

# CORRECTIONAL SERVICE CANADA

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## RESEARCH REPORT

### Women Offenders, Substance Use, and Behaviour

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# **Women Offenders, Substance Use, and Behaviour**

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This report is also available in French. Should additional copies be required, they can be obtained from the Research Branch, Correctional Service of Canada, 340 Laurier Ave. West, Ottawa, Ontario K1A 0P9.



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## Executive Summary

**Key words:** *women offenders, substance use, substance use severity, type of substance user*

About four-in-five women offenders in Canada have substance use problems, and recent evidence suggests that substance use is more important in understanding women's offending than it is in men's. However, little research has focused on the differences in substance use behaviours among women and their relationship to correctional outcomes. Considering that substance use variability has been shown to inform treatment success in the community, this study examined the relationships of both substance use severity and type of user with institutional and post-release behaviour.

Participants were 962 women newly admitted to a federal women's institution from February 2010 to February 2014 who completed a computerized assessment of their substance use problems. Women were categorized both based on the severity of their substance use issue and on the type of substance that was most problematic for them (none, alcohol, drugs, or alcohol and drugs). Women in each category were contrasted in terms of their demographic and offence information, their substance use behaviours, their institutional adjustment (institutional offences and segregation placements), and their post-release outcomes.

Both substance use severity and type of user were found to be associated with the women's offence, risk, and substance use characteristics. As severity increased, so did the proportion of women who had committed a violent index offence and who had served a previous federal sentence. Not surprisingly, severity of problem was also associated with a more extensive history of substance use, as well as use of a wider variety of drugs. In terms of type of substance user, women in the alcohol and drug group were more likely than those in the other groups to have been convicted of a violent offence or served a previous federal sentence and had more elevated risk. The breadth of the alcohol and drug users' substance use history was also more extensive. As well, both substance use severity and type of user were associated with institutional behaviour and post-release outcome. Women with more severe substance use problems and who had used drugs (either as their sole problematic substance or together with alcohol) were more likely to be found guilty of disciplinary offences, to be placed in segregation, and to be returned to custody after their release, even after accounting for possible covariates.

Overall, results emphasized the importance of considering differences in substance use among women offenders. This finding, together with the prevalence of substance use problems among women, underscores the importance of interventions in this area. The Correctional Service of Canada offers women offenders correctional programs that address the problematic behaviours directly or indirectly linked to their crime – which may include substance use. The programs aim to help women understand the impact of problematic behaviours and to enhance their ability to live balanced and crime-free lives. Conforming to this principle, at CSC, women offenders participating in correctional program create individual self-management and healing plans focused on the behaviours they identify as problematic in their own lives and offence cycles, including substance use.



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## **Introduction**

Women represent a small but growing proportion of the Canadian correctional population (Public Safety Canada, 2014), and as many as four-in-five women offenders have substance use problems (Farrell MacDonald, in press; Grant & Gileno, 2008). Though substance use is also common among men offenders (e.g., Grant & Gileno, 2008), women and men offenders who abuse substances differ in terms of motivation, frequency, and severity (e.g., Langan & Pelissier, 2001; Messina, Burdon, & Prendergast, 2003; Pelissier & Jones, 2006). Research indicates that many women have different pathways to offending than do men, and that substance use can play a role in women's unique paths to offending (Salisbury & Van Voorhis, 2009); indeed, recent large-scale studies have identified substance use as the single strongest predictor of women's re-offending (Andrews et al., 2012; Olver, Stockdale, & Wormith 2014).

Correctional interventions for women focused on substance use are common and have been shown to be effective in reducing returns to custody after release (e.g., Matheson, Doherty, & Grant, 2009; Tripodi, Bledsoe, Kim, & Bender, 2011). Few of these interventions, however, focus on the characteristics of women's substance use – namely the severity of substance use and the types of substances used – despite evidence from community samples showing that consideration of such factors may be linked to treatment outcome (e.g., Agrawal et al., 2007; Babor, Dolinsky, et al., 1992). As such, the current study was undertaken to examine the relationship of both severity of substance use and type of substances used with returns to custody. In addition, given the limited existing research in the area, relationships with institutional adjustment were also examined.

