The challenges of Fetal Alcohol Spectrum Disorder (FASD) to sentencing:

A comparative analysis of FASD and non-FASD sentencing judgments

by

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Abstract

The cognitive and/or behavioural problems associated with Fetal Alcohol Spectrum Disorder (FASD) place this population at increased risk of involvement in the justice system. Although FASD poses challenges at each stage of the justice system, legal discussion and commentary have pinpointed the sentencing stage as the phase in which the issue of FASD is most commonly raised and considered. The purpose of this study is to examine if (and how) FASD is being taking into consideration at sentencing. To this end, a comparative analysis of 87 sentencing judgments (42 FASD offenders and 45 non-FASD offenders) reported in Quicklaw was conducted. Cases were matched on most serious offence (assault, robbery and sexual assault) and jurisdiction (Yukon, British Columbia and Ontario). Descriptions of FASD and non-FASD offenders as reported by judges were found to differ in a number of significant ways. Similarly, sentencing purposes applied to each offender group emerged as distinct. Despite these distinctions, no differences were found in the type and length of sentence handed down (even after controlling for criminal record and breaches). These findings indicate a need for further research and possible policy changes.

Keywords: fetal alcohol spectrum disorder (FASD), prenatal alcohol exposure, adults, sentencing, criminal justice system

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CHAPTER ONE

Introduction

The examination of the effects of alcohol during pregnancy is said to have begun in ancient times. However it was not until relatively recently – the late 1960s – that the impact of alcohol on the fetus were scientifically studied and reported. Today, Fetal Alcohol Spectrum Disorder (FASD) is the non-diagnostic term used to describe the wide variety of outcomes of prenatal exposure to alcohol.

FASD is said to be one of the leading preventable (i.e., not genetically heritable) causes of mental and developmental disability in the western world (Berg, 1995; Malbin, 2004; Green & Moore, 2004; Grant, Huggins, Connor & Streissguth, 2005). Caused by prenatal consumption of alcohol, FASD has a wide range of effects (Chudley, Conry, Cook, Loock, Rosales & Leblanc, 2005). The timing and dosage of alcohol during pregnancy, as well as behavioural, environmental, social and genetic factors, all play a role in how the effects of alcohol on the fetus are manifested (Chudley, 2011; May 2011; Koponen, Kalland &Autti-Rämö, 2009; O'Malley, 2007; Fast & Conry, 2004; Koren, Nulman, Chudley & Loocke, 2003; Page, 2001). As such, the effects/outcomes and severity of the prenatal damage are variable and so too are the diagnoses. Fetal alcohol syndrome (FAS) is said to be the most severe manifestation of the disability, exhibiting physical as well as intellectual disabilities (Chudley *et al.*, 2005). However, other diagnoses found under FASD include partial FAS (pFAS) and Alcohol Related Neurodevelopmental Disorder (ARND).

When describing the impact that a disease or a disability has on a population, incidence and prevalence rates are commonly used. FASD is no exception. When

discussing incidence, the term often refers to the number of new cases of FASD that are discovered during a specific time period and are usually reported per 1000 live births (Tough & Jack, 2011; May & Gossage, 2001). On the other hand, prevalence rates consider both the new and existing cases of FASD at any point in time (Tough & Jack, 2011; May & Gossage, 2001). This is usually reported per 1000 people among a particular population[1] (for example per 1000 Canadians, per 1000 children in foster care, etc.) (Tough & Jack, 2011; May & Gossage, 2001).[2] With FASD, while there is considerable data and research on incidence and prevalence interpretation must be made cautiously as, just like diagnosis, there are several challenges when collecting this type of information (Tough & Jack, 2011; May & Gossage, 2001).[3] As such, the literature warns that the incidence rates discovered during their studies should not be generalized to other populations (or Canada in general) (Chudley *et al.*, 2005; Tough & Jack, 2011; Williams, Odaibo, & McGee, 1999).

In Canada, there are no official national statistics regarding the incidence of FAS or FASD (Tough & Jack, 2011; Thanh & Jonsson, 2009; Chudley *et al*, 2005; Mitten,

[1] Similar to incidence rates, it is not uncommon to also see prevalence rates discussed as per 1000 live births when talking about large specific populations like the United States or Canada.

[2] In Canada, child welfare systems, corrections and Aboriginal communities appear to be the three main subgroups on which prevalence research tends to focus (Tough & Jack, 2011). There are extremely limited prevalence rates on adults with FASD. The diagnosis of adults tends to be complex and therefore the adult population is believed to be significantly under-diagnosed (Chudley *et al.,* 2007). As such, estimates of adult prevalence likely under-represent the actual rates (Chudley *et al.*, 2007).

[3] Both the prevalence and diagnosis of FASD are contentious issues among practitioners, academics, and service providers because there is a lack of consensus surrounding such issues as diagnostic inconsistency and methodological limitations like case finding, sampling, and coordination (or lack thereof) across interdisciplinary entities (May & Gossage, 2001). Tait (2003a) warns that incidence and prevalence should be examined cautiously as there is also the possibility of over- or under-reporting. However, the majority of the literature suggests that FASD is under-diagnosed or the incidence and prevalence of FASD is under-estimated, especially in correctional settings (Fast & Conry, 2009; Chudley *et al.*, 2005, Burd *et al*., 2004). In contrast, Armstrong (2003), and Armstrong & Abel (2000) argue that FASD is over-diagnosed and thus prevalence rates are higher than they should be. However, this sentiment appears to reflect the minority view when examining the literature on incidence and prevalence. It is also important to be mindful that many studies of prevalence undertaken are done in areas in which alcohol consumption is known to be high or in clinical or hospital settings specifically dealing with such disabilities (Mitten, 2004).

2004). However FAS has been estimated at 1 to 3 per 1000 live births and FASD at 9.1 per 1000 births (Tough & Jack, 2011; Chudley *et al.* 2005; see also Streissguth, 1997; Boland *et al.,* 2000; Brimacombe *et al.* 2005; Thanh & Jonsson, 2009). Incidence rates for various provinces have been obtained through numerous research studies which seem to be primarily concentrated in Western Canada (Tough & Jack, 2011). For example, in British Columbia, studies have placed incidence rates (of FAS) around 0.25 per 1000 live births among non-Aboriginal individuals and 4.7 per 1000 live births among Aboriginals (Tough & Jack, 2011). In Saskatchewan, a study conducted between 1988 and 1992 estimated the province's FAS incidence rate at 0.589 per 1000 live births (Tough & Jack, 2011). In Manitoba, a study conducted at a northern hospital yielded an incidence rate of 7.2 per 1000 live births (for FAS) (Williams, Odaibo, & McGee, 1999; Tough & Jack, 2011).

Incidence and prevalence rates for Aboriginal populations in Canada tend to have higher estimates than the rates given for the general population (Mitten, 2004; Burd & Moffat, 1994).[4] Most FASD prevalence rates dealing with Canadian Aboriginals relate to specific isolated geographic areas and therefore vary greatly (Tough & Jack, 2011; Mitten, 2004; Tait, 2003; Burd & Moffat, 1994). For example, in 1984, a northern British

[4] Notably, FASD does not discriminate; it can affect all ethnicities. However, certain populations seem to exhibit higher incidence rates than others. This variability however is often attributed to a variety of factors like genetics, living conditions, social status, etc. (Mitten, 2004; Chudley *et al*., 2005; Tough & Jack, 2011). Some of these ethnicities also have the tendency to be surveilled more closely than others –such as those damaged by colonization and/or globalization (Mitten, 2004; Tait, 2003a). In Canada, the intergenerational effects of colonization have marginalized the Aboriginal population and this is important to remember when examining incidence and prevalence rates among this population. Of equal importance, when discussing the prevalence rates of Aboriginals, it must be made clear, however, that these rates are by no means indicative or generalizable to all First Nations, Inuit and Métis peoples. Additionally, on a global scale, incidence rates among Canadian Aboriginals are comparable to other similarly marginalized populations in countries such as South Africa, Russia, China, Romania and South America (Nguyen *et al.* 2011; Mitten, 2004; Tait, 2003a; Tait, 2003b).

Columbia community was examined by Asante and Nelms-Matzke who found the rate of FASD among native children to be 25 per 1000 children (Tait, 2003a; Chudley *et al.* 2005; Tough & Jack, 2011). Conversely, in 1987, a study conducted on a remote reserve in British Columbia by different researchers found a rate of 190 per 1000 children aged 18 or less with FASD (Robinson, Conry, & Conry, 1987; Tough & Jack, 2011; Chudley *et al*, 2005). Although it is important to be critical of such Aboriginal incidence and prevalence rates because of a multitude of methodological challenges and deeper social considerations, most researchers will acknowledge that FASD is clearly a problem - not necessarily more prevalent than other groups, but nonetheless prevalent - among certain Canadian Aboriginal populations (Mitten, 2004; Adams, 2002).

In addition to prevalence and incidence rates, economic costs associated with a disease or disability over time are also used to describe its impact. The physical, behavioural and cognitive effects of FASD are varied in type and severity and, according to researchers, have the potential to be "…costly to treat and to rehabilitate and may limit an individual's ability to contribute to society's productivity" (Stade, Ali, Bennett, Campbell, Johnston, Lens, Tran & Koren, 2009, p. 92). Although individual and national cost estimates of FASD have been conducted, they are said to most likely be underestimates of actual costs, as those institutionalized, homeless, and in the judicial system are typically not included in the calculations (Stade *et al.* 2009; Thanh & Jonsson, 2009; Thanh, Jonsson, Dennett and Jacobs, 2011). Additionally, FASD affects many sectors of society for which cost data may not be available and only evaluates those who have been formally diagnosed (Stade *et al.* 2009; Thanh & Jonsson, 2009; Thanh *et al.* 2011). Therefore the true extent to which FASD costs society is most likely greater than

any current estimates. Nonetheless, current studies (Stade *et al.* 2009; Thanh *et al.* 2011) estimate the annual cost of FASD in Canada to be between $5.3 billion[5] and about $6.2 billion.[6] The individual costs of FASD vary depending on several factors including the severity of the disability, as well as the age of the individual and the relationship of the caregiver to the individual (Stade *et al.*, 2009; Thanh *et al.*, 2011)[7]. As such, the adjusted *average* annual cost per individual - birth to 53 years of age (Stade *et al.* 2009) and one year to 21 years old (Thanh *et al.* 2011) - with FASD in Canada is estimated to be between $22,300 and $25,000.[8] The greatest percentage of these costs is attributed to medical costs (30-35% or around $7000 per person) and educational costs (24-33% or around $5500 per person) (Stade *et al.,* 2009; Thanh & Jonsson, 2009; Thanh *et al.* 2011).[9] The remainder of costs is attributed to social services and out-of-pocket expenses such as externalizing behaviours like stealing or property damage.

In addition to the direct costs to healthcare, education and social services, FASD is also a substantial cost to the criminal justice system. The cost of FASD to the justice system has been conservatively estimated at approximately $700 million annually (Thanh

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[5] Using 2007 price levels and incidence rates of 1 per 100 live births (0.01 per live birth). The sample was of those 0-53 years old.

[6] Using 2009 price levels and incidence rates of 9 per 1000 live births (0.009 per live birth). The sample was of those 1-21 years old.

[7] That is, the more severely impaired the individual is, the greater the annual cost. Interestingly, in terms of age, annual costs appear to decrease in late adolescence (Stade *et al.*, 2009). However, researchers speculate that this decrease is due to a lack of services for older age groups, as well as an inability of young adults and adults with FASD to access services due to their cognitive disabilities or often times because they do not want to accept services (Stade *et al.*, 2009; Thanh *et al.*, 2011). Last, the costs of children in foster care are greater than costs for adoptive and biological caregivers (Stade *et al.*, 2009).

[8] Estimates are in 2009 dollars. As such, in today's dollar amount, both estimates would likely be greater.

[9] Cost analyses of FASD typically study costs relating to medical (e.g., hospital admissions, surgeries, medications, etc.), education (e.g., home schooling, specialized schooling, therapy programs, etc.), social services (e.g., foster care, respite care, adoption costs, etc.), direct costs to the individual or family (e.g., transportation, parking, medical therapies not covered by healthcare, etc.), productivity losses (e.g., caregivers' lost wages or individuals' lost wages, etc.) and externalizing behaviours (e.g., costs incurred because of damage to people, property or stealing, etc.) (Stade *et al* 2009; Thanh & Jonsson, 2009).

et al., 2011).[10]. Indeed, FASD individuals would appear to be frequently involved in the justice system. In fact, the organic brain damage suffered by those exposed to alcohol prenatally has been shown to cause several cognitive and behavioural deficits. Behavioural problems arising as a result of environmental and social factors (also referred to as secondary disabilities) have the potential to – and often do, if left unmitigated - lead to FASD individuals being involved in the justice system.

Indeed, problems arising from the primary disability such as adaptive behaviours, language, attention, reasoning and memory are not uncommon and each has the potential to lead to the individual being involved with the law (Fast & Conry, 2004). Specifically, problems with adaptive behaviours are often said to make FASD individuals "…ineffective in meeting the accepted standards of personal independence and social responsibility" (Fast and Conry, 2004, p.162).

In addition to adaptive functioning, many FASD individuals have an illusionary sophistication with expressive language, making them appear more competent than they truly are (Page, 2007; Fast & Conry, 2004). In other words, FASD offenders often tend to be quite unusual in that their expressive language skills are generally stronger than receptive language skills - often referred to as "superficial fluency" (Page, 2001; Byrne, 2002; Fast & Conry, 2004). Other primary characteristics such as impulsivity, ADHD, difficulty understanding and predicting consequences of behaviours, inability to learn and generalize from past mistakes (in other words, to link cause and effect), suggestibility and poor memory tend to play a large part in individuals becoming involved in the criminal justice system (Byrne, 2002; Fast & Conry, 2004; Page, 2001).

[10] See Thanh *et al.* (2011, p.57) for more information on how this amount was calculated.

In addition to these primary characteristics, mental health issues, disrupted school experiences, inappropriate sexual behaviours and alcohol and drug problems are a few of the secondary behaviours that lend themselves to potential problems with the law (Streissguth *et al.* 1997). Environmental factors greatly influence the development of secondary disabilities that often cause FASD offenders to be in contact with the justice system. Secondary effects can have protective factors according to Streissguth and colleagues (1997). However, it appears that these protective factors – e.g., a stable home life, no history of violence at home – have a tendency to be absent with FASD individuals involved in the criminal justice system. In studies of FASD youths and the justice system, it was found that home environments of these offenders were marked with parental alcohol abuse, violence, abuse, and chaotic disorganization (Fast & Conry, 2004) – all factors that, themselves, are likely to be associated with youths being involved with the criminal justice system.

Not only do these primary and secondary behaviours experienced by FASD individuals put them at risk of becoming involved in the justice system, but they also present challenges to the various stages of the criminal justice system. Research has shown that each phase of the justice system - police, courts, corrections - has the potential to be problematic for FASD offenders (Fraser, 2008; Fast & Conry, 2004, Fast & Conry, 2009).

At the first stage of the criminal justice system - contact with police - language, memory, attention, and other cognitive deficits can prove to be problematic in areas like understanding one's rights, the waiver of rights, questioning, and giving statements (Fast & Conry, 2009; Moore & Gagnier, 2008; Gagnier, Moore & Green, 2011). The

suggestibility of FASD offenders may also increase the possibility of false confessions (Gagnier, Moore & Green, 2011; Moore & Gagnier, 2008). *The FASD guidebook for Police Officers* (Laporte, McKee, Lisakowski, Chudley, & Conry, 2003) explains, "conducting an interview or taking a statement from someone with FASD can be very frustrating and demanding…" and thus requires "…patience and understanding in order to get to the heart of what is being said…" (p.20). Although it is agreed that FASD individuals in contact with police should be considered to have a diminished capacity, this requires officers to be aware of FASD, its characteristics and behaviours (Laporte, *et al.*, 2003). As many FASD individuals do not have formal diagnoses, certain behaviours and characteristics can be perceived as unwillingness to cooperate, defiance, guilt, etc. (Fast & Conry, 2004, 2009; Moore & Gagnier, 2008). Therefore, recognizing the possibility of FASD requires police to possess a level of awareness, knowledge, understanding and adaptation (Laporte *et al.*, 2003) that they often do not have.

At the court level, the deficits of FASD can cause difficulties in finding a lawyer or applying for legal aid (Gagnier, Moore & Green, 2011; Roach & Bailey, 2009). Once a lawyer has been obtained, FASD individuals may have trouble instructing their counsel, attending meetings and court, as well as understanding and following their lawyer's advice (Gagnier, Moore & Green, 2011). Although FASD individuals tend to have problems instructing or following counsel, they are rarely found unfit to stand trial or not criminally responsible as they simply do not meet the thresholds of the strict criteria for these findings, despite their deficits (Gagnier, Moore & Green, 2011; Roach & Bailey, 2009).

Though some offenders do well with the structure that prison provides, there are still several issues facing FASD offenders at the correctional stage of the criminal justice system. FASD individuals incarcerated are at risk of victimization and being used as scapegoats by other prisoners because of their deficits (Brintnell *et al.*, 2011; Chartrand & Forbes-Chilibeck, 2003). Participating in and benefiting from prison programming is another issue facing FASD offenders at the correctional stage (Brintnell *et al.*, 2011; Chartrand & Forbes-Chilibeck, 2003). Programming is simply not designed to accommodate the learning deficits and special requirements of FASD individuals (Brintnell *et al.*, 2011; Chartrand & Forbes-Chilibeck, 2003).

Although every stage of the criminal justice system appears to be problematic for FASD individuals to navigate, legal discussion and commentary have pinpointed the sentencing stage as the phase in which the issue of FASD is most commonly raised and considered (Gagnier, Moore & Green, 2011; Roach & Bailey, 2009). This appears to be particularly true for adult offenders with FASD who tend to be under-studied in comparison to their youth counterparts. Unfortunately, very little empirical social science research on FASD and the justice system has concentrated solely on the sentencing of FASD offenders. Even less research has been done on adult offenders with FASD.

Previous FASD research has tended to focus on youths for several reasons. Perhaps the most important reason is that diagnosing FASD during childhood/adolescence is much more achievable than during adulthood. Fast and Conry (2004) explain, "the complex interactions among the brain damage caused by prenatal alcohol exposure, genetics, and the environment are difficult to disentangle and become more complex the older the individual is" (p.162); hence the difficulty in determining

what is inability and what is actual non-compliance among adult FASD individuals becomes quite difficult (Page, 2007). Indeed, adulthood presents an extra set of barriers to diagnosing FASD (Chudley *et al.* 2005). By adulthood, primary and secondary disabilities are often masked by co-morbid disorders that have accumulated over time due to a lack of proper supports and accommodations (O'Malley, 2007). As such, this becomes a barrier to obtaining a referral for diagnostic testing. Should diagnostic procedures even take place, several barriers such as (but not limited to) the disappearance of any possible facial features or growth deficiency, absence of family histories, and the need for additional evaluative components not present (or necessary) during the child/youth diagnostic process, are difficult to avoid or overcome (Chudley *et al.* 2005). In addition to diagnostic issues, research on FASD individuals in the justice system typically tends to concentrate on the youth population because this tends to be the time of first contact with the justice system and it is also where the majority of FASD programming tends to be situated.

FASD is not a simple disability, nor is it an issue for the criminal justice system that is likely to subside over time. In fact, some (Gelb & Rutman, 2011; O'Malley, 2007; Grant, Youngblood Pedersen, Whitney & Ernst, 2007;) speculate that FASD has generational/transgenerational effects. As such, the likelihood of FASD continuing to come into contact with the justice system is more likely than not. Indeed, the justice system needs to be prepared to continue (or, in some cases, to start) dealing with these offenders and research can help assist in guiding this preparation. Much current FASD research addressing the justice system is youth focused. However, FASD is a lifelong disability - youths do not grow out of their disability - and therefore there is a need for

adult focused research to fill this gap. Just as there has been research conducted on the sentencing of potentially vulnerable populations like Aboriginals, women and other general mental health issues to evaluate the fairness and functioning of the justice system, FASD too, merits academic attention.

The purpose of this study therefore is to examine how FASD is being taken into consideration during the (adult) sentencing process. The goals of this study are to first look at how the backgrounds of the FASD offenders differ from, or compare to, non-FASD offenders, and second to determine whether the approach to sentencing offenders with FASD differs from that used with non-FASD offenders. Specifically, do the sentences of offenders with FASD differ from the sentences of non-FASD offenders when they have committed similar offences and are the same sentencing purposes/principles applied to both the non-FASD and FASD offenders during the sentencing process?

Chapter TWO

Literature Review

The Historical Link Between Alcohol and Pregnancy

Alcohol and its uses have been well documented, studied and critiqued. The same may be said about the speculation of alcohol's effects on pregnancy (Warren & Hewitt, 2009). As Elizabeth Armstrong (2003) explains, "Alcohol has been an integral part of most Western Societies for centuries, and speculation about the relationship of alcohol to reproductive process and outcome has a long history" (p.23). Some scholars go so far as to say that alcohol's effects on the fetus have been observed since biblical times (Boland *et al.*, 2000; see also Abel, 1997,1999; Armstrong, 1998). Calhoun and Warren (2007) suggest that ancient Greeks and Romans believed that intoxication of the mother at the time of procreation resulted in a damaged child. Further, an ancient Carthaginian custom prohibited drinking on the wedding night as it was believed that this would prevent conception and lead to deformities; moreover it was believed that the father's drunkenness could affect conception just as much as, if not more than, the mother's drunkenness (Calhoun & Warren, 2007; Armstrong, 1998).

In the eighteenth and nineteenth centuries, the relationship between alcohol and reproduction was conceptualized and critiqued in a fashion similar to that of ancient times. It was believed that the mental, emotional, and physical state of the parents at the moment of conception left a lasting imprint on the child (Armstrong, 2003). Those who were inebriated during intercourse were thus believed to produce a child who was weak, "crooked" and inclined "to be fond of wine" (Armstrong, 2003).

In fact, England's Gin Epidemic of the 1700s flooded the country with cheap gin and many blamed this overabundance of gin consumption for an increased rate of fetal and infant mortality and social disorder (Berg, 1995; Armstrong, 2003; Golden, 2005). "Although most commentators were concerned primarily with crime, vice, and general social disorder among the lower classes…", increased fetal and infant mortality, regardless of class, was brought to the forefront (Armstrong, 2003, p. 26). In 1725, the College of Physicians in England lobbied for a tax on gin, citing that it was the "cause of weak, feeble and distempered children" (Warner & Rosett, 1975, p.1397). These general observations linking alcohol, pregnancy and child defects continued to evolve well into the 1800s.

Empirical corroboration for this hypothesis was provided as early as 1848 when Stanley G. Howe observed that of the 359 observed "idiots", 99 of these institutionalized people happened to be the children of "drunkards" (Armstrong, 2003; Golden, 2005). As concerns grew, studies of institutionalized (i.e. mentally-ill and deviant) populations were supplemented by studies of the general population. The nineteenth century thus gave rise to the emerging concept of alcohol as a social evil (Armstrong, 2003; Armstrong, 2000). The insight into the relationship between alcohol and pregnancy thus began to take on more scientific (albeit limited) direction of inquiry. New concerns over inebriety, public order, reproduction and increased medical ideas about alcohol gave rise to broader notions of heredity and degeneration. Although medical interest in female inebriety was limited at this time, some argued that it led to increased rates of infant mortality (Golden, 2005). In fact, temperance advocates in the field of medicine took great interest in this argument and claimed that maternal drinking tends to produce offspring with an unstable

nervous system, and also lowers their mental, moral and physical capabilities (Armstrong 2003; Golden, 2005).

William Sullivan's 1899 study of women in prison illustrated a shift toward a new medicalized thinking about the relationship between alcohol and offspring (Berg, 1995; Armstrong, 2003). Sullivan found "that the children of alcoholic women incarcerated during pregnancy and thus unable to drink had higher survival rates than their siblings born when the mother was free to drink during pregnancy" (Armstrong, 2003, p. 56; see also Berg, 1995). Despite the growing perception that alcohol was responsible for creating a large social burden in general, a direct scientific relationship to alcohol consumption during pregnancy – such as alcohol passing through the placenta – was not yet made (Armstrong, 2003; Golden, 2005; Calhoun & Warren, 2007).

Early- to mid-twentieth century medicine actually seemed to take a step back and ignore the hypothesized connections between alcohol and reproduction made by doctors in previous generations. At this point, doctors actually denied any harmful consequences of drinking alcohol while pregnant. In fact, they used to prescribe it as a painkiller for halting premature labour and to calm the woman during pregnancy (Armstrong, 2003; Golden, 2005). It was not until the late 1960s when gender roles and the women's movement were in the forefront that alcohol's effect on reproduction was rediscovered (Armstrong, 2003; Golden, 2005). Slowly, observations between alcohol and pregnancy began to move from simple speculation and scientific/medical curiosity into more rigorous scientific exploration; a sort of "rediscovery" of the link between alcohol and pregnancy was made.[11]

[11] Although there may be other ways of examining and understanding FASD – for instance, through the lens of social constructionism, the medicalization of deviance, labeling theory/stigma, social control

The Discovery of Fetal Alcohol Syndrome

In 1968, Dr. Paul Lemoine of France conducted a study in which he documented some commonly occurring problems in over 127 children born to women who drank heavily during pregnancy (Berg, 1995; Armstrong, 1998; Calhoun & Warren, 2007; O'Malley, 2007; Nguyen, Coppens & Riley, 2011). Subsequently, he authored several articles related to alcohol consumption and pregnancy; in his second article, he coined the term "Fetal Alcohol Syndrome" (FAS) (Armstrong, 2003; Golden, 2005; Calhoun & Warren, 2007; O'Malley, 2007). From this point on, literature on FAS grew quickly and the complexities and variability of the nature of alcohol's effects in utero began to emerge (Golden, 2005). For example, further research in the late 1970s conducted by Clarren and Smith noted that the physical and neurobehavioural outcomes of alcohol exposure *in utero* could be variable and therefore introduced the term "Fetal Alcohol Effects" (FAE) (Spohr, Steinhausen, & Willms, 1993; Spohr & Steinhausen, 1994; Berg, 1995; Calhoun & Warren, 2007). As research evolved, variations in diagnosis continued with the emergence of terms such as partial Fetal Alcohol Syndrome (pFAS), partial Fetal Alcohol Effects (pFAE), Alcohol-Related Birth Defects (ARBD), and Alcohol-Related Neurodevelopmental Disorders (ARND).

Fetal Alcohol Spectrum Disorder Today

Due to the variety of diagnostic outcomes of FAS and other alcohol related neurological disorders, in 1996 the Institute of Medicine (IOM) placed prenatal exposure

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models, etc.- the majority of the current literature, and in turn the current study, tends to focus on the scientific/medical approach to understanding FASD. Although this approach would be classified generally under the positivist umbrella - that is, seen as rooted heavily in scientific knowledge - it is not rigid or deterministic. Specifically, most of the current literature does not ignore the influence of environmental and social factors on the disorder. Therefore most of the literature, and in turn this study, takes on a biosocial approach to understanding FASD. In particular, it acknowledges the objective scientific proof of the disorder while simultaneously considering the influences of the environment on the disorder.

to alcohol under the umbrella term of Fetal Alcohol Spectrum Disorder (FASD) (Verbrugge, 2003; Fast & Conry, 2004; Malbin, 2004; Calhoun & Warren, 2007; O'Malley, 2007). FASD is not a diagnosis, but rather an encompassing term used to express the range of outcomes (for example FAS, pFAS, ARND, etc.) on a continuum (Fast & Conry, 2004; Calhoun & Warren, 2007). The diagnoses contained within FASD such as ARND, FAS, or pFAS are also not black and white but shades of grey; each diagnosis varies in severity[12].

In addition to the creation of an umbrella term for diagnoses contained within FASD, much research has been conducted on the cause of FASD. Although Lemoine, Clarren and Smith noted the effects of prenatal alcohol exposure in utero and the associated variability in the early 1970s, it was not until 1976 that medical textbooks began to actually mention that alcohol crosses the placenta – the first real explanation as to how alcohol has the potential to effect pregnancy (Berg, 1995). Today, as Streissguth (2012) explains, alcohol is a known "teratogen" and thus "crosses the placenta freely, and within minutes the fetus has the same blood alcohol level as the mother" (p. 139; see also Uban, Bodnar, Butts, Sliwowska, Comeau & Weinberg, 2011; Olson, Feldman, Streissguth, Sampson, Bookstein, 1998; Olson, Streissguth, Sampson, Barr, Bookstein & Thiede, 1997).

A "teratogen" is defined by Berg and colleagues (2005) as "a substance which, when given to a pregnant woman, can produce a specific pattern of birth defects in her baby" (p.6), and by Chudley (2011) as "any environmental factor that can produce a

[12] This idea of a range of outcomes on a continuum is best demonstrated by an example. An individual with ARND may have eight of the nine brain domains affected and be more severely impaired than an individual with full FAS, yet this former person is not labeled with FAS because of his/her lack of physical and facial anomalies.

permanent abnormality in structure or function, restriction of growth, or death of the embryo or fetus" (p.109). Common teratogens are drugs, medications (such as the well-known drug thalidomide), chemicals, radiation and even maternal diseases or conditions including infections, viruses, etc. (Chudley, 2011). It has been suggested by some that FASD is now perhaps the most common teratogenic disorder (Chudley, 2011; Abel & Sokol, 1986; Warren & Hewitt, 2009; Mattson & Riley 1998). Others have even gone as far as to say that alcohol has helped to introduce an entirely new discipline within the study of teratology – behavioural teratology – because of its effects on the individual's behavioural development and functioning (Warren & Hewitt, 2009).

As with any teratogen, the timing, dosage, and other conditions, including genetic and environmental factors, all affect the impact of that teratogen on the fetus (Streissguth, 2012; Chudley, 2011; Olson *et al.* 1997). Alcohol, according to numerous scientific studies (Uban *et al.* 2011; Chudley, 2011; May, 2011; Olson *et al.* 1997), has been found to act on, or modulate, a variety of different molecules or mechanisms, at different stages of development and at different levels of exposure (i.e. dosages). Therefore, the quantity of alcohol consumed during pregnancy, the frequency at which it was consumed, and the period(s) during gestation in which it was consumed, all influence how FASD affects the development of the fetus (May, 2011; Chudley, 2011). As Nguyen and colleagues (2011) explain, " the pattern of structural and functional abnormalities will vary depending on alcohol exposure during particular critical periods of development, as different aspects of the developing nervous system become more or less vulnerable to alcohol's toxicity" (p.5). This variability in factors is thought to be the most likely reason for the diversity in

behavioural and developmental characteristics exhibited by those with FASD throughout their lifetime (Uban *et al.*, 2011; Koren, Nulman, Chudley & Loocke, 2003).

It is argued that at even a low dosage, alcohol has the potential to be teratogenic (O'Malley, 2007). However, not all women who drink heavily during their pregnancy will have a child with an FASD, and not all women who have children with FASD are alcoholics (Nguyen *et al.* 2011; Chudley, 2011; Warren & Foudin, 2001; Olson *et al*. 1997). Consequently, even with the quantity of scientific research (both controlled animal models and human observation) on the teratogenicity of alcohol, a definitive amount of alcohol (if any at all) has yet to be identified as safe during pregnancy, or in other words, unlikely to cause FASD (Koren *et al.*, 2003; Koponen *et al.* 2009; May, 2011). As such, most literature reviewed stresses that there is no known safe level of alcohol consumption during pregnancy (May, 2011; Koren *et al.*, 2003; Koponen *et al.* 2009; May, 2011).

However, alcohol alone does not fully explain how FASD is manifested in an individual with PAE. Other factors and complex interactions such as behavioural, environmental, social and genetic factors also play a role. For example, scientific research has found that co-occurring drug exposures, maternal age, weight, stress, nutrition and genetics all impact the teratogenicity of alcohol (Chudley, 2011; May 2011; Koponen, Kalland &Autti-Rämö, 2009; O'Malley, 2007).

Diagnosis of FASD

Because there is a myriad of factors involved when a fetus is exposed to a teratogen such as alcohol in utero, it is not surprising that the effects and outcomes of that exposure will be variable. As such, universal diagnostic criteria are hard to establish. Indeed, the variety of disorders attributable to FASD varies in severity and is often

attributable to factors other than prenatal alcohol exposure (as previously discussed) (Page, 2001). Because of this lack of universal diagnostic criteria for FASD, there is room for great variation – a reality often seen as a problem by those studying it (see Avner & Nulman 2005).

Diagnoses

Possible diagnoses under FASD are Fetal Alcohol Syndrome (FAS), partial Fetal Alcohol Syndrome (pFAS), and Alcohol Related Neurodevelopmental Disorder (ARND). Although commonly found under the umbrella term of FASD, Alcohol Related Birth Defects (ARBD) should not be used as a diagnostic term according to some diagnostic guidelines (Chudley *et al.* 2005). Additionally, the term Fetal Alcohol Effects (FAE) is no longer used as it came to be misapplied by being used to label any child with behavioural problems that came from a family with suspected alcohol abuse (Calhoun & Warren, 2007). For this reason, the term FAE was abandoned and replaced with ARND.

Several different diagnostic guidelines have been put forth, each attempting to address or reduce the limitations in providing a diagnosis. The Institute of Medicine (IOM) and Washington University each created their own set of criteria in 1996 and 2000 respectively (Avner & Nulman, 2005; Andrew, 2011; Hoyme *et al.* 2005). As expected, each method has its own criticisms. More recently, in an attempt to mitigate problems with the IOM criteria, Hoyme *et al.* (2005) proposed several changes to the IOM measures (see also: Avner & Nulman, 2005). Similarly, Chudley, Conry, Cook, Loock, Rosales and LeBlanc (2005) proposed changes to both the IOM and 4-Digit code criteria. However, there continues to be no recognized universal diagnostic criteria or guidelines.

As a result, consistency and reproducibility of diagnostic findings across clinics is variable (Andrew, 2011).[13]

Current Canadian Diagnostic Criteria

In 2005, Chudley and his team came up with a set of Canadian guidelines for diagnosis by harmonizing the IOM criteria and Washington's 4-Digitic Diagnostic Code (Chudley, Conry, Cook, Loock, Rosales, LeBlanc, 2005; Calhoun & Warren, 2007). This guideline for diagnosis is now widely referred to both in Canada and elsewhere[14].

The current Canadian Diagnostic guidelines are a medical tool used in diagnosing and understanding the behaviours associated with FASD. The guidelines provide an outline/criteria for each of the diagnoses possible under the FASD umbrella. As a first step, the guidelines assess evidence of prenatal or postnatal growth impairment related to one or more of the following: low birth weight (at or below the 10th percentile); low height or weight (at or below the 10th percentile for the age); and disproportionately low weight-to-height ratio (equal the 10th percentile) (Chudley *et al.*, 2005). Evidence of short palpebral fissures[15] (two standard deviations below the mean), smooth or flattened philtrum[16], and a thin border of the upper lip are all facial anomalies needed to instruct a diagnosis of FAS (Chudley *et al.*, 2005).

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[13] Inclusion of FASD in the Diagnostic and Statistical Manual of Mental Disorders (DSM) has been suggested as a way to provide continuity and uniformity in diagnosis. For more information on this possibility, see Moansfield, 2006.

[14] According to Andrew (2011), an updated version of the 4-Digit Code is also available in Canada. In the Western jurisdictions, this 4-Digit Code is said to be used in most of the clinics providing a diagnosis. However, this update is similar to Chudley's diagnostic guidelines in that it requires a multidisciplinary team approach (Andrew, 2011). Chudley's guidelines are presented in-depth in this dissertation because they combine both the 4-digit code and IOM measures and they are more commonly referred to in the Canadian literature than the 4–digit code.

[15] A palpebral fissure is the vertical and horizontal distance between the upper and lower eyelid.

[16] A philtrum is the vertical indentation or groove just above the top lip.

Along with these physical and facial measurements, a neurobehavioural assessment is completed. During this assessment, nine brain domains are examined for effects. Simply put, the nine brain domains are: brain structure, sensory, attention regulation, general cognition (IQ), memory, communication, executive functioning, academic achievement and social adaptivity (Chudley *et al.*, 2005)[18]. In order for one of these brain domains to be considered affected, it must be determined that its function is two standard deviations below the mean of the normal population (Chudley *et al.*, 2005).

For a diagnosis of FAS, the individual must have evidence of at least one prenatal or postnatal growth impairment, simultaneously present all three facial anomalies (at any age), have at least three brain domain impairments, and, most importantly, maternal confirmation of alcohol exposure (Chudley *et al.*, 2005). A diagnosis of partial fetal alcohol syndrome can be obtained if there are two facial abnormalities simultaneously occurring at any age, at least three impaired brain domains, and maternal confirmation of alcohol exposure (Chudley *et al.*, 2005). A diagnosis of ARND may be obtained with confirmation of maternal alcohol exposure and at least three impaired brain domains (Chudley *et al.*, 2005). A diagnosis of ARND is not deemed to be less severe than a diagnosis of FAS, as often those diagnosed with ARND have significantly greater brain domain impairments than those with FAS but lack the physical characteristics (Chudley *et al.* 2005).

[18] An American article by Lang (2006) suggests that brain domains are often lumped together and are unclear. As such, she suggests that there should be ten concise brain domains studied when diagnosing FASD. Her ten proposed brain domains are as follows: achievement, adaptation, attention, cognition, executive functioning, language, memory, motor, sensory/soft neurological and social communication. In the Canadian Guidelines, the motor and the sensory/soft neurological brain domains are considered together.

Manifestations and Disabilities of FASD

Prenatal alcohol exposure can lead to a variety of effects including physical, mental, behavioural, and or/learning disabilities; many of which are outwardly invisible yet have lifelong implications (O'Malley, 2007; Streissguth, Barr, Kogan & Bookstein, 1997). According to Page (2007), "recognizing FASD is difficult, perhaps more so than for any other disability" (p. 122). Although FAS has physical characteristics, those features become harder to detect when an individual ages into adulthood, adding to its invisibility (Streissguth *et al*., 1997). Additionally, other diagnoses (other than FAS and pFAS) under the FASD spectrum do not have any outward physical characteristics, making them essentially invisible (yet individuals falling within this description may be equally cognitively impaired as those with FAS) (Streissguth *et al*. 1997; Streissguth *et al.*, 2004). The cognitive and/or behavioural problems associated with FASD stem from prenatal damage to the brain – organic brain damage – thus making FASD a permanent disability that cannot be cured with drugs, surgeries, or any other medical interventions (Astley *et al.* 2009; Andrew, 2011). When a person has FASD, they unfortunately are burdened with it for life (Streissguth *et al.* 1997).

Even with much research, the full range of effects of FASD is still unknown (Mattson, Roesch, Fagerland, Autti-Ramo, Jones, May, Adnams, Konovalova & Riley, 2010). As such, much work has been done to try and develop a behavioural phenotype for children and adolescents with FASD in hopes of helping to improve identification, diagnostic processes/criteria, and simply understand behaviours through the life span (Mattson *et al.*, 2010; Massey & Massey, 2007). Unfortunately, research focused solely on the cognitive and behavioural deficits experienced among FASD individuals in

adulthood are often lacking[19] (Olson, Feldman, Streissguth, Sampson & Bookstein, 1998). However, since FASD is a lifelong disability, many of the manifestations described in youth and adolescent studies continue into adulthood and sometimes become even more exacerbated. As such, it is important to consider those studies on children/adolescents as well when focusing on adults.

In a study conducted by Streissguth and colleagues in 1996, it was found that there were two types or groups of disabilities that manifest in FASD individuals. These two groups have been designated as *primary disabilities* and *secondary disabilities* (Streissguth *et al*., 1997*)*. Streissguth and colleagues (1997) describe primary disabilities as "…functional deficits that reflect the CNS [Central Nervous System] dysfunctions inherent in… [FASDs]" (p.27) and secondary disabilities as "…those that arise after birth and presumably can be ameliorated through better understanding and appropriate interventions" (p.27).

Primary Disabilities

Primary disabilities or behaviours —in other words, cognitive deficits— are a result of damage to the brain structure and central nervous system (CNS) caused by drinking during pregnancy (Brintnell, Bailey, Sawhney, & Kreftin, 2011; Mattson *et al.* 2010; Chudley, 2005; Malbin, 2004; Baumbach, 2002; Verbrugge, 2003; Olson *et al.* 1998). Studies reviewing autopsy reports of those severely affected by PAE have shown significant structural damage or changes to the brain (O'Malley, 2007). In those with less severe forms, or that are less recognizable as being affected by PAE, studies using MRI and CAT scan technology have also shown abnormalities within the structure of the brain

[19] Further, the studies that do exist tend to focus only on those adults with full fetal alcohol syndrome and not any other diagnoses found within the FASD umbrella (for a more detailed discussion, see Olson *et al.,* 1998).

- most commonly microcephaly[20] (O'Malley, 2007; Astley, Aylward, Olson, Kerns, Brooks, Coggins, Davies, Dorn, Gendler, Jirikowic, Kraegel, Maravilla & Richards, 2009).

FASD is considered a "Complex Learning Disorder" that affects multiple domains of functioning including memory, impulsivity, attention, social skills, language, and learning (O'Malley, 2007). Traditionally in determining an intellectual disability, tests of IQ are often the measures utilized. However, several studies have shown that IQ is, in fact, a poor predicator of the extent of disability in PAE individuals (O'Malley, 2007; Streissguth *et. al.* 1997; Brintnell *et al*. 2011; Kerns, Don, Mateer & Streissguth, 1997). According to O'Malley (2007), " …70 to 75% of patients with FASD are not mentally retarded, so the developmental disability is commonly seen in the context of a normal IQ" (p.5). Although some FASD individuals have normal IQs, they are often not able to perform at that predicted level (Brintnell *et al.* 2011;O'Malley, 2007; Kerns *et al.*, 1997). Therefore, there is often a discrepancy between general IQ and levels of specific cognitive functions (Kerns *et al.*, 1997). In other words, independent of IQ, an individual's executive functioning can be severely impaired (Page, 2007). Primary behaviours associated with the impaired domains of functioning can be broken down into four broad sub-categories: cognitive/learning, interpersonal/social, speech/language, and behavioural.

First, characteristics of cognitive/learning behaviours often include difficulties with memory (Dubienski, 1996; Malbin, 2004; Page, 2001). Inputting information, forming associations, integrating ideas and retrieving information are often sources of

[20] Simply put, microcephaly is a small head – meaning that the individual has a significantly smaller head than what is expected for his/her age and sex.

difficulty (Dubienski, 1996; Malbin, 2004; Page, 2001). Memory is often inconsistent and short (Dubienski, 1996; Malbin, 2004; Page, 2001). For example, they may be told something important on Monday and forget by Tuesday (Malbin, 2004).

The difficulty with forming associations often means that the FASD individuals will repeat the same mistake over and over again, regardless of punishment and increasingly punitive attitudes (Dubienski, 1996; Malbin, 2004; Page, 2001). Further, the inability to generalize information means those with FASD have trouble transferring newly learned rules to different settings (Malbin, 2004). When FASD individuals become adults, these problems clash with the expectations that society has to comply with norms (Page, 2007). As Page (2007) explains, "…the belief that all people learn from their mistakes, learn from consequences, grow inevitably into 'responsibility'…" is problematic for FASD individuals as they get older precisely because they are simply seen as individuals who "just don't want to comply" (p.124).

Those with FASD also may have issues with abstract concepts like money handling and time, which are often related to their problems with math (Dubienski, 1996; Malbin, 2004; Page, 2001). Slow cognitive and auditory pace means ideas, concepts, and language are processed much slower (i.e. they may require minutes, instead of seconds, to comprehend and generate an answer) (Dubienski, 1996; Malbin, 2004; Page, 2001). As Malbin (2004) describes, FASD affected individuals are "ten-second people in a one-second world" (p.55) and may only grasp every third word from normally paced speech.

Second, interpersonal/social characteristics are often characterized by dysmaturity[21] (Dubienski, 1996; Malbin, 2004; Page, 2001). Additionally, FASD individuals may also display perseveration (Dubienski, 1996; Malbin, 2004; Page, 2001). In other words, they may have trouble with changes in routine, program, personnel or setting (Dubienski, 1996; Malbin, 2004; Page, 2001). Similarly, they may also have problems with transitioning to a new activity and stopping the old one (Dubienski, 1996; Malbin, 2004; Page, 2001).

Impaired judgment has the potential to get FASD individuals in trouble (Dubienski, 1996; Malbin, 2004; Page, 2001). They often have difficulty making decisions and distinguishing reality from fantasy (often rendering them gullible) (Dubienski, 1996; Malbin, 2004; Page, 2001). This is especially dangerous as they cannot distinguish strangers from friends and have difficulty understanding safety as different from danger (Dubienski, 1996; Malbin, 2004; Page, 2001). Page (2007) explains that FASD individuals often exhibit a type of "moral retardation" regardless of their moral upbringings. That is, their impaired judgment or inability to recognize boundaries and their impulsivity often override any sense of moral responsibility.

Third, characteristics of speech/language usually revolve around language problems (Dubienski, 1996; Malbin, 2004; Page, 2001). Difficulty answering and comprehending questions is a major problem (Dubienski, 1996; Malbin, 2004; Page, 2001). Many individuals diagnosed with an FASD will appear to understand instructions and agree even when they truly do not understand (i.e. they might nod "yes" even when they do not actually comprehend) (Dubienski, 1996; Malbin, 2004; Page, 2001). They

[21] Dysmaturity differs from immaturity in that it signifies that a person is functioning at a younger developmental level and does not have the capacity to catch up with chronological age. In contrast, immaturity means that an individual has the capacity to catch up (Malbin, 2004).

may also give fictitious accounts to compensate for gaps in their memories (also known as confabulation) (Dubienski, 1996; Malbin, 2004; Page, 2001). Talkativeness is often used by FASD individuals to create an impression of competence although they may not be able to engage in a meaningful conversation (Dubienski, 1996; Malbin, 2004; Page, 2001). Many of those with an FASD also have the ability to recite rules perfectly, but are then unable to comply with them (Dubienski, 1996; Malbin, 2004; Page, 2001). As Malbin (2004) puts it, they are able to 'talk the talk', but not 'walk the walk'.

Finally, general behaviours/characteristics are usually summed up by the umbrella term of compromised executive functioning (Dubienski, 1996; Malbin, 2004; Page, 2001). The inability to plan, organize, prioritize, set goals, sequence and initiate then follow through are all examples of compromised executive functioning (Dubienski, 1996; Malbin, 2004; Page, 2001). It is important to note the difficulty that FASD individuals have with adhering to a schedule, being on time, and complying with contractual expectations (Dubienski, 1996; Malbin, 2004; Page, 2001). In addition (and as discussed), the inability to predict outcomes or process abstract situations can lead to impulsivity (Dubienski, 1996; Malbin, 2004; Page, 2001). Sensory system dysfunctions are also possible in those with FASD and this may, in turn, make them over-reactive to stimuli (Malbin, 2004).

Secondary Disabilities

Just as environmental factors relating to women's nutrition, stress level, etc. during pregnancy have the potential to affect the primary disabilities of the FASD individual (O'Malley, 2007; Streissguth, 2012; May, 2011;Chudley, 2011), postnatal environmental factors also tend to influence the clinical manifestation of FASD through

the mitigation or aggravation of secondary disabilities (O'Malley, 2007; Streissguth *et al.*, 1997; Page, 2007). Secondary disabilities are behavioural problems that are mediated by social factors – they develop after birth (Brintnell *et al.,* 2011; Chudley *et al.*, 2005; Malbin, 2004; Verbrugge, 2003; Baumbach, 2002; Page, 2001; Olson *et al* 1998; Olson *et al.* 1997). High levels of secondary disabilities have been explained by Streissguth and colleagues to be the effect of untreated primary disabilities which are often hidden and lead society to expect normal behaviour and reasoning (Streissguth *et al.*, 1997; Page, 2003; Page, 2007). Said differently, these behaviours are usually developed over time as defensive mechanisms (behaviours) to a constant poor fit between the individual and his/her environment (Clark *et al.* 2004).[22] It is important to note that secondary behaviours often begin to develop in early childhood and are often engrained patterns of behaviour by adolescence (Clark *et al.* 2004; Burd *et al.* 2004; Tait, 2003; Baumbach, 2002).[23] In adulthood, secondary disabilities tend to mask the primary disabilities or brain damage of the individual (Page, 2007). Many secondary disabilities associated with FASD are often misdiagnosed, as their behaviours largely resemble other differential

[22] For example, an FASD individual with a sensory system dysfunction (a primary disability) over-reacts to stimuli such as the bright lights in a classroom setting and becomes angry and aggressive as a result of being made to attend that classroom. Over time, this response leads to the disruption of his/her school experience. The anger, aggressiveness and eventual disrupted school experience are the secondary disabilities that stem from a lack of understanding and accommodation of the primary disability. In other words, it is a result of the poor fit between the individual and his/her environment. With better understanding, simple solutions such as dimming the lights could possibly have ameliorated the secondary disabilities such as the anger and aggressiveness.

[23] Notably, there are several risk and protective factors that are associated with the development of secondary disabilities (Streissguth *et al.*, 1997). A risk factor is a characteristic or condition that increases the odds of a particular disability occurring. A protective factor is a characteristic or condition that decreases the odds of a secondary disability occurring (Streissguth *et al.*, 1997, p. 27). Protective factors include living in a stable home for over 72% of the individual's life; being diagnosed before 6 years old; no experience of violence; staying in each living situation for close to three years; experiencing a good quality home from 8-12 years of age; being eligible for disability services; having a diagnosis of FAS; and having basic needs met for at least 13% of life (Streissguth *et al.*, 1997). Risk factors include a disrupted school experience, trouble with the law/confinement, and being male and older than 12 (Streissguth *et al.*, 1997).

diagnoses such as hyperactivity or attention deficit disorder as well as bipolar disorder and may even be confused with conduct disorder (Boland *et al.*, 2000; Page, 2001;Verbrugge, 2003).

In a study by Streissguth and colleagues (1997), 415 individuals (6 years of age or older with an FASD) were sampled for investigation of secondary disabilities. The most prevalent secondary disability experienced by this sample was the presence of mental health problems (observed for over 90% of the sample). Similarly, Clark and colleagues (2004) found in a study examining secondary disabilities that 92% of the 113 FASD individuals 17 years or older had at least one mental health diagnosis compared to only 30-40% of the non-PAE intellectually disabled population (Clark, Lutke, Minnes, & Ouellette-Kuntz, 2004).

Additional research studies have also found that FASD individuals tend to have co-morbid psychiatric or mental health conditions (O'Malley, 2007; Famy, Streissguth, & Unis, 1998). As O'Malley (2007) explains, "co-morbidity is the rule rather than the exception in patients with FASD. It often begins in infancy, continues through the lifespan, and may change over time due to environmental stressors" (p.11). Therefore, FASD individuals tend to have dual diagnoses – a neurodevelopmental disorder and a co-morbid neuropsychiatric disorder[24] (O'Malley, 2007). O'Malley found that co-morbid psychiatric or mental health disorders are much more prevalent in FASD individuals throughout their life — with 90-94% of FASD individuals experiencing a co-morbid psychiatric disorder compared to individuals with other developmental disabilities like Autism, Aspergers, Down's Syndrome, etc. of whom only 40% to 60% experienced a co-

[24] Co-morbid psychiatric disorders can include Attention Deficit Hyperactivity Disorder, Mood Disorders, Conduct Disorders, Major Depressive Disorder, Anxiety/Panic Disorders, etc. (O'Malley, 2007; Famy *et al.* 1998).

morbid psychiatric disorder (O'Malley, 2007). According to Massey & Massey (2007), ADHD is one of the most frequent co-morbidities among both FASD children and adults. However, they explain that "...there is a qualitative difference in the type of ADHD observed in FASD children when compared to ADHD children without FASD" (Massey & Massey, 2007, p.105). ADHD in FASD individuals generally has early onset, an atypical medication response and may actually worsen symptoms like impulsivity and aggressiveness (O'Malley, 2007b).

As individuals age into adulthood, several studies (Famy *et al.*, 1998; O'Malley, 2007) have found that co-morbid psychiatric/mental disorders become even more prevalent and features of a triple diagnosis – FASD plus a co-morbid psychiatric/mental health disorder and a co-morbid alcohol and/or substance abuse disorder — are common. O'Malley (2007) found that PAE has been shown "to increase the prevalence of co-morbid alcohol abuse in adolescents and young adults with FASD by as much as threefold" (p.11) and thus would explain the prevalence of the triple diagnosis in FASD adults.

In addition to mental health problems and disrupted school experience, inappropriate sexual behaviours have also been identified as secondary disabilities by Streissguth and colleagues (1997). Specifically, 60% of those 12 years old and over in the study were found to have experienced issues with school including expulsion or dropping out. This finding is not surprising. FASD is a complex learning disability (O'Malley, 2007) and primary disabilities related to memory, language, attention, social interaction and so on, when unaddressed/unaccommodated, can (individually and collectively) have negative effects on an individual's school experience – both academically and socially. In

a follow up study in 2004, Streissguth and colleagues found that attention problems and incomplete schoolwork were the most common learning (or, in other words, academic) problems and difficulties getting along with peers and being disruptive in class were the most frequent behavioural (or social) problems related to the disrupted school experiences of FASD individuals.

Currently, there is no *definitive* research that shows sexual offending to be more or less prevalent among individuals with cognitive and/or neurological deficits than with the normal population (Novick-Brown, 2007). However, the research that has been conducted shows slightly higher incidence rates of sexual offending among the developmentally disabled compared to the regular offending population (Novick-Brown, 2007). It is speculated that inappropriate sexual behaviours[25] are prevalent among FASD individuals because of the attention and impulse control deficits commonly associated with FASD (Novick-Brown, 2007; Baumbach, 2002). Additionally, emotional dependency, stubbornness, excessive need for attention, failure to learn from mistakes, lack of consideration for others, and unresponsiveness to social cues, are also primary functional deficits that affect sexual behaviour in FASD individuals (Novick-Brown, 2007). Not only do primary deficits related to PAE have the potential to impair sexual expression, but there is also a lack of sexual socialization generally for people with cognitive disorders (Novick-Brown, 2007). As Novick-Brown (2007) explains, "instead of recognizing that individuals with CNS [central nervous system] impairments have the same sexual urges and desires as non-impaired persons and teaching them the range of

[25] Inappropriate sexual behaviours include: inappropriate sexual advances, inappropriate sexual touching, incest behaviour, voyeurism, exhibitionism, promiscuous sexual behaviours, compulsive sexual behaviour (e.g. compulsive masturbation), public masturbation, obscene phone calls, sexual acts with animals, contact with the law regarding sexual offending or any other worrisome sexual behaviours (Novick-Brown, 2007; Streissguth *et al.*, 2004).

behaviours involved in appropriate sexual expression, caregivers generally ignore their sexuality until problems develop" (p.152).

In the study of secondary disabilities by Streissguth and colleagues, inappropriate sexual behaviours were reported for about 50% of FASD individuals 12 years of age and over (Streissguth *et al.*, 1997). In the more recent follow-up study (Streissguth *et al.,* 2004), repetitive inappropriate sexual behaviours were found to be the most adverse life outcome for FASD individuals across the lifespan after mental health problems (Novick-Brown, 2007; Streissguth *et al.* 2004). Additionally, inappropriate sexual behaviours were found to increase slightly with age from 39% in children to 48% in adolescents and 52% in adults (Streissguth *et al.* 2004; Novick-Brown, 2007). The most frequent inappropriate sexual behaviours in childhood were found to be exposing oneself and inappropriate touching; in adolescence and adulthood, promiscuity and inappropriate sexual advances were found to be most common (Streissguth *et al.*, 2004). This study also showed that there appeared to be some gender differences when it came to the type of inappropriate sexual behaviour among adults and adolescents. For example, promiscuity was twice as common in females than in males and males were twice as likely to have had trouble with the law for inappropriate sexual behaviours (Streissguth *et al.*, 2004).

While many of the secondary disabilities associated with FASD begin to develop early in life, there are some that are more specific to adults. Most notably, a study by Streissguth and colleagues (1997) of those over 21 years of age (n=90) suggested that dependent living and problems with employment were particularly prevalent characteristics of FASD individuals. Specifically, it was found that only seven out of the

90 individuals lived independently – that is, over 90% of the sample were in a dependent living situation. In this same study, 80% were found to have had problems with employment.[26]

Whether one focuses on children, adolescents or adults with FASD, arguably the most worrisome secondary disabilities highlighted by Streissguth and colleagues (1997) are trouble with the law and confinement. These researchers found that 60% of those 12 years and over had come into contact with the law through either contact with authorities, a charge, or conviction of a crime (Streissguth *et al.*, 1997). Further study by Streissguth and colleagues (2004) identified the most frequently mentioned category of law violations as crimes against persons. Further, they found that "among those [in trouble with the law], the fraction actually charged, arrested and/or convicted increases with age from 13% for children to 67% for adolescents and 87% for adults" (p.233). Subsequently, 50% of the FASD individuals 12 years old and over in this sample had been incarcerated for a crime or had been confined to an inpatient treatment centre for mental health or alcohol/drug problems (Streissguth *et al.*, 1997).

For criminologists, these findings are unsurprising. Criminological research (see, for example, Wilson J.Q & Petersilia, J. (Eds.) 1995; Levitt, S.D. & Lochner, L. 2001) has repeatedly identified disrupted school experience, employment difficulties, substance abuse issues and mental health problems as correlates of involvement in the criminal justice system. Given the prevalence of these factors – as secondary disabilities of FASD individuals – it is not unexpected that they can lead to the criminalization of this population (Byrne, 2002; Malbin, 2004; Page, 2001). And, in fact, multiple scholars

[26] Of note, research conducted by Clark and colleagues (2004) found that 92% of FASD individuals in their study were also described by their caregivers as "vulnerable to manipulation" (p.10) and 87% of the FASD adults had experienced verbal, physical and/or sexual abuse.

(Byrne, 2002; Malbin, 2004; Page, 2001; Stade, Ali, Bennett, Campbell, Johnston, Lens, Tran & Koren, 2009; Brintnell *et al.*, 2011; Thanh, Jonsson, Dennett & Jacobs, 2011; Thanh & Jonsson, 2009) have noted that individuals with FASD not only frequently come into contact with the health care system, social services (child protection/foster care, welfare, disability services etc.) and the education system but also with the criminal justice system.

Indeed, behavioural and cognitive disabilities (i.e. primary and secondary disabilities) play a large role in FASD individuals' involvement with the justice system (Fast & Conry, 2004; Koren, Roifman & Nulman, 2004; Malbin, 2004; Verbrugge, 2003). As Verbrugge (2003), states, "the most pressing legal issues arise from the cognitive and behavioural expressions of the disorder" (p.2). The result, as Malbin (2004) explains, is that "a disproportionate number of people involved in the legal system have FASD" (p. 54; see also Fast & Conry, 2004 and Fast, Conry, Loock, 1999).

In an attempt to determine the prevalence of youth in the justice system, Fast, Conry and Loock (1999) conducted a study of youth remanded to a psychiatric inpatient facility in British Columbia for psychological and psychiatric assessments. They found that of the 287 studied, 67 (23.3%) had an alcohol-related diagnosis; three of those 67 were diagnosed with full FAS (Fast, Conry, Loock, 1999). Overall, they found that "the percentage of occurrence of fetal alcohol syndrome (FAS) in the youth remanded to the Inpatient Assessments Unit (1.0%) is 3 to 10 times the accepted worldwide incidence for this disorder..." (Fast, Conry, Loock, 1999, p.2). Looking at youth rates is also important in determining possible rates for FASD adults involved in the justice system. Indeed, precisely because these youths do not "grow out" of FASD, they become adults with

FASD. One of the only studies to specifically examine adult rates (in an adult correctional setting) found that 10% of the 91 adult offenders screened had an FASD and an additional 18% were listed in the "possible" category (Fast & Conry, 2009; MacPherson & Chudley, 2007).

Challenges of FASD to the Justice System

Clearly, a non-trivial number of FASD individuals are involved in the Canadian criminal justice system. Not surprisingly, this population has begun to attract scholarly attention (Fast & Conry, 2004; Malbin, 2004; Roach & Bailey, 2009; Chartrand & Forbes-Chilibeck, 2003) as well as consideration by justice practitioners (Boulding, 2007; Moore & Green 2004; Moore & Gagnier, 2008; Gagnier, Moore & Green, 2011; Cox, Clairmont & Cox 2008). Indeed, the (often multiple) disabilities experienced by FASD people (rendering them particularly susceptible to involvement with the law) constitute significant concerns for the justice system. In fact, all stages of the criminal process – police, courts and corrections – are faced with considerable challenges in dealing with this population (Fraser, 2008; Chartrand & Forbes-Chilibeck, 2003; Roach & Bailey, 2009).

Police

As the frontline workers of the justice system, the police are likely to be the first persons with whom FASD individuals will have contact in the criminal justice system. It is important to remember that FASD individuals can come to the attention of the police as suspects, but also as victims or witnesses. Further, each role presents significant challenges due to the deficits of FASD. More specifically, memory and language deficits, as well as slow auditory and cognitive paces are often at the centre of the difficulties

posed by FASD individuals during their contact with police (Fast & Conry, 2009; Laporte, McKee, Lisakowski, Chudley, & Conry, 2002).

Simply as a case in point, one can consider the central role of police questioning. Research has found that because individuals with FASD often have a limited ability for abstract thinking, they may not possess the ability to relate one question to another and consequently become easily confused (Laporte, *et al.* 2002; Fast & Conry, 2009; Fast & Conry, 2004; Malbin, 2004). Confusion created by questioning can, in turn, lead to frustration and agitation, which may be perceived as defiance and aggression by uneducated police officers (Fast & Conry, 2004; Malbin, 2004). Additionally, Fast & Conry (2009) explain that "individuals with FASD, similar to those with intellectual disabilities, are more suggestible and tend to acquiesce to statements and questions by police…" (p. 254). They tend to be particularly vulnerable to acquiescence when they are confused with questioning. This outcome is exacerbated by the fact that most FASD individuals are eager to please (Fast & Conry, 2009; Moore & Gagnier, 2008), further undermining the reliability and validity of statements made by FASD persons.

As a corollary of these tendencies, FASD individuals may not understand the consequences of providing police with self-incriminating statements (Moore & Gagnier, 2008). Moreover, certain FASD deficits like impulsivity, suggestibility, cognitive deficits, language deficits and impaired executive functioning also increase the likelihood of providing false statements (Gagnier, Moore & Green, 2011). Thus, FASD individuals are said to be vulnerable to making false confessions (Fast & Conry, 2009). Similarly, a person's decision to waive his/her rights is yet another area that poses considerable

challenges for FASD individuals. As Moore & Gagnier (2007) point out, the caution used in Canada is linguistically complex and is often at odds with FASD deficits.

Trial Process/Determining Guilt

As an accused in the justice system, FASD individuals continue to pose significant challenges as they move through the criminal court process. Specifically, the assumptions on which the Canadian criminal justice system are built are tested by the reality of FASD. As explained by Roach & Bailey (2009),

> The cognitive deficits associated with FASD present a fundamental challenge to the standard assumptions of the Canadian criminal justice system. The justice system is premised on assumptions that people act in a voluntary manner that is determined by free will and that they can make informed and voluntary choices both with respect to the exercises of their rights and the decision to commit crimes (p. 3).

Exceptions to this vision of voluntariness have been made for issues of mental disorder. However, the law assumes that mental disorders can be treated and cured – that is, they are not permanent (Roach & Bailey, 2009; Fraser, 2008; Gagnier, Moore & Green, 2011; Verbrugge, 2003). As has been mentioned several times, FASD is permanent organic brain damage that cannot be "cured." As such, "the treatment of FASD defendants raises fundamental questions about how we assess individual responsibility, both at the guilt-determining and sentencing stages of the adjudicative process" (Moore & Green, 2004, p. 3).

The answer – it would seem – is that FASD offenders have generally fallen into a grey area or, perhaps more accurately, 'fallen between the (legal) cracks'. As Verbrugge (2003) highlights, a principle of fundamental justice is that an accused will not be found guilty unless there was a blameworthy state of mind when the act was committed. A person can be found unfit to stand trial if it can be proven that he/she does not understand

the nature, object, and potential consequence and cannot instruct counsel (Gagnier, Moore & Green, 2011). Despite often possessing primary disabilities which might arguably limit (if not, in many cases, inhibit) the extent to which FASD accused possess this understanding and abilities, Gagnier, Moore & Green (2011) clarify that relatively few FASD offenders have been found unfit to stand trial (UST). As Verbrugge (2003) explains, the idea of this remedy is that the offender will eventually become fit to stand trial and until that time they will remain in custody. However, he further notes that this assumption is inappropriate as FASD individuals will never recover the sufficient mental capacities because of the organic brain damage (Verbrugge, 2003; see also Roach & Bailey, 2009).

Similarly, in order to establish that someone is Not Criminally Responsible by Reason of Mental Disorder (NCRMD), the defence must prove that the accused was fully unable to comprehend the consequences of his/her actions because of the mental disorder (Gagnier, Moore, & Green, 2011). In many cases, FASD individuals do not rise to the required standard to be found NCRMD (Gagnier, Moore & Green, 2011;Roach & Bailey, 2009; Verbrugge, 2003; Chartrand &Forbes-Chilibeck, 2003). As such, Gagnier, Moore & Green (2011) assert that FASD accounts for only three percent of cases that appear before review boards in Canada.

Corrections

Although some FASD offenders may do well in prison because of the rigid structure and constant supervision, they tend to more often encounter problems (Boulding, 2007; Gagnier, Moore, & Green 2011; Brintnell *et al.*, 2011). As Gagnier and colleagues (2011) point out, not only does incarceration provide structure, it also provides

increased exposure to anti-social peers. Because of suggestibility, gullibility, and wanting to be well liked by fellow inmates, the possibility of negative influences of prison on FASD offenders is increased (Fast & Conry, 2004) In turn, prison may actually increase the criminality of FASD offenders or exacerbate their secondary disabilities (Brintnell *et al.*, 2011).

Further, people with FASD tend to be victimized (both psychologically and physically), used as scapegoats, and/or recruited for gangs while in prison (Brintnell *et al,* 2011). Particularly with adults in prison, being stigmatized as stupid, according to Brintnell and colleagues (2011), can have dangerous consequences. Additionally, for many FASD offenders, learning the rules of the prison and the rules of the other inmates is extremely difficult because the hierarchy of prison relies heavily on social cues and the understanding of social order which many FASD offenders lack (Brintnell *et al.*, 2011; Fast & Conry, 2004).

Finally, traditional prison programming has been found to be quite ineffective in treating FASD offenders because of the unique deficits that FASD offenders possess (Brintnell *et al.*, 2011; Chartrand & Forbes-Chilibeck, 2003). Although impairments due to PAE are recognized as a disability in the courts, the same is not true for corrections. As Brintnell and colleagues (2011) explain, "those people whose brain functions are impaired by PAE are not currently considered intellectually disabled by the corrections system" (p. 238).

This disconnect between the expectations of corrections and the actual abilities of the offender greatly reduces the potential of rehabilitation[27] in a correctional environment (Brintnell *et al.* 2011). Submitting FASD offenders to traditional programming has been described by some (Brintnell *et al.* 2011) as setting the offender up for failure. Although some correctional programs would do well in dealing with the secondary disabilities acquired by FASD offenders, these programs are not tailored to the learning and specific needs of the FASD offender (Chartrand & Forbes-Chilibeck, 2003; Gagnier, Moore, & Green, 2011).

Challenges of FASD at Sentencing

The sentencing stage is arguably the most critical stage of the criminal justice system as it holds the possibility of significantly impacting the freedom and, in turn, the life of the offender. In recent years, the mention or acknowledgement of FASD in court cases has been increasing. Having said this, and as Gagnier, Moore and Green (2011) point out, "…FASD is still primarily considered at sentencing" (p.431)(see also Roach & Bailey, 2009). A possible reason for this occurrence is that it may not be wise, or in the offender's best interest, to raise the issues of FASD before this stage as FASD does not fit well with the NCRMD and fitness to stand trial doctrines because of the permanency of the disability (Roach & Bailey, 2009; Chartrand & Forbes-Chilibeck, 2003). Specifically, Roach and Bailey (2009) explain that "given the difficulty…of fitting FASD into traditional criminal law doctrines of fault and defences, it is not surprising that FASD is most commonly discussed in judgments at the sentencing stage" (p. 45). In other words, Verdun-Jones and Butler (2013) explain that "…Canada does not recognize the

[27] The term of 'rehabilitation' is used loosely here. As it has already been determined that FASD is lifelong and cannot be cured (being a result of organic brain damage), rehabilitation in terms of FASD offenders refers simply to the mitigation of secondary disabilities.

doctrine of diminished criminal responsibility in the determination of guilt or innocence, it is only at the sentencing stage that the impact of mental disorder and/or neurocognitive impairment on the degree of the offender's responsibility may be taken into account" (pp. 496-497).

Although FASD has been found to be primarily discussed at the sentencing stage, little is known about how judges are actually dealing with these offenders. Indeed, while FASD research pertaining to the justice system is quite limited as a whole, even less research has focused on the sentencing stage - in contrast to the other stages of the criminal justice system (police, trial process and corrections). In view of the literature surrounding the challenges which FASD poses generally, it would not seem incorrect to assume that FASD offenders raise unique and difficult issues for sentencing judges.

One of the broadest challenges that FASD poses to sentencing revolves around the issue of knowledge. A sizeable amount of the literature states that although a large proportion of people involved in the legal system have FASD, the knowledge and attitudes of justice system workers in relation to FASD are often deficient. Cox, Clairmont & Cox (2008) surveyed 20 judges and 19 prosecutors about their knowledge of and attitudes towards FASD. From the survey, a lack of formalized training and education in regards to FASD individuals is evident. Fifty-three percent of both judges and prosecutors cited the media as a crucial source of information about FASD (Cox *et al.*, 2008). Further, both prosecutors and judges often acknowledged their lack of familiarity in regards to diagnosis and labeling of FASD disabilities (Cox *et al.*, 2008).

Perhaps more importantly, although judges and prosecutors acknowledge that they see FASD-related disabilities regularly, they admit that they are not as prepared as

they would like to be to deal with the situation (Cox *et al.*, 2008; Verbrugge, 2003; Boland *et al.,* 1998). These legal professionals blame the lack of provincial FASD diagnostics and intervention services as well as a lack of training for their personal knowledge deficits (Cox *et al.*, 2008). Whatever the underlying causes, Chartrand & Forbes-Chilibeck (2003) claim that "The Canadian judicial system, for the most part, is uninformed, misinformed and ill-prepared to deal with the challenge these [FASD] individuals present" (p.43). Equally notable, Roach & Bailey (2009) stress that the "growing jurisprudence on FASD has been developed almost entirely by judges. It is not uniform in its treatment of FASD, especially with respect to taking of statements and sentencing" (p. 5). It is interesting to note that there is nothing in any of the literature to contradict this claim of a lack of knowledge.

Not surprisingly, recommendations as to how to deal with FASD individuals in the justice system are few and quite diverse. There has been no uniform method or consensus reached as to the appropriate intervention for adults who are involved in the justice system. In fact, literature specifically related to how to deal with FASD in the justice system is very scarce. By extension, sentencing judges find themselves in a sort of a conundrum: judges who claim that they are not knowledgeable about FASD are creating precedents in FASD cases. This leaves room for great variation in sentencing and the possibility that offenders' sentences may be misaligned with their disability.

Even if judges are aware of (and understand) FASD, they still face challenges pertaining to diagnostic issues and a lack of *Criminal Code* provisions for assessment (should they suspect an offender of having FASD). In sharp contrast to the adult system, the Youth Criminal Justice Act (YCJA, which came into force in 2003) has devices built

into it to provide diagnostic opportunities for youth suspected of mental health issues, including FASD. For example s. 34 of the YCJA states:

> 34. (1) A youth justice court may, at any stage of proceedings against a young person, by order require that the young person be assessed by a qualified person who is required to report the results in writing to the court,
>
> (*a*) with the consent of the young person and the prosecutor; or
>
> (*b*) on its own motion or on application of the young person or the prosecutor, if the court believes a medical, psychological or psychiatric report in respect of the young person is necessary for a purpose mentioned in paragraphs (2)(*a*) to (*g*) and
>
> (i) the court has reasonable grounds to believe that the young person may be suffering from a physical or mental illness or disorder, a psychological disorder, an emotional disturbance, a learning disability or a mental disability,
>
> (ii) the young person's history indicates a pattern of repeated findings of guilt under this Act or the Young Offenders Act, chapter Y-1 of the Revised Statutes of Canada, 1985, or
>
> (iii) the young person is alleged to have committed a serious violent offence.

Therefore, directing an assessment for FASD by an FASD specialist has been found to be within the jurisdiction of the court (*R v. K. (T.)* 2006, NUCJ 15). In *R v. K. (T.)* (2006), for example, the court states:

> … the details of the assessment that was ordered in the case at bar, namely, the specific assessor and the specific type of assessment, were within the jurisdiction of this Court. This authority is much broader than that conferred by s.672.11 of the Code and permits the Court to order a particular expert to assess a particular problem such as fetal alcohol syndrome (para. 30).

In comparison, there is no meaningful equivalent in the *Criminal Code* that compares with the diagnostic potential created by the YCJA. Section 672.11 of the *Criminal Code* allows for an assessment of the mental condition of the accused in a more restrictive sense. For example, an assessment can be requested if the court has reasonable grounds to believe that it is necessary in order to determine fitness to stand trial, mental capacity at time of offence, or if a 'not criminally responsible' verdict has been rendered.

Notably, it does not mention sentencing or other applications. In fact, in a British Columbia case (*R v. Gray* 2002 BCSC No. 1192), the British Columbia Supreme Court found on *Certiorari* that the court was reaching beyond its authority when it ordered a diagnostic assessment for a suspected FASD adult offender using s. 672.11 and s. 672.14. It was stated that "While it is clear that an assessment order to determine whether an accused is unfit to stand trial or not criminally responsible may be made at any time during the proceedings (section 672.12), the court has no jurisdiction to make an assessment order under that section for the purpose of determining sentence" (R v. Gray 2002 BCSC No. 1192, para. 30). Regarding the request of an FASD-specific assessment, the court stated specifically that

> There is nothing in this section that gives the court the jurisdiction to order a specific type assessment such as an assessment to determine whether the accused has schizophrenia, has brain damage caused by meningitis or fetal alcohol syndrome. Rather what the court can order is that a medical practitioner conduct an assessment into the mental condition of the accused to determine whether he understands the nature and object of the proceedings, understands the possible consequences of the proceedings or can communicate with counsel… to determine whether he understands the nature and quality of the act he is accused of committing or whether he understands that it was wrong (*R v. Gray*, 2002 BCSC No 1192, paras. 54, 55).

The lack of legal provisions for assessment, layered with the diagnostic difficulties facing adults (as previously discussed), greatly reduces not only the visibility of adult FASD offenders, but also (and especially, given the focus of the research) the information available to the sentencing judge regarding these offenders.

In addition to the varying levels of knowledge of FASD and a lack of provisions for assessment, sentencing judges are also faced with limited alternative options to incarceration (Gagnier, Moore & Green, 2011; Chartrand &Forbes-Chilibeck, 2003). Jail is the harshest sanction available and often the one most frequently imposed when

sentencing FASD offenders precisely because it is the best way to ensure rehabilitation efforts while ensuring public safety (Roach & Bailey, 2009). Programming and community resources as well as support are severely lacking, making it difficult for FASD individuals to be monitored in the community, hence the use of a custodial sentence (Roach & Bailey, 2009).

In addition to procedural differences, the YCJA also focuses on providing programming for criminally involved youths. Although restorative justice programs, diversionary programs and alternative measures are provided for in s. 718.2 of the C*riminal Code*, their use obviously depends on their existence. *An inventory of programming for youth and adults who have FASD and are involved with the criminal justice system* by Charlotte Fraser (2008) shows that nationally, Canada has (as of June 2008) eight FASD programs operating; only two of those programs are adult focused while the rest are youth focused. Of these two adult programs, one serves as transition housing and programming for adult male offenders released from federal prison on parole (Genesis House FASD program), and the other is an alternative to custody for adult offenders[28] with mental health problems, addictions, and/or FASD (Fraser, 2008; Yukon Courts).[29]

Challenges to sentencing judges only multiply when one considers the various purposes of sentencing and their application to FASD offenders. Section 718 of the

[28] Note, however, that offenders cannot be involved if their offences resulted in death, involved crimes of violence against children, were of a sexual nature, involved serious violence or if a dangerous or long term offender application is being considered, or if they are known to be involved with a criminal organization or have other serious charges outstanding (Yukon Courts). These exclusions severely limit the FASD population.

[29] A quick scan of more recent literature and the Internet for more up-to-date programming information (and/or new programs) yielded nothing. An FASD-specific substance abuse program starting in 2012 was mentioned in one FASD legal case (*R v. Blanchard,* 2011). However an attempt to find more information on this program again yielded no results.

Criminal Code states that "the fundamental purpose of sentencing is to contribute, along with crime prevention initiatives, to respect for the law and the maintenance of a just, peaceful and safe society by imposing just sanctions that have one or more of the following objectives…" which are namely denunciation, deterrence, separation from society (i.e. protection of society), rehabilitation, reparation and the promotion of a sense of responsibility in offenders (*Criminal Code,* 1985, s. 718; Gold, 2012). There is a debate (or rather a lack of consensus) about which purposes of sentencing should be applied to FASD offenders due to their differing cognitive abilities. As a case in point, there is some indication in the literature that in some courts, deterrence is progressively becoming regarded as inappropriate when used for an FASD offender.

Indeed, according to Chartrand and Forbes-Chilibeck (2003), there has been some judicial recognition at the trial level that approaches such as deterrence should no longer be applied to offenders with FASD. However they caution that because of a lack of appellate court decisions, it is too soon to say whether deterrence and/or denunciation is/are no longer appropriate to use in cases involving FASD offenders (Chartrand & Forbes-Chilibeck, 2003). Roach and Bailey (2009) echo this finding, explaining that some judges reject the use of general or specific deterrence for FASD offenders. Additionally, Roach and Bailey (2009) suggest that although denunciation is related to the seriousness of the offence, it should not be separated from the degree of responsibility of the offender.

To further complicate the sentencing process, the length of a sentence can also be affected by aggravating and mitigating factors of the offence. Not surprisingly, there is also debate about whether FASD should be considered a mitigating or aggravating factor

(Roach & Bailey, 2009; Chartrand & Forbes-Chilibeck, 2003). The answer is not clear-cut. Typical mitigating factors include: being a first time offender; having prior good character; entering a guilty plea and demonstrating remorse; evidence of an impairment; a good employment record; post-offence attempts at rehabilitation, etc. (Manson, Healy, Trotter, Roberts & Ives, 2008). In contrast, aggravating factors include - but are certainly not limited to - whether the offence was motivated by bias, prejudice, or hate; whether the offender abused a position of trust or authority; whether during the offence an offender abused his/her spouse or child; and whether the offence was committed for or in association with a criminal organization (Gold, 2012).

For the most part, Roach and Bailey (2009) found that FASD was "properly viewed as a mitigating factor because of its influence on moral culpability…" but its effect on sentence did not always reflect this view of reduced moral culpability (p. 52). At first, it was suggested that FASD has been found to often increase an offender's custodial time for two reasons: poor judicial understanding and the prospect of rehabilitation (Roach & Bailey, 2009). According to Roach and Bailey (2009), there are two types of cases that see increased custodial time in response to FASD. The first is the situation in which an offender is seen as unlikely to benefit from (or even complete) programming and, by extension is at a high risk to reoffend (Roach & Bailey, 2009). The second case occurs where a sentence is increased because the offender is a good candidate for rehabilitation but the availability or the duration of the program requires a longer (most often federal) sentence (Roach & Bailey, 2009). For example, the only place in which an offender can receive FASD-specific programming in Newfoundland and Labrador is in the federal penitentiary (Roach & Bailey, 2009).

Looking broadly at the literature on FASD and the justice system, it becomes quite clear that FASD is at odds with the current legal theory employed in Canada. Given the issues regarding criminal responsibility in the determination of guilt (i.e. Canada does not have a doctrine of diminished criminal responsibility and UST and NCRMD standards pose issues for FASD), and the lack provisions for assessment in the *criminal code*, it is not surprising that FASD also appears at odds with sentencing theory (i.e. the principles and purposes of sentencing). As Roach and Bailey (2009) explain, "the fundamental principle for sentencing adults is the retributive idea that the sentence must be proportionate to the gravity of the offence and the offender's degree of responsibility" (p.2).

It appears then, that judges are left grappling with how to reconcile proportionality with the purposes of sentencing when it comes to FASD offenders. Clearly, there appear to be good reasons to suspect that sentencing judges face a difficult task with FASD offenders. Unfortunately, while these complex issues are frequently commented in the literature (Roach & Bailey, 2009; Chartrand & Forbes Chilibeck, 2003; Gagnier, Moore & Green, 2011; Moore & Gagnier, 2008), there has been little empirical research conducted on the reality of sentencing for FASD offenders. That is, if (and how) judges take FASD into account at sentencing. Of the few available studies (see, in particular, Chartrand & Forbes-Chilibeck, 2003; Douglas, 2010), discussions of the sentencing of FASD offenders are not the primary focus. Perhaps by extension, they tend to raise more questions than they answer about the (potentially unique) issues surrounding this offender population. There are a few notable exceptions (Verdun-Jones & Butler, 2013; Roach & Bailey, 2009). However, while these studies focus on the actual

sentencing of FASD offenders, they share one important limitation. Specifically, they lack a comparison or control group which compares the sentencing of FASD and non-FASD offenders.

For instance, in their study, Chartrand and Forbes-Chilibeck (2003) identified 42 offenders with FAS/ARND. Of those 42 offenders, they found that the majority of the cases were Aboriginal offenders (31) with the remaining 11 cases being either non-Aboriginal or unknown. In addition, they noted what they called a "pocket of expertise" in courts in British Columbia, Saskatchewan and the Yukon (Chartrand & Forbes-Chilibeck, 2003, p. 41). Their sample appeared to range in age from 12-43 although this issue was not discussed in the body of their paper. All of the offenders in the cases reported in the study had other diagnoses such as a mental health issue or substance abuse problem, in addition to Fetal Alcohol Syndrome (FAS)/Alcohol Related Neurodevelopmental Disorder (ARND). Twenty-two of the cases had a firm FASD diagnosis and 15 were just suspected of FAS. Three cases had a firm ARND diagnosis and two were only suspected of ARND. While clearly valuable information on the demographic profile of FASD offenders as relevant factors at sentencing, the ability to determine whether certain of these characteristics of FASD offenders are taken into consideration by the sentencing judge compared to non-FASD offenders was absent because of a lack of a comparison group. More broadly, it is impossible to know whether judges sentence FASD (versus non-FASD) offenders differently.

Indeed, the ability to compare similar FASD and non-FASD offenders is essential in order to identify whether any differences exist in the decision-making process and the sentences which are ultimately handed down to FASD offenders. Within this context,

this study aims to conduct a comparative study of sentencing of adult FASD and non-FASD offenders. More specifically, this research will not only compare the descriptive or demographic characteristics of FASD (versus non-FASD) offenders but also examine any differences in the purposes, type and length of sentencing. To this end, this study will attempt to answer (if only partially) the following research questions:

1) How do judges describe FASD offenders?
    a. Do these descriptions differ from the way in which they describe non-FASD offenders who have committed similar crimes?
    b. Additionally, are there specific factors or information that judges seem to consider salient when addressing FASD (versus non-FASD) cases? Said differently, do judges report or highlight different information in their sentencing reports when dealing with FASD offenders than when dealing with non-FASD offenders?
2) Are judges trying to accomplish different purposes when sentencing FASD versus non-FASD offenders? That is, are there specific sentencing purposes that judges consider to be more appropriate or relevant for FASD offenders?
3) Are FASD offenders sentenced differently than non-FASD offenders? That is, do judges hand down different sentences for FASD (versus non-FASD) offenders?

CHAPTER THREE

Method

In an attempt to determine if/how FASD is taken into account at sentencing, the following research questions were addressed in this study:

1) How do judges describe FASD offenders? Do these descriptions differ from the way in which they describe non-FASD offenders who have committed similar crimes? Additionally, are there specific factors or information that judges seem to consider salient when addressing FASD (versus non-FASD) cases? Said differently, do judges report or highlight different information in their sentencing reports when dealing with FASD offenders than when dealing with non-FASD offenders?
2) Are judges trying to accomplish different purposes when sentencing FASD versus non-FASD offenders? That is, are there specific sentencing purposes that judges consider to be more appropriate or relevant for FASD offenders?
3) Are FASD offenders sentenced differently than non-FASD offenders? That is, do judges hand down different sentences for FASD (versus non-FASD) offenders?

As all of these questions are inherently comparative in nature (that is, focusing on FASD as compared to non-FASD offender populations), the research design employed in this study needed to reflect this characteristic. As such, the current project adopted a pre-experimental design. This type of research design is typically used in observational situations in which independent variables are not/cannot be manipulated (Mann, 2003; Carlson & Morrison, 2009). In other words, the effect of an intervention, disease or

disability is observed, rather than manipulated, by the researcher (Carlson & Morrison, 2009). Indeed, it is impossible to randomly assign FASD to participants in this study. Rather, the two groups of interest were already pre-determined prior to this research project. Clearly, it would have been preferable to have used an experimental design given its strength in permitting causal inferences to be drawn. Unfortunately, given the nature of this study (particularly the inability to randomly assign our principal independent variable – FASD/non-FASD), a pre- or non-experimental design was used. Specifically, a static group comparison was chosen. Obviously, any differences found between the two groups of interest must be considered to be merely correlational (and not causal) in nature.

A static-group comparison occurs when one group has already (i.e. not as a result of the study) experienced a treatment, intervention, disease, etc., whereas the comparison- or control-group has not (Campbell & Stanley, 1963; Mann, 2003; Carlson & Morrison, 2009). A static group comparison follows a cross-sectional design in that it examines a snapshot of the study's variables at one point in time to reveal how they are represented in a cross-section of the population (Campbell & Stanley, 1963; Mann, 2003; Carlson & Morrison, 2009). Although static-group comparisons tend to use non-random, non-matched groups, this does not mean that an attempt to match some of the variables cannot be undertaken. In fact, in an attempt to increase the comparability of the two groups of interest, matching certain variables in the control group with the sample group was carried out (Mann, 2003; Carlson & Morrison, 2009). The selection of cases observed in this study focused on ensuring certain similar characteristics for all offenders. Specifically, only adult offenders who had been convicted of a criminal offence and

sentenced in a provincial/territorial court were considered. Appeals, youth cases, dangerous offender applications, and non-criminal cases (i.e. family court, tax laws, legislation, etc.) were omitted from the study.

Data Sources

As FASD is a relatively understudied topic and does not garner the same legal attention that other issues may, there is no formal FASD-specific legal case reporter or database. Thus, there is no simple — or comprehensive— way to go about collecting sentencing data on FASD offenders. For practical reasons, the collection of data through direct observation in the courts was not an option for several reasons. First, the length of time that would be required to collect a sufficient sample would far exceed the scope of this study. Knowledge of FASD by the courts, as discussed previously, tends to be low (especially outside western Canadian jurisdictions), with few FASD cases likely being identified. By extension, it is almost certain that one would have to sit through days (or more) of cases before one pertaining to an FASD offender arises.[31] Requesting and collecting court transcripts is also time consuming and would be prohibitively expensive as most provinces charge a fee for transcript requests. From a practical perspective, collecting cases directly from the courts would have also limited the project to a single jurisdiction, in turn limiting the breadth of the study.

This study, therefore, examined written sentencing judgments involving offenders identified as FASD. A limitation of written judgments is that unlike transcripts, they do not include all of the information given in open court at the time of sentencing. Further,

[31] Further, observations would be complicated by the fact that some defence lawyers will strategically not raise the issue of a possible diagnosis of FASD. In addition, there is the possibility that although FASD is mentioned in a pre-sentence report used by the judge while constructing a sentence, it may not be mentioned during the hearing.

certain cases involving FASD would not be included in the population of 'written judgments'. These would include, for example, routine cases involving joint crown-defence submissions, cases that are subject to publication bans, cases in which defence counsel does not raise the offender's FASD status, etc.

Despite these limitations, this data source has the advantage of examining those cases which judges deemed important enough to produce a written (and publicly available) judgment. Further, written judgments are also unobtrusive to collect. Perhaps even more importantly given the focus of the current study, the advantage of looking at written judgments[32] resides in their richness. In contrast, the more routine 'joint submission' cases in which few reasons for sentences are given, it is more likely that this type of data source will include details of the manner in which judges assessed the cases. Additionally, these written judgments tend to be easier and most cost efficient to access in comparison to transcripts, while still managing to provide a detailed account of the proceedings.

There are several methods to accessing case law. The most common are through printed case reporters and through electronic database searches. Recently, electronic research has become very commonplace when doing legal research (McCormack, Papadopoulos & Cotter, 2010). Conducting legal research through print is still carried out and is indeed still very important. However, electronic research has several benefits over searching only traditional print sources, like court reporters and the *Canadian*

[32] Judgments that were, essentially, written judgments but were apparently delivered orally were also included. These were largely indistinguishable from 'written' judgments. The main issue, for inclusion in the study, was that the two samples of offenders include judgments in which the logic of the sentence and some information about the accused, etc., was included.

Abridgment (McCormack *et al*., 2010). Electronic research expands the ability to collect case law beyond what is traditionally available in libraries (McCormack *et al*., 2010). For example, what is often found in library holdings are traditional printed court reporters which have limits as to what can be included due to length; electronic research databases give greater access to a larger number of cases because they have the ability to publish the cases that do not make it into the printed sources (McCormack *et al*., 2010). Printed law reporters are selective in what they report – choosing only certain cases to publish (McCormack *et al*., 2010). Additionally, print sources are only updated when new volumes are published whereas electronic databases have the potential to be updated as soon as new judgments or legislation are produced and released (McCormack *et al*., 2010). Electronic databases therefore give greater access to a larger number of cases than traditional reporters (McCormack *et al*., 2010). Perhaps the most beneficial quality of electronic databases is the ability to search case law based on topics, keywords, case facts and so on (McCormack *et al.*, 2010). This ability greatly increases the simplicity and efficiency of searching for topic-relevant case law.

McCormack *et al*. (2010) explain that "there are three different kinds of electronic legal research providers: commercial vendors, government providers, and non-profit providers"(p.49). Commercial vendors are companies that compile case law, statutes, legislation, journal articles, government documents, books, and other legal and academic reports and make them available to users in full text format (McCormack *et al*., 2010). These services are usually provided by paid subscription or pay-per-use – they are not free (Best, 2011). Examples of commercial vendors are LexisNexis Quicklaw and Westlaw LawSource. Government providers are somewhat more limited than commercial

vendors in what they provide access – which is generally provide access to statutes, legislation, bills and Supreme Court decisions (Best, 2011). An example of a government provider would be the Parliament of Canada website which contains, for example, Supreme Court decisions (Best, 2011). Last, a non-profit provider, as the name suggests, is a non-profit organization that compiles as many legal resources as possible and provides access to them free of charge (McCormack *et al*., 2010; Best, 2011). Non-profit providers often offer access to case law from superior courts, important legislation, administrative tribunals, human rights proceedings, and labour laws just to name a few (Best, 2011; McCormack *et al*., 2010). Non-profits do not offer access to secondary sources like their commercial counterparts (McCormack et al., 2010). An example of a non-profit legal resource is the Canadian Legal Information Institute (CanLII). CanLII however is not comprehensive enough to be the sole source for caselaw or statute research as it does not have the same depth or breadth as paid resources (Best, 2011; McCormack et al. 2010).

Of the three different kinds of electronic legal research providers, commercial vendors appear to be the most comprehensive and ideal for the scope of this project. In Canada, there are two main electronic research providers: Westlaw LawSource and LexisNexis Quicklaw (Queens University Library, nd). Quicklaw originated at Queens University law school and eventually grew to become a private company (Queens, nd; McCormack et al. 2010). Quicklaw has been operating for over 30 years and "is the original Canadian legal database system" (Queens, nd, p.1). Westlaw LawSource, on the other hand, is "a combination of Carswell, a Canadian legal publishing company and Westlaw, an American legal publishing company" (Queens, nd, p.4). Both of these

services contain similar content, however they are not identical and they often differ in features offered.

As Best (2011) asserts, "[t]he criteria for selecting an appropriate electronic research tool are similar to those for evaluating print sources: comprehensiveness, accuracy, currency, quality of content, ease of use and cost" (p.1). Following these guidelines (with the exception of cost), LawSource and LexisNexis Quicklaw were evaluated to determine which database would be the most appropriate source for data collection. Although neither LawSource and Quicklaw is free to the average user, students have access to them through the University of Ottawa library[33], making cost an unnecessary point of evaluation.

In terms of comprehensiveness, LawSource and Quicklaw have very similar, but not identical, coverage. LawSource has excellent coverage of Carswell case reporters whereas Quicklaw has excellent historical coverage of the Supreme Court of Canada, British Columbia and Ontario databases and Federal court. Both have similar coverage of reported decisions from 1986 onward. Unreported cases, on the other hand, are useful when looking for a topic that is not common (McCormack *et al.,* 2010). When it comes to unreported decisions[34], Quicklaw will actively make a request to the court to obtain them (S. Parisien, personal communication, February 2012), setting it apart from LawSource. In addition, Quicklaw publishes everything that they receive from the courts (S. Parisien, personal communication, February 2012), thus making Quicklaw very up-to-date and current; which also speaks to its accuracy and comprehensiveness.

[33] University of Ottawa subscribes to Quicklaw and Lawsource. The Quicklaw subscription is "Quicklaw plus, campus wide". Law students have access to Canadian and international cases while the rest of the university have access to Canadian cases and legislation.
[34] Unreported decisions are decisions that have not been published in a report series (see McCormack *et al*, 2010 for further information).

In terms of ease of use, LawSource and Quicklaw both allow for searches using keywords, names and citations. Searching on LawSource is done by template, Boolean search or natural language and Quicklaw is done through Boolean search terms (Best, 2011). It was the search functions of these databases that were most important in deciding which one to use. As Best (2011) explains, "Quicklaw offers tremendous flexibility in sorting and grouping search results. LawSource is more restrictive in this regard. In particular, on LawSource search results cannot be re-sorted after the search is run" (p.2). For example, the default template and Boolean searches for LawSource are by court level and within that sub-group, there are options to sort by date or relevancy, but this must be done before the search is conducted (Best, 2011). Quicklaw, on the other hand, has a default setting of relevancy but allows users to re-sort their search results by jurisdiction, topic, court, etc. (Best, 2011). In addition, it allows for the grouping of results by both jurisdiction and topic (Best, 2011).

In addition to Best's criteria for evaluating databases mentioned above, Queens University suggests that it is important to analyze your research question before choosing a service and ask four important questions: "What exactly am I looking for?"; "Are there other words to describe the same thing?"; "How do I want to limit my search?"; and "what database(s) is/are most important for the information I want?". This project was looking for a database with exceptional keyword searches that could be manipulated and sorted after the initial search and that had the ability to focus on the topic of sentencing. An up-to-date database with exceptional coverage of unreported cases was also required. In answering these questions, one comes to the conclusion that Quicklaw would, in fact, be the most appropriate to use in collecting case law data for this project.

Sampling

The Quicklaw database was used to construct both the FASD sample and the random non-FASD (control) sample. Because the two groups are very different, the search and collection of the samples were undertaken somewhat differently and are thus discussed separately.

FASD Sample

Once logged into Quicklaw, the search tab is automatically selected. Under the search tab, the user is given further search options. For this project, case law was used. As such, the tab titled "court cases" which takes one to the court cases search page was selected. This page allows one to enter specific search terms and narrow search parameters according to legal topic, sources, case name, jurisdiction, and court — just to name a few.

To construct the FASD group, cases obviously needed to have an offender who had an FASD or was suspected of one, and therefore search results need to be limited to those that mention the umbrella term FASD or one of its diagnoses in relation to the offender. Search terms to describe FASD were derived from the literature (see, for example, Chudley *et al.*, 2005) and entered into the search box using the Boolean separator "OR". Both full words and abbreviations were used as search terms. The search terms used were: Fetal Alcohol Spectrum Disorder, FASD, Alcohol Related Neurodevelopmental Disorder, ARND, Alcohol Related Birth Defects, ARBD, Partial Fetal Alcohol Syndrome, pFAS, Fetal Alcohol Syndrome, FAS, Fetal Alcohol Effects, FAE[35], prenatal alcohol exposure, PAE and prenatal exposure to alcohol.

[35] While the term Fetal Alcohol Effects has no longer been used (as mentioned in the review of literature) since around 1996, it was widely used before this time and in some cases is still used by those

A general search (that is one without any restrictions on time period, type of offence, court level, provincial jurisdiction, etc.) of the FASD keywords was done to see how many (if any) cases were available. The search returned several cases — many of which were irrelevant - that is, for example, cases pertaining to family court, tax laws, commissions/tribunals, legislation, dangerous offenders, youth, etc. Therefore the search was refined to include only provincial and territorial court cases and omitted appellate courts and Federal courts. The aim of this project was to examine sentencing decisions and for this reason, appeals (both of conviction and sentence) were not an appropriate source of data.[36] Since the initial search returned several types of cases other than criminal law, the search was refined by topic "criminal law" and sub topic "sentencing". From there, the 30 most recent cases available were chosen. All of these cases were read in order to get a sense of the type of crimes and issues being discussed in regard to FASD. Next, the search was further refined by jurisdiction and the five most recent cases from each jurisdiction in Canada were selected.[37] Once sorted by jurisdiction, it became clear that there were some provinces/territories that had considerably more cases than others. After reading and making notes on all of these cases, the offences of assault, robbery, and sexual assault seemed to yield the greatest number of cases in several jurisdictions.[38] Other common offences that were found (but not numerous enough to be meaningfully included in the sample) were break and entering, and theft. The jurisdictions with the greatest number of these cases were Alberta, British Columbia,

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unknowledgeable about current terminology. It was included so as not to limit relevant cases due to semantics.

[36] Appeals are made when there is a question of law or fact and therefore do not focus wholly on the sentencing decision but rather only on the areas of law in question.

[37] Several jurisdictions did not have five FASD cases. Some only had one or two relevant ones (for example, New Brunswick, and Prince Edward Island).

[38] These categories were the most serious offences in the case but other convictions may have also been present.

Ontario and Yukon. Once refined by offence however, Alberta proved to be lacking in assault and sexual assault cases[39] and was therefore omitted, leaving British Columbia, Ontario and Yukon as the three jurisdictions of interest.

Once the offences and jurisdictions involved in the study were decided, a search was conducted to find five cases per offence, per jurisdiction, for a total of 15 cases per jurisdiction and 45 cases overall. Again, the search was refined to exclude appeal courts and refined by the topics of criminal law and sentencing. Just as before, youth cases, dangerous offender cases, cases in which FASD was talked about but not in relation to the offender etc. were omitted, as well as those cases that had an offence more serious than the one identified to be examined.[40] For each jurisdiction and offence, the five most recent relevant cases were selected. Unfortunately, in Ontario a fifth case in which sexual assault was the most serious offence could not be found. In Yukon, there were two cases missing from the robbery category because at the time of this study there simply were not enough cases in which robbery was the most serious offence. As such, the sample size once the missing cases were taken into account was 42.[41]

Limitations

A major limitation when sampling the FASD offender population is that not all FASD offenders are identified as such in court. It is possible, and quite likely, that there are many offenders who may be suffering from FASD yet no one has raised this issue as a possibility within the context of the criminal proceedings. This sample therefore is

[39] A large portion of the cases from Alberta were for robbery, theft and break and enter and therefore did not satisfy the three offence categories.
[40] The most serious offence was determined utilizing the Courts Program Seriousness Ranking and Crime Severity Index. For example, a conviction for assault was not utilized if there was also a conviction for the more serious offence of murder as part of the same case.
[41] See Appendix A for a complete list of each of theses cases by province and offence (i.e. most serious offence type).

drawing from a small population of FASD individuals who have had the issue of FASD raised as a possibility or have been diagnosed with an FASD, and have been convicted of a crime. Consequently, the findings of this study cannot be generalized to the entire FASD offender population because that population has yet to be completely discovered/defined. Until issues surrounding screening, diagnostics and such are resolved, a complete picture of the FASD offender population will not be available and, as such, no FASD sample will be truly generalizable. The findings from this study will provide a snapshot of the population of identified FASD offenders who have committed and were convicted of certain offences.

FASD offenders are responsible for a wide array of offences but violent offences seemed more plentiful in the written judgments which were examined. There may be several reasons for this pattern. For instance, less serious cases may be handled through joint submissions, or they are simply deemed not complex enough (or of enough societal concern) to warrant a full written judgment. However, not all FASD offenders commit serious offences like assault, robbery and sexual assault, and therefore the results of this study would not be generalizable to the entire FASD offender population. Since all of the offences studied are considered to be violent offences however, examination of these three offences provides a window into the ways in which judges sentence those offenders who are usually considered to represent the greatest risk and provoke the greatest public fear.

British Columbia and Yukon are two of the jurisdictions that Chartrand and Forbes-Chilibeck (2003) describe as “informed pockets of expertise” in the courts. Therefore, it is not surprising that these two jurisdictions yielded a large portion of FASD

cases. Although these two jurisdictions are considered knowledge pockets, they also share with other jurisdictions (for example, Northwest Territories, Nunavut, Saskatchewan, and Manitoba) a high percentage of Aboriginal offenders and similar geographical issues such as rural/northern isolation, etc. While findings from British Columbia and Yukon cannot be generalized to these other western/northern jurisdictions, it again provides insight into how judges - judges who are likely faced more frequently with FASD and may potentially be more knowledgeable and sensitive to FASD offenders - respond. While not typically viewed as being accustomed to dealing with FASD offenders, Ontario, the third jurisdiction studied, handles approximately 40 % of all criminal court cases in Canada (Webster, Doob & Myers, 2009). The findings from this jurisdiction, again although not generalizable to the entire population or other jurisdictions, may provide a general sense of overall tendencies in Canada, especially among areas without FASD experience.

A small sample size was chosen in this study for obvious reasons - the number of FASD cases available is quite limited in comparison to the number of non-FASD criminal court cases. This small sample size, however, dramatically limits the generalizability of the findings to not only other jurisdictions but also the jurisdictions studied and is therefore a further limitation that must be noted.

Control Sample

To gather data for the control group, a search for each jurisdiction was conducted using the offence type as the search term. Indeed, the intention was to identify five comparable cases for each of the three offences as chosen in the FASD group for each of the three jurisdictions under study. Offences that were more serious than the offence at

hand were excluded by using the Boolean separator "AND NOT". Additionally, to narrow the results, topics to include and exclude from the search were chosen. Finally, the results were constrained to a specific date range. Each offence, in each province, had a specific date range dictated by the FASD cases. For example, the FASD assault cases in British Columbia ranged from July 4th, 2002 to April 3rd, 2012, so those same dates were used in the search parameters when identifying the non-FASD British Columbia assault control group.[42] Finding cases within the same time frame was done in an attempt to match the two samples as closely as possible. The effect of this approach is to 'control for' the date within offence and jurisdiction. It has the effect, however, of creating different date ranges for each of the three offences in the three jurisdictions. However, since the purpose of this study was to compare FASD cases to non-FASD cases, this variability in dates is not a problem as the date ranges were identical for both groups.

Once the search was completed, selecting the topic 'criminal law' and sub-topic 'sentencing' further refined the results. Findings were displayed in order from newest to oldest. The number of results (after refining) - a sort of stratified sample - served to guide the process of random selection. Each result is numbered in Quicklaw, so a chart of random numbers was used to determine which case numbers to choose. The first five relevant random cases identified became part of the control sample. The selected random cases were pre-screened for suitability; that is, if they had another charge that was more serious, or if it was somehow an appeal, a bail application, an FASD case, a youth case or a dangerous offender application, or if no sentence was given or if there were multiple accused, it was omitted and the next random number in the sequence was selected. This

[42] The date ranges for the FASD cases were derived from the judgment day reported at the beginning of the sentencing report. The same practice was used when identifying the control groups.

process was conducted for each offence, in each jurisdiction, for a total sample size of 45.[43]

Limitations

Like the FASD sample, the same issues related to sample size and jurisdictions are also found when sampling the non-FASD group. Additionally, there are some other limitations specific to the sampling of the non-FASD offenders. In an attempt to draw the non-FASD cases from roughly the same population (minus the disability) as the FASD group and, as such, increase the internal validity of the study findings, certain variables of the control group were matched to the FASD group. These variables included the jurisdiction, most serious offence[44], and the date range. However, even with this attempt to match the groups, there are still several limitations to the non-FASD sample. More specifically, the control group was chosen from a stratified sample and therefore not representative of the entire offender population or even the jurisdictional or offence population. The findings of the non-FASD group are therefore not generalizable to the whole (non-FASD) offender population. However, they do provide insight into the type and circumstances of the violent offences during the allotted time period and how the judges handed down the sentence.

Variables

Data collection/coding categories (or variables) were created using the literature on FASD as well as knowledge of basic criminogenic factors. Additionally, emergent themes from the initial reading of the 30 most recent FASD cases also helped to guide the

[43] See Appendix B for a complete list of each of theses cases by province and offence (i.e. most serious offence type).
[44] It is important to remember that no two crimes will ever be identical. Further, matching beyond simply the offence type (i.e. matching the events surrounding the offence) were beyond the scope of this project.

creation of variables. Because there were numerous variables being studied, three main groupings were used. The first grouping was demographic factors, which recorded information about the following variables: age, gender, ethnicity, marital status, and whether the offender had children. The second grouping of variables was environmental influences which the offender experienced such as foster care, history of abuse, history of violence, parental substance abuse, offender substance abuse, whether the offender had contact with his/her biological family, level of education, parental education, whether supports were/are available to the offender (such as community supports, church programs, social programs, etc.), employment history, whether the offender was employed at the time of the offence, whether the offender was suspected of having, or diagnosed with, FASD, ADHD, and/or learning disabilities, and whether the offender had other mental health/general health issues. The third grouping had to do with sentencing information on: previous convictions (existence as well as number or description of amount), previous youth and adult record, previous breaches (existence as well as number or description), type of plea, type of offence, other current convictions, current breaches, pre-sentence report, Gladue report, pre-sentence custody (existence as well as length and credit of pre-sentence custody), the length of sentence (global), the length of sentence (after credit), type of sentence, and the purposes of sentencing.

Missing data

Missing information is not an uncommon occurrence when studying secondary data, as often the data may not include all of the variables of interest (Carlson & Morrison, 2009). This study is no exception to this limitation. In several cases —if not all cases— not all variables identified for the purposes of this study were adequately

described in the case. As such, information appears to be missing.[45] However, one cannot lose sight of the fact that most missing data reflect the manner in which sentencing judges constructed their sentencing reports. The fact that data are often missing is actually just as important as the data presented in the cases.

Section 726(2) of the *Criminal Code* states that "when imposing a sentence, a court shall state the terms of the sentence imposed, and the reasons for it, and enter those terms and reasons into the record of the proceedings." However, prior to a 1996 set of amendments to the *Criminal Code* (Bill C-41, 35th Parliament, 1st session), the previous statutory framework held that it was preferable, but not required, for a judge to submit reasons when sentencing an offender (Ruby, Chan & Hassan, 2012). Further, a 2010 amendment to the Criminal Code (Bill C-25, 40th Parliament, 2nd session) now requires the sentencing judge to state, on record, four specific items: the term of imprisonment that would have been imposed before any credit was granted for pre-sentence custody; the amount of time spent in pre-sentence custody; the amount of time credited, if any, for that pre-sentence custody; and the sentence imposed (Ruby, Chan & Hassan, 2012). Since the dates of the cases involved in this study range considerably – spanning both amendments – this can account for some of the variation in the reports, but not all. More importantly, since the main focus of the study was to compare FASD and non-FASD cases, the sampling method used ensured that time periods were equivalent for the two groups. As such, one would not expect that this issue of missing data would have any biasing impact on the findings. In other words, the amendments would affect both groups equally and therefore should not affect the comparability of the two groups.

[45] In almost all cases, missing data were coded as simply not specified, not mentioned, not given, or unknown.

The issue of missing data may also be rooted in the completeness of pre-sentence reports. Indeed, the variables or factors considered during sentencing such as background factors, life history, environmental factors, and so on, are mentioned or included in the written or oral report at the discretion of the judge. In most cases, judges rely on pre-sentence reports to provide this type of information and therefore the completeness of the pre-sentence report is a determining factor in those variables which are included in the sentencing report (Bonta, Bourgon, Jesseman & Yessine, 2005). As Ruby, Chan and Hassan (2012) explain,

> The information in a pre-sentence report is to be used by the sentencing judge to assess the offender's character and relate the sentence to the individual. It is designed to portray for the court the background, family, education, employment record, physical and mental health, associates, social activities, potential and motivation of the offender (para. 196).

However, section 721 of the *Criminal Code* only states what pre-sentence reports must contain 'whenever possible'; there are no hard and fast rules.[46] Additionally, regulations regarding pre-sentence reports can vary by province and offence type.[47] Having said this, as the FASD and non-FASD cases are matched by jurisdiction, this source of missing data is not likely to cause any fundamental problems, as it is likely that this limitation would equally affect both groups in each jurisdiction. This variation in pre-sentence reports, combined with the differences in reporting reasons, and the

[46] The creation and use of the pre-sentence report is guided by s. 721 of the *Criminal Code*. Section 721(3) states: "Unless otherwise specified by the court, the report must, wherever possible, contain information on the following matters: (a) the offender's age, maturity, character, behaviour, attitude and willingness to make amends…".
[47] See s.721(2) of the *Criminal Code*.

circumstances of the offence and offender, likely had some impact on what was described and not described in each case.[48]

Any remaining missing information that has not been accounted for after taking into consideration the legislative differences and pre-sentence report differences, is then presumably due to the discretion of the judge. In other words, it is assumed for the purposes of this study that information is missing from the sentencing judgment because the sentencing judge did not consider the information to be relevant or important enough to the sentence to be included. Any differences in the information included/missing between the two groups in this study were therefore assumed to be meaningful. Said differently, the differences between the two groups were interpreted as suggestive of different factors considered salient by the judge at sentencing. For example, learning disabilities and ADHD were two pieces of information (variables) that were not mentioned in any of the non-FASD cases. This is not to say that learning disabilities and/or ADHD were not present among the non-FASD offenders or that they were less likely to have a learning disability or ADHD. What it more likely suggests is that the judge felt that the presence or absence of learning disabilities and ADHD was less important when sentencing non-FASD offenders than FASD offenders.

Data Analysis

In this study, a mixed method approach was utilized; that is, both quantitative and qualitative analyses were conducted in the hope of providing a more complete and in-depth analysis of the two groups. As Morse (2003) explains, a mixed method approach

[48] Aside from other considerations, the differences in regulations and practices across provinces in the nature of pre-sentence reports underlines the importance of comparing roughly similar proportions of FASD and non-FASD cases from each province.

can “increase the scope and comprehensiveness of the study” (pg. 192). In this particular instance, the study is primarily a quantitative study. However, it uses a qualitative element to “aid in the interpretation of data in the core project providing explanations for unexpected findings or supporting results” (Morse, 2003, pg. 192). Said differently, the qualitative aspect is used to add more depth or richness to the research.

In this study, the quantitative analysis was conducted before the qualitative analysis; Mertens (2010) calls this type of design a “pragmatic sequential mixed methods design” (p.300). A sequential design occurs when the method that drives the project is conducted first and the second method is designed to resolve problems uncovered by the first method or to provide an extension of the findings from the first method (Morse, 2003, p. 199). The second method, however, often analyzes data collected from a second sample (Morse, 2003). In this case, the data used for both analyses in this study were derived from the same sources and collected in similar fashion - a practice more characteristic of simultaneous or parallel mixed methods designs (Mertens, 2010; Morse, 2003). A simultaneous design occurs when methods are used concurrently (Morse, 2003). The “supplemental” analysis (in this case, the qualitative analysis) is often used to achieve what the first method could not or to inform, in greater detail, aspects of the dominant analysis (Morse, 2003, p 199). Although the methods of analysis were completed sequentially, the design of this study aligns itself more closely with the simultaneous research design.

Both the quantitative and qualitative analyses in this study utilized a form of content analysis. As Granheim & Lundman (2004) explain, “analysis of what the text says deals with the content aspect and describes the visible, obvious components, referred

to as the *manifest content"* (p.106). In contrast, "…analysis of what the text talks about deals with the relationship aspect and involves an interpretation of the underlying meaning of the text" and is referred to as "*latent content*" (p. 106). The quantitative analysis of this research tended to look at the more descriptive content and the qualitative analysis focused on the more latent content of the reports. As an example, one can consider the variable "foster care". The manifest content - whether or not the offender had been involved in foster care, at what age, how many foster homes, etc. - was analyzed quantitatively. The more latent content - why they were in foster care, their reported experiences in foster care, etc. – was analyzed qualitatively to supplement the quantitative findings.

Quantitative Analysis

Once the collected data were numerically coded, quantitative methods were used to statistically analyze the coded data. These statistical analyses were done using the Statistical Package for the Social Sciences (SPSS).

To determine whether there were differences between the groups regarding demographic and environmental variables, cross-tabulations using a chi-square test of significance were run. However, it is important to note that the chi-square statistic was not calculated when there were expected counts of less than five. Because of the relatively small sample size and the variability in data contained within the reports — as discussed previously— low expected counts were not uncommon. Using the "described" and "not described" tables (Tables 1, 2 and 3), variables with high numbers of "not described" cases in both groups were omitted from the tables.[49]

[49] Statistical tests were run on all variables in the demographic and environmental categories. However, several had such low described rates that they could not be reliably compared. For example, "learning

Cross-tabulations were also run to determine whether there were differences between the groups in sentencing purposes used. Additionally, for these sentencing purposes, a cross-tabulation by group and by province was also run.

Several cross-tabulations involving whether prison was used and length of prison sentence were also run.[50] As a more exact measure of the length of prison experienced by group, an independent sample t-test was used to determine whether there was a significant difference in the mean sentence length (in months, not years). Criminal record[51] and breaches were also examined in cross-tabulations. Finally, a regression analysis was performed to determine whether prison length differed by group when controlling for criminal record and number of breaches.

Qualitative Analysis

For the qualitative analysis, the quantitative results helped to inform which variables were to be examined qualitatively. This was done to add depth and richness, as well as to ensure a fuller understanding of the quantitative results. In other words, a type of directed content analysis was used for the qualitative analysis (Hsieh & Shannon, 2005). According to Hsieh & Shannon (2005), "content analysis using a directed approach is guided by a more structured process than in a conventional approach. Using existing theory or prior research, researchers begin by identifying key concepts or variables as initial coding categories" (p. 1281). The variables examined qualitatively – as guided by quantitative results – were age, education, employment, substance abuse,

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disabilities" was omitted from the demographic category and "type of abuse experienced", "history of violence (witnessed or experienced by the offender) and by whom", and "parental education", were omitted from the environmental category.

[50] The recoding of this variable is discussed in the results section as needed.

[51] Again, the recoding of this variable is discussed in the results section as needed.

family circumstances (i.e. parental substance abuse, history of violence etc.), foster care, the purposes of sentencing, prison, criminal record, and breaches.

The information compiled in the spreadsheet during the data recording/collection process was used to identify which cases had information pertaining to the variables that were to be studied qualitatively. The initial spreadsheet was used as a guide to determine which cases had sections relevant to each variable and from there, relevant sections/paragraphs of each sentencing report were extracted and compiled into two categories: background information (i.e. the offender's age, education, employment, etc.) and sentencing information (i.e. purposes of sentencing, criminal record, etc.). The excerpts compiled from these cases were then examined, variable-by-variable, looking for any emergent themes or patterns, both between the groups and/or within the groups that help to explain, or build on, the quantitative findings.

A variety of techniques were utilized during the analysis, starting with open coding. Open coding refers to labeling and categorizing of concepts (Pandit, 1996). Sections pertaining to each variable were identified and colour coded and any important wording or observations were noted in the margins. For instance, anything to do with criminal record was highlighted in orange and words used to describe the record were noted in the margins.

Following the open coding was the axial coding. Axial coding refers to the development of main categories or themes (Pandit, 1996, Corbin & Strauss, 1990). This type of coding puts concepts and categories together by making connections between various concepts and thus develops larger themes (Pandit, 1996; Corbin & Strauss, 1990). It was during this exercise that the observations and notes made during the open coding

were compared, contrasted and combined to develop themes. The themes derived from this coding were then used to add descriptive detail and/or further explain the quantitative results.

CHAPTER FOUR

Results

Certainly from the literature, there is reason to believe that FASD presents several challenges to the criminal justice system, particularly at sentencing. In recent years, the number of court cases acknowledging FASD has been increasing, yet there is still little to no research on how judges are dealing with these particularly challenging cases. As such, the primary objective of this study is to examine if and how FASD is being taken into consideration during the sentencing process. In an attempt to provide at least a partial answer to this overarching question, three sub-questions will be addressed in this chapter: First, how do judges describe FASD offenders compared to non-FASD offenders? (description of offenders); Second, are judges trying to accomplish different purposes when sentencing FASD (versus non-FAD) offenders? (purposes of sentencing); And third, do judges hand down different sentences for FASD offenders compared to non-FASD offenders? (differences in sentence).

Description of Offenders

This section addresses how judges describe FASD offenders in the sentencing reports. More specifically, it examines whether the description of FASD offenders (as described by judges in their sentencing decisions) is different from that of non-FASD offenders. It is assumed that when writing a sentencing decision a judge includes factors that he/she finds most relevant or salient about each case as it applies to sentencing. Therefore, in order to fully address whether judges describe FASD offenders differently, the groups needed to be compared not only in terms of differences between the variables highlighted (that is, if certain variables were used to describe one group and not the other)

but also in terms of the actual differences between those variables (that is, whether the information presented about each variable is the same/different across the two groups). In order to do this, two different approaches were taken. Firstly, the information reported by judges in FASD and non-FASD cases was compared to determine if certain variables were unique to FASD offenders. In other words, sentencing judgments were compared in terms of the factors/variables that were selected to describe the offender. Variables were identified as either described or not described and then compared by group. The second approach went beyond whether the variable was described or not and compared the actual information/variables contained in the sentencing reports. These differences were measured both quantitatively (i.e. for statistical significance) and qualitatively (i.e. for differences in actual descriptive explanations).

First Approach: Described Versus Not Described

Tables 1, 2 and 3 present the results of this first analysis. Table 1 examines which demographic variables were (or were not) highlighted by judges in their reports. From this table, one quickly notes that one variable that was always described in the reports of both the FASD and non-FASD groups was gender. Additionally, the age of the offender at the time of offence was mentioned more often than not for both groups (chi-square= 0.186, df= 1, ns). Similar findings are noted for a number of other variables. Specifically, there were no significant differences between the two groups when it came to describing marital status, education, employment history, age at which substance abuse started, and other conditions (i.e. mental and physical health issues other than FASD).

In contrast, ethnicity – another common background factor – tended to be mentioned significantly more in FASD cases than non-FASD cases (chi-square= 19.297,

df=1, p<.001). Whether the offender had children was described significantly more often in non-FASD cases compared to FASD cases (chi-square= 5.415, df=1, p<.05). Additionally, non-FASD cases tended to mention the offender's employment status during the time they committed their offence significantly more often than in FASD cases (chi-square= 9.183, df=1, p<.01). Whether the offender had a substance abuse issue was also more likely to be mentioned in the FASD group (about 79% of the time) than in the non-FASD group (about 58% of the time)(chi-square=3.404, df=1, p=.043 by Fisher exact test[52]). However, FASD cases were more likely to go one step further and mention the type of substance abuse issue that the offender had, compared to the non–FASD cases (chi-square= 8.767, df=1, p<.01). Interestingly, the variables of learning disabilities and ADHD were not mentioned in any of the non-FASD cases. In contrast, FASD cases mentioned ADHD in approximately 29% of the cases and learning disabilities in approximately 24% of the cases. Both learning disabilities and ADHD yielded statistically significant differences between the two groups (chi-square= 12.106, df=1, p=.001 and chi-square= 14.914, df=1, p=.000 respectively).

[52] See note "b" in Table 1 for more information.

Table 1

Number of Cases that Described the Demographic Variables Identified in the Study

	Described	Not Described		
Variable	n	n	Total	χ^2
Demographics				
Age				
Non-FASD	36	9	45	0.186
FASD	31	11	42	
Gender				
Non-FASD	45	0	45	Not Calculated[a]
FASD	42	0	42	
Ethnicity				
Non-FASD	9	36	45	19.297***
FASD	29	13	42	
Marital Status				
Non-FASD	21	24	45	1.100
FASD	14	28	42	
Children				
Non-FASD	25	20	45	5.415*
FASD	12	30	42	
Education				
Non-FASD	16	29	45	0.063
FASD	17	25	42	
Employed at Offence				
Non-FASD	21	24	45	9.183**
FASD	6	36	42	
Employment History				
Non-FASD	22	23	45	0.122
FASD	18	24	42	

(Table 1 continues)

(Table 1 continued)

	Described	Not Described		
Variable	n	n	Total	χ^2
Substance Abuse				
Non-FASD	26	19	45	3.404[b]
FASD	33	9	42	
Type of Substance Abuse				
Non-FASD	18	27	45	8.767**
FASD	31	11	42	
Substance Abuse Age				
Non-FASD	6	39	45	0.967
FASD	10	32	42	
Learning Disability				
Non-FASD	0	45	45	12.106***
FASD	10	32	42	
ADHD				
Non-FASD	0	45	45	14.914***
FASD	12	30	42	
Other Conditions				
Non-FASD	19	26	45	0.262
FASD	21	21	42	

Note. The overall sample size is 87; non-FASD n=45, FASD n= 42. The Yates Correction for Continuity was used to determine the χ2. Chi-square was not calculated when expected counts were less than five. Substance Abuse Age = the age at which the offender's substance abuse began; ADHD = Attention Deficit Hyperactivity Disorder; Other Conditions = mental health and physical health issues (other than FASD)

[a] Statistical tests were not performed for some of these variables because of low expected values. That is, it was impossible to explore whether there was a relationship because of the inability to use the chi-square test. The chi-square statistic becomes unstable when there are low expected values and therefore one cannot have confidence in the results of this statistical test. The phrase "not calculated" was therefore used when values did not permit a chi-square test to be run. This is standard practice for the entirety of the results section.

[b] Using the continuity correction, the result is only marginally significant (.065) but using the Fisher Exact Test, the result is significant (.043).

* $p < .05$ ** $p < .01$ *** $p < .001$.

Table 2 examines the environmental variables that were described (or not described) in the sentencing reports. Notably, the variables of whether the offender was involved in foster care, and if so, the age at which he/she entered the foster care system, were both significantly more likely to be described in FASD (versus non-FASD) reports (chi-square = 8.286, df=1, $p<.01$; chi-square = 12.182, df=1, $p<.001$ respectively). Similarly, the FASD cases were more likely to describe a history of parental substance abuse as well as elaborate on the type of abuse (i.e. who had the substance abuse problem) (chi-square = 7.773, df=1, $p<.01$; chi-square =6.630, df=1, $p<.01$ respectively). The remaining variables studied (history of abuse, type of abuse experienced by the offender, history of violence experienced by the offender, violence by whom, contact with biological family by the offender, parental education and supports) exhibited no significant differences between the groups (see Table 2).

Table 2

Number of Cases that Described the Environmental Variables Identified in the Study.

	Described	Not Described		
Variable	n	n	Total	χ^2
Environmental Influences				
Foster Care				
Non-FASD	13	32	45	8.286**
FASD	26	16	42	
Age Entered Foster Care				
Non-FASD	3	42	45	12.182***
FASD	17	25	42	
History of Abuse				
Non-FASD	10	35	45	0.844
FASD	14	28	42	
Type of Abuse				
Non-FASD	8	37	45	1.403
FASD	13	29	42	
History of Violence				
Non-FASD	4	41	45	1.792
FASD	9	33	42	
Violence by whom?				
Non-FASD	3	42	45	Not Calculated
FASD	2	40	42	
Parental Substance Abuse				
Non-FASD	7	38	45	7.773**
FASD	19	23	42	
Who Substance Abuse				
Non-FASD	7	38	45	6.630**
FASD	18	24	42	
Contact with Biological Family				
Non-FASD	20	25	45	0.000
FASD	18	24	42	
Parent Education				
Non-FASD	1	44	45	Not Calculated
FASD	5	37	42	
Supports				
Non-FASD	21	24	45	0.020
FASD	18	24	42	

Note. The overall sample size is 87; non-FASD n=45, FASD n= 42. The Yates Correction for Continuity was used to determine the $\chi 2$. Chi-square was not calculated when expected counts were less than five. Violence by whom = who did the offender witness committing a violent act? Who substance abuse = Which parent(s) had the substance abuse issue; Supports = does the offender have supports (family or community) available to him/her currently.

* $p < .05$ ** $p < .01$ *** $p < .001$.

Table 3 examines the sentencing variables described (or not described) by judges. As one can quickly see, significantly more FASD cases reported on the offender's youth criminal record than non-FASD cases (chi-square =4.063, df=1, $p<.05$). The same was also true for the reporting of current breaches (chi-square =5.283, df=1, $p<.05$). Additionally, slightly more FASD cases (n=29) described the number of convictions of the offender (i.e. the number of previous convictions) than the non-FASD group (n=20) (chi-square = 4.392, df=1, $p<.05$).

Use of a pre-sentence report was described more often in FASD cases (n=30) than non-FASD cases (n=22) but this was only marginally significant (see Table 3).[53] Gladue reports, on the other hand, were described (that is, the case mentioned their use) significantly more in FASD cases than non-FASD cases (chi-square= 22.033, df=1, $p<.001$). In fact, only one non-FASD case described using a Gladue report. The remaining sentencing variables (previous convictions, adult record, number of convictions described in words, previous breaches, number of previous breaches, number of previous breaches described in words, pre-sentence custody, length of pre-sentence custody, pre-sentence custody credit, probation and sentencing purposes) yielded no statistically significant differences (see Table 3).

[53] Note: Some cases may have, in fact, used a pre-sentence report and simply not made mention of it in the report. The same can also be said for Gladue reports.

Table 3

The Number of Cases that Described the Sentencing Variables Identified in the Study

	Described	Not Described		
Variable	n	n	Total	χ^2
Sentencing/Legal				
Previous Convictions				
Non-FASD	40	5	45	Not Calculated
FASD	38	4	42	
Adult Record				
Non-FASD	37	8	45	0.023
FASD	36	6	42	
Youth Record				
Non-FASD	15	30	45	4.063*
FASD	24	18	42	
Number of Convictions				
Non-FASD	20	25	45	4.392*
FASD	29	13	42	
Number of Convictions Words				
Non-FASD	13	32	45	0.047
FASD	14	28	42	
Previous Breaches				
Non-FASD	20	25	45	1.420
FASD	25	17	42	
Number of Previous Breaches				
Non-FASD	6	39	45	0.511
FASD	9	33	42	
Number of Breaches Words				
Non-FASD	2	43	45	Not Calculated
FASD	5	37	42	
Current Breach				
Non-FASD	19	26	45	5.283*
FASD	29	13	42	

(Table 3 Continues)

(Table 3 Continued)

	Described	Not Described		
Variable	n	n	Total	χ^2
Pre-Sentence Custody (PSC)				
Non-FASD	31	14	45	1.749
FASD	35	7	42	
PSC Amount				
Non-FASD	39	6	45	Not Calculated
FASD	42	0	42	
PSC Amount After Credit				
Non-FASD	42	3	45	Not Calculated
FASD	42	0	42	
Probation				
Non-FASD	42	3	45	Not Calculated
FASD	42	0	42	
Pre Sentence Report				
Non-FASD	22	23	45	3.700*[a]
FASD	30	12	42	
Gladue Report				
Non-FASD	1	44	45	22.033***
FASD	20	22	42	
Sentencing Principles				
Non-FASD	38	7	45	0.022
FASD	34	8	42	

Note. The overall sample size is 87; non-FASD n=45, FASD n= 42. The Yates Correction for Continuity was used to determine the $\chi 2$. Chi-square was not calculated when expected counts were less than five. Number of Convictions = the number of previous convictions; Number of Convictions Words = the words used in the report to describe the number of previous convictions the offender has; Number of Breaches Words = the words used to describe the number of previous breaches; PSC Amount = Total amount of pre-sentence custody; PSC Amount After Credit = the amount of pre sentence time after the credit was applied.

[a] The Continuity correction was marginally significant (.054), however, when examining the Fisher Exact Test, the result is significant (.048).

* $p < .05$ ** $p < .01$ *** $p < .001$

Second Approach: Comparing Information Provided

Table 4 and 5 present the results of this second analysis. Table 4 examines potential differences across the FASD and non-FASD groups in terms of the information contained in the demographic variables. From a purely numerical perspective, no statistically significant differences emerged between the two groups in terms of their age (as reported by the judge). However, there was a non-significant tendency for FASD offenders to be younger than those in the non-FASD group. More interesting were the qualitative clarifications that the judges made with regards to the age of FASD offenders.

Seemingly because of the disabilities associated with FASD, the physical age of the offender does not always correspond with the age level at which the offender functions. Therefore, the difference in ages between non-FASD and FASD offenders — although not significant in a numerical sense — can be quite significant when comparing their functional age. The disconnect between physical age and functional age is best exemplified in the case of 35 year-old Jason Harper about whom the court explains, "…it is important to be aware that Jason functions best at a 6 - 8 year old functional level thus, he requires the same level of supervision and protection as a 6 - 8 year old child would" (*R v. Harper*, 2009, para. 17). In the case of another FASD offender (26 years old), the court stated that "[g]iven the severe nature of his disability, Mr. F.C. effectively comprehends the world as a ten to 12-year-old child would" (*R v. F.C.*, 2011, para. 28). In yet another instance, a 22 year-old FASD offender was described as operating "…at a pre-teen level with respect to executive functioning skills and understanding of abstract concepts" (*R v. Quash*, 2009, para. 30). This discrepancy between actual and functional age was not reported in any of the non-FASD cases.

No differences were found relative to the gender of the offenders. Indeed, the majority of offenders in both samples were male (91% to 93%). However, one factor on which the two groups differed significantly is ethnicity (chi square = 19.297, df=1, $p<.001$). Sixty-nine percent of FASD offenders (29 of the 42 offenders) were identified as being Aboriginal, compared to only 20% (9 of 45 offenders) of the non-FASD sample. There was no statistically significant difference between the groups in regard to marital status. However, it appeared that about twice as many non-FASD offenders (n=24) compared to FASD offenders (n=12) were reported as having children (chi square= 4.518, df=1, $p<.05$).

Table 4
Cross-Tabulations of the Demographic Variables by Group.

Variable		Group: Non- FASD n	Non- FASD %	FASD n	FASD %	Total (column)	df	Chi Square
Age								
18-22		8	22.2%	13	41.9%	21(31.3%)		
23-30		12	33.3%	9	29.0%	21 (31.3%)	2	3.224
31-75		16	44.4%	9	29.0%	25 (37.3%)		
	Total (row)	36	100%	31	100%	67 (100%)		
Gender								
Male		41	91.1%	39	92.9%	80 (92%)	1	0.000
Female		4	8.9%	3	7.1%	7 (8%)		
	Total (row)	45	100%	42	100%	87 (100%)		
Ethnicity								
Aboriginal		9	20%	29	69%	38 (43.7%)	1	19.297***
Non-Aboriginal[a]		36	80%	13	31%	49 (56.3%)		
	Total (row)	45	100%	42	100%	87 (100%)		
Marital Status[b]								
Married		15	71.4%	7	50%	22 (62.9%)	1	0.862
Single		6	28.6%	7	50%	13 (37.1%)		
	Total (row)	21	100%	14	100%	35 (100%)		
Children								
Yes		24	53.3%	12	28.6%	36 (41.4%)	1	4.518*
No[c]		21	46.7%	30	71.4%	51(58.6%)		
	Total (row)	45	100%	42	100%	87 (100%)		
Education								
Below High school		2	12.5%	15	88.2%	17 (51.5%)		
High school		4	25.0%	1	5.9%	5(15.2%)	3	Not
Below Post Secondary		7	43.8%	0	0.0%	7 (21.2%)		calculated
Post Secondary		3	18.8%	1	5.9%	4 (12.1%)		
	Total (row)	16	100%	17	100%	33 (100%)		
Employed at time of Offence								
Yes		15	33.3%	1	2.4%	16 (18.4%)		
No		6	13.3%	5	11.9%	11 (12.6%)	2	17.103***
Not Specified		24	53.3%	36	85.7%	60 (69%)		
	Total (row)	45	100%	42	100%	87 (100%)		
Employment History[d]								
Employed Steadily		16	35.6%	6	14.3%	22 (25.3%)		
Limited Employment		3	6.7%	8	19.0%	11 (12.6%)		
Unemployed		2	4.4%	2	4.8%	4 (4.6%)	4	Not calculated
Never Employed		1	2.2%	2	4.8%	3 (3.4%)		
Unknown		23	51.1%	24	57.1%	47 (54%)		
	Total (row)	45	100%	42	100%	87 (100%)		

(Table 4 continues)

(*Table 4 continued)*

Variable	Group				Total (column)	df	Chi Square
	Non- FASD		FASD				
	n	%	n	%			
Substance Abuse							
Yes	18	40.0%	33	78.6%	51 (58.6%)	2	Not Calculated
No	8	17.8%	0	0.0%	8 (9.2%)		
Not Specified	19	42.2%	9	21.4%	28 (32.2%)		
Total (row)	45	100%	42	100%	87 (100%)		
Type of Substance Abuse							
Alcohol	8	17.8%	12	28.6%	20 (23.0%)	4	Not calculated
Drugs	4	8.9%	2	4.8%	6 (6.9%)		
Drugs & Alcohol	6	13.3%	17	40.5%	23 (26.4%)		
Not Specified	0	0.0%	2	4.8%	2 (2.3%)		
Not Applicable	27	60.0%	9	21.4%	36 (41.4%)		
Total (row)	45	100%	42	100%	87 (100%)		
Substance Abuse Age[e]							
Young	3	6.7%	5	11.9%	8 (9.2%)	2	Not Calculated
High School	3	6.7%	5	11.9%	8 (9.2%)		
Unknown	39	86.6%	32	76.2%	7 (81.6%)		
Total (row)	45	100%	42	100%	87 (100%)		
Learning Disability							
Yes or Suspected	0	0%	10	23.8%	10 (11.5%)	1	12.106***
No or Not Specified	45	100%	32	76.2%	77 (88.5%)		
Total (row)	45	100%	42	100%	87 (100%)		
Mention of ADHD							
Diagnosis	0	0%	5	11.9%	5 (5.7%)	2	Not Calculated
Suspected	0	0%	7	16.7%	7 (8.0%)		
No	45	100%	30	71.4%	75 (86.2%)		
Total (row)	45	100%	42	100%	87 (100%)		
Other Physical or Mental Conditions							
Yes	17	37.8%	21	50%	38 (43.7%)	1	0.869
No or Not Specified	28	62.2%	21	50%	49 (56.3%)		
Total (row)	45	100%	42	100%	87 (100%)		

Note. Percentages are "within group" percentages. Chi- square was not calculated when there were cells with an expected count less than five. Due to missing data (i.e. data not provided in the sentencing judgment), group totals do not always add up to 45 (non-FASD) and 42 (FASD).

[a] Non-Aboriginal includes those not identified as Aboriginal or whose ethnicity was not provided.[b] Marital status was collapsed into married or single. The variable 'Married' includes those who are common law, divorced and separated and the variable single includes those who were identified as single or as having a boyfriend or girlfriend.[c] When discussing children, categories were collapsed into yes and no, with no including those cases which did not specify whether the offender had children or not.[d] Employment history: Employed steadily = employed steadily or somewhat steadily; Limited Employment = limited employment history, sporadic employment; Unemployed = unemployed, has difficulty maintaining employment; Never employed = unemployed and never employed, no work history.[e] Substance abuse variables: Young = 13 years old or younger or described as young, early; High School = 14 years old or older or in high school; Unknown = unknown or not applicable.

* $p < .05$ ** $p < .01$ *** $p < .001$

Although no statistical test was conducted due to low expected values, FASD offenders appeared to have a much lower level of education than non-FASD offenders. In cases that mentioned the offender's level of education, 15 out of the 17 FASD offenders had an education level below grade 12 or high school; this was the case for only two of the 16 non-FASD cases in which education was mentioned (Chi Square =16.02, df=1 $p<.01$)[54]. One of the FASD offenders had no formal education whatsoever and one had only attended Grade 1. For the most part, the non-FASD sample had attended school until roughly Grades 9-11.

These differences in education are even more pronounced when examining the offender's education level qualitatively. The qualitative data shows that although an FASD offender has formally completed a certain level of education, his/her actual education or level of academic functioning may be significantly different (i.e. lower). For example, in *R v. Sisco* (2008), the FASD offender was described as having completed Grade 8. However, when describing the offender's school history, a completely different picture of his actual academic abilities emerges. As this particular case report explains, after becoming a Crown Ward at age 15, Mr. Sisco "…was assessed as operating at a grade two or three level and was placed in a school program for the 'trainably mentally retarded'... To this day, Mr. Sisco remains functionally illiterate" (*R v. Sisco*, 2008, para. 7). Similarly, in *R v. D.A.H* (2012), the report states that "Mr. H. did not do well in school. He has a reduced level of knowledge and skills, well below what his Grade 10 completion would suggest" (para. 8). In one extreme case, it was found that although the

[54] A supplementary chi-square test was conducted using a 2x2 contingency table which compared the two groups simply in terms of having either below or above grade 12 or high school education. This test was not included in Table 4.

FASD offender attended school until he was 16 years of age, he never got beyond a Grade 1 level (*R v. Clement*, 1994).

The instability of the offender's educational environment also emerges as another theme potentially affecting the actual grade level achieved. For example, in *R v. Louie* (2012), the court states,

> Mr. Louie's educational background was difficult. It is not surprising given the family moved so very frequently. He attended nine schools throughout the Metro Vancouver and Mission areas. He did make some academic progress with adaptations, but as one might expect from a lack of structure in the household, he was frequently late. He had some behaviour issues in school, but he was well liked by his peer group" (para.38).

Similarly in *J.E.R* (2012), the FASD offender "…attended 11 different schools, always taking modified programs… to the grade ten or 11 equivalent level"(para. 55) and in *Alkenbrack* (2011), the offender "…completed part of grade ten" but "during his education and his school years, he moved to seven different schools" (para. 36). No mention of such extreme unsettled schooling was mentioned in the non-FASD reports.

Similarly, in instances in which a specific grade level was not given in FASD cases, it was not uncommon for the courts to use phrases like " illiterate"," essentially illiterate", "functioning at low levels", "reads at a grade 2 level", " math skills at grade 3 level" "poor reading and writing skills", "limited education" and so on (See: *R v. F.C*, 2011; *R v. Quash* 2011 and 2009; *R v. R.W.L*, 2004; *R v. R.L* 2004;*R v. Moses*, 1991). If a specific grade level was not mentioned in non-FASD cases, then school experiences were generally not talked about at all.

In fact, themes drawn from the non-FASD group which were related to education are substantially different than those of FASD offenders. Although there were instances in which the (non-FASD) offender did not complete high school, the cases tended to

report more positive aspects or attempts at upgrading. For example, the report in *R v. Freeman* (1992) states that he "…has a Grade 11 education, but wishes to upgrade his vocational skills" (para. 3). In *R v. G.S.J* (2007), the court explains that "…he completed grade 11 in high school and that he *did well* in school though his reading skills are deficient" (para. 4, emphasis added). Additionally, they explain that *G.S.J* attended Toronto School of Business to further his education but did not complete the course (*R v. G.S.J*, 2007).

"Successful education" serves as another theme for non-FASD offenders. For example, one report stated that the offender completed high school "… and apparently did well. He has subsequently taken training in forestry and firefighting" (*R v. D.B.M.*, 2002, para. 11). In another case, the offender had graduated high school but has also learned two to three additional languages and has applied to college (*R v. Krebs*, 2010).

For the most part, there was no discussion of the negative aspects of non-FASD offenders' educations; the courts tended to highlight more successful aspects such as attempts at college or university education, upgrading and doing well at school despite dropping out — a description which is very dissimilar to the FASD group.

One similarity between the two groups arose when it came to the connection of education to employment. The topics of education and employment were often linked in the text, with education being used to explain employment or lack thereof. Perhaps not surprisingly (given the educational differences between the FASD and non-FASD offenders), a statistically significant difference between the groups emerged relative to the offender's employment status at the time of the offence. Thirty-three percent of the non-FASD offenders were described as being employed at the time of the offence

compared to only one (2%) of the FASD offenders (chi square= 17.103, df=2, p<.001). This quantitative difference between the groups is echoed when examining the previous work histories (not just the employment status at time of offence) of the offenders in each group from a qualitative perspective.

In particular, the poor educational background of the FASD group was recognized as negatively affecting their employment attainment and success. A good example of this comes from *R v. Sisco* (2008) in which the court reports that "[t]o this day, Mr. Sisco remains functionally illiterate. Unsurprisingly, he has since had difficulty maintaining employment" (para. 7). In *R v. J.E.R* (2012), the case states that "… the reports provided to the Court do not suggest that Mr. R. has either the formal education or any real vocational training that would allow him to work at any types of entry level employment in society" (para. 55). Additionally, in *R v. R.W.L* (2004) the court recognizes that the FASD offender's "low intellectual functioning will limit his ability to succeed in the formal trades" (para 8).

Although education was also often discussed in conjunction with the offender's employment in non-FASD cases, poor education appeared to impact their employment accomplishments to a lesser extent than their FASD counterparts. For example, one offender left school in grade 10 but still managed to find stable, long-term employment (*R v. S.K.A.*, 2004). An even better demonstration arguably comes from *R v. Stewart* (1992) in which the court states,

> I am most impressed, perhaps even overwhelmed by your *excellent work record given the circumstances of your education*, your childhood, and particularly in light of the fact that you abused alcohol on a regular basis. The glowing reports from several employers indicate a very positive future for you if you can suppress alcohol abuse. *You have excellent prospects to be gainfully employed for the rest*

> *of your life* and thereby become a provider for your family. If that is your desire, you clearly have the ability to achieve it (page 5, emphasis added).

Equally notable, the non-FASD group appears to exhibit more stable and/or successful work histories than their FASD counterparts. It was not uncommon to see positive statements about the non-FASD offenders' work histories. For example, statements such as the offender "had been steadily employed", had "an impressive and solid career history" or "excellent work record", "has been fairly steadily employed", "has had a relatively positive employment history" or had "a fairly stable employment history" were not uncommon when describing their employment histories (see: *M.W.H*, 2001; *Cottrell*, 2005; *Stewart*, 1992; *D.B.M,* 2002; *Krebs,* 2010; *R.A*, 2010).

In addition to these positive descriptions, the theme of stability and success was also reflected through the number of non-FASD offenders who owned and/or operated their own businesses. Specifically, four offenders owned and/or operated their own business (See *Mattison,* 2001; *Rose*, 2011; *Laquant* 2004; and *Dawson,* 2009); an occurrence not found in any of the FASD cases. In addition, the employment history also appears to be more stable and successful for the non-FASD offender. For example, *Cordeiro* (2006) has "…worked for the same employer for 15 years" (para. 19); *S.K.A* (2004) "…has been working for approximately six years for a cement products firm..." (para. 31); and *Valente* (2010) "…has worked as a machine operator for a major corporation for eight years" (para. 6). Although generally positive, there are, nonetheless, instances in the non-FASD group in which limited employment — or unemployment — was a problematic issue, though those cases were few (see *King,* 2007; *Freeman,* 1992; *Peters*, 2005).

Similar to the quantitative findings, the FASD group appeared to be employed less frequently – that is, they demonstrate limited employment histories. Several offenders appear to be unemployed or never have been employed. The following quotations are examples of this:

> "Mr. R. has a very limited work history" (*J.E.R.*, 2012, para. 53).
> "He has not been regularly employed for some time" (*D.A.H*, 2010, para. 11).
> "She has virtually no employment history or prospects" (*Elias*, 2009, para. 9).
> "He has only worked sporadically in the past..." (*D.C.*, 2005, para.15).
> "He does not have any work experience to speak of" (*Alkenbrack,* 2011, para. 32).

In some cases, unemployment or limited employment histories were attributed to the FASD offender's criminality, substance abuse issues and, in one instance, disability. For example, in *R v. Peters* (2005) the court directly links the offender's employment difficulties with his criminality when explaining that the offender "…has been in and out of jail since he was a teenager and this cause [sic] him not to be employed" (para. 9). Similarly in *R v. R.W.L* (2004), the offender's limited work history was attributed to "…his young age and frequent incarceration" (para. 10). In terms of substance abuse, the court explains in *R v. D.L* (2002) that drug and alcohol abuse "…has interfered with his [the offender's] ability to find and keep employment". It was in *R v. Harper* (2009) that the court stated that "Jason Harper has limited work skills and employment history due to his cognitive disabilities" (para. 16).

Unlike the theme of stability characteristic of non-FASD offenders, the FASD cases draw attention to unstable, short periods of work – a reality that might aptly be labeled as "transient employment". The following are quotes from two different cases that help to clearly exhibit this theme:

> Since the age of 20, Mr. Brown has held various manual labour positions. He has never worked for more than a year and most of the positions he held were seasonal (*R v Brown*, 2009, para 21).
>
> His [the offender's] longest job that he has held was a paper route when he was young. There is reference in some of the materials to having worked at roofing, I believe, but those would have been very short-term jobs, perhaps a month at most. He really has never had a job (*R v. C.J.M*, 2006, para. 16).

Notably though, despite the frequency of this theme in FASD cases, it was also found in two non-FASD cases (see *Strelocke* 2009, and *Freeman* 1992). Of equal note, there were some FASD cases that appeared to be exceptions and show a stable employment history (*Mustard*, 2007; *Steeves*, 1998; and *Baptiste*, 1992). However, upon closer inspection in the case of *R v. Steeves* (1998), the offender's stable employment was the direct result of extensive support by his parents and not the offender's personal ability to retain employment. As the case explains, "Mr. Steeves senior and his wife have changed their hours of work so that one or other of them is home when the defendant is not at work. One or other of them drives the defendant to his place of work and picks him up after he has finished his shift" (para. 18). This dedicated support ensured that the offender attended his shifts and that he was not late for work, thus enabling him to retain employment that he otherwise would be unlikely to do. It also raises questions as to whether the other FASD cases showing "stable" employment are, in fact, stable or simply a result of extensive support.

The qualitative data additionally show that several of the offenders from both groups were unemployed but on disability payments due to medical/health problems or the offenders' FASD.

Although no statistical test was conducted due to low expected values, differences also appear to exist between the two groups in terms of substance abuse. Most obviously, nearly 79% of FASD offenders were identified as having an issue with substance abuse as compared to "only" 40% of non-FASD offenders. Further, FASD offenders (n=17) appeared to be more likely to abuse a combination of both drugs and alcohol than non-FASD offenders (n=6), but again, this difference is only speculative because no statistical test was performed due to low expected values.

It is interesting to note that ADHD was only mentioned in FASD cases. Of those cases that mentioned ADHD, five FASD offenders were diagnosed with ADHD and seven were suspected of having ADHD. Similar findings emerged relative to learning disabilities. While no non-FASD ffenders were reported as having or suspected of having a learning disability, 10 of the 42 FASD offenders fell in this category. Not surprisingly, there was a statistically significant difference between the two groups (chi- square = 12.106, df=1, p=.001).

Perhaps not surprisingly, the family and related circumstances of the FASD sample differ in important ways from the non-FASD sample.[55] As an initial (and broad) assessment, the overarching theme of inadequate upbringing clearly emerges from the qualitative data. Although this theme is present in both groups, it appears as particularly

[55] Several environmental variables (history of violence, type of abuse, violence by whom and parental education) included in the first approach (i.e. examination of what judges highlighted in their reports) were purposely omitted from the current examination of the actual information because they were described so infrequently for both groups. In other words, these variables were "*not* described" more often than they were "described" for both groups. Therefore comparisons of these variables between groups were not conducted because they lacked sufficient statistical power to produce any reliable inferences. Said differently, there was more missing (that is, unreported) information than actual information for both groups and thus the amount of actual information provided lacked sufficient statistical power for any reliable quantitative analysis. As such, it was felt that comparisons of those variables would not provide an accurate indication of whether a relationship existed between the variables and the two groups. These variables were therefore not included in the tables used for the second approach.

relevant to the FASD group. Specifically, it appears that the offenders' upbringings were not just inadequate, but severely inadequate. For example, when summarizing the FASD offenders' backgrounds, it was not uncommon to come across words and phrases such as "tragic and difficult", "unfortunate", "stressful", " unsettled and traumatic", "dysfunctional", "unenviable", "violent", and "chaotic" (see: *J.E.R*, 2012; *Louie,* 2012; *Oates,* 2012; *W.T.K,* 2012; *D.A.H,* 2010; *S.L.N,* 2010; *Brown,* 2009; *D.L*, 2002; *X.W,* 2002; *J.L.H,* 2000). When describing the upbringing of *S.L.N* (2010), the court states that "…hers was *a spectacularly chaotic* upbringing. She was one of a number of children in a *highly dysfunctional* family…" (*R v. S.L.N.,* 2010, para. 5 emphasis added). Perhaps the best example of this theme though comes from *R v. W.T.K* (2012). When explaining the offender's circumstances, the judge explains that "to say he has had an extremely sad and hard life is an understatement that does not capture the disadvantages Mr. W.T.K. has suffered…it is without a doubt that Mr. W.T.K has not had any of the advantages of a stable upbringing to which every child is entitled" (paras.10 & 47). There was only one instance in which the upbringing of an FASD offender was described as being "good" (*R v. D.C*, 2005, para. 14).

In contrast and although several of the non-FASD offenders did display upbringings which were less than adequate (see: *A.T.R*, 2011; *S.R.S* 2010; *S.K.A*, 2004; *R.A*., 2010; *Smarch*, 2010; *F.N*., 2005; *Anderson*, 1997; *Stewar*t, 1992), this group did, in fact, have more than one instance in which a poor upbringing was not an issue. For example, in *R v. Mattison* (2011), the court described her upbringing as "normal and largely uncomplicated…"(para. 11). In another instance, the court explains that the offender "…grew up with a lot of advantages…the advantage of a religious faith, … the

advantage of a father who owned and operated a business and was obviously able to provide [for her] materially" (*R v. Gelfant*, 2003, para.13). Additionally, in *R v. G.S.J* (2007), the offender was reported as having been "...raised in a stable environment with positive role models" (para. 4).

Stemming from this overarching theme of inadequate upbringings, several sub-themes such as issues of parental substance abuse, abuse, and foster care also become apparent. When examining all of these factors together, the differences in upbringings between the two groups become even more salient.

Notably, significantly more FASD offenders (45.2%) had parents with substance abuse issues than non-FASD offenders (15.6%) (chi-square = 7.773, df=1, $p<.01$). It was not uncommon in FASD cases to find that both parents and other close family members had substance abuse issues (see: *J.E.R*, 2012; *Louie*, 2012; *Alkenbrack*, 2011; *F.C.*, 2011; *Brown*, 2009; *Quash,* 2009; *Mustard*, 2007; *D.C.*, 2005; *R.L*, 2004; *R.W.L*, 2004; *Moses*, 1991). This was not the case for non-FASD offenders identified as having a parent with substance abuse issues. In fact, it was uncommon for both parents to be reported to have substance abuse issues (see: *S.R.S,* 2010 and *Stewart*, 1992 for cases with both parents). Additionally, several of the parents of the FASD offenders had multiple substance abuse issues - that is, issues with both drugs and alcohol (see: *J.E.R*, 2012; *W.T.K,* 2012; *Alkenbrack,* 2011; *Wilson,* 2009).

In turn, parental substance abuse was closely related to the overarching qualitative theme of tragic upbringing found within the FASD cases. Several FASD cases tie parental substance abuse to intergenerational abuse and parental attendance at residential schools. In *Sisco (2008),* the court notes that "there is a multi-generational history of

alcohol abuse in Mr. Sisco's family" (para. 8). In *F.C.* (2011), the link to residential schools is asserted by the judge when he states,

> This history of F.C.'s family is important because it identifies a direct link between the colonization of the Yukon and the government's residential school policies to the removal of children from their families into abusive environments for extended periods of time, the absence of parenting skills as a result of the residential school functioning as an inadequate parent, and their subsequent reliance on alcohol when returned to the communities (para. 9).

Another excellent example of this intergenerational effect comes from the case of *R v. J.E.R* (2012) (see paras. 30-40). In this case, the offender's Aboriginal mother was sold[56] as an orphan to the United States because her parents were violent alcoholics. J.E.R's mother was physically, mentally, emotionally and sexually abused in her adoptive and subsequent foster homes. J.E.R's Aboriginal father was also in foster care and adopted out to a family in the United States. As a result, both of J.E.R's parents have been described as alcoholics who "have never really acted as parents for him" (*R v. J.E.R*, 2012, para. 118). Similarly, R.L's parents were both involved in the residential school system in which they were abused and thus began to abuse alcohol at very early ages (*R v. R.L,* 2004).

Parental substance abuse was also often found to be intertwined with the theme of abuse and/or violence for the FASD group. Simply put, this theme refers to whether the offender experienced or witnessed physical, mental or other types of abuse/violence against another person who was close to them. A good example of this interconnectedness is shown in one FASD case in which it was explained that when the offender's adoptive grandfather drank, he tended to sexually abuse the offender (*R v. C.J.M.*, 2000). This particular offender was also physically beaten with the end of a belt

[56] This wording— "sold" as an orphan— was taken directly from the sentencing report at para 31.

by his violent father and was repeatedly emotionally abused due to his ethnicity (*R v. C.J.M*, 2000). Yet another example was found in the case of *R v. R.W.L* (2004) which states that "[the offender's] mother and stepfather abused alcohol and he witnessed violence as he was growing up" (para 7).

However, this entwinement between parental substance abuse and abuse/violence toward the offender can also be found in non-FASD cases. In fact, no significant differences were found between the two groups in terms of a history of abuse (chi-square= 0.844, df=1, ns). In an example from a non-FASD case (*R v. Dee* (2009)), it is explained that the "….father, an alcoholic for most of Mr. Dee's childhood, was physically abusive towards his mother…" and this abuse was witnessed by the offender (para. 23). In *R v. S.K.A* (2004), the offender's father "… was abusive to both his mother and siblings when he was intoxicated, which was frequently" (para 31).

Table 5

Cross-Tabulations of Environmental Variables by Group

Variable		Group: Non- FASD n	Non- FASD %	FASD n	FASD %	Total (column)	df	χ^2
Parental Substance Abuse								
Yes		7	15.6%	19	45.2%	26 (29.9%)		
Unknown [a]		38	84.4%	23	54.8%	61 (70.1%)	1	7.773**
	Total (row)	45	100.0%	42	100.0%	87 (100%)		
History of Abuse								
Yes		10	22.2%	14	33.3%	24 (27.6%)		
Unknown [a]		35	77.8%	28	66.7%	63 (72.4%)	1	0.844
	Total (row)	45	100%	42	100%	87 (100%)		
Foster Care								
Yes		7	15.6%	23	54.8%	30 (34.5%)		
No or Not Specified		38	84.4%	19	45.2%	57 (65.5%)	1	13.096***
	Total (row)	45	100%	42	100%	87 (100%)		
Age Foster Care								
0-5 years old		3	7.3%	13	36.1%	16 (20.8%)		
6-18 years old		0	0.0%	4	11.1%	4 (5.2%)	2	Not calculated
No foster care		38	92.7%	19	52.8%	57 (74%)		
	Total (row)	41	100%	36	100%	77 (100%)		

(Table 5 Continues)

(Table 5 Continued)

Variable	Group				Total (column)	df	χ^2
	Non- FASD		FASD				
	n	%	n	%			
Biological Family							
Yes	17	37.8%	15	35.7%	32 (36.8%)		
No	3	6.7%	3	7.1%	6 (6.9%)	2	0.042
Unknown[a]	25	55.6%	24	57.1%	49 (56.3%)		
Total (row)	45	100%	42	100%	87 (100%)		
Supports							
Yes	21	46.7%	16	38.1%	37 (42.5%)		
No	0	0%	2	4.8%	2 (2.3%)	2	3.347
Unknown[a]	24	53.3%	24	57.1%	48 (55.2%)		
Total (row)	45	100%	42	100%	87 (100%)		

Note. Percentages are "within group" percentages. The Yates Correction for Continuity was used to determine the $\chi 2$. Chi- square was not calculated when there were cells with an expected count less than five. Due to missing data, the tables do not always add up to 45 (non-FASD) and 42 (FASD). Age Foster Care= Age at which offender first entered the foster care system.

[a] Unknown includes not specified, not given, not mentioned, etc.

* $p < .05$ ** $p < .01$ *** $p < .001$

In contrast with history of abuse, FASD offenders were significantly more likely than non-FASD offenders to have been in foster care during their childhood (chi-square=13.096, df=1, p<.001). Over half (55%) of FASD offenders but only 16% of non-FASD offenders were reported to have been in foster care at some point in their childhood. Although no statistical test was conducted due to low expected values, FASD offenders who were involved in the foster care system also appeared to be apprehended at a younger age. Indeed, 36% were described as being apprehended between birth and 5 years of age compared to only 7% of the non-FASD sample.

From the qualitative data, it appears that parental substance abuse is a common reason in both groups for which offenders were removed from the home and placed in foster care or the care of another relative. For example, one non-FASD offender was described as being "…taken into the care of the Children's Aid Society because his mother, an alcoholic, could not care for him properly" (*R v. F.N.,* 2005, para. 9). Harper, an FASD offender, "… was raised by his grandparents because his mother…had significant problems with alcohol abuse" (*R v. Harper,* 2009 para. 14). Louie, also an FASD offender, "...was at a young age apprehended by the Ministry of Children and Families because his mother was unable to care for him arising out of her own substance abuse and her lack of training in child care (*R v. Louie,* 2012*,* para 32).

In addition to substance abuse, other forms of abuse and neglect were also reasons for removal. In *R v. J.E.R* (2012), the FASD offender was placed in foster care over concerns of "…poor supervision and allegations of sexual abuse..." (para. 35). Similarly in *R v. Alkenbrack* (2011), the offender (also from the FASD group) experienced physical beatings from both parents and for one such beating, his father was charged with assault.

Due to this assault charge, the offender was removed from the home and placed in foster care.

When first examining foster care qualitatively, aside from the obvious fact that FASD offenders experienced foster care more frequently, the foster care experiences of both groups seemed quite similar on the surface. For example, it was not uncommon to find a theme of instability or transiency in both groups when discussing foster care placements. In other words, it was not uncommon for both groups to have experienced multiple placements throughout their time in foster care. Commonly used descriptors of the number of placements were: "numerous", "a series of ", "various", "many" and "no lengthy placements" (see: *WTK* 2012; *A.T.R*, 2011; *S.L.N*, 2010; *S.R.S*, 2010; *Brown*, 2009; *Sisco*, 2008; *R.L*, 2004; *Baptiste*, 1992; *Stewart*, 1992). When looking deeper into this theme however, it becomes apparent that the FASD offenders exhibit this theme to a greater extent than the non-FASD group. For example, one non-FASD offender estimated that he lived in approximately 16 different foster or group homes (*R v. S.R.S,* 2010). In contrast, Mr., R. (an FASD offender) "believes he was in as many as 30 to 50 foster homes during his lifetime due to his difficult and defiant behaviour". However, his social worker explained that his "total number of foster care placements was closer to some 62" (R v. *J.E.R*, 2012, para. 36).

Although more FASD offenders were involved in foster care as children, surprisingly there was no significant difference between the two groups when it came to contact with their biological family (chi-square=0.042, df=2, ns). Specifically, approximately 38% and 36% of non-FASD and FASD offenders respectively reportedly

had contact with a biological family member[57] at the time of the case. In relation to contact with a biological family member, there were also no statistically significant differences in whether the offender had supports available to him/her (i.e. community support, family support, etc.). Interestingly however, two FASD cases specifically stated that the offender had *no* supports available to them; this did not occur in the non-FASD cases examined. But again, this difference is not statistically significant.

More broadly, when the themes of unstable upbringing, parental substance abuse, abuse and foster care are combined, it is clear that they are interconnected, especially in regard to FASD offenders. For example, in R v. Moses (1991), it is explained:

> Throughout Phillip's early childhood, the family experienced serious problems due to parental alcohol abuse, inter-family violence and neglect of children, that resulted in an alcohol home. There was extreme physical discipline given to the boys and children, and they witnessed numerous incidents of their mother being battered. There is evidence of Phillip's experiencing emotional neglect and he appears to have been the scapegoat of the family. There is also an indication in the report that he was a victim of sexual abuse. He was removed from the home… (paras.7 & 8).

Purposes of Sentencing

This section examines whether judges are trying to accomplish different purposes when sentencing FASD versus non-FASD offenders. That is, are there specific sentencing purposes that judges consider to be more appropriate/relevant for FASD offenders? In an attempt to address this second research question, two methods were used. First, the sentencing purposes were examined quantitatively to determine if there were any statistically significant differences between the two groups. Second, the sentencing purposes were examined qualitatively by looking at the various ways in which

[57] A biological family member includes a parent, grandparent, aunt, uncle, etc.

judges explained or justified the purposes that they invoked to further examine any differences across the two groups.

In discussing the purposes of sentencing, judges often choose more than one of the traditional purposes listed in Section 718 of the Criminal Code (i.e. general and specific deterrence, denunciation, protection of the public, rehabilitation). And, in fact, in only 17 of the 87 cases in this sample did judges invoke only one sentencing principle. Further, a multitude of different combinations of purposes were stated. In fact, Table 1 (Appendix C) demonstrates that a full 13 different categories were invoked, depending on the various combinations. For purposes of analysis, the frequency of invocation of each sentencing purpose was determined by calculating the number of cases in which it was mentioned by the sentencing judge – either alone or in combination with other purposes. As such, a judge could invoke rehabilitation and deterrence as relevant purposes in the same case and the case would be included as part of the count for both deterrence and rehabilitation.[58] Following this counting strategy, both deterrence (in 53 cases) and denunciation (in 49 cases) emerged as the most frequently invoked sentencing purposes. However, it quickly became obvious that the vast majority of these cases (73%) overlapped whereby deterrence and denunciation were mentioned together. Further, the sentencing purpose of denunciation (as its own category or in combination with other purposes other than deterrence) only appeared in 6 (7%) of the cases (see Table 1 in Appendix C). Given this marginal representation (and, by extension its insufficient statistical power as an independent sentencing category) this sentencing purpose was not analyzed as a separate category.

[58] For a more complete illustration, see Figure 1 in Appendix D.

Interestingly, the two remaining sentencing purposes – protection and rehabilitation – were equally invoked (either alone or in combination with other purposes), albeit with substantially less frequency than that of deterrence or denunciation. Specifically, 'protection' appeared in 31 cases and 'rehabilitation' in 31 cases. Even more notable, these two sentencing purposes were invoked together in over half of the 'combined' cases. That is, of all of the cases in which protection was mentioned in combination with other sentencing purposes, 67% (24) of them invoked protection and rehabilitation together. Similarly, of all of the cases in which rehabilitation was mentioned in combination with other sentencing purposes, 53% (30) of them invoked rehabilitation and protection together. Given that – from a statistical perspective – neither purpose had, on its own, sufficient statistical power for any quantitative analyses, these two sentencing purposes were also combined and labeled as "Protection/Rehabilitation".

Table 6

Deterrence as a Purpose of Sentencing by Group

	Group						
	Non- FASD		FASD				
Purposes	n	%	N	%	Total (column)	df	$\chi 2$
Deterrence	35	77.8%	18	42.9%	53 (60.9%)	2	14.328***
Other	3	6.7%	16	38.1%	19 (21.8%)		
None	7	15.6%	8	19.0%	15 (17.2%)		
Total (row)	45	100%	42	100%	87 (100%)		

Note. Percentages are "within group" percentages. Deterrence = Deterrence was given as a principle of sentencing alone or in combination with another purpose; Other = A purpose other than deterrence was given as a purpose of sentencing; None = A purpose of sentencing was not given or explained in the report. Combining "other' and "none" and contrasting this category with "Deterrence": Chi Square (continuity corrected) = 9.71, df=1, p<.01.

* $p < .05$ ** $p < .01$ *** $p < .001$

Tables 6 and 7 examine any differences in sentencing purposes across FASD and non-FASD cases. From Table 6, one notes that deterrence (general and/or specific) as a purpose of sentencing was used alone or in combination with other sentencing purposes in 78% of non-FASD cases. It was invoked significantly less often as a purpose for FASD offenders (43% of all cases)(chi-square=14.328, df=2, p<.001). Indeed, FASD cases were more likely than non-FASD cases to use a purpose (or combination of purposes) other than deterrence (38% of the FASD cases and only 7% of the non-FASD cases)(chi-square= 14.328, df=2, p<.001). Notably, judges did not mention one of the traditional purposes of sentencing in their sentencing decisions in 7 (15.6%) of the non-FASD cases and 8 (19%) of the FASD cases (see Tables 6 and 7).

From Table 7, it quickly becomes apparent that protection and/or rehabilitation as purposes of sentencing were used in only one non-FASD case (2.2%). This value was significantly less than that found for the FASD group (29%) (chi-square=13.100, df=2, p<.001). Indeed, non-FASD cases (82%) were significantly more likely to use purposes other than protection and/or rehabilitation than FASD cases (52%) (Chi Square= 13.100, df=2 p<.001).

Table 7

Protection and/or Rehabilitation as a Purpose of Sentencing by Group

	Group						
	Non- FASD		FASD				
Purposes	n	%	N	%	Total (column)	df	χ^2
Protection/Rehabilitation	1	2.2%	12	28.6%	13 (14.9%)		
Other	37	82.2%	22	52.4%	59 (67.8%)	2	13.100***
None	7	15.6%	8	19.0%	15 (17.2%)		
Total (row)	45	100%	42	100%	87 (100%)		

Note. Percentages are "within group" percentages. Protection/Rehabilitation = Protection and/or rehabilitation was given as a principle of sentencing alone or in combination; Other = other combinations of purposes; None = a purpose of sentencing was not given or explained in the report. Combining "other" and "none" and contrasting this category with "Protection/Rehabilitation": Chi-Square (continuity corrected) = 9.88, df=1, p<.01.

* $p < .05$ ** $p < .01$ *** $p < .001$

Although a stable finding, other Canadian research (Tucker, 2009) has warned us about inter-jurisdictional variability in sentencing practices. As such, in order to examine whether these findings (those presented in Tables 6 and 7) were consistent across the three jurisdictions (Ontario, BC, and Yukon), the results (from Tables 6 and 7) were broken down by jurisdiction (province/territory) and are presented in Table 8. Notably, it appears that deterrence was more likely to be named as a purpose of sentencing in non-FASD cases than in FASD cases in all three jurisdictions.[59] Having said this, the difference is relatively small in Ontario precisely because judges in this jurisdiction invoke deterrence as a purpose quite frequently, regardless of group. In Ontario, deterrence was invoked in 87% of the non-FASD cases and 71% of the FASD cases. While deterrence was also invoked 87% if the time in non-FASD cases in British Columbia, it was unlike Ontario in that it only invoked deterrence in 33% of the FASD cases. Similarly, Yukon invoked deterrence in 60% of the non-FASD cases studied but only 23% of the FASD cases.

This jurisdictional variability in the use of deterrence as a sentencing purpose is corroborated by a more qualitative examination of the cases. Specifically, it appears that many justices – particularly in British Columbia and Yukon – do not favour the use of deterrence as a purpose of sentencing for FASD offenders. In terms of general deterrence, it appears that justices in several of the cases in both British Columbia and Yukon subscribe to the notion that offenders with cognitive disabilities should not be used as examples to deter others. Illustratively, the judge in one case asks, "[S]hould we use [the offender] as a whipping boy by imposing a gaol sentence of greater length on him in

[59] Simply note that a chi-square test of significance was not calculated because of low expected values. As such, findings from this table must be interpreted with caution.

order to deter others who should and are capable of knowing better?" (*R v. Harper*, 2009, para. 47). Similarly, Justice Trueman asserts in *C.J.M* (2000) that "[u]sing C.J.M. as a vehicle to express society's abhorrence for this type of offence, by imposing a sentence of greater length, is to use him as a whipping boy. He would take the punishment for the acts of others who should know better and are capable of knowing better. To sentence him with the objective of deterring others of like mind is pure fallacy" (para. 110).

In addition to general deterrence, justices in several cases in British Columbia and Yukon take issue with the use of specific deterrence as well. A good example of this position comes again from Justice Trueman in *C.J.M* (2000). She explains that to sentence an FASD offender with the aims of specifically deterring her/him is to fail to understand the offender's background, his/her FASD diagnosis and the secondary disabilities that are associated with this diagnosis, and the type of support that the offender needs to succeed. This opinion is echoed in *Kendi* (2011) in which it is asserted that specific deterrence will not work for the FASD offender because he/she is not capable of making the connection between cause and effect – a required pre-requisite for its effectiveness.

Notably though, these British Columbia and Yukon perspectives contrast starkly with opinions expressed in cases from Ontario. In this latter jurisdiction, Justice Borenstein (in *W.T.K*. (2012)) explains in reference to an FASD offender that "deterrence is the most important factor in this sentencing: specific and general deterrence. Mr. W.T.K can understand the consequence of his actions and he must get the message that if he commits robberies, he will go to jail for a long time" (para. 56). Additionally, Justice Fraser in *D.B.* (2003) - another case in which the offender has FASD - asserts that

"…principles of sentence which are of the most and primary importance here are denunciation of this sort of conduct and deterrence, both specific and general… Mr. D.B., and *others of a like mind,* must know that significant penalties are the result of this sort of behaviour" (para 16, emphasis added). The jurisdictional variability in perspective is notable.

Table 8

Deterrence as a Purpose of Sentencing by Group and Province

		Group				
		Non- FASD		FASD		
Variable		n	%	n	%	Total (column)
Ontario						
Deterrence		13	86.7%	10	71.4%	23 (79.3%)
Other		0	0.0%	3	21.4%	3 (10.3%)
None		2	13.3%	1	7.1%	3 (10.3%)
	Total (row)	15	100%	14	100.0%	29 (100%)
British Columbia						
Deterrence		13	86.7%	5	33.3%	18 (60%)
Other		1	6.7%	5	33.3%	6 (20%)
None		1	6.7%	5	33.3%	6 (20%)
	Total (row)	15	100%	15	100%	30 (100%)
Yukon						
Deterrence		9	60.0%	3	23.1%	12 (42.9%)
Other		2	13.3%	8	61.5%	10 (35.7%)
None		4	26.7%	2	15.4%	6 (21.4%)
	Total (row)	15	100%	13	100%	28 (100%)

Note. Percentages are "within group" percentages. Overall chi-square tests were not calculated because of low expected values. Deterrence = Deterrence was given as a principle of sentencing alone or in combination with another purpose; Other = A purpose other than deterrence was given as a purpose of sentencing; None = a purpose of sentencing was not given or explained in the report.

Similar inter-jurisdictional variability was found relative to the sentencing purposes of protection and/or rehabilitation. As Table 9 demonstrates, these purposes were not invoked by judges in any of the cases in Ontario - for either FASD or non-FASD offenders. As such, the overall difference in the invocation of protection and/or rehabilitation across FASD and non-FASD cases (presented in Table 7) was due exclusively to judicial decisions in British Columbia and Yukon. That is, the greater use of these sentencing purposes in FASD (versus non-FASD) cases can be accounted for entirely by these two provinces. Both jurisdictions tended to use protection and/or rehabilitation more in cases involving an FASD offender than a non-FASD offender.

Table 9

Protection and/or Rehabilitation Used as a Purpose of Sentencing by Group and by Province

	Group				
	Non- FASD		FASD		
Variable	n	%	n	%	Total (column)
Ontario					
Protection/Rehabilitation	0	0.0%	0	0.0%	0 (0%)
Other	13	86.7%	13	92.9%	26 (89.7%)
None	2	13.3%	1	7.1%	3 (10.3%)
Total (row)	15	100%	14	100.0%	29 (100%)
British Columbia					
Protection/Rehabilitation	1	6.7%	4	26.7%	5 (16.7%)
Other	13	86.7%	6	40.0%	19 (63.3%)
None	1	6.7%	5	33.3%	6 (20%)
Total (row)	15	100%	15	100%	30 (100%)
Yukon					
Protection/Rehabilitation	0	0.0%	8	61.5%	8 (28.6%)
Other	11	73.3%	3	23.1%	14 (50%)
None	4	26.7%	2	15.4%	6 (21.4%)
Total (row)	15	100%	13	100%	28 (100%)

Note. Percentages are "within group" percentages. Protection/Rehabilitation = protection and/or rehabilitation was given as a principle of sentencing alone or in combination; Other = other combination of purposes; None = A purpose of sentencing was not given or explained in the report.

Equally notable are the additional insights that a more qualitative analysis of these sentencing purposes of protection and/or rehabilitation provides. For instance, an examination of the BC and Yukon cases suggests that the youthfulness of the offender has an impact on the consideration of using rehabilitation as a purpose for both FASD and non-FASD groups. As such, in cases in which offenders were described as youthful or young, rehabilitation was often mentioned as a purpose considered during sentencing. In *Louie* (2012) – an FASD offender - for example, the court states that it puts "…some emphasis on the rehabilitation of the offender, not merely because he is Aboriginal, but also because of his extreme youth…" (para. 63). This view is echoed in *Smarch* (2010) – a non-FASD offender - in which the court asserts that "…I cannot lose sight of the principle of rehabilitation. I cannot lose sight of the fact that Mr. Smarch is still a young man" (para 21). Similarly in *T.R.P.* (2003) – a non-FASD offender - the court says that "…certainly principles in sentencing a youthful offender – Mr. T.R.P. is only 18 - require that I consider rehabilitation…" (para 30).

Another theme that emerges in relation to rehabilitation is found when examining the Yukon cases. It appears that instead of a traditional rehabilitation expectation – that is, that the offender will be cured – and a traditional rehabilitation format – that is, programming with a one-size-fits-all educational approach - there is a more realistic expectation and flexible approach to rehabilitation in relation to an FASD offender. This is best exemplified by excerpts from *Kendi* (2011), *Elias* (2009) and *Quash* (2009):

> By rehabilitation, I want to make it clear that I am talking about rehabilitation in the context of Mr. Kendi's disability. So this is not a situation where he is ever going to be cured; this is not a situation where we can send him off to a particular program that is going to change his behaviour. Rehabilitation in the context of a situation with an FASD offender is really about adjusting our expectations to their abilities, but also about setting up a situation which maximizes his chances of

> being successful within the community, and that is really all about structure, support, and supervision. A situation in which there are others around him to provide, in the absence of his ability to do so, that executive brain functioning to help him to make appropriate decisions. So rehabilitation, in this case, I am viewing within that context (*Kendi*, 2011, para 11).
>
> …
>
> Ms. Elias should be given every opportunity to pursue her rehabilitation to the extent, given that we do not know what, if any for certain, cognitive difficulties Ms. Elias may have. It may not be the form of rehabilitation found in individuals who do not suffer from any cognitive defects or limitations (*Elias*, 2009, para. 29).
>
> …
>
> Mr. Quash will always be FASD. He cannot be cured. Rehabilitation in his case depends on him being provided with sufficient supports and guidance to direct and encourage him to maximize the abilities and understanding he has and channel it towards positive and non-criminal behaviours. It is achievable. It also requires effort by Mr. Quash to take advantage of any opportunities that are provided to him (*Quash*, 2009, para. 83).

Differences in Sentence

In an attempt to examine the third portion of the research question - that is, whether judges hand down different sentences for FASD offenders than non-FASD offenders - a comparison of sentences was done across the two groups using several methods. First, a comparison was done looking for any differences across the two groups in terms of custodial versus non-custodial sentences. Second, a comparison across the two groups was conducted on only those cases in which a custodial sentence was handed down. Specifically, this analysis examines whether there were any quantitative differences in the custodial sentence (i.e. length of sentence). As part of this analysis, the question of qualitative difference for the justification or explanation of the sentence/sentence length was also assessed.

Type of Sentence: Custodial or Non- Custodial

Given the seriousness of the violent offences that were sampled (for both groups), it is not surprising to find that offenders in both groups were more likely to receive a

prison sentence than a non-custodial sentence. In particular, only around 27% of non-FASD cases and 19% of FASD cases did not receive a prison sentence (See Table 10). However, what is notable is that the non-FASD and FASD offenders were almost exactly equally likely to receive a prison sentence. Specifically, while 73% (33) of the non-FASD group was given a custodial sanction, 81% (34) of the FASD group was also given this type of sentence. In fact, no statistically significant difference was found across the two groups (chi-square = 0.347, df=1, ns).

Table 10

Does the Offender Receive a Prison Sentence?

	Group						
	Non- FASD		FASD				
Sentence Type	n	%	n	%	Total (column)	df	χ^2
No Prison	12	26.7%	8	19.0%	20 (23.0%)	1	0.347
Prison	33	73.3%	34	81.0%	67 (77.0%)		
Total (row)	45	100%	42	100%	87 (100%)		

Note. Percentages are "within group" percentages. The Yates Correction for Continuity was used to determine the χ^2.
$^*p < .05$ $^{**}p < .01$ $^{***}p < .001$

Notably, this general finding also held across jurisdictions. In Ontario, British Columbia and Yukon respectively, 21%, 30%, and 18% of cases studied (that is both non-FASD and FASD cases in each of those jurisdictions) were given a non-custodial sentence. When examining whether a prison sentence was given in each of the three provinces under study, Table 11 shows no obvious differences between groups. Said differently, the apparent *lack* of difference between the FASD and non-FASD samples on

whether (or not) an offender received a prison sentence held in all three jurisdictions, suggesting that the finding may be robust.[60]

[60] However, note that a chi-square test of significance was not calculated because of low expected values. As such, findings from this table must be interpreted with caution.

Table 11

By group and province- Does the offender receive a prison sentence?

		Group				
		Non- FASD		FASD		
Variable		n	%	N	%	Total (column)
Ontario						
No Prison		4	26.7%	2	14.3%	6 (20.7%)
Prison		11	73.3%	12	85.7%	23 (79.3%)
	Total (row)	15	100%	14	100.0%	29 (100%)
British Columbia						
No Prison		5	33.3%	4	26.7%	9 (30.0%)
Prison		10	66.7%	11	73.3%	21 (70.0%)
	Total (row)	15	100%	15	100%	30 (100%)
Yukon						
No Prison		3	20.0%	2	15.4%	5 (17.9%)
Prison		12	80.0%	11	84.6%	23 (82.1%)
	Total (row)	15	100%	13	100%	28 (100%)

Note. Percentages are "within group" percentages. Overall Chi Square Tests not calculated because of low expected values.

* $p < .05$ ** $p < .01$ *** $p < .001$

Although no obvious differences emerged between the FASD and non-FASD groups in terms of whether or not they received custodial sentences, this finding does not necessarily mean that there may be no differences across these groups in terms of the type of non-custodial sanctions handed down. Indeed, 12 non-FASD offenders and 8 FASD offenders were given non-custodial sentences. As shown in Table 12, these 20 offenders received a variety of different non-prison sanctions – either alone or in combination. Notably, FASD offenders appear to be concentrated in the more restrictive or more onerous categories of community sanctions (i.e. probation and conditional sentences), than the non-FASD offenders.

Table 12

For Those Who Did Not Receive a Prison Sentence: Which non-Custodial Option(s) Did They Receive?

	Group	
	Non- FASD	FASD
Non-Custodial Type	n =12	n=8
Probation	6	7
Conditional Sentence	8	5
Community Service	4	0
Intermittent Sentence	1	0
Conditional Discharge	1	0

Note. The total N for each group reflects the number of offenders that were given non-custodial sanctions, not the sum of the type of sanctions. Because some offenders were given multiple non-custodial sanctions, the sum of the non-custodial types does not equal the Total N.

The overall absence of differences across FASD and non-FASD cases – particularly in terms of custodial sanctions – merits further examination. Indeed, the different descriptions of these two groups as reported by sentencing judges, coupled with the different sentencing purposes invoked, might have suggested different sentences. As one possible strategy for further exploring the findings relative to the sentence handed down, the justifications for the particular sanction provided by the sentencing judge were qualitatively examined. In particular, one common theme emerged which might provide a partial explanation for the lack of difference in sentence between FASD and non-FASD offenders (whereby both groups were equally likely to receive prison sentences). Indeed, several justices called attention to the lack of options for FASD offenders in terms of resources, programming and alternatives to incarceration. In these instances, a term of prison was selected. However, this sanction – it would seem – might not have been the outcome had appropriate resources or programs been available for these FASD offenders.

Illustratively, Justice Trueman of the British Columbia Provincial Court explains in *R v. C.J.M* (2000),

> I am convinced that sending C.J.M. to jail once again would not contribute to "the maintenance of a just, peaceful and safe society." It will remove him from the community for a time, and it may satisfy some other sentencing considerations such as denunciation. It will not be a deterrent to him, nor will it be a deterrent to other "like-minded" individuals. Jail has undoubtedly compounded C.J.M.'s problems and made it more difficult for him to succeed on the outside. If I sentence him to jail yet again, I may be condemning him to a lifetime in prison, which will be interrupted only by a revolving door. I expect that his level of violence would either remain the same or it would increase. Is it possible to change his living situation to one in which he can function, without the need to be apparently or actually violent, that is safe for him and safe for society? Yes. Is it realistic with the current level of available resources? That is more problematic. C.J.M. does not have to be sent to jail for public safety reasons. I have no doubt that the issue of public safety can be entirely addressed by a conditional sentence. Something far less than jail would alleviate these concerns. The question is whether the executive branch of government or the Canadian public can provide something that is "just" for C.J.M. and "safe" for society (paras. 66-67).

Similarly, when weighing the sentencing principles of protection and rehabilitation and the options to satisfy these principles, Justice Ruddy states in the Yukon case of *R v. Kendi* (2011) the following:

> My biggest struggle in this particular case, when I am weighing protection of the public against rehabilitation for Mr. Kendi, is really about knowing what the options are for release in this particular case. It is evident to me that jail is not going to be capable of changing Mr. Kendi's behaviour in any way, shape or form. It does, however, provide a situation whereby the public is protected so long as he is in custody. My preference, given his disability, obviously, would be to have an appropriate structured and supervised placement for him within the community that would provide that same protection of the public but would not require him to be warehoused in a jail situation. In this particular case, I do not have that… What I have then, at the end of the day, is a situation where we have an individual who is perhaps not best kept in a jail facility, but who does present a danger to the public, and for whom I do not, today, have a placement which would satisfy me that he is going to have the requisite support and supervision within the community to protect the public, but some potential that this new program will come up with that in the near future. I certainly hope that it does, because, as I have said earlier, Mr. Kendi is going to be returning to the community. Whether that is tomorrow or six months from now, he is going to be returning to the community, and, in the absence of a structured and supervised

> placement, he is not going to do well in the community, and he is going to present a risk to himself and others…I keep coming back to this: What this case really needs is an appropriate placement for Mr. Kendi, which we do not have at present (paras. 14,18 & 19).

In yet another Yukon case (*R v. Quash,* 2009), Justice Cozens suggests that a lack of supports and programming specifically designed for FASD offenders is creating a roadblock to ending the "revolving door of offending" that is so common with FASD offenders (para 74). Specifically, he explains,

> … separation from society does not necessarily require incarceration of the FASD offender or, if incarceration is necessary in the circumstances, which may well be the case, perhaps not incarceration for as long a period. The problem, however, is that certain offenders affected by FASD commit offences of such a serious nature that they cannot simply be released into society without sufficient supports in place. The frank reality is that there are insufficient residential facilities in the Yukon of the type required to meet the needs of these FASD offenders. If there were, fewer of these offenders would be incarcerated in jail; those who were incarcerated would not be incarcerated for as long, and, in the end, there is a very real likelihood that the revolving door of offending, often with increasing severity, would slow or be closed altogether for the individual FASD offender. In the end, society would be better protected and would also benefit from the knowledge that its youngest victims were now being assisted to find a meaningful life, despite the crime visited upon them in the womb. The problem of providing appropriate supportive residential care facilities for FASD victims is one that will require collaborative effort of all governments, from federal to territorial and/or provincial and municipal, as well as an understanding by us as Yukon and Canadian residents that this is a societal problem and a societal responsibility. If we would choose to put our collective efforts into addressing this immediate need, in the end all parties would benefit…. The principle of rehabilitation must be considered in conjunction with that of separation from society. I accept that Mr. Quash wishes to change his life from what it has been. At present, there are insufficient resources available to allow Mr. Quash to serve any further time imposed as a custodial disposition in the community (*R v. Quash,* 2009, paras. 74-76, 82).

Notably though, this issue of lack of programming or options as a consideration when choosing between a custodial and non-custodial sanction was raised in only two of the three jurisdictions under study. Specifically, the justices who called attention to this limitation were exclusively from either Yukon or British Columbia. No judges in Ontario

highlighted this concern, nor invoked it when explaining or justifying a particular sentence.

Length of Sentence

Another potential explanation for the lack of difference between the sentences handed down to FASD and non-FASD offenders may reside in the measure of comparison. Specifically, a more sensitive or 'fine grained' measure of the sentence may produce different results. In this light, a 5-category measure was used, ranging from 'no prison' to '3.5 years and up' (Table 13). However, even using this new categorization of sentence, no significant differences between the two groups on the type of sentence received was found (chi-square = 3.087, df=4, ns).

Table 13
Length of Sentence by Group Including Offenders Given No Prison

	Group						
	Non- FASD		FASD				
Sentence Length	n	%	n	%	Total (column)	df	χ^2
No Prison	12	26.7%	8	19.0%	20 (23.0%)		
1 year or less	11	24.4%	13	31.0%	24 (27.0%)		
>1 year to <2 years	7	15.6%	6	14.3%	13 (14.9%)	4	3.087
2 years to < 3.5 years	6	13.3%	10	23.8%	16 (18.4%)		
3.5 years and up	9	20.0%	5	11.9%	14 (16.1%)		
Total (row)	45	100%	42	100%	87 (100%)		

Note. Percentages are "within group" percentages. The analysis was done using the recoded sentence variable, which created groupings of sentence length.

Another possibility is to remove the 20 offenders who received a non-custodial sentence from the analysis. In this way, the focus is exclusively on those offenders who received a prison sentence. Said differently, the analysis simply examines various lengths of custodial sanctions. However, even restricting the analysis to the 4 categories of sentence length (ranging from '1 year or less' to '3.5 years and up'), there was still no statistically significant difference in length of prison sentence handed down by group (see Table 14).

Table 14
Length of Sentence by Group Excluding Offenders Given No Prison

	Group						
	Non- FASD		FASD				
Sentence Length	n	%	n	%	Total (column)	df	χ^2
1 year or less	11	33.3%	13	38.2%	24 (35.8%)		
>1 year to <2 years	7	21.2%	6	17.6%	13 (19.4%)		
2 years to < 3.5 years	6	18.2%	10	29.4%	16 (23.9%)	3	2.372
3.5 years and up	9	27.3%	5	14.7%	14 (20.9%)		
Total (row)	33	100%	34	100%	67 (100%)		

Note. Percentages are "within group" percentages. The analysis was done using the recoded sentence variable, which created groupings of sentence length.

A similar story emerges with an even more precise measure of 'length of prison sentence'. Specifically, a continuous variable was employed which captured the exact sentence length in months. Non-prison sanctions were given a score of zero. As shown in Table 15, while the FASD group (M=22.35, SD=25.33) appears to receive prison sentences which are approximately 3 months longer, on average, than those handed down to non-FASD offenders (M=19.21, SD=20.45), this difference is not statistically

significant (t=0.641, df= 85, ns). However, it is noteworthy that the standard deviations of the sentence lengths (in months) for both groups are quite high (approximately 20 months).

Table 15
Mean Number of Months in Prison for Non-FASD and FASD Offenders

	Non- FASD			FASD				
	n	M	SD	n	M	SD	*T*	df
Sentence Length	45	19.21	20.45	42	22.35	25.33	0.641	85

Note. M= Mean. SD= Standard deviation. Length of sentence in months.
. *$p < .05$ **$p < .01$ ***$p < .001$

As one final attempt to understand the lack of difference in the sentences handed down to FASD and non-FASD offenders, it is important to consider the possibility that other variables (also correlated with sentence length) may be masking a real difference between the two groups. To examine this hypothesis, several factors need to be assessed. Given that criminal record is a known correlate of sentence length (whereby a longer criminal record is associated with a longer or harsher criminal sanction), it is possible that the lack of difference in sentence length between the FASD and non-FASD offenders may simply reflect differences in criminal record across these two groups.

To examine this possibility, differences in criminal record of FASD and non-FASD cases were examined. Unfortunately, the exact number of previous convictions was not always reported in the sentencing judgment. Rather, in some cases, the judge simply provided qualitative descriptions of the offender's criminal record such as "some", "minor", "horrific" or "ugly". For the quantitative analyses, these qualitative

terms were classified into two groups: ‘a relatively small number of prior convictions’ and ‘many prior convictions’.

Table 16 looks at the three (nominal) *categories* of criminal record of the offenders by group. No significant relationship was apparent when the traditional Pearson chi-square test is used (chi-square=4.98, df=2, ns). However, this statistical test does not take into account order and although these categories are nominal, they also have the potential of being ordered. That is, an ugly record can be assumed to be worse than a minor record, and minor record worse than no record/no mention and so on. By using a linear-by-linear association chi-square test rather than the traditional Pearson chi-square test, order can be taken into account. This type of test allows for more statistical power.

As such, once these three categories of criminal record (no record or no mention; minor record; ugly record) were ordered and the linear-by linear association conducted, a significant relationship emerged (chi-square=4.155, df=1 p=.042) (Table 16, see note “a”). The correlation between the two variables (group by record) also is statistically significant (r=.22, p=.041), giving us further confidence in its existence. Indeed, it would appear the FASD offenders have more serious criminal records than non-FASD offenders.

Table 16
Severity of Previous Criminal Record by Group

	Group						
	Non- FASD		FASD				
Criminal Record	n	%	n	%	Total (column)	df	□2
No Record/No Mention	14	31.1%	5	11.9%	19 (21.8%)		
Minor	22	48.9%	24	57.1%	46 (52.9%)	2	4.98[a]
Ugly	9	20.0%	13	31.0%	22 (25.3%)		
Total (row)	45	100%	42	100%	87 (100%)		

Note. Percentages are "within group" percentages. No record or no mention = the offender was either a first time offender, or his/her criminal history was not mentioned in the case; Minor = 1, 2, or 3 previous convictions or previous convictions described in words such as 'some' or 'minor'; Ugly = 4 through 60 convictions or described in words such as 'ugly', 'horrific', 'extensive', etc.
[a] Linear by linear association, χ^2=4.155, df=1, p=.042

This conclusion is further corroborated by a more qualitative examination of the ways in which the offenders' prior records are discussed in the sentencing judgments. Specifically, it appears that FASD offenders' criminal histories tend to be described negatively and also appear to be more frequent.

In particular, FASD offenders with lengthy records are described using terms with negative tones. Terms such as "horrific", "substantial", "relatively continuous", "unenviable", "numerous", "extensive", "multipage", "terrible", "disturbing", "very significant" and "strikingly serious" are all examples of descriptors used in relation to FASD offenders' criminal records (See: *Oates*, 2012; *Peters*, 2011,; *J.S.*, 2011; *Quash*, 2011; D.*A.H.*, 2010; *Kendi*, 2010; *S.L.N.*, 2010; *Elias*, 2009; *Quash*, 2009; *Wilson*, 2009; *C.J.M.*, 2006; *R.W.L.*, 2004; *D.B.*, 2003). In terms of non-FASD cases in which offenders' criminal records were also quite abundant, descriptors – although negative in a sense – tended to be softer. For example, the offender's record is described in one case

as “somewhat lengthy” (*Gilbert*, 2006, para. 4). In this instance, instead of simply stating that the offender had a lengthy record – which could be considered quite negative – the description is softened by the qualifier “somewhat.” An exception to this observation, however, comes when examining Yukon cases. It appears that both FASD offenders and non-FASD offenders with plentiful records were equally described using negative descriptors like “ugly”, “extensive”, “unfortunate” and “significant and lengthy” (See: *Smarch*, 2010; *S.R.S.*, 2010; *Wagner*, 2003; *Laquant*, 2002; *Freeman*,1992; *Stewart*, 1992).

In addition to these differences of semantics used to describe criminal records in the non-FASD cases, there were also several instances in which the courts made notice of the offender’s lack of criminal record, or downplayed an existing criminal record. In one instance, the court mentions that the (non-FASD) offender “has a previous record” but “the record is not the most serious” (*Lee*, 1998). In other instances, the court referred to the offender’s record as “short criminal record” – a description that was not found in the FASD cases – or referred to the offender’s record as “dated” or “unrelated” (Smith, 2003; R.A, 2010, Peters, 2005). Although there were a few instances in which FASD offenders did not have previous criminal records (see: *Alkenbrack*, 2011; *Blanchard*, 2011, *D.B.*, 2002; *J.L.H.*, 2000; *Clement*, 1994), this fact appeared to be mentioned more clearly with the non-FASD group. For instance, it was not uncommon to see this lack of record described in ways such as: the offender is “without criminal antecedents” or had “no previous criminal antecedents nor criminal record” or simply has “no criminal record” (*Chung*, 2012; *Bedard*, 2011; *Chau,* 2010; *Ross*, 2009; *G.S.J.*, 2007; *Cordeiro*, 2006; *Cottrell*, 2005; *M.W.H.*, 2001).

An examination of criminal record also highlighted yet another theme for both groups. Specifically, one quickly discerns the notion of "continuous offending". However, this theme is particularly prominent in the FASD group, with most offenders having records of significant length. Conversely, the non-FASD offenders are reported as demonstrating more variety; that is, there were long-term continuous offenders but there were also offenders with minor criminal records which contained few convictions or sporadic convictions spread over a long period of time.

In contrast, FASD offenders were described as truly continuous offenders. Indeed, there were several cases in which another offence was committed soon after the release of the offender or while he/she was still on parole or probation. For example, the offences for which the offender was being sentenced in *R.W.L.* (2004) were committed shortly after his release on parole. In another instance, an offender had only been out of custody for one week at the time of his next offence (*R v. J.E.R.*, 2012). Similarly, Peters had not yet finished his probation period for his last conviction when he was arrested for the offence in which he is currently being sentenced (*R v. Peters*, 2011). In the extreme case of *S.L.N.*(2010), most of the offences that make up her extensive criminal record were, in fact, committed while in custody serving a life sentence.

In both groups, those with continuous records also appear to have youth records. In other words, their offending started during their youth and has continued well into adulthood. For example, Oates – an FASD offender who was still quite young – had a criminal record that "spans five pages, beginning with convictions in 2000 and the most recent being in December, 2011" (R v. *Oates*, 2012, para. 7). J.S – also an FASD offender – was described as having a "relatively continuous" criminal record from youth

to adulthood (*R v. J.S.*, 2011, para. 3). R.W.L – again also an FASD offender – has "an extensive criminal history going back to when he was 13 years-of-age. Although now only 22 years old, he has accumulated 45 criminal convictions" (*R v. R.W.L.,* 2004, para. 9). S.K.S (2003) – a non-FASD offender – has a long record that commenced 6 years prior to his current offence when he was just 16 years old. Wagner (2003) – also a non-FASD offender – has both assault and robbery convictions for which some occurred while he was a youth.

In contrast to this pattern of continuous offending, there were non-FASD offenders with extensive records but who displayed gaps in their offending. Although there were a few FASD offenders that also were reported to have some gaps in offending (see: *J.S*, 2011; *Sisco,*2008), the non-FASD gaps appeared longer, with some being for 10 and 17 years (see: *R.A*, 2010; *Gilbert*, 2006; *Laquant*, 2002).

A second variable meriting particular attention when considering the possibility that a real difference in sentence length between FASD and non-FASD offenders may actually exist and is simply being masked by a third variable (which is also related to sentence length) are breaches of court conditions. Indeed, one might naturally assume that a history of breaches is likely correlated with a longer or harsher criminal sanction. As such, it is possible that the lack of difference in sentence length between the FASD and non-FASD offenders found in this study may simply reflect differences in breaches across these two groups.

And, in fact, it is not unrealistic to assume differences in breaches between FASD and non-FASD offenders. It is often suggested (Fast & Conry, 2004; Chudley, Conry, Laporte, McKee & Lisakowski, 2002; Moore & Green, 2004; Roach & Bailey, 2009) that

FASD offenders may not fully understand the scope of the restrictions that are placed on them (e.g., as part of a probation order or bail conditions). Further, this lack of understanding may also reflect their limited literacy skills and/or issues with executive functioning deficits (e.g., time telling and memory) of some FASD offenders.

To examine this possibility, differences in breaches reported in FASD and non-FASD cases were examined. As Table 17 shows, slightly more FASD offenders (N=10) than non-FASD offenders (N=4) had "many" (defined as six or more) previous breaches. However, this difference was not statistically significant (chi-square= 3.585, df=2, ns). Similar results were found when more qualitative measures (e.g. expressions such as "past record of poor compliance" or has a "history of non compliance") were used.

Table 17
Number of Previous Breaches by Group

	Group						
	Non- FASD		FASD				
Previous Breaches	n	%	n	%	Total (column)	df	$\chi 2$
None/Not Mentioned	37	82.2%	29	69.0%	66 (75.9%)		
Few	4	8.9%	3	7.1%	7 (8.0%)		
						2	3.585
Many	4	8.9%	10	23.8%	14 (16.1%)		
Total (row)	45	100%	42	100%	87 (100%)		

Note. Percentages are "within group" percentages. None/not mentioned = the offender either had no previous breaches or they were not mentioned in the case; Few = 1 to 5 breaches or described in words as 'few'; Many = 6 or more breaches or described in words as 'many'.

Just as with the examination of previous breaches, an assessment of current breaches (i.e. violations of court conditions which constitute part of the package of convictions for which the offender is currently being sentenced, including the current (violent) offence) by group yielded no significant relationships (chi-square= 1.91, df=1, ns) (Table 18).

Even after combining previous and current breaches, no significant relationship was demonstrated between the two groups (chi- square= 2.492, df=1, ns) (Table 19).

Table 18
Does Offender Have a Breach in the Current Set of Offences by Group?

	Group						
	Non- FASD		FASD				
Current Breaches	n	%	n	%	Total (column)	df	$\chi 2$
Yes	10	22.2%	16	38.1%	26 (29.9%)		
No or Unspecified	35	77.8%	26	61.9%	61 (70.1%)	1	1.91
Total (row)	45	100%	42	100%	87 (100%)		

Note. Percentages are "within group" percentages. The Yates Correction for Continuity was used to determine the $\chi 2$.

Table 19
All Breaches (Past and Present) by Group

	Group						
	Non- FASD		FASD				
All Breaches	n	%	n	%	Total (column)	df	$\chi 2$
None	30	66.7%	20	47.6%	50 (57.5%)		
At Least One	15	33.3%	22	52.4%	37 (42.5%)	1	2.492
Total (row)	45	100%	42	100%	87 (100%)		

Note. Percentages are "within group" percentages. The Yates Correction for Continuity was used to determine the $\chi 2$.
None = no current or previous breaches apparent; At least one = at least one current or previous breach mentioned.

In light of the findings from these two possible ('third') variables, a multiple regression analysis was carried out to determine whether group (i.e. FASD and non-FASD cases) impacts the length of a sentence after controlling for criminal record and number of breaches. Table 20 presents the first analysis in which the five-point or five-category scale of 'custodial sentence' (first presented in Table 13) was used as the dependent variable. From this table, one sees that the number of breaches that an offender possessed had no effect on length of sentence. Indeed, the relationship was not statistically significant (β=0.044, t(84)=0.414, ns). In contrast, the offender's length of criminal record proved to have a statistically significant effect (β=0.242, t(84)=2.27, p<.05.), even after controlling for the number of breaches. However, once group (FASD or non-FASD) was added to the equation, while criminal record remained statistically significant (β=0.252, t(84)=2.31, p<.05) and number of breaches remained insignificant (β=0.053, t(84)=0.491, ns), there continued to be no effect of group (β= -0.055, t(84)=-0.499, ns). In other words, even after controlling for any differences in sentence length resulting from differing criminal records and number of breaches, the sentence length of FASD offenders was not found to be different from that of non-FASD offenders.

Table 20

Ordinary Least Squares Regression: Dependent Variable Sentence Length on a Five-Point Scale

	Model 1				Model 2			
Variable	*B*	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
All Breaches	0.125	.302	0.044	0.414	0.151	.308	0.053	0.491
Criminal Record	0.494	.218	0.242	2.27*	0.517	.224	0.252	2.31*
Group	—	—	—	—	-0.155	.310	-0.055	-0.499

Note. R = .251 (Model 1); R=.256 (Model 2) R-squared change F<1, not significant

*$p < .05$

A second regression – this time using the exact prison sentence length (in months) as the measure of 'custodial sentence' – was conducted (Table 21). However, even using this more sensitive measure, the results were the same. Specifically, even after controlling for the effects of criminal record and number of breaches, there continued to be no differences found between FASD and non-FASD offenders in terms of sentence length (β=0.020, t(84)=0.188, ns). It would seem that while criminal record predicts sentence length (controlling for number of breaches), FASD versus non-FASD group membership does not affect the length of the custodial sentence handed down.

Table 21

Ordinary Least Squares Regression: Dependent Variable Sentence Length in Months

	Model 1				Model 2			
Variable	*B*	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
All Breaches	-3.830	4.817	-0.084	-0.795	-3.99	4.916	-0.087	-0.811
Criminal Record	10.04	3.473	0.303	2.89*	9.90	3.566	0.299	2.78*
Group	—	—	—	—	0.928	4.946	0.020	0.188

Note. R = .304 (Models 1 & 2); R-squared change F<1, not significant
*$p < .05$

CHAPTER FIVE

Discussion

Although the disabilities caused by FASD appear to create difficulties at every stage of the criminal justice system (i.e. police, court, corrections), previous legal discussion and commentary have focused primarily on the court stage of the justice system. That is, commentary and interest have frequently been situated on the process of determining guilt (i.e. the trial stage) and the sentencing of offenders; although not a lot of empirical research has been conducted. Because FASD individuals often do not meet the stringent conditions of NCRMD and UST – and, in fact, it may be unwise in some incidences to raise the issues of FASD during the trial phase of the criminal justice system- it is the sentencing stage in which the issues of FASD are most commonly raised and considered. Therefore, there is a need for closer examination and empirical research to address whether FASD is being taken into account at sentencing and if so, how.

When Medicine Meets Criminal Law

Most of the current literature describing the features and disabilities of FASD individuals is very medically oriented; even the literature pertaining to FASD in the justice system. Nonetheless, the literature on FASD offenders paints a picture of a very different type of offender. One aim of the current study was to determine how judges, more specifically sentencing judges, describe FASD offenders and how these descriptions differ from non-FASD offenders. It was found that what judges tended to highlight as salient about FASD offenders in their sentencing judgments largely corresponds to the descriptions contained in the literature. In other words, the medical and legal descriptions about how FASD and non-FASD individuals differ are similar.

Whether this is indicative of an increased knowledge of FASD on the judges' part or an increase in knowledge and reporting on the part of those constructing the pre-sentence reports, it is hard to say. Interestingly, in this study, slightly more FASD judgments than non-FASD judgments included reference to a pre-sentence report.

When comparing the non-FASD and FASD cases, it was found that age and gender appeared to be important factors utilized in both groups. However, with further comparison, certain characteristics emerged as distinctive of FASD offenders. For example, the mention of learning disabilities and/or ADHD was used (or considered salient) in *only* FASD judgments. Given the presence of previous medical research (see O'Malley, 2007a,b) which has discussed the links between learning disabilities, ADHD, and FASD, a finding such as this is not particularly surprising. However, ADHD and learning disabilities are not exclusively FASD-related characteristics - meaning that those without FASD can also be affected, and quite frequently are - making it surprising that there was not a single mention of them in the non-FASD group. Additionally, ethnicity, substance abuse, the type of substance abuse, foster care experience, history of parental substance abuse, youth criminal record and current breaches were all variables utilized more often in the FASD group (versus the non-FASD group). On the other hand, whether the offender was employed at the time and had children were elements that were found more commonly in non-FASD judgments. Considering FASD offenders often have a difficult time finding and maintaining employment, it is not surprising that employment was described more often in the non-FASD cases.

Not only did differences between groups emerge in terms of what was described and not described, but also when looking more in-depth at how the variables were

described for each group. The backgrounds of FASD individuals described in the general FASD literature are similar to the backgrounds of the FASD sample in the reported cases that were examined as part of the current study. The backgrounds paint a picture of extreme social disadvantage as well as acute cognitive deficits.

Although there were a few instances in which non-FASD offenders had experienced foster care and/or had parents with substance abuse issues and inadequate upbringings, it was far less common than for the FASD group. Over half of the adult FASD offenders in this study had been in foster care at some point in their lives, with reasons for removal most commonly associated with parental substance abuse, and/or other forms of abuse and neglect. In addition, about 45% of parents (of FASD individuals) were reported as having a substance abuse issue and there appeared to be an overall theme of unstable/inadequate upbringings among the FASD offenders. As Fast and Conry (2004) point out, as FASD individuals (i.e. children/youths) get older, they tend to develop their own substance abuse issues as well. This, too, tends to play a role in their criminal behaviour. The current study found substance abuse to be quite common among the FASD adults studied, with 79% of the offenders in the study being described as having some form of substance abuse – whether it was drugs, alcohol or a combination of the two.

Although no statistical differences appear between the numerical ages of the offenders in each group, the level at which they function on a daily basis proved to be qualitatively much different. That is, FASD offenders were described as behaving at an age lower than what their physical age would suggest. Similarly, while FASD and non-FASD offenders were said to have reached a certain level of education, qualitative results

indicate that the actual level of academic functioning of those with FASD tended to be much lower. Not surprising then, FASD offenders were also employed less frequently. Judges often attributed this to not only poor educational background, but also the offender's criminality and substance abuse issues.

One surprising difference between the FASD and non-FASD groups that needs to be addressed is the offender's ethnicity. While FASD can affect all ethnicities, incidence and prevalence rates for Aboriginal populations in Canada tend to have higher estimates than the rates given for the general population (Mitten, 2004; Burd & Moffat, 1994). In terms of criminalization and involvement in the justice system, Canada's Aboriginal population also tends to be overrepresented as well. In 2010/2011, despite only making up three percent of the Canadian population on the whole, 27% of adults in provincial/territorial custody and 20% in federal custody were Aboriginal (Dauvergne, 2012). In view of this, one might expect to find several FASD offenders that are Aboriginal. However, what was surprising was the disproportionately large number of FASD individuals who were Aboriginal in comparison to non-FASD offenders. In the current study, nearly 70% of the FASD offenders were identified as being Aboriginal, compared to only 20% of non-FASD offenders. Considering this study utilized a small number of cases, these findings cannot be generalized to the larger population. However, they are cause for concern and do demand further investigation.[61]

Indeed, a lot of the medical features of FASD described in the literature largely correspond to what the judges have highlighted as salient factors about FASD offenders

[61] For instance, this finding might simply reflect the tendency of judges to consider Aboriginal (versus non-Aboriginal) FASD cases as meriting formal (written) decisions. It may also, however, reflect a more stereotypical view of FASD whereby lawyers and judges may be more likely to suspect FASD - and make their suspicions known - when an offender is Aboriginal (versus non-Aboriginal). Clearly, further examination of this area of the research is needed in order to draw more conclusive explanations.

in their sentencing judgments. Optimistically, this correspondence may indicate an increased knowledge or awareness of FASD by judges (or those preparing the pre-sentence report). More generally, this alignment suggests that the decisions of sentencing judges are not based on a total void of awareness/knowledge of FASD. Some might even be tempted to conclude that some judges are beginning to grapple with the unique challenges which FASD presents when considering an appropriate sentence.

Rethinking Sentencing Purposes for FASD Offenders

Canadian courts have historically adopted an approach to sentencing that has allowed judges to recognize and weigh various (different) objectives of sentencing such as incapacitation, rehabilitation, deterrence, denunciation, and retribution (Manson, Healy, Trotter, Roberts and Ives, 2008). Formal legislative guidance on the objectives and the principles of sentencing, however, were not provided for in the *Criminal Code* until 1996 when Canada underwent substantial sentencing reform (Manson, Healy, Trotter, Roberts and Ives, 2008; Roberts & Cole, 1999). It was then that a statutory statement as to the purposes and principles of sentencing was included in the *Criminal Code* in the attempt to make sentencing more uniform by providing judges with guidance when sentencing (Roberts & Cole, 1999). Currently, section 718 of the *Criminal Code* states,

> The fundamental purpose of sentencing is to contribute, along with crime prevention initiatives, to respect for the law and the maintenance of a just, peaceful and safe society by imposing just sanctions that have one or more of the following objectives:
> (*a*) to denounce unlawful conduct;
> (*b*) to deter the offender and other persons from committing offences;
> (*c*) to separate offenders from society, where necessary;
> (*d*) to assist in rehabilitating offenders;
> (*e*) to provide reparations for harm done to victims or to the community; and

> (*f*) to promote a sense of responsibility in offenders, and acknowledgment of the harm done to victims and to the community. (R.S., 1985, c. C-46, s. 718; R.S., 1985, c. 27 (1st Supp.), s. 155; 1995, c. 22, s. 6.)

Much like the rest of Canadian criminal law that is based on an assumption of free will, individual responsibility, and voluntary actions, the purposes of sentencing are also based on a set of assumptions. Most obviously, they are based on the assumptions that individuals are capable of making choices, predicting and understanding the consequences of their actions, and most importantly, are able to learn from their mistakes (Roach & Bailey, 2009; *R v. Harper* 2009). However, when considering the deficits and disabilities of FASD – e.g., impulsivity, poor memory, diminished understanding of cause and effect, gullibility, etc.) it becomes apparent that the assumptions behind at least some of the purposes – most notably denunciation, deterrence, and rehabilitation – simply do not align well with FASD (Roach & Bailey, 2009; Chartrand & Forbes-Chilibeck). Consequently, there is a poor fit between FASD offenders and at least some of the traditional purposes of sentencing.

Comparing non-FASD and FASD offenders, it appeared that judges tended to invoke different sentencing purposes depending on the group. Most notably, non-FASD cases were significantly more likely to use purposes *other than* protection and/or rehabilitation. In fact, only one non-FASD case invoked protection and/or rehabilitation (alone or in combination) as purposes of sentencing. As such, non-FASD cases tended to invoke deterrence most often, with almost 80% of cases using this purpose alone or in combination with other purposes. FASD cases, on the other hand, were more likely than non-FASD cases to use purposes other than deterrence. For example, close to 30% of cases invoked the purposes of protection and/or rehabilitation alone or in combination.

Indeed, FASD cases invoked deterrence as a purpose of sentence significantly less than the non-FASD cases, although the percentage of cases using deterrence as a purpose of sentencing was still quite high at just over 40%.

Deterrence as a purpose of sentencing is perhaps the most problematic purpose used with FASD offenders as it assumes a level of functioning and understanding that is usually not met by FASD offenders. Deterrence, as is spelled out in the *Criminal Code*, has two quite different aspects: attempting to convince the current offender not to commit offences in the future (i.e., specific deterrence) and also to deter others from committing similar offences (general deterrence) (Gold, 2012). Both aspects of deterrence assume that the offender being sentenced – or offenders more generally – can connect their actions to the consequences and learn from their mistakes (*R v. Harper*, 2009). As for deterring other offenders, it has generally been said that "general deterrence should be given very little, if any, weight in a case where an offender is suffering from a mental disorder because such an offender is not an appropriate medium for making an example to others" (*R v. Belcourt,* 2010 para 8; Gold, 2012). As such, some judges have recently begun to reject the use of deterrence as a purpose of sentencing for FASD offenders. However, it was found in the current study that although deterrence was invoked significantly less in FASD cases than non-FASD cases, it was still used in a large portion (43%) of all of the FASD cases. This option underlines that although deterrence may not be favoured or even appropriate, it is still being used. Qualitatively, it appears that the rejection of deterrence as a purpose of sentencing occurred most often in cases from areas of British Columbia and Yukon where judges appear to be more knowledgeable and

sympathetic to FASD. In Ontario, deterrence was invoked as a purpose of sentencing regardless of whether offender had, or was suspected of having, FASD or not.

Although denunciation was not specifically studied in the current research, it was not entirely excluded. As it overlapped with deterrence in almost three-quarters of the cases and was used very infrequently as a purpose on its own or in combination with other (non-deterrence) purposes, it was indirectly examined in combination with deterrence for the purposes of analysis. However, denunciation can also become problematic for FASD individuals if the judge fails to consider the degree of responsibility or blameworthiness of the offender in conjunction with the purpose (Roach & Bailey, 2009; Chartrand & Forbes Chilibeck, 2003). It can be equally problematic when denunciation is tied closely to the purpose of deterrence in order to set an example or, as Justice Lilles says, to use the offender as a "…whipping boy by imposing a gaol sentence of greater length on him in order to deter others who should and are capable of knowing better" (*R v. Harper,* 2009, para. 47).

Although rehabilitation seems as though it would be one purpose well suited to FASD, it too has its downfalls. In a legal sense, rehabilitation is based on the assumption that offenders can be treated and cured (Ruby, Chan & Hassan, 2012). It aims at changing the underlying future behaviour of the offender. Rehabilitation of FASD offenders, however, is not possible in a traditional sense, as the underlying behaviours (or primary behaviours) stem from *permanent* organic brain damage. As Justice Lilles explains, rehabilitation "is largely a cognitive process premised on the ability to understand, to learn, to remember and to make choices", all of which potentially are problematic areas for FASD offenders (*R v. Harper*, 2009, para 30.). Requiring FASD offenders to partake

in rehabilitative programming designed for functional non-learning disabled individuals sets them up for failure as they often cannot meet the requirements or expectations of the program. Rehabilitation in terms of FASD should be directed at managing or mitigating secondary behaviours and building on the offender's abilities (Page, 2001; Fast & Conry, 2009; Gagnier, Moore & Green, 2011). This, however, requires specialized FASD programming, which is, in almost all cases, simply not available. In the present study, acknowledgement of this need for a modified understanding of rehabilitation for FASD offenders is found only in decisions from Yukon.[62] In several instances, Yukon judges not only laid out the context in which rehabilitation (as a purpose) should be considered in relation to FASD offenders, but were mindful that FASD cannot be cured and also appeared cognizant that the form of rehabilitation used for FASD offenders is not necessarily the form of rehabilitation found in individuals who do not have cognitive deficits.

After grappling with the problematic application of the previous purposes (deterrence and rehabilitation) in relation to FASD, it seems that judges are left considering separation from society, or in other words, the protection of the public. Separation from society or protection of the public can be achieved through several avenues including conditional sentences, alternative measures (if some appropriate controls or treatments can be found) and, most directly, by way of incarceration. Although incarceration is not always needed to achieve the purpose of protection of society, it is often the only option for FASD offenders because of a lack of programming and suitable alternatives for this offender population. Specifically, deficits associated

[62] This is not surprising given that there appears to be a pocket of FASD knowledge in Yukon (see Gagnier, Moore & Green, 2011).

with FASD can make it difficult to fashion clear, concise, and appropriate non-custodial conditions for which the offender would not only be capable of truly understanding, but also, actually following. Further, this type of tailoring requires a judge to have both a good working knowledge of FASD generally and an understanding of each FASD offender's individualized deficits and strengths - both of which are not commonly seen at this point in time.

Even if a judge has a good sense of FASD generally, the very individualized understanding of the deficits of the offender before him/her relies on the information usually only obtained through proper assessment and diagnosis - sadly, an uncommon reality among adults with FASD. Frustration at fashioning an appropriate sentence due to lack of resources or programming was evident when qualitatively examining the cases from Yukon and British Columbia. Justices in these two jurisdictions describe that without appropriate programming or supports available to them, their options for fashioning appropriate sentences for FASD offenders were limited.[63]

With deterrence making no sense to use for FASD offenders and a lack of re-conceptualized and appropriate rehabilitation/treatments, it appears that all that is left to choose is separation from society. Even then, prison is often without appropriate treatments and FASD offenders have the potential to be victimized in prison. It appears then that judges are being forced to choose from a set of purposes that really do not fit or work with FASD individuals, thus making the sentencing process that much more challenging than it already is with non-FASD individuals.

Problematic Purposes, Differing Capabilities but Same Sentences

[63] There was no discussion of this nature in any of the FASD cases from Ontario.

Determining an appropriate purpose (or purposes) of sentencing for FASD offenders is not the only required step of the sentencing process that proves difficult for judges. The fundamental principle of sentencing is that "a sentence must be proportionate to the gravity of the offence and the degree of responsibility of the offender" (R.S., 1985, c. C-46, s. 718.1). Understanding the degree of responsibility of the offender in FASD cases requires an understanding of the deficits and disabilities of each FASD offender. A complete understanding of an FASD offender's level of functioning and abilities relies heavily on diagnostic information and the inclusion of this information in pre-sentence reports for the judge's use. In order to have complete diagnostic information, a previous diagnosis is usually required. For those who are *suspected* of having an FASD but not yet formally assessed, judges understandably will unlikely have as complete a description or understanding – if any - of the FASD offenders deficits. Unfortunately, there is currently no provision in the *Criminal Code* for the courts to legally order an assessment for an adult offender, should they see fit (see *R v. Gray*, 2002), unless there are questions of fitness, infanticide, or being exempt from criminal responsibility because of a mental disorder (see *Criminal Code* section 672.11). As such, even if it is determined that an offender should be held to a lower level of responsibility, a lack of programming often hinders any type of alternate form of sentence (see qualitative results p. 122).

In view of the seriousness of the offences sampled in this study, it was not surprising that both non-FASD and FASD offenders were likely to receive prison sentences rather than another form of sentence. In terms of length of sentence, knowing that an offence should be proportionate to the degree of responsibility of the offender, it would not be implausible for one to assume that since an FASD offender has a

diminished responsibility, the length of sentence would somehow reflect this reality. One might even be tempted, given the extreme disadvantages and limited cognitive disabilities of the FASD offenders described in the reports, to interpret these unique descriptions as a type of mitigating factor at sentencing. What was of interest in this study, however, was the fact that there were no significant differences in the type or length of the sentences handed down to the non-FASD and FASD groups.

In their examination of FASD in the justice system, Roach and Bailey (2009) found, for the most part, that although FASD was considered properly as a mitigating factor due to its influence on moral culpability, its effect on the sentence did not always reflect this view of reduced moral culpability. The findings of the current study support this supposition. Despite the reduction in moral culpability due to cognitive deficits, the sentences that FASD offenders received in this study did not differ from their non-FASD counterparts. Thus, one is tempted to suspect that the mitigating effect of the FASD disabilities - while acknowledged - have no real effect on the outcome or duration of sentence given. In other words, FASD, although given the impression of being a mitigating factor, does not, in fact, attenuate the severity of the sentence.

In addition to the acknowledgement by judges – at least for the most part (some exceptions apply in Ontario) – that FASD is a disability reducing moral culpability, the lack of difference in the lengths of sentences is also surprising considering that judges often highlighted different sentencing purposes for FASD offenders (versus non-FASD offenders). Part of the explanation may reside in the belief that the protection of society is paramount in FASD cases because of their perceived dangerousness. As Roach and Bailey (2009) explain, "although it is increasingly recognized that FASD is a disability

that can have a profound impact on the level of an offender's moral culpability, the mitigation that this consideration would normally have on the length of a sentence is frequently tempered by the practical need to protect the community" (p.46). However, it is elucidating to remember that even after controlling for both criminal records and breaches – factors that would influence the need to protect the community– there were still no differences in the length of sentences between the non-FASD and FASD offenders. Equally notable is the lack of evidence to support the other hypothetical effect of FASD at sentencing – that is, that FASD acts as an aggravating factor whereby the sentence of an FASD offender (in comparison with a non-FASD offender) is increased because of his/her perceived dangerousness, coupled with the inability to cure him/her of this disorder. Clearly, the lack of difference between the two groups in this study undermines – at least to some degree – this alternative possibility.

Perhaps a more compelling explanation may be found (at least partially) in the recognition that the need to protect the public was found to be invoked as a sentencing purpose in conjunction with rehabilitation quite frequently in the current study. As rehabilitation is often a factor that has a potential mitigating effect on sentence, and the protection of society tends to have a potentially aggravating effect on sentence, this combination of purposes may seem incongruent at first. One could, however, interpret this seemingly incompatible pairing of purposes as indicative of the struggle between what judges want to accomplish and what they are actually able to accomplish.

Indeed, a closer qualitative examination of purposes and sentence length revealed that when sentencing FASD offenders, judges are often left weighing the protection of the public against the rehabilitation of the offender. It certainly seems, in some

jurisdictions at least (Ontario being the exception), that this balancing of rehabilitation and the protection of the public is met with frustration. Many judges acknowledge the fact that jail is not a successful rehabilitation tool, nor will it be successful in changing the behavior of an FASD offender; however, it is the only way that they feel they can sufficiently ensure the protection of the public. It is important to be mindful that it is possible to create non-custodial sanctions with the same level of severity as custodial sentences. This would – in theory – provide a more rehabilitative sanction; yet still serve the denunciatory purpose often associated with violent offences while also protecting the public. There are judges who believe that a change in living situation, structure, routine, etc. would be safe for society and beneficial for the FASD offender, though they feel that this option is unrealistic in view of the current level of available resources. Indeed, another facet when weighing the purpose of protection of the public in relation to length of sentence is the options for release. Knowing that there is insufficient programming to fashion a more appropriate sentence, it is not surprising that upon release there are also few options and little programming available. In other words, without proper programming and options, it seems as if judges feel that they are forced to incarcerate. Some judges in this study eluded to this as "warehousing" FASD offenders.

In the current study, the option to use non-custodial sanctions for FASD offenders did not occur in the majority of cases examined. This finding may also arguably be affected by the severity of the offence and the circumstances precipitating the offence. Perhaps less serious offences may have produced differences across the two groups. Further research is needed. Similarly, and although the type of offences was generally matched between groups, it was nearly impossible, in the scope of this study, to match

the exact conditions and circumstances of each offence. As such, utilizing more sensitive measures when comparing offences in future research may, in fact, also produce different findings.

Conclusions and Future Research

Clearly, FASD constitutes a significant challenge to the criminal justice system as a whole and the sentencing stage is no exception. In the end, even with the recognition of ill-fitting purposes and the challenges of designing a sentence which is proportional to the degree of responsibility of the offender, judges appear to be still sentencing FASD offenders in a manner that is indistinguishable from the manner in which they sentence non-FASD offenders – at least in terms of these serious violent offences. The examination between length and/or method of sentencing between non-FASD and FASD offenders when less serious offences are concerned warrants future investigation.

What is clear is that the sentencing of an FASD offender is by no means an easy, clear-cut process. But what can be done about this? A reasonable starting point might be to examine the issue of the lack of assessment and diagnosis of suspected FASD adults. Perhaps a provision for psychological testing as found in s.34 of the *Youth Criminal Justice Act* should be included in the *Criminal Code* for use in special circumstances such as with FASD or other organic brain disorders like Autism Spectrum Disorders and Alzheimer's disease. Even if a formal diagnosis cannot be made due to the complexities that adulthood creates in regard to diagnostics, an effort toward documenting problematic areas in the offender's executive functioning and secondary disabilities could be very beneficial — especially when determining the level of responsibility of the offender, as well as determining effective "treatments" and/or alternative sentencing measures.

Second, some sort of statutory guiding principles in regard to FASD need to be constructed and implemented. As Roach & Bailey (2009) suggest, FASD cases are currently being treated using judge-made sentencing policy, which is by no means static, nor consistent. As such, future research on inter-jurisdictional variability in the response of judges at sentencing to FASD offenders also needs to be conducted and alternative purposes need to be created with the understanding that the traditional concentration on the ability to understand cause and effect and the ability to learn from mistakes do not work with FASD offenders. Perhaps the best place to implement and utilize such purposes would be through an alternative process of sentencing such as a mental health court.

Third, there is a severe lack of programming for adults with FASD, both in the community and within the criminal justice system. Currently, most of the focus of FASD in the justice system is on youth. This singular focus ignores the obvious fact that eventually these youths become adults, and will need the same, if not more, attention and programming than they received as youths. There is a need for rehabilitative programs especially within corrections that understand the nature and needs of adult FASD offenders and also a need for supportive living and post-release programming.

Further research is also required on the release of FASD offenders from custody. In particular, probationary conditions assigned to FASD offenders need to be carefully examined. This will help identify the conditions that are being imposed, how they are worded and how they are presented to the offender. By extension, this research would also help to address the relationship between FASD and breaches.

As it stands now, the criminal justice system appears to be unprepared to deal with adult FASD offenders – as it may be with any group of offenders with any form of mental/behavioural challenges. As a result, there appears to be no difference in how FASD offenders are sentenced compared to their non-FASD counterparts. Sadly, there are no simple answers to dealing with FASD in the justice system, as it seems with every recommendation provided comes some sort of barrier to implementation – especially in regard to adult FASD offenders. Indeed, FASD offenders truly highlight the limitations of the Canadian criminal justice system as it is currently conceptualized and operated.

References

Abel, E.L. (1999). Was the fetal alcohol syndrome recognized by the Greeks and Romans? *Alcohol & Alcoholism,* 34(6), 868-872.

Abel, E.L. (1997). Was the fetal alcohol syndrome recognized in the ancient near east? *Alcohol & Alcoholism,* 31(1), 3-7.

Abel, E.L. & Sokol, R.J. (1986). Fetal alcohol syndrome is now a leading cause of mental retardation. *Lancet,* 2, 1222.

Adams, M. (2002). *Our son a stranger: Adoption breakdown and its effects on parents.* Montreal, QC. :McGill- Queen's University Press.

Andrew, G. (2011). Diagnosis of FASD: An overview. In E.P. Riley, S. Clarren, J. Weinberg & E. Jonsson (Eds.). *Fetal Alcohol Spectrum Disorder: Management and Policy Perspectives of FASD* (pp. 127-148) Germany: Wiley-Blackwell.

Armstrong, E. (2003). *Conceiving risk, bearing responsibility: Fetal alcohol syndrome and the diagnosis of moral disorder*. Baltimore, Maryland: The Johns Hopkins University Press.

Armstrong, E. (1998). Diagnosing moral disorder: The discovery and evolution of fetal alcohol syndrome. *Social Science & Medicine* 47(12), 2025-2042.

Armstrong, E. & Abel, E.L. (2000). Fetal alcohol syndrome: The origins of a moral panic. *Alcohol and Alcoholism,* 35(3), 276-282.

Astley, S., Aylward, E., Olson, H., Kerns, K. Brooks, A., Coggins,T., Davies, J., Dorn, S., Gendler, B. Jirikowic, T., Kraegel, P. Maravilla, K. & Richards, T. (2009). Magnetic resonance imaging outcomes from a comprehensive magnetic resonance

study of children with fetal alcohol spectrum disorders. *Alcoholism: Clinical and Experimental Research,* 33(10), 1671-1689.

Avner, M. & Nulman, I. (2005). Attempts at more specific and practical diagnostic criteria for fetal alcohol spectrum disorder. *JFAS Int.,* 3(12), 1-3.

Badry, D. (2007). Birth mothers of fetal alcohol syndrome children. *Social Justice in Context*. 3, 88-103.

Baumbach, J. (2002). Some implications of prenatal alcohol exposure for the treatment of adolescents with sexual offending behaviors. *Sexual Abuse: A Journal of Research and Treatment,*14(4), 313-327.

Berg, S. (Ed.). (1995). *A Layman's Guide to Fetal Alcohol Syndrome and Possible Fetal Alcohol Effects.* Surrey, B.C.: FAS/E Support Network.

Berg, J.P., Lynch, M.E., & Coles, C.D. (2005). Increased mortality among women who drank alcohol during pregnancy. *Alcohol,* 42(7), 603-610.

Best, C. (2011). *Best guide to Canadian legal research. Making good choices: Canadian electronic research*. Retrieved from http://legalreserach.org/docs/Making_Good_Choices.html.

Boland, J., Burrill, R., Duwyn, M., Karp, J. (1998). *Fetal alcohol syndrome: Implications for correctional service.* Ottawa: Correctional Services of Canada, Research Branch Corporate Development.

Boland, F., Duwyn, M., & Serin, R. (2000) Fetal alcohol syndrome: Understanding its impact. *Forum on Corrections Research*. 12(1), 16-18.

Boulding, D. (2007, September, 17). *Mistake I have made with FAS clients*. Retrieved November 4th, 2008, from http://www.asantecentre.org/legal.html

Bonta, J., Bourgon G., Jesseman, R., & Yessine, A.L. (2005). Presentence reports in Canada 2005-03. Ottawa: Public Safety & Emergency Preparedness Cat No: PS3-1/2005-4EPDF

Brimacombe, M., Adubato, S., Cohen, D., Wilson, A., & Lamendola, M. (2005). Comprehensive approaches to the diagnosis, screening and prevention of fetal alcohol syndrome in New Jersey. *JFAS Int.,* 3(4), 1-8.

Brintnell, S.E., Bailey, P.G., Sawhney, A. & Kreftin, L. (2011). Understanding FASD: Disability and social supports for adult offenders. In E.P. Riley, S. Clarren, J. Weinberg & E. Jonsson (Eds.). *Fetal Alcohol Spectrum Disorder: Management and Policy Perspectives of FASD* (pp. 233-257). Germany: Wiley-Blackwell.

Burd, L., Martsolf, J. & Juelson, T. (2004). Fetal alcohol spectrum disorder in the corrections system: Potential screening strategies. *JFAS Int.*, 2(1), 1-10.

Burd, L. & Moffat, M.E. (1994). Epidemiology of fetal alcohol syndrome in American Indians. *Public Health Reports,* 109(5), 688-694.

Burd, L., Selfridge, R., Klug, M., & Juelson, T. (2003) Fetal alcohol syndrome in the Canadian corrections system. *JFAS Int.,* 1(14), 1-7.

Byrne, C. (2002). *The Criminalization of Fetal Alcohol Syndrome (FAS)*. BC: Asante Centre.

Calhoun, F., & Warren, K. (2007). Fetal alcohol syndrome: Historical perspectives. *Neuroscience and Biobehavioral Reviews,* 31, 168-171.

Campbell, D.T., & Stanley, A. (1963). Experimental and quasi-experimental designs for research. Chicago: Rand McNally.

Carlson, M.D.A, & Morrison, R.S. (2009). Study design, precision, and validity in observational studies. *Journal of Palliative Medicine,* 12(1), 77-82.

Chartrand, L.N, & Forbes-Chilibeck, