive relationship Victim of present abusive relationship Perpetrator of abusive relationship Have children Limited family supports Good family supports Impaired family relationships Good family relationships Divorced/separated parents Parents are/were drug users/ alcoholics
<b>Childhood</b>	History of physical abuse/neglect as a child History of sexual abuse as a child Removed from home as a child/foster care placement History of schooling difficulties
<b>Living Skills/Accommodation</b>	Problems with independent living skills Accommodation difficulties Had periods of homelessness Financial difficulties at assessment Needs employment/education/training
<b>Mental Health</b>	Depression/anxiety/hopelessness (sub clinical) Known past psychiatric hospitalisation Currently prescribed mental health medication Diagnosed personality disorder Diagnosed mental health problem
<b>Other</b>	Legal issues other than current offending Gambling problem

*Structure of the Report*

This report is divided into two main sections.

- Section 1 details time spent on the program and levels of completion of Drug Court participants during the first thirty eight months of operation, from May 2000 to June 2003. It also assesses the probability of termination/completion and the reasons given for terminations.
- Section 2 compares participants who completed the program (Completers) with those who were terminated (Terminated) in order to identify possible predictors of “success” in the Drug Court program. The significance of these variables as predictors is determined using logistic regression.

## Section 1: Completion levels

During the first 38 months of operation until June 30, 2003, 263 people had been accepted into the Adelaide Magistrates Drug Court Program<sup>6</sup>. Of these participants three had been accepted twice, but only their first experience is considered in this analysis. This is because repeated experiences in the Drug Court are likely to be different from the first. Familiarity with Drug Court procedures and protocols is likely to influence the outcome for participants accepted on subsequent occasions and in particular, is likely to influence their risk of termination.

### Completion status

As shown in Table 3, about one quarter (26.2%) of these 263 participants reached completion, while just over half (55.9%) were terminated. A small proportion (17.9%) withdrew voluntarily. However, Drug Court personnel noted that many (but not all) of these individuals would probably have been terminated by the court if they had not decided to voluntarily withdraw. In effect then, in many instances, the decision to withdraw simply pre-empted a court termination<sup>7</sup>.

Table 3 Outcome of Drug Court Clients: 2000-2003		
Outcome	Number	Proportion (%)
Completed	69	26.2
Terminated	147	55.9
Withdrew	47	17.9
<b>Total</b>	<b>263</b>	<b>100.0</b>

Overall, there were some differences across time in the number of participants who completed, were terminated or who voluntarily withdrew from the program in each of the three cohorts. As shown in Table 4, a higher percentage of participants in Cohort 3 completed the program (33.8%) while the next highest level of completion was recorded by those in Cohort 1 (25.2%). However, these differences did not prove to be statistically significant<sup>8</sup>.

<sup>6</sup> The data from five other people who had participated in the program but who were accepted after June 30, 2003 was also available but they were not included in this part of the analysis. Only those who had finished with their involvement in the program are counted.

<sup>7</sup> Because it was not possible to determine which of the voluntary withdrawals were made for legitimate reasons and which were done to forestall termination, this group has been omitted from much of the analysis outlined in this and the subsequent section of the report.

<sup>8</sup>  $\chi^2 = 7.6$ ,  $df=4$ ,  $p < 0.11$

Table 4 Drug Court Outcome by Cohort

Outcome	Cohort 1		Cohort 2		Cohort 3	
	Number	Percent(%)	Number	Percent(%)	Number	Percent(%)
Completed	29	25.2	13	19.1	27	33.8
Terminated	69	60.0	37	54.4	41	51.3
Withdrew	17	14.8	18	26.5	12	15.0
<b>Total</b>	<b>115</b>	<b>100.0</b>	<b>68</b>	<b>100.0</b>	<b>80</b>	<b>100.0</b>

**Time spent on the program – all participants**

Time spent on the program for participants is detailed in Table 5, where time periods are shown in monthly intervals. Almost one quarter (22.4%) spent less than three months on the program, while one quarter (25.5%) spent between three and six months, and 8.0% spent between seven and nine months. At the other end of the scale, 21.7% were involved with the program for 12 months or more.

Table 5 Time spent on Program for Drug Court Participants

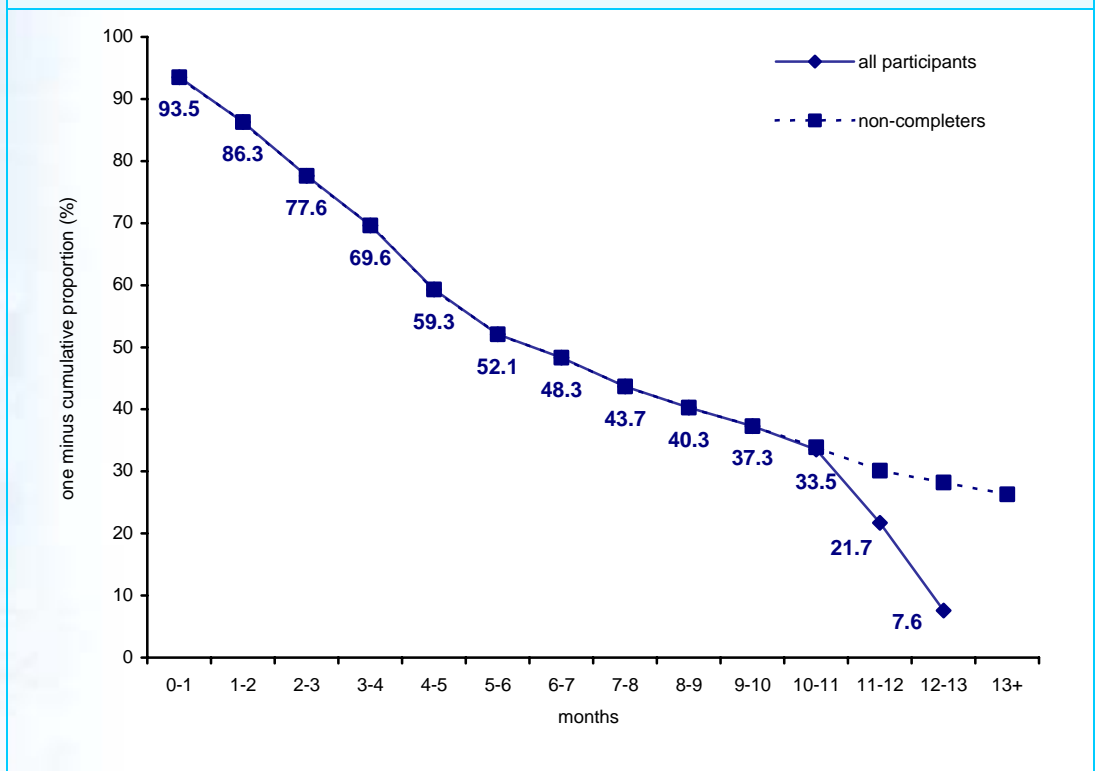
Months	Number	Percent (%)
0 to less than 1 month (0-1)	17	6.5
1 month to less than 2 months (1-2)	19	7.2
2 month to less than 3 months (2-3)	23	8.7
3 month to less than 4 months (3-4)	21	8.0
4 month to less than 5 months (4-5)	27	10.3
5 month to less than 6 months (5-6)	19	7.2
6 month to less than 7 months (6-7)	10	3.8
7 month to less than 8 months (7-8)	12	4.6
8 month to less than 9 months (8-9)	9	3.4
9 month to less than 10 months (9-10)	8	3.0
10 month to less than 11 months (10-11)	10	3.8
11 month to less than 12 months (11-12)	31	11.8
12 month to less than 13 months (12-13)	37	14.1
13 months or more (13+)	20	7.6
<b>Total</b>	<b>263</b>	<b>100.0</b>

Figure 2 presents the same data somewhat differently. It illustrates the proportion of all participants remaining on the program at the end of each passing month<sup>9</sup>. As indicated, while just over three quarters (77.6%) remained on the program at the end of the third month, only half ‘survived’ until the end of the sixth month. For several months thereafter,

<sup>9</sup> this includes all participants who remained on the program until they left because they completed, withdrew or were terminated.

the rate of ‘drop out’ was lower, with 40% still on the program at the end of the ninth month and 33.5% there at the end of the eleventh month. However, this trend changed in the twelfth month, when levels declined more sharply to 21.7%. This is mainly due to some actually being assessed as having completed the program just prior to the one year period. However, it is also due to the fact that some participants continue to ‘drop out’, either by withdrawing or by being terminated, at this late point in the program. This is illustrated by the dotted line in Figure 2, which shows the ‘drop out’ rate of those who left the program because they withdrew or were terminated. It indicates that while the rate of ‘drop out’ slows it none-the-less continues as the program approaches completion. Anecdotally this reflects participants’ growing apprehension about nearing the end point of the program, and all that this entails, including final court sentencing with the possibility of a prison term being imposed.

Figure 1 Proportion of participants Remaining in the Program per month.



*Time spent on the program – a comparison between Completers, Terminated and Withdrawn participants*

The Drug Court program was, in most instances, designed to run for 12 months. For the majority of the 59 participants who completed the program during its first three years of operation, this was the case. However, one person finished the program after 10 months, and nearly one in three (30.4%) Completers were judged to have completed the program between 11 and 12 months. The majority (68.1%) remained involved for 12 months or more.

Time spent on the program by those who were terminated or who withdrew is detailed in Table 6. As shown, about one in twelve of those who withdrew (8.5%) exited the program in the first month. Over one quarter (27.6%) withdrew within the first three months, while over one in three (38.2%) of those who withdrew did so within the three to six month period.

