FACTORS RELATED TO CRIMINAL BEHAVIOUR AND DESISTANCE AMONG JUSTICE-INVOLVED WOMEN

"I've Certainly Grown From All of This": Factors Related to Criminal Behaviour and Desistance From Crime Among Canadian, Justice-Involved Women

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A Thesis Submitted to
Saint Mary's University, Halifax, Nova Scotia
In Partial Fulfillment of the Requirements for
The Degree of Master of Science in Applied Psychology (Forensic Stream)

December 2021, Halifax, Nova Scotia

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Abstract

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The rate of incarceration of Canadian women increased by 16.3% between 2009-2010 and 2018-2019 (Public Safety Canada, 2020). Trauma, mental illness and substance use have been noted to be integral in understanding women's pathways to criminal behaviour (Salisbury & Van Voorhis, 2009), however, Canadian research is needed. In this mixed-methods study, justice-involved women affiliated with Elizabeth Fry Society of Mainland Nova Scotia (*n*=8) were interviewed and completed a test battery. Women indicated that negative influences from others, life circumstances, substance abuse, inadequate services and 'the system failed me' were related to their criminal behaviour. Despite these adversities, many women reported an improvement to their well-being and that positive influences, self-motivated change, and adequate services and supports were related to their desistance from crime. Findings from this study may be used by organizations to make important decisions regarding advocacy and programming for supporting the desistance of justice-involved women.

December 20th, 2021

Acknowledgements

I received a great deal of guidance, feedback and support from many people during my time at Saint Mary's University, especially while conducting this research and writing my master's thesis. I would first like to thank my supervisor, Dr. Marguerite Ternes, for her unwavering support and belief in me. We discussed this project for several years, and your persistence and hard work made this project a reality. I feel lucky to have been a part of it and I am so grateful to have had the opportunity to work with you.

I would also like to thank the other members of my wonderful thesis committee, including Drs. Skye Stephens, Amanda Brazil and Leslie-Anne Keown for their insightful comments and suggestions. I know that your vast knowledge of these topics and the invaluable feedback you provided strengthened the finished product.

In addition, I would like to thank the friends I have made during my pursuit of this master's degree for their guidance, feedback and support. In particular, I would like to sincerely thank Kathleen Hyland, Anna McInnis, Sarah Shaw, Samantha Perry and Kamelle LePage. I would also like to express my gratitude to my partner, Connor Stanhope, and my family and friends for their encouragement and support throughout the last few years. I could not have completed this degree without you all.

Finally, this thesis is dedicated to the women from Elizabeth Fry Society of Mainland Nova Scotia. Thank you for sharing your experiences with me and I hope that I presented an accurate description of your thoughts on these important issues. Your resilience has truly inspired me, and I wish you all the best in what I know will be bright futures.

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"I've Certainly Grown From All of This": Factors Related to Criminal Behaviour and Desistance From Crime Among Justice-Involved Women

Women account for a small proportion of individuals in correctional institutions (Kong & AuCoin, 2008; Malakieh, 2018; Public Safety Canada, 2015). In 2016/2017, women represented between 8-21% of admissions to Canadian correctional institutions, with less representation in federal correctional institutions and greater representation in community supervision settings (Malakieh, 2018). Although the rate of adults entering the correctional system is continuing to decline (Malakieh, 2018), the rate of incarceration of women has been growing at a rate that warrants further attention (Public Safety Canada, 2020). For example, at the federal level, the rate of incarceration of women increased by 16.3% between 2009-2010 and 2018-2019 (Public Safety Canada, 2020), while the rate of federal incarceration of men decreased by 11%. Given the increasing number of women being incarcerated, it is important that we understand the factors that influence criminal behaviour among justice-involved women. Of equal importance is understanding factors that have motivated women to stop committing crimes, which is referred to as desistance. This information may be used to facilitate one of the ultimate goals of corrections; the prevention of future crimes (Correctional Service Canada; CSC, 2019).

Trauma exposure is widely considered to be integral in understanding women's offending (Salisbury & Van Voorhis, 2009) and is associated with detrimental sequalae (Afifi et al., 2014; Zlotnick, 1997). For example, trauma exposure has been found to be related to mental disorders including posttraumatic stress disorder (PTSD), major depressive disorder (MDD), lifetime substance use disorder (SUD) and borderline personality disorder (Zlotnick, 1997). For individuals with one or more of these mental illnesses, symptoms can cause marked dysfunction. According to Kubiak (2004), substance use may begin as a coping strategy to deal with the

aftermath of trauma and PTSD symptoms, however, prolonged substance use can compound the problem and create more difficulties.

While there is some evidence that trauma exposure and criminality are not causally linked (Dougherty, 1998), the relationship between trauma exposure and offending behaviour among justice-involved women is well-established (Tam & Derkzen, 2014) and it is argued that they are related by a highly interconnected process (Byrne & Howell, 2002). Byrne and Howell (2002) proposed offending behaviours can emerge as a result of victimization, PTSD generated from the victimization, or the substance use relied upon for coping. Daly (1992) suggested five pathways that lead women to crime, including; 1) *street women* who used drugs, sex work or theft to escape abuse, 2) *drug-connected women* who were introduced to drugs or trafficking, frequently through a family member or intimate partner, 3) *harmed and harming women* who experienced severe childhood abuse, typically followed by problems in school and aggressive behaviour, 4) *battered women* who experienced intimate partner violence that led to criminal behaviour that likely would not occurred without this relationship, and 5) *other women* who committed crimes for survival or financial gains.

Women involved in the justice system appear to have a unique relationship with cooffending (Daly, 1992; McNeeley, 2019). In a study of robbery and burglary offences, McNeeley
(2019) identified a link between co-offending and substance abuse with intimate partners or
family members among women and not men. More specifically, women were three times more
likely to co-offend with intimate partners or family members than men. Married women were
seven times more likely to co-offend with intimate partners or family members than non-married
women. Justice-involved women with histories of substance abuse were more than 13 times
more likely to co-offend with romantic partners or family members than women without such

histories. Indeed, the relationship between trauma and criminal behaviour is complex and warrants further study. Further investigation is needed to gain a better understanding of how these factors are related and how they influence women's criminal behaviour.

The purpose of this research is to address identified gaps in the literature in regard to justice-involved women. For many years, justice-involved men were the focus of the majority of studies on justice-involved persons. Although the body of literature on justice-involved women is growing, there is very little published research on Canadian, justice-involved women (Tam & Derkzen, 2014). Without this research, it remains unknown if Canadian, justice-involved women share experiences and traits similar to American, justice-involved women, who have been the subjects of most of the published literature on justice-involved women. Despite the lack of Canadian focused research, programs and policies that affect Canadian women are being put in place without a large body of evidence to inform them. This study aims to contribute to the scant literature and inspire future directions of research in the Canadian context.

Further, the importance of asking women with criminal histories what factors they believe contributed to their criminal behaviour is important, as they are the ones who have the lived experience and therefore possess a unique knowledge. According to Roche (2020), the voices of marginalized populations, such as justice-involved individuals, are less frequently heard in research. The present study has been designed with the intention of amplifying the voices of justice-involved women to learn what they believe is related to their criminal behaviour and desistance from crime.

Characteristics of Canadian, justice-involved women

Identifying differences between women with and without justice involvement may point to factors related to criminal behaviour. Ideally, this information will be utilized for interventions

designed to reduce crime. Research has identified that when compared to women in the community, justice-involved women have different characteristics related to demographic characteristics (Kong & Aucoin, 2008). Kong and Aucoin (2008) utilized data from Statistics Canada of samples of Canadian women from the community, provincial/territorial corrections and federal corrections. For example, federally-sentenced women are more likely to be single, Aboriginal, and younger than women in the community. Data from provincial correctional systems indicated that women in the provincial system are more likely to be single and less likely to be in a common-law relationship or married than women in the federal system (Kong & Aucoin, 2008). Women in the provincial system also tend to be younger than those in the federal system.

In addition, women are arriving at Canadian, correctional institutions with increasingly complex needs (Kong & AuCoin, 2008). Older data from the Offender Management System (OMS), a database that contains information about each offender, indicated the number of incarcerated women who have "high needs" has doubled between 1997 and 2006 and accounted for 50% of women (Kong & AuCoin, 2008). This finding suggests that more resources may be needed to meet justice-involved women's growing needs in correctional institutions in the future. Additionally, during the same period, the number of federally-sentenced justice-involved women evaluated as at a "high risk" of re-offending increased from 19% to 33%, which included all types of crimes. Although the risk of reoffending among justice-involved women appears to be growing, research has found that the majority of recidivist women commit less severe revocation offences (65.7%; Stewart et al., 2019). Understanding what leads to offending behaviours and often less severe reoffending behaviours perpetrated by justice-involved women is critical in preventing future crimes.

The age group that females most frequently commit crimes is between the ages of 12 and 17 (Kong & Aucoin, 2008) and an earlier age at the first engagement in criminal behaviour is associated with more childhood trauma exposure (Messina & Grella, 2006). Police-reported data revealed that female youths were accused of offences at a rate three and a half times higher than the rate of accusations against adult women (Kong & AuCoin, 2008). This data also suggested that the rate of female offending peaked at age 15 and then declined substantially. A similar effect has been observed among adolescent males, however, males have a peak age of offending at age 16 (Kong & AuCoin, 2008).

Gender differences between justice-involved women and men

Prior research has identified gender differences between justice-involved women and men, which lends support to the distinction of justice-involved women as a unique subpopulation deserving of independent analysis (Kong & AuCoin, 2008). Prior to incarceration, women are frequently the primary caregivers of minor children (Stanley & Byrne, 2000) and many incarcerated women are mothers (Cunningham & Baker, 2004). In an older study, it was conservatively estimated that 25,000 Canadian children were separated from their mothers due to incarceration (Cunningham & Baker, 2004). Given the increase in the number of women who are incarcerated (Public Safety Canada, 2015), it is expected that the number of children separated from their mothers is much higher twenty years later. This is concerning given the negative effect that separation through incarceration has on the health of incarcerated mothers and their children (Miller, 2006; Stanley & Byrne, 2000). Further, the impact of this separation on children is considered so detrimental to children's well-being that parental incarceration is an item on the Adverse Childhood Experiences (ACE) questionnaire (Felitti et al., 1998).

Justice-involved women significantly differ from justice-involved men in terms of their rates of offending, rates of reoffending, and the type of offences committed (Kong & AuCoin, 2008; Savage, 2019). When compared to justice-involved men, justice-involved women commit a higher proportion of property crimes and a lower proportion of crimes against the person (Kong & AuCoin, 2008). Of women accused of an offence, 47% were accused of a property crime compared to 39% of men, and 28% of women were accused of a crime against the person in comparison to 34% of men accused of the same type of crime.

Among justice-involved women, the most commonly committed crimes are property crimes (theft and fraud; Kong & Aucoin, 2006; Savage, 2019) and the most commonly committed property offence is shoplifting (Savage, 2019). Though theft and fraud are crimes that women commit most frequently, the rates of these property crimes perpetrated by women are only half the rates of these crimes that are perpetrated by justice-involved men. This statistic reflects that women are much less likely to commit crimes, including property crimes, than men (Kong & AuCoin, 2008; Savage, 2019). Justice-involved women also commit violent crimes less frequently than justice-involved men (Kong & AuCoin, 2008; Savage, 2019). Recent data from Statistics Canada utilized by Savage (2019) indicated that the rate at which women are accused of a violent crime is nearly four times lower than the rate among men. Specifically, data from police-reported crime identified that among 100,000 individuals in the population, 366 females committed a violent crime compared to 1,274 males (Savage, 2019).

Research has found that women, both provincially and federally-sentenced, are less likely than men to reoffend (Kong & AuCoin, 2008). In fact, federally-sentenced women are 30% less likely than federally-sentenced men to have received a prior federal sentence (Kong & AuCoin, 2008). Longitudinal police-reported data of women's criminal histories between 1995 and 2005

indicated that the majority offended only one time (72%; Kong & AuCoin, 2008). Of the remaining justice-involved women in this sample, 21% committed 2-4 offences and 7% committed five or more offences. Additionally, most justice-involved women who do reoffend do not commit more serious crimes than they were previously charged with. Using police-reported data of Canadian, federally-sentenced, justice-involved persons, Stewart and colleagues (2019) reported that 65.7% of women reported less severe revocation offences compared to 61% of men.

Other gender differences between justice-involved women and men have been the subject of much debate in the literature. For example, justice-involved women report a high degree of many types of trauma exposure (Tam & Derkzen, 2014), and the most widely reported gender difference has been noted in the rate of sexual abuse, with numerous studies that reported higher rates of sexual abuse among justice-involved women (Afifi et al., 2014; Fagan, 2001; Messina & Grella, 2006; Komarovskaya et al., 2011). It is worth noting that some experts in the field suggest exercising caution when interpreting the rates of sexual abuse among males (Depraetere et al., 2020). Given the combined effect of the unreported nature of the offense and societal conceptions of gender roles, some have argued that sexual abuse is more prevalent among men than most studies have identified (Depratere et al., 2020).

Another example is with criminogenic needs, which are also referred to as dynamic risk factors and are factors that are subject to change (Morash, 2009). Briefly, an offender's criminogenic needs are identified upon intake to correctional institutions as part of a risk assessment to identify domains to target in future interventions (Kong & AuCoin, 2008). Criminogenic needs include needs in domains such as employment/education, associates/social interaction, marital/family, substance abuse, community functioning, personal/emotional

orientation and attitude (Kong & AuCoin, 2008). Justice-involved women tend to report different criminogenic needs than justice-involved men in risk assessments and thus may have different treatment needs (Kong & AuCoin, 2008). For example, Kong and AuCoin (2008) found evidence that justice-involved women were more likely than justice-involved men to have needs in domains such as marital/family and education/employment, whereas men were more likely than women to have needs in areas such as personal/emotional orientation, associates/social interaction, and substance use domains.

Despite this finding, there are other researchers who argue that there is a great deal of overlap between justice-involved women and men, and using gender-neutral risk assessment tools are acceptable (Geraghty & Woodhams, 2015). Risk assessment tools utilized on justiceinvolved persons of both genders are referred to as gender-neutral tools, and they were developed and validated on white, males, and based on theories of male crime (Holtfreter & Cupp, 2007; Motiuk, 1997; Serin et al., 2011). Given the sample gender-neutral tools were created with, the appropriateness of utilizing these risk assessment tools for risk assessments of women has faced intense scrutiny and this topic has been fiercely debated (Holtfreter & Cupp, 2007). Recent research has demonstrated that some gender-neutral risk assessments exhibit moderate performance with women (Geraghty & Woodhams, 2015; Van Voorhis, Wright, Salisbury, & Bauman, 2010), but this performance is enhanced with the addition of genderresponsive factors that pertain to women (Van Voorhis et al., 2010). According to Van Voorhis and colleagues (2010), gender-responsive factors that demonstrated promise by explaining more variance included "a) parental stress, family support, self-efficacy, educational assets, housing safety, anger/hostility, and current mental health factors in probation samples; b) child abuse, anger/hostility, relationship dysfunction, family support and current mental health factors among prisoners; and c) adult victimization, anger/hostility, educational assets, and family support among released inmates" (p.261). It appears that while there is evidence of significant overlap between justice-involved women and men, there are some important differences between the two groups.

Trauma exposure

A traumatic event is defined by the 5th edition of the Diagnostic and Statistical Manual of Mental Disorder as an experience in which the individual faced "actual or threatened death, serious injury or sexual violence" (DSM-5; American Psychiatric Association, 2013, pg. 271). According to the DSM-5, traumatic events include abuse, accidents, witnessing a traumatic event or learning that a loved one experienced a traumatic event and do not include psychosocial stressors such as divorce or job loss (North et al., 2016). Trauma exposure is a relatively common experience; among a nationally representative sample of Canadians, more than 1 in 4 reported experiencing physical abuse and 1 in 10 reported sexual abuse in their childhoods (Afifi et al., 2014). The same dataset also provided evidence for sex differences in rates of abuse; men reported more childhood physical abuse (31%) than women (21.3%), and women reported more childhood sexual abuse (14.4%) than men (5.8%).

In the highly esteemed ACE study, Felitti and colleagues (1998) provided strong evidence for the deleterious effects of trauma. They utilized data from a nationally-representative sample of 9,508 U.S. residents. This study identified a dose-response relationship between frequency of exposure to adverse childhood experiences and physical diseases that are leading causes of death, including skeletal fractures, poor self-rated health, history of hepatitis or jaundice, chronic bronchitis or emphysema, heart disease and cancer.

Trauma Exposure among Justice-involved Women

While there is some evidence that trauma experiences and offending behaviour are not causally linked (Dougherty, 1998), there is strong evidence that supports a relationship between trauma exposure and offending behaviour among justice-involved women. Further, trauma exposure is considered integral in understanding women's pathways to criminality (Salisbury & Van Voorhis, 2009; Tam & Derkzen, 2014). Although there is no published research that assesses trauma exposure among Canadian justice-involved women (Matheson, Brazil, Doherty, & Forrester, 2015), a high degree of trauma exposure has been repeatedly reported by justice-involved women in the U.S. (Belknap & Holsinger, 2006; Clements-Nolle, Wolden & Bargmann-Losche, 2009; Radatz & Wright, 2017; Siberman, 2010) and is anticipated in Canadian samples.

Justice-involved women have consistently reported a high degree of childhood trauma (Fagan, 2001; Johnson & Lynch, 2013). Prior research has identified rates of childhood physical abuse between 15 and 37% and childhood sexual abuse between 14 and 26% for justice-involved women (Fagan, 2001; Johnson & Lynch, 2013). This trend was further supported by Johnson and Lynch (2013) who investigated childhood abuse in a sample of 224 justice-involved women in the U.S. They found that before the age of 14, 64% of justice-involved women reported childhood sexual abuse, 61% reported forced sexual touch, 74% endorsed experiencing forced sex, 56-78% reported being attacked with or without a weapon and half of the sample reported being beaten by a family member.

Justice-involved women also report a high degree of interpersonal violence (CSC, 1995; Siberman, 2010) evidenced by older data from CSC (1995) that revealed 60-90% of federally incarcerated women reported exposure to violence within their family units. Belknap and

Holsinger (2006) suggested justice-involved female youth often come from troubled homes. In a study looking at family history among justice-involved female youth, these authors found these youths reported high instances of parental incarceration with approximately two-thirds of the sample who reported at least one parent with a criminal history.