### **Substance Use Severity and Type of Substance Used**

Research with community samples clearly shows that consideration of the different use characteristics of substance users can inform assessment and therapeutic approaches (e.g., Babor & Caetano, 2006; Basu, Ball, Feinn, Gelernter, & Kranzler, 2004). Indeed, there is ample evidence of the relevance of both substance use severity (e.g., Babor, Dolinsky, et al., 1992; Babor, Hoffman et al., 1992) and type of substance used (e.g., Agrawal et al., 2007; Cleveland, Collins, Lanza, Greenberg, & Feinberg, 2010; Kuramoto, Bohnert, & Latkin, 2011; Schwartz, Wetzler, Swanson, & Sung, 2010). Although less research has focused on differences among substance users in offender samples, both substance use severity and type of substance used have

been examined. There is an extensive body of literature that demonstrates that offenders' assessed levels of substance use need (which typically reflects the severity of substance use problems together with other factors such as links with offending or negative impacts on pro-social activities) is strongly associated with future offending (e.g., Andrews et al., 2012; Olver et al., 2014). In addition, alcohol and drug use have been found to be associated with different offences. The link between alcohol use and violent offending is now well established (Boles & Miotto, 2003; Lundholm, Haggård, Möller, Hallqvist, & Thiblin, 2013; McMurren, Riemsma, Manning, Misso, & Kleijnen, 2011; Pernanen, Cousineau, Brochu, & Sun, 2002; White, Lee, Mun, & Loeber, 2012), while drug use is generally associated with acquisitive offending (Comiskey, Stapleton, & Kelly, 2012; Hayhurst et al., 2013). Examinations of the differences among women offenders who use substances are more limited. That said, the links between level of assessed substance use need and offending (Andrews et al., 2012; Olver et al., 2014) and between alcohol and violent offending (McMurren et al., 2011) found for men offenders have also been demonstrated among women.

### **Institutional Behaviour**

Though recidivism is likely the most frequently-used outcome variable in correctional research, institutional behaviour has a direct impact on the safety and security of both staff and offenders, as well as on the institutional climate. In addition, institutional adjustment and recidivism have been found to not be strongly associated (Trulson, DeLisi, & Marquart, 2011). Men and women offenders differ in terms of their institutional misconduct (Harris, 2013; Sorensen & Cunningham, 2010; Sorensen, Cunningham, Vigen, & Woodes, 2011) and its predictors (e.g., Gover, Pérez, & Jennings, 2008), yet few researchers have focused on the association between substance use and women offenders' institutional adjustment.

Among men offenders, substance use, and especially drug use, is associated with institutional misbehaviour. In a sample of Canadian federally-sentenced men offenders, offenders who used drugs were more likely than their counterparts who used alcohol to engage in institutional offences (Cheverie, Ternes, & Farrell MacDonald, 2014). In another study of over 18,000 US inmates, Kuangliang and Sorenson (2008) found recent drug use to be associated with rule violations overall, as well as in all individual categories except escapes. Jiang (2005) found that substance use was predictive of both institutional misconduct related to substance use (e.g., possession of drugs or alcohol while in custody) as well as unrelated misconduct.

The few studies specific to the role of substance use in women's institutional adjustment have also found a link between the two. In their study involving 156 women in Ohio, Salisbury, Van Voorhis and Spiropoulos (2009) found that scores on the substance use subscale of a risk assessment measure were associated with subsequent prison misconducts. In another study of over 4,000 women (though relying on almost twenty-year-old data), others have found a link between drug use immediately prior to incarceration and both violent and non-violent institutional misconducts (Steiner & Wooldredge, 2009).

### **Post-Release Outcomes**

Though substance use has long been known to be associated with offending (Andrews & Bonta, 2010), gender differences in this relationship have emerged. Recent meta-analyses have shown substance use to be more predictive of recidivism for women than for men (Andrews et al., 2012; Olver et al., 2014). Aggregating across five meta-analytic samples, Andrews and colleagues (2012) found that, for women, substance use as assessed on the Level of Service Inventory – Revised, a well-accepted risk assessment measure, was more strongly associated with recidivism than were any other subscales. In fact, the association between substance use and recidivism for women was also stronger than were any of the associations calculated for men.