For those who were terminated, about one in three (31.2%) left the program in the first three months and a further third (33.3%) exited between the three and six month mark.

Of particular note is the fact that surviving the first nine months of the program did not guarantee successful completion. In fact, 19.1% of those who withdrew and 19.0% of those who were terminated left the program after reaching the nine month point.

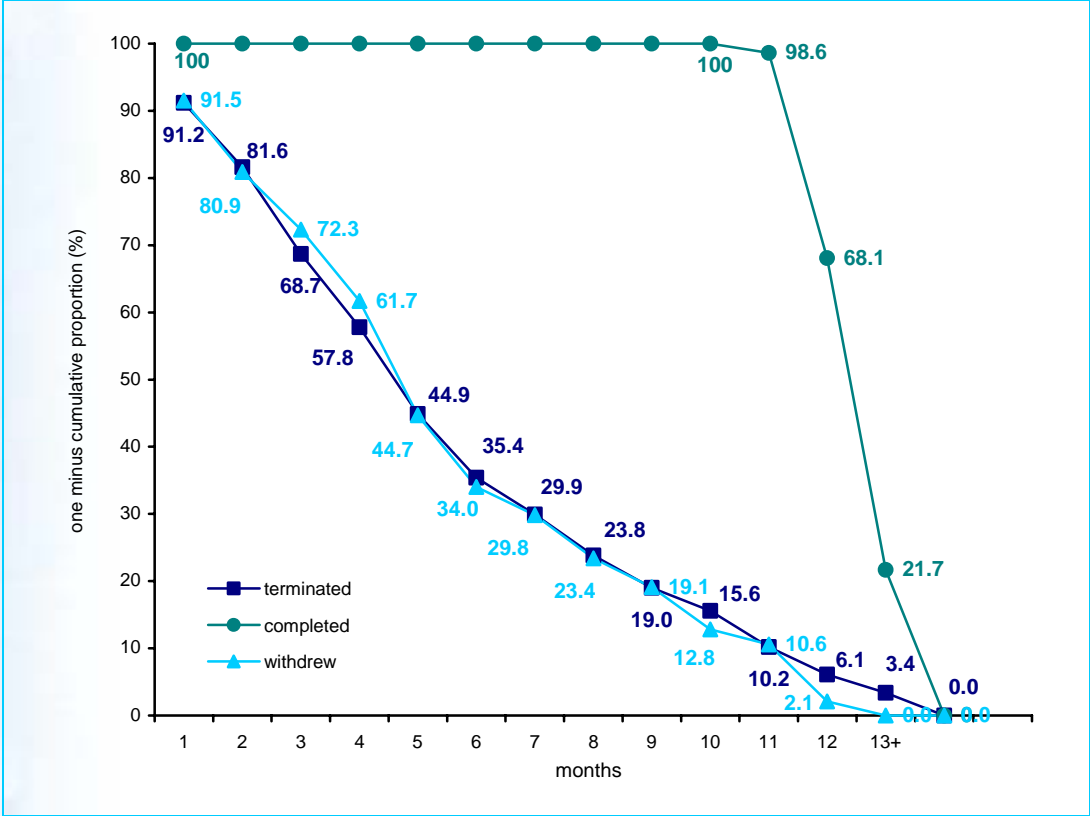
Table 6 Time spent on Program by Drug Court Participants who participated in the program

	Completed		Withdrew		Terminated	
	Number	Proportion	Number	Proportion	Number	Proportion
0-1			4	8.5	13	8.8
1-2			5	10.6	14	9.5
2-3			4	8.5	19	12.9
3-4			5	10.6	16	10.9
4-5			8	17.0	19	12.9
5-6			5	10.6	14	9.5
6-7			2	4.3	8	5.4
7-8			3	6.4	9	6.1
8-9			2	4.3	7	4.8
9-10			3	6.4	5	3.4
10-11	1	1.4	1	2.1	8	5.4
11-12	21	30.4	4	8.5	6	4.1
12-13	32	46.4	1	2.1	4	2.7
13+	15	21.7	0	0.0	5	3.4
<b>Total</b>	<b>69</b>	<b>100.0</b>	<b>47</b>	<b>100</b>	<b>147</b>	<b>100.0</b>

As shown in Figure 2, by five months less than half of all those who were terminated (44.9%) or who voluntarily withdrew (44.7%) still remained on the program. By nine months about one in twenty, 19.0% of those terminated and 19.1% of those who withdrew, were still on the program.

Noteworthy is the similarity between those who withdrew and those who were terminated, with similar rates in each group having left the program each month. The exception to this pattern occurred towards the end of the program where all participants who withdrew did so before twelve months came to an end.

Figure 2 Proportion of participants Remaining in the Program per month who were terminated, withdrew or completed the program



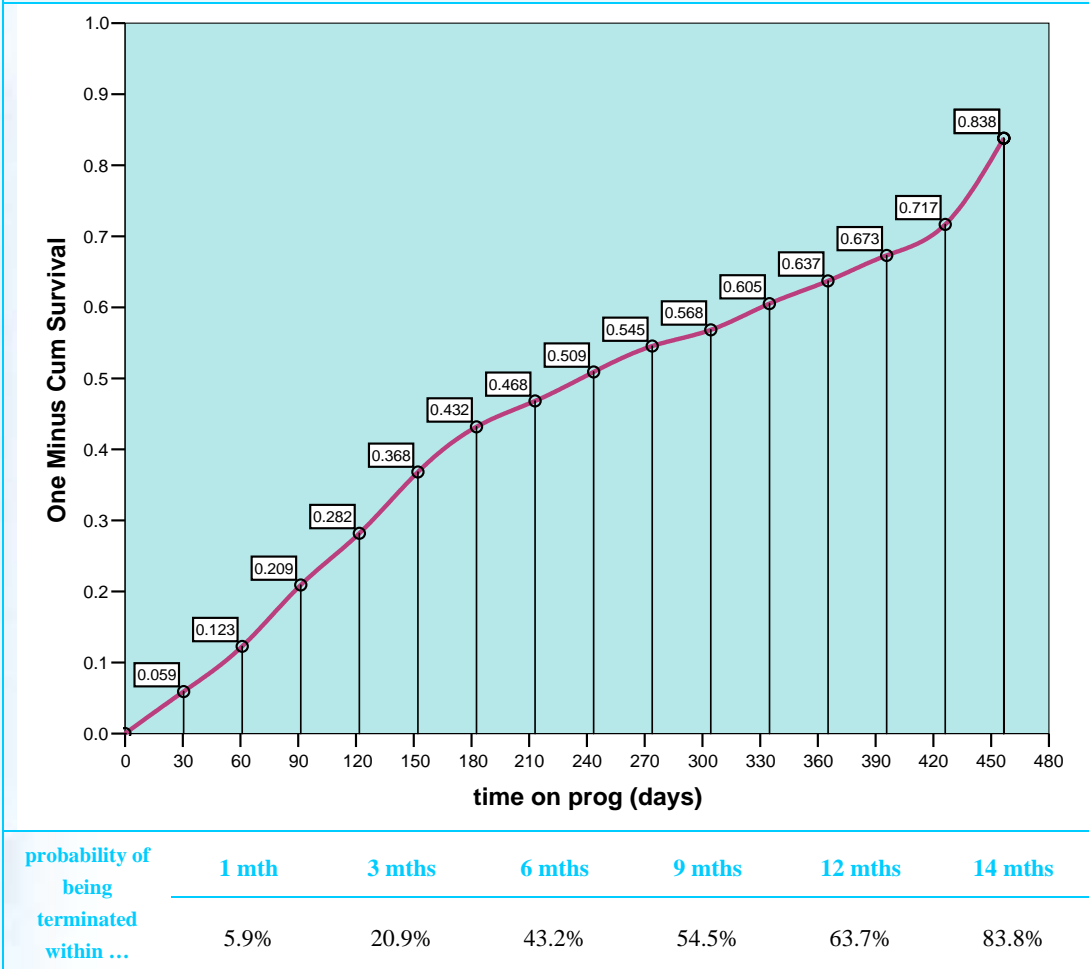
*Probability of being terminated from the program*

While the above data provides information about the actual proportion of participants who remained on the program after a given amount of time, this next section utilises this information to determine the **probability** that, given the same conditions, anyone participating in the program will be terminated.

For this (survival) analysis, participants who voluntarily withdrew from the program were not included as there was some indication that this was not an homogenous group. As noted earlier, while there were members in this group whose withdrawal was legitimate, for others the withdrawal was simply a strategy to avoid being terminated by the court as they anticipated that such an outcome was looming. Thus, only the data from participants (n=220) who were terminated or who completed the program in the first 38 months of operation was used.

Figure 3, which details the results of the survival analysis, provides an indication of the proportion of participants who are likely to be terminated from the program at a given point in time. As shown, at three months (approximately 90 days) 20.9% of offenders accepted onto the Drug Court program are expected to be terminated from the program. The odds of termination are 43.2% at six months, 50.9% at eight months and 56.8% at 10 months. In other words, based on these results, the chances that a person will be terminated from the Drug Court program within eight months (or approximately 240 days) is 50-50.

