

# Research Publication

## Evaluation of the Getting SMART Program

### *Study One: Factors impacting program completion*

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# Executive Summary

## Background

In 2007 Corrections Research, Evaluation and Statistics (CRES), Corrective Services NSW (CSNSW) initiated the Corrections Treatment Outcome Study (CTOS) to provide a broad evaluation framework for drug treatment programs delivered in NSW correctional centres. CTOS enabled the examination of previously unavailable data.

The CTOS framework was used in the current evaluation of the custody-based Getting SMART (Self-Management and Recovery Training) program. Getting SMART is the most commonly delivered program in the NSW correctional system.

There is limited empirical evidence on the influence of individual psycho-social characteristics on offender program retention and completion. Prior to the current evaluation, there were no standardised baseline assessment procedures in place for the Getting SMART program aside from the eligibility criteria. The CTOS framework combined computer-assisted baseline and post-program assessment interviews (DATOP) with demographic and criminal history factors to examine individual and program factors associated with program completion and subsequent behavioural outcomes.

This evaluation aimed to examine factors associated with successful completion of the program to provide an empirical basis for improving program completion and program outcomes. The specific objectives of the evaluation were to examine program elements and characteristics, program outputs, participant characteristics and perceptions and factors predictive of program completion.

This evaluation directly addressed NSW 2021 goals relating to the prevention and reduction of re-offending through increasing the completion rates of offender programs (NSW Government 2011). The related target entailed reviewing programs to 'identify ways to increase completion rates' (NSW Government 2011, p 35).

Getting SMART – the most commonly delivered program

## Key Findings

This report presents findings derived from 39 Getting SMART programs that were run across six custody-based sites in NSW from April 2007 to October 2008.

### *Program elements and characteristics*

Getting SMART is a moderate intensity, psycho-educational, manual-based offender program of 12 sessions (18-24 hours) designed for group delivery. The aims of the program are to reduce the risk of re-offending, treat alcohol and/or other drug use to reduce dynamic risk and prepare and motivate offenders to participate in ongoing SMART Recovery® maintenance meetings. The program targets offenders with a medium or higher risk of reoffending.

In line with the accepted responsivity principle, Getting SMART adopts the widely used treatment model of Cognitive Behavioural Therapy. While participation is voluntary, prisoners are strongly encouraged by management to address their offending behaviour through participation in programs in order to progress through the security classification system and become eligible for parole. Therefore, this type of correctional program is more precisely defined as 'quasi-compulsory'.

The intensity of Getting SMART is lower than the 40 to 70 hours of intervention that is

NSW 2021 target to increase the completion rates of offender programs

typically ascribed to this program type. Notwithstanding, the program is a tier of a treatment pathway designed to facilitate enrolment in SMART Recovery® (self-help, recovery group modality).

### ***Program outputs, completion and referral rates***

During the period of the evaluation, 355 prisoners participated in Getting SMART across the six custody-based sites. The overall program completion rate was 83%.

Of the program non-completers (n=60), just over one in two (59%) dropped out of their own accord, while more than one in three (39%) failed to complete the program due to systemic factors (i.e. institutional transfers and releases from custody). Only one participant was removed from the program due to non-compliance.

On program completion, three in four (77%) participants were referred to another drug treatment program by their program facilitator. More than half of the referrals (57%) were to SMART Recovery®.

### ***Participant characteristics - reaching the target population***

The program participants were male with an average age of 33 years and 16% were of Indigenous background. Approximately 60% of participants had a history of prior imprisonment, 76% had a prior violent conviction(s) and 77% had a recidivism risk level of 'Medium' or higher (as assessed by the Level of Service Inventory – Revised, LSI-R). An additional 7% had an LSI-R Alcohol or Other Drug needs domain score of five or more, which made them eligible for the program.

Two in three participants (66%) had a history of drug treatment, having spent a median of nine months in treatment. Almost one in three (31%) participants had previously participated in a residential drug treatment facility.

Around three in four (74%) participants were rated as dependent on their main problem drug prior to the current prison term. Alcohol (37%) was the most commonly reported main problem drug, followed by amphetamine (25%), heroin (16%) and cannabis (16%).

In the three months prior to custody, 56% of participants had used an illicit drug on four or more days per week and 52% of participants had used a 'heavy-end' drug (heroin, amphetamine or cocaine).

Users of 'heavy-end' drugs were found to have higher needs than the other participants. They were significantly more likely to be drug dependent ( $p < .05$ ) and have poor social functioning ( $p < .05$ ) and less likely to have held employment ( $p < .05$ ) prior to their current prison term.

Over one in four participants (28%) reported using illicit or non-prescribed drugs during their current prison episode.

As a measure of co-existing disorder, 48% also had mental health needs (ranging from some to considerable) according to the LSI-R.

In total, more than eight in ten participants (84%) met the program eligibility criteria (either 'Medium' or higher recidivism risk or a domain score of five or more on the LSI-R). Of the remaining participants, some appeared to be valid treatment candidates based on their baseline assessment (DATOP). A nominal number (n=9), appeared not to have any drug treatment needs.

In terms of motivation to change, most participants were assessed as program ready, with 70% ranked in the Action stage of resolution of the problem behaviour, and a further 27% ranked in the Contemplation stage (based on the Readiness to Change Questionnaire).

'Heavy-end' drug users had higher treatment needs than other participants

Pre-program risk factors were younger age and poor social integration



## ***Factors associated with program non-completion***

The application of multivariate logistic regression identified younger age (19-24 years;  $p < .005$ ) and poor social integration prior to custody (a composite measure of housing, employment, relationship stability and involvement in drug culture;  $p < .005$ ) as **participant factors** significantly predictive of program dropout, after adjusting for other risk factors.

**Program factors** significantly predictive of program dropout, after adjusting for other risk factors, were automatic release from prison (i.e. release to freedom or a court-based parole order) versus conditional release ( $p < .005$ ) and entry into the program less than four months proximal to release from prison ( $p < .005$ ). Specifically, participants were more likely to drop out of the program if their release from prison was imminent or not subject to official review.

Of those participants whose release was subject to review by the State Parole Authority (SPA), 9 in 10 completed the program. This result was most likely due to the effect of making release from prison contingent on the successful completion of programs.

## ***Participant feedback – expectancies and satisfaction***

While the majority (81%) of program completers lacked confidence at baseline with regard to achieving their main program goal, 73% stated they achieved their main goal at program completion. Almost all completers (99%) reported the program was useful in terms of addressing their drug problem. However, some participants questioned the relevancy of the program's content, chiefly the focus on illicit drug use. This finding was consistent with the fact many program participants cited alcohol (37%) as their main problem drug.

The overall high level of participant satisfaction may help to explain the high rate of program completion.

## **Conclusions**

To be eligible for participation in offence-related rehabilitation programs, NSW offenders should be assessed as having a re-offending risk level of 'Medium' or higher. This eligibility criterion adheres to the 'Risk' principle which directs available services towards medium to high risk offenders. Getting SMART is of moderate intensity, indicating that ongoing treatment would be required for the participating offenders according to the Risk principle.

The evaluation found that a substantial number of program participants not only had significant criminogenic needs relating to drug misuse, but needs in the areas of education and social functioning and integration (employment, housing and relationship stability). However, more than one-tenth of participants (16%) in this study did not meet the program's stated eligibility criteria.

The key aim of the current evaluation was to identify factors impacting program completion in order to assist refinements in program conditions and maximise treatment effects. Of the participant baseline measures, poor social functioning and younger age (19-24) were the only factors significantly impacting program retention, after adjusting for other risk factors. The inclusion of additional preparatory work prior to participation in the program or adaptations to the program may improve the responsiveness of the program these offender groups. In turn, these refinements to the program may improve program completion rates.

Significantly more program completers than non-completers had serious offences. This was likely a result of the effect of conditional parole release on program retention rates.

Protective program factors were prison release subject to official review and a sentence of four months or more remaining

Conditional release to parole by the State Parole Authority was the most significant predictor of program completion. This finding indicates that offender motivation to complete the program was strongly influenced by the perception that completion of the program would improve their prospects of being granted parole.

Willingness to change and personal motivation to complete offence-related programs has been correlated with program success. However, external motivators, such as meeting parole requirements, may reduce the long-term effectiveness of custody-based interventions. Personal motivation may be improved through the inclusion of preparatory work, such as motivational interviewing, prior to program commencement. Increased personal motivation to complete programs is likely to improve the long-term effectiveness of programs.

Stage of sentence was significantly related to program success, with participants in the last four months of their term of imprisonment less likely to complete the program. Program entrants with less than four months imprisonment remaining were significantly less likely to complete the program. This was directly related to the custodial setting in which the programs took place. A substantial proportion of program non-completers dropped out of treatment as a result of institutional transfers and releases from custody.

Implications for whole-of-sentence planning point to the importance of factoring into program admission criteria the stage of prison term at which participants commence moderate intensity programs.

Getting SMART is a moderate intensity program that was designed to facilitate ongoing participation in SMART Recovery® maintenance meetings. The majority of program participants in this study had a medium to high risk of re-offending, complex needs, unsuccessful outcomes from prior drug treatment and low confidence at program entry. While the overall completion rate of the program observed in this study was acceptable, responsivity factors have been identified that could improve motivation to participate in and complete this and other programs. In conclusion, it is considered important that any program gains from Getting SMART as a moderate intensity program are consolidated with ongoing and multi-faceted interventions, both in custody and the community.

## Proposed Markers for Program Improvement

The evaluation findings highlighted a number of potential markers for improvement that could be considered to refine Risk, Need and Responsivity (RNR) strategies and whole-of-sentence planning for moderate intensity, group-based drug treatment programs.

### 1. Proper pre-program assessment

- 1.1 Administer standardised, pre-program assessments and in-program progress assessments to treatment candidates to identify potential responsivity considerations such as treatment history, high risk drug use behaviour, motivation and self-efficacy to assist program facilitators in targeting assistance to individual needs.
  - Consistent with duty of care requirements and standards in the broader drug treatment field, health risks, such as injecting drug use, needle sharing behaviour and the associated transmission of blood-borne viruses be addressed in pre-program assessments.