In the same sample of justice-involved female youths, Belknap and Holsinger (2006) identified a high degree of abuse. Specifically, two-thirds reported verbal abuse from a family member, three-quarters reported physical abuse by a family member, and three-fifths reported sexual abuse by family or non-family member. Further, qualitative data suggested that over half of the sample believed that the abuse they experienced significantly affected their motives to commit offences (Belknap & Holsinger, 2006). Findings from this study lend support to the notion that trauma exposure has a detrimental effect on young women and that this exposure may have contributed to why these adolescents committed an offence.

There is evidence justice-involved women report elevated rates of trauma than non-justice-involved women in the community (Messina & Grella, 2006; Siberman, 2010). Indeed, justice-involved women are twice as likely as women in the community to have experienced both physical and sexual abuse (Siberman, 2010). Messina and Grella (2006) explored the effect of childhood trauma on women's health outcomes among a convenience sample of 500 drug dependent justice-involved women from California. An interesting component of this study is that they had a comparison sample of women in the community from the ACE study. Among incarcerated women, 84.3% reported experiencing one or more childhood traumatic events (CTE) in comparison to 68.7% of women from the community who reported the same. The frequency of each type of trauma exposure was not accounted for in this study, but the number of different types of traumatic events experienced was analyzed. Further, 21.2% of justice-involved

women reported experiencing 5 or more types of childhood traumatic events (CTEs) and 12.5% of the non-justice-involved women sample reported the same. Justice-involved women who reported more CTEs were more likely to have had conduct disorder, past substance abuse treatment and histories of homelessness. In addition, justice-involved women with 5 or more CTEs engaged in criminal behaviours at an earlier age than women with fewer CTEs; women with 5 or more CTEs tended to be between 15 and 20 years of age when they first engaged in criminal behaviour, whereas women with 0 CTEs were between the ages of 21 and 27. Incarcerated women with 5 or more CTEs also had the largest number of arrests.

As mentioned above, justice-involved women differ from justice-involved men in the types of childhood trauma they have reported experiencing. In addition, Belknap and Holsinger (2006) found that justice-involved female youths, in comparison to justice-involved male youths, were significantly more likely to have been abandoned by a parent, have others help to raise them, and maintain the preference to live in secure institutions than in their own homes. The authors suggested that these findings may represent broader themes in the homes of justice-involved female youth and point to reasons why young girls act out and commit offences.

Childhood abuse has been found to have adverse psychological, physiological and behavioural effects among justice-involved women (Johnson & Lynch, 2013; Messina & Grella, 2006). For example, there is evidence that childhood sexual abuse is correlated with self-blame (Johnson & Lynch, 2013). Further, Johnson and Lynch (2013) found self-blame to be associated with utilizing maladaptive coping strategies and experiencing dysfunctional emotion regulation and distress. Assigning blame to oneself after sexual victimization has the potential to have serious ramifications on the trajectories of these women's lives. In addition, Clements-Nolle and colleagues (2009) found that exposure to childhood trauma is a risk factor of suicide attempts

among justice-involved women and this relationship was not mediated by duration of incarceration, psychological distress or drug use.

Further, correctional institutions may present additional challenges for trauma survivors and can retraumatize justice-involved persons (Covington, 2008; Lord, 2008; Siberman, 2010). Common practices in the criminal justice system may further traumatize women who are trauma exposed (Covington, 2008), such as mandating survivors of sexual abuse to endure physical searches or showers in the presence of male staff. Lord (2008), a former prison superintendent, described an incident that involved a woman who caused excessive noise at night in the correctional institution. It was later realized that this woman was abused and locked in a dark closet by a family member as a child, and the dark environment was triggering. This situation was remedied by the institution supplying this woman with a night light and the noise stopped. This example highlights the importance of exercising empathy and utilizing trauma-informed approaches when working with incarcerated populations. Indeed, trauma exposure prior to incarceration can make serving time more difficult, however, it is important to note that some aspects of incarceration alone can be traumatizing (Covington, 2008). In addition, elements of the criminal justice system, such as racism and class discrimination, can traumatize those who are incarcerated.

Polyvictimization

Polyvictimization is a term used to describe the occurrence of being victimized multiple times and having experienced multiple types of trauma. It has been suggested by some as the manifestation of trauma that presents with the most adverse psychological consequences (Finkelhor et al., 2007; Radatz & Wright, 2017). Finkelhor and colleagues (2007), who have numerous publications on polyvictimization, argue that polyvictimization should be considered a

condition due to the numerous symptoms and detrimental effects it has on the children included in their studies. Unfortunately, children who have been polyvictimized may blame themselves for their abuse (Finkelhor et al., 2007; Johnson & Lynch, 2013). A plausible explanation for this finding is that children who have been polyvictimized may have more difficulty attributing the cause of trauma to an external source and consequently blame themselves.

There has been little research completed on polyvictimization among justice-involved women (Radatz & Wright, 2017) and no published Canadian research to date (Tam & Derkzen, 2014). In the U.S., Radatz and Wright (2017) compared the effects of polyvictimization on health outcomes between incarcerated and non-incarcerated women. In concordance with previous research findings, they found incarcerated women demonstrated significantly higher rates of trauma in comparison to non-incarcerated women. This study also identified polyvictimization as a risk factor for alcohol problems. Contrary to what was expected, the researchers found that polyvictimization was related to an increased likelihood of attempted suicide and drug problems in non-incarcerated women, but only associated with higher likelihood of alcohol problems among incarcerated women. The authors speculated that this finding may be the result of the greater effect that polyvictimization has on non-incarcerated women when compared to incarcerated women. It was suggested that polyvictimization may have a dampened effect on incarcerated women due to the high degree of trauma exposure that they have faced.

Psychological Disorders

The relationship between trauma exposure and psychological disorders is well-established in the literature (Afifi et al., 2008, 2014). Providing evidence for the strength of this relationship, Afifi et al. (2008) investigated the proportion of psychological disorders, including

mood, anxiety and substance use disorders, that are attributable to ACEs using nationally representative data from the U.S. To determine the proportion of psychological disorders attributable to ACEs, population attributable fractions, which predict the proportion of each outcome that would be reduced if exposure to that outcome had not occurred, were computed using regression analyses. This study revealed medium to large proportions of psychopathology attributed to childhood adversity and several gender differences in these attributions.

Specifically, more categories of psychological disorders were attributable to physical abuse among men (mood disorders, anxiety disorders, and substance use disorders) than women (only substance use disorders). Among women, sexual abuse appeared especially damaging, given that more categories of psychological disorders were attributable to sexual abuse (mood disorders, anxiety disorders and substance use disorders).

Further, Green et al. (2016) investigated the relationship between trauma exposure and psychological disorders in a sample of 491 justice-involved women in the U.S. Psychological disorders included in this study were mood disorders, anxiety disorders, and substance use disorders. Green et al. (2016) found exposure to interpersonal violence and family dysfunction contributed to all of the mental disorders included in this study in a strong and independent manner. Providing further support for the relationship between trauma exposure and mental illness, Messina and Grella (2006) found that for an increase of one childhood traumatic event (CTE), the odds of justice-involved women having received mental health treatment increased by 40%. This research also identified an additive effect for multiple childhood traumatic experiences among justice-involved women, given that the odds of having received mental health treatment increased by 980% for those who reported 7 CTEs compared to those who reported no CTEs.

PTSD develops in the aftermath of a qualifying traumatic event and consists of a particular set of symptoms including flashbacks (American Psychological Association, 2013). Justice-involved women report higher rates of PTSD when compared to women in the community (Komarovskaya et al., 2011). Given the previously mentioned high rates of trauma exposure reported by this population (Messina & Grella, 2006; Tam & Derkzen, 2014), the elevated rate of PTSD among justice-involved women is not surprising. In the DSM-5, PTSD consists of twenty symptoms under four symptom clusters: intrusion of trauma-related memories, avoidance of trauma-related stimuli, negative alterations in cognition or mood, and alterations in arousal and reactivity (APA, 2013). These symptoms can cause marked dysfunction among afflicted individuals (Komarovskaya et al., 2011). Justice-involved women are more likely than justice-involved men to experience symptoms of PTSD (Komarovskaya et al., 2011) and report more severe symptoms (Kubiak, 2004). Komarovskaya et al. (2011) compared rates of PTSD among justice-involved men and women, and found that 13% of justice-involved men met the diagnostic criteria for PTSD and 40% of justice-involved women met the same criteria.

Fortunately, positive outcomes have been identified among trauma exposed individuals and one example is post-traumatic growth (PTG). According to Tedeschi and Calhoun (2004, p. 4), "PTG describes the experience of individuals whose development, at least in some areas, has surpassed what was present before the struggle with crises occurred." The authors hypothesize that PTG is transformative because processing the traumatic event is more than an intellectual process and a sign of developmental learning, as it is distinguished by a highly emotional component. Tedeschi and Calhoun (2004) suggest that PTG is a by-product of attempts to survive or cope with the traumatic event.

Prior research has identified features of PTG among justice-involved populations and found evidence that it is related to desistance (Mapham & Hefferon, 2012; Tedeschi, 2011). Given that desistance may be related to PTG, understanding PTG is highly important to corrections. It is possible that gaining a better understanding of PTG could facilitate desistance among offending populations.

Tedeschi (2011) developed a program to galvanize PTG in trauma-exposed combat veterans. This program consists of interventions that include: "1) understanding the seismic nature of the trauma 2) enhancing emotional regulation 3) constructive self-disclosure 4) creating a trauma narrative with PTG domains, and 5) developing life principles that enhance resilience" (p.139-140). The author found that this program facilitated PTG, promoted resilience, and reduced PTSD symptoms among combat veterans. There is also some evidence that interventions designed to facilitate PTG are effective with offending populations (Mapham & Heffereon, 2012; Van Ginneken, 2016).

Mapham and Heffereon (2012) investigated an offender rehabilitation program that mirrored Tedeschi's (2011) PTG program. They found that the interventions were effective among this population and suggested that it facilitates rehabilitation. Van Ginneken (2016) explored PTG among incarcerated women using interviews and also identified features of PTG among this sample. Women who participated reported positively reconstructing their identities through finding meaning in the challenging prison experience. These findings are encouraging for justice-involved populations.

Substance Use

Covington (2008) suggested that when a traumatic event inundates normal coping mechanisms, trauma emerges. Bodily responses to the event, both physical and psychological,

are normal and may lead to a negative emotional state. Individuals who have experienced trauma may engage in maladaptive coping mechanisms, such as substance use, to relieve unpleasant emotional states (Covington, 2008; Khantzian, 1985). Paradoxically, using substances to cope often exacerbates the individual's problems in the long term by leading to marked social problems and even criminal involvement to support their costly habit (Bowles et al., 2012).

Despite the popularity of self-medication theory of substance use and its influence on medical culture (Lembke, 2012), there is a lack of empirical evidence (Hall & Queener, 2007). Alternative theories of substance use with some evidence include the genetic vulnerability model and the dopamine hypothesis. The generalized vulnerability model reflects the tendency to abuse substances due to underlying causes such as genetics. The dopamine hypothesis states that the neurotransmitter, dopamine, rewards and incentivizes substance use (Robinson et al., 1993). It is likely that no single theory explains substance abuse behaviours for all people, but that these behaviours have origins unique to each individual (Lembke, 2012).

Given the high degree of trauma exposure reported by justice-involved women, it is unsurprising that there is a corresponding high degree of substance abuse. In a sample of Canadian justice-involved women, it was found that 80% met diagnostic criteria for a substance use disorder (Derkzen et al., 2012; Grant & Gileno, 2008). This is especially concerning considering engagement in substance use can have serious repercussions for afflicted individuals, their loved ones, and correctional institutions. For example, a U.S. study by Houser et al. (2011) found that justice-involved women with psychiatric disorders and substance use disorders were the most likely to engage in institutional misconduct. Institutional misconduct creates a safety risk for other inmates as well as correctional staff and places a larger burden on the facility to manage these individuals. It is therefore advantageous for correctional staff to identify risk

factors for engaging in institutional misconduct in order to attempt to reduce the occurrence of this behaviour.

Some differences between justice-involved women who engage in substance use and those that do not use substances have been identified. In an older study by Dowden and Blanchette (1999), justice-involved women who abused substances were compared to non-substance abusing justice-involved women in Canadian federal institutions. Large differences in terms of risk to reoffend were found between these groups, with 60% of non-substance abusing women classified as low risk to reoffend, while only 28% of substance-abusing women were low risk. Women who engaged in substance abuse were also more likely to start committing crimes at a younger age than non-substance abusing women. Of the justice-involved women in this sample, 39% of substance abusers possessed prior involvement with the youth criminal justice system, while only 8% of non-substance abusers had similar histories in their youths.

Bowles et al. (2012) explored the impact of trauma exposure, such as witnessing violence, being abused as a child, or having an absent, addicted or mentally ill caregiver, on womens' offending behaviours. These women reported that they believed a lack of parental supervision contributed to their early substance use and that many attempted to cope with childhood adversity by using substances. In a study of women enrolled in The Women Offender Substance Abuse Program (WOSAP), substance abuse programming previously offered by federal corrections, they found that all of the justice-involved women in their sample reported trauma exposure (Hume et al., 2007). Further, the majority of these women revealed that they used substances to cope with the aftermath of the trauma they had experienced.

Banducci and colleagues (2014) were interested in the relationship between child abuse and psychopathology in a sample of inpatients for substance use. They found a robust

relationship between child abuse and adult psychopathology, including major depressive disorder, bipolar I/II disorder, social phobia, generalized anxiety disorder, post-traumatic stress disorder, psychotic symptoms, borderline personality disorder, antisocial personality disorder, alcohol dependence and cocaine dependence. Results demonstrated that for each psychological disorder examined, the participant was significantly more likely to present with comorbidities if they had experienced abuse. Findings from this study support the idea that substance abuse programming should be trauma-informed, which aims to take trauma into consideration and avoid re-traumatization (Covington, 2007).

In a study by Messina and Grella (2006), engagement in substance abuse also appeared to be related to number of CTEs. This sample of justice-involved women was substantially more likely to have reported each CTE in comparison to the community sample. Findings from this study revealed intravenous drug use did not appear to be related to CTEs, but alcohol use was related to CTEs. An increase of 1 CTE meant a 21% increase in the odds of having an alcohol problem, a 19% increase in odds of engaging in prostitution as an adult, and 19% increase in odds of having eating problems in adulthood. Further, among women with no CTEs, 21% reported having had alcohol problems, however, 44% of women with 5 or more CTEs reported having had alcohol problems. It is clear from this study that justice-involved women with histories of childhood trauma are at high risk for adverse health outcomes such as alcohol misuse.

Women's Pathways to Criminality

Given the differences identified between justice-involved women and men, it is likely that justice-involved women have pathways to criminality that are distinct from their male counterparts (Salisbury & Van Voorhis, 2009). Understanding women's pathways to criminal

behaviour may inform interventions designed to reduce future offending behaviours. A substantial portion of the gendered pathways literature has been qualitative in nature, which has provided insights that quantitative data may not have captured and a strong foundation for future research (Salisbury & Van Voorhis, 2009). Retrospective interviews with justice-involved women have consistently revealed difficult life histories characterized by abuse, mental illness and addiction and women have reported the belief that these factors contributed to their criminality (Belknap & Holsinger, 2006; Bowles et al., 2012; Chesney-Lind & Rodriguez, 1983; Fagan, 2001).

In recognition of the importance of adding quantitative research to the extant literature, Salisbury and Van Voorhis (2009) utilized path analytic statistical procedure to explore three distinct pathways to criminality among a sample of 313 women. The three models investigated in this study were identified by prior research and included a childhood victimization model, relational model, and social and human capital model. The childhood victimization model consisted of childhood victimization, history of mental illness, history of substance abuse, current depression/anxiety, dynamic substance abuse, and prison admission. Second, the relational model included relationship dysfunction, adult victimization, self-efficacy, current depression/anxiety, dynamic substance abuse, and prison admission. The third model is the social and human capital model and it included family support, educational strengths, relationship dysfunction, self-efficacy, employment and financial difficulties.

In this study, Salisbury and Van Voorhis (2009) found support for three gendered pathways to criminality among justice-involved women. The childhood victimization model demonstrated that child abuse did not directly affect women's recidivism, however, it led to five indirect paths of future offending. This model also revealed that substance abuse and depression

and anxiety symptoms had a direct effect on women's imprisonment. The relational model indicated that unsupportive and unsatisfying intimate relationships put women at indirect risk for future offending behavior. Specifically, dysfunctional relationships led to women's recidivism through addictive behavior, depression and anxiety symptoms, reduced self-efficacy, and increased risk of adult victimization. Finally, the social and human capital model identified that reductions in social and human capital affected women's continued offending. Risk factors considered gender-neutral, employment and financial problems, as well as educational achievements, had direct effect on women's incarcerations, however, these needs were worsened by gendered constructs such as reduced self-efficacy and lack of support in intimate or familial relationships.

A more recent study of justice-involved women in the U.S. was conducted by DeHart et al. (2014) with the aim of gaining a better understanding of pathways to offending among women with and without mental illness. A total of 491 women were recruited for structured diagnostic interviews and 1 in 4 of this sample were randomly selected for more extensive life history interviews. Data revealed a high degree of trauma, mental health problems and substance use in this population. Specifically, 86% indicated histories of sexual violence, 77% of intimate partner violence and 60% of childhood abuse or neglect. Half of the sample met diagnostic criteria for a serious major mental illness (major depressive disorder, bipolar disorder, and psychotic spectrum disorders) and just over half reported lifetime histories of PTSD (51%). The majority of these women (85%) met criteria for a lifetime substance use disorder (SUD).

Further, DeHart et al. (2014) utilized event history modeling to explore the effect of trauma and adversity on substance use and offending among women with and without mental illness. In this dataset, patterns emerged that may be helpful in informing the women's offending

literature. They found that women with serious mental illness were at great risk for substance abuse at each time period. The presence of a SUD was the only significant predictor of time to onset of substance use and women with SUDs were at greater than twice the risk for onset of substance use in comparison to women without SUDs. In addition, the presence of a SUD significantly predicted time to onset of substance use in that women who met diagnostic criteria for SUD were more than 6 times as likely to have a driving violation when compared to those without a SUD.