Figure 3 Probability of Termination per Month



### Time Spent on the Program – variations over time

As noted earlier, a higher proportion of participants in Cohort 3 completed the program compared with those in Cohort 1 and 2 respectively. While these differences did not prove to be statistically significant, they are in line with the results achieved when the actual amount of time spent on the program per cohort was compared. As shown in Table 7, Cohort 3, on average, had the longest stay in the program and Cohort 2 the shortest. These differences were statistically significant<sup>10</sup>. Half of Cohort 2 participants remained on the program for a period of 145 days compared with 220 days for Cohort 1 and 268.5 days for Cohort 3. For Cohort 3, the minimum amount of time recorded on the program was three weeks (one person), compared to one week (3 people) for Cohort 1 and just under one and a half weeks for Cohort 2.

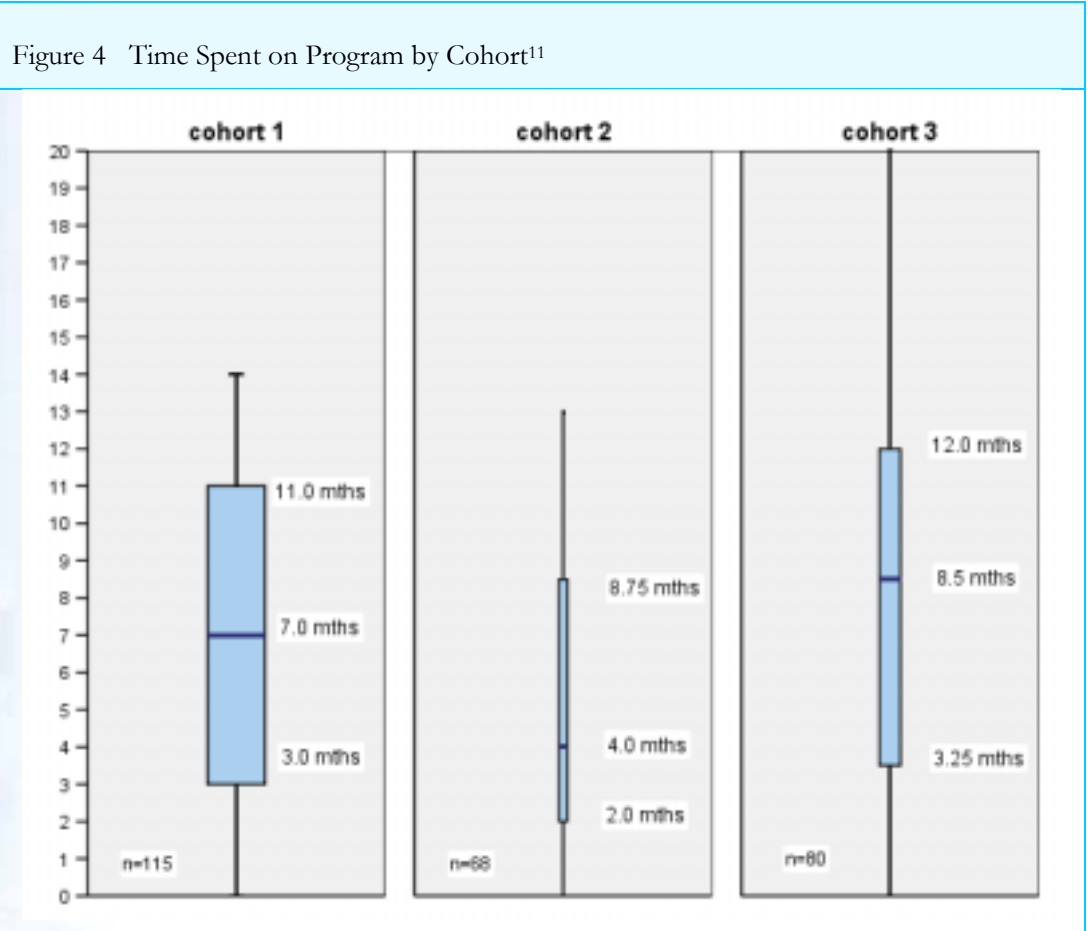
Table 7 Time Spent on Program by Cohort

	Mean (days)	Stand dev	Median	Minimum (days)	Maximum (days)
<i>Cohort 1</i>	222.2	131.7	220	7	455
<i>Cohort 2</i>	179.1	125.7	145	10	401
<i>Cohort 3</i>	255.3	142.2	268.5	21	627

<sup>10</sup> Significantly different,  $F_{(2,260)} = 5.99$ ,  $p=0.003$



The differences in the amount of time spent on the program for participants in the three cohorts is illustrated in more detail in Figure 4. As shown, participants in Cohort 3, which had the smallest number of participants (n=68), generally spent the least amount of time on the program with one quarter spending two months or less, half four months or less and three quarters 8.75 months or less. However, this trend was changed by Cohort 3, where time spent on the program for one quarter of the participants was 3.25 months or less, for half it was 8.5 months or less, and for three quarters of them it was twelve months or less.



*Probability of Being Terminated from the Drug Court by Cohort*

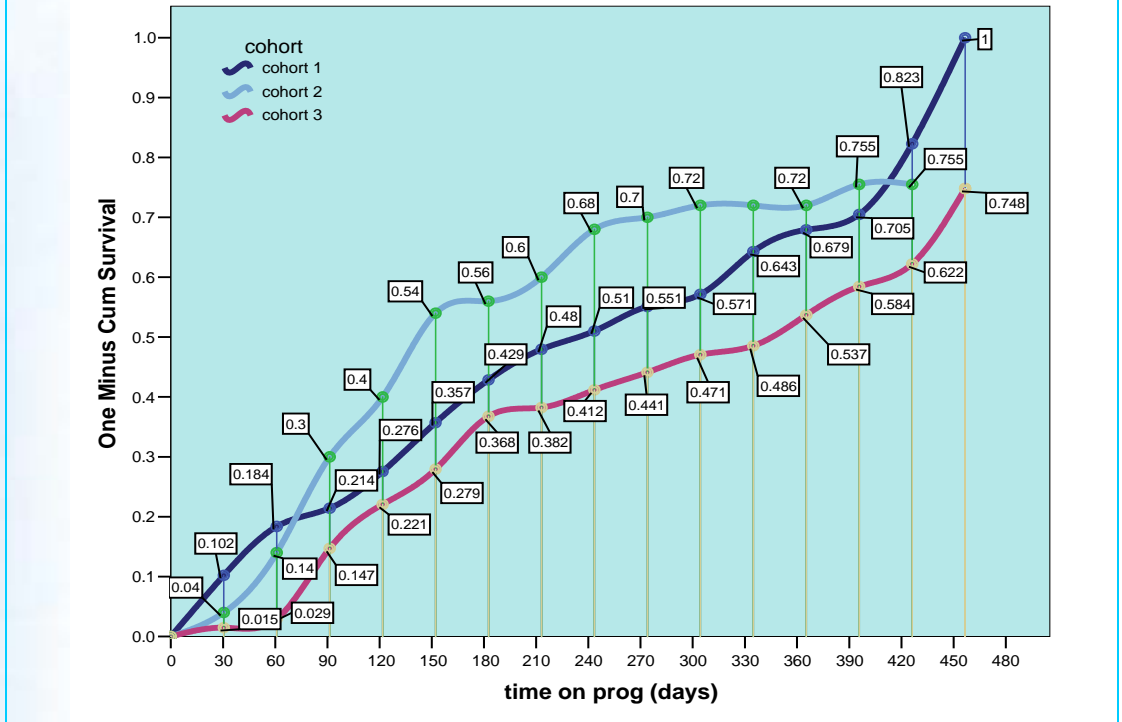
The probability of being terminated also differed significantly between cohorts. Illustrated in Figure 5 is the cumulative proportion of Drug Court participants who were terminated each month for the three cohorts. Those who withdrew were omitted from this analysis for reasons stated above. As shown, the probability of being terminated from the Drug Court varied significantly<sup>12</sup> between the cohorts. Participants in Cohort 2 were generally the most likely to be terminated, while those in Cohort 3 were the least likely to be terminated.

As shown, participants in Cohort 1 were the most likely to be terminated within the first two months of the program. After this time however, participants in Cohort 2 were more likely to be terminated. As shown, the rate of termination for this cohort increased quickly as the fifth month approached. In other words, participants in Cohort 2 were generally terminated more quickly during the first five months of the program than participants in other cohorts.

<sup>11</sup> The bottom of each box is the 25th percentile, the middle line is the 50th percentile and the top line is the 75th percentile. For example, for cohort 1, 25% of participants spent three months or less on the program, while 50% spent seven months or less and 75% spent 11 months or less.

<sup>12</sup> Wilcoxon Gehan Statistic = 7.7, df=2, p=0.021

Figure 5 Probability of Being Terminated by Cohort



As shown in Table 8, the probability of being terminated within the first six months on the Drug Court program varied from just over one in two (56.0%) for Cohort 2 participants to just over two in five (42.9%) for Cohort 1 participants, to just over one in three (36.8%) for Cohort 3 participants.

Table 8 Probability of Being Terminated from the Drug Court Program by Cohort

within ...	1 mth	3 mths	6 mths	9 mths	12 mths	14 mths
<i>Cohort 1</i>	10.2%	21.4%	42.9%	55.1%	67.9%	82.3%
<i>Cohort 2</i>	4.0%	30.0%	56.0%	70.0%	72.0%	75.5%
<i>Cohort 3</i>	1.5%	14.7%	36.8%	44.1%	53.7%	62.2%

### Reasons for Terminations – all participants

Reasons for terminations were recorded for 146 of the 147 people who were terminated. As shown in Table 9, the maximum number of reasons listed for any one termination was five although the majority terminated (67.1%) had only one reason recorded.

Table 9 Number of Termination Reasons

Number of reasons	Frequency	Proportion (%)
1	98	67.1
2	30	20.5
3	13	8.9
4	4	2.7
5	1	0.7
<b>Total</b>	<b>146</b>	<b>100.0</b>

Table 10 shows all reasons listed for those who were terminated. Counted are the number of participants who had at least one of these recorded as a reason for being terminated. For example, if a participant was terminated for breach of bail and failure to appear, (s)he would be counted once in each of these categories.

Non-compliance was likely to be listed as a termination reason if there had been continued non-adherence to a case manager’s instructions, avoidance of a case manager, non-attendance for urinalysis when directed, or the breaching of Home Detention or a curfew bail condition. Generally more than one of these episodes would have needed to occur for a participant to be terminated.

A termination reason of “re-offending” would not generally have involved minor offending, such as minor traffic offences. However, any offending which was viewed as a risk to the community, such as property offences and offences of violence, may have resulted in a termination.

Drug use/positive urine may have been listed as a reason for termination if it became apparent to the Drug Court that a client was not making gains towards drug abstinence. Often, when this became apparent additional supports may have been provided in combination with increased contact with the Drug Court to assist the participant and only then, if drug use continued did termination occur.

As shown, half (50.7%) of those terminated from the Drug Court were terminated for non-compliance and about two in five (40.4%) were terminated because they continued to reoffend. Only a small proportion (10.3%) had drug use or positive urine results listed as a reason for termination. This finding is in accordance with the Drug Court philosophy of drug minimisation rather than abstinence.

Table 10 Reasons given for Terminations: number of participants per category

Reason	Frequency	Proportion (%) <sup>13</sup>
non- compliance	74	50.7
breach of bail	20	13.7
reoffended	59	40.4
drug use - positive urine	15	10.3
warrant issued	24	16.4
imprisoned	2	1.4
referred to mental impairment court	2	1.4
failed to appear	15	10.3
Other	5	3.4

*Note* the total number exceeds the number of individual participants because multiple reasons for termination could be listed per person. However, percentages are based on the number of discrete individuals.

The main reasons for termination for those who had only one termination reason recorded was for non-compliance (39.8%) or for re-offending (36.7%).

<sup>13</sup> because some people had more than one reason these do not sum to 100 percent.

For those with two reasons listed, re-offending was given as one of the two reasons in 43% (n=13) of cases, while non-compliance was listed in 70% (n=21) of cases. Both breach of bail and drug use were each listed as one of the reasons in 23% (n=7) of cases.

A very small proportion of those who were terminated (n=13) had three reasons listed. For these offenders all but one had non-compliance as one reason, while nine had re-offending and five had drug use as a reason.

Four people who were terminated had four reasons listed. All but one of these had non-compliance as one reason, while two had re-offending as a reason. All of these participants had “breach of bail” and “failed to appear” as reasons for termination.

The Drug Court database also included some comments about the participant and one common remark was that the participant’s whereabouts were unknown. This comment was made for 28 of the 146 (19.2%) people who were terminated. In most of these cases a warrant was issued. This suggests that there were a substantial number of participants who absconded from the program and factors relating to this require investigation.

## Summary

Overall, just over one quarter (26.2%) of offenders accepted into the Drug Court program in the first thirty eight months of its operation reached a point of completion, with the majority being terminated or withdrawing voluntarily from the program.

The most common reason for being terminated was for non-compliance, with the results suggesting that participants were not necessarily terminated for drug use or offending episodes.

The results show that the likelihood of being terminated or remaining in the Drug Court program changed during the various stages of the Drug Court’s operation with the greatest likelihood of completion occurring in the last of the three years. By the third year of operation the odds of remaining on the Drug Court program for a period of twelve months increased from just over one in four (28.0%) during the first year of operation to nearly two in five (39.2%). Correspondingly, the odds of being terminated within twelve months decreased from year one to year three, going from just over two in three (67.9%) to just over one in two (53.7%).

The findings suggest that changes to the operation of the Drug Court may have had a positive effect in keeping participants in the program for a period of one year. This may have been due to a variety of reasons, including case workers gaining experience as well as better screening of participants. However, further research would be needed to substantiate this.

## Section 2: A comparison between those who completed and those who were terminated from the program

In this section of the study those who completed the Drug Court program were compared with participants who were terminated. For reasons outlined earlier, participants who voluntarily withdrew from the program were not included.

In the following discussion, comparisons are spread across four major areas:

- Demographic characteristics;
- Offending characteristics;
- Drug use characteristics; and
- Personal characteristics, such as physical and mental health, social and family issues, living skills, accommodation and financial issues.

In the first part of the discussion, the analysis focuses on comparing participant characteristics at the commencement of the program. The second part focuses on comparing offending behaviour during involvement with the program itself.

### Differences between Completers and Terminated at the point of assessment

#### *Demographic comparisons*

A comparison between Completers and Terminated (n=219<sup>14</sup>) found that there were no statistically significant differences in terms of the key demographic factors such as gender, age at acceptance, marital status or education attainment.

#### **Gender**

As shown in Table 11, one in three (30.6%) male and just over two in five (43.5%) female participants completed the program. These differences were not statistically significant<sup>15</sup>.

Outcome	Males		Females	
	Number	Proportion (%)	Number	Proportion (%)
Completed	59	30.6	10	43.5
Terminated	134	69.4	13	56.5
<b>Total</b>	<b>193</b>	<b>100.0</b>	<b>23</b>	<b>100.0</b>

<sup>14</sup> assessment variables were missing for one case

<sup>15</sup>  $\chi^2$ (Fishers Exact test) = 1.6, df=1, p=0.21

### Indigenous Status

The overwhelming majority (92.8%) of Drug Court participants were non-Indigenous. The small number of Indigenous participants prohibited any valid statistical comparisons<sup>16</sup>. However, as shown in Table 12, a smaller proportion of Indigenous participants (about three in thirteen) completed the program compared with a slightly higher proportion (32.4%) of the non-Indigenous participants.

Table 12 Outcome of Drug Court 2000-2003 Clients by Indigenous Status			
Outcome	Non-Indigenous		Indigenous
	Number	Proportion (%)	Number
Completed	66	32.4	3
Terminated	137	67.2	10
<b>Total</b>	<b>204</b>	<b>100.0</b>	<b>13</b>

### Age

No significant differences in the age at acceptance of Completers and Terminated were found<sup>17</sup>. The average age of Completers accepted onto the program was 30.0 years<sup>18</sup>, while that of Terminated participants was 29.8 years<sup>19</sup>.

### Marital Status

As shown in Table 13, those who completed or were terminated from the Drug Court did not differ significantly in terms of their marital status<sup>20</sup>. As shown, over seventy percent of Completers (70.7%) and those terminated (76.9%) were single/separated or divorced.

Table 13 Outcome of Drug Court 2000-2003 clients by Marital Status					
Outcome	Single/separated/divorced		Married/defacto		Total
	Number	Percent	Number	Percent	Number
Completers	29	70.7	12	29.3	41
Terminated	80	76.9	24	23.1	104
<b>Total</b>	<b>109</b>	<b>75.2</b>	<b>36</b>	<b>24.8</b>	<b>145</b>

<sup>16</sup> 33.3% of the cells had a count less than 5

<sup>17</sup> Mann Whitney U, Z=-0.04, P<0. 97

<sup>18</sup> standard deviation of 7.1 years

<sup>19</sup> standard deviation of 6.6 years

<sup>20</sup>  $\chi^2$ (Fishers Exact test) = 0.52, df=1, p=0.28

**Employment**

There were no major differences in the employment status of Completers and Terminated participants. The majority of both Completers (96.8%) and Terminated (95.7%) were unemployed.

**Education**

A comparison between Completers and Terminated found that there were no statistically significant differences in the level of education attained before they joined the Drug Court<sup>21</sup>. As shown in Table 14, just over seven in ten (77.4%) Completers and just under seven in ten (68.0%) Terminated had a level of education that was Year 10 or less.

Table 14 Level of Education				
Year Level	Completers		Terminated	
	number	Percent (%)	number	Percent (%)
7	1	1.6	1	0.8
8	3	4.8	21	16.4
9	14	22.6	27	21.1
10	30	48.4	38	29.7
11	8	12.9	28	21.9
12	6	9.7	12	9.4
13	0	0.0	1	0.8
<b>Total</b>	<b>62<sup>22</sup></b>	<b>100.0</b>	<b>128<sup>23</sup></b>	<b>100.0</b>

*Offending History Five Years Pre-Acceptance*

**Total number of criminal events charged in the five years pre-acceptance<sup>24</sup>**

There were clear differences between Drug Court Completers and those who were terminated in terms of the *total* number of criminal events charged against them as a group in the five years prior to their entry onto the program. Overall, Completers were apprehended for a total of 1,192 criminal events over the five years. This was less than half of the total of 2,786 for which the Terminated group had been apprehended over the five years.

**Type of Offending Five Years pre-Acceptance**

The offending history of Completers and terminated participants during the five years prior to entry into the Drug Court was analysed to see if there were differences in the types of offences associated with each group. For this analysis, the major or most serious charge for

<sup>21</sup> Mann Whitney U, Z=-0.4, P<0. 69

<sup>22</sup> data for 7 people was missing

<sup>23</sup> data for 19 people was missing

<sup>24</sup> exposure time was not accounted for as time spent incarcerated did not differ significantly between the groups.

each apprehension event was identified and then grouped into ASOC categories for ease of comparison. The results are shown in Table 15.

In terms of total charges in each ASOC category, for most offence categories listed, there were no significant differences between the two groups. However, a lower percentage of Completers were charged with fewer *theft and related offences*<sup>25</sup>, as well as *weapons and explosive offences*<sup>26</sup>, than terminated participants (35.7% vs 39.7% and 0.8% vs 1.8% of all offences, respectively).

ASOC Category	Completers		Terminated	
	Number	Percent	Number	Percent
Homicide and related offences	0	0.0	0	0.0
Acts intended to cause injury	29	2.4	87	3.1
Sexual assault and related offences	2	0.2	2	0.1
Dangerous acts endangering persons	9	0.8	20	0.7
Abduction and related offences	0	0.0	0	0.0
Robbery, extortion and related offences	5	0.4	22	0.8
Break and enter and related offences	262	22.0	544	19.5
<b>*Theft and related offences</b>	<b>425</b>	<b>35.7</b>	<b>1,106</b>	<b>39.7</b>
Deception and related offences	110	9.2	231	8.3
Illicit drug offences	29	2.4	77	2.8
<b>*Weapons and explosives offences</b>	<b>10</b>	<b>0.8</b>	<b>49</b>	<b>1.8</b>
Property damage and environmental pollution	49	4.1	70	2.5
Public order offences	28	2.3	72	2.6
Road traffic and motor vehicle regulatory offences	152	12.8	298	10.7
Offences against justice procedures and government	74	6.2	197	7.1
Miscellaneous offences	8	0.7	11	0.4
<b>Total</b>	<b>1,192</b>	<b>100.0</b>	<b>2,786</b>	<b>100.0</b>

\* significantly different

The second comparison compared the number of *discrete individuals* in each of the Completer and Terminated groups who had at least one charge in each ASOC category in the five years prior to being accepted into the Drug Court program. Table 16 shows the results of this analysis.

Unlike the previous comparison, there was only one area of difference - a higher proportion of Terminated participants were charged with a *weapons and explosives offence* than Completers. As shown, more than twice the proportion of Terminated (23.0%) were charged at least once for an offence of this type than Completers (11.1%). No other statistically significant differences were found.

<sup>25</sup> Mann Whitney Z=-2.13, P<0. 033

<sup>26</sup> Mann Whitney Z=-2.10, P<0. 036



Of particular note is that, in contrast to the results obtained when all major charges were considered, there were no differences in the actual proportion of individuals charged with at least one *theft and related offence* during the preceding five years. The most likely explanation for this apparent discrepancy is that those terminated participants who were charged with a *theft and related offence* must have been charged with a greater number of such offences than the Completers.

Table 16 Drug Court Participants with at Least One Offence in each ASOC Category Pre-Acceptance<sup>27</sup>

ASOC Category	Completers		Terminated	
	Number	%	Number	%
Homicide and related offences	0	0	0	0
Acts intended to cause injury	19	26.4	52	35.1
Sexual assault and related offences	2	2.8	2	1.4
Dangerous acts endangering persons	8	11.1	17	11.5
Abduction and related offences	0	0	0	0
Robbery, extortion and related offences	5	6.9	14	9.5
Break and enter and related offences	57	79.2	112	75.7
Theft and related offences	64	88.9	141	95.3
Deception and related offences	28	38.9	64	43.2
Illicit drug offences	22	30.6	53	35.8
<b>*Weapons and explosives offences</b>	<b>8</b>	<b>11.1</b>	<b>34</b>	<b>23.0</b>
Property damage and environmental pollution	31	43.1	44	29.7
Public order offences	21	29.2	51	34.5
Road traffic and motor vehicle regulatory offences	37	51.4	92	62.2
Offences against justice procedures and government	35	48.6	88	59.5
Miscellaneous offences	6	8.3	9	6.1

\* significantly different

*Seriousness of Offending Five Years Pre-Acceptance*

Table 17 shows the level of seriousness (determined using NOI) of the most serious charge laid against Completers and Terminated five years before being accepted into the Drug Court program. As shown, there were no significant differences between the groups, with over nine in ten Completers (95.8%) and Terminated (90.5%) charged with at least one serious offence.

<sup>27</sup> Because these categories are not mutually exclusive the sum of the percentages exceeds 100.

Table 17 Most Serious Charge Five Years Pre-Acceptance

Most serious charge	Completed		Terminated	
	Number	Percent (%)	Number	Percent (%)
Minor	0	0.0	3	2.0
Moderately-Serious	3	4.2	11	7.4
Serious	69	95.8	134	90.5
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>

*Previous Imprisonment of Completers and Terminated*

One area of difference between Completers and Terminated at the point of assessment was their *overall*<sup>28</sup> history of previous imprisonment. As shown in Table 18, those who were terminated were more likely to have been previously imprisoned either as a remandee or sentenced prisoner, during their juvenile and, or adult years<sup>29</sup>. Nine in ten (90.5%) of those who were terminated had spent some time in prison prior to being accepted into the Drug Court, compared with two in three (66.7%) Completers.

Table 18 History of Previous Imprisonment

	Completers		Terminated		Total	
	Number	Percent	Number	Percent	Number	Percent
No	24	33.3	14	9.5	38	17.3
Yes	48	66.7	134	90.5	182	82.7
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>	<b>220</b>	<b>100.0</b>

However, a comparison between those Completers and Terminated who had spent time in custody found no significant difference between the two groups in the actual amount of time spent incarcerated in the *five years* prior to joining the Drug Court program. Table 19 shows some minor differences between the two groups, but these were not statistically significant<sup>30</sup>.

Table 19 Time Spent in Custody Five Years Pre-Acceptance

Time in months	Completers		Terminated		Total	
	Number	Percent	Number	Percent	Number	Percent
0-6 mths	36	50.0	69	46.6	105	47.7
6-9 mths	8	11.1	11	7.4	19	8.6
9-12 mths	7	9.7	7	4.7	14	6.4
12-24 mths	8	11.1	23	15.5	31	14.1
24+ mths	13	18.1	38	25.7	51	23.2
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>	<b>220</b>	<b>100.0</b>

<sup>28</sup> not just in the five year pre-acceptance period  
<sup>29</sup>  $\chi^2$  (Fishers Exact test) = 19.32, df=1, p<0.0001  
<sup>30</sup> Mann-Whitney U, Z=-1.2, P<0.24

**Span of Criminal Career**

It was possible to approximate the time span of each Drug Court participant’s criminal career. This was calculated by considering the age of an individual at the first recorded criminal event on SAPOL’s Apprehension data base (post 1991) and the age of their first court hearing where the outcome was a finding of guilt (pre 1991). Which ever date was the earliest was taken as the age of onset. Subtracting the age of onset from the age at acceptance into the Drug Court gave an estimate of the length of their criminal career.

It should be noted that for those whose age of onset was based on the date of their first finding of guilt in court, this would not be an accurate measure of the age when offending was actually initiated. It is possible that an individual may have been apprehended several times before it resulted in a court hearing, particularly amongst juvenile offenders who, prior to 1991 could be diverted to a Children’s Aid Panel. However, while our estimate of the span of criminal career may not be entirely accurate, it was still useful for comparative purposes.

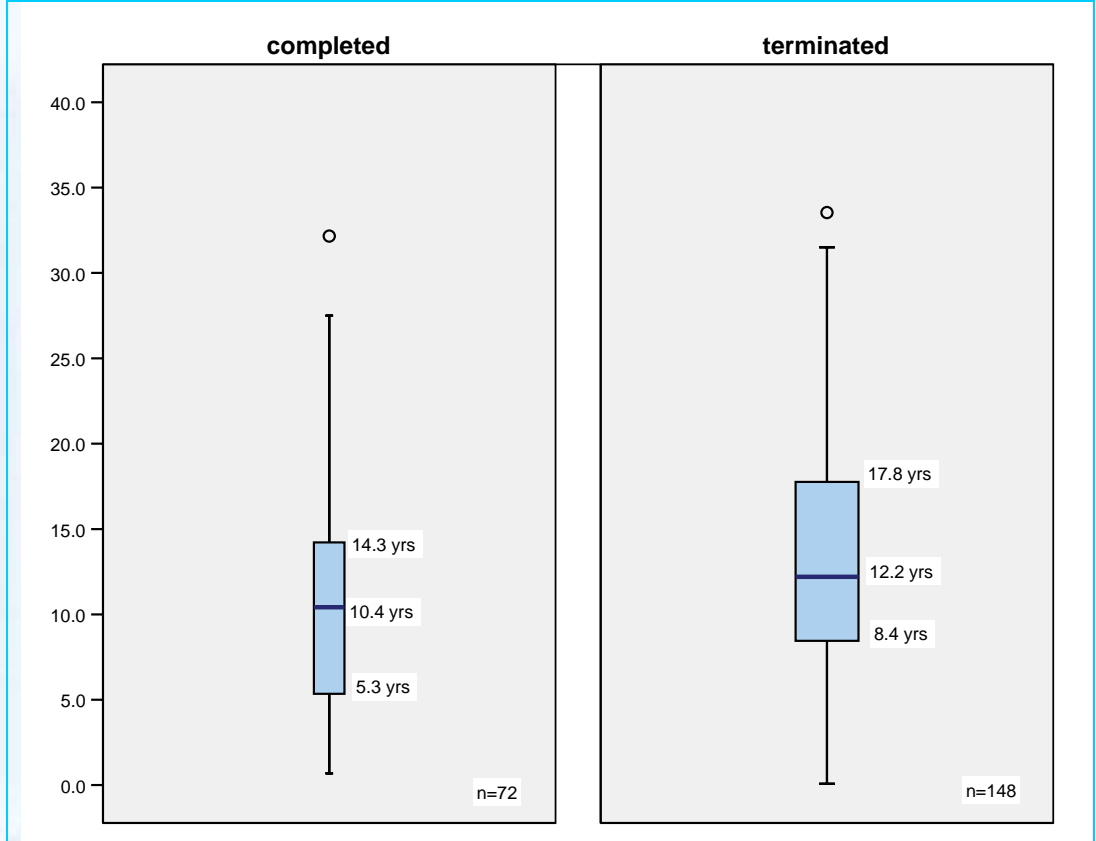
Completers and Terminated differed in the span of their criminal careers<sup>31</sup>. As shown in Table 20, a greater proportion of Completers had a criminal career that spanned less than five years - nearly one quarter (22.2%) of Completers compared to just over one in ten (8.8%) of those Terminated. Over one third (35.8%) of those Terminated compared to nearly one quarter (23.6%) of Completers had a criminal career that spanned 15 years or more.

Table 20 Span of Criminal Career of Completed and Terminated Participants				
Years	Completed		Terminated	
	Frequency	Proportion	Frequency	Proportion
<1	2	2.8	2	1.4
1-4	14	19.4	11	7.4
5-9	17	23.6	38	25.7
10-14	22	30.6	44	29.7
15-19	8	11.1	34	23.0
20+	9	12.5	19	12.8
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>

Overall, those who were terminated had longer criminal careers than those who completed the Drug Court program. As shown in Figure 6, half of those who completed the Drug Court program had a criminal career that spanned 10.4 years or less, while for half of those who were terminated it spanned 12.2 years or less. The shortest criminal career span for Completers and Terminated was 8.4 months and 1.2 months respectively, while the longest within each group was 32.2 years and 33.5 years, respectively.

<sup>31</sup> Mann-Whitney U, Z=-2.4, P<0.016

Figure 6 Span of Criminal Career of Completed and Terminated Participants



A criminal career that spanned seven years or more was the period of time that greatly distinguished Completers from Terminated. As shown in Table 21, a significantly greater proportion of Terminated than Completers had a criminal career that spanned seven years or more before being accepted onto the Drug Court program<sup>32</sup>. As shown, this was the case for nearly two in three (62.5%) Completers compared with over four in five (83.1%) Terminated.

Table 21 Span of Criminal Career of Completed and Terminated Participants

Years	Completers		Terminated	
	Frequency	Proportion	Frequency	Proportion
0-7 years	27	37.5	25	16.9
7+ years	45	62.5	123	83.1
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>

<sup>32</sup>  $\chi^2$  (Fishers Exact test) = 11.4, df=1, p=0.001

## Drug Use History of Completers and Terminated

### History of Substance Use

At the point of assessment, participants were asked to provide a history of their substance use. The areas in which information was elicited during the interview included whether the individual had:

- periods of drug abstinence greater than six months;
- periods of failed drug treatment;
- a history of poor compliance with treatment;
- drug abuse prior to adulthood;
- alcohol abuse prior to adulthood;
- overdose experiences; and
- lack of insight into their drug use behaviour.

As noted earlier, such information has major limitations because of the way in which it was collected. Despite this (or perhaps because of this), no significant differences were identified between Completers and those terminated from the program, with one exception – namely alcohol abuse prior to adulthood. The analysis found that at the point of assessment Completers were more likely to report alcohol abuse prior to adulthood<sup>33</sup> than those who were terminated.

As shown in Table 22, nearly half (44.4%) of the Completers reported that they had experienced alcohol abuse prior to becoming an adult, compared to less than one quarter (23.1%) of participants who were terminated. This could indicate that Completers had been entrenched abusers of both alcohol and drugs.

	Completers		Terminated		Total	
	Number	Percent	Number	Percent	Number	Percent
No	40	55.6	114	77.0	154	70.0
Yes	32	44.4	34	23.0	66	30.0
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>	<b>220</b>	<b>100.0</b>

For those who had said that they had started alcohol abuse prior to adulthood (n=66) the age they reported that this commenced was analysed<sup>34</sup>. This did not differ between Completers and Terminated<sup>35</sup>.

<sup>33</sup>  $\chi^2$  (Fishers Exact test) = 10.6, df=1, p<0.002

<sup>34</sup> data for one person was missing.

<sup>35</sup> Mann-Whitney U, Z=-0.26, P<0.8

**Age of self-reported drug use initiation**

There were no significant differences in the self-reported age of drug use initiation between those who completed or were terminated from the program<sup>36</sup>.

*Personal Characteristics at Time of Assessment*

**Physical health**

Completers did not differ significantly in terms of their physical health at the point of assessment. This included an assessment of whether they had Hepatitis C or HIV.

**Social/Family**

Completers did not differ significantly from those who were terminated on most of the social/family support aspects covered at the point of assessment. There were no differences, for example, in terms of whether the participant:

- Was a victim of a past abusive relationship;
- Was a victim of a present abusive relationship;
- Was a perpetrator of an abusive relationship;
- Had children;
- Had good family supports;
- Had either impaired or good family relationships;
- Had undefined social/family issues;
- Had parents who were divorced/separated; or
- Had parents who were or had been drug users/alcoholics.

However, results showed that Completers were more likely than those who were terminated to report being “socially isolated”<sup>37</sup>. As shown in Table 23, nearly one quarter (23.6%) of Completers reported that they felt socially isolated at the time of assessment compared to less than ten percent (8.8%) of those who were terminated.

Table 23 Social Isolation Reported at Assessment						
	Completers		Terminated		Total	
	Number	Percent	Number	Percent	Number	Percent
No	55	76.4	135	91.2	190	86.4
Yes	17	23.6	13	8.8	30	13.6
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>	<b>220</b>	<b>100.0</b>

<sup>36</sup> Mann-Whitney U, Z=-0.26, P<0.8

<sup>37</sup>  $\chi^2$ (Fishers Exact test) = 9.0, df=1, p=0.006

Those who were terminated were also more likely to report that they had “limited family support”<sup>38</sup> than Completers. As shown in Table 24, nearly half (48.6%) of those who were terminated reported that they felt the support they would get from their family would be limited.

Table 24 Limited Family Support Reported at Assessment						
	Completers		Terminated		Total	
	Number	Percent	Number	Percent	Number	Percent
No	53	73.6	76	51.4	129	58.6
Yes	19	26.4	72	48.6	91	41.4
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>	<b>220</b>	<b>100.0</b>

**Living Skills/accommodation/financial**

Analysis found that Completers were no more likely than terminated participants to have problems with independent living skills, to experience accommodation difficulties, to have had periods of homelessness and to require employment, education or training.

However, Completers were more likely than those who were terminated to report that they were experiencing financial difficulties at the time they were assessed<sup>39</sup>. As shown in Table 25, nearly two-thirds (61.1%) of Completers reported financial difficulties compared to just over one third (38.8%) of those who were terminated.

Table 25 Financial Difficulties Reported at Assessment						
	Completers		Terminated		Total	
	Number	Percent	Number	Percent	Number	Percent
No	28	38.9	93	62.8	121	55.0
Yes	44	61.1	55	37.2	99	45.0
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>	<b>220</b>	<b>100.0</b>

**Mental health**

Five issues were assessed under this general heading:

- Depression/anxiety/hopelessness (sub clinical);
- Known past psychiatric hospitalisation;
- Currently prescribed mental health medication;
- Diagnosed personality disorder; and
- Diagnosed mental health problem.

No significant differences between the two groups were identified on any of these measures.

<sup>38</sup>  $\chi^2$  (Fishers Exact test) = 9.9, df=1, p=0.002

<sup>39</sup>  $\chi^2$  (Fishers Exact test) = 7.27, df=1, p=0.006

**Other**

Two factors were assessed under this generic heading – whether the individual had legal issues other than current offending and whether there were gambling problems. While there were no differences with respect to legal issues, a gambling problem<sup>40</sup> was more likely to be reported by Completers at assessment. As shown in Table 26, four times as many Completers (13.9%) than Terminated (3.4%) reported having experienced gambling problems at some time before they were accepted into the Drug Court program. While this is a statistically significant result, the numbers were low, with only 6.8% (n=15) of the entire group reporting this problem. Thus, it may be that this is a spurious result.

Table 26 A Gambling Problem Reported at Assessment						
	Completers		Terminated		Total	
	Number	Percent	Number	Percent	Number	Percent
No	62	86.1	143	96.6	205	93.2
Yes	10	13.9	5	3.4	15	6.8
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>	<b>220</b>	<b>100.0</b>

**Offending Differences Between Completers and Non-Completers During the Program**

Apart from non-compliance with treatment referrals, once accepted onto the Drug Court program defendants risked being terminated either because of on-going drug use or, more importantly, continued offending. While information on drug use during the program should technically have been available from the urinalysis results, in approximately 50% of cases, there was some missing urinalysis data. It therefore could not be used in this analysis. As a result, this section concentrates entirely on participants’ offending behaviour which was officially detected by police and which resulted in a formal apprehension.

Data from all Completers and Terminated (n=220) for whom information was available were included in this part of the analysis.

*Offending During Program*

As shown in Table 27, Completers were less likely than those who were terminated to offend during the program<sup>41</sup>. Just over half (54.2% or 39) of those who completed, compared to over three quarters (77.0% or 114) of those who were terminated, were charged with at least one offence during the program.