For men offenders, both substance use severity and type of substance used are associated with post-release outcome. In a sample of nearly 13,000 Canadian federally-sentenced men, Farrell MacDonald (2014) found that over half of those identified as presenting a substantial or severe substance use problems returned to custody within 18 months, as compared to less than a quarter of those with no substance use problems and a third of those with problems rated as being of low severity. In another study, Cheverie and colleagues (2014) found that the rate of return to custody was higher for drug users than for alcohol users among a sample of over 2,500 offenders followed in the community for two years.

For women offenders, investigations have only focused on substance use severity. In keeping with findings for men, Scott, Grella, Dennis, and Funk (2014) found women with more severe substance use problems were more likely to return to custody. They found this association to be strongest in the first three months after release, but also significant in a one-year follow-up.

## **Current Study**

Though extensive literature links women offenders' substance use to their post-release outcomes, and the evidence base is beginning to accumulate for a similar association with institutional adjustment, research allowing a more nuanced understanding of these relationships remains limited. Substance use severity and type of user, areas consistently recognized as important in both community samples and men offender populations, require investigation with women offenders as well. As such, the current project was undertaken to examine the relationships of both substance use severity and type of user with institutional and post-release behaviour.

## Method

### Participants

Participants were 962 Canadian women offenders admitted to a women's institution between February 2010 and February 2014 who had completed the Women's Computerized Assessment of Substance Abuse (W-CASA; see below).<sup>1</sup> Women tended to be single, to be serving short sentences, and to have been convicted of drug-related offences (see Table 1). Overall, 29% were Aboriginal, and the average age at admission was 37 years ( $SD = 10.9$ ).

Table 1.

*Description of Study Participants*

Descriptive Variable	Distribution	
	%	<i>n</i>
Marital Status		
Single	55	526
Currently married / common-law	31	299
Previously married	14	132
Sentence Length		
<3 years	56	538
3-6 years	32	307
> 6 years	12	117
Most Serious Offence on Sentence		
Homicide or related	11	108
Robbery	13	124
Assault	10	95
Sexual	3	27
Other violent offence	4	39
Drug-related	33	313
Property	16	154
Other non-violent	10	98

<sup>1</sup> This represented 90% of all women admitted during the study period.

The women's substance use history is more fully described elsewhere (see Farrell MacDonald, in press), but 77% of the women had an identified substance use issue, with 55% assessed as having a moderate to severe problem. Women were categorized both based on the severity of their substance use problem and on the type of substance that was most problematic for them according to two measures included in the W-CASA, the Alcohol Dependence Scale (ADS; Skinner & Horn, 1984) and the Drug Abuse Screening Test (DAST; Skinner, 1982). As can be seen in Table 2, women were relatively evenly distributed among substance use severity levels. Distributions across type of user, however, were less even: almost half of women were categorized as having no or a low-level substance use problem; of the remainder, the greatest proportion were drug users.

Table 2.

*Distribution of Women by Substance Use Severity and Type of User*

Categorization	Distribution	
	%	<i>n</i>
<i>Substance use severity (Greater of ADS and DAST ratings)</i>		
None	23	218
Low	22	212
Moderate	14	134
Substantial	24	233
Severe	17	165
<i>Type of user (Meets or exceeds threshold of "moderate" on ADS and/or DAST)</i>		
None / low substance use problem	45	430
Alcohol user	5	50
Drug user	32	312
Alcohol and drug user	18	170

*Note.* ADS = Alcohol Dependence Scale (Skinner & Horn, 1984). DAST = Drug Abuse Screening Test (Skinner, 1982).