### 2. Increasing program readiness at baseline

- 2.1 Increase participants' change readiness at baseline with measures such as Motivational Interviewing (MI).
  - This may provide benefits that are twofold;
    - i) Maximise program gains for participants completing the program due to an external influence such as conditional release to parole, and

- ii) Improve retention rates for participants lacking an incentive to complete the program.

### 3. Preparatory and/or adapted programs for younger offenders and ancillary interventions to address social integration needs

- 3.1 Provide preparatory or adapted programs for younger offenders and ancillary interventions to address social integration needs which might serve to maximise the ability of such offenders to engage with and benefit from drug treatment.
  - Findings suggested the importance of utilising resources differentially to manage participants according to their particular treatment needs.

### 4. Program timing in relation to release (temporal intensity) and placing a no-transfer hold on participants until program completion

- 4.1 Match moderate intensity, psycho-educational programs to an appropriate stage of a prison term, when offenders are less likely to dropout and program gains can be reinforced with subsequent maintenance meetings or other appropriate interventions.
- 4.2 Place a no-transfer hold on participants until program completion to minimise the impact of institutional transfers on program non-completion.

### 5. Targeted program content

- 5.1 Incorporate relevant material and examples in the delivery of drug treatment programs to address the specific criminogenic needs of participants with a main problem drug of alcohol and/or cannabis, especially where these individuals form a significant proportion of the group.
- 5.2 Monitor drug use at regular intervals before, during and after time in program in line with the aims of CSNSW drug treatment programs to address drug use.
- 5.3 Implement contingency management strategies, such as structured incentives within the latter stages of the program to encourage program retention.

### 6. Linking correctional outcomes to program completion

- Findings indicated that prisoners were significantly more likely to complete treatment due to an external condition (conditional parole release).

### 7. Ensuring program integrity

- 7.1 Conduct ongoing independent program fidelity reviews to ensure the program is being implemented in-line with its design.
- 7.2 Introduce verification procedures to ensure accurate enrolment data in official records to mitigate data quality issues in reporting on program activity.
  - Record systematically, the reasons for program dropout, both voluntary and involuntary discharges and also completion.
  - Understanding why participants remain on program may be as informative for responsivity strategies as understanding why they choose to dropout.



# 1. Introduction

In Australian correctional settings, rehabilitative efforts for drug-involved offenders often involve the provision of programs that address drug misuse as a dynamic risk factor for offending. As part of this endeavour, it serves to determine ways of increasing program completion rates to maximise treatment effects. This consideration is the focus of the current report.

## 1.1 Program Retention

An attrition rate of 25% is considered typical for correctional programs overall (Losel, 2001). However, the literature reports large variance in completion rates for offender-focused programs (Polaschek, 2010). Programs delivered in prison often report higher rates of successful completion compared to community corrections samples (McMurran & McCulloch, 2007).

### ***Program Completion and Recidivism Risk***

Aside from recidivism, a key measure of treatment failure in the context of offender programs is program attrition (Day et al., 2006). Program attrition represents loss, not only in terms of cost and efficiency, but also in terms of an offender's future prospects. There is evidence of higher recidivism rates among program dropouts compared to program completers (Heseltine et al., 2011, Olver et al., 2011, Hollin and Palmer, 2009, Passey et al., 2007, Stevens et al., 2003). There are also findings that program dropouts are at higher risk of recidivism than untreated offenders, even when they have a similar reoffending risk, which is referred to as the non-completion effect (Olver et al., 2011, McMurran and Ward, 2010, Hollin and Palmer, 2009, Passey et al., 2007). One meta-review further suggested that retention in treatment could be used as a proxy measure for long-term treatment outcomes (Stevens et al., 2003).

While evaluations have identified reduced risk of re-offending among offenders who complete their treatment, many of these evaluations have omitted data on those offenders who do not complete treatment (Polaschek, 2010). Examination of program non-completers can be useful in providing additional information about program effectiveness and could identify areas where a program could improve the effectiveness of its service (Polaschek, 2010).

### ***The Risk, Need and Responsivity (RNR) Model***

The principles of Risk, Need and Responsivity (RNR) are used to guide effective interventions to reduce the risk of recidivism (Andrews and Bonta, 2010). These principles form the RNR model which is the dominant rehabilitation theory guiding cognitive-behavioural offender programs based on the 'what works' and 'what works for whom' (i.e. differential treatment) evidence base (Polaschek, 2011).

According to the risk principle, program intensity should be matched to offenders' risk of re-offending, while the needs principle maintains that treatment should target dynamic risk factors (otherwise known as criminogenic needs) that are conducive to criminal behaviour. The responsivity principle focuses on how interventions can be delivered to maximise the ability of offenders to learn from the interventions. This principle comprises two approaches; general responsivity, which promotes the application of cognitive social learning methods to teach new behaviours; and specific responsivity, which endorses tailoring programs to address offenders' specific learning styles and abilities, motivation levels and personal attributes such as demographic and personality factors. This approach also advocates identifying other individual needs and issues that may prevent a person from benefiting from an intervention and which may need to be addressed prior to or concurrently with the program (Kennedy, 2000).

## Factors Associated with Program Retention

The literature provides mixed results regarding predictors of program completion or attrition in offender programs. Often these identified predictors of program completion have reflected the considerations of the criminogenic Risk, Need and Responsivity model.

### Individual Factors

Several studies have shown that offenders with higher re-offending risks and criminogenic needs are more likely to drop out of drug treatment. Background characteristics associated with program dropout have included younger age, unemployment, less education, co-occurring psychiatric illness, more severe drug problems, prior criminal involvement, peer deviance and poorer family and social integration (Clifford, et al., 2002; Evans, et al., 2009).

A prior study of NSW prisoners in drug treatment also identified a psychological factor, namely suicidal ideation as a responsivity variable affecting program retention, in addition to the factors of 'heavy-end' illicit drug use (heroin, amphetamine or cocaine) and concurrent employment during time in program (Kevin, 2011). This study found suicidal ideation and 'heavy-end' illicit drug use increased the odds of program attrition, while the inclusion of employment as a program element increased the odds of program completion. In another report, Fishbein and colleagues (2009) found that impulsivity was significantly associated with program attrition. However, the available literature on the influence of psychological factors on program completion has been equivocal. There is some evidence indicating that specific responsivity issues such as depression, self-esteem, intelligence, ethnicity and sexual abuse are unrelated to program completion for offenders (Hubbard, 2007).

### Responsivity Factors

A number of studies that identify program attrition predictors also recommend a greater adherence to responsivity considerations on the basis that program dropouts had higher risk and needs (Lang and Belenko, 2000; Evans et al., 2009; Olver et al., 2011).

Lang and Belenko (2000) recommended integrating models of behaviour change and multimodal treatment approaches to address the comparatively more severe problems of program non-completers which were associated with a number of factors including but not limited to; lack of social conformity and close friends, psychiatric history, drug dealing income, higher need for employment counselling, unprotected sex, prior experience of gunshot or stabbing, and commencement of heroin use at an older age.

Hubbard's longitudinal study which measured the impact of individual characteristics suggested that utilising a cognitive-behavioural treatment approach assisted to "*negate the effects of offender personal characteristics on treatment success*" (2007; p 7). To improve program completion rates, Hubbard recommended applying the general responsivity principle and matching higher risk offenders to more intensive treatment. Similarly, Evans and colleagues (2009) recommended therapies to increase motivation, treatment engagement and retention, and to address special needs.

Olver and colleagues (2011) found program non-completers had higher risk/needs as predicted from formal risk assessment tools and a range of demographic, personality and criminal history variables. Notably, this meta-analysis found specific responsivity issues such as disruptive behaviour, denial and negative attitudes toward treatment were the strongest predictors of program attrition, while higher motivation and readiness to change predicted higher rates of program completion.

Finally, a study which incorporated multiple individual and program factors found that program satisfaction variables, particularly participants' perceptions of treatment utility, were salient in treatment retention (Fiorentine, et al., 1999). It is worth noting that in 2001

Studies have linked a broad array of individual characteristics to program attrition



the US Institute of Medicine integrated patient values (unique preferences, concerns and values) into its definitional framework of evidence-based practice.

## 1.2 Program Readiness

As evidenced in the literature, increasing an offender's 'readiness' to engage can have a positive effect on reducing program attrition (Heseltine et al., 2011). As such, an offender's motivation and treatment readiness should be considered as an important responsiveness factor in drug treatment, given this signifies their 'treatability' (Serin and Kennedy, 1997).

Prochaska and DiClemente's Stages of Change Model, also known as the Transtheoretical Model of Change, describes the stages through which an individual moves in the resolution of an addictive problem, namely *Pre-contemplation*, *Contemplation* and *Action* (Heather and Rollnick, 1993). This model, and various adaptations, has been widely applied in offender rehabilitation to explore individuals' motivation to change, and has proven to be clinically useful in guiding the treatment of addictions (Day et al., 2006). A relevant example is the large scale Australian Treatment Outcome Study (ATOS) which followed-up more than 500 community-based drug treatment participants and found that being in the 'Action' stage of motivation to change was a factor associated with subsequent 12 months continuous heroin abstinence (Darke, et al., 2005). For Taxman and Belenko (2012), enhancing the 'intrinsic motivation' of offenders is a distinct step preceding targeted interventions based on considerations of risk, need and responsiveness principles.

Motivational Interviewing (MI) has also been cited as an effective brief intervention that reduces reactance and enhances treatment engagement and motivation for change, particularly among drug misusing offenders (Lynch, 2006, Milkman and Wanberg, 2007, McMurrin and Ward, 2010). Notably, Polaschek (2011) stated that brief motivational interviewing interventions and preparatory programs can assist to prepare 'unready' offenders for treatments that require a degree of readiness, particularly highly structured, content focused and manualised programs that have little capacity to respond to differences in client readiness.

According to McMurrin and Ward (2010), assessing treatment readiness is different from gauging an offender's motivation per se, and should incorporate consideration of various offender, program and setting factors to better facilitate engagement in treatment. Addressing barriers to engagement may involve modifying the setting or modifying the program for an individual.

### **Mandated Treatment**

Studies of court mandated drug treatment and other corrections-based programs have shown the positive impacts of legal coercion on treatment outcomes, including reduced program attrition and recidivism rates (Clifford, et al., 2002). However, other studies have emphasised the importance of addressing problem recognition and willingness to change at the initial phase of treatment in correctional settings, given the higher proportions of involuntary clients (Farabee et al., 1999). Lynch (2006) similarly posited that coercion and social exclusion in correctional settings could undermine individual motivation for change. Interestingly, prior evaluations of drug treatment programs delivered to the NSW correctional population have identified that the majority of participants were already in the 'Action' stage of motivation to change at baseline, which was consistent with their prior exposure to drug treatment (Furby and Kevin, 2008; Kevin, 2011).

## 1.3 Summary

The literature suggests that maximising program retention and completion rates is not only cost effective, but also positively affects the behaviour of participants. While the evidence is mixed on what specific factors, either individual or program, are critical to program completion, age and motivation to change or program readiness have emerged as consistent moderators for program retention. Younger age has been flagged as a risk factor for program retention, while motivation to change has been flagged as a protective factor for program completion. There is also some confirmatory evidence to suggest that severity of drug use and poor social integration may pose risk for program retention and that concurrent employment programs may provide protection for program completion.

## 1.4 Evaluation Rationale

The association between drug misuse, crime and recidivism highlights the importance of further developing outcome evaluations of drug treatment programs delivered in correctional settings, in order to gauge treatment effects on offending behaviour.

In CSNSW, the research division developed the CTOS initiative to provide a broad evaluation framework for the agency to examine program retention as well as short and longer term outcomes of custody-based drug treatment programs, such as Getting SMART. As part of the CTOS initiative, pre- and post- program automated assessment interviews (from the Drug and Alcohol Treatment Outcome Procedures (DATOP) database) were routinely conducted to provide pre- and post- measures of change that can be analysed in future evaluations. The rationale for this design was that interview data obtained from discrete programs run throughout CSNSW could be aggregated to overcome sample size limitations and lend statistical power to evaluation results.

The current evaluation addresses NSW State Plan goals relating to the prevention and reduction of re-offending through increasing the completion rates of offender programs (NSW Government 2011). The related target entailed reviewing programs to 'identify ways to increase completion rates' (NSW Government 2011, p 35). In view of these goals, a primary focus of the current evaluation was to analyse program non-completion as an indicator of treatment failure.

Identify ways of increasing program completion rates to maximise program effects

## 1.5 Aims and Objectives

The main aim of the current study was to identify factors associated with program completion as a means of providing an empirical basis for improving completion rates and program outcomes.

The study's specific objectives are presented as evaluation questions as follows –

1. *What are the elements and characteristics of the program?*
2. *What is the overall program completion rate, how do completion rates vary across locations, and to what extent are participants referred to ongoing programs?*
3. *What are the characteristics of the participants and to what extent is the program reaching the target population?*
4. *What factors are predictive of program completion and what are the barriers to program completion?*
5. *Are the participants satisfied that the program has met their personal goals and expectancies?*



## 2. Method

### 2.1 Design

This evaluation was a prospective, observational study. The sample included 355 prisoners who participated in the Getting Smart program between April 2007 and October 2008. Structured baseline assessments were administered by way of personal interview to a sub-sample (n=291) of these participants to examine individual factors associated with program completion. Single case, repeated measures collected at baseline and follow-up (n=146) were used to examine expectancies and satisfaction.

### 2.2 Data Sources

The assessment data was drawn from the Drug and Alcohol Treatment Outcome Procedures (DATOP) database. The DATOP baseline assessment included a range of measures identified in reviews (Teeson, et al., 2000; Dawe, et al., 2002) as being associated with drug morbidity and treatment outcome. This assessment filled an information gap in the existing assessment process, covering patterns of drug use (prior to and during imprisonment), details of prior and current drug treatment, and participant perceptions and experiences. The DATOP also included standardised scales (see **Table A1**, Appendix) appropriate for identifying;

- drug dependency;
- social functioning;
- program suitability;
- immediate program effects on drug and crime-related cognitions.

Prior to the current evaluation, there were no baseline assessment procedures in place for the Getting SMART program aside from the eligibility criteria listed in the Appendix **Table A3** (LSI-R Alcohol & Other Drug domain scores, etc.). Program facilitators were trained in the administration of DATOP by the researchers and instructional materials were provided to promote reliability.

The baseline and post-program assessment data were supplemented with measures derived from the Offender Integrated Management System (OIMS) in order to examine additional criminogenic and demographic background information on program participants. Analysis of the data was performed utilising datasets which were derived from these two primary data sources; DATOP and OIMS (see **Figure 1**).

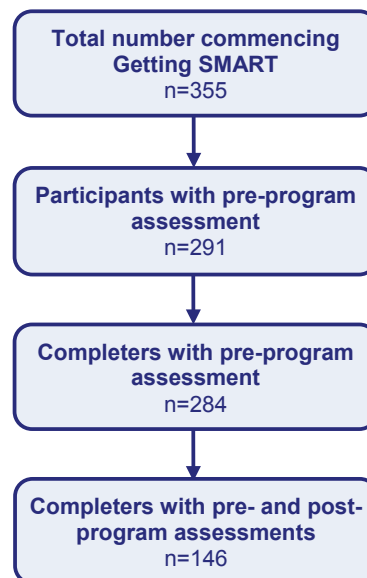
The data sets were as follows;

1. A whole of program dataset (n=355) containing all program participants<sup>1</sup>. OIMS was utilised to extract program outputs. Official records were retrospectively analysed to categorise the dropout reasons of program non-completers.
2. A DATOP subset, of participants with pre-program assessments (n=291) and matched post-program assessments (n=146).

This dataset was used to derive descriptive statistics on participant characteristics (n=291) and identify any participant or program factors that were predictive of program completion (n=284). It was also utilised to examine participant goals, expectancies and feedback.

Demographic and criminogenic variables for this subset were derived from OIMS.

**Figure 1: Description of the Evaluation Sample for Measuring Program Outcomes**



## 2.3 Statistical Analysis

Data analysis included descriptive statistics on program outputs, participant characteristics and participant goals. Although individual reasons for program non-completion were not consistently documented in official records, these data were retrospectively analysed using the following categories defined by Wormith and Olver (2002) as cited by Polaschek, 2010, p.526).

- a) **Client initiated dropout** – the client asks to leave the program;
- b) **Agency initiated exclusions/expulsions** – excluding clients perceived to be difficult or untreatable from continuing the treatment;
- c) **Administrative exits** – the client is unable to complete the program because of a systemic factor unrelated to program attendance (e.g. release from prison).

Chi-squared and t-tests were performed to analyse associations and differences between participant characteristics. To analyse program attrition, bivariate relationships between participant characteristics and the outcome measure of program completion were explored using the chi-squared statistic (tested at the .05 significance level). Univariate logistic regression was then applied to selected variables to identify whether they were predictive of program attrition. The variables were finally combined in a multivariate logistic regression model to identify the most parsimonious model of independent predictors for program attrition using the Statistical Package for the Social Sciences (SPSS) software.

The post-program interview comments of Getting SMART completers (n=146) were content analysed line-by-line to identify and code main categories and themes relating to program success or failure, in order to provide context to the quantitative findings.

<sup>1</sup> As enrolment information was unavailable for the entire study period, the evaluation sample was determined through matching program start dates and facilitators in the DATOP database with those contained in Getting SMART group attendance records, which were sourced from the Offender Services and Programs (OS&P) Data Reporting System.

## 3. Findings

### 3.1 Getting SMART - Program Elements and Characteristics

#### Development

Getting SMART (Self-Management and Recovery Training) is a moderate intensity group-based offender rehabilitation program of 12-sessions (18-24 hours) that is modelled on Dr Joe Gerstein's U.S. based abstinence program, SMART Recovery® (self-help, recovery group modality).

The CSNSW Offender Programs Unit developed Getting SMART in 2005 as part of its strategy to provide effective group-based offender programs that adhere to RNR principles (Corrective Services NSW, 2012).

The program was designed with the following aims and objective:

#### Aims

- To reduce the risk of re-offending
- To treat AOD use to reduce dynamic risk
- To prepare and motivate offenders to participate in SMART Recovery® maintenance meetings.

#### Objective

- To assist offenders in 'getting' or understanding SMART Recovery®.
- (Getting SMART, 2009)*

1. Motivation to Abstain
2. Urge Coping Skills
3. Problem Solving Skills
4. Lifestyle Balance

#### Approach

Consistent with the objective of Getting SMART, the program adopts a psycho-educational orientation to teach participants the cognitive-behavioural concepts, tools and techniques espoused by SMART Recovery®.

In line with the general responsivity principle, Getting SMART adopts the widely used treatment model of Cognitive Behavioural Therapy (CBT). It provides a structured manualised program in a group setting. Participants undertake group exercises, discussion and homework assignments over 12 sessions (one or two sessions per week). The program also provides a handbook for facilitators and a participants' handbook.

The self-help manual for participants includes SMART Recovery's® cornerstone 4 point program, which covers areas in which drug dependent offenders typically have difficulties: Motivation to Abstain, Urge Coping Skills, Problem Solving Skills, and Lifestyle Balance. The first stage of the program explores participants' motivation to change using the Stages of Change model, which is salient given the program's psycho-educational orientation and emphasis on self-empowerment as a means of recovery from addiction.

According to Polaschek's (2011) classification of rehabilitation programs, Getting SMART is a basic-level program given its psycho-educational orientation, group-style delivery and structured, manualised approach to treatment. However, the intensity of Getting SMART is lower than the 40 to 70 hours of intervention that is typically ascribed to this program type. Basic-level rehabilitation programs affect change through imparting skills and knowledge via 'limited practice', and it ultimately rests with the individual participant to apply learned behaviours outside the program (Polaschek, 2011; p 26). The key program elements of Getting SMART are summarised in **Table A2** (Appendix).

## Program Integrity

At the time of this evaluation, the division responsible for the development and delivery of offender programs (Offender Programs Unit - OPU) was also responsible for reviewing program integrity. According to agency documentation, the OPU provided program facilitators with training, ongoing support, quality monitoring and supervision (Corrective Services NSW, 2012). This included a program accreditation process, ongoing facilitator training and video observation of program implementation by facilitators. The practice of screening videotapes of program sessions is a technique often used to measure adherence to program manuals in basic-level rehabilitation programs (Polaschek, 2011). However, this approach presented the potential for bias as the program integrity assessments were not independent of program management. Notwithstanding this, Getting SMART is a structured, content focussed program with complementary facilitator and participant manuals, which augurs well for reliable program delivery and program fidelity. This delivery format carries the usual limitation associated with manualised programs, whereby responsiveness and adapting to local conditions may be comprised.