<sup>40</sup>  $\chi^2$  (Fishers Exact test) = 8.4, df=1, p=0.008

<sup>41</sup>  $\chi^2$  (Fisher’s Exact) = 12.0, df=1, p=0.001



Table 27 Offended During Program

Offended During Program	Completed		Terminated	
	Number	Percent (%)	Number	Percent (%)
Yes	39	54.2	114	77.0
No	33	45.8	34	23.0
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>

Completers were also slower to re-offend during the program. Table 28 shows the time taken to commit an offence during the program for participants who re-offended. As shown, nearly one in five (17.6%) of those who were terminated committed an offence within one month of entering the program compared to only 4.2% of Completers.

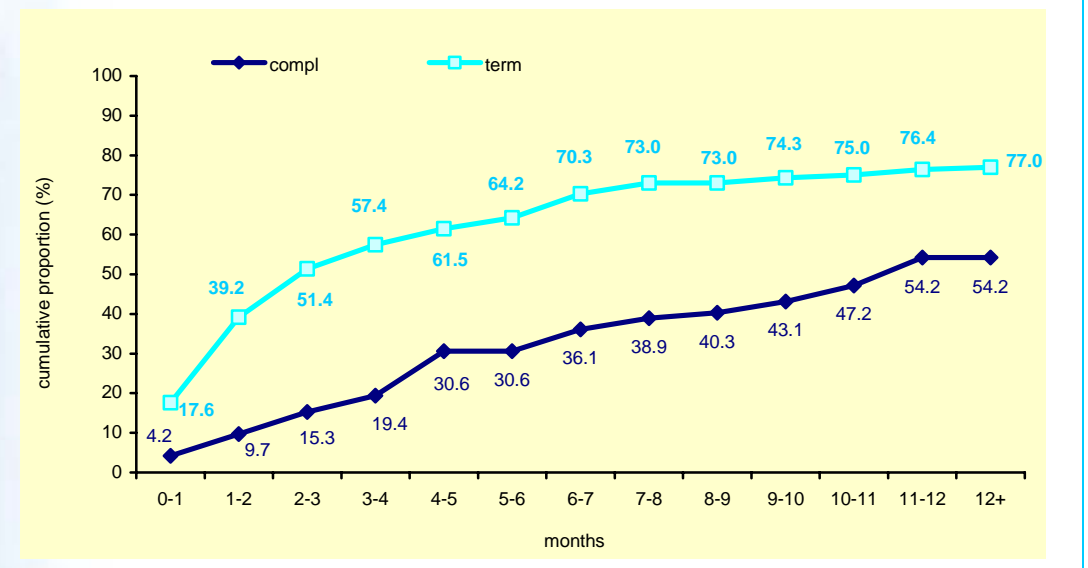
Table 28 Time to First Criminal Event During Program

Months	Completed		Terminated	
	Number	Percent (%)	Number	Percent (%)
0-1	3	4.2	26	17.6
1-2	4	5.6	32	21.6
2-3	4	5.6	18	12.2
3-4	3	4.2	9	6.1
4-5	8	11.1	6	4.1
5-6	0	0.0	4	2.7
6-7	4	5.6	9	6.1
7-8	2	2.8	4	2.7
8-9	1	1.4	0	0.0
9-10	2	2.8	2	1.4
10-11	3	4.2	1	0.7
11-12	5	6.9	2	1.4
12+	0	0.0	1	0.7
<b>Total</b>	<b>39</b>	<b>54.2</b>	<b>114</b>	<b>77.0</b>

Figure 7 shows the cumulative proportion of participants who offended during the program according to the month in which their first offence occurred. As shown, there were significant differences in the time taken to offend during the program for Completers and Terminated<sup>42</sup>. As illustrated, over half of all participants who were terminated (57.4%) had re-offended within four months of being on the program compared to 19.4% of Completers. By the end of nine months on the program, nearly three quarters (73.0%) of those who were terminated had offended at least once during the program compared to two in five (40.3%) Completers.

<sup>42</sup> Mann-Whitney U, Z=-8.2, P<0.0001

Figure 7 Cumulative Proportion of Completers and Terminated Offending During the Program



*Number of Criminal Events During Program*

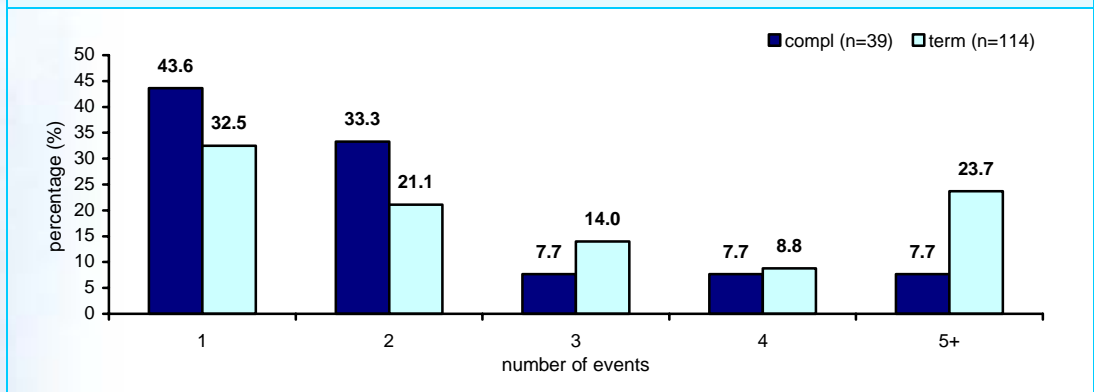
Nearly half (45.8%) of the Completers did not offend during the program, compared with less than one quarter (23.0%) of those who were terminated. About half of those who were Terminated (52.0%) were involved in two or more criminal events compared to about one third (33.4%) of Completers.

Amongst those who continued to offend during the program, those who were terminated were charged with a significantly greater number of criminal events during the program<sup>43</sup> than Completers. As shown in Figure 8, just over two in five (43.6%) Completers who offended during the program did so only once compared with nearly one third (32.5%) of those Terminated. At the other extreme, nearly one quarter (23.7%) of those Terminated offended five or more times during the program compared with less than one in ten (7.7%) of offending Completers.

The maximum number of criminal events associated with a participant was 16. This was recorded by a person who was terminated after being on the program for six months.

<sup>43</sup> Mann Whitney U, Z = -5.1, p<0.0001

Figure 8 Number of Events During Program by Those who Continue to Offend



### Most Serious Event During Program

The most serious criminal event charged against participants also differed significantly between the groups<sup>44</sup>.

The majority of those who were terminated were charged with either a moderate or serious offence. As shown in Table 29, about one in eight (12.8%) of those terminated committed only minor offences during the program, compared with one quarter (25.0%) of Completers. On the other hand, about one third of those who were terminated (34.5%) from the program had committed at least one serious offence during the program, compared with only 15.3% of Completers.

For Completers nearly three-quarters (70.8%) either did not offend or committed only minor offences during the program.

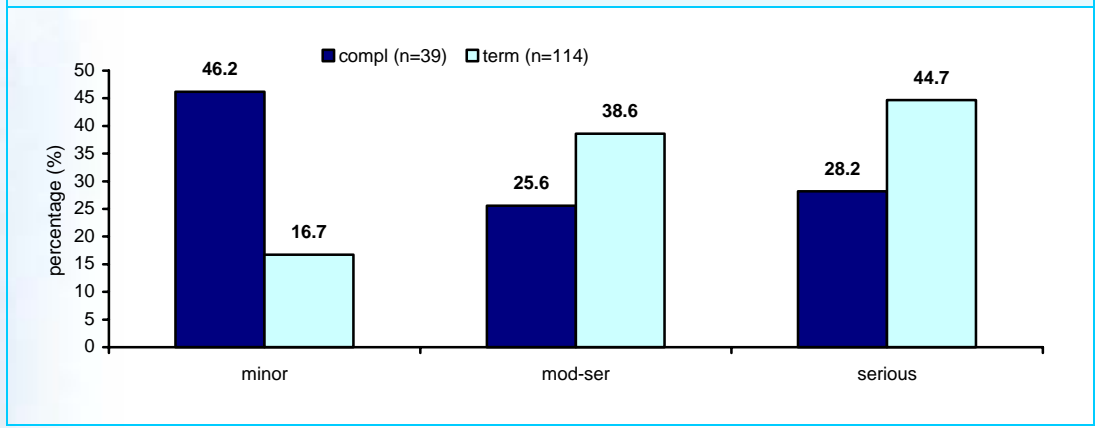
Table 29 Seriousness of Offending During Program

Seriousness of offending	Completers		Terminated	
	Number	Percent (%)	Number	Percent (%)
did not offend	33	45.8	34	23.0
minor	18	25.0	19	12.8
moderately-serious	10	13.9	44	29.7
serious	11	15.3	51	34.5
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>

The most serious offence committed by those who continued to offend during the program is shown in Figure 9. As shown, nearly half (46.2%) of offending Completers committed only minor offences and just over one quarter (28.2%) committed at least one serious offence. In comparison, only one in six (16.7%) Terminated participants committed only minor offences while nearly half (44.7%) of them were charged with at least one serious offence.

<sup>44</sup>  $\chi^2 = 23.8, df=3, p<0.0001$

Figure 9 Most Serious Criminal Event During the Program of those who continued to offend



*Number of Serious Events During Program*

The number of criminal events which involved a serious charge also differed between the groups<sup>45</sup>. As shown in Table 30, over eighty percent (84.7%) of Completers were not involved in any serious offending during the program. However, amongst those terminated the proportion was 65.5%. About one in eight (12.8%) of those who were terminated had two or more serious events during the program.

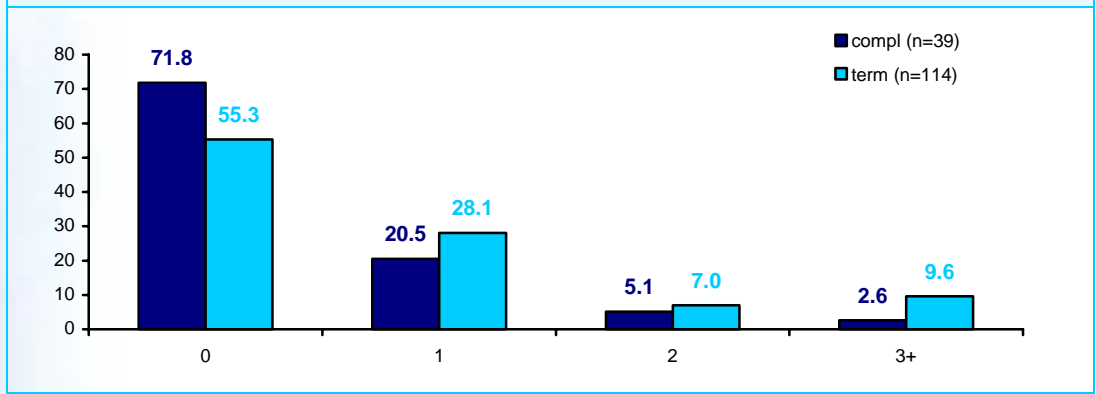
The maximum number of serious criminal events was eight and these were committed by a person who was terminated after they had spent over a year on the program. This suggests that offending alone (even serious offending) did not necessarily result in termination from the Drug Court program.

Number	Completed		Terminated	
	Number	Percent (%)	Number	Percent (%)
0	61	84.7	97	65.5
1	8	11.1	32	21.6
2+	3	4.2	19	12.8
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>

Figure 10 shows the proportion of serious offences committed by those who continued to offend during the program. As shown, seven out of ten (71.8%) Completers compared to just over one in two (55.3%) Terminated had no serious offences listed against them. On the other hand, nearly one in ten (9.6%) of those offenders who were terminated had three or more serious offences charged against them for criminal events which occurred during the program, compared to only one person who completed the program.

<sup>45</sup> Mann Whitney U, Z = -2.9, p<0.004

Figure 10 Number of Serious Events during program recorded by those who continued to offend



As shown in Table 31, a significantly<sup>46</sup> greater proportion of Terminated participants (21.6%) recorded three or more criminal events, at least one of which was serious, during the program compared to Completers (4.2%).

Table 31 Having at least three events during program, at least one serious

	Completed		Terminated	
	Number	Percent (%)	Number	Percent (%)
yes	3	4.2	32	21.6
no	69	95.8	116	78.4
<b>Total</b>	<b>72</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>

### Summary of Differences Between Completers and Terminated

For many variables tested, Completers and Terminated were relatively similar. However, some significant differences were found. Generally, Completers were more likely than Terminated to report that they had started abusing alcohol prior to adulthood, that they felt socially isolated and were having financial difficulties at the point of assessment, while those who had been terminated were more likely to report that they had limited family support at the time of assessment.

In terms of the type of offending, while these were generally comparable, those who had been Terminated had a greater number of *weapons and explosives* offences listed against them in the five years prior to being accepted onto the program.

While the grouped number of charges of *theft and related offences* did not differ significantly between Terminated and Completers, the findings suggest that Terminated individuals each had a greater number of these offences listed against them than Completers.

Terminated individuals were more likely to have been incarcerated at least once before being accepted onto the Drug Court program than Completers.

<sup>46</sup>  $\chi^2$  (Fisher's Exact)= 11.0, df=1, p<0.0001

A larger majority of those terminated (over four in five) had a criminal career which spanned seven years or more before being accepted onto the Drug Court program.

As would be expected, Terminated individuals were more likely to offend during the program and some of them seriously.

## Predictors of Drug Court Outcome

### Logistic Regression

Those factors which were found to be significantly different between Completers and Terminated were entered into a Logistic Regression to see if these variables were significant predictors of being terminated or completing the program.

Specifically, the dichotomous variables which were entered included previous imprisonment, reported social isolation, limited family support, financial difficulties, alcohol abuse prior to adulthood, having a criminal career spanning more than seven years, having been charged with at least three criminal events during the program, and being charged with at least one serious offence during the program. An interaction variable of the latter two (ie having at least three criminal events and one serious event during the program) was also entered. While offending during the program was likely to increase the likelihood of termination, it was the number and the seriousness of the offending that was the focus here. The results are shown in Table 32.

	B	S.E.	Wald	df	Sig.	Exp(B)
Limited Family Support	1.6	0.4	15.5	1	0.00	5.2
Abused Alcohol before Adulthood	-1.0	0.4	6.5	1	0.01	0.4
Span criminal career of 7 years or more	0.9	0.5	4.3	1	0.04	2.5
Constant	-2.3	-2.2	1.1	1	0.29	0.10

Note: R<sup>2</sup>=0.29 (Hosmer & Lemeshow), 0.30 (Cox & Snell), 0.42 (Nagelkerke). Model  $\chi^2(11) = 74.9, p < 0.0001$

As shown, factors which were found to be significant predictors<sup>47</sup> included having limited family support at the time of assessment, reporting alcohol abuse before adulthood and having a criminal career that spanned seven years or more.

Because logistic regression predicts the most commonly occurring outcome (Field, 2005), the predictors shown relate to the likelihood of being terminated. Thus, the findings indicate that having limited family support increased the odds of being terminated by 5.2, while having a criminal career that spanned seven years or more before joining the program more than doubled (x 2.5) the odds of termination. On the other hand, reporting that alcohol abuse began prior to adulthood decreased the odds of being terminated (by 60%). It is not known why this predictor may have been significant and why the relationship was in this direction. However, it could be that participants who had abused alcohol as children or

<sup>47</sup> Hosmer & Lemeshow  $\chi^2 = 3.0, df=8, p=.94$

teenagers were entrenched substance abusers who may have responded well to the treatment program to which they were referred by the Drug Court (which may have included treatment for alcohol abuse). Further research is needed to explore this possibility.

Having previously been imprisoned and being charged with serious offences during the program as well as reporting social isolation or financial difficulties at the point of assessment were found to be unstable predictors. This means that it was not always the case that these variables were predictors of termination, but that in some cases they indicated that completion was likely.

Overall, the strength of association of the predictors with the likelihood of termination was only 28.5%. This suggests that other predictive factors are missing from the model. Moreover, it may be that the variables collected at the point of assessment were unreliable or that factors such as abusing alcohol before adulthood are indicative of other factors which might be more directly related to the likelihood of termination. There could also be other social factors which may be relevant but which have been missed by this current research.

## Conclusion

Like other Drug Courts, the Adelaide Magistrates Drug Court has evolved since it first began operating in 2000. There have been many changes and it appears that these may have affected the probability of completing the program, which increased from 28.0% in its first year to 39.2% in its third year of operation. Overall, however, there has been no change in the demographic profile of participants.

Noteworthy is that some of the variables on which Completers and Terminated differed were the same as those on which the Cohorts differed (see Skrzypiec, 2006). For example, reporting alcohol abuse prior to adulthood, feeling socially isolated and having financial difficulties at the point of assessment were three factors more likely to be reported by Completers as well as participants in Cohort 3. It may be that the characteristics of the Completers in Cohort 3 are influencing these results. On the other hand, it may be that assessors may have become more experienced at recording more complete and accurate information on the participants.

Nonetheless, when the differences between Completers and Terminated were entered into a Logistic Regression some significant predictors were found<sup>48</sup>.

The most significant predictor of termination was limited family support, which increased the odds of termination by a factor of 5.2. The importance of family and social support has been noted in other Australian studies of Drug Courts (see Makkai and Veraar, 2003; Payne, 2005). In an evaluation of the North Queensland Drug Court, Payne (2005) found that “almost all terminated participants cited the lack of contact with family as a reason for their termination” (p.78), while family support was one of five areas found by Makkai and Veraar (2003) to influence the likelihood of graduation in a study of the South East Queensland Drug Court.

Having a criminal career that spanned seven years or more before joining the program was another significant predictor of termination. This finding suggests that those with entrenched criminal habits may be less able to make changes to their offending and, or drug use and that the level of criminal involvement prior to joining the Drug Court program is an influential factor for completion. In fact prior criminal involvement (arrests) was the only

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<sup>48</sup> an analysis of the model statistics did not indicate any undue leverage from cohort 3 participants.

significant factor of completion found by evaluators of the Perth Drug Court (CRC, 2003). They concluded that “it is offending history rather than drug use history that predicts program completion” (CRC, 2003, p. 110).

However, the finding that abusing alcohol prior to adulthood decreased the odds of being terminated is more difficult to explain. It is not known why this predictor may have been significant. It could be that participants who reported that they abused alcohol prior to adulthood may have responded well to the treatment programs and support obtained through the Drug Court. It may be that those reporting *abuse* of alcohol as children or teenagers may have had a stronger dependency on alcohol than drugs. Only further research could elucidate the meaning of this variable as a predictor of Drug Court outcomes.

It is important to state that the findings presented above should be accepted with caution and to recognise that they pertain only to the AMDC during its first 38 months of operation and cannot be generalised to any other Drug Court.

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