DeHart et al. (2014) found evidence that additional variables were related to women's offending behaviours. More specifically, intimate partner violence was a significant predictor of time to onset of drug offending and sex work. Women with violent partners were at greater than twice the risk for onset of drug offending and over four times the risk for sex work in comparison to women without violent partners. Among women who ran away from home as youth, the majority (60%) demonstrated signs of serious mental illness. Caregiver violence emerged as a covariate that significantly predicted running away and women who reported abuse or neglect were at more than 4 times the risk of running away. Further, witnessing violence significantly predicted time to onset of fighting in that women who were exposed to violence were at twice the risk for fighting others. In addition, witness violence and partner violence were significant predictors of time to onset of property crimes. Overall, it is apparent that there are several viable pathways to criminal behaviour among justice-involved women, and trauma, mental illness, and substance abuse are integral components of these pathways.

Women's Desistance from Crime

Unsurprisingly, theories on desistance have also been developed using research findings with males (Rodermond et al., 2016). According to Giordano and colleagues (2002), desistance

is considered to be a process that involves an openness to change, exposure to turning points, visualizing a new self, and transforming the way deviant behaviour is conceptualized. Giordano et al. (2002) emphasizes the necessary identity transformation and work that the individuals themselves must put in to facilitate desistance. In a review article of 44 studies on desistance among women, Rodermond and colleagues (2016) explored how these male-based theories of desistance applied to justice-involved women. They identified that having economic independence, children, supportive relationships, individual agency and the absence of drugs were all important for justice-involved women in reaching desistance. Gender differences were identified in terms of the influence of employment, children, supportive relationships and the absence of criminal affiliates. The authors concluded that male-based theories of desistance are appropriate for application with justice-involved women, however, some factors may have different meanings for women.

The Current Study

The rate by which Canadian women are being incarcerated is increasing (Public Safety Canada, 2015), yet there is very little published research on this group (Tam & Derkzen, 2014). Trauma and trauma-related sequelae are considered integral in understanding criminal behaviour among justice-involved women (Salisbury & Van Voorhis, 2009), but more Canadian research is needed. It is important to organizations, such as the Elizabeth Fry Society of Mainland Nova Scotia, to have findings from Canadian research to make informed decisions for Canadian, justice-involved women. According to McCall and colleagues (2004), research findings are increasingly requested from policy makers to secure funding needed for evidence-based programming. It is possible that policy makers may also want evidence of an identified need for programming. We expect that similar to findings in the U.S., trauma, mental illness and

substance use will be noted as contributing factors to criminal behaviour, however, research is needed to confirm such relationships.

The aim of this study is to gain a better understanding of factors that influence criminal behaviour and desistance among a sample of justice-involved women. The current study contributes to the literature by providing direct and indirect links between factors and both criminal behaviour and desistance, which were provided by women with valuable lived experience with the criminal justice system.

Research Questions and Hypotheses

This study explored two research questions. The first research question asked: which factors do justice-involved women believe contributed to their criminal behaviour? Of these factors, which factors do justice-involved women believe contributed the most to their criminal behaviour? The second research question asked: which factors do justice-involved women believe helped them stay away from criminal behaviour?

Based on the extant literature on justice-involved women, seven hypotheses were formed.

H1: The most commonly endorsed contributing factors for criminal behaviour will be traumatic

experiences, mental illness, and substance abuse.

H2: Age at the time the first crime is committed will be negatively associated with trauma histories.

H3: The majority of crimes committed by justice-involved women will be property crimes.

H4: The majority of justice-involved women will report multiple and diverse incidents of trauma exposure in childhood and adulthood.

H5: Trauma histories will be positively associated with PTSD symptoms.

H6: PTSD symptoms will be positively associated with substance abuse.

H7: The majority of justice-involved women will report histories of substance abuse.

Method

Sample

Participants (N=8) were justice-involved women who were affiliated with the Elizabeth Fry Society of Mainland Nova Scotia. The majority of the women identified as Canadian (N=7) and one woman identified as Mi'kmaq. Women ranged in ages from 22 to 50 and the average age reported was 36. Most women reported heterosexual orientations and marital statuses of single or never married. Women reported an average age of 25 at the time their first crime was committed, although their ages at first crime ranged from 12 to 50. This sample reported a mixture of provincial and federal sentences in correctional institutions.

This study is part of a larger project between Saint Mary's University and the Elizabeth Fry Society of Mainland Nova Scotia (EFSMNS). Eligibility criteria for participation in this study included having a criminal history and being over the age of 19 to allow women to provide their own informed consent to participate. Participants were eight women involved with the EFSMNS who were recruited through posters and word of mouth.

It was determined that 8 participants was sufficient for qualitative analysis according to the literature (Braun & Clark, 2013). Braun and Clarke (2013) state a sample size of six to ten is sufficient for small, qualitative projects. There are several strategies that may be employed to determine adequate sample size, including data saturation and conceptual depth (Braun & Clark, 2019b; Low, 2019; Nelson, 2017). Data saturation is defined as the point at which no new information is identified in a dataset (Low, 2019) and it is considered by some to be the gold standard of determining sample size in qualitative research (Braun & Clark, 2019b). In contrast, several researchers have put forth convincing arguments that this concept is problematic (Braun

& Clark, 2019b; Low, 2019; Nelson, 2017). According to Braun and Clark (2019b), the operational definition of data saturation is broad, which has likely contributed to the term's propensity for being misunderstood and misused. Further, Low (2019) argued that the definition of data saturation is a logical fallacy given that 'there are always new theoretical insights to be made as long as data collection continues' (p.131). An alternative to data saturation for determining sufficient sample size is conceptual depth and it focuses on the quality of the data collected rather than the quantity (Nelson, 2017). Given the richness of the data collected for this study, we argue that conceptual depth is achieved. See Appendix A for a fulsome discussion on conceptual depth and how this data meets the criteria for conceptual depth.

Interview protocol

This study employed the use of semi-structured interviews to explore factors related to criminal behaviour and desistance from crime among justice-involved women. The voices of members of marginalized populations, such as justice-involved women, are often excluded from research on their own experiences (Roche et al., 2020) and we wanted to hear from the women themselves. In recognition of the importance of first-person experience, interviews were selected as the methodology for this study.

Prior to conducting this study, a talking circle was held with members of the EFSMNS and the women were asked what information they thought was important to collect and to consider what factors contributed to their criminal behaviour. The next few hours were spent discussing just a few factors and it became clear from this experience that the interview protocol would need to be revised to make the most out of the limited time we would have with participants. The interview protocol was developed by senior graduate students, Taylor MacNeill and Kayla Parsons, and reviewed by a supervisor on the project, Dr. Marguerite Ternes. It

included factors that justice-involved women may or may not have felt is related to their criminal behaviour and desistance from crime. These factors were generated from both a talking circle held at EFSMNS prior to conducting the study and the literature on justice-involved women.

Prior to beginning the interview, the interviewer went over the informed consent form with the participant and received their verbal consent to proceed with the study. Participants were also informed about what to expect during the interview, the purpose of the study, how the findings may be used and how they could withdraw their participation at any time throughout the process.

Interviews were in depth and provided rich data in response to the research questions. The length of each interview varied widely and ranged from 28-140 minutes, however, the average length of the interview was approximately 40 minutes. The interviews were conducted by one of four trained research assistants; three of which were graduate students and one who was an undergraduate student. Of eight interviews, the primary student investigator of the present study conducted four interviews. All interviewers practiced conducting interviews using the interview protocol in Zoom meetings attended by the research team. Additionally, interviewers submitted practice sessions of a recorded interview for review and approval by the supervisor of this project, prior to conducting interviews with participants.

The first section was designed for rapport building and assessed demographic variables including age, ethnicity, education, marital status and employment. Next, participants were asked to consider the factors that they believed contributed to their criminal behaviour. The interviewer went through a comprehensive list of factors that included trauma, substance use, foster care and Child Protective Services (CPS), psychosocial factors, and factors pertaining to interactions with legal system, with many subfactors, with the participants. Participants were asked to answer yes

or no after each factor depending on whether or not they believed that factor contributed to their criminal behaviour. The interviewer circled back to factors endorsed by participants and asked the participant to describe why they believed this factor contributed. The interviews ended with a section on positive factors that included social support, role models, public services and supports, spirituality, education and other, and asked which factors they believed helped them avoid committing future crimes. Participants were then asked to describe why they think these particular factors helped them. This section was included as the final section in a conscious effort to end the interview directly after discussion of a positive topic. See Appendix B.

Measures

Adverse Childhood Experience Questionnaire (ACE; Felitti et al., 1998). The ACE is a self-report 10-item measure of adverse childhood experiences. These experiences include emotional abuse, physical abuse, sexual abuse, neglect, parental separation, household violence, parental substance abuse, parental mental illness and parental incarceration. Scores range from 0-10 and higher scores indicate more adverse childhood experiences. The ACE has adequate internal consistency when administered to women (Cronbach's alpha = 0.88; Murphy et al., 2014). This survey was modified to measure the frequency of each type of ACE, with the exception of three items. We adopted categorical response options used in prior research if participants indicated they had experienced a particular trauma (1, 2-3, 4-10, 11+; Wilker et al., 2015). Wilker and colleagues (2015) assessed the retest reliability and predictive validity of trauma measures in a sample with a high degree of trauma exposure, Ugandan rebel war survivors. They found that using the number of types of trauma exposure was the best predictor of lifetime PTSD, however, event frequencies did improve the predictability of current PTSD.

Given that we are measuring lifetime PTSD and current PTSD symptoms in the present study, we decided to assess event frequencies as well. See Appendix C.

Life Events Checklist for DSM-5 (LEC-5). The LEC-5 is a self-report 17-item measure of trauma history (Weathers et al., 2013). This measure assesses participants' exposure to traumatic events that are related to PTSD (Weathers et al., 2013). Scores on the LEC-5 range from 0-17, with higher scores indicating more trauma exposure. Psychometric data from samples of college students on previous versions of the LEC have been satisfactory (Gray et al., 2004). When compared with another well-established trauma history measure, the Traumatic Life Events Questionnaire, the LEC demonstrated good convergent validity and identified relationships between trauma exposure and other key variables similar to the established measure (TLEQ; Gray et al., 2004). Reliability was found to be primarily satisfactory, except for one item, a history of being assaulted or threatened with a weapon. See Appendix D.

National Stressful Events Survey PTSD Short Scale (NSESSS-PTSD). The NSESSS-PTSD is a 9-item self-report instrument of PTSD symptoms that reflects DSM-5 criteria for PTSD (LeBeau et al., 2014). This measure was also developed in collaboration with the DSM-5 PTSD workgroup (LeBeau et al., 2014). Participants are asked to rate on a 5-point Likert scale how much they have been bothered over the past 7 days by PTSD symptoms. Response options range from 0- "Not at all" to 4- "Extremely" and total scores range from 0- 36, with higher scores indicating more PTSD symptoms endorsed or more severe symptoms. This measure demonstrated strong psychometric properties that included a satisfactory convergent validity and excellent internal consistency in a non-clinical sample of U.S. university students (LeBeau et al., 2014) and in a trauma exposed sample in Iran (Rafiey et al., 2017). In addition, average total

scores ranging from 0-4 were calculated (APA, 2013). Average total scores of 0, 1, 2, 3, and 4 indicated none, mild, moderate, and severe PTSD symptoms respectively. See Appendix E.

Additional Mental Illness Items. Two items that measured mental illness histories were added to the test battery. One item asks whether participants have been diagnosed or treated for any mental illness and then for participants to disclose which mental illness they have been diagnosed with or treated for. The second item asks participants to describe their current mental health status. Response options for this question include poor, fair, good, great or prefer not to say. See Appendix F.

Alcohol Use Diagnostic Inventory Tool (AUDIT). Engagement in problematic alcohol use will be measured with the widely used AUDIT (Bernards et al., 2007). The AUDIT is a 10-item measure developed by the World Health Organization (WHO) from a multi-national data set to identify hazardous drinking behavior of varying severities (Saunders et al., 1993). The majority of questions, items 1-8, are assessed on a 5-point Likert scale, with the exception of items 9 and 10, which are assessed on a 3-point Likert scale. All items receive a score between 0 and 4 and total scores of this measure range from 0 to 40 (Saunders et al., 1993). Three factors are present in the AUDIT: alcohol consumption is represented by items 1-3, physical dependence is represented by items 4-6, and finally, consequences associated with alcohol use are represented by items 7 through 10 (Babor & Robaina, 2016). See Appendix G.

Cut-off points of 8 and 10 have been identified based on their sensitivity and specificity (Saunders et al., 1993). The cut-off point of 8 demonstrated sensitivity for abnormal drinking behavior in 93-100% of cases, hazardous alcohol use from 95-100% of cases, problems with alcohol over the last year in 91-100% cases and alcohol dependence syndrome in 100% of cases (Saunders et al., 1993). Validity of this measure, determined by its ability to identify individuals

with hazardous alcohol use from those without hazardous alcohol use through comparisons of reference groups of non-drinkers and alcoholics, was determined to be excellent (Saunders et al., 1993). However, more recently, women are classified as having alcohol-related problems with a score of six (Berman, 2003).

The AUDIT has been subjected to criticism by some researchers for the overestimation of the rate of hazardous drinkers (Bernards et al., 2007). Despite generating some criticisms of the AUDIT, Bernards and colleagues (2007) tested the psychometric properties of this measure and found them to be adequate. The researchers concluded that the AUDIT is appropriate for a screening tool of hazardous drinking, but cautioned that when used in some settings where it is highly important to identify those who are at an elevated risk of experiencing alcohol-related consequences, researchers should consider removal of the frequency item.

Drug Use Diagnostic Inventory Tool (DUDIT). The DUDIT is an 11-item self-report measure that assesses drug problems other than alcohol (Berman et al., 2005; Voluse et al., 2012). Almost every item on the DUDIT assesses responses on a 5-point Likert scale, with the exception of two items. Items 1 and 2 range from 0= "Never" to 4= "4 times a week or more often", item 3 ranges from 0= "0" to 4= "7 or more", and items 4 to 9 range from 0= "Never" to 4= "Daily or almost every day". Items 10 and 11 are assessed on 3-point Likert scales that ranged from 0= "No" to 4= "Yes over the past year". Total scores of the DUDIT range from 0-44. Psychometric properties of the DUDIT were found to be sufficient among individuals in the U.S. with milder drug problems than the measure was previously validated with (Voluse et al., 2012). In comparison to another well-established measure, the Drug Abuse Screening Test (DAST-10), the DUDIT has demonstrated high convergent validity, r=.85, and a Cronbach's alpha of .94 (Voluse et al., 2012). Using a cut-off score of 8, this measure has 90% sensitivity

and 85% specificity. Discriminant validity was good, as demonstrated by the DUDIT's ability to distinguish drug abusers from alcohol abusers. The cut-off score to classify women as having drug problems is two (Berman, 2005). See Appendix H.

Additional Alcohol and Drug Use Items. Four items that addressed substance abuse histories were added. Two items measured age at onset of alcohol use and age at onset of other drug use. One item asked whether participants felt they had ever had a problem with drugs and the last item asked whether they had attended substance abuse programming or had received other medical treatment for drug use. See Appendix I.

Procedure

Ethics approval was obtained from the internal Research Ethics Board at Saint Mary's University prior to data collection. Women were recruited through flyers and word of mouth posted at the EFSMNS locations and contacted by the primary student researcher to schedule an interview conducted by one of the four interviewers. The interviews were expected to take approximately forty minutes, although the length of the interview depended on the amount of information each participant provided. The interview began with a demographics section designed to build rapport. The following section asked the women which of the factors included in the interview protocol they believe contributed to their own criminal behaviour. The women who participated in the interview portion of this study were compensated with a \$15 electronic gift card. Following the interview protocol, the women were asked to complete a test battery containing 5 surveys including ACE, LEC-5, NSESSS-PTSD, AUDIT and DUDIT. This test battery took participants between ten to twenty minutes to complete and the women received \$10 for completing this portion of the study. Women were debriefed after their participation in the study and provided a list of local mental health resources. In addition, women were encouraged

to reach out to the research team if they experienced an adverse emotional reaction due to their participation in this study. No participants indicated they had experienced an adverse reaction to the study.

Results and Discussion

Thematic analyses

This present study is a mixed methods study that includes qualitative and quantitative data. The qualitative data generated from the interviews was explored using reflexive thematic analysis to examine both of the research questions separately. Thematic analyses is one of the most widely used methods to analyze qualitative data and it involves identifying patterns, referred to as themes, in a dataset (Braun & Clarke, 2013). Specifically, reflexive thematic analysis is a flexible type of thematic analysis that may be used to answer numerous types of research questions, including people's perceptions and experience (See Braun & Clark, 2019a). All interviews were transcribed by the interview team and one research assistant using Microsoft Office software. To analyze the data, the steps outlined by Braun and Clarke (2013) were followed. First, the transcriptions were read through carefully and thoroughly and anything interesting was noted in a process referred to as noticing. The second step was generating initial codes of relevance to the research questions. Third, candidate themes were generated. Fourth, candidate themes were reviewed and the data was examined for how it fit with these themes. The fifth step was defining and naming the final themes. The sixth and final step was writing up the data analyses in this results section. Although these steps are presented in a particular order, the analysis did not proceed neatly from steps 1-6. There was some shifting back and forth between steps, which is typical of reflexive thematic analyses.

Data was coded using a hybrid inductive and deductive approach to thematic analyses. The hybrid approach was selected to allow codes to be inductive, meaning data-driven, and deductive, referring to theory-driven codes. This approach fit best with the research questions and more specifically, with the combination of the list of factors from our interview protocol and the open-ended questions we asked participants. Codes were developed by the primary student researcher using a semantic approach, which means that only the explicit content of the data was interpreted (Braun & Clark, 2013). This approach was selected to remain as close to the information disclosed in the interviews as possible. All coding information, including the coding process and interpretation, was recorded and kept in a coding journal. Further, the supervisor of this project, Dr. Marguerite Ternes, reviewed all coding materials to validate the content and the interpretation of the data.

