

Peterborough Community Support Court: An Evaluation of Recidivism

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April 30, 2018

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### Mental Health and Drug Treatment Court Program

The paradigm shift to evidence-based justice policy has deepened our understanding of criminality and its causes (Rezansoff, Moniruzzaman, Clark, & Somers, 2015). Criminal behaviors are not always a reflection of individual choice but can result from difficult life situations (Slinger & Roesch, 2010). The criminology literature suggests that not only is incarceration ineffective at re-offense prevention, it sometimes even causes or exacerbates offenders' problems (Anestis & Carbonell, 2014). Cognizant of this, problem-solving courts were developed to treat the root cause of criminality, rather than the manifestations of some underlying issues (Slinger & Roesch, 2010). These specialized courts have a separate docket for offenders with a variety of problems, such as domestic violence, substance abuse, mental health issues, homelessness, truancy, and gun use. The basis of these court lies in the Therapeutic Jurisprudence and Restorative Justice principles, which posit that people with life issues who come into contact with the law need support, rather than correctional services, and that court authority can be used to impact a positive change in offenders' lives (Burns, Hiday, & Ray, 2013; Ennis, McLeod, Watt, Campbell, & Adams-Quackenbush, 2016). By moving away from the traditional adversarial court model and taking a rehabilitative approach to justice, these courts offering some forms of collaborative and individualized treatment to offenders, thereby increasing rehabilitation and reducing risk (Slinger & Roesch, 2010).

Mental health and drug courts are two of the most common types of problem-solving courts in Canada (Slinger & Roesch, 2010). Mental health courts (MHCs) are established in the recognition that the rate of mental illness is substantially higher among people committing criminal offense than that in the general population (Anestis & Carbonell, 2014; Slinger & Roesch, 2010). The approach taken by the traditional criminal system is not particularly useful

when dealing with criminally ill offenders. They would be subjected to a possibly harmful environment and many people with mental illness have difficulties adjusting to jails and prisons (Dirks-Linhorst & Linhorst, 2012). This leads to an exacerbation of their psychiatric symptoms, which is further compounded by a lack of sufficient treatment. Further, after being discharged, they reoffend more frequently and more quickly since they still suffer from the deleterious effect of mental illness (Anestis & Carbonell, 2014).

As an alternative to the traditional criminal system, MHCs aim to address psychiatric conditions that contribute to the criminal behaviors, thereby reducing subsequent court contact (Burns et al., 2013). The integration of mental health and social services intervention into the court's operation reflects the attempt to simultaneously fulfill the legal responsibility of protecting the public and meet the mental health needs of offenders (Campbell et al., 2015b). While MHCs are established to help mentally ill people involved in the criminal justice system, drug treatment courts (DTC) target a different group of offenders – people with drug addictions. Drug-related crimes and the adverse effect of unsafe drug use on public health are ubiquitous in many countries including Canada (Werb et al., 2007). Drug markets and drug use are strongly associated with various criminal offense, such as public disorder, acquisitive, and property crimes. Similar to MHCs, the primary goal of DTC is to treat the addiction offenders have, thereby reducing or eliminating their future criminal activities and subsequently improving public safety (Slinger & Roesch, 2010a).

### **Operational Features**

The models adopted by MHCs and DTCs vary substantially across jurisdictions in Canada (Slinger & Roesch, 2010). One reason is that each jurisdiction has access to unique local resources to support offenders as well as different levels of funding (Slinger & Roesch, 2010).

Moreover, besides from commonly shared goals such as public safety, cost-reduction, and improvement in quality of life, different communities might have specific goals and initiatives in developing their problem-solving courts. For example, the Vancouver Community Court puts a strong emphasis on reducing property crimes due to the prevalence of such of offense in the city. In contrast, the Toronto MHC seeks to minimize the time taken to conduct fitness evaluation on offenders whereas the Saint Johns MHC aims to reduce intervention leading to restrictive environments for offenders (Slinger & Roesch, 2010).

Canadian MHCs and DTCs differ significantly in their eligibility criteria regarding the nature of the offense. Some will only accept summary offences while others accept those with indictable offences. The eligibility criteria of the Toronto and Saint John's MHC encompass the full scale of criminal offences (Slinger & Roesch, 2010) while DTDs in Canada will only accept offenders with non-violent charges (Werb et al., 2007). Similarly, the Winnipeg MCH excludes offenders facing sex offences, serious assaults, home invasions, gang membership, and criminal organization offences. The Downtown Community Court in Vancouver initially restricted inclusion to participants who were charged with drug-related offences under Canada's Controlled Drug and Substances Act (CDSA). This criterion was later relaxed to include participants charged with a broader range of offences, including violent crimes (Somers, Currie, Moniruzzaman, Eiboff, & Patterson, 2012).

The type of sanctions for non-compliance are decided by the judge of each court, thus resulting in a variability of sanctions across jurisdictions (Slinger & Roesch, 2010). Some courts would send participants to jail for a period of time, some would re-adjust the current treatment mandate while others terminate offender's participation in the program. The majority of Canadian MHCs do not usually use jail time as sanctions. Typically, they would revise treatment

order or increase court appearances. For the Vancouver Community Court, the sanction is at the discretion of the judge, depending on the severity and frequency of non-compliance (Slinger & Roesch, 2010).

Different problem-solving courts also have different time points for intervention, some will start treating clients before the plea of guilty while others will not (Slinger & Roesch, 2010). MHC participants in Saint John, New Brunswick and Nova Scotia must formally admit responsibility for their crimes, though not necessarily in the form of guilty plea (Campbell et al., 2015b; Campbell, Adams, Ennis, & Canales, 2015a). The Winnipeg MHC, all Canadian DTCs, and the Vancouver Downtown Community Court require an admission of guilt under the law to be accepted into the program (Slinger & Roesch, 2010). The Toronto MHC, however, will start the intervention pre-plea. It has been suggested that the requirement of the guilty plea would motivate offenders to participate in the programs since they are faced with criminal charges until program graduation.

The outcome of graduation differs among problem-solving courts in Canada. Some would result in complete dismissal of charges, in the recognition that having criminal convictions on their records would negatively impact opportunities for housing and employment of offenders (Slinger & Roesch, 2010). Other courts would not make any changes to the impending criminal records; completing the program would simply help participants avoid serving jail time. Canadian MHCs and DTCs typically aims to drop charges. Similarly, the Vancouver Community Court would stay the charges or expunge the records of successful completers.

### **Guidelines**

A number of guidelines have been proposed to ensure the quality and effectiveness of diversion programs for offenders with mental health and substance abuse issues. This literature

review focuses on three recommendations: individualization of treatment plan, implementation of specific evidence-based treatment techniques, and increase in retention rate in the initial phase of the intervention. These recommendations are discussed in more details below.

**Individualized treatment.** It is recommended that interventions be tailored to an individual's needs and diagnosis (Livingston, 2008). The literature on correctional and criminal justice treatment has generally supported the effectiveness of treatment based on the Risk-Need-Responsivity (RNR) model, an empirically supported framework for matching offenders' characteristics to treatment programs (Somers, Rezansoff, & Moniruzzaman, 2014). Existing evidence suggests that correctional programs that adhered to the RNR models reduced recidivism by up to 35% (Andrews & Bonta, 2010). The model is comprised of the three principles of risk, need, and responsivity (Justice and Public Safety, 2017). Studies have shown that the greatest reduction in recidivism is associated with full adherence to these 3 core principles.

The risk principle highlights the importance of matching the level of services to the offender's risk to re-offend (Justice and Public Safety, 2017). It is recommended that the most intensive treatment, with high frequency and large dosage, be reserved for those at highest risk for recidivism. Treatment dosage for higher risk offenders has been estimated to range from 100 to 300 hours (Andrews & Bonta, 2010). In contrast, low risk offenders, known in the psychotherapy literature as the YAVIS client (young, attractive, verbal, intelligent, and successful) only need minimal services. In fact, some studies found that treatment delivered to low-risk offenders even increased the likelihood of negative outcomes (Andrews & Bonta, 2010).

Adherence to this principle requires a reliable and valid assessment of risk (Andrews & Bonta, 2010). One method of risk assessment is structured clinical judgement, in which the



evaluator makes the decision based on specific factors that needs to be considered. Although this method has been shown to outperform unstructured clinical assessment, its predictive utility is not as high as that of structured actuarial risk tools. The actuarial approaches consider both predominantly static and dynamic risk factors (Andrews & Bonta, 2010). The former encompasses various criminal and drug abuse history variables while the later refers to risk and need factors associated with criminal behaviors that can be changed through treatment (Andrews & Bonta, 2010; Weekes, Mugford, Bourgon, & Price, 2006). One static risk factor (history of antisocial behavior) and seven dynamic risk factors (procriminal attitudes, antisocial peers/limited prosocial peers, antisocial personality, lack of prosocial leisure activities, lack of education/employment, family/marital problems, substance abuse) have been identified in the literature as the 8 central correlates of criminal conduct (Campbell et al., 2015b; Gutierrez & Bourgon, 2009).

The need principle recommends treatment to target individuals' criminogenic needs/dynamic risk factors (Justice and Public Safety, 2017). This principle differentiates between criminogenic and noncriminogenic needs (Andrews & Bonta, 2010). Some examples of the latter are self-esteem, feelings of emotional discomfort, major mental disorder, lack of ambition, history of victimization, fear of official punishment, and lack of physical activity. Unlike criminogenic needs, noncriminogenic needs are factors that demonstrate minimal or no relationship with criminal behaviors. For example, increasing self-esteem without addressing procriminal attitudes is unlikely to reduce recidivism. Therefore, participants might benefit from treatment that specifically target their individual criminogenic needs. For example, treatment plan for clients with family functioning difficulties can include family counselling, instead of general counselling or brief therapy (Davis, Peterson-Badali, Weagant, & Skilling, 2015).

The responsivity principle involves the appropriate match between treatment plan and offenders' unique strengths and weaknesses (Justice and Public Safety, 2017). General and specific responsivity constitute 2 major aspects of this principle (Andrews & Bonta, 2010). The former recognizes that the types of intervention would influence the effectiveness of the program. It stresses the importance of therapeutic relationship and advocates for the use of cognitive behavioral intervention in treatment plans. The latter is concerned with designing treatment according to strengths, learning styles, motivations, personalities, bio-demographic characteristics (e.g., gender, ethnicity, age) and abilities (e.g., physical disabilities, mental health, level of intelligence). While these elements do not directly predict reoffending, they influence the effectiveness of the intervention (Davis et al., 2015).