## Data Sources

**W-CASA.** The W-CASA is a 261-item computerized assessment examining the scope

and nature of women's substance use, with a focus on both lifetime substance use and use in the year preceding arrest. It is completed as part of women offenders' intake assessment process. The W-CASA includes two standardized measures that were included in this study: the ADS (Skinner & Horn, 1984) and the DAST (Skinner, 1982). The ADS is a 25-item assessment of the degree of physiological dependence to alcohol, while the DAST is a 20-item assessment of the abuse of drugs other than alcohol. Both scales produce an overall severity rating – none, low, moderate, substantial, or severe – and have been found to have satisfactory psychometric properties (ADS: Cronbach's alpha = 0.91, Skinner & Horn, 1984; DAST: 0.74 to 0.92, Skinner, 1982; Yudko, Lozhkina, & Fouts, 2007).

**Other Offender Management System data.** Additional data were drawn from the Offender Management System (OMS), the computerized database of offender information of the Correctional Service of Canada (CSC). Data drawn from this database included demographic information, offence and sentence information, and indices of both institutional and post-release behaviour. Institutional behaviour indicators – specifically, institutional offences (of which the woman was found guilty) and placements in segregation – were included if they occurred between when the woman completed the W-CASA and the first of her release, the end of her sentence, or the date of data extraction (June 22, 2014). Post-release behaviour was examined via returns to custody during conditional release, either due to revocation or due to a new offence, and the time elapsed from release until the return.

## **Analysis**

As all women who completed the W-CASA were included in this study (rather than a sample), inferential statistics were not appropriate. To account for differences in time at risk, institutional outcomes were examined using incidence rates. Logistic regression was used to determine both the impact of the predictors of interest, substance use severity/type of user, and other covariates, such as static risk rating, dynamic risk rating, number of federal sentences served, Aboriginal ancestry, age at W-CASA assessment (categorized in quartiles), initial security classification, motivation level, accountability level, impulsivity, engagement, and responsivity. Post-release outcomes were examined first using descriptive statistics. For these analyses, an untruncated follow-up period was used in order to retain as much data as possible (verifications showed similar patterns using six, 12, and 18 month fixed follow-up periods). To confirm findings, additional analyses were conducted using Cox proportional hazards models. In

addition to the predictors of interest, potential covariates included: static risk rating, dynamic risk rating, number of federal sentences served, Aboriginal ancestry, type of release, age at release (categorized in quartiles), initial security classification, motivation level, and the seven need domain areas (associates, attitudes, community functioning, employment/education, marital/family relations, personal/emotional orientation, and substance abuse). Offenders who died or were deported/extradited during release were censored in the data.

## **Results**

### **Participant Characteristics**

Both substance use severity and type of user were found to be associated with the women's offence, risk, and substance use characteristics (see Appendix A). As severity increased, so did the proportion of women who had committed a violent index offence and who had served a previous federal sentence. Indeed, women with no or little substance use issues were most likely to have a drug-related offence as their most serious offence, while those with more serious problems were more likely to have a violent offence. Not surprisingly, substance use severity was also associated with a more extensive history of substance use, as well as use of a wider variety of drugs. In terms of type of substance user, women in the alcohol and drug group were more likely to have been convicted of a violent offence or served a previous federal sentence and had more elevated risk. The breadth of the alcohol and drug users' substance use history was also more extensive.

### **Institutional Behaviour**

As can be seen in Figures 1 and 2, both substance use severity and type of user were associated with institutional behaviour. The pattern for disciplinary offences was unchanged when substance-related use and non-substance-related charges were considered separately (results not shown). Accounting for time at risk, relative to those with no identified substance use issue, women with substantial or severe substance use issues were 5.2 and 6.6 times more likely, respectively, to have a disciplinary offence as well as 5.6 and 7.0 times more likely, respectively, to be placed in segregation. Among types of substances user, women who used drugs (either only drugs or drugs together with alcohol) had the most elevated indices of institutional misbehaviour. Again after accounting for time at risk, drug users were most likely to be convicted of disciplinary charges (3.8 times more likely than none / low users) but alcohol and drug users were most likely to be placed in segregation (4.3 times more likely than none / low users). Results were confirmed via forward stepwise logistic regression wherein a number of statistically relevant variables were entered as covariates (based on bivariate analyses): static risk, age at W-CASA administration, initial security classification, time at risk, presence of a responsibility issue (results not shown).