There are several strategies for quality control in qualitative research, including reflexivity. According to Berger (2015), reflexivity is 'viewed as the process of a continual internal dialogue and critical self-evaluation of researcher's positionality as well as active acknowledgement and explicit recognition that this position may affect the research process and outcome' (p. 220). The primary student researcher of this study acknowledges being sympathetic to what the women have experienced and holding the belief that the criminal justice system is flawed. This position may have affected the outcome of the present study.

Factors related to criminal behaviour

Table 4 presents the factors from the interview protocol that justice-involved women indicated contributed to their criminal behaviour. Readers should be aware that some participants interpreted the first research question differently than originally intended; however, these interpretations were clarified later in the interviews. For example, one participant answered "no"

to the problems with addiction factor, however, endorsed "alcohol in my life" as a contributing factor, which may reflect an aversion for the term "addiction". Thus, readers should interpret the findings from Table 4 with caution and note that the themes discussed below are a more accurate reflection of factors that women reported were related to their criminal behaviour.

Table 4

Factors related to criminal behaviour reported by justice-involved women

Factors	Responses	
Trauma	Number	%
Victimization	6	75.00
Experiencing domestic violence	6	75.00
Witnessing domestic violence	5	62.50
Incarceration of a household member	1	12.50
Mental illness of a household member	5	62.50
Substance abuse of a household member	7	87.50
Parents separated or divorced	1	12.50
Human trafficking	2	25.00
Sexual assault	3	37.50
Physical abuse	5	62.50
Emotional abuse	5	62.50
Neglect	4	50.00
Racism/sexism	4	50.00
Foster care/CPS	5	62.50
Other trauma	5	62.50
Substance use		
Lack of services	7	87.50
Substance use as a barrier for successful probation	5	62.50
parole		
Problems with addiction	7	87.50
Other substance use factor	1	12.50
Foster care and CPS		
Placement	3	37.50
Maltreatment	3	37.50
Limited caregiver closeness	3	37.50
Other foster care factor	2	25.00
Psychosocial factors		
Work	4	50.00
School	4	50.00
Housing	4	50.00
Poverty	4	50.00
Health	7	87.50

Other psychosocial factor	0	00.00
Interactions with legal system		
Probation/parole officer	2	25.00
Expectations	5	62.50
Racial biases	2	25.00
Other legal factor	4	50.00

All women who participated in this study have been given pseudonyms and gender identifying relationships have been changed to further protect women's anonymity. Quotes that have been shortened are denoted by ellipses and any filler words have been removed in the interest of clarity. It was clear during data analysis that understanding women's traumatic experience was integral in understanding factors that contributed to their criminal behaviour. The women described lives characterized by high rates of trauma beginning in childhood and carrying on to adulthood. All the women attributed their traumatic experiences as contributing factors to their criminal behaviour.

The bottom-up, inductive and bottom-down deductive analyses resulted in one overarching theme, trauma, and five themes: 1) negative influences from others, 2) life circumstances,, 3) substance abuse, 4) inadequate services, and 5) 'the system failed me.' The first theme, negative influences from others, had five distinct subthemes: 1) caregivers who didn't care, 2) afflictions of a household member, 3) recipients and perpetrators of abuse, 4) crime-involved associates and 5) separation from children. The second theme, life circumstances, had three subthemes: 1) physical and mental health problems, 2) 'I was treated differently,' and 3) crime for survival. The third theme, substance abuse, had two subthemes: 1) substance use as a coping strategy and 2) acts differently under the influence. The fourth theme, inadequate services, did not have subthemes. The fifth and final theme, 'the system failed me,'

had three subthemes: 1) *the school system*, 2) *the foster care system*, and 3) *the criminal justice system*. All themes and subthemes are discussed in depth below.

Trauma

The lone overarching theme identified in the data is *trauma*, given that it underlies every theme and subtheme in the data. Accordingly, trauma significantly impacts criminal behaviour, consistent with the literature (Belknap & Holsinger, 2006; Bowles et al., 2012; Chesney-Lind & Rodriguez, 1983; Fagan, 2001). Women with criminal histories reported extensive trauma histories; the majority reported that their trauma exposure began in childhood and continued to adulthood. Of her life experiences, Dana acknowledged that she was exposed to 'trauma upon trauma upon trauma.' Women indicated that the relationship between trauma and criminal behaviour was robust. Violet noted that the reason 'most people are going to jail is caused by trauma. It's the way they're acting out. It's a way to survive.' The high degree of trauma exposure reported is concerning given the harmful impact of trauma (Afifi et al., 2014) and how it impacted criminal behaviour, which is discussed at length below.

Negative influences from others

The theme *negative influences from others* captures features of the women's relationships that contributed to their engagement in criminal behaviour. Subthemes include *caregivers who did not care, afflictions of a household member, recipients and perpetrators of abuse,* and *crime-involved associates.* The subtheme *caregivers who did not care* captures the limited caregiver closeness reported by women and its effect on criminal behaviour. This subtheme includes relationships with caregivers, including biological families and foster families. *Afflictions of a household member* explores the influence that exposure to a household member's mental illness, substance use, and incarceration had on the women's criminal behaviour. The subtheme

recipients and perpetrators of abuse captures the harmful consequences of receiving abuse and how these experiences can lead to engagement in abusive and other criminal behaviour. Crime involved associates explores the relationships with people who were engaging in criminal behaviour and the influence this has on the women's own criminal behaviour. Finally, separation from children refers to the negative influence participants described when their children were removed from their care by Child Protective Services.

Caregivers who did not care. Women frequently reported caregivers who did not display caring behaviour towards them when they were children in their care. They described parental figures, both biological and foster, as spending a lot of time outside the household and noted that they did not seem interested in the children or what they were involved in when they were around. Women also frequently described feeling unwanted by their caregivers. In reference to her mother, Liz said, 'she finally told me that she never wanted to have me and she hated me, you know. And she wanted to have an abortion, but my dad wouldn't let her'. Women portrayed the lack of support from their caregivers as exceptionally painful, making coping with challenges more difficult. As Shelly said 'the only support I ever really had in my life was my social worker or the youth care staff, the ones that you know cared about me. And then when I get these charges, it kind of hit me hard.' This comment demonstrates the injurious effect the lack of support from caregivers had on both the women's early life and after incurring criminal charges as an adult. Several women felt that their caregivers had abandoned them and that these caregivers did not make a significant effort to place the children back in their care. Grace said of her mother's parenting, 'she didn't keep trying to fight for us, so it didn't really matter what we do. It was like a free for all.' The significance of the missed opportunity by caregivers to make a meaningful difference in their children's lives was not lost on these women. Shelly noted, 'if

they would have cared, if they were able to show they cared, or didn't have these problems, then I feel like I wouldn't have made so many mistakes when I was younger.'

Feeling ignored or unwanted by their caregivers resulted in the children acting out to get their parents' attention. Of her mother refusing to pick her up at the police station, Violet said: 'That's literally all I was doing it for was so she would come get me. To show me that she wanted me there and she just told me that she didn't, which is like, why am I gonna go back there?... So that's when I was just like bye, I'm not coming home anymore.' This lack of supervision from caregivers translated into not having someone deter them from engaging in criminal behaviour. The caregivers were often not present to correct the minor's behaviour and model positive behaviour. As Grace commented, 'I just don't feel like it really mattered to anyone if I did do wrong or if I did do good.' Women also reported that negative aspects of their relationship with their caregiver contributed to them running away. Liz said she was 'sort of running away to try and find someone to take me in that would do these things that a mother should be doing.' Youth who run away from home are more vulnerable and may be exposed to dangerous lifestyles, including crime (Kempf-Leonard & Johansson, 2007). For example, Violet described acting out to get her mother's attention and running away from home when her mother did not react. She noted that she incurred her first charge during this period, which would be her first of several encounters with the criminal justice system.

Afflictions of a Household Member. This subtheme captures the influence of a household member's afflictions, including substance abuse, mental illness, incarceration, and domestic violence, on women and how it relates to their propensity to engage in criminal behaviour. Women reported that some household members were not able to perform their parental duties due to their afflictions. When discussing her mother, Shelly reflected, 'she wasn't

really in a position to care about what I did because of her mental health.' Women reported that witnessing a member of the household abuse substances led them to recreate these unhealthy behaviours. As Dana acknowledged, 'my father is an alcoholic, so that I think contributed to my substance abuse.' Further, witnessing a household member contend with an affliction can be traumatic for children, and women reported that the afflictions of a household member had negative consequences for them. As Violet described her mother, 'I just think she doesn't know how to tell people what's going on in her emotions. She's always been the one to conceal and then lashes out on everybody. She was very physically abusive, and I blame that on her mental health problems.'

Women also reported that the afflictions experienced by a household member had adverse ramifications for their own mental health and future relationships. Of her adoptive and birth mother's mental health problems, Shelly acknowledged, 'it took a toll on me.' Violet added, 'it did have a huge impact on my overall life and my own standards for who I meet and who I thought I was worthy enough for if that makes sense.' Women reported that the afflictions of a household member both indirectly and directly contributed to their criminal behaviour. For example, Olivia described that the alcohol use of her partner and the consequent violence in their home 'contributed definitely to my trauma, which led to my criminalization.' This account explains the connection between witnessing a household member's substance abuse and the perpetration of criminal behaviour. Further, this woman noted that the pathway between the two is paved by trauma. In other cases, afflictions of a household member directly led to criminal behaviour, such as underage drug use. Shelly explained:

'my mom she smokes crack and does pills and stuff, and she was the first one that ever gave me a pill. I was just having a bad day, and she was like, this will make you feel better, and I was probably like 14... from there like, I really got I liked the way it made me feel. I started doing it more, and that contributed to me making a lot of mistakes and I kind of formed a type of dependency for a while.'

This experience started Shelly on a difficult path of addiction and criminal involvement. Women reported that the criminal involvement modelled by household members encouraged their own criminal behaviour. Of her charges for drug trafficking, Grace disclosed that she believes her brother's charges for trafficking contributed to her own charges for a similar crime. Consistent with social cognitive theory (Bandura, 1986), individuals who witness a role model engage in antisocial behaviours may reproduce the behaviour and there is some evidence that a role model's antisocial behaviour produces a more powerful effect on individuals than prosocial behaviour (Hurd et al., 2011). As Shelly acknowledged how her mother's work as an escort made her feel, it was 'almost like my mom is doing it then it should be okay.' The belief that this behaviour was okay led to her reproducing the criminal behaviour she had seen modelled, and so began her involvement with crime. For example, Shelly received her first charge as a minor when a trip to her first client's house went wrong. She tried to leave the client's house abruptly, but he tried to prevent her departure physically and kept her personal property. When she went back to retrieve her belongings, she was charged with a break and enter. Shelly added that the charge 'ended up getting thrown out because like I was 15 and the guy who was trying to have sex with me was like 40.' This narrative demonstrates the dangerous situations that the women put themselves in, which can be partially explained by the negative influence of a household member's afflictions.

Recipients and Perpetrators of Abuse. Women described the harmful effect of being recipients and perpetrators of abuse and how this treatment contributed to their criminal

behaviour. The majority of women reported histories of abuse that began in childhood and continued into adulthood. The abusive incidents ranged from neglect to violence, and the acts were perpetrated by family members, romantic partners, and friends. Several women reported extensive histories of abuse. For example, Shelly commented, 'I went from being in an abusive foster home to this like abusive adoptive home to like being an abusive foster home.' Of the neglect she faced, Violet commented, 'we would have to fend for ourselves.' The neglect had grave ramifications for the child, given that Violet's older sibling often missed school to care for her younger siblings. Similarly, Dana lost school-related opportunities due to domestic violence and explained, 'I graduated with honours with my first year University paid for in scholarships, and because of domestic violence, I didn't end up going, so my life kind of went downhill after that.' The barriers to women's education may be tied to a loss of opportunities later in life.

Several participants reported that the turmoil in their childhood homes elicited anger responses. For example, after witnessing her parents' fights, Grace said: 'my temper was up a lot.' Of the beatings she endured in childhood, Shelly reported experiencing similar feelings of anger and then she stopped caring. Shelly added, 'for a long time, it caused me to think, why would they give me this treatment and then it contributed to me not given a fuck... Was not giving a fuck leading to being jail.' This indifference may represent an adaptive defence mechanism the women employed to protect themselves (McClelland, 2020). These narratives represent how early experiences with abuse can indirectly lead to criminal behaviour.

The exposure to abuse also affected the women's future relationships. Of the neglect and abuse she faced, Shelly said, 'it's just kind of messed my head up a bit and made it harder for me to like form close relationships with people.' The abuse that women reported negatively affected their family dynamic, and this damage appeared to be long-lasting. Of her mother's abuse, Violet

said, 'now I haven't seen her in over 12 years, and she has many grandchildren she has never met.' In some instances, abuse in the household preceded abuse in their adult relationships. As Violet described her mother's extreme physical abuse, she added, 'as I got older, it turned into more domestic abuse with my partner and yeah, it was a lot.' Although these women described enduring a great deal of abuse, women identified emotional abuse as the most painful and damaging type of abuse, with lasting impacts on the way they think about themselves. As Violet said, 'The emotional abuse is always the worst 'cause yeah, I was getting beat all the time, and yeah, I was abused in every other way, but you could heal from those things. The emotional abuse is constantly being told you're not good enough, constantly being told you're ugly, and you know this and that. Those things stick with you...They stick in your subconscious for your whole entire life. You're not healing from that until you find the courage to tell yourself that you're not those things.'

The abuse also negatively affected the women's mental health. Of the physical abuse she faced, Shelly said, 'it kind of made me depressed and lowered my self-esteem.' After being physically attacked, Taryn said, 'ever since I was attacked, I've been having flashbacks,' and she described drinking alcohol to cope with the mental health symptoms she faced. Moreover, women reported that these negative feelings about themselves were long-lasting and led to unhealthy behaviour. Shelly added, 'that's why I ended up doing drugs. I really didn't ever really care much about the consequences of things. Just because I really didn't think about myself in a positive light.'

Domestic violence was commonly endorsed as a particularly insidious factor related to women's criminal behaviour. Women reported physical, emotional and financial abuse and other control tactics utilized by their romantic partners. There was some evidence that these men

would target young women they considered especially vulnerable, such as younger women or women who were houseless. Women also disclosed that these domestic violence relationships encouraged behaviour they would not have exhibited had it not been for the relationship. For example, Violet reflected 'he forced me to use needles. He forced me into all kinds of things.' This behaviour change had severe consequences for the women, including criminal behaviour. For example, Violet was encouraged to rob a drug store by her partner for narcotics and received a jail sentence for her involvement. Olivia described how her experience with domestic violence perpetrated by the father of her children led to her engagement in criminal behaviour:

'It led me to poor emotion management, which led me to being super impulsive and not having, you know, rational thinking or decision making, right... So for me, I wasn't healthy enough to make decisions, so I was making these poor decisions that led me to crime.'

Women also disclosed the distressing effects of sexual abuse. Liz acknowledged 'sexual assault affected me completely in all sorts of things.' One source of pain appeared to be tied to victim-blaming and not being believed. As Liz describes the sexual abuse by her brother and another community member, 'I was victim-blamed for those incidences in my childhood, and I was the bad one. It was my fault.' As a direct consequence of not being believed, Violet described the damage to her relationships within her family, as her family thought she was a troublemaker. Women reported feeling helpless in how they were negatively perceived by family members and surrendering to a self-fulfilling prophecy. Liz explained, 'I definitely internalized that and thought at one point if I'm so bad, I might as well just be bad.' This account clarifies the connection between not being believed and criminal behaviour. In other cases, women engaged in criminal behaviour to regain some of their power that was lost through victimization. Dana

explained that escorting 'gave me a feeling of empowerment. I felt like I had control back over my body.' She described that part of the empowerment she felt came from the fact that 'it was on my terms.' Dana said:

'I've been victimized by many men over the years... sexually assaulted, domestic abuse, things like that. So when I started to sell drugs, I was all of a sudden very powerful. And it was very much a feeling of empowerment that all of a sudden, I was the one in control after being beat and raped by men for so many years. All of a sudden, I was the one in control, and I was the one that they were bowing down to. So that helped, at the time, that kind of kept me that that power kept me doing what I was doing.'

Furthermore, women disclosed experiences with human trafficking. Similar to perpetrators of domestic violence, perpetrators of human trafficking approached women they deemed especially vulnerable, such as houseless youth. Violet describes travelling with a man to Ontario at the age of 14 or 15 and dancing in clubs underage. This behaviour can have damaging effects on how young women perceive themselves. Violet said, 'you just feel gross and dirty.' These abusers also use coercion and abuse to control their victims and force them into submission. On the consequences of refusing her trafficker's directions, Violet said, 'it got to the point where if I didn't want to, I would get beat, and he would make me sit in cold baths and like just psycho weird stuff like that.'

The exposure to violence sometimes led to the woman perpetrating violence in adulthood. On her mother modelling aggressive behaviour, Liz said:

'it was kind of like that was my role model, so I think that kind of was instilled in me that I had to be the aggressor in situations, and she would always be the one to be physical if there was going to be anything physical she was the initiator. So, I think I learned that behavior at a young age.'

This account explains how watching a parent modelling aggressive behaviour affected the behaviour of the children, which is consistent with research findings on role models (Hurd, 2011). Further, these negative role models affected the women's ability to maintain healthy relationships into adulthood. Liz said, 'because I didn't know how to deal with a healthy relationship, all I knew to do was hit. And when I wasn't being hit, I must hit them because something is not right.' In other cases, the dangerous lifestyle they lived at that time led to the perpetration of trauma. For example, Olivia describes going to a pimp's house with a gun and friends to locate a friend that was a victim of human trafficking. At the time, she felt justified in her behaviour, however, now she acknowledges the emotional harm she caused. Olivia recognized, 'in my healthy mindset now, like I had no right to do that right and like to scare somebody in their own home, to traumatize them.'

Crime-involved associates. Women reported that negative influences from crime-involved associates also contributed to their criminal behaviour. The spaces women frequented made avoiding crime-involved associates difficult, and women met these associates at treatment centers, correctional facilities, schools or work. Spending time with these associates exposed the women to criminal behaviour and other behaviour that contributed to crime, such as substance abuse. During her time in a treatment facility, Liz said, 'I had an alcohol problem, and then I ended up coming out of treatment with a crack problem.' Despite correctional facilities' purported mission of rehabilitation, several women felt that their time in a correctional facility harmed them and explained that this was partially a result of exposure to crime-involved associates. Of the time she spent in a correctional facility, Violet said, 'you're not going there to

get help. You're actually going there and become worse. Because now you have more connections with people that have the same issues as you.' Other women spoke about how their workplace negatively affected their behaviour. Liz explained that alcohol consumption was a large part of the industry she worked in and that it was a part of her job to take clients out for drinking events. All of the employees at this workplace engaged in criminal activity. Liz said, 'we drank on the job, you know, everybody drove home drunk, even my boss, like we all did.' For example, Shelly described being houseless and living in a shelter: 'I mean almost everybody at the shelter who is criminal likes things that break the law, that's how they get by.'

There was a hesitation to label some of these people as bad, reflecting a desire to separate the person from their behaviour. For example, Olivia said, 'I got involved with a super I don't even want to say the bad cro- like the bad crowd because it's like they're people, right?' Women disclosed that the lack of support they experienced led them to seek acceptance in unhealthy places. Describing the hardships of her upbringing, Shelly noted, 'I just kind of like drifted towards the people that reminded me, or had those characteristics.' Liz agreed and commented 'because of where I came from, it pushed me in that direction of searching for anybody who would take me in and, you know, unfortunately, it was amongst people that were involved in criminal activity.'

Violet said:

'when you find friends who you think are your friends who are involved in whatever you may be doing at that time. Like you're gonna follow. Why? Because you want to feel like you are cared for in some way in that moment, I guess.'

In other cases, women were seeking security and protection that was not otherwise provided to them. Of the crime families she became involved with, Liz said they 'provided that safety I've been looking for my whole life. Like, we'll accept you no matter what, and we'll have your back'. Looking for people or places to feel safe with seemed to be related to feeling unsafe at home and in other spaces that should provide a sense of safety to women. As Liz said, 'I feel more safe in a room full of drug addicts than I would ever in a room full of police officers.' This account may reflect negative experiences with justice workers, which women frequently reported.

The consequences of socializing with crime-involved associates were serious, such as exposure to criminal activity and encouragement to engage in criminal behaviour. The women reported committing criminal behaviour as a way to conform with peers and prevent further social isolation. Of her experience in a group home, Shelly described engaging in criminal behaviour, 'so, I was trying to fit in with the crowd, so I wasn't lonely.' The negative consequences of spending time with crime-involved associates were sometimes severe. For example, Olivia had friends in her home that carried a gun, and her children were removed from her care over this incident.

Separation from their children. Several women reported that the separation from their children was a contributing factor to their criminal behaviour. Women reported feeling poorly about themselves and experiencing feelings of guilt due to not being their children's primary caregivers. Dana described, 'that made me want to involve myself in as much other stuff as possible so that I would alleviate some of the guilt.' These negative feelings were at times coped with by engagement in other distracting activities. Dana suggested, 'I was doing all kinds of other stuff, so I didn't have to think about how big of a piece of shit I felt like because my

mother had my kids.' When separated from their children, other feelings reported by the women were anger, and these feelings led to lashing out. For example, Olivia said, 'once my sons were apprehended, I think that's when I start lashing out more and more and more.' Lashing out behaviours are considered aggressive and may be criminal in nature themselves or lead to criminal behaviour. These behaviours occur when strong negative emotions and arousal are present, and can be difficult to suppress without established coping strategies (Stangor, Tarry & Jhangiani, 2014). Further, the prefrontal cortex facilitates the control of aggressive behaviour and there is some evidence that the cerebral cortex is less activated among those who committed violent crimes (Raine, Buchsbaum & LaCasse, 1997), which suggests that difficulty regulating emotions may partially explain criminal behaviour (Davidson, Putnam, & Larson, 2000).

Life circumstances

The theme *life circumstances* represents the social, cultural and environmental influences that women reported were related to their criminal behaviour. The subtheme *physical and mental health illnesses* captures the various illnesses and symptoms the participants described and how that affected their criminal behaviour. The subtheme *I was treated differently* explores the differential treatment resulting from their race, sex, criminal history, and financial status women reported. Finally, the subtheme *crime for survival* captures the barriers to lawful employment and the cyclic nature of criminal behaviour.

Physical and mental illnesses. Women reported a range of physical and mental illnesses, including chronic pain, depression, PTSD symptoms, attention deficit hyperactivity disorder (ADHD), and body image problems. The physical and mental illnesses contributed to their criminal behaviour by negatively affecting their mindset and well-being. Additionally, some

women reported that their physical illness negatively impacted their mental health. On her chronic pain, Taryn said:

'I can't really do what I want to do, so that's a mental factor. You know, it plays with your head because there's things you want to do, but you're limited to what you can do because of your pain.'

Mental illness had a negative impact on women and their families. Several women expressed that their depressive symptoms negatively affected their ability to care about consequences. For example, Shelly said, 'when I'm not on my medication, and when you're depressed, you don't really give a shit about anything.' The indifference about consequences seemed to be connected to their later criminal behaviour. Violet commented, 'if you don't even feel like you wanna live that day, how are you gonna survive? How are you gonna have enough morals for yourself to not commit those crimes?' Some women did not know how to mitigate the mental health symptoms they experienced, and they reported that this negatively affected their family dynamic. Of her PTSD symptoms, Taryn described feeling like she was 'dying all the time,' and these symptoms affected her sleep and led to her social isolation. Without adequate treatment, Taryn added, 'I took all my frustrations out on my family. Kind of like, not blaming them for the way I was feeling, but I didn't know how to handle the way I was feeling.' There was considerable evidence that the women used substances to alleviate uncomfortable symptoms of mental illness. Dana acknowledged: 'my mental health, I've got some severe mental health issues. That contributed to my substance abuse'. The ramifications of poor mental health were grievous and, in some cases, included suicide attempts. One participant discussed experiencing body dysmorphia after surviving human trafficking; Violet reflected:

'that's where a lot of needing to be smaller and using drinking all the time, and after a few months of living out there, I ended up moving home. I actually tried to hang myself. My sister found me in the basement, hanging from the rafters, the wood on the ceiling...I guess she grabbed my legs to push me up, so I wasn't hanging anymore, and her boyfriend had to cut me down. I don't remember it ever happening or me doing it, but I woke up in the hospital the next day, and it was very scary.'

This finding is consistent with the literature on sequalae of human trafficking (Ottisova, Hemmings, Howard, Zimmerman, & Oram, 2016). In a systematic literature review, Ottisova and colleagues (2016) found that survivors of human trafficking reported high levels of mental health problems including anxiety, depression, and post-traumatic stress disorder. Further, in a sample of child trafficking survivors, Kiss, Yun and Pocock (2015) identified a high rate of mental illness and noted an alarming proportion of these children had thoughts of self-harm or suicide.

I was treated differently. Women reported receiving differential treatment due to their perceived race, sex, financial status or criminal history. The women received this treatment from their caregivers, justice workers, and members of the community. For example, Grace said, 'because we're Native, the outsiders like to tease us. It's harder to get jobs on your own.' Discriminatory hiring practices reduce the number of opportunities available to women and make it more difficult to make money lawfully. Given the prejudicial treatment members of a minority group face, some women felt they had to conceal their race. Violet noted, 'when I moved here into the city, I wouldn't say I was Aboriginal at all because if I did, I was treated way worse.' Feeling unable to disclose one's actual ethnicity elicited feelings of distress for the women.

Women who described being white-passing did not always avoid discriminatory treatment, and some faced social repercussions for socializing with members of a racial minority group. Despite being white-passing, Violet spent time with Indigenous friends and faced prejudicial treatment directed towards her 'because of who I hung out with.' People with white skin colour benefit from racial inequality, and this is referred to as white privilege (Merriam-Webster, n.d.). Some women reported being treated better because of their white skin colour. Liz disclosed being let off the hook more easily in treatment and by the criminal justice system. Women reported justice workers, especially police officers, failing to apply the same rules equally and fairly to all. Liz compared her experience to others:

'so, you know, at 18, getting slapped with an \$80.00 fine for I literally jumped on the police officer's back and I started smashing him, and I got an \$80.00 fine. Well, we do know now, we know, you know, that if I was Black or Indigenous or, you know, a person of a visible minority, I wouldn't have gotten away with an \$80.00 fine.'

In a unique account, Liz disclosed the belief that the lack of consequences she faced from the criminal justice system did not deter her from committing subsequent crimes.

In contrast, some women described being treated poorly because of their white skin colour. Of her foster mother, Shelly described receiving differential treatment and said, 'she assumed that I was black, I know she did. Anyway, she was very like... I ended up running away.' In this case, the discriminatory treatment perpetrated by the foster mother led to the minor running away from home, and she became houseless, which exposed her to a dangerous lifestyle.

Women also disclosed differential treatment based on their sex. Several women described being treated worse than their male siblings by their families. On being treated differently

because she is female, Violet said: 'she actually found out my little sister was gay, and she would let her do whatever she wanted, partially because my mom looked at it like we were her. We didn't have children at that young age.' Women expressed frustration for being mistreated based on their sex, and the women sometimes acted out to express this frustration or prove themselves. Liz said:

'when I got involved in crime, it was like I wanted to prove myself as a woman that I could, you know, I thought I needed to be the badass and be harder, so I could measure up to that male standard and be accepted. You know, I think the more that people, men especially, sort of like well you're just a girl and you're not tough, and you're you know... I think it made me want to be tougher and want to commit crime to be like, yeah, well, look at me, look what I can do sort of.'

Dana shared a similar sentiment and expressed how defying gender norms on crime pushed her further towards crime. On being a female drug dealer, Dana said:

'I dealt with a lot of flak from larger organizations, I guess, underground organizations, being a female in charge. Which kind of furthered my involvement in the underground, and it also pissed off a lot of people.'

The controversy surrounding being a female drug dealer led to Dana's arrest and incarceration upsetting organized crime members who volunteered to be informants in her case. Women reported being treated differently and facing a lack of employment opportunities because of their criminal histories. Of working in the province, Violet said: 'having my past openly spoken about and being an advocate in those areas, I guess it's really hard to hold a job, so that's my problem is basically being able to hold a job.' The implication is that if one cannot hold a job, they need to find other ways to sustain themselves and their families, leading to more criminal behaviour.

Violet's motivation to commit crime fits with patterns of women offending identified by Daly (1992). More specifically, this account appears to fit the "other" pathway to offending that is characterized by a desire for economic gain.

Crime for survival. Many of the women reported engagement in crime for survival.

Women reported a wide range of reasons for committing crimes that included providing basic needs, such as food, and purchasing drugs to feed an addiction. Violet said: 'still to this day, I have that problem where I choose days I don't want to eat because I have to save it for my child.' Some criminal involvement resulted from a lack of secure housing and problems at home. For example, on incurring her first charges as a runaway, Violet described sneaking into an abandoned house with friends, as the minors had no alternative place to sleep. Failing to obtain secure housing was reported to have negatively affected women's lives by making employment difficult. Regarding being houseless, Violet explained:

'if you didn't have an address, you couldn't be on welfare and holding a job when you're homeless is really hard 'cause you gotta figure out how you're gonna shower and how you're gonna clean your uniform or whatever it is you're doing, and just to be emotionally there and emotionally stable enough to keep the job would affect your criminal history I guess 'cause he would literally instead of working you would literally have to survive other ways.'

Several women described engagement in criminal behaviour to financially support themselves. Grace explained how poverty led her to drug trafficking because 'you're always just are trying to make money to survive.' Shelly said she was experiencing poverty and an alcohol issue and stole out of necessity: 'I had a really bad problem with drinking when I was younger, and I ended up stealing from a liquor store and getting charged.' Violet described the compulsion

as 'didn't go in the drug store and browse the drug store because I wanted to...at that moment I felt I needed to.' These accounts outline the continuous cycle of addiction and crime that is so hard to break. For example, some women needed money to fund an addiction, but their engagement in drug use or criminal record prevented them from holding an average job. Without adequate treatment or other support, the cycle of addiction is tough to break alone.

Some women reported additional challenges in regards to maintaining steady and legal employment. For example, Grace described how her partner's hospitalization in another part of the province affected her ability to hold a job: 'the money just doesn't even stay up here. It was a lot... I didn't have enough money to like stay around. That's why I started selling drugs'. Other women described having difficulty maintaining a job due to their criminal history. In some cases, the need for money to survive is so great that women reported extreme measures. Violet said: 'I've had to or I've thought about it having to just self-traffic myself basically and to get by 'cause you just... it's that hard.' This narrative resembles a narrative in Daly's (1992) study. In Daly's study of women's pathways to offending, a women described her desperation for cash as a mother with a young child on social assistance. Driven by her financial need, she charged an elderly man for sex who she was hired to provide care to.

Substance abuse

A theme that explains propensity to engage in criminal behaviour is *substance abuse*. The subtheme *substance use as a coping strategy* captured the use of drugs to numb negative feelings or mental illness symptoms. The subtheme *acts differently under the influence* was reported by women in several different ways, including using drugs to facilitate socialization and committing crimes under the influence that may not have occurred soberly.

Substance use as a coping strategy. Consistent with self-medication theory (Khantzian, 1985), women reported relying on substance use as a coping strategy. This coping strategy was utilized to deal with the emotions they faced after experiencing trauma. Liz noted that as a sexual assault survivor, she was 'resorting to substances to try to numb everything.' Violet said: 'it's just a scapegoat. You know? You just you use drugs, so you don't have to think about anything else, and I know it kind of sounds cliche, but it's the truth.' Shelly described witnessing a friend overdose and being retraumatized by police officers: 'after that happened, I really got back into drugs and alcohol, and I stopped really caring about a lot of things.' Despite recognizing that using substances to cope was unproductive, women still relied on this coping strategy and maintained that they were not aware of other healthy coping strategies. Taryn acknowledged, 'I think because of trying all the different medications and it not helping, again, I would turn to the alcohol to get some relief. It was a vicious circle, you know what I mean? If one thing didn't work, then I'd try another thing, and all that was doing was just making things worse.' The lack of knowledge surrounding healthy coping strategies suggests inadequate services and supports in the community, correctional or institutional settings. Prior research lends support to the benefits of healthy coping strategies among justice-involved persons in correctional facilities, including a higher quality of life (Skowronski & Talik, 2018).

Acting differently under the influence. The majority of women reported acting differently under the influence of substances. Grace reflected: 'I think I do things that I wouldn't normally do.' Some women reported committing the majority of their crimes under the influence of substances. Shelly reflected: 'every time that I did something or I broke the law, I was under the influence.' The sudden shift in behaviour suggests that the behaviour under the influence of drugs was not the standard behaviour. This behaviour change stemmed from impaired judgement

and the ability to think critically under the influence. Jan said: 'when you're drinking, you're not really thinking in the same frame of mind, so that's what gets you in trouble, that's all the alcohol...' Shelly added: 'it impaired my judgment and made me not really care, and sometimes I didn't even remember.' The lack of caring about consequences likely contributed to her subsequent criminal behaviour. One participant shared a unique perspective. This participant described noticing at an early age that alcohol changed the behaviour of the adults around her. Liz said this motivated her to use substances: 'I could see adults and how different they acted and maybe if I drank then things could be different for me and that sort of started my road to addictions.' Some women endorsed the belief that had it not been for their substance abuse, the criminal acts may not have happened. This is consistent with research that has demonstrated that substance abuse may lead to certain crimes due to the drugs disinhibiting effects or the high cost (Albery, McSweeney, & Hough, 2004).

Inadequate services

The theme *inadequate services* represents the lack of services women reported and the provided services that women did not find beneficial. These required services were targeting needs related to substance abuse, mental illness, domestic violence, emotions management and parenting.

Women reported that they could not find help due to some of the services they needed were not being offered, they did not know where to access the services, or they were unable to afford the services. In acknowledging the connection to trauma, Violet said: 'people are stuck abusing drugs every day because there's a lack of support for people like myself who have experienced an entire lifetime of trauma.' Several women noted long wait times for services that are in place. One barrier to accessing these services was the high cost of entry. On completing a

rehabilitation program for drug use, Dana acknowledged that it 'was helpful, but it cost me \$15,000.' These high costs mean that it is out of reach of many Nova Scotians. On the lack of services she experienced, Grace said:

'like they put us on bail with no support. They don't point us in the direction of where to go or even to better ourselves. No number, nothing. They just let you out, you're out on bail, there you go, so you go back home to the same environment, the same place, so like, what now?'

Some women disclosed that correctional institutions were the only place to receive services that they needed. Violet noted, 'I know girls that chose to go to jail all the time instead of getting help anywhere else because they just felt it was impossible to get help anywhere else.' Of her incarceration, Olivia said, 'the federal penitentiary was the best thing that ever happened to me.' The logic that informed this comment was that the correctional institution was the only place to receive sufficient treatment. Some women commented that the services were reactionary and not preventative. Of her suicide attempt, Taryn said: 'I had hurt myself, and I was reaching out for help... it took me to get to the hospital for them to find me a place to get addiction services started and mental health started.'

In addition, some women reported receiving ineffective services, including long wait times and improper care. Grace noted long wait times for the opiate recovery program: 'it used to take like two months to get on there a couple of months. It's for your name on the waiting list and stuff.' Despite being in a treatment facility, one woman, Shelly, reported not receiving treatment for substance abuse. On her experience with a local youth facility, Shelly said: 'it like ultimately made things worse, right? Being in there, I felt kind of like I was getting institutionalized.' Moreover, women believed receiving adequate service would have improved

their lives. Taryn said: 'I think things would have been a lot different today.' Jan acknowledged: 'if I could have gotten help, then I wouldn't have been involved with the police so much or gotten arrested.' This finding is consistent with prior research on justice-involved women (Doherty et al., 2014). In a qualitative study on successful reintegration of justice-involved women, Doherty and colleagues (2014) found that prompt access to community support and treatment was crucial for women with histories of substance abuse. They also reported that these women found the transition into the community a stressful experience and emphasized the importance of continuity of care with this population.

"The system set me up for failure"

A theme that partially explains criminal behaviour engagement is 'the system set me up for failure.' Women reported three primary system failures that became themes: failed by the school system, failed by the foster care system, and failed by the criminal justice system. Of her experiences with various systems, Violet commented that she has 'been failed by every system you could think of that it may help us and teach us and to help us grow as people.'

Failed by the school system. Women reported feeling failed by the school system and that this failure preceded their criminal behaviour. This finding is consistent with research on the school-to-prison pipeline, which refers the negative impact that zero tolerance punitive measures have on students who are labeled delinquent and funnelled to the criminal justice system (Advancement Project, 2010). According to Bernard and Smith (2018), minorities are targeted disproportionately given that "the Eurocentric values that have characterized the formation of our institutions have led to the criminalization of children's behaviour in classrooms, creating a pipeline that funnels racialized students to imprisonment" (p. 151). Liz commented, 'it all has to do with, you know, trauma at home, trauma in school, nobody supporting me as a child through

any of this, and everyone turning a blind eye.' They described negative interactions with teachers and receiving unfair treatment from these teachers. On the punishment she received in school, Violet noted: 'you're punishing the kids that are troubled you're sending him back to the place where she's being troubled from.'

Violet also said:

'kids can't trust their teachers if they see you as a lost cause. And that's what they did...they see me as well 'cause they did not want to help me when I was in school. They seen the bruises. You know they seen the trauma I was going through. I was there every day. How could you not see something like that and do something about it?'

From this account, it appears that the school should have recognized signs of abuse and intervened, but they did nothing about it. Women received unfair treatment due to perceptions teachers had of their worth and the company they kept. Women recounted how the unfair treatment at school made them feel alone and angry. Of the injustice she faced, Liz said that it: 'gave me more of an anger issue and wanting to rebel more because they looked at me as being better than my friends.' Liz noted 'I feel like the school lacked on its responsibility on an intervention with me.' The lack of intervention by the school was perceived to be a missed opportunity that may have prevented the women from receiving more trauma exposure.

Failed by the foster care system. Women reported that they felt failed by the foster care system. Despite living in turbulent homes, some women reported feeling better off at home than in the foster care system. Violet commented 'I was better off at home getting beat up by my mom. At least she loved me when she was beating me.' One explanation that the women reported feeling this way was the instability in the foster care environment. Shelly

acknowledged: 'I was constantly moving around like, how am I supposed to do good when I'm constantly moving?' Grace added, 'it's not really structured like it's all like different in every home you go to. Different set of rules, different kind of things. Everything is just different every time you move.' The logic behind these comments is that instability in the family home is detrimental to the children's development, and research has demonstrated a link between instability and criminal behaviour (Bosick & Fomby, 2018).

Moreover, women described that some of the placements were negative environments. Of her experience in a group home, Grace commented, 'you were just with a bunch of random people. Some of the staff weren't really doing their job.' Violet outlined that her foster mother ran an at-home daycare and that 'one on one was literally impossible.' These narratives demonstrate how some of the women felt disconnected from their caregivers in the foster care system. Grace added, 'it's like we're in jail. And I tried to always run away from there.' In this case, the negative perception of the environment led to running away, which made the minor more vulnerable. Women also reported maltreatment in foster care that ranged from neglect to abuse. Of her foster home, Violet said, 'putting me in foster care to get sexually assaulted and drugged wasn't the solution.' Violet added 'I missed like six months of my classes. I was not in school the entire time I was there.' Some women reported feeling that their foster families were involved in this program for the wrong reasons, such as financial assistance, and they sometimes described the living quarters as inadequate. Violet commented that her room was a 'walk-in closet. I had like this air mattress type thing.'

Women also reported negative influences from their peers in the foster care system. For example, Shelly admitted that she began escorting in part due to the influence of 'group homes too where like the majority of these other girls were doing that themselves.' Women described

bullying at group homes and how they tried to fit in to avoid more loneliness. After experiencing extreme bullying at a group home, Shelly described moving to a second group home. Shelly said: 'after that, I just kind of wanted to fit in, and you know in order to not get picked on, I mean back then, let's say a group of girls that I was around, you know you have to act like them and not appear weak I guess. I wasn't weak, but it really did harden my character being so young and having that happen...I guess I kind of became like them. Like it's kind of inevitable really, if you're around it and have no phone and you have no family. So, I mean, that's why I said it did contribute because it was my environment, I was a product of my environment. Everyone gets in trouble in group homes... We would choose to break the law and drink.' At her foster care placement, Violet described being pressured by her foster sisters to try alcohol for the first time around ages 7-8. These accounts describe how conforming to the behaviour of the other youth at group homes led to criminal behaviour.

Failed by the criminal justice system. Women reported feeling failed by the criminal justice system and how this contributed to their criminal behaviour. Women stated that some of the criminal justice system's conditions and procedures were unrealistic and set them up for failure. For example, personal belongings are often removed from their living quarters during incarceration, as there is no one to pay the rent or storage bills. Violet questioned, 'how are you supposed to rehabilitate and reintegrate if everything you had before you went in is gone?' In this case, women are forced to start over when released from correctional facilities, and these conditions do not set them up to succeed upon release.

An additional condition that set the women up for failure was placing conditions that prohibited drug use on women battling substance abuse problems. The majority of women reported these drug prohibiting conditions were a significant contributing factor to their criminal

behaviour in the form of breaches. Dana acknowledged that after a long battle with addiction, she 'was released on parole twice and breached for substance abuse for using.' Grace agreed that substance use hindered her success during probation: 'I couldn't stay away from drugs.' Women reported that having the freedom to access drugs without having completed substance abuse treatment created unrealistic expectations from the criminal justice system. Of these conditions. Violet said, 'they just give you enough rope to hang yourself with basically.' On why conditions prohibiting drug use are ineffective, Shelly noted 'going back to jail for breaching for drinking isn't going to make me stop drinking, I'm going to want to drink more.' The unrealistic conditions set by the criminal justice system led to secrecy between the women and their parole or probation officers instead of allowing them to reach out to these staff for help. Liz noted that one of her probation conditions prohibited drug use, but she didn't receive treatment to help her stay away from drugs. She noted, 'still did them I just didn't get caught. So, you know, I think did it contribute? Yeah, because it still led me down a path of no one helping me, no one offering to help me.' Women reported ineffective or even abusive interactions with correctional workers that exacerbated their difficulties. One criticism of the current system that arose is how the probationer or parolee cannot be honest with their probation or parole officer. Violet said:

'you should be able to talk to him about anything without them automatically having to report you. You know? I should be able to call him and say, hey, I need a bed in detox 'cause I relapsed. It's their job to help us, but if I were to say that to him, I would automatically go to jail. It's just backwards.'

Women reported being treated inhumanely by corrections workers during incarceration.

On an ineffective parole officer, Dana commented that she 'made me feel like I had no chance of getting back to see my kids.' Corrections workers should strive to motivate the justice-involved

persons they work with to make positive changes, as support is integral in effectively reintegrating into the community after incarceration (Portillo et al., 2017). Some women reported that corrections workers abused the power they held over people who were incarcerated. Of guards taking hours to retrieve basic needs like tampons or clean underwear, Violet said, 'it was punishment in a way too because I wasn't following in line and being a role a perfect role model prisoner.' Olivia described how she had engorged breasts due to needing to breastfeed her infant and was subjected to a particularly rough search: 'they forcefully took my bra off in front of all the other inmates that were in the police station. They held me down, so when I got up from being, you know I felt sexually assaulted.' Olivia reacted to this behaviour by spitting at the officer and had over one year added to her sentence. The unrealistic expectation here is that those involved with the criminal justice system should not respond to feeling violated and are expected not to react to this treatment. At the age of 17, Shelly's friend overdosed in her presence, and police officers mistreated her in the aftermath. Shelly said:

'the cops ended up arresting me for manslaughter, and they took me down to the courthouse for questioning. And, basically, I got there, and they just wanted to get shit out of me, so they tried to scare me, pull like a scare tactic, but it kind of fucked me up a little bit.'

After police interrogated Shelly for eight hours consecutively, she felt traumatized and turned to drugs to cope. Some women suggested other alternatives that could have helped them more than what the current system offered. Violet offered: 'instead of paying that probation officer, they could've paid for a spot in a rehab.' She further explained: 'they put you in a room with eleven other women who have some of the same problems, less or more and expect you to get better and expect you to get out and learn your lesson. But those traumas that you went in

with are still there. They don't make any sense. They're setting you up for failure.' In this example, Violet expressed how the system failed her by failing to address the root causes of her criminal behaviour and expecting a spontaneous recovery.

Strongest contributing factor to criminal behaviour

In addition, justice-involved women were asked which factor they believed was the strongest contributor to their criminal behaviour. Women reported a variety of factors found in Table 5. Interestingly, half of the sample did not endorse one particular factor as the strongest contributor, but several interconnected factors. The majority (75%) of justice-involved women endorsed substance abuse as atleast one of the strongest contributing factors to their criminal behaviour.

Table 5

Strongest contributing factor to criminal behaviour reported by justice-involved women

Interview quotes

Domestic violence

The event [physical attack] and alcohol

Drinking

I had nothing better to do. I couldn't get a job. I didn't have a working phone. I couldn't get a job because I didn't have a working phone... and like not having anywheres to live and like connected to that was me getting discharged from care. And, you know the only support I ever really had in my life was my social worker or the youth care staff the ones that you know cared about me.

Domestic abuse and sexual abuses and my addiction

Substance abuse

Substance abuse

Finances and substances

Note. These responses are direct quotes from justice-involved women, and context is provided in brackets as needed. N=8.

Quantitative analyses

Quantitative analyses were used to test the seven hypotheses. A total of seven women completed the test battery, although some missed questionnaire items and their responses on that questionnaire had to be removed for analyses. Event frequencies were not analyzed given the small sample size. All inferential tests were not statistically significant, however, it is likely that the small sample size underpowered our analyses and therefore reduced our ability to detect significant effects (Field, 2005). Effect sizes measure the importance of an effect (Field, 2005) and will also be used to interpret the results. According to Cohen (1988), a small effect is noted by r=.10, a medium effect by r=.30, and a large effect by r=.50. Further, studies with a small sample size produce larger effect sizes than larger studies (Slavin & Smith, 2009), and the effect sizes reported in this study should be interpreted with caution.

The total scores on the ACE questionnaire are presented in Table 1. The average score on the ACE questionnaire was 4.29 (SD=3.20), which indicates women experienced an average of four types of trauma in childhood. According to research by Murphy and colleagues (2014) of ACE prevalence rates, this average is high compared to community samples who most frequently reported below four ACEs (73.50%). The ACEs reported in this study were more in line with ACE prevalence rates of CPS-involved mothers, of which 82.90% reported four or more ACEs. In addition, scores on the LEC-5, that assessed lifetime trauma histories, ranged from two to nine and the average score was 6.57 (SD=2.51), which indicated justice-involved women had experienced an average of nearly seven trauma types across their lifespan.

Table 1

Prevalence of childhood trauma exposure among justice-involved women

	Responses		
ACE total scores	Number of women	%	
0	1	14.30	
1	1	14.30	
2	0	00.00	
3	1	14.30	
4	0	00.00	
5	2	28.60	
6	0	00.00	
7	1	14.30	
8	0	00.00	
9	1	14.30	

Note. n=7.

In addition, participants answered further questions on their mental health. The majority of the sample reported that their mental health was fair (57.10%), and the remaining participants were evenly distributed and answered that their mental health was poor (14.30%), good (14.30%) or great (14.30%). The majority (57.10%) of the sample also disclosed diagnoses or treatment for mental illnesses that included depression, anxiety, bipolar disorder, post traumatic stress disorder, and substance use disorder. The prevalence of mental illness and poor health status was unsurprising given that poor health was cited by the participants in the interviews as one of the most frequent factors related to criminal behaviour.

Table 2 presents total average scores on the NSESSS-PTSD and the mean score was 2.20 (*SD*=1.28). One participant missed a single item on the NSESSS-PTSD and as recommended in the DSM-5 (APA, 2013), their total score was pro-rated and calculated by hand.

 Table 2

 Prevalence of acute PTSD symptoms among justice-involved women

		Respons	es
NSESSS-PTSD total scores	PTSD symptom severity	Number of women	%
0	None	2	28.57
1	Mild	0	00.00
2	Moderate	3	42.86
3	Severe	2	28.57
4	Extreme	0	00.00

Note. n=7.

Table 3 presents the prevalence of substance use problems among this sample. Several participants missed items on the AUDIT and DUDIT questionnaires and as suggested in the manual, their total scores were not calculated. The average score on the AUDIT reported by justice-involved women was 14.75 (*SD*= 14.17). Half of the sample reported AUDIT scores in the mid-twenties, well over the cut off score of six that indicated alcohol-related problems, and the other half reported low scores of two or three. Justice-involved women reported an average score of 6.6 on the DUDIT (*SD*= 11.52). Also of interest, one participant reported a DUDIT score of 27, which is well above the cut-off of two for drug-related problems.

 Table 3

 Prevalence of substance-related problems among justice-involved women

	AUDIT results		DUDIT results	
	No alcohol-related	Alcohol-related	No drug-related	Drug-related
	problems	problems	problems	problems
Number	2	2	2	3
%	50%	50%	40%	60%

Note. n=4 for the AUDIT and n=5 for the DUDIT.

Analyses identified partial support for the seven hypotheses. The first hypothesis, that the most commonly endorsed factors reported by justice-involved women would be trauma, mental illness, and substance abuse, was supported. This hypothesis was analyzed qualitatively, and the most commonly endorsed factors reported by justice-involved women were victimization, substance abuse of a household member, addiction and poor health.

The second hypothesis was that the relationship between age at first crime and trauma histories would be negative and this hypothesis was partially supported. The correlation between age at first crime and ACEs was not statistically significant, n=6, r=-.67, [-.99, -.04], p=.149, however, it represented a large effect. The relationship between age at first crime and LEC-5 scores was also not significant, but it represented a small to moderate sized effect, r=-.22, [-1.00, .77], p=.679. Prior research identified trauma exposure in adolescence as a risk factor for violent behaviour (Peltonen et al., 2020). This was demonstrated by women in the present study who reported in the interviews that exposure to violence in childhood led to anger problems and criminal behaviour.

The third hypothesis, that the majority of crimes committed by justice-involved women would be property crimes, was supported. A total of 12 charges were reported by the women, seven of which were property crimes (58.33%). Other crimes reported by the sample included drug charges (16.67%), offences against the person (16.67%), and offences against the administration of justice (8.33%). Property crimes as the most frequently committed type of crime was consistent with prior research on justice-involved women (Savage, 2019), however, the proportion of other types of crimes appeared to differ. More specifically, this sample reported more drug charges and less offences against the person than other studies (7% and 25% respectively).

Fourth, the hypothesis that the majority of justice-involved women would report multiple and diverse incidents of trauma exposure was supported, as indicated by their high scores on the ACE questionnaire and LEC-5. In childhood, justice-involved women reported exposure to emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect, maltreatment, intimate partner violence, household members' substance abuse, household members' mental illness and a household members' incarceration. Further, these women reported experiencing natural disasters, fires, transportation accidents, physical assaults, weapons assaults, sexual assaults, unwanted sexual touches, captivity, severe human suffering, sudden violent death, sudden accidental death, and the death of a child over their lifetimes. This is consistent with prior research on justice-involved women that have identified a high degree of trauma exposure among this population (Tam & Derkzen, 2014).

The fifth hypothesis was that trauma histories would be positively associated with PTSD symptoms. The relationship between ACEs and PTSD symptoms, r= .40, [-.79, .94], p= .381, and the relationship between LEC-5 scores and PTSD symptoms lent partial support to this hypothesis, r= .41, [-.92, .97], p= .364, as both represented moderate to large effect sizes.

The sixth hypothesis was that PTSD symptoms would be positively associated with substance abuse, and this relationship was partially supported. More specifically, the relationship between PTSD symptoms and alcohol use was not statistically significant, r= .77, [.55, 1.00], p= .229, however, it represented a large effect. This finding was also demonstrated in the qualitative data, in that women reported engaging in substance abuse to manage symptoms of a mental illness. The relationship between PTSD symptoms and drug use was also not significant, r= -.36, [-1.00, 1.00], p= .555, however, it represented a moderate, negative effect. This negative

relationship was unexpected and may be interpreted with caution, given the small sample size and potential for errors.

Finally, the seventh hypothesis, that the majority of women would report histories of substance abuse, was supported. All women reported histories of substance abuse and the majority (75%) reported that it was among the strongest contributing factors to their criminal behaviour. This finding was anticipated given the significance of substance abuse on women's pathways to offending identified in the literature (DeHart et al., 2014; Salisbury & Van Voorhis, 2009).

Factors related to desistance from crime

In contrast, the second research question asked justice-involved women which factors deterred them from engagement in criminal behaviour. Table 6 presents factors related to desistance from crime. It should be noted that this table can be interpreted in a more straightforward manner than Table 1.

 Table 6

 Factors related to desistance from crime reported by justice-involved women

	Responses		
Factors	Number	%	
Social supports	6	75.00	
Public services and supports	7	87.50	
Spirituality	7	87.50	
Education	5	62.50	
Other positive factor	5	62.50	

Note. N=8

Justice-involved women reported factors that, some of which overlapped with domains of post-traumatic growth including an increased appreciation of life and altered sense of priorities; improved interpersonal relationships; an increased sense of personal strength; recognition of new possibilities for one's life and spiritual development (Tedeschi & Calhoun, 1996). As Liz noted,

'I've certainly grown from all of this. Like I've really become a different person since my last crime, and I don't regret anything because I believe everything I've done, you know, brought me to this point.'

From this data, three themes were identified: positive influences, self-directed change, and adequate supports and services.

Positive influences

The theme *positive influences* reflects the reported beneficial impact that other people have had on the women. The subtheme *social support from family or friends* describes the benefit of social networks. The subtheme *role models* reflects the people in the women's lives that they admired and how they provided motivation for positive changes in their lives.

Social support. Social support was frequently endorsed as having steered participants away from criminal behaviour. Most women reported receiving social support from at least one family member, although not all women reported supportive families. Women described the support from family and friends as very important to their rehabilitation and desistance from crime. Grace commented: 'a lot of people need more support when a crime is committed... while you're in that position, you need a lot of support to help guide you back the right way, right?' Women attributed the social support as beneficial because they had somebody to believe in them, and this appeared to increase their self-esteem. When describing the support she received, Jan acknowledged it 'just makes all the world of a difference.' After incarceration, some women reported improvements to their social circles due to meeting others who had experienced similar circumstances. Olivia said, 'I created such a good community for myself that didn't have expectations.' The belongingness hypothesis posits that humans are strongly motivated by interpersonal relationships and that feeling a sense of belonging is integral to well-being

(Baumeister & Leary, 1995). This theory may partially explain the benefits the women acknowledged of finding a like-minded community to share and gain support during the trials and tribulations of one's life.

Many of the women described the social support they received as therapeutic and as a key component of their rehabilitation. According to House (1981), there are four types of social support: appraisal, emotional, instrumental and informational support. Emotional support is a type of social support that involves a sense of belonging achieved through providing love, care, trust or comfort or concern (House, 1981). Olivia said, 'I just think by having my back right and like having someone to talk to when, like you know, have your feelings validated right.' As Grace suggested, 'you talk to people before it starts to get worse, or you just start thinking crazy.' Social support served to validate the women's feelings and help them to feel understood by others. Other types of social support were reported, including instrumental and information support, which refers to tangible aid and to the provision of advice respectively (House, 1981). When asked about the benefit of communicating with her support system, Grace said, 'they will hopefully hear you out and figure it out like with you.' Maintaining regular communication with a support system was at times reported to be crucial. Olivia said, 'one of my warning signs for me would be isolating from him. That's when I start to know, like when I'm not in regular contact with him, that's when I know that I have to check myself a little bit.'

One woman described how her sexual assault disclosure was not initially believed by a close family member and this reaction negatively impacted their relationship. Research has suggested that negative social reactions to disclosures of sexual assault are related to poorer outcomes including greater PTSD symptom severity (Filipas & Ullman, 2001). Over time, the

family member began to believe this woman's disclosure and their relationship was strengthened. Violet explained,

'after that... we got really close because he realized like all the things I was saying was true and, he felt so bad for not believing me, and he just felt like he failed me and just him admitting that and like opening up to me about that and supporting me after that like that was huge because I always felt like everything I said didn't matter anyways, so that support after everything was like it's now stronger than it's ever been.'

This narrative highlights the importance of social support from loved ones. Social support from staff at EFSMNS was also cited as a significant contributor to the positive changes the women made. Liz commented,

'they took me in as family, and I'm still family to this day, and they support me and guide me, and they're helping me make changes in other parts of my life ... But I didn't have any of this as a kid or as a young adult. There wasn't any of those types of things I came across in my life.'

Role models. Women reported looking at family, friends, and community members as role models and that these role models served to deter them from further criminal behaviour. In some cases, the positive behaviours exhibited by role models motivated the women to replicate these behaviours. As Grace explained, 'because like, they're doing good and you want to do good too.' Jan added: 'seeing so many people doing positive things here, it's motivating to do good yourself.'

Selection of role models appeared to be based on the challenges they have faced and how they responded to these challenges. Dana identified a staff member at the EFSMNS as one of her role models because 'she gets everything done and she cares about everybody she sees the good

in everybody, and she supports everybody, and she makes time for everybody.' In addition, Dana mentioned her mother as another role model because 'she raises both my kids on her own, works a full-time job and still manages to smile at the end of the day.'

In addition, women also described having role models with lived experience similar to their own as being particularly meaningful. Violet explained, 'women that have lived it and are doing something now with their life... like those are the role models I look up to because it gives me hope.' Similarly, Taryn said 'some of the E. Fry staff are ex-criminals, so I see how they've evolved and became who they are today from their mistakes. So, it's possible that you could fuck up and still have a future.' People with criminal histories are faced with stigma and may believe that they cannot be successful in reintegrating into society with this burden. It seems that witnessing those with lived experience who are successful challenges this belief, and these role models have given women the invaluable gift of hope for their own futures. Peer navigators are described as professionals who have lived experience similar to the clients they work with (Portillo et al., 2017). There is some evidence that peer navigators are beneficial when working with mental health care, however, there are few studies on peer navigators who work within the criminal justice system. Portillo and colleagues (2017) analyzed a pilot group and argued that peer navigators play an important role in the lives of their clients as they navigate re-entry into the community.

Women also reported that motivation to be someone else's role model deterred them from engagement in criminal behaviour. Violet said:

'one of the biggest things that made me do that was my child and them coming see me one day...why would I want them to look back at me and see that I had always been a failure?... I want them to see that I am fully capable to be someone

else's mother. I just wasn't able to take care of them at that time because I didn't even care about myself.'

Finally, some women commented that having a role model to look up to earlier on would have positively impacted their lives. Shelly said:

'if I would have had positive role models that I thought you actually gave a shit about me when I was younger, versus now because I sort of like I do now, then that would have made a world of difference.'

Self-directed change

The theme self-directed change represents the positive changes that women made to their lives due to their internal motivation. Women reported a wide range of self-directed changes that deterred them from engaging in criminal behaviour and many were consistent with features of post-traumatic growth, such as a changed sense of priorities, a greater sense of personal strength, and recognition of new possibilities for one's life. Violet said: 'I think just my willingness to see things differently and strength within myself to want change and to get it no matter how hard it was to get.' In a study of PTG among a South African justice-involved sample, Mapham and Heffereon (2012) identified the theme of new identity that involved reports of a greater sense of personal strength. In this narrative, Violet describes the strength it took to change and implies a new, improved identity.

The subtheme *reconnection with spirituality* describes the benefit of religion or participation in other spiritual practices and how these practices facilitated coping with challenges. The subtheme *new opportunities with education* captures the increase in access to opportunities due to continued education. The subtheme *advocacy work for other justice-involved women* reflects the motivation to help other women experiencing similar hardships.

Reconnection with spirituality. Several women reported that reconnection with spirituality deterred them from engagement in criminal behaviour. Some women reported engagement in spiritual aspects of their Indigenous culture, such as attending sweat lodges, and engagement in other spiritual activities such as attending church or practicing yoga.

Reconnecting with their spirituality was reported to provide mental and physical benefits to the women. Of her yoga and meditation practices, Dana said, 'it helped me to remain present in the moment and not worry about the future or the past' She added that it,

'helped me get in tune with my body and prevent dissociations and, like that anhedonia feeling, which is something that I struggle with coming off of meth. It helped me to get through a lot of cravings and urges.'

Having a strong spiritual side brought the women comfort during hardships and also motivated them to make positive changes in their lives. On her spiritual beliefs, Violet said: 'I do believe that when you die, you go somewhere, and I believe that having that belief has been able to get me out of some really dark places.' Spiritual beliefs were noted to have been particularly important to lean on when facing difficult circumstances associated with incarceration. One woman also mentioned that her belief in the afterlife provided comfort when she spoke to deceased loved ones. Additionally, lacking a sense of spirituality was noted to have damaging effects by some women. Liz said:

'the lack of spirituality in my life contributed me again to searching towards more alcohol and drug use to fill that void. And then, when I was able to, you know, change that part of me and allow spirituality in my life... I haven't had a drink it'll be three years in May, so...'

This finding is consistent with the spiritual development factor of post-traumatic growth (Tedeschi & Calhoun, 1996). According to Tedeschi and Calhoun (2004), spiritual development may be experienced after trauma by individuals who were not religious or even atheist. There is some evidence that engagement in religion is positively related to desistance from crime (O'Connor & Perreyclear, 2008). According to O'Connor and Perreyclear (2008), religious activities are an inexpensive intervention that may lead to rehabilitation and desistance from crime.

New opportunities due to education. Women described improved access to new opportunities due to education and the positive impact on their lives. Some women reported seeing education as a stepping stone to new opportunities. Olivia said the 'quicker that I'm done of school is, the quicker that I can continue on with my work at E. Fry.' Dana said: 'only because I'm furthering my education now. I've applied to University, which is something I wouldn't have been able to do had all of this not happened.' Some women reported that the new opportunities as a result of their continued education deterred them from committing crimes for survival, as they could make a legal income. Finally, women reported experiencing positive changes to their self-image as a result of their education. Shelly acknowledged:

'I got my GED, and it just made me feel a lot better about myself. I felt like it was a huge like obstacle for me to kind of get to like through that, almost like a barrier to my future. So, when I got my GED, I was like, oh well, now I can like apply for school, now is my time to move on and I was able to make goals, and yeah, so I was looking forward to the future.'

Research has identified a positive relationship between education and crime desistance among justice-involved women (Brown & Bloom, 2018; Davis et al., 2013). Davis et al. (2013)

conducted a metanalysis to examine the effect of correctional education and found that justice-involved persons who participated in institutional education programs had a 43% reduction in their chances to recidivate than justice-involved persons who had not participated. Given the influence that justice-involved women have on their families and communities (Kruttschnitt, 2010), education programs are worth investing in. According to Brown and Bloom (2018), "investments in women's education will pay generational dividends" (p. 7).

Advocacy work for other justice-involved women. Women reported discovering advocacy for other justice-involved women as a new purpose and that this purpose motivated positive change. Olivia said: 'so I did my time, and you know I'm thankful like I did like because now I advocate for women that especially Aboriginal women because we're treated so so differently.' According to Tedeschi and Calhoun (2004), identifying a new purpose for one's life may represent an attempt to make meaning from a traumatic event. Violet said that she 'turned my lived experience into something positive that could help people and to change the system.' This advocacy work gives justice-involved women the opportunity to help other women who have experienced similar traumatic events. Olivia commented,

'I have all this life experience to help these women that are suffering, and it's like I don't really believe there always has to be that one casualty that has to go through all the worst of the worst for there to be a change, right.'

This advocacy work has already made significant improvements to the lives of other justice-involved women. For example, Violet described the dehumanizing practice of transporting pregnant women from the provincial jail to prenatal appointments in shackles and jumpsuits.

After advocating for why this practice is shameful, it has been abolished and pregnant, incarcerated women are now permitted to travel in different attire. In addition, one woman also

described starting a non-profit with the intention of it becoming a rehabilitation center. She said, 'there will be short-term and long-term housing, job opportunities, mental health support, addiction support, um everything and anything you can think of. We want it to be in a rural area where we basically have a farm, animals and housing and everything.' The motivation behind advocating for other justice-involved women appears to derive from the desire for others to avoid navigating the existing criminal justice system and the trauma that can come with that experience.

Adequate services and supports

Finally, *adequate services and supports* reflect the positive impact that services and supports had on women's behaviour. These services and supports were delivered by CPS workers and probation officers, mental health court, and non-profit organizations such as the EFSMNS.

Several women found Dialectical Behavioural Therapy helpful in managing their emotions. Of another emotion management program that she completed while incarcerated, Olivia commented, 'I loved it because it was like shit just made sense to me. I was like, wow, like why is this not being taught in the community?' The implication is that the incidents that led this woman to incarceration may not have occurred had she received adequate programming in the community.

Additionally, several women remarked on the difference made when someone or an organization exercised care and understanding to their situation. Women described how these positive interactions changed the trajectories of their lives. In some cases, the actions of just one competent employee were effective at creating positive change in the women's lives. Of her meeting with a CPS Officer, Liz said:

'The first thing he said to me was "I don't blame you", and he said, "I know what happened to you when you were younger" And I was like shocked. This is the first time, I'm living in BC, like how did you know that when I didn't disclose that to you? So, when he had said like I was able to pull CPS files from all across the country, and I saw and I just... I might cry a little... it was the first time in my life that somebody actually wanted to look at the root of the problem... he did his homework before he even met with me, and he found information out about me that he knew that probably contributed to my behaviour like 20 years later. And he let me know understood that he wasn't going to blame me and he was going to work with me and get to the root of the problem and help me. That was a pivotal moment in my life.'

Some women reported aspects of the criminal justice system that worked effectively for them. Of mental health court, Shelly said, it 'really, really helped me. They looked at like what I have been through compared to like regular court.' This is consistent with research on mental health court. Anetis and Carbonell (2014) explored recidivism among justice-involved persons with mental illness who participated in mental heart court or the traditional criminal court system and found that participation in mental health court predicted a lower rate of recidivism and a longer time until rearrest when compared to the traditional system. The empathy exercised by criminal justice professionals appeared to have helped justice-involved individuals avoid committing future crimes. The mechanism for this change appears to be related to having someone believe that you are good and are capable of good things. Shelly said that mental health court 'believed in me and they gave me chances. And it just feels good when people believe in you, you want to do better, and you probably don't want to let them down.'

One woman disclosed attending weekly parenting classes as a preventative measure to avoid contact with CPS and a tool to learn parenting skills. Violet said:

'the first reason is my past with CPS. My past addiction, my past criminal history. It can be used against me someday. You know, if I were to ever go through a custody battle with my daughter's father or if someone ever called CPS on me, I wanna have that support to have my back if ever needed... and just to have her to talk to, to have someone that's not gonna sit there and lead me in the wrong direction when it comes to my parenting. If I have a question, I don't ask Facebook, I ask her, *laughs* you know so..'

This woman fears for the custody of her children and worries that CPS may look unfavorably at parents like herself, with criminal histories. Given that people with criminal histories are a highly stigmatized group (Pogorzelski et al., 2005), this concern is legitimate.

Finally, the majority of the women reported the EFSMNS and their transitional house, Holly House, as invaluable resources for their rehabilitation. Taryn said, 'coming here really changed my life in so many different ways. Really, they say things happen for a reason, unfortunately, a bad thing had to happen for things to be better in a sense.' As Olivia said, "if we had 100 Holly houses across Canada, there would be no need for jails I'll tell you that right now." Holly house was reported to have made an impact in part due to their unwavering support and patience with the women as they rebuilt their lives. Shelly said: 'I mean, I didn't go there and I wasn't good right away, and they didn't like kick me out. They gave me like a chance, you know to kind of do good and that sort of made a lot of difference for me.' This finding reflects the literature, which has found that supportive offender-staff relationships are related to positive outcomes for justice-involved persons (Morash et al., 2015). Specifically, Skeem et al. (2007)

found that trust and caring/fairness exhibited in offender-staff relationships resulted in positive outcomes, such as rule following and no violations of conditions, whereas relationships characterized by toughness lead to negative outcomes (e.g., violations of conditions, arrests). They also found that among justice-involved persons with co-occurring disorders, toughness in these relationships is particularly harmful and it worsens their mental health and makes it harder for them to stop drug use and follow conditions. An additional reason why EFSMNS has had this profound impact on the women is the resources they connected them with and the progress they made due to connection with community resources. For example, Liz said, she 'was able to go through domestic violence court and have an absolute discharge.'

Conclusion

In this study, Canadian justice-involved women identified factors related to their criminal behaviour and desistance from crime. More specifically, justice-involved women reported that negative influences from others, life circumstances, substance abuse, inadequate services and system failures were related to their criminal behaviour. Further, justice-involved women reported that positive influences, self-directed change, and adequate supports and services were related to their desistance from crime. Canadian justice-involved women reported factors related to their criminal behaviour and desistance from crime that coincided with research findings from the U.S.

Strengths and limitations

Strengths of the present study include the qualitative nature of the research. For example, some of the factors included on the interview protocol such as trauma, substance use, foster care and CPS, psychosocial factors, and interactions with the legal system, were not interpreted in the manner that was intended by the participants. For example, one participant reported that

victimization did not contribute to her criminal behaviour, however, she reported that being the victim of a physical attack was a contributing factor. Given the design of the study, the women's interpretation of the questions became clear during the interview. This clarification would not have been possible with other types of data collection, such as survey data. In addition, qualitative data is especially important when studying vulnerable populations (Roche, 2020), such as justice-involved women, because it amplifies their voices and provides context that may not be gained elsewhere. This study also contributed a direct link between factors and criminal behaviour to the literature, which was provided by women with lived experience with the criminal justice system.

Data collection was stopped after 8 interviews were conducted in part because of the ongoing Covid-19 pandemic and related considerations to participant health and safety. Data collection occurred during the first and second waves of the Covid-19 pandemic in Nova Scotia and our plan changed from in person to an entirely virtual format. The original plan was to ask participants to come to EFSMNS to collect all interview and survey data over a span of a few days, however, this plan was adapted to telephone interviews and online surveys.

The Covid-19 pandemic presented challenges with recruitment and retainment of research participants. A few more women expressed their interest in participation, but they were prevented by technological issues such as poor internet connection or a lack of a telephone. The organization also expressed that some potential participants were plagued with other issues such as housing troubles stemming from the pandemic and were unable to participate. The sample size of this study was small, N=8, and therefore our study was limited in terms of statistical power. It should be noted that small sample sizes inflate effect sizes and have low statistical power, which reduces the likelihood of an effect reaching statistical significance. As mentioned previously,

Braun and Clarke (2013) suggest sample sizes of 6-10 is sufficient for small, qualitative projects, however, this sample size was too small to draw meaningful conclusions from the quantitative findings. The quantitative findings of this study, including null hypothesis significance testing and effect sizes, should be interpreted with caution.

An additional limitation is that this study did not employ member checking. Member checking is a quality assurance process used for qualitative research and has been described as controversial (Braun & Clark, 2013). It involves asking some of the participants to verify the interpreted information from the interviews. This strategy was not employed as it was not built into the original study design, which meant there was not ethics clearance. An additional concern was Covid-19 and anticipated difficulties with additional recruitment for the study. While member checking seems advantageous, it does have drawbacks including participants general disinterest in the process, participants not feeling comfortable to honestly critique the research, or participants' alternative agendas to have their own opinions expressed instead of the opinions of the group (Braun & Clark, 2013).

The interview protocol, that included asking women whether particular factors were related to their criminal behaviour or desistance from crime, was utilized to restrain the length of the interviews. This study design may be a limitation due to priming, which refers to how exposure to a stimulus changes the processing of the same stimulus (APA, n.d.). More specifically, it is possible that presenting these factors led to an increase in the women's endorsement of these factors, however, this limitation was minimized. This limitation was minimized because the factors originated from not only the data, but from the talking circle at EFSMNS that some of the same participants attended and contributed to. In addition, women were asked several times throughout the course of the interview if there were other contributing

factors to their criminal behaviour or desistance from crime that were not covered by the interview protocol and therefore had many opportunities to provide alternative factors.

The sample included in this study lacked diversity and appeared to contain more white women than other samples of justice-involved samples. Of the eight participants in this sample, 87.5% reported being White or Canadian, and only one reported being Mi'kmaq. This is in disagreement with other justice-involved samples that have repeatedly demonstrated an overrepresentation of Indigenous peoples. It may be that more representation from other ethnic groups would have produced different results and findings from this study are not appropriately applied to justice-involved women with ethnicities that were not well represented here.

An additional limitation was using the term "addiction" instead of "substance abuse" on the interview protocol. Interestingly, when asked whether addiction contributed to their criminal behaviour, two women answered "no", but when asked for any other contributing factors, both explained the effect of substance abuse. This discrepancy appeared to reflect a reluctance to use the label of addiction for their experiences. The design of this study permitted space for different interpretations of the interview protocol, as the women's interpretation became clear when asked how or why they believed a particular factor had contributed.

Implications and future directions

Given the sparsity of literature on Canadian, justice-involved women, a need for further research has been identified. As previously mentioned, findings from this study describe the experiences of justice-involved women in Nova Scotia and suggest what leads to criminal behaviour, as well as desistance for crime, among this population. This study revealed the influential impact that trauma exposure and substance abuse have on criminal behaviour among justice-involved women and this relationship should be explored further in future research.

The findings from this study may be used by the EFSMNS for their important advocacy work that helps numerous justice-involved women in Nova Scotia, Canada. Findings may also be used to inform future programs or interventions designed to reduce crime. Transferability is a term that is preferred by qualitative researchers over generalizability (Braun & Clark, 2013), and it is believed that the findings from this study are transferable to other groups of justice-involved women affiliated with the Elizabeth Fry Society. It is our hope that this study will be built on by future research exploring the experiences of Canadian, justice-involved women. It was intended that this study would galvanize other Canadian researchers to conduct this important research to learn more about the experiences of justice-involved women in this country.

One of the most important findings of this study was the information gained about widespread system failures across the province. Further research should be conducted on this issue to dive deeper into system failures and to identify what areas need improvement. Studies could examine the lack of available resources such as mental health, addiction, parenting, domestic violence and other service gaps. As Roche (2020) highlights, listening to those with lived experience, especially when working with vulnerable populations, such as justice-involved women, is highly important. Future research should heed this recommendation, and work to amplify the voices of justice-involved women who are experts in factors that contribute to criminal behaviour and desistance from crime.

FACTORS RELATED TO CRIMINAL BEHAVIOUR AND DESISTANCE AMONG JUSTICE-INVOLVED WOMEN

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Appendix A- Conceptual depth criteria

Conceptual depth is a measure of data quality and therefore may be used as a substitution for saturation. According to Nelson (2017), the qualitative data must meet five conditions to meet the criteria for conceptual depth. These conditions are:

- 1. A wide range of evidence can be drawn from the data to illustrate the concepts.
- The concepts must be demonstrably part of a rich network of concepts and themes in the data within which there are complex connections
- Subtlety in the concepts is understood by the researcher and used constructively to articulate the richness in its meaning
- 4. The concepts have resonance with existing literature in the area being investigated
- 5. The concepts, as part of a wider analytic story, stand up to testing for external validity (p.12)

The first criterion was met given the wide range of codes and several examples of concepts in the data that illustrated the themes and subthemes presented in this paper. For example, the subtheme 'recipients and perpetrators of abuse' included codes that captured abuse from family, friends, and romantic partners, as well as emotional abuse, physical abuse and sexual abuse. This subtheme also included codes that identified coercion to commit crimes and modeling abusive behaviours. Second, the themes in this dataset are all highly interconnected, demonstrated by women's frequent reports that several factors led to their criminal behaviour and desistance. This point was emphasized when the majority of participants could not point to one specific factor that they felt contributed the most to their criminal behaviour, but instead disclosed several interconnected factors. Third, the subtlety criterion asks if the codes have different shades of meaning and this was achieved by the varying experiences reported by

women that are captured by the codes. For example, the subtheme 'acts differently under the influence' captured women's reports that substance abuse changed their behaviour by facilitating socialization or by leading to criminal behaviour. Fourth, the concepts identified in this dataset echo what has emerged in the extant literature on justice-involved women; specifically, that trauma, mental illness and substance abuse strongly contribute to criminal behaviour. The fifth and final criterion has been met, given that the findings are similar to other studies of justice-involved women and some of the qualitative findings are transferable to other groups of justice-involved women who are affiliated with the Elizabeth Fry Society particularly in Nova Scotia.

Appendix B- Interview protocol

*Interviewer will begin by introducing herself and outlining the goals of the interview. That is, the interviewer will explain that we are going to ask them some questions to learn more about them and the factors they believe are related to their criminal behaviour. The interviewer will remind the participant that this is completely voluntary and if there are any questions that make them uncomfortable, they do not have to answer. The interviewer will then ask the participant to complete the informed consent form.

Demographics/Rapport Building

- Tell me a little about yourself.
- Only ask the following questions if they have not been answered yet:
 - What is your name (first name only)?
 - How old are you?
 - What is your ethnic heritage/cultural background? Where were you born? What do you consider your race to be?
 - How many years of formal education have you completed? What is your highest level of education? How many grades have you completed? Have you completed high school? Have you completed any college/university courses?
 - Do you go to school/work? If so, where?
 - Can you tell me about your criminal history? What crimes have you been convicted for? How much time have you served in an institution? In the community? How old were you when you first engaged in criminal behaviour?

Participants will be given a paper copy of this list and asked to indicate which factors they believe contributed to their criminality. The factors they identified will be used as prompters for interviewers in order to tailor the interview to each participant.

From this list, please indicate all that apply to you and that you believe may be associated with your own criminalization:

Trauma

- Victimization
- Experiencing domestic violence
- Witnessing domestic violence
- Incarceration of a household member
- Mental Illness of a household member
- Substance abuse of a household member
- Parents separated or divorced
- Human trafficking
- Sexual assault
- Physical abuse
- Emotional abuse
- Neglect
- Racism/sexism

- Foster care/child protection
- Other

• Substance use

- Lack of services
- Substance use as barrier for successful probation/parole
- Problems with addiction
- Other

• Foster Care and Child Protection Services

- o Placement (group home, institution, foster family, etc.)
- o Maltreatment (abuse/neglect) before or during placement
- o Limited caregiver closeness (i.e. being taken from family/moved around a lot)

• Psychosocial factors

- Work
- School
- Housing
- Poverty
- Health (mental, physical, etc.)
- Other

• <u>Interactions with legal system</u>

- Probation/parole officer
- Expectations
- Racial biases
- Other

From this list, please indicate all that apply to you and that you believe may have helped you in a positive way in the context of your own criminalization:

- Social support (family, friends, other)
- Role models
- Public Services and Supports
- Spirituality
- Education
- Other

<u>Prompters</u>

Interviewers will use the above list filled out by each participant, to prompt further discussion on topics relevant to the participant.

- Think about your life experiences that you believe are related to your criminalization. Is there one experience that you feel contributed the most to your criminalization?
- You've indicated that ____ may be related to your criminalization, can you elaborate on that?
- You mentioned that you've experienced , could you elaborate on that experience?

•	Can you tell us about why	you believe your experience with	is related to your
	criminalization?		
•	You've indicated that	has been a positive factor in your life.	. Can you elaborate on
	that?		

Appendix C- Adverse Childhood Experiences

ACE Questionnaire (Felitti et al., 1998)

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willic you we	ac growing up.	. uuiiiig voui	11151 10	veais of file.
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1. Did a parent or other adult in the household ever...

i) Swear at you, insult you, put you down or humiliate you?

Yes

No

Prefer not to say

If yes, how many times? 1 time, 2-3 times, 4-10 times, and 11+ times, Prefer not to say

ii) Act in a way that made you afraid that you might be physically hurt?

Yes

No

Prefer not to say

If yes, how many times? 1 time, 2-3 times, 4-10 times, and 11+ times, prefer not to say

2. Did a parent or other adult in the household ever ...

i) Push, grab, slap, or throw something at you?

Yes

No

Prefer not to say

If yes, how many times? 1 time, 2-3 times, 4-10 times, and 11+ times, Prefer not to say

ii) Ever hit you so hard that you had marks or were injured?

Yes

No

Prefer not to say

If yes, how many times? 1 time, 2-3 times, 4-10 times, and 11+ times, Prefer not to say

3. Did an adult or person at least 5 years older than you ever...

i) Touch or fondle you or have you touch their body in a sexual way?

Yes

No

Prefer not to say

If yes, how many times? 1 time, 2-3 times, 4-10 times, and 11+ times, Prefer not to say

ii) Try to or actually have oral, anal, or vaginal sex with you?

Yes

No

Prefer not to say

If yes, how many times? 1 time, 2-3 times, 4-10 times, and 11+ times, Prefer not to say

4. Did you ever feel that ...

i) No one in your family loved you or thought you were important or special?

Yes

No

Prefer not to say

If yes, how many times? 1 time, 2-3 times, 4-10 times, and 11+ times, Prefer not to say

ii) Your family didn't look out for each other, feel close to each other, or support each other?

Yes

No

Prefer not to say

If yes, how many times? 1 time, 2-3 times, 4-10 times, and 11+ times, Prefer not to say

- 5. Did you ever feel that ...
 - i) You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?
 - ii) Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

Yes

No

Prefer not to say

If yes, how many times? 1 time, 2-3 times, 4-10 times, and 11+ times, Prefer not to say

6. Were your parents ever separated or divorced?

Yes

Nο

Prefer not to say

- 7. Was your mother or stepmother:
 - i) Ever pushed, grabbed, slapped, or had something thrown at her?

Yes

No

Prefer not to say

If yes, how many times? 1 time, 2-3 times, 4-10 times, and 11+ times, Prefer not to say

ii) Sometimes or often kicked, bitten, hit with a fist, or hit with something hard?

Yes

No

Prefer not to say

If yes, how many times? 1 time, 2-3 times, 4-10 times, and 11+ times, Prefer not to say

iii) Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

Yes

No

Prefer not to say

If yes, how many times? 1 time, 2-3 times, 4-10 times, and 11+ times, Prefer not to say

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?

Yes

No

Prefer not to say

9. Was a household member depressed or mentally ill or did a household member attempt suicide?

Yes No Prefer not to say

10. Did a household member go to prison?

Yes No Prefer not to say

Appendix D- Trauma Histories

Life Events Checklist for DSM-5 (LEC-5; Weathers et al., 2013).

Instructions: Please answer the following questions based on your experiences over the course of your life.

your life.							
Event	Yes/No/	If yes,	If yes,	1 time	2-3	4-10	11+ times
	Prefer not	then	then how		times	times	
	to say	before age	many				
		18 or after	times?				
		age 18?					
1. Natural disaster (ex:							
flood, hurricane,							
tornado, earthquake)							
2. Fire or explosion							
3. Transportation							
accident (ex: car							
accident, boat accident,							
train wreck, plane							
crash)							
4. Serious accident at							
work, home, or during							
recreational activity							
5. Exposure to toxic							
substance (ex:							
dangerous chemicals,							
radiation)							
6. Physical assault (ex:							
being attacked, hit,							
slapped, kicked, beaten							
up)							
7. Assault with a							
weapon (ex: being shot,							
stabbed, threatened							
with a knife, gun,							
bomb)							
8. Sexual assault (rape,							
attempted rape, made to							
perform any type of							
sexual act through force							
or threat of harm)							
9. Other unwanted or							
uncomfortable sexual							
experience							

10. Combat or exposure				
to a war-zone (in the				
military or as a civilian)				
11. Captivity (ex: being				
kidnapped, abducted,				
held hostage, prisoner				
of war)				
12. Life-threatening				
illness or injury				
13. Severe human				
suffering				
14. Sudden violent				
death (ex: homicide,				
suicide)				
15. Sudden accidental				
death				
16. Serious injury,				
harm, or death you				
caused to someone else				
17. Any other very				
stressful event or				
experience				

Appendix E- PTSD Symptom Severity

National Stressful Events Survey PTSD Short Scale (NSESSS-PTSD; LeBeau et al., 2014)

Instructions: People sometimes have problems after extremely stressful events of experiences. How much have you been bothered during the PAST SEVEN (7) DAYS by each of the following problems that occurred or became worse after an extremely stressful event/experience? Please respond to each item by marking check or x one box per row

0= Not at all	1= A little bit	2= Moderately	3= Quite a	4= Extremely
			bit	

- 1. Having "flashbacks," that is, you suddenly acted or felt as if a stressful experience from the past was happening all over again (for example, you reexperienced parts of a stressful experience by seeing, hearing, smelling, or physically feeling parts of the experience)?
- 2. Feeling very emotionally upset when something reminded you of a stressful experience?
- 3. Trying to avoid thoughts, feelings, or physical sensations that reminded you of a stressful experience?
- 4. Thinking that a stressful event happened because you or someone else (who didn't directly harm you) did something wrong or didn't do everything possible to prevent it, or because of something about you?
- 5. Having a very negative emotional state (for example, you were experiencing lots of fear, anger, guilt, shame, or horror) after a stressful experience?
- 6. Losing interest in activities you used to enjoy before having a stressful experience?
- 7. Being "super alert," on guard, or constantly on the lookout for danger?
- 8. Feeling jumpy or easily startled when you hear an unexpected noise?

9. Being extremely irritable or angry to the point where you yelled at other people, got into fights, or destroyed things?

Appendix F- Additional Mental Illness Items

10. Have you been diagnosed or treated for any mental illness?				
a) Yes which mental illness?				
b) No				
c) Prefer not to say				
11. How would you describe your mental health?				
a) Poor				
b) Fair				
c) Good				
d) Great				
e) Prefer not to say				

Appendix G- Alcohol Use

Alcohol Use Diagnostic Inventory Tool (AUDIT; Saunders et al., 1993)

1.	How often do you have a drink contain	ing alcohol?
	Never	[]
	Monthly or Less	[]
	Two to four times a month	[]
	Two to three times a week	[]
	Four or more times a week	[]
2.	How many drinks containing alcohol de	o you have on a typical day when you are
,	drinking?	
	1 or 2	[]
	3 or 4	[]
	5 or 6	[]
	7 to 9	[]
	10 or more	[]
3.	How often do you have six or more drin	nks on one occasion?
	Never	[]
	Less than monthly	[]
	Monthly	[]
	Weekly	[]
	Daily or almost daily	[]

4.	How often during the last ye	ar have you found that you were not able to stop drinking
	once you had started?	
	Never	[]
	Less than monthly	[]
	Monthly	[]
	Weekly	[]
	Daily or almost daily	[]
5.	How often during the last ye	ar have you failed to do what was normally expected of
	you because of drinking?	
	Never	[]
	Less than monthly	[]
	Monthly	[]
	Weekly	[]
	Daily or almost daily	[]
6.	How often during the last ye	ar have you needed a first drink in the morning to get
	yourself going after a heavy	drinking session?
	Never	[]
	Less than monthly	[]
	Monthly	[]
	Weekly	[]
	Daily or almost daily	[]

7.	How often during the last year ha	we you had a feeling of guilt or remorse after
	drinking?	
	Never	[]
	Less than monthly	[]
	Monthly	[]
	Weekly	[]
	Daily or almost daily	[]
8.	How often during the last year ha	we you been unable to remember what happened the
	night before because of your drin	king?
	Never	[]
	Less than monthly	[]
	Monthly	[]
	Weekly	[]
	Daily or almost daily	[]
9.	Have you or someone else been i	njured because of your drinking?
	No	[]
	Yes, but not in the last year	[]
	Yes, during the last year	[]
10.	Has a relative, friend, doctor or o	ther health care worker been concerned about your
	drinking or suggested you cut do	wn?
	No	[]
	Yes, but not in the last year	[]
	Yes, during the last year	[]

Appendix H- Other Substance Use

Drug Use Diagnostic Inventory Tool (DUDIT; Berman et al., 2005)

1.	. How often do you use drugs other than alcohol?		
	Never	[]	
	Once a month or less often	[]	
	2-4 times a month	[]	
	2-3 times a week	[]	
	4 times a week or more often	[]	
2.	Do you use more than one type of o	drug on the same occasion?	
	Never	[]	
	Once a month or less often	[]	
	2-4 times a month	[]	
	2-3 times a week	[]	
	4 times a week or more often	[]	
3.	How many times do you take drugs	s on a typical day when you use drugs?	
	0	[]	
	1-2	[]	
	3-4	[]	
	5-6	[]	
	7 or more	[]	

4.	How often are you influenced heavi	ily by drugs?
	Never	[]
	Once a month or less often	[]
	2-4 times a month	[]
	2-3 times a week	[]
	4 times a week or more often	[]
5.	Over the past year, have you felt that	at your longing for drugs was so strong that you
	could not resist it?	
	Never	[]
	Once a month or less often	[]
	2-4 times a month	[]
	2-3 times a week	[]
	4 times a week or more often	[]
6.	Has it happened, over the past year,	that you have not been able to stop taking drugs
	once you started?	
	Never	[]
	Once a month or less often	[]
	2-4 times a month	[]
	2-3 times a week	[]
	4 times a week or more often	[]

7.	How often over the past year have ye	ou taken drugs and then neglected to do
	something you should have done?	
	Never	[]
	Less often than once a month	[]
	Every month	[]
	Every week	[]
	Daily or almost every day	[]
8.	How often over the past year have ye	ou needed to take a drug the morning after heavy
	drug use the day before?	
	Never	[]
	Less often than once a month	[]
	Every month	[]
	Every week	[]
	Daily or almost every day	[]
9.	How often over the past year have ye	ou had guilt feelings or a bad conscience because
	you used drugs?	
	Never	[]
	Less often than once a month	[]
	Every month	[]
	Every week	[]
	Daily or almost every day	[]

10. Have you or anyone else been hurt (mentally or physically) because you used drugs?	
No	[]
Yes, but not over the past year	[]
Yes, over the past year	[]
11. Has a relative, or a friend, a doctor or a nurse, or anyone else, been worried about	
your drug use or said to you that you should stop using drugs?	
No	[]
Yes, but not over the past year	[]
Yes, over the past year	[]

Appendix I - Additional Alcohol and Drug Use Items

12. How old were you when you first tried alcohol?
13. How old were you when you first tried drugs other than alcohol for the first time (ex
marijuana, MDMA, cocaine, LSD, magic mushrooms, other)? Which drug
was it?
14. Have you ever had a problem with alcohol or other drugs?
a) Yes
b) No
c) Prefer not to say
15. Have you ever attended substance abuse programming or received medical treatment
for an issue related to your alcohol or drug use?
a) Yes
b) No
c) Prefer not to say