## Eligibility Criteria

While this evaluation principally focused on the impacts of Getting SMART as an Alcohol and Other Drugs (AOD) program, Getting SMART generally targets offenders with drug, alcohol and gambling addictions.

The eligibility criteria of Getting SMART stipulates that program entrants should have a re-offending risk level of Medium to High on the Level of Service Inventory - Revised (LSI-R) assessment. While Polaschek (2011) indicates that low intensity, rehabilitation programs are best offered to 'Low' to 'Medium' risk offenders, this criterion does adhere to the Risk principle whereby services are directed towards Medium to High risk offenders (Hollin and Palmer, 2009). Offenders with high risk/needs are thus provided priority access to available treatment resources. Program candidates with a score less than 'Medium' can also attend the program if their LSI-R AOD domain score is between 5 and 9, signifying a 'considerable need for improvement' in reference to their addiction problem. As a general rule, these offenders should not be mixed with offenders with a risk level of Medium or above.

Currently, there are no baseline or post-program tests administered for Getting SMART, however the CSNSW Compendium of Correctional Programs stipulates that participants should complete a pre-program interview to determine motivation, readiness and suitability (Corrective Services NSW, 2012).

Although participation in Getting SMART is voluntary, custody-based offenders are often strongly encouraged to complete rehabilitation programs as part of their case management plan in order to progress through the correctional classification system. As such, the program would be more accurately described as 'quasi compulsory'. On completion of the program, participants are eligible to attend SMART Recovery® maintenance meetings in custody or the community.

The program participation criteria of Getting SMART are summarised in **Table A3** (Appendix).

## 3.2 Program Outputs, Completion and Referral Rates

This evaluation identified 355 prisoners who participated in Getting SMART programs over the 18-month period of this study. Taking into account the absence of complete records, it was ascertained that 39 custody-based programs were delivered within the timeframe over 6 correctional centre locations. The majority of these programs (n=32) ran twice weekly over a six week period.

## Program Completion

As participants' completion status was commonly missing in program records, program 'completion' was defined by the statistical measure of 80-100% (i.e. completion of 10 to 12 sessions). Program 'non-completers' were defined as those prisoners who attended between one and nine sessions of the program. Of the 347 participants for whom program attendance records were available, 288 (83%) were regarded as 'completers' of the program, having completed at least 10 of the 12 sessions. Approximately 86% of Indigenous participants completed the program, compared to 82% of non-Indigenous participants.

**Table 1: Completion Status (n=355)**

Completion Status	No.	%
Completers	288	81.1
Non-completers	59	16.6
Unknown	8	2.3
<b>Total</b>	<b>355</b>	<b>100.0</b>

Base n=355  
(n=8 cases with indeterminate completion status)  
Source: OIMS & OPU

The overall program completion rate ranged from 71% to 90% across the six NSW correctional centres where the program was conducted. A breakdown of program numbers and completion rates by centre is shown in **Table 2**.

Of the 59 participants who failed to complete the program, the majority (59%) were client initiated or voluntary discharges, followed by administrative exits (39%) and one (2%) agency initiated exclusion/ involuntary discharge (see **Table 3**).

**Table 3: Non-Completion Types (n=59)**

Non-completion Type	No.	%
Client initiated dropout	35	59.3
Administrative exits	23	39.0
Agency initiated expulsions	1	1.7
<b>Total</b>	<b>59</b>	<b>100.0</b>

Source: OIMS & OPU.

Of total participants, 81% completed the program, 17% failed to complete the program and 2% had no completion status recorded (see **Table 1**)

**Table 2: Program Output**

Correctional Centre	Participants (No.)	Completions (No.)	Completion Rate (%)
St Heliers	126	109	86.5
Kirkconnell	95	73	76.8
Cessnock	72	65	90.3
Parklea	28	20	71.4
Wellington	14	12	85.7
John Morony	12	9	75.0
Unknown	8	-	2.3
<b>Total</b>	<b>355</b>	<b>288</b>	<b>83.0</b>

Base n=355 (8 cases with an indeterminate completion status).  
Source: OIMS & OPU.

Some reasons for 'client initiated dropout' or voluntary discharge included;

- preference for employment opportunities (n=6),
- inadequate literacy (n=3),
- lack of motivation/interest (n=3),
- changes in legal status (n=2),
- denial of AOD issues (n=1),
- distress over a personal issue (n=1), and
- disrupted attendance due to lock-ins (n=1).

Notably, 86% of program non-completers had a minimum security classification level (C2 or C3) compared to 73% of program completers ( $\chi^2=4.597$ ,  $df=1$ ,  $p<.05$ ). This classification level generally enables the participation of prisoners in a broader range of options, including correctional centre transfers, work release and other external leave, which may have impacted on voluntary dropout rates. While a high proportion (61%) of program completers (base=171) had undertaken employment during their time in

program, it is most likely these work placements were custody-based. The reasons for 'administrative exits' principally included; transfers to other correctional centres (n=14), and releases from custody (n=9). Significantly, 61% of those with administrative exits had less than four months imprisonment remaining at program entry, compared to 49% of voluntary program exits and 22% of program completers ( $\chi^2=25.921$ ,  $df=1$ ,  $p<.001$ ). With regard to 'agency initiated exclusions', or involuntary discharges there was only one case pertaining to a prisoner who was removed from the program due to 'immaturity'. This finding reflected the general practice of program facilitators to retain all participants in treatment where possible – including participants testing positive to illicit drugs (or non-prescribed medication) during time in program.

### **Pre- and Post-assessment Capture Rates**

Pre- and post-program assessment interviews were conducted by Offender Services and Programs staff who facilitated the programs across six NSW correctional centres<sup>2</sup>.

There was a shortfall in the number of assessments conducted on program participants and this was more pronounced at the post-program stage. Of the total evaluation sample (n=355), 291 participants were administered pre-program assessments, representing a capture rate of 82%. In addition, 171 of the 288 program completers (59%) were administered post-program assessments. Of these participants, 146 (51%) were administered both pre- and post- program assessments. Pre-program and post-program capture rates by correctional centre are listed in **Tables A4** and **A5** (Appendix).

### **Concurrent Program Participation and Ongoing Referrals**

Of those participants who completed post-program assessments, 71% reported undertaking additional programs (including work and education) during their time on the Getting SMART program. These activities are listed in **Table A6** (Appendix). More than three-quarters (77%) were referred to another program by their program facilitator. The most common referral type was further drug treatment (82%). Notably, 57% of those referred, were referred to SMART Recovery® maintenance meetings. These data contained up to 25% missing cases with some program completers failing to be referred due to imminent release, unavailability of further programs and other exceptional circumstances such as deportation.

## **3.3 Participant Characteristics**

The following section examines the background characteristics of the 291 participants (82%) who were assessed at baseline. These participants had approximately equivalent results when compared with the total participant sample (n=355) in terms of demographic characteristics and criminal history, indicating their representativeness of the total sample. Baseline demographic, criminogenic, and drug-related characteristics are summarised in **Table A7** (Appendix) and **Table 4**.

### **Participant Demographic and Criminal History**

Almost half (46%) the participants fell within the 25-34 year age group with the average being 33 years (range=19-61). The majority had never married (60%) and Indigenous participants comprised 16% of the sample (see **Table A7**, Appendix). Overall, the data showed that participants in the program constituted a high-risk group with complex needs, demonstrating their suitability for participation on the program. The majority of participants had prior contact with CSNSW, with close to two-thirds of participants (60%) having served prior custodial sentences, and 72% having served prior community orders. More than three-quarters (76%) of participants had a historical conviction for violence, and almost one-third (30.4%) had a principal offence for violence at the time of program

<sup>2</sup> Dillwynia CC was the sole correctional centre housing female prisoners that administered assessments within the period; however, due to the limited numbers of assessments, female-based Getting SMART groups were excluded from all analyses.



entry (see **Table A7**, Appendix). The eligibility criteria for Getting SMART stipulate that participants should normally have an LSI-R rating or re-offending risk level of 'Medium' or higher to qualify for the program. Of the participants with a recorded LSI-R rating (n=285, 98%), 77% had suitable LSI-R ratings of Medium, Medium-High or High. The majority (60%) of these participants had a rating of 'Medium'. Of those whose reoffending risk levels did not fall within the program eligibility criteria, 29% had LSI-R AOD domain scores of five or more which made them eligible for the program. In total, more than eight in ten participants (84%) met the program eligibility criteria. Of the remaining participants, some appeared to be valid treatment candidates based on their baseline assessment (DATOP). A nominal number (n=9), appeared not to have any drug treatment needs and were not suited to the program. Additional baseline assessment information indicates that over one-third (37%) of participants had less than 10 years of schooling, and less than half (44%) had full-time or part-time employment prior to their current sentence. In terms of motivation to change, most participants were assessed as program ready, with 70% ranked in the Action stage of resolution of the problem behaviour, and a further 27% ranked in the Contemplation stage (based on the Readiness to Change Questionnaire).

### ***Drug Use, Prior Treatment, Health and Social Factors***

Participants also showed high rates of drug dependency, frequent drug use, 'heavy-end' illicit drug use, custody-based drug use, poor social integration and mental health problems. As shown in **Table 4**, alcohol (68%) was the most commonly used drug in the three months prior to imprisonment. A substantial proportion of participants (48%) were illicit poly-drug users (using two or more drug types), while just over half (52%) reported using a 'heavy-end' drug (heroin, amphetamine or cocaine), and 56% reported using illicit drugs on four or more days per week (this rate was 72% including alcohol users). Notably, almost a third (32%) of participants reported that they had injected drugs, with the majority of users of heroin (80%) and amphetamine (58%) stating they injected these drugs. Cocaine users most commonly reported snorting (41%) or injecting (39%) the drug.

When asked to identify their primary problem drug, participants most commonly reported alcohol (37%). After alcohol, amphetamine (25%), heroin (16%), cannabis (16%), cocaine (4%) and pills (2%) were cited as participants' primary problem drug. While almost three-quarters (74%) of Getting SMART participants were scored on the Severity of Dependence Scale (SDS) as being dependent on their main problem drug, a significant proportion (68%) reported they had been able to abstain or control their use of drugs whilst in the community. As expected, a greater proportion of those who had not abstained were found to be dependent on their problem drug (83% vs. 70%;  $\chi^2=4.672$ ,  $df=1$ ,  $p<.05$ ). With regard to changing drug use behaviour in custody, a higher proportion of participants (86%) claimed they had abstained whilst serving imprisonment.

In the current prison term, 28% of participants reported use of an illicit drug on at least one occasion. Those who elected a 'heavy-end' drug (heroin, amphetamine or cocaine) as their main problem drug constituted 67% of participants who used illicit drugs (excluding cannabis) or non-prescribed medication during their sentence ( $\chi^2=8.680$ ,  $df=1$ ,  $p<.005$ ). It was additionally found that 'heavy-end' drug users were more likely than others to be drug dependent ( $\chi^2=7.596$ ,  $df=1$ ,  $p<.05$ ) and have poor social functioning ( $\chi^2=7.667$ ,  $df=1$ ,  $p<.05$ ) at baseline, and less likely to have held employment ( $\chi^2=6.853$ ,  $df=1$ ,  $p<.05$ ) prior to their current prison term.

Two thirds of participants (66%) reported receiving drug or alcohol treatment in the past. Of these participants, 80% were rated as drug dependent in the three months prior to imprisonment. While this indicates the majority of treatment receivers constituted a high needs group, around half (49%) reported that their total time in prior treatment was under nine months. The top four treatment modalities reportedly utilised by participants included rehabilitation/therapeutic communities (31%), counselling (30%), Alcoholics Anonymous /Narcotics Anonymous (26%) and detoxification units (24%). In addition, 13% had previously been hospitalised for treatment due to accidental overdose.

As a marker of co-existing disorder among participants, almost half (48%) had mental health needs (ranging from some to considerable) according to the LSI-R. As a

measure of social integration, 46% of participants were rated as having poor social functioning (based on their Social Functioning Scale score) prior to their current prison episode.

**Table 4: Participants' Drug Use Patterns, Drug Treatment Status, Health and Social Functioning**

Drug Use #	No.	%
<b>Drug Use in the Three Months Prior to Custody</b>		
<i>Alcohol</i>	193	68.0
<i>Cannabis</i>	160	56.3
<i>Amphetamine</i>	114	40.3
<i>Heroin</i>	55	19.4
<i>Ecstasy</i>	43	15.2
<i>Cocaine</i>	39	13.8
<i>Pills – Benzodiazepines</i>	33	11.7
<i>Other</i>	14	5.0
<i>'Heavy-end' drug use before custody</i>	152	52.2
<i>Poly-drug use (&gt; one illicit drug) before custody</i>	134	47.5
<i>Injecting illicit drug use before custody</i>	93	32.0
<b>Main Problem Drug (most common)</b>		
<i>Alcohol</i>	98	37.1
<i>Amphetamine</i>	66	25.0
<i>Heroin</i>	43	16.3
<i>Cannabis</i>	41	15.5
<i>Cocaine</i>	11	4.2
<i>Pills / benzodiazepines</i>	5	1.9
<b>Dependent on Main Problem Drug (SDS score)</b>	198	73.9
<b>Patterns of Abstinence</b>		
<i>Ever abstained or controlled their drug use</i>	239	92.3
<i>Abstained in prison</i>	223	86.1
<i>Abstained in the community</i>	176	68.0
<b>Drug Use During Current Prison Episode</b>	<b>75</b>	<b>28.1</b>
<i>Cannabis</i>	59	22.1
<i>Diverted medication</i>	21	7.9
<i>Heroin</i>	18	6.7
<i>Amphetamines</i>	15	5.6
<i>Diverted pharmacotherapy</i>	9	3.4
<i>Pills</i>	6	2.2
<i>Cocaine</i>	6	2.2
<i>Ecstasy</i>	3	1.1
<i>Alcohol</i>	2	0.7
<i>Hallucinogens</i>	1	0.4
<b>Prior drug or alcohol treatment</b>	<b>186</b>	<b>66.4</b>
<i>Rehabilitation unit / therapeutic community</i>	88	31.4
<i>Counselling</i>	83	29.6
<i>Alcoholics Anonymous (AA) / Narcotics Anonymous (NA)</i>	73	26.1
<i>Detox Unit</i>	66	23.6
<i>Methadone /Buprenorphine /Naltrexone</i>	52	18.6
<i>AOD CBT group program</i>	43	15.4
<i>Hospitalised for treatment of accidental overdose</i>	36	12.9
<i>Drink driving program</i>	26	9.3
<i>AOD information / awareness group</i>	22	7.9
<i>SMART Recovery</i>	4	1.4
<b>Mental health needs (LSI-R score)</b>	<b>136</b>	<b>47.9</b>
<b>Poor social functioning/integration (SFS score)</b>	<b>129</b>	<b>46.2</b>

Base=291. Data sources: DATOP database and OIMS. #Drug variables contain up to 10% missing cases. Missing, undecided and refusal cases were excluded – base numbers vary for each variable.



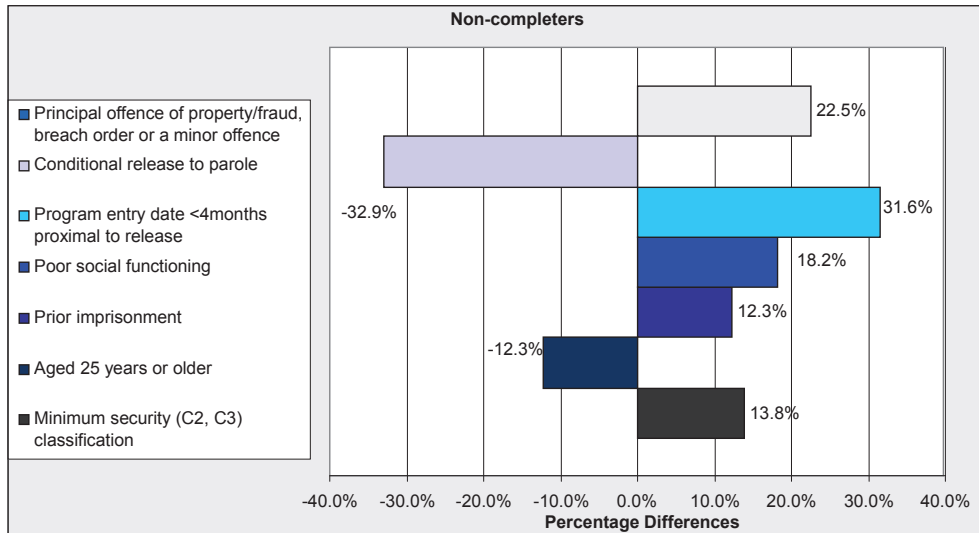
### 3.4 Factors Associated with Program Completion

#### Pre-Program Differences between Completers and Non-Completers

Within group analysis of the baseline characteristics of program completers and non-completers showed the two groups to have a similar profile on a range of factors including Indigenous background, prior violent convictions, years of schooling, marital status, prior employment, drug dependency, main problem drug, drug use/charges in custody, prior drug treatment, and treatment readiness level (Readiness to Change Questionnaire score). Those factors on which program completers and non-completers differed by more than 10% are shown in **Figure 2**.

When compared with completers, non-completers were more likely to show the following pre-program characteristics: imminent release from prison, poor social functioning, less serious offences, minimum security classification and prior imprisonment. Non-completers were also less likely to have their release from prison subject to conditional parole or to be 25 years of age or over when compared with completers.

**Figure 2: Main Factors of Difference – Program Non-Completers Referenced Against Completers as a Percentage Difference**



Base=284 (includes up to 6.5% missing entries)

Data sources: Drug and Alcohol Treatment Outcome Procedures (DATOP) database – CRES and OIMS.

#### Factors Associated with Program Completion

Exploring factors predictive of program completion through statistical modelling is useful in that it can identify those individuals suited to the program and also flag areas for program improvement. Multivariate logistic regression analysis was used for this purpose.

As an initial exploratory step, bivariate associations were examined on 22 individual and program factors with program outcome (completion or non-completion) as the dependent variable. A detailed breakdown of the bivariate analysis is shown in the **Table A8** (Appendix). Only a modest number of factors were found to be significantly associated with program outcome at the .05 level. It is worth noting that a number of these factors were included in the baseline assessment given their relevance to subsequent post-release outcomes.

**Three program factors;** conditional release to parole ( $p < .001$ ), time remaining in prison ( $p < .0001$ ) and security classification at program entry ( $p < .05$ ) were found to be significantly associated with program completion.

In addition, **three individual factors**; social functioning level ( $p < .05$ ), offence type ( $p < .05$ ) and age ( $p < .05$ ) were found to be associated with program completion.

Participants with a higher re-offending risk level (LSI-R score) had lower program completion rates by 7%; however, this difference was not statistically significant.

As expected, these findings on factors associated with program outcome corresponded with the within-group differences between completers and non-completers observed in **Figure 2**.

### **Factors Independently Predictive of Program Completion**

Those factors identified in the bivariate analysis as being associated with completion were retested using univariate logistic regression in order to identify if they were predictive of completion. In addition, the prior imprisonment variable was retained in the analysis due to its near statistical significance at the .10 level. To identify the subset of independent predictors that provides the best predictive power, these variables were then fit using multivariate logistic regression with backward elimination and an inclusive cut-off of 10%. The variable of Indigenous background was also included in the multivariate analysis as a control variable.

The final logistic regression model indicated that the odds of program attrition were higher for participants with the characteristics listed below.

#### **Key risk factors associated with program non-completion ( $p < .05$ )**

- *Automatic release from prison as opposed to conditional release*
- *Program entry date less than four months proximal to release*
- *Younger age (18-24 age group)*
- *Poor social functioning*

The program factor of automatic release from prison refers to those program participants who were released to freedom, a court-based parole order or other community order at the end of their custodial sentence. As a general rule, prisoners with court-based parole orders serve a custodial sentence (comprising a parole and non-parole period) of up to three years in duration and their release to parole is automatic. Alternatively, prisoners with State Parole Authority (SPA) parole orders serve a custodial sentence that is longer than three years and their release to parole can be subject to various conditions including the completion of relevant rehabilitation programs. In view of this, prisoners with comparatively more serious offences (and thus longer sentences and conditional release to parole) would arguably have had a stronger incentive to complete the program, when compared with prisoners who were released to freedom or automatic parole. Overall, 93% of participants with a SPA order completed the program, compared with 74% of other participants.

The final model was statistically significant ( $\chi^2 = 40.739$ ,  $df = 4$ ,  $p < 0.001$ ) and the Hosmer-Lemeshow statistic was indicative of a good model fit ( $\chi^2 = 7.308$ ,  $df = 6$ ,  $p = 0.293$ ). Further, the Area under Curve (AUC) statistic was .771 which indicated the model discriminated program completers from non-completers at an acceptable level. The results of both the univariate and multivariate logistic regression analyses are shown in **Table 5**.

**Table 5: Univariate and Multivariate Analysis of Participant and Program Factors Predictive of Program Completion**

Factors	Univariate Logistic Regression		Multivariate Logistic Regression	
	P Value	Odds Ratios (95% Confidence Interval)	P Value	Adjusted Odds Ratios (95% Confidence Interval)
<b>Conditional release to parole vs. automatic release to freedom or parole</b>	.000	4.367 (2.083-9.154)	.001	3.977 (1.753-9.026)
<b>More than 4 months imprisonment remaining at program entry vs. less than 4 months imprisonment remaining</b>	.000	4.006 (2.109-7.609)	.001	3.407 (1.673-6.941)
<b>Principal offence</b>	.042			
Breach				
Property/fraud	.868	.905 (.279-2.937)		
Driving	.324	.523 (.144-1.897)		
Violence	.481	1.513 (.479-4.776)		
Robbery	.160	2.677 (.680-10.307)		
Drug law*	.122	3.088 (.739-12.910)		
<b>Above average social functioning (scale score) vs. poor social functioning</b>	.023	2.089 (1.109-3.933)	.030	2.150 (1.075-4.301)
<b>Age 25+ vs. Age 18 – 24</b>	.030	2.257 (1.081-4.711)	.004	3.785 (1.544 -9.279)
<b>Higher Security Classification vs. Minimum Security Classification</b>	.057	2.286 (.977-5.350)		
<b>First time in custody vs. prior imprisonment</b>	.088	1.796 (.917-3.519)		
<b>Non-Indigenous background<sup>1</sup> vs. Indigenous background</b>	.280	.580 (.216-1.558)		

Base = 291 (8.9% (n=26) missing cases). Data sources: Drug and Alcohol Treatment Outcome Procedures (DATOP) database– CRES and OIMS – CSNSW. \* Most of the drug law offences were for supply or manufacture. <sup>1</sup> Indigenous background was included in the multivariate analysis as a control variable.

## 3.5 Participant Feedback

### *Personal Expectancies*

In view of previous studies linking participant expectations and satisfaction with program outcomes, the attitudes and impressions of program participants were canvassed in the current evaluation.

The pre-program assessment interview for Getting SMART included questions designed to ascertain what participants hoped to achieve from the program. The response set allowed for more than one response.

According to the responses of program completers with matched pre- and post- program assessments, the most commonly identified goals at program entry were:

- Drug free – outside (79%)
- Information/education (70%)
- Stop offending/legal (66%)
- Improve relationships (66%)
- Improve health (63%).

Program participants were then asked if they were confident the program would assist them in achieving their main goal. This question included a response set with a Likert-type scale.

Of those who commenced the program, 76% were either 'Lacking confidence' or 'Not at all confident' that they would achieve their main program goal. Similarly, the majority of program completers with matched pre- and post-program assessments responded they were 'Lacking confidence' at 41% or 'Not at all confident' at 40%. The responses of program completers are shown in **Table 6**.

**Table 6: Participants' Confidence Level at Program Entry in Terms of Achieving Personal Goals**

Level of confidence that main goal would be achieved in program	No.	%
Very confident	2	1.4
Fairly confident	1	0.7
50/50	24	17.0
Lacking confidence	58	41.1
Not at all confident	56	39.7
<b>Total</b>	<b>141</b>	<b>100.0</b>

Base=146 (5 missing cases)

Source: Alcohol, Drugs and Addictions: Screening, Assessment and Evaluation Data Base – CRES, CSNSW.

### Program Satisfaction

While, at baseline, the majority of program completers lacked confidence with regard to achieving their main program goal, upon completion, half of the completers were of the opinion that their main goal had been achieved 'to a large extent', and 23% stated their main goal had been achieved 'almost completely'. Furthermore, nearly all program completers stated that they found the program either 'very useful' (59%) or 'fairly useful' (40%).

The responses of program completers relating to the achievement of their main goal and utility of the program are shown in **Tables 7 and 8**.

In addition to the closed-ended questions, the post-program assessment included six open-ended questions which were designed to elicit participants' impressions of program effectiveness in their own words. Program completers were asked what they had learnt from the program, and what they had found useful and not useful in terms of changing their drug use.

**Table 7: Participants' Perception of the Extent to which they Achieved their Main Program Goal**

Extent to which program completers achieved their main program goal	No.	%
Almost completely	32	22.9
To a large extent	70	50.0
To a reasonable extent	35	25.0
To a small extent	3	2.1
Not at all	0	-
<b>Total</b>	<b>140</b>	<b>100.0</b>

Base = 146 (6 missing cases)

Source: Alcohol, Drugs and Addictions: Screening, Assessment and Evaluation Data Base – CRES, CSNSW.

**Table 8: Participants' Perception of Program Utility at Program Completion**

Perceived utility of program	No.	%
Very useful	83	58.9
Fairly useful	57	40.4
Neither	0	-
Not very useful	1	0.7
Not at all useful	0	-
<b>Total</b>	<b>141</b>	<b>100.0</b>

Base=146 (5 missing cases)

Overall, the feedback of program completers was primarily positive (See **Figure 4** for quotes). Just over half (56%) of program completers had no criticisms to offer when asked to comment on non-useful program elements. Those program features most commonly cited by program completers as most useful and least useful are outlined in **Figure 3**.

These qualitative findings suggested participants benefited from the CBT techniques employed in the Getting SMART program, particularly with regard to changing their thinking patterns, beliefs and attitudes. Participants also cited skills learnt in the areas of

urge coping/relapse prevention, and to a lesser extent, goal setting and problem solving, with some participants desiring more comprehensive coverage of program topics. In addition, some participants referred to the benefit of listening to others' experiences in the group and desired the provision of more relatable examples in the program material. The issue of relevancy was further reflected in the feedback of some participants who questioned the focus on illicit drug use. This finding was consistent with the fact many program participants cited alcohol (37%) as their main problem drug.

**Figure 3: Most Useful and Least Useful Features of Getting SMART According to Participants**

**Program features most commonly perceived as useful:**

- *Changing thinking patterns and practising consequential thinking (n=59)*
- *Gaining an awareness of the possibility to choose an alternative way of living and the availability of support (n=46)*
- *Skills for coping with urges to use drugs and relapse prevention (n=45)*
- *Challenging negative thinking and irrational beliefs (n=39)*
- *Positive thinking and developing a sense of self-acceptance and self-belief (n=31)*
- *Goal setting (n=29)*

**Program features most commonly perceived as least useful or program limitations:**

- *The Six Thinking Hats® technique (problem-solving) required more explanation (n=13)*
- *The focus on illicit drug use was irrelevant to the addiction problems of some participants (n=9)*

**Figure 4: Quotes - What Program Completers Gained from Getting SMART**

***“That it wasn’t focused on the past, but on what I can do in the future”***

(35 years of age, main problem drug amphetamine, serving a minimum term of 12 months for Break and Enter Building Commit Serious Indictable Offence, LSI-R risk level Medium)

***“Finding out there is a range of other options I can do rather than using drugs”***

(41 years of age, main problem drug heroin, serving one year, 9 months Balance of Parole for Rob with Offensive Weapon, LSI-R risk level Medium)

***“Being reminded how good it feels to be clean”***

(37 years of age, main problem drug amphetamine, serving four months for Stalk/Intimidate with Intent to Cause Fear Physical/Mental Harm, LSI-R risk level Medium-Low)

***“How my thinking affects my outcomes”***

(28 years of age, main problem drug cannabis, serving a minimum term of six months for Break and Enter with Intent to Steal, LSI-R risk level Medium)

***“Confirming on a high level that I have moved on from my addictions to positive thinking”***

(40 years of age, main problem drug cocaine, serving a minimum of term of 30 months for Break and Enter Building Commit Serious Indictable Offence (2 counts), LSI-R risk level Medium-High)

***“Start to think about myself in another narrative”***

(54 years of age, main problem drug heroin, serving a minimum term of 48 months for Rob whilst Armed with Dangerous Weapon (2 counts), LSI-R risk level Medium)

## 4. Discussion

The broad evaluation framework of the Corrections Outcome Study (CTOS) provided the context for this evaluation, which aimed to identify factors associated with successful program completion and make recommendations to improve program completion rates. This study's objectives were to examine program elements and characteristics, participant population appropriateness, factors predictive of program completion and participant perceptions relating to the Getting SMART program. Participants in the evaluation sample attended the program across a range of custodial sites where they were taught cognitive-behavioural skills and techniques to achieve the program goal self-directed recovery from addiction.

The evaluation found that program participants not only had significant criminogenic needs relating to drug misuse, but needs in the areas of education, social functioning and integration (employment, housing, relationship stability and immersion in the drug culture). 'Heavy-end' users (heroin, amphetamine or cocaine) were significantly more likely than other participants to be drug dependent and have poor social functioning and less likely to have held employment. These factors, such as patterns and severity of drug use and also drug treatment history are not measured in the LSI-R or considered in the program's eligibility or suitability criteria. Current findings suggest that the use of baseline drug assessments could improve responsiveness, particularly decision making around participant program matching.

As more than 80% of the participant sample who commenced Getting Smart went on to successfully complete the program, the program completion rate was encouraging. This finding is consistent with the 25% attrition rate considered typical for correctional programs overall.

The overall high level of participant satisfaction may help to explain the rate of program completion. According to participants, positive cognitive thinking styles and skills acquisition in the areas of urge coping and relapse prevention were the most useful program elements. Furthermore, program participants were not treatment naive as two in three had a history of drug treatment on entry to Getting SMART. Exposure to prior drug treatment may well have contributed to the high prevalence of change readiness among program entrants.

A key finding of this evaluation was that program completers and non-completers did not differ significantly on most criminogenic need variables, with the exception of poor social functioning. This finding supports prior evidence indicating the adverse effect of variables such as poorer family and social functioning, and lack of social conformity and close friends on program retention rates (Evans, et al., 2009; Lang and Belenko, 2000). The other personal characteristic found to be independently predictive of program non-completion was younger age (aged 19-24), which is also consistent with the research evidence already cited.

Although the measures used in the current evaluation are not directly comparable with those used in other studies, the factors of younger age and poor social functioning may be viewed as compatible with the program attrition predictors of impulsivity, disruptive behaviour, denial and negative attitudes as identified in other studies. Notably, the retrospective analysis of dropout reasons indicated only one prisoner failed to complete the program due to an agency-initiated exclusion or non-compliance, which was attributed to his 'immaturity'. These findings suggested the potential merit of addressing younger age and poor social functioning as responsiveness considerations to assist prisoners with these characteristics to better engage with treatment. Further, the confirmatory evidence of prior studies signifies that efforts aimed at improving the social capital of drug-related prisoners through education and employment can serve to maximise their rehabilitation.



## ***The Influence of Sentence-Related Factors on Program Retention***

A prominent finding from the program attrition analysis was the influence of sentence-related factors on program retention rates. Participants who were conditionally released by the State Parole Authority to parole were more likely to complete the program. These offenders typically have a more serious principal offence compared to participants who were released automatically to freedom or a court-based parole order. As a result, more serious offenders were more likely to successfully complete treatment.

This finding indicates that offender motivation to complete the program was strongly influenced by the perception that completion of the program would improve their prospects of being granted parole.

As noted in the Introduction to this report, willingness to change and personal motivation to complete offence-related programs are highly correlated with program success. However, external motivators, such as meeting parole requirements, may reduce the long-term effectiveness of custody-based interventions. Personal motivation may be improved through the inclusion of preparatory work, such as motivational interviewing, prior to program commencement. Increased personal motivation to complete programs is likely to improve the long-term effectiveness of programs.

In the current study, higher risk prisoners (Medium or higher reoffending risk level) did not have significantly higher program attrition rates when compared with lower risk prisoners. Current findings supported the effect of conditional release on program retention and marked a departure from previous studies which found a stronger link between higher risk prisoners and program attrition.

Another sentence-related factor affecting program retention was the stage of sentence. Participants with less than four months imprisonment remaining at the time of program entry were less likely to complete the program compared to those with more than four months left to serve. It was noteworthy from the retrospective analysis of participant dropout reasons that more than one third of program non-completers failed to complete due to systemic factors such as institutional transfers and releases from custody. These types of movements more commonly occur at the beginning or end of a prison sentence, which was exemplified by the finding that two-thirds of program non-completers with administrative exits had less than four months imprisonment remaining at program entry. These findings highlighted the importance of minimising non-completion caused by systemic factors, such as institutional transfers when a prisoner commences drug treatment.

More than three in four program non-completers had a minimum security (C2, C3) classification level, which generally enables prisoners nearing the completion of their prison sentences to participate in a broader range of programs including work release and other external leave programs. While the retrospective analysis of dropout reasons was limited by incomplete records, almost one in five non-completers discontinued the program due to their preference for work opportunities. However, a high proportion of program completers worked while they completed the program in Corrective Services Industries. Bivariate analysis of the effect of employment on program completion was precluded as this information was only available for program completers with post-program assessments. Kevin (2011) found that combining employment with drug treatment produced higher program completion rates. Therefore, this is an area warranting further exploration.

## ***The Influence of Individual Factors on Program Retention***

From the range of demographic and psycho-social characteristics examined, only age and social functioning were found to be independently predictive of program completion after controlling for other risk factors. The results showed that program completers and non-completers did not differ significantly based on the type or severity of their drug problem. It is possible that type and severity of drug problem are more influential in post-

release outcomes. Significantly more 'heavy-end' drug users were drug dependent, used illicit drugs in custody, and had social integration problems prior to their current prison term when compared with those who did not use these drugs. On the other hand, program participants most commonly reported alcohol as their main problem drug with some program completers providing feedback that the focus on illicit drug use was irrelevant to their drug problem. Some program completers wanted more comprehensive coverage of the program topics.

These findings suggested that while the program content addressed the needs of 'heavy-end' drug users, these prisoners required more intensive and broad based interventions for improved longer-term outcomes. Whereas, program participants with an alcohol and/or cannabis problem may have benefited from more specific references to their criminogenic needs.

The study found that the majority of participants were in the desired stage of program readiness at program entry. This is consistent with findings that the majority of program participants had taken part in prior drug treatment, it is not surprising that most were also in the desired stage of program readiness at program entry. In the program attrition analysis, the factor of change readiness had no significant impact on program retention rates. However, conditional release alone may not be sufficient to improve longer-term behavioural outcomes and increasing responsiveness through addressing change readiness appears warranted according to the literature.

### **Limitations**

The principal limitations arising from this evaluation related to the sample size. Due to the high program completion rate of the sample, only a small number of non-completers were available for the comparative analysis of changes in institutional behaviours between program completers and non-completers. As a result, conclusive inferences could not be drawn in these areas of enquiry. It is further noted the analysis of dropout reasons for program non-completers was retrospective in nature and reliant upon existing program records which included incomplete information. Also, due to resource limitations non-completers were not followed-up on their views of the program.

There was missing information evident in the assessment procedure. The capture rate for Getting SMART pre-program assessments was acceptable. However, the rate of post-program assessments was less satisfactory. It is further noted that only a small number of recorded assessments were available for female participants of the program; as a result females were excluded from the evaluation which created a gender bias.

As an outputs and outcomes focussed study, this evaluation did not examine program fidelity in detail or obtain staff perspectives to explain program success or failure. The focus was rather on exploring the effect of a wide range of measures with regard to program completion and short term program effects. The CTOS framework has enabled the examination of previously unavailable measures, which has led to new findings. Although the CTOS evaluation framework originally allowed for the examination of both program delivery and outcomes, program management had the remit for assessing program integrity at the time of the current evaluation, which involved the use of observational techniques of program delivery and the program accreditation process. The current study can offer no empirical evidence of program fidelity. As the program is conducted at many sites, by many facilitators outside the supervision of the program developer there are inherent risks to program fidelity. Conversely, the program constitutes elements that safeguard program fidelity, such as standardised, highly structured form and content, direct training and complementary facilitator and participant manuals.

In this evaluation, the post-program feedback of program completers provided useful insight into their perceived gains from the program. The findings suggested the potential merit of conducting future evaluations that further examine process, including program integrity as a means of providing context to measured outcomes.



## Concluding Remarks

The key aim of the current evaluation was to provide specific information on factors affecting the program completion rates of Getting SMART participants, in order to assist refinements in program conditions and maximise treatment effects.

While the findings were promising in terms of the overall high completion rate and participant satisfaction, they also shed light on some participant and program factors warranting consideration for further improving program outcomes.

In contrast to prior studies, significantly more of the program completers were found to be more serious offenders when compared with program non-completers. This finding underscored the utility of targeting more serious offenders to complete treatment while they are in custody, particularly when they are subject to conditional parole release. There was no statistically significant difference observed in re-offending risk level between program completers and non-completers, suggesting the effectiveness of extending program eligibility to prisoners with a higher re-offending risk level, who often have greater treatment needs and require priority access to scarce resources in a correctional setting. 'Heavy-end' drug users, who had more complex problems, were also retained in treatment; however, both 'heavy-end' drug users and higher risk prisoners require more intensive, broad based interventions as per the Risk and Needs principles.

The results highlighted the issues affecting the provision of drug treatment to prisoners in a prison setting, namely the institutional transfers and releases that impact on program retention rates, and the quasi-compulsory nature of program participation. These issues could be mitigated by preventing administrative exits from programs through whole-of-sentence planning, and increasing change readiness at baseline to improve the responsiveness of program participants. The latter measure could serve to reduce the level of dropout by participants without an external incentive to complete the program, while improving the program outcomes of participants completing treatment to gain parole.

The findings suggested the importance of providing differential treatment to address other criminogenic needs of program participants. Providing appropriate preparatory programs and ancillary interventions to address younger age and poor social functioning might serve to maximise the ability of prisoners with these characteristics to benefit from drug treatment, which could in turn positively impact on recidivism outcomes. Furthermore, there may be scope to refine program materials and/or program delivery methods to better engage participants with a main problem drug of alcohol and/or cannabis.

Overall, given the majority of program participants had complex needs, unsuccessful outcomes from prior drug treatment, and lacked confidence at baseline to achieve their program goals, it is important that program gains from Getting SMART as a moderate intensity program are consolidated with ongoing and broad-based interventions. The findings suggest that with effective whole-of-sentence planning and attention to responsiveness issues, the positive impacts of this psycho-educational program, particularly in reference to participants' confidence levels and perceived ability to change, can be maximised and maintained within a model of ongoing care.

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## 6. Appendix

**Table A1: Data Collection Measures – Scales**

Measurement Instruments	Function
<b>Severity of Dependence Scale*</b>	Assesses impaired control and anxiety in relation to drug use.
<b>Social Functioning Scale (SFS)*</b>	Subscale of the Opiate Treatment Index, which examines aspects of social integration (employment, residential stability, interpersonal conflict, social support and involvement in drug subculture).
<b>Readiness to Change Questionnaire</b>	Scale that identifies current stage of change in relation to resolution of problem behaviour.
<b>Situational Confidence Questionnaire</b>	Scale used to measure self-efficacy in high-risk situations for drug use.
<b>Crime Avoidance Self-Confidence Inventory (CASCI)#</b>	In-house developed pilot instrument which was designed to measure self-efficacy in high-risk situations for criminal activity.

\*This scale was applied in the pre-program assessment only as it lacks comparative validity in a custodial environment. #Locally developed pilot scale.

**Table A2: Getting SMART – Key Program Elements**

Program Element	
<b>Program objective</b>	To help participants understand the concepts, tools and techniques of SMART Recovery ®.
<b>Criminogenic need addressed</b>	Addiction issues including drugs, alcohol and gambling
<b>Treatment model</b>	<ul style="list-style-type: none"> <li>➤ Cognitive Behavioural Therapy (CBT)</li> <li>➤ Rational Emotive Behaviour Therapy (REBT)</li> </ul>
<b>Orientation</b>	Psycho-educational with a focus on skill acquisition and self-management
<b>Format</b>	<ul style="list-style-type: none"> <li>➤ Accredited program manual</li> <li>➤ Groups of 5-16 participants</li> </ul>
<b>Duration and intensity of delivery</b>	<ul style="list-style-type: none"> <li>➤ 12 sessions (18-24 hours)</li> <li>➤ 1-2 sessions per week</li> </ul>

Source: Compendium of Correctional Programs in NSW 2012 (Corrective Services NSW, 2012).

**Table A3: Getting SMART – Participant Criteria**

Participant Criteria	
<b>Level of Service Inventory Revised (LSI-R) risk category</b>	<ul style="list-style-type: none"> <li>➤ Low, Medium-Low (AOD domain score must be between 5 and 9)</li> <li>➤ Medium</li> <li>➤ Medium High</li> <li>➤ High</li> </ul>
<b>Australian Core Skills Framework (ACSF) literacy level</b>	<ul style="list-style-type: none"> <li>➤ Reading Level 2</li> <li>➤ Writing Level 1</li> </ul>
<b>Gender</b>	At least two females in mixed groups
<b>Accreditation level</b>	Level 3
<b>Pathway to further programs</b>	SMART Recovery® maintenance meetings

Source: Compendium of Correctional Programs in NSW 2012 (Corrective Services NSW, 2012).

**Table A4: Pre-program Assessment Capture Rate**

Correctional Centre	Participants (No.)	Pre- tests administered (No.)	Capture Rate (%)
St Heliers	127	93	73.2
Kirkconnell	100	88	88.0
Cessnock	72	57	79.2
Parklea	29	29	100.0
Wellington	14	14	100.0
John Morony	13	10	76.9
<b>Total</b>	<b>355</b>	<b>291</b>	<b>82.0</b>

Base n=355. Source OIMS & OPU.

**Table A5: Post-program Assessment Capture Rate**

Correctional Centre	Completions (No.)	Post- tests administered (No.)	Capture Rate (%)
St Heliers	109	58	53.2
Kirkconnell	73	42	57.5
Cessnock	65	50	76.9
Parklea	20	19	95.0
Wellington	12	0	0.0
John Morony	9	2	22.2
<b>Total</b>	<b>288</b>	<b>171</b>	<b>59.4</b>

Program completers n=288. Source OIMS –CSNSW and the CSNSW Offender Programs Unit

**Table A6: Supplementary Programs Undertaken by Program Completers**

Treatment Type	No.	%
Work	105	61.4
Education	72	42.1
Psychology	27	15.8
Health promotion	15	8.8
Composite programs*	15	8.8
Aggression and violence	13	7.6
Aboriginal programs	11	6.4
Pharmacotherapy	11	6.4
Community engagement**	5	2.9
Sexual offending	3	1.8

Base= 171. Set= may contain multiple responses as a % of total cases.

Data source: Drug and Alcohol Treatment Outcome Procedures (DATOP-1) database– CRES.

\*Composite programs are residential programs providing a range of inputs to address multiple offender needs.

\*\*Community engagement programs re-connect offenders with agencies in the community that can assist in their resettlement and integration into pro-social activities. These programs focus on education, training, employment, financial literacy and parenting.

Table A7: Participants' Characteristics<sup>#</sup> (n=291)

Demographic Characteristics	No.	%
<b>Non-English Speaking Background</b>	36	12.4
<b>Indigenous Background</b>	47	16.2
<b>Age</b>		
15-24	47	16.2
25-34	135	46.4
35-44	79	27.1
45-54	21	7.2
55-64	9	3.1
<b>Education (Years of Schooling)</b>		
9 years or less	107	36.8
<b>Marital Status</b>		
Never married	174	60.0
Married or de facto	100	34.5
Separated or divorced	16	5.5
<b>Employment (Income source)</b>		
Government benefit/other	139	47.8
Full-time or part-time	128	44.0
Non legal/criminal	24	8.2
Criminogenic Characteristics	No.	%
<b>Security Classification</b>		
Minimum Security (C2, C3)	218	74.9
Other	73	25.1
<b>Reoffending Risk Rating (LSI-R)</b>		
Medium	131	46.0
Medium High	69	24.2
Medium Low	49	17.2
High	20	7.0
Low	16	5.6
<b>Legal status</b>		
Sentenced	283	97.3
Appellant	8	2.7
<b>Sentence Length<sup>###</sup></b>		
Up to 6 months	38	13.1
7-12 months	55	19.0
13-24 months	70	24.1
Over 24 months	127	43.8
<b>Principal Offence</b>		
Violence	88	30.4
Robbery	51	17.6
Property	56	19.4
Drugs	46	15.9
Driving	26	9.0
Breach order	22	7.6
<b>Prior Contact with CSNSW</b>		
Any prior contact	231	79.4
Prior imprisonment	173	59.5
Prior conviction(s) for violent offence	220	75.6

Data sources DATOP database and OIMS.

<sup>#</sup> The criminal data included up to 6 missing cases.

<sup>###</sup> The sentence length was calculated from reception to discharge date in the current prison episode – 1 missing case.



**Table A8: Factors associated with program completion using bivariate analysis (n=284)<sup>1</sup>**

Variable	Number	Completion Rate	Significance
<b>Demographic</b>			
Age group	15-24 (n=45)	71.1%	$\chi^2=4.693$ , df=1, p=.030
	25+ (n=239)	84.5%	
Indigenous background	Yes (n=44)	86.4%	$\chi^2= .565$ , df =1, p=.452
	No (n= 240)	81.7%	
Marital status	Never married (n=170)	80.6%	$\chi^2 =1.308$ , df =1, p=.253
	Other (n=113)	85.8%	
Main income source in the three months before imprisonment	Full-time or part-time job (n=126)	84.9%	$\chi^2=.996$ , df =1, p=.318
	Other [government benefit, illegal income, dependent on others] (n=158)	80.4%	
Years of schooling	Nine years or less (n=105)	81.0%	$\chi^2=.239$ , df =1, p=.625
	10 years or more (n=179)	83.2%	
<b>Criminogenic</b>			
Time remaining on custodial sentence (at program entry)	Up to four months (n=76)	65.8%	$\chi^2=20.538$ , df =1, p=.000
	Over four months (n=201)	88.8%	
Release type	Conditional release to parole (n=128)	93.0%	$\chi^2=17.962$ , df =1, p=.000
	Automatic release to freedom or parole (n=156)	73.7%	
Principal offence	Violence (n=86)	83.7%	$\chi^2=12.523$ , df =5, p=.028
	Robbery (n=50)	90.0%	
	Property/fraud (n=53)	75.5%	
	Drug (n=46)	91.3%	
	Driving (n=25)	64.0%	
	Breach (n=22)	77.3%	
Classification	Minimum security (C2, C3) (n=212)	79.7%	$\chi^2=4.132$ , df =1, p=.042
	Other (B, C1 and E2) (n=72)	90.3%	
Previous custodial sentence	Yes (n=170)	79.4%	$\chi^2= 2.957$ , df =1, p= .107
	No (n=114)	86.8%	
LSI-R Score	Low or Medium-Low (n=64)	87.5%	$\chi^2= 1.485$ , df =1, p=.223
	Medium to High (n=220)	80.9%	
Historical conviction for violent offence	Yes (n=216)	82.9%	$\chi^2 =.141$ , df =1, p=.707
	No (n=68)	80.9%	
<b>Mental health</b>			
Mental health needs according to official records	Yes(n=136)	84.6%	$\chi^2= .843$ , df =1, p= .359
	No (n=148)	80.4%	

<sup>1</sup> some missing cases



**Table A8 cont.: Factors associated with program completion using bivariate analysis (n=284)<sup>1</sup>**

Variable	Number	Completion Rate	Significance
<b>Drug-related</b>			
Injecting drug use in the three months before imprisonment	Yes (n=93)	78.5%	$\chi^2=1.450$ , df =1, p=.229
	No (n=191)	84.3%	
Drug use during current prison episode (drug type)	'Heavy-end' drugs (heroin, amphetamine, cocaine) and other's pharmacotherapy (n=28)	85.7%	$\chi^2= .305$ , df =1, p=.581
	Other (cannabis, alcohol, pills, ecstasy, hallucinogens, other's medication and non-users) (n=232)	81.5%	
'Heavy-end' drug use (heroin, amphetamine, cocaine) in the three months before imprisonment	Yes (n=150)	83.3%	$\chi^2=.193$ , df =1, p=.660
	No (n=134)	81.3%	
Poly-drug use (two or more drug types) in the three months before imprisonment	Yes (n=133)	81.2%	$\chi^2=.169$ , df =1, p=.681
	No (n=142)	83.1%	
Main problem drug	Alcohol/cannabis (n=134)	82.8%	$\chi^2=.103$ , df =1, p=.748
	Other (n=123)	81.3%	
Prior drug treatment in the community	Yes (n=180)	81.7%	$\chi^2=.053$ , df =1, p=.818
	No (n=93)	82.8%	
<b>Test scale scores</b>			
Social Functioning Scale (SFS) - poor	Low and Below Average (n=146)	87.0%	$\chi^2=5.337$ , df =1, p=.021
	Average, Above Average and High Dysfunction (n=126)	76.2%	
Severity of Dependence Scale (SDS)	Dependent (n=194)	80.4%	$\chi^2=1.278$ , df =1, p=.258
	Non-dependent (n=67)	86.6%	
Readiness to Change stage (RCQ)	Pre-Contemplation or Contemplation stage (n=85)	81.2%	$\chi^2=.112$ , df =1, p=.738
	Action stage (n=198)	82.8%	

<sup>1</sup> some missing cases







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