Figure 1.

Substance Use Severity and Institutional Behaviour

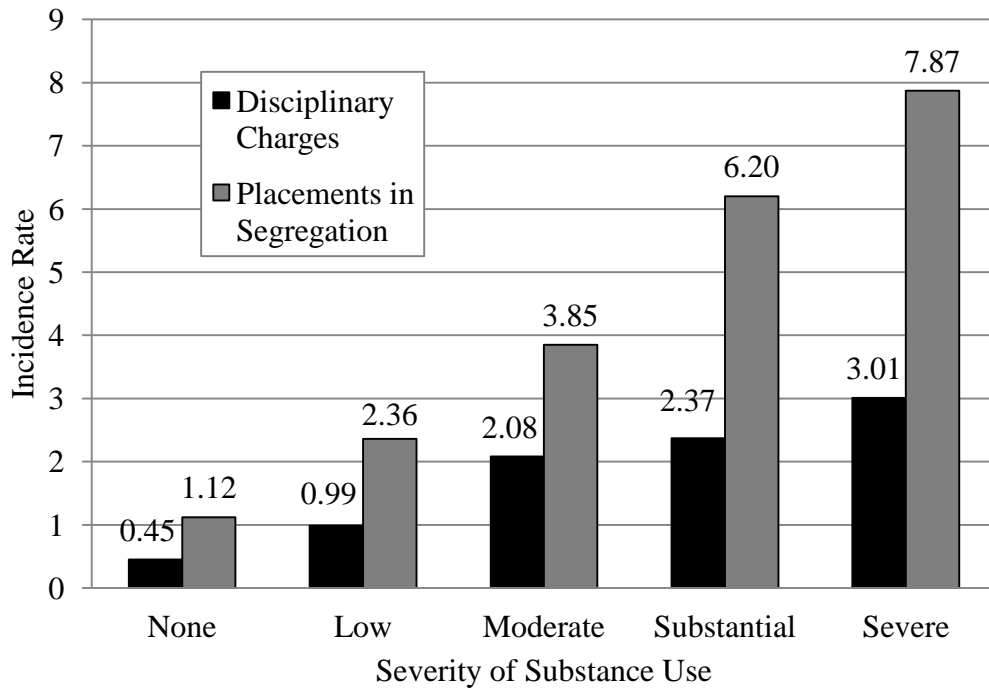
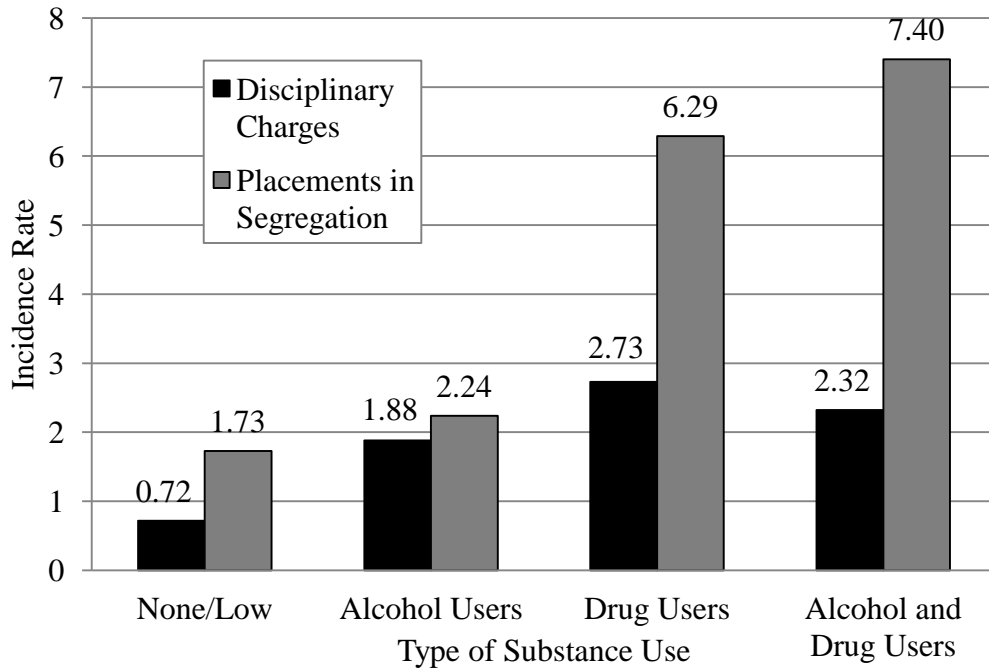


Figure 2.

Type of Substance Used and Institutional Behaviour



## Post-Release Outcomes

Overall, 61% ( $n = 587$ ) of the women were released from custody during the study period. As can be seen in Table 3, women with no identified substance use issues or issues of low severity were more likely to be granted discretionary release (i.e., day or full parole) and less likely to return to custody – both with and without an offence. Similar analyses for type of user showed that drug users were more likely to be granted discretionary release while women in the alcohol users were less likely to return to custody. On the other hand, these women spent the fewest number of days in the community prior to their return; this somewhat inconsistent finding may be partially attributable to the small size of the alcohol users group ( $n = 29$ ) and as such, should be interpreted cautiously.

Table 3.

*Substance Use Severity, Type of Substance Used, and Post-Release Outcomes*

Category	Granted Discretionary Release (%)	Return to Custody (%)		Days to Return <i>M (SD)</i>
		Any Return	Return with a New Offence	
Substance Use Severity				
None	83	8	1	217 (95)
Low	81	9	1	346 (136)
Moderate	68	20	6	286 (173)
Substantial	58	35	6	177 (84)
Severe	44	45	9	180 (100)
Type of Substance Used				
None / low	82	9	1	281 (132)
Alcohol users	48	28	0	161 (71)
Drug users	60	33	6	202 (129)
Alcohol and drug users	51	37	11	193 (96)

Again, results were confirmed via alternative analyses. Six-, 12-, and 18-month fixed follow-up analyses produced similar results. Moreover, Cox regression analyses, controlling for possible covariates (as previously described) demonstrated that, even after accounting for these covariates and time at risk, those with no or low substance use issues were significantly less

likely to return to custody than were those with more severe issues. There were no differences between alcohol, drug, and alcohol and drug users.

## Discussion

Though substance use has long been recognized as a key risk factor for women offenders, its gendered salience is now emerging (e.g., Andrews et al., 2012; Olver et al., 2014). Nonetheless, to date, very limited research has explicitly focused on the variability among women offenders with substance use problems. The current study was innovative in its examination of the association of both substance use severity and type of user with institutional and community behaviour.

Overall, results provided further evidence for the relationships previously found between substance use and both institutional behaviour (Salisbury et al., 2009; Steiner & Wooldredge, 2009) and post-release outcomes (e.g., Andrews et al., 2012), but also emphasized the importance of considering differences among women offenders with substance use problems. Women with varying severity of substance use issues and those who had problematic use of different types of substances also diverged behaviourally. More serious substance use problems and use of drugs (either in isolation or together with alcohol) tended to be associated with a number of variables indicative of more entrenched criminal careers and higher levels of risk. Women with more serious substance use problems and who used drugs also displayed behavioural adjustment challenges both in the institution and post-release; specifically, they were more frequently found guilty of institutional offences, placed in segregation, and returned to custody.

Findings aligned with existing literature. Specifically, higher rates of return to custody among women with more severe substance use problems were consistent with results previously found in a U.S. sample (Scott et al., 2014) and with the very strong association between substance use and recidivism among women offenders (Andrews et al., 2012; Olver et al., 2014). The inverse association between substance use severity and length of community success found here also mirrored that previously found for men (Farrell MacDonald, 2014). With respect to type of user, higher rates of behavioural adjustment challenges among drug users found among women in this study mirrored previous findings with men (Cheverie et al., 2014). Notably, despite the fact that patterns with respect to returns to custody aligned with those for institutional behaviour, discretionary release findings did not. Women who used only alcohol – though less likely to return to custody – were also the least likely to be granted a discretionary release. This

did not seem to be explained by differences in risk or criminal history. This pattern may be due to the small number of women released to the community classified as alcohol users only.

### **Operational Implications**

The high rates of substance use need among women offenders, together with the links of between substance use characteristics and subsequent behaviour both in the institution and the community, underscore the importance of providing interventions for women with substance use needs. Federally-sentenced women at CSC can participate in the Women Offender Correctional Program and Aboriginal Women Offender Correctional Program, which, although not specific to substance use, may include a focus on the area, if appropriate. The programs' broad goals are to help participants understand the impact of problematic behaviour across an array of situations and relationships, and to enhance their ability to live balanced and crime-free lives. By focusing on problematic behaviours directly or indirectly linked to crime for each woman – including substance use – the programs assist each woman in making positive change in the areas most pertinent to her. As a central program activity, the women develop and refine self-management plans or healing plans reflective of their problematic behaviours, including identifying risk factors, high risk situations, warning signs, triggers, goals and specific plans to manage and reduce the behaviours. In addition, at the beginning of their program participation, women complete the Inventory of Drug Taking Situations (Annis, Turner, & Sklar, 1997), a measure that assists in identifying the personal states and situations with others that are associated with problematic alcohol and drug use. Responses to this measure, which have previously been found to be associated with substance use severity among men offenders (CSC, 2008), are used in developing these highly individualized plans.

Though the effectiveness of this program has not yet been examined, the previously-available Women Offender Substance Abuse Program, which formed the basis for the current programs, was evaluated with positive results. In a one year follow-up, women who completed this program returned to custody at a lower rate than did a historical comparison group (39% vs. 47%; Matheson et al., 2009). These authors also found that women who participated in the Community Maintenance and Relapse Prevention aspect of the program after release from custody had 10 times lower odds of being reincarcerated than those who did not, suggesting that community maintenance is an important program component in supporting substance-using women's successful community reintegration. Both the current programs also include such

community maintenance components.

### **Limitations**

It is important to acknowledge that women with varying levels of substance use problems and who use different types of substances may differ in ways not captured in the present analyses, and that these differences could impact findings. For example, Houser, Belenko, and Brennan (2012) found that mental health problems (not reflected in the current study) were more important in understanding women's institutional behaviour than was substance use. Although a number of possibly-important covariates (e.g., risk, age, security classification) were included in confirmatory multivariate analyses, it was impossible to reflect all differences in these analyses for methodological reasons (e.g., sample sizes). Given this issue, future research involving more key variables – particularly those thought to be especially relevant to women – would increase understanding of the questions examined. Nonetheless the consistency of findings between the current study and those conducted with other populations (Babor, Dolinsky, et al., 1992; Babor, Hoffman et al., 1992; Cheverie, et al., 2014; Farrell MacDonald, 2014; Kuramoto et al., 2011; Lundholm et al., 2012; McMurran et al., 2011) allows greater confidence in concluding that differences were attributable to the substance use issues which were the focus of this study rather than solely to variables not reflected in analyses.

### **Conclusion**

In sum, this study strongly suggests that, just as is the case in community and men offender samples, consideration of differences among women offenders' substance use allows for a better understanding of key behaviours, namely institutional adjustment and post-release outcome. Research with community samples clearly indicates that consideration of this variability – and specifically of substance use severity and type of user – can inform interventions and to improve intervention results (e.g., Babor & Caetano, 2006; Basu et al., 2004). Conforming to this principle, at CSC, women offenders participating in correctional programs create individual self-management and healing plans focused on the behaviours they identify as problematic in their own lives and offence cycles, including substance use.

Overall, given the important role of substance use in both women offenders' institutional behaviour (Salisbury et al., 2009; Steiner & Wooldredge, 2009 ) and their post-release outcomes (Andrews et al, 2012; Olver et al., 2014), it is clear that women offenders' substance use is an

area worthy of continued and concentrated attention. This study represents an important and needed first step in beginning to identify aspects of substance use that may be effectively targeted.

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## Appendix A: Participants' Characteristics

Table A1.

*Distribution of Demographic, Offence, and Risk Characteristics (%)*

	Severity					Type of User			
	None	Low	Moderate	Substantial	Severe	None / Low	Alcohol	Drugs	Alcohol & Drugs
Ethnicity									
Aboriginal	8	22	34	40	46	15	54	28	59
Non-Aboriginal	92	78	66	60	54	85	46	72	41
Marital Status									
Single	49	51	58	60	58	50	60	58	61
Currently married	31	34	29	30	32	32	22	34	26
Previously married	20	15	13	10	11	18	18	9	13
Most Serious Offence									
Homicide or related	6	12	15	13	13	9	30	6	23
Robbery	1	5	12	25	23	3	14	22	21
Assault	4	6	11	14	15	5	10	12	19
Sexual	4	4	5	1	1	4	6	2	0
Other violent offence	4	5	4	4	4	4	2	5	3
Drug-related	43	40	34	24	20	42	12	33	16
Property	29	10	10	12	17	20	10	16	9
Other non-violent	9	18	9	7	9	13	16	6	9
Offence Was Violent									
Yes	19	32	46	57	55	25	62	46	66
No	81	68	54	43	45	75	38	54	34
Previous Federal Sentence									
Yes	5	6	14	21	26	5	8	22	22
No	95	94	86	79	74	95	92	78	78
Static Risk Rating									
Low	67	51	31	17	15	59	28	23	11
Moderate	26	33	48	46	49	29	48	49	45
High	7	16	21	37	36	12	24	28	44
Dynamic Risk Rating									
Low	37	24	5	2	0	30	0	3	1
Moderate	54	51	41	29	19	53	46	32	17
High	9	25	54	69	81	17	54	65	82

Table A2.

*Distribution of Substance Use History Variables (%)*

	Severity					Type of User			
	None	Low	Moderate	Substantial	Severe	None / Low	Alcohol	Drugs	Alcohol & Drugs
Drugs Used (Ever)									
Marijuana	8	57	69	88	91	32	46	86	94
Cocaine / crack	1	36	68	92	96	18	40	89	97
Opioids	1	21	40	71	88	11	26	69	78
Benzodiazepines / tranquilizers	1	10	26	50	69	5	14	49	61
Amphetamines / methamphetamines	1	11	31	50	64	6	16	49	59
Hallucinogens	1	19	34	60	68	10	20	56	67
Ecstasy	1	20	36	57	68	10	28	57	59
Other	92	41	32	41	63	67	62	37	57
Injection Drug Use (Ever)									
Yes	1	7	25	50	76	4	12	53	62
No	99	93	75	50	24	96	88	47	38
Drugs Used Most (12 Months Preceding Arrest) <sup>a</sup>									
Marijuana	100	55	21	15	7	56	69	10	15
Cocaine / crack	0	21	39	38	37	21	31	38	38
Opioids	0	9	15	10	36	9	0	28	28
Benzodiazepines / tranquilizers	0	11	13	12	9	10	0	15	6
Amphetamines / methamphetamines	0	0	4	3	4	0	0	4	3
Hallucinogens	0	0	3	1	0	0	0	0	1
Ecstasy	0	0	4	3	1	0	0	1	4
Other	0	4	25	3	6	4	0	4	4
Offence Linked to Substance Use									
Yes	2	26	59	74	86	14	67	73	77
No	98	74	41	26	14	83	33	27	23

<sup>a</sup>Restricted to those who reported using drugs in the year prior to arrest. Severity:  $n_{\text{None}}$ : 2;  $n_{\text{Low}}$ : 66;  $n_{\text{Moderate}}$ : 98;  $n_{\text{Substantial}}$ : 215  $n_{\text{Severe}}$ : 159. Type of user:  $n_{\text{None/Low}}$ : 68;  $n_{\text{Alcohol}}$ : 13;  $n_{\text{Drugs}}$ : 297;  $n_{\text{Alcohol/Drugs}}$ : 162.