Because of the strong empirical evidence for treating criminogenic needs to reduce recidivism, it has been recommended that the RNR model be used to guide the development of treatment program for offenders with mental illness and substance use disorders (Campbell et al., 2015a; Justice and Public Safety, 2017). Research has shown that offenders with and without mental illness share the same major risk factors for general and violent recidivism (Campbell et al., 2015b). Although mental health is associated with criminal behaviors, it is not a strong predictor of recidivism (Davis et al., 2015). The direct relationship between mental illness and criminal behaviors is only evident in a small group of people with mental disorders. For the majority of mentally ill offenders, this relationship is mediated by criminological needs. These findings have important implications for intervention. People whose mental illness directly causes criminal behaviors might benefit from treatment primarily targeting mental health problems. However, since this direct relationship does not apply to the majority of offenders with mental illness, a diversion program is unlikely to reduce recidivism if it only focuses mental

health intervention and neglecting criminogenic factors and recidivism risk (Campbell et al., 2015b). Within the RNR framework, mental health needs can be categorized as responsivity factors that influence the effectiveness of the treatment of criminogenic needs. Application of the RNR model within the MHC and DTC context requires case management plans to match levels of supervision and intervention to the recidivism risk of each client (Campbell et al., 2015b). Treatment plan would target both criminogenic needs and mental health and substance abuse problems.

There are a number of basic concepts and techniques, such as relapse prevention and motivational interviewing, that may be suitable for most groups of offenders (Weekes et al., 2006). However, programs designed for Caucasian adult males, which are most common among MHCs and DTCs, may not be effective when delivered to different populations. Thus, it has been suggested that the design of treatment plan takes into account gender, age, sexual orientation, and cultural differences (Justice and Public Safety, 2017). Research indicates that specific population of offenders have different pathways into crime and thus require unique interventions and services (Smith, 2011). For example, sexual and physical abuse, especially within familial and romantic relationships, have been linked to substance abuse, mental illness, and criminal behaviors in women (Ennis et al., 2016). It is possible that women who have experienced trauma and abuse use drugs as a coping mechanism and thus develop dependence over time (Smith, 2011). Addiction, in turns, is associated with criminal activities. These individuals might commit crime either to obtain drugs or while under the influence. Based on these findings, it is recommended that life experiences such as primary care-taking responsibility for children or history of domestic violence be taken into account when designing treatment plans for incarcerated women. A number of strategies have been proposed to address women's specific

needs. For examples, some interventions have been designed to create informal and formal spaces where women can safely share their stories and learn about the connections between substance use, violence, poverty, stress, health problems, and other connecting factors (Weekes et al., 2006). Other programs aim to increase feelings of security, teach effective coping mechanisms, and provide social support via therapeutic alliance (Smith, 2011). However, limited research has been done to evaluate the effectiveness of these intervention programs.

An individual's cultural history, values, and beliefs are also important factors to be considered. (Justice and Public Safety, 2017). Individuals with aboriginal ethnicity are grossly underrepresented in MHC and DTC, given the high crime rate within this population (Somers et al., 2012; Watts & Weinrath, 2017). For examples, indigenous people only represented around one-thirds of the sample in a study of the Winnipeg MHC (Watts & Weinrath, 2017). High proportion of Caucasian admissions into MHC was also present in New Brunswick (97%) and Nova Scotia (84%). Indigenous offenders are faced with numerous social inequalities that might interfere with the recovery process from substance use and reintegration into the community after correctional involvement (Somers et al., 2012). There is a need to incorporate indigenous understanding of wellness into the programs, so that indigenous clients would have access to culturally responsive services and culturally safe practices. This requires collaboration with indigenous partners and organizations (Justice and Public Safety, 2017).

**Empirically validated interventions.** Despite sharing similar restorative and therapeutic purposes, there is a wide variability in treatment methods among DTCs and MHCs in Canada, ranging from cognitive behavioural therapy to therapeutic community programs to psycho-educational programs (Livingston, 2008; Smith, 2011). Evaluations of court programs administering psycho-educational interventions (i.e., interventions that provide information and

support to mentally ill people to better understand and cope with their illnesses) have not found strong evidence of their effectiveness (Smith, 2011). Participants did not demonstrate discernible improvements in coping skills or knowledge about the consequences of substance abuse. In contrast, the existing evidence generally supports the efficacy of cognitive-behavioral intervention programs on reducing recidivism (Gutierrez & Bourgon, 2009). These programs aim to prevent relapse by building problem-solving skills and addressing personal, social, and economics factors associated with criminal behaviors (Smith, 2011). Other treatment techniques associated with significant reduction in substance abuse are stress management and goal-setting trainings, motivational interviewing/enhancement techniques, cognitive restructuring techniques targeting anti-social attitudes and values, and community reinforcement techniques (Weekes et al., 2006).

It is generally recommended that DTCs take a harm reduction approach, whereby participants are not required to be abstinent at application or admission (Justice and Public Safety, 2017). Studies on post-release behaviour of incarcerated offenders found that individuals attempting to abstain completely from all alcohol and other drug use had a significantly higher rate of reoffending, relative to those who aimed to moderate or reduce their substance use (Weekes et al., 2006). This finding has important implications for substance abuse treatment programs that tend to demand complete abstinence and frequent urine test to verify compliance. Unlike US drug courts which are based on a strict abstinence model, the majority of DTCs in Canada allows for certain harm reduction practises (Lyons, 2013). For example, offenders who are prescribed methadone is eligible to apply to the Toronto DTC. Moreover, participants in the Toronto DTC are not required to immediately abstain from all intoxicants, although they are expected to actively work towards abstinence (Newton-Taylor, Patra, & Gliksman, 2009).

Moreover, relapse does not automatically result in sanctions or expulsion in the Toronto DTC. Similarly, participants of the Ottawa DTC who are regular IV users are required to enter a contract not to break skin if they relapse (Rideauwood Addiction and Family Services, 2009). This practise aims to prevent the spread of infectious disease and other health concerns related to IV drug use.

The harm reduction model is a health-oriented approach that, rather than focusing on punishment, aims to minimize the harm to offenders and the society resulting from drug abuse (Heagle & Scott, n.d.). It recognizes that drug abuse is a chronic illness and that relapse may occur during treatment, especially for offenders with a long-term and serious dependency on drugs (Heagle & Scott, n.d.; La Prairie, Gliksman, Erickson, Wall, & Newton-Taylor, 2002). However, abstinence is still promoted as the long-term goal, with the court typically providing some forms of rewards to clients who show progress, motivation, and commitment to abstinence (La Prairie et al., 2002). Moreover, most DTCs require participants to remain abstinent for a certain period of time as part of graduation criteria (Heagle & Scott, n.d.).

Post-program maintenance, support, and aftercare in the community are no less important in relapse prevention and recidivism reduction than treatment programs (Smith, 2011). Since participants are used to a structured routine duties and activities during treatment, the transition to community may lead to feelings of incompetency, alienation, anxiety, and ultimately relapse. This may explain why in some cases, positive effects of treatment did not extend beyond completion of the program (Weekes et al., 2006). Since reintegration into the community can be a gradual process that requires further professional assistance, access to aftercare services might be a critical component of DTCs. Continuing care may come from many forms, such as telephone contacts or in-person meetings with a therapist or case manager,

attending peer support group, further assistance with housing, employment, emotional healing, and skill building (Health Canada, 1999; Smith, 2011). These services can help maintain treatment gains and ensure smooth transition into the community. Similar to treatment plans, the intensity of after care programs is also recommended to be tailored to an individual's risk and needs, which are assessed at program completion.

**Increased retention rate.** Although limited research has been done on characteristics of offenders participating in mental health and drug diversion programs, some evidence suggests that certain sociodemographic and clinical factors may influence retention and successful outcomes of a diversion program (Verhaaff & Scott, 2015a). These findings have important implications, since prematurely terminated participants are more likely to relapse and engage in criminal activities than those who stay longer in the program (Patra et al., 2010). Thus, one way to reduce recidivism is to increase retention rate in the group of clients at high risk for program non-completion. To this end, factors associated with program outcomes can be used to identify this subgroup of participants and guide the development of effective interventions for them (Health Canada, 1999).

A study of participants of a post-charge mental health diversion program operated by Durham Mental Health Services (DMHS) found that unemployment, symptoms severity of mental disorder, comorbidity, and residential instability can predict program completion (Verhaaff & Scott, 2015). Employment status has been used in some studies to indicate the extent to which individuals are attached to society and are willing to engage in normative behaviors. Some researchers hypothesized that MHC and DTC clients who are currently employed (an indicator of conformity) are more likely to complete a diversion program. However, Verhaaff and Scott (2015) found that unemployment prior to MHC entry was

positively related to program completion. It is possible that lack of meaningful employment acts as a deterrent against program withdrawal and motivates client to comply with treatment procedures. In contrast, employment responsibilities may present a competing demand to treatment compliance, since both requires considerable energy and time commitments. Thus, participants with a job may be less concerned with a long-term goal such as completing the program while they have to focus on attaining employment security and financial stability. This finding suggests that in some cases, employment may act as a barrier to success in a diversion program.

Verhaaff and Scott (2015) also found that housing security predicted successful completion. This finding is in line with another study of predictors of program retention in a group of the Toronto DTC participants (Patra et al., 2010). Those who stayed in the program for more than 3 months but did not complete the requirement reported a high level of residential instability. A plausible explanation is that clients failing to secure permanent housing may have to withdraw from treatment services and continue their criminal activities as an alternative to homelessness (Verhaaff & Scott, 2015). Unstable housing is a common problem facing marginalized or street-involved drug users (Patra et al., 2010). Since having stable housing may motivate participants to stay in the program longer, DTCs might find it useful to provide clients with assistance in finding housing and financial support for the cost of housing.

Verhaaff and Scott (2015) hypothesized that the severity of mental illness would be positively associated with program non-completion. However, the results indicate that although still requiring an additional referral to further treatment, clients reporting symptoms of a severe mental illness without a concurrent disorder were more likely to complete the planned treatment relative to those who did not present severe symptoms. This finding may be attributed to the



program's frequent and intensive mental health treatment. In contrast, the presence of a concurrent disorder increases the likelihood of program non-completion, with clients having a dual diagnosis being more than twice as likely to withdraw from the program. This is unsurprising given that people with a concurrent disorder require an integrative approach that is often costly and difficult. Therefore, it is typical for services for this population of offenders to be fragmented and disjointed, with some programs only addressing one disorder while neglecting the other (Verhaaff & Scott, 2015).

Patra et al. (2010) examined treatment compliance and its effect on retention in a sample of the Toronto DTC participants. They identified a number of characteristics that differentiate participants who were not expected to comply yet did so in the long run (unexpected retention) from those expected to comply but did not (unexpected expulsion). The former showed noncompliance in the first 30 days of their participation but stayed in the program for more than 3 months, while the latter showed compliance in the first 30 days of their participation but stayed in the program for less than 3 months. The results indicate that the unexpected expulsion group was characterized by stable housing, lack of family chaos, and not being in custody at program admission. However, they were more likely to have a family member with substance abuse problems. Unlike the unexpected expulsion group, the majority of the unexpected retention group were faced with difficulties such as chaotic family life or unstable residence. However, they were highly motivated to stay out of jail. This finding suggests that although intrinsic motivation for treatment is essential in successful program completion, extrinsic motivators such as the desire to stay out of jail are also strong predictors of treatment retention among participants. Therefore, to motivate participants to stay in the program, DTCs can design treatment programs that emphasize the rewards of participation, such as housing

accommodation, counselling, and graduated incentives. Another way to increase participants' motivation is to incorporate motivational enhancement therapies into their treatment plans, which have been shown to improve program outcomes (Patra et al., 2010).

Taken together, these findings suggest that there are a number of factors that differentiate between offenders who are more likely to complete their treatment plan and those who are less likely. Some of these factors are employment and housing security, having a dual diagnosis, having family members with substance abuse issues, and being motivated to complete the program. Diversion program can take these factors into account to increase retention rate in the group of clients at high risk for non-completion.

### **Recidivism Outcomes**

Despite the upward trends to internationalization of problem-solving courts, the majority of research outcome are from studies done in the US (Aubry, Sylvestre, Smith, Miller, & Birnie, 2009; Somers et al., 2012). Limited peer-reviewed research has been done on the effectiveness of Canadian mental health and drug courts, which have distinct drug-related laws, judicial procedures, mental health services and targeted population.

Among the few studies that have been conducted to evaluate the impact of Canadian problem-solving courts on recidivism, there is wide variability in the way recidivism is defined, the length of follow-up period, and the type of clients being tracked. A number of studies examining recidivism outcomes in MHC and DTC did not conduct null hypothesis statistical significance testing. This might be because small sample size is fairly common in this type of research. The use of small sample may violate several hypothesis test assumptions and potentially compromise the accuracy of the results of the analysis. However, descriptive results from these studies are fairly promising. Several studies found that the majority of participants did

not have new charges brought against them within the follow-up period. For example, in a study evaluating the Canadian Mental Health Association (CMHA) Ottawa Branch's Court Outreach Program in a group of 59 clients who were no longer in the program at the time of the study, Aubry et al. (2009) found that many participants (65%) did not have any new charges between admission and termination. Clients who reoffended have an average of 2.82 charges, with 65% having 2 or more charges brought against them.

Recidivism rate is also fairly low in two MHCs, one in St Thomas and the other in London (Swaminath, Mendonca, Vidal, & Chapman, 2002). Only 2% to 3% of the participants in each MHC had any charge brought against them within a year of program admission. An evaluation of the DTC in Calgary using a sample of 22 CDTC clients who successfully graduated from the program also found favorable results (Hoffart, 2015). Approximately 70% of the graduates had no new criminal convictions since graduation until the end of the study and 80% had no new criminal convictions or outstanding charges during the first year post-graduation. Hoffart (2015) also found that the number of criminal convictions of the sample decreased from 794 at pre-admission to only 48 at post-graduation. The average number of convictions per graduate decreased from 36.1 to only 2.18 following graduation. The percentage of severe offences committed after graduation was also lower than pre-admission.

These findings, while promising, must be interpreted with caution. Several studies evaluating recidivism outcomes by conducting null hypothesis statistical significance testing have not found significant results regarding the effectiveness of MHCs and DTCs. For example, an evaluation of the Nova Scotia MHC using a sample of 80 participants found that even though completers and those still active in MHC tend to take longer to reoffend than those not admitted or expelled from the program, these differences were not statistically significant (Campbell et al.,

2015a). Moreover, there was no significant difference in the number of individuals who reoffended within 12 months of MHC referral between MHC participants and offenders referred but not admitted into the program. The time to the first new charge post-MHC referral was also similar for these two groups. It is interesting to note that general recidivism tended to occur within an average of 226.84 days after MHC referral. This suggests that the year after MHC referral was the most vulnerable period for recidivism.

Watts and Weinrath (2017) also did not find a significant improvement in recidivism outcomes of a group of 35 Winnipeg MHC participants. In this study, a per month rate of criminal justice involvement was compared between 2 years before admission and from admission to the date of the study. The results showed that one fourth of the participants had been charged with a new crime while they were in the program, and those criminally re-involved had an average of 1.9 charges per month. However, when data on one participant with more than 11 charges was removed from the analysis, this figure dropped to only 0.19 per month, almost a 50% reduction from pre-intervention. There was also a reduction of more than 50% in average custody days per month among MHC participants. However, the reduction in number of charges per month and number of days in custody per month were not statistically significant.

The lack of significant results is also present in a study evaluating Saint John MHC, in which a group of 187 offenders were tracked from their discharge date to the end of the study (Campbell et al., 2015b). Since participants started the program at different times, follow-up period was different for each participant. In this study, cases were grouped into three different MHC status depending on their level of involvement with the MHC: completers, partial completers, and non-completers. The results showed that approximately one third of the whole sample had at least one new charge following MHC discharge for the entire follow-up period. A

moderate reduction in recidivism risk was observed at the end of the program for completers, while that of non-completers and non-starters did not show any significant changes. Although completers have the lowest recidivism rate among three MHC groups, these differences were not statistically significant. When the total time from discharge to a new charge for recidivists was examined, partial-completers have the shortest time to reoffend, relative to completers and non-completers.

The non-significant results found in these studies may be due to low statistical power. Power is the probability of finding a statistically significant difference when the difference does exist in the population (Sullivan & Feinn, 2012). Failure to detect a plausible effect is often assumed to be caused by insufficient power resulting from using small samples (Cohen, 1992). The sample size in the Campbell et al. (2015a) study of the Nova Scotia MHC was 80 while that of the Watts and Weinrath (2017) study was only 35. If the true population effect size is small or medium, these studies might not have sufficient power to detect the true effect. Another possible contributing factor is that lack of focus on criminogenic needs in treatment plan. In their evaluation of the Saint John MHC, Campbell et al. (2015b) noted that the program seemed to put greater emphasis on mental health and social service needs, such as psychiatric follow-up, housing, and financial support, rather than on criminogenic needs. As described above, mental illness is not a strong predictor of criminal behaviors (Davis et al., 2015). Therefore, treating mental health issues without targeting criminogenic needs might not reduce recidivism.

It is important to note that not every study evaluating Canadian MHCs and DTCs found nonsignificant results. For example, results from an evaluation of recidivism outcomes of the DTC in Vancouver generally support the success of the Vancouver DTC in reducing recidivism (Somers et al., 2012). In this study, recidivism outcomes of a group of 360 offenders was

compared between 2 years prior to admission and 2 years after program exit. The decrease in the number of offences per person per year of the DTC cohort was significantly greater than that of the control group. The reduction in drug-related offences followed the same pattern, with the intervention group demonstrating significant improvement in the two years following their involvement with the program. The percentage of people in the DTC and the control group who committed any offence both decreased significantly post-intervention, with the former demonstrating a greater magnitude of the reduction. Regarding the percentage of people committing drug-related offences, only the DTC group showed a significant decrease in the two-year post intervention period.

These findings are impressive, given that nearly half of the DTC cohort was considered at baseline as having a “severe” risk of recidivism related to substance abuse. In comparison to the general offender population in the same neighborhood, DTC participants included people with significantly lower educational achievement, significantly higher proportions of females and Aboriginal people, significantly higher per capita disability support, and a greater numbers of hospital days prior to entering DTC. These characteristics are prognostic of poorer responsiveness to justice and substance-related interventions. Therefore, the positive findings on recidivism indicate that the local adaptations of the Vancouver DTC, including Aboriginal liaison services, financial assistance, and housing supports, may have contributed to the success of the program.

Taken together, these findings suggest that MHCs and DTCs within the Canadian judicial context have the potential to reduce recidivism of a population of offenders with diverse and complex needs. However, due to the wide variability in the models adopted by these courts, to draw a general conclusion about the effectiveness of Canadian MHCs and DTCs is to be overly

simplistic. Some processes and procedures may be more effective than others. Therefore, each court should be evaluated separately in order to examine its own strengths and weaknesses.

### **The Peterborough Community Support Court (CSC)**

The Peterborough Community Support Court (CSC) is a specialized criminal court established in 2011 to address the mental health and addiction issues contributing to criminal behaviors and thus reduce recidivism rate among the populations of offenders facing these problems. The primary focus of the court rehabilitation and reintegration into the community, rather than denunciation and deterrence. The CSC consists of 3 tracks: Diversion, Track1, and Track 2, with each track having its' own eligibility criteria, treatment plan, and completion criteria.

**Eligibility criteria.** To be eligible for Diversion, applicants must have a mental health and/or substance use concern, be charged with a Class 1 offence (i.e., mischief under \$5000, theft under \$5000, cause disturbance, fraud under \$5000, etc.), and have no or a minor criminal record and not facing any significant jail time (under 90 days). Track One eligibility criteria include having a mental health or substance use concern, charge(s) that warrant a conviction but not necessarily jail time or may be facing a minimum jail time of less than 90 days and most likely has a criminal record. If accepted into Track One the client must plead guilty to their charge(s). In contrast, an individual applying for Track 2 must have a mental health and/or addiction concern, be facing 90 or more days of jail time, must plead guilty to their charge(s), and sentencing is held over until the individual completes the program or is discharged.

**Court appearances.** Asides from following the treatment plan, participants are also required to attend court regularly. For Diversion and Track 1 clients, the frequency of appearances will be dependent on their needs as they are not generally required to present on

every CSC day. In contrast, it is mandatory that Track 2 clients attend court on regular CSC days.

**Treatment plan.** Diversions last approximately 6 months whereas Track 1 usually involves a 3-month diversion and a probationary period. Track 2 is the most intensive of the 3 tracks, requiring the individual to commit to a minimum of 12 months participation in Community Support Court, regular twice weekly urine screens, and 3 months consecutive abstinence for the final months of the program.

All clients are active participants in the development of their diversion plan. The plan provides them with goals and objectives developed using the assessments and additional evaluations, reports from collaborative professionals, and the applicant themselves. Track 2 is the only track that require the Community Treatment Intervention Plan (CTIP) to be approved of by Multidisciplinary Team (MDT) in order to proceed. Treatment plans may include attending groups, individual counseling, medication management, concrete issues related to stable housing, gaining increased financial stability and mandated or voluntary anger management interventions. This also includes frequent contacts with the Court Support Worker or the Lead Staff during their period of involvement in the program.

**Sanctions and incentives.** Throughout Track 2 program, incentives and sanctions are also utilized. Behaviours that demonstrate program compliance will be recognized by the Judge to provide incentive to individuals to continue their recovery. Upon the recommendation of the Multidisciplinary Team, participants may be given rewards or incentives for compliant behavior. Recognition and/or a tangible incentive (i.e., movie pass) may be offered to clients who are in compliance with the court order and following the treatment plan. If, however, a sanction is necessary, the Judge will impose it swiftly upon violation of the program rules. Some examples



of behaviours that will result in sanctions are unexcused absences from court or treatment, dishonesty to the court, lack of engagement, and new criminal or civil charges.

**Completion outcomes.** A successful completion of the tracks requires completing treatment plan's goals and objectives. For Diversion clients, a successful outcome results in the charge being withdrawn or stayed whereas for Track 1 clients, program completion results in a Joint Submission for a Suspended Sentence or a Conditional Discharge, subject to approval by Crown. In contrast, upon successful completion of Track 2, the client, the crown, and defense submit a joint submission for a noncustodial position (i.e., no jail time), subject to approval by the judge, followed by probationary period with a probation officer.

### **Current study**

The current study aims to assess the impact of the Peterborough CSC on reducing recidivism. Towards this end, we compared the recidivism patterns between 2 groups of participants (completers and non-completers) at 3 assessment periods: while in the program, during the first year following program exit, and during the second year following program exit. We predicted that individuals who completed their treatment plan were less likely to reoffend than those not completing the program. This study also examined the factors potentially associated with program completion such as length of treatment or number of court appearances. This can reveal the characteristics differentiating participants who did and did not complete the program, thus contributing to the early identification of participants who are at high-risk of program non-completion. In addition, factors potentially influencing the likelihood of reoffending were also examined. Similar to the factors associated with program completion, this helps identify participants with high risk of reoffending following CSC involvement.

## **Method**

### **Data Sources**

Data for the present study was provided by a Peterborough Crown attorney who developed and managed the Peterborough CSC. The Crown recorded information on treatment program characteristics, completion status, criminal history, and mental health and/or addiction history of each participants. Recidivism data was provided by the Peterborough Police.

### **Participants**

Participants were included if they were enrolled in the Peterborough CSC between its inception in 2011 and 2017, regardless of their eventual status in the program (i.e., graduated, discharged, withdrawn). We restricted inclusion to individuals who have exited the Peterborough CSC by the time of the study (January 2018) to ensure completion status data for each participant.

Participants were categorized into two groups to describe their status at the point of exiting the program. Participants who were expelled or decided to withdraw from the program were characterized as “non-completers”. People who fulfilled the program requirements and graduated from the program were described as “completers”.

### **Measures**

Participants’ characteristics available for analysis included completion status, criminal history, and mental health and/or addiction history, recidivism, duration of treatment, and duration of involvement with CSC. Variables that were measured dichotomously were completion status (completers = 1, non-completers = 0), mental health and/or addiction history (having comorbid mental health and addiction issue = 1, having only either mental health or addiction issue =0), recidivism (reoffended = 1, did not reoffend = 0).

Recidivism was defined as being charged with at least one offence, regardless of whether the person was convicted of those offences or not. Participants were followed up to identify subsequent charges during the first and second year following involvement in the Peterborough CSC, regardless of their status at program completion (i.e., graduated, discharged, withdrawn). In the current study, recidivism while in the program was also recorded, although recidivism in the post-program period was considered as the primary outcome.

The number of charges participants had prior to entering the program and the type of crime they committed were used to capture some of their criminal history. The number of pre-admission charges was measured on a continuum, as were the number of days participants spent undergoing their treatment and the number of days they were involved with CSC.

### **Statistical Procedures**

A descriptive analysis was performed for the sample. To identify whether any significant association existed between diversion outcomes and other variables, Wilcoxon rank sum tests with continuity correction data were conducted for continuous variables and Chi-squared tests were conducted for categorical variables. Chi-squared tests for trend in proportion were performed to assess the trend in recidivism over time.

Data analysis was conducted using R (Team, R., 2015). Extreme values on a continuous variable (e.g., outliers) were replaced with the median value of the data set. Participants with missing values on a variable were excluded in the analysis involving that variable.

## **Results**

### **Participants Information**

A total of 201 participants who were enrolled in the program since its inception 2011 until November 30, 2017. Among them, 12 participants were excluded because of their active

program status. Thus, the sample included a total of 189 Peterborough CSC participants who were no longer in the program by the time of our study. Offence history and mental health history of the sample are presented in Table 1. On average, Peterborough CSC participants were convicted of 3.34 offences before entering the program. The most common offences committed by the participants were Failure to comply with probation order (45%), Offences Against Rights of Property (45%), Offences Against the Person and Reputation (36%), and Offences Against the Administration of Law and Justice (28%). Regarding participants’ mental health history, 37% of the cohort were diagnosed with comorbid substance use and mental health disorders, whereas 38% were diagnosed with mental disorders only and 25% with addiction only.

Table 1  
*Offence History and Mental Health History of the Sample*

Variables	<i>n (%)</i>
<b>Type of offences committed pre-admission</b>	
Offences Against the Administration of Law and Justice	53 (28)
Offences Against the Person and Reputation	68 (36)
Offences Against Rights of Property	85 (45)
Fraudulent Transactions Relating to Contracts and Trade	16 (8)
Willful and Forbidden Acts in Respect of Certain Property	22 (12)
Failure to comply with probation order	85 (45)
Possession of substance	12 (6)
Trafficking in substance	10 (5)
<b>Number of charges pre-admission</b>	

<i>M (SD)</i>	3.34 (2.73)
History of mental health/addiction issues	
Mental health issues only	51 (38)
Addiction issues only	33 (25)
Both mental health and addiction issues	49 (37)

Program-related characteristics and recidivism rate of participants are shown in Table 2. From its inception in 2011 to the end of 2017, the Peterborough CSC’s completion rate was 56%, with 106 out of 189 participants successfully completing the program. Regardless of their status at program exit, participants were enrolled in CSC for an average of 203.31 days and spent a mean of 165.38 days undergoing their treatment plan. There was a wide variation in client time in the CSC and the CTIP, with the former ranging from 11 to 622 days and the latter from 12 to 588 days. Participants made an average of 15.32 number of court appearances during their time in CSC. Regarding recidivism rate, 54% of the cohort were charged with at least one new crimes while in the program. During the first and second year following their involvement in the Peterborough CSC, 41% and 33% of the sample were charged with new offences respectively.

Table 2

*Program-related Characteristics and Recidivism Rate of the Sample*

Variables	<i>n (%)</i>
Program status	
Completers	106 (56)
Non-completers	83 (44)

Duration in CSC in days	
<i>M (SD)</i>	203.31 (118.80)
Duration in treatment program in days	
<i>M (SD)</i>	165.38 (98.64)
Number of court appearances	
<i>M (SD)</i>	15.32 (9.37)
Recidivism during the program	
Yes	79 (54)
No	68 (46)
Recidivism in the 1 <sup>st</sup> year post-program	
Yes	72 (41)
No	103 (59)
Recidivism in the 2 <sup>nd</sup> year post-program	
Yes	43 (33)
No	89 (67)

**Factors Associated with Program Completion**

Table 3 illustrates the relationship between program completion status and other variables. No significant differences were found in number of court appearances or number of pre-admission charges between completers and non-completers. However, there was a significant difference in the amount of time spent in CSC between two groups ( $W = 1283, p < .001$ ). Participants who completed the program spent significantly more time in CSC ( $M = 228$  days) than those who did not complete it ( $M = 153$  days). Similarly, the length of treatment plan of

completers ( $M = 173$  days) was significantly greater than that of non-completers ( $M = 128$  days),  $W = 642.5, p < .05$ .

Program completion was associated with the co-existence of mental disorders and substance abuse. Participants who had both mental health and substance abuse issues were less likely to complete the program than those with only mental illness or substance abuse ( $\chi^2 (1) = 5.862, p < .05$ ). Specifically, less than half (47%) of participants with comorbid mental disorders and addiction graduated from the program whereas of the participants without the comorbidity, the majority (79%) were program completers. Another factor associated with the likelihood of program completion is recidivism while in the program. Participants who were charged with at least one new offence while in the program were significantly less likely to complete the program than those who did not reoffend ( $\chi^2 (1) = 38.406, p < .001$ ). Only 36% of the people who reoffended while in the program graduated whereas for people who did not reoffend, 77% did.

Table 3

*Characteristics of Program Completers and Non-completers*

Variables	Completers <i>n (%)</i>	Non-completers <i>n (%)</i>
Duration in CSC in days		
<i>M (SD)</i>	228.40 (108.62)	153.13 (123.47)
Duration in treatment program in days		
<i>M (SD)</i>	172.68 (95.87)	127.74 (106.72)
Number of court appearances		

<i>M (SD)</i>	15.07 (9.48)	16.50 (9.00)
History of mental health/addiction issues		
Mental disorders or substance abuse only	66 (70)	18 (46)
Both mental health and addiction issues	28 (30)	21 (54)
Number of charges pre-admission		
<i>M (SD)</i>	2.98 (2.29)	3.78 (3.15)
Recidivism during the program		
Yes	26 (25)	46 (66)
No	79 (75)	24 (34)

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### Factors Associated with Recidivism

**Reoffences while in program.** Table 4 shows the relationship between recidivism during the program and other variables. The results indicated that participants charged with at least one new crime during their time in CSC and those who were not did not differ significantly in terms of the amount of time spent in CSC, length of treatment plan, and number of court appearances. However, there was a statistically significant difference in the number of pre-admission charges between these two groups,  $W = 1833.5, p < .01$ . Specifically, participants who reoffended while in the program were charged with an offence prior to program admission significantly more often ( $M = 3.949$  charges) than those who did not reoffend ( $M = 2.767$  charges). The co-existence of mental health and substance abuse issue was also found to be a factor associated with reoffences during the program ( $\chi^2 (1) = 6.626, p < .05$ ). A recidivism rate of 67% was observed in people



who had both mental disorders and addiction during their time in the CSC. In contrast, the recidivism rate was only 37% for people with either mental disorders or addiction.

Table 4

*Characteristics of Participants Reoffending and not Reoffending while in the Program*

Variables	Reoffended while in the program <i>n (%)</i>	Did not reoffend while in the program <i>n (%)</i>
Duration in CSC in days		
<i>M (SD)</i>	190.24 (137.45)	210.00 (109.04)
Duration in treatment program in days		
<i>M (SD)</i>	151.79 (111.40)	167.38 (99.45)
Number of court appearances		
<i>M (SD)</i>	14.48 (8.36)	15.73 (10.61)
History of mental health/addiction issues		
Mental disorders or substance abuse only	24 (52)	41 (79)
Both mental health and addiction issues	22 (48)	11 (21)
Number of charges pre-admission		
<i>M (SD)</i>	3.95 (3.06)	2.77 (2.21)

**Reoffences in the first year after program exit.** The relationship between recidivism in the year following involvement in CSC and other variables are displayed in Table 5. No

significant associations were found in the duration of CSC involvement, the number of court appearances, or the coexistence of mental disorders and substance abuse. However, results suggested that program completion was significantly related to recidivism during the first year following CSC involvement ( $\chi^2 (1) = 27.421, p < .001$ ). The recidivism rate observed in completers (25%) was significantly lower than that in non-completers (66%), indicating that people who successfully graduated from the program were less likely to reoffend during the first year after their program exit. Moreover, there was a significant difference in treatment duration between people who did and did not reoffend in the first year following their involvement in CSC. Participants who were charged with at least one new crime during this period had significantly shorter treatment plan ( $M = 136$  days) than those who did not reoffend ( $M = 176$  days) ( $W = 1874.5, p < .05$ ).

Participants' offense history also appears to influence reoffences within one year post-program. First, a significant difference in the number of pre-admission charges was found between people who did and did not reoffend during the first year after their exit from the CSC ( $W = 2315, p < .001$ ). Specifically, participants who reoffend within this period were charged with an offense significantly more often before entering CSC ( $M = 4.167$  charges) than those who did not reoffend ( $M = 2.786$ ). In addition, lower recidivism while in the program was significantly associated with lower recidivism 1 year after the program ( $\chi^2 (1) = 27.353, p < .001$ ). Among the people who reoffended while in the program, 68% reoffended within the first year after exiting the program. In contrast, only 23% of the people who did not reoffend while in the program were charged with a new crime during the year after their exit.

Table 5

*Characteristics of Participants Reoffending and not Reoffending during the First Year Post-intervention*

Variables	Reoffended during 1 <sup>st</sup> year post-intervention  n (%)	Did not reoffend during 1 <sup>st</sup> year post- intervention  n (%)
Duration in CSC in days		
<i>M (SD)</i>	181.33 (116.59)	213.73 (115.09)
Duration in treatment program in days		
<i>M (SD)</i>	135.67 (84.95)	176.46 (99.27)
Number of court appearances		
<i>M (SD)</i>	14.98 (9.02)	15.31 (9.58)
History of mental health/addiction issues		
Mental disorders or substance abuse only	29 (59)	47 (63)
Both mental health and addiction issues	20 (41)	28 (37)
Number of charges pre-admission		
<i>M (SD)</i>	4.17 (3.12)	2.79 (2.29)
Recidivism during the program		
Yes	50 (77)	23 (31)
No	15 (23)	51 (69)
Program status		
Completers	26 (36)	79 (77)

Non-completers

46 (64)

24 (33)

**Reoffences in the second year after program exit.** Table 6 shows the relationship between recidivism during the second year following CSC participation and other variables. No significant difference was found in the duration of CSC involvement, duration of treatment plan, or in the number of court appearances between participants who faced new charges during the second year after exiting the program and those who did not. However, program completion was related to lower recidivism in the second year following program exit ( $\chi^2 (1) = 8.004, p < .05$ ) such that participants who did not complete the program were significantly more likely to reoffend within this period than those who successfully completed it. Specifically, of all completers, only 23% were charged with new crimes in the second year following their exit from the program, whereas a significantly higher recidivism rate of 46% was observed in non-completers.

Participants' offense history is another factor associated with reoffences during the second year post-exit. First, there was a significant difference in the number of pre-admission charges between the participants who did and did not reoffend in the second year after their involvement in CSC ( $W = 938.5, p < .001$ ). Specifically, participants who reoffended in this period had significantly higher number of charges brought against them prior to entering the program ( $M = 4.65$  charges) than those who did not reoffend ( $M = 2.48$  charges). In addition, the likelihood of reoffending during the second year after exiting the program is also associated with reoffending while in the program ( $\chi^2 (1) = 12.228, p < .001$ ) and with reoffending during the first year after the program ( $\chi^2 (1) = 33.315, p < .001$ ). Only 16% of the people who did not reoffend while in the program were charged with a new crime in the second year after their exit, whereas

this figure was 52% for those individuals who reoffended while in the program. Similarly, among the people who reoffended during the first year after the program, 62% reoffended the next year. In contrast, only 13% of the people who did not reoffend the first year after they exited the program were charged with a new crime the next year.

In addition to program completion and criminal history, the co-existence of mental health and substance abuse issue was also associated with reoffences in the second year post-exit. Participants who had both mental health and substance abuse issues reoffended significantly more often in the second year following their exit from the program than those with only mental illness or substance abuse ( $\chi^2 (1) = 4.804, p < .05$ ). Specifically, more than half (54%) of participants with comorbid mental health and addiction issues reoffended within the second year after program exit. In contrast, recidivism rate in this period was much lower in the group of participants with only mental health or addiction issues (26%).

Table 6

*Characteristics of Participants Reoffending and not Reoffending during the Second Year Post-intervention*

Variables	Reoffended during 2 <sup>nd</sup> year post-program n (%)	Did not reoffend during 2 <sup>nd</sup> year post-program n (%)
Duration in CSC in days		
<i>M (SD)</i>	204.88 (130.64)	204.28 (111.27)
Duration in treatment program in days		
<i>M (SD)</i>	165.09 (89.63)	165.07 (92.68)

Number of court appearances

<i>M (SD)</i>	15.35 (10.21)	14.62 (8.51)
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History of mental health/addiction issues

Mental disorders or substance abuse	15 (52)	42 (78)
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only

Both mental health and addiction issues	14 (48)	12 (22)
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Number of charges pre-admission

<i>M (SD)</i>	4.65 (3.48)	2.48 (1.63)
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Recidivism during the program

Yes	27 (75)	29 (38)
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No	9 (25)	48 (62)
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Recidivism 1 year post-exit

Yes	33 (77)	20 (22)
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No	10 (23)	69 (78)
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Program status

Completers	18 (42)	60 (76)
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Non-completers	25 (58)	19 (24)
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**Reoffences over time.** A Chi-squared test for trend in proportion indicated a statistically significant linear decrease in recidivism rate of the whole sample over time ( $\chi^2 (1) = 12.847, p < .001$ ). Although 54% of the participants reoffended while in the program, only 41% reoffended during the first year after they exited the program. Moreover, during the second year after the program, only 33% of the Peterborough CSC participants were charged with a new crime.

Separate analysis for program completers and non-completers revealed that the linear decrease in recidivism rate of the whole sample over time was mostly driven by a decrease in recidivism rate of non-completers. Recidivism rate of completers remained relatively stable over time ( $\chi^2 (1) = 0.373, p > .05$ ), with the proportion of completers who reoffended during the program, 1 year after the program, and 2 years after the program being 27%, 25%, and 23% respectively. In contrast, there was a significantly linear decrease in recidivism rate of non-completers over time ( $\chi^2 (1) = 15.331, p < .001$ ). While in the program, 80% of non-completers were charged with a new crime. However, recidivism rate among non-completers decreased to 66% 1 year after they exited the program. During the second year post-exit, only 46% of people who did not complete the program reoffended.

### **Discussion**

The current study was an evaluation of a mental health and drug treatment court with a sample of adult offenders with mental health and/or substance use issues. This evaluation provided information about the typical profile of participants in the Peterborough CSC, the efficacy of the court in reducing recidivism, and the factors associated with program completion as well as recidivism following CSC involvement.

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

One of the core objective of this study was to determine whether involvement in the Peterborough CSC was associated with the reduced likelihood of reoffences. The results of this study provide at least partial support for the efficacy of the Peterborough CSC in facilitating recidivism reduction. Completion of the programs was significantly associated with the reduced likelihood of reoffending. Compared to non-completers, completers demonstrated significantly lower recidivism rate within both the first and second year after their exit from the program.

During the first year following their CSC involvement, a quarter of participants who successfully graduated from the program reoffended. This was significantly lower than the recidivism rate observed in the group of participants who did not complete the program (66%). A similar pattern of results was found regarding recidivism within the second year after CSC involvement. During this period, 23% of program completers reoffended, whereas the recidivism rate was twice as high in the group of non-completers, with 46% being charged with new offences. Taken together, these results suggested that participants who completed the program tend to reoffend less often than people who did not complete it, at least in the first two years following their exit from CSC.

The association between program completion and reduced recidivism found in this study is mostly consistent with the literature on mental health and drug treatment courts. For example, in a study examining drugs and social exclusion in 10 European cities, March, Oviedo-Joekes, and Romero (2006) found that drug treatment court participants who were prematurely terminated or expelled from the program were more than twice as likely to be in jail after one year following their exit from the program, compared to the people who stayed in the program. Another example of the success of a DTC in reducing recidivism can be found in the Calgary DTC. Hoffart (2015) reported that the majority of program graduates (80%) had no new criminal convictions in the year following their exit from the program. The benefits of program completion have also been noted by Campbell, Canales, Wei, Moser, and Joshi (2011) in their evaluation of Saint John MHC. In this study, MHC participants who completed the program demonstrated significantly lower rate of reoffending in the year following discharged from MHC, compared to those who were not admitted or who failed to complete the program. Not only were Saint John MHC completers reoffended significantly less often than other participants,



the amount of time passed without reoffending observed in this group was also significantly longer than other groups of participants (e.g., people who were not admitted to or did not complete the program).

Program completion has also been linked to benefits other than reduced recidivism. For example, March, Oviedo-Joekes, and Romero (2006) found that DTC participants in 10 European cities who completed the program were at lower risk of relapse than those who withdrew or were expelled from the program. In their evaluation of the Saint John MHC, Campbell et al. (2011) found that participants who completed the MHC demonstrated significant improvement in their mental health functioning in one year following their graduation relative to the time of their referral to the program. In contrast, people who did not complete or were not admitted to the program showed no significant improvement in their mental health status. Given the benefits of program completion in terms of reduced recidivism, as well as reduced risk of relapse for DTC participants and improved mental health functioning for MHC participants, one way to help participants avoid further court contact, which is the main goal of most problem-solving courts, is to improve retention rate of the courts.

### **Retention Rate**

Over the period between 2011 and 2017, 56% of participants in Peterborough Community Support Court successfully completed the diversion program. This retention rate is fairly low compared to that of other Canadian MHCs. For example, Winnipeg MHC reported that from 2012 to 2014, 89% of their participants graduated from the program (Watts & Weinrath, 2017), whereas the retention rate of Nova Scotia MHC was slightly lower, with 86% of the people admitted into the program successfully completing it (Nova Scotia, 2014). In their evaluation of the Durham MHC, Verhaaff and Scott (2015) found that 85% of the individuals

admitted into the program from 2005 to 2009 completed it. Data from New Brunswick indicated an impressive retention rate of 90% within the period between 2000 and 2008 for Saint John MHC, with all groups of offenders including high-risk, medium-risk, and even high-risk participants achieving a high rate of completion (94.1%, 96.2%, and 77.1% respectively) (Campbell et al., 2011). The retention rate of the Peterborough CSC is also lower than that of the MHCs in the US, which, based on the findings of 10 studies, was estimated to be 61% (Ray, Hood, & Canada, 2015).

On the other hand, a retention rate of 56% is higher than the rate reported by other Canadian DTCs. For example, of all the participants accepted into the Toronto DTC from 1999 to 2003, only 16% graduated from the program (Newton-Taylor et al., 2009). The retention rate found in the Vancouver DTC was higher, with almost a quarter of the participants successfully completing the program within the period between 2001 and 2011 (Rezansoff et al., 2015). Compared to the DTCs in Toronto and Vancouver, the Calgary DTC had the highest retention rate; from 2007 to 2015, 31% of the participants successfully completed the program (Hoffart, 2015).

It is clear that in Canada, MHCs tend to have a much higher retention rate relative to DTCs. Given that Peterborough CSC was designed to help offenders with both mental disorders and substance use disorders, it is not surprising that its retention rate is between the rate observed in MHCs and DTCs. Since program completion has been linked to a number of positive outcomes, as mentioned above, the Peterborough CSC might find it useful to increase the percentage of their participants who complete the program. To this end, factors associated with program completion can be used to identify subgroups of participants at high risk of failing to complete the program.

The results of this study indicated that there were three factors linked to reduced chance of program completion: shorter time spent in treatment and CSC, recidivism while in the program, and comorbidity of mental and substance use disorders. Results showed that people who stayed in CSC and their treatment longer were more likely to successfully graduate. In addition, longer duration of treatment was significantly associated with reduced recidivism in 12 months following program exit. This suggested that participants who were able to continue their treatment for a longer period of time reoffended significantly less often than those who stayed in treatment for a shorter time, regardless of whether they completed the program or not.

The result of our study is also in line with Patra et al. (2010), who suggested that program retention for 3 months or more is associated with better outcomes. This pattern of result supports the importance of retaining individuals in diversion programs as long as possible. Not only would this increase the likelihood of completing the program, it might also reduce the likelihood of reoffending within one year after exiting the program. Moreover, Patra et al. (2010) found that although Toronto DTC participants typically experienced difficulties in complying to rules and regulations during the early stages of treatment plans, in the long run, many did engage and complete the program. Therefore, a strategy to increase the retention rate is to make adjustment for this typical trajectory of treatment progress. For example, programs can allow more flexibility in rules and regulations, and limit penalties for initial non-compliance.

Another variable that showed a significant relationship with Peterborough CSC program completion is recidivism during the program. Participants who faced new charges while in the program were significantly less likely to graduate relative to those who did not reoffend. This result is not surprising given that incurring new criminal charges is one of the reasons for program expulsion. It is interesting to note that in an evaluation of the Nova Scotia MHC,

Campbell et al. (2015a) found that recidivism tended to occur within an average of 226.84 days after MHC referral. This suggests that the year after MHC referral was the most vulnerable period for recidivism for Nova Scotia MHC participants. If this is also the case for Peterborough CSC participants, they would be most likely to commit a new crime during their time in CSC, since the average duration of CSC involvement was around 203.31 days. The Peterborough CSC can try to retain participants who reoffend while in the program for as long as possible, since the recidivism rate of the whole sample and especially of participants who did not complete the program did decrease significantly over time.

In addition to shorter treatment duration and recidivism while in the program, the coexistence of mental disorders and addiction was also negatively linked to the likelihood of program completion. Our analyses indicated that Peterborough CSC participants who had a co-occurring mental illness and addiction issue were significantly less likely to complete the program than those with either mental illness or addiction. This pattern of result is consistent with the study by Verhaaff and Scott (2015b), who found that the Toronto DTC participants diagnosed with a concurrent disorder were more than twice as likely to withdraw from the program relative to people who did not report a co-occurring mental health and addiction issue. Concurrent substance use and mental disorders have also been linked to poorer treatment outcomes in the general health system (Najt, Fusar-Poli, & Brambilla, 2011). This pattern of results is not surprising given that people with a concurrent disorder require an integrative approach to treatment that is often costly and difficult. Therefore, it is typical for services for this population of offenders to be fragmented and disjointed, with some programs only addressing one disorder while neglecting the other (Verhaaff & Scott, 2015).

Not only is this group of offenders at high risk for program non-completion, there has also been growing recognition that it is quite common for substance use and mental disorders to occur (Verhaaff & Scott, 2015). The rate of comorbidity of the Peterborough CSC was 37%, which was lower than the rate observed in other courts. For example, both DTCs in Vancouver and Toronto reported that approximately half of the sample were diagnosed with a concurrent disorder (Somers et al., 2012; Verhaaff & Scott, 2015). Verhaaff and Scott (2015) argued that this rate of comorbidity was likely to be an underestimation of the true prevalence of co-occurring mental and substance use disorders in their sample. This is because in the Vancouver DTC, participants were only identified as having a co-occurring mental disorder when they sought medical care and were formally diagnosed with a mental health problem. Thus, the true rate of comorbidity in the Vancouver DTC was probably higher than one half. Given the high rate of concurrent substance use and mental disorders, combined with the findings of the association between comorbidity and negative treatment outcomes, MHCs and DTCs might find it useful to integrate addiction and mental health services in order to be more responsive to participants' needs. In this respect, the Peterborough CSC has done fairly well. To the best of our knowledge, this is the only problem-solving court in Ontario that is both a mental health and a drug treatment court. The treatment plan integrates mental health with substance-related care for participants with a concurrent disorder. However, it should be noted that this group of participants still completed the program significantly less often than those with only either mental or substance use disorder. Thus, the Peterborough CSC can increase its retention rate by increasing support for participants with comorbid mental and substance use disorders.

### **Limitations and Future Directions**

The recidivism rate of non-completers was significantly higher than that of completers in both post-program follow-up periods (e.g., the first and second year following CSC involvement), indicating program completion is consistently associated with reductions in recidivism for this sample. However, it is premature to conclude that program completion is the reason for the difference in recidivism rate between completers and non-completers. It is possible that there are certain personal characteristics that predispose some participants to not completing the program and to reoffending following their CSC involvement (e.g., confounding variables). One possible confound might be the co-occurrence of mental and substance use disorder. Our analyses showed that participants with a concurrent disorder were less likely to graduate from the program. They also reoffended significantly more often in the second year after program exit than people with comorbidity, regardless of their program completion status. Thus, it is uncertain whether the difference in recidivism rate in the second year post-CSC between completers and non-completers was due to the effects of treatment, or the comorbidity between mental health and addiction. It might be the case that having a concurrent disorder predisposed some participants to not completing the program and to reoffending after CSC involvement.

The second factor that potentially affects both the likelihood of completing the program and of reoffending after program exit is recidivism during the program. The results suggested the participants charged with new offences while in the program were less likely to graduate relative to people who did not reoffend during their time in CSC. These participants also reoffended significantly more often in both the first and second year post-CSC, regardless of whether they completed the program or not. Therefore, although it is possible the program was the reason why completers were less likely to reoffend than non-completers, we could not rule out the possibility

that people who reoffended while in the program were already less likely to complete the program and more likely to reoffend after program exit.

Moreover, assuming that the reason why completers had a lower recidivism rate than non-completers was because of the program, its impact on recidivism seems to be stronger in the first year following CSC involvement than in the second year. First, the recidivism rate of completers and non-completers were 25% and 66% respectively in the first year after the program, whereas the rate observed in the second year was 23% and 46% respectively. It is clear that although completers reoffended significantly less often than non-completers in both follow-up periods, the difference in recidivism rate between two groups in the second year post-CSC was not as large as the difference in the first year. Second, the duration of the treatment was associated recidivism in the first year post-CSC, but not during the program or in the second year post-CSC. In contrast, having both mental health and addiction issues was associated with recidivism while in the program and in the second year post-CSC, but not in the first year. In addition, the number of charges participants had prior to entering the program was associated with recidivism in all three assessment periods. Thus, it appears that the effect of the program on recidivism was strongest in the first year following CSC involvement. After the first year, participants' mental health and addiction history and offense history seemed to exert a stronger influence on the likelihood of reoffending than the program.

It is interesting to note that although the recidivism rate of program completers was significantly lower than that of non-completers, it did not decrease over time. Specifically, out of all the participants who completed the program, 27%, 25%, and 23% reoffended while in the program, in the first year post-CSC, and in the second year post-CSC respectively. In contrast, the recidivism rate observed in participants who did not complete the program decreased

significantly over time. Although most non-completers were charged with new offences while in the program (80%), 66% reoffended the following year after exiting CSC, and by the second year post-CSC, the recidivism rate of this group had decreased to 46%. These findings indicate that people with comorbid mental and substance use disorders, who were less likely to complete the program, tend to reoffend less often over time, whereas the recidivism rate of people without this issue, who were more likely to complete the program, appears to stabilize over time. It is possible that solely participating in the program, even without completing it, had a positive effect on recidivism in that participants were less likely to reoffend over time. Alternatively, it might be the case that recidivism naturally decreased for this group of offenders, with or without the program.

Taken together, although completion of CSC program is associated with reduced recidivism, a causal relationship cannot be inferred, given the existence of the factors that may have confounded the results. There are several ways in which the impact of confounding variables can be minimized. The first method is to conduct randomized controlled trials, where participants are randomly assigned to three groups: completion, non-completion, and non-participation. However, there are challenges to randomization, one of which is the unfairness of denying treatment to individuals who may benefit from it (Werb et al., 2007). Another method is to have a control group who do not participate in the program. To this end, the court can collect data on individuals who applied but were not accepted into the program. One limitation to this approach is that it creates an unequal comparison groups, since people who are not accepted might have committed more serious offences than CSC participants, thus being at higher risk of recidivism. Alternatively, a comparison group can be established by matching offenders who are managed by the traditional justice system to CSC participants on a number of variables such as



demographics (e.g., age, race/ethnicity, gender), mental health functioning, and number of previous charges. If it is not possible to have a matched comparison group, future research can also control for these variables when analyzing data.

In this study, recidivism is defined as being charged with at a least one new offence. Although our results are promising, future research may want to use a broader set of measures for assessing recidivism to validate the results found. For example, it might be useful to recollect data on the exact number of new charges that participants incur and the time it takes for participants to commit a new crime following their CSC involvement. Other measures of success apart from recidivism can also be added to allow for a more comprehensive picture of benefits of CSC. For example, the court can assess the change in participants' mental health functioning or substance use after they participate in the program by collecting data on these variables. Moreover, it might also be useful to have more demographic information about the participants such as age, gender, and ethnicity to examine if these factors can influence the likelihood of program completion.

### **Conclusion**

The present study is the first evaluation of the Peterborough CSC, a mental health and drug treatment court established in 2011. The results are promising regarding the efficacy of CSC in reducing recidivism. Program completion was associated with reduced likelihood of reoffending in both the first and second year following participants' involvement in CSC. However, further research is still needed to establish a clearer picture of the effects of CSC on recidivism, especially by having a control group who do not participate in the program.

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Appendix A

The relationship between program participation and recidivism

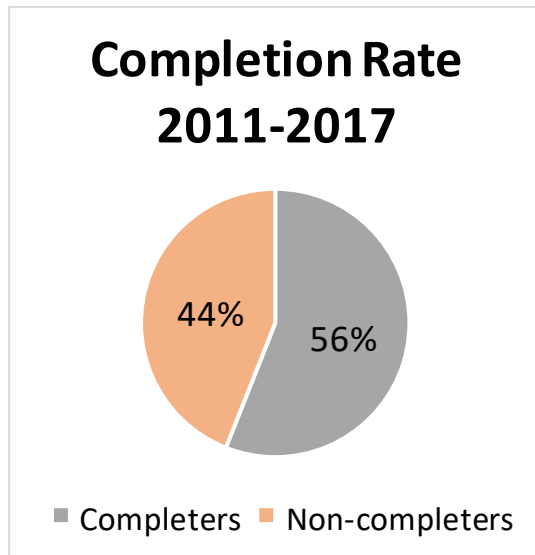


Figure 1. Peterborough CSC Completion rate from 2011 to 2017

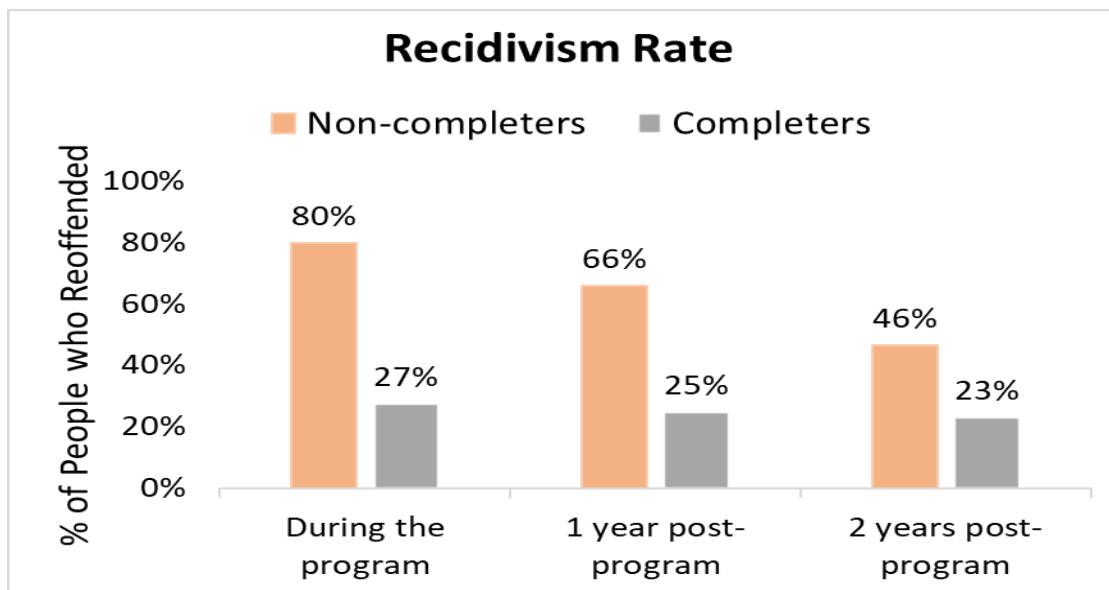


Figure 2. Recidivism rate of program completers and non-completers

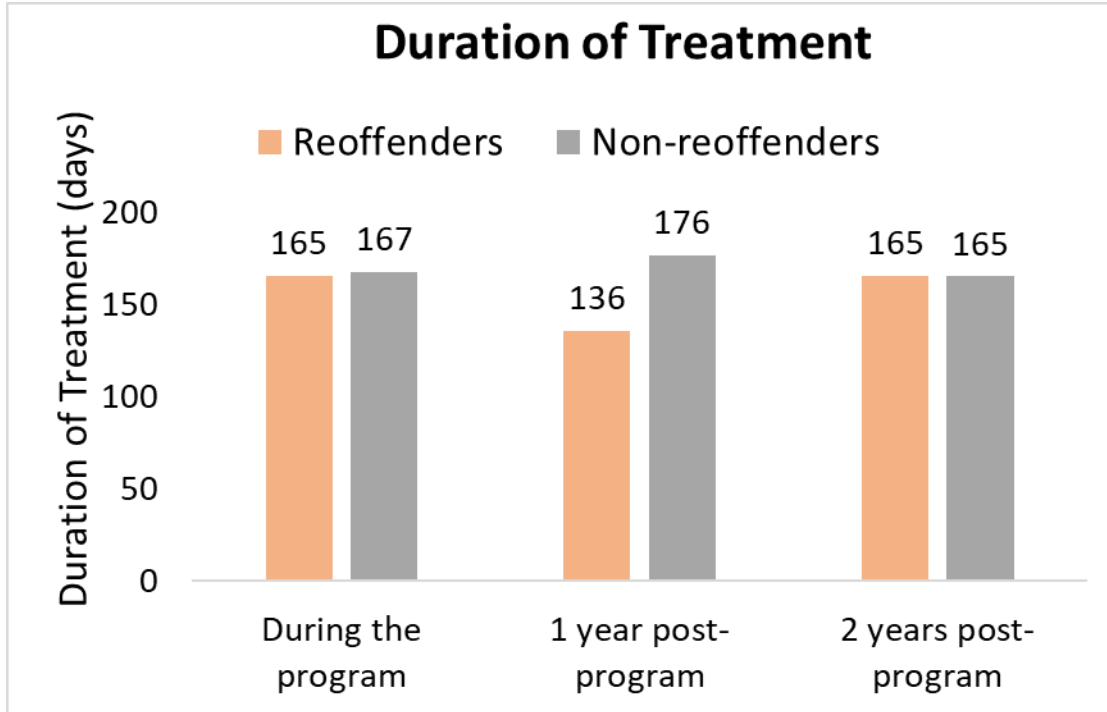


Figure 3. Treatment duration of people who reoffended and people who did not reoffend



Appendix B

Factors associated with program completion and recidivism

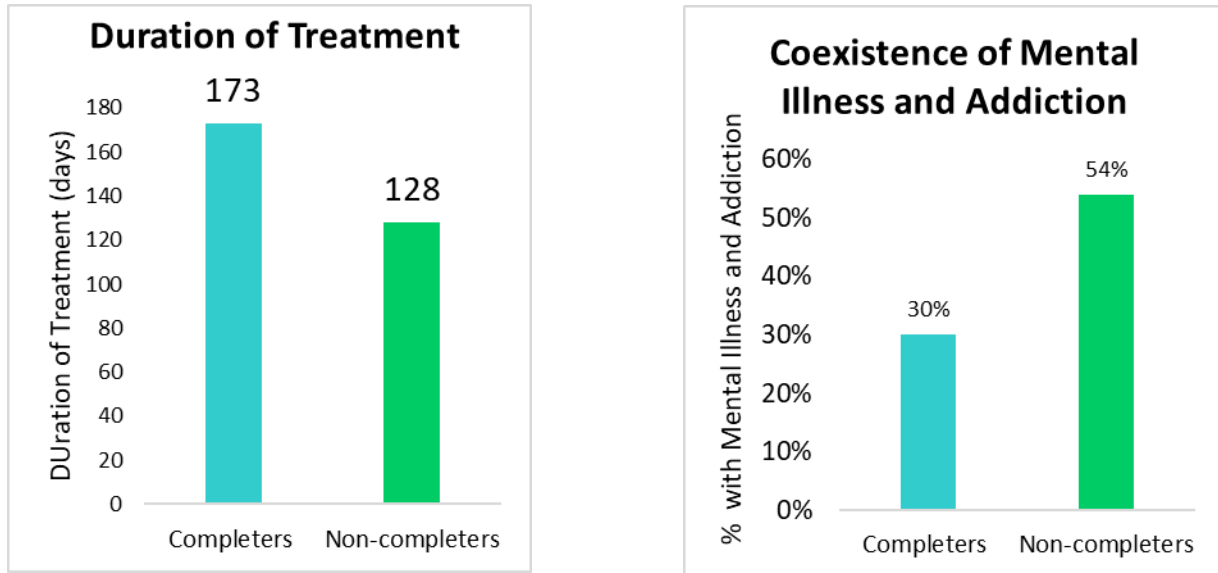


Figure 4. Factors associated with program completion

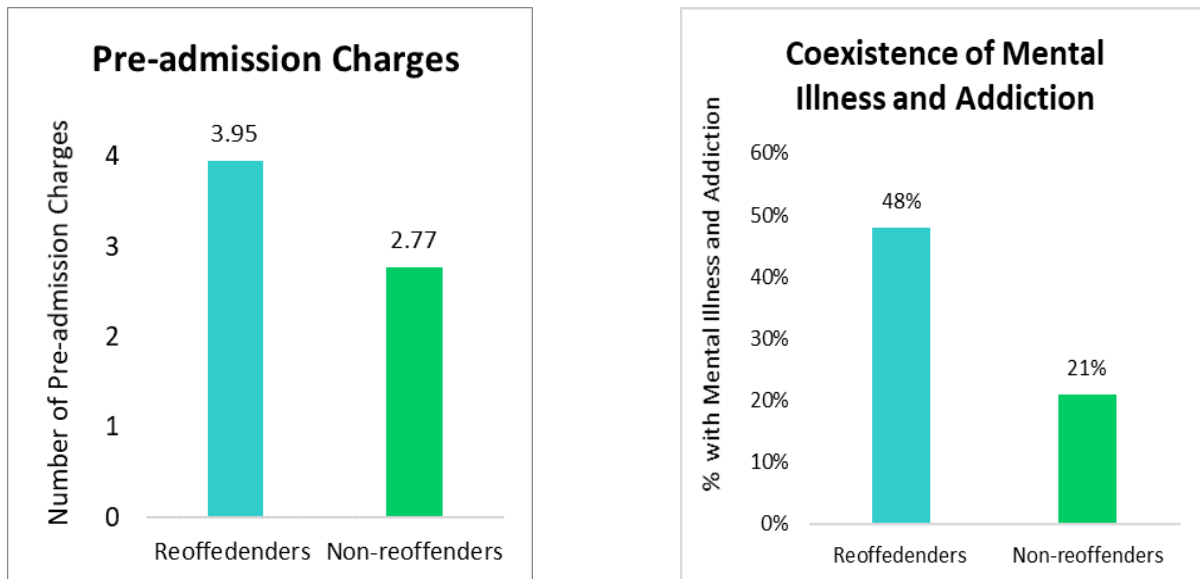


Figure 5. Factors associated with recidivism while in the program

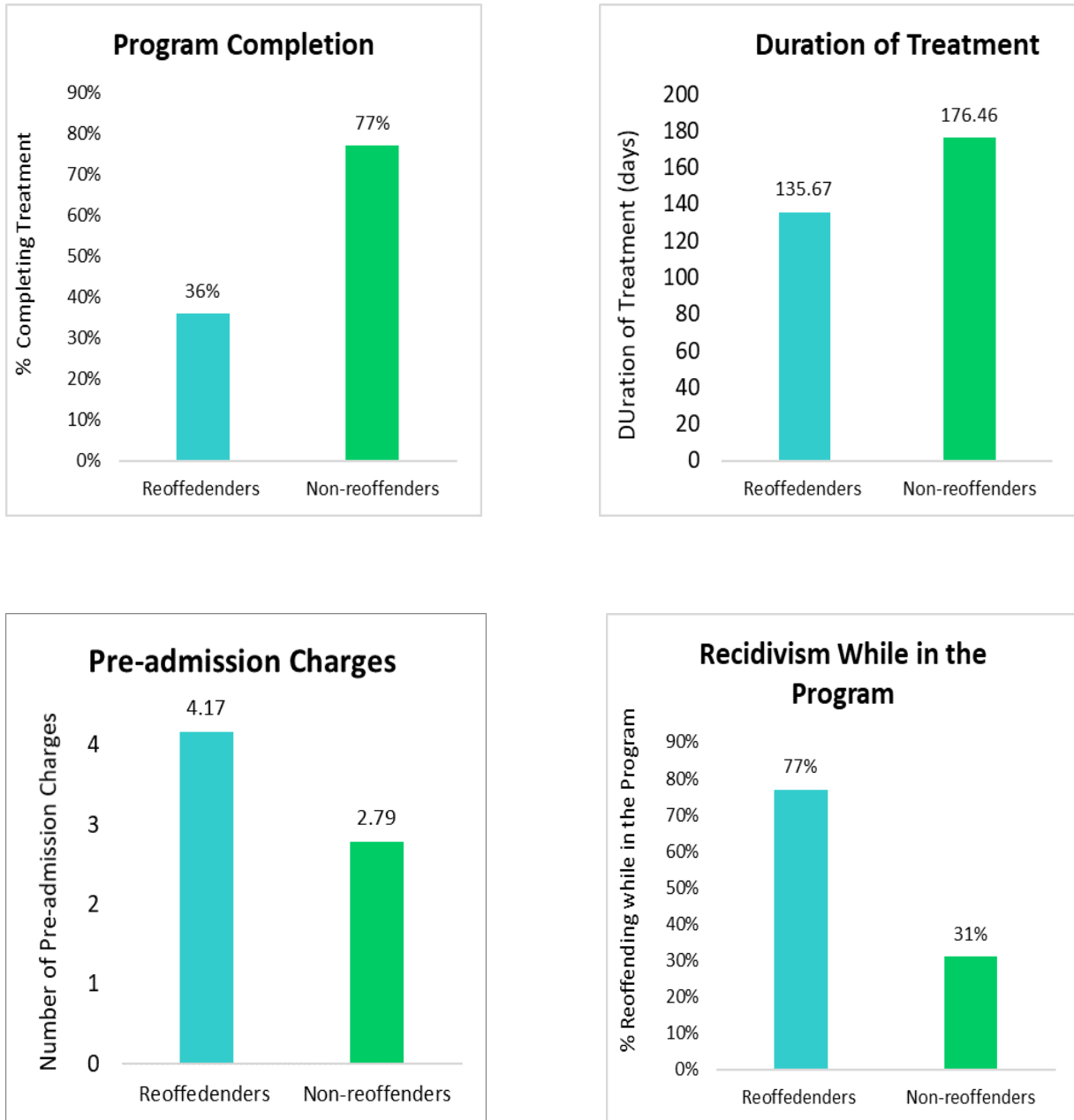
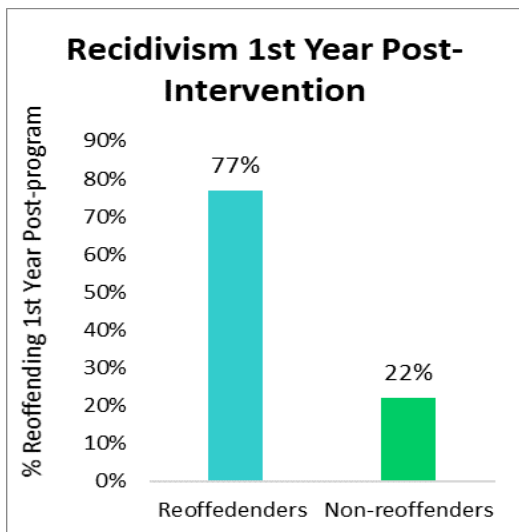
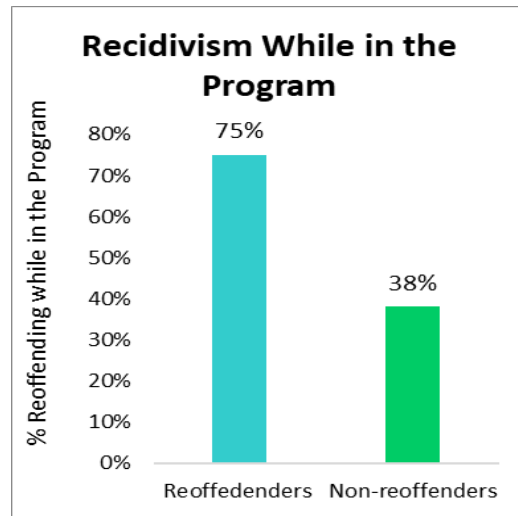
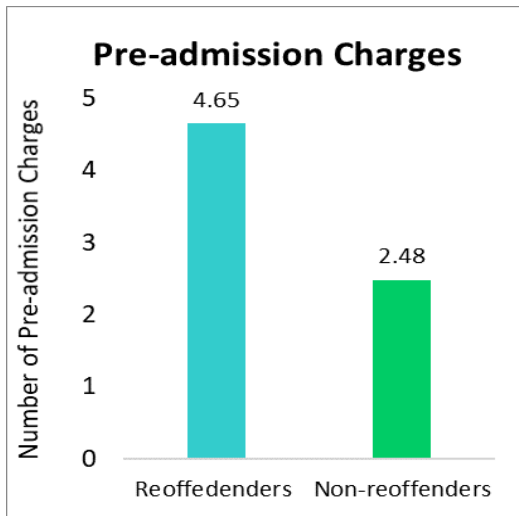
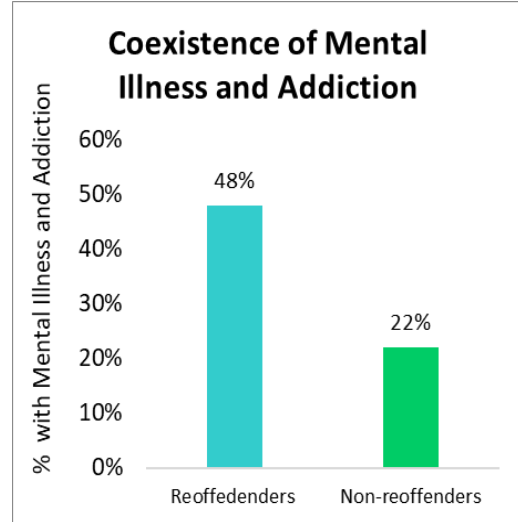
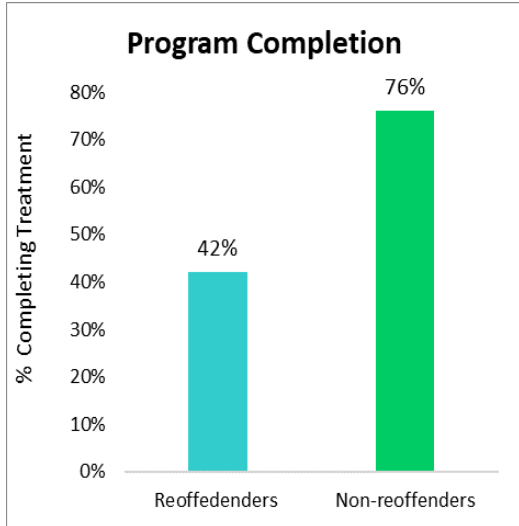


Figure 6. Factors associated with recidivism 1<sup>st</sup> year post-intervention



*Figure 7.* Factors associated with recidivism 2<sup>nd</sup> year post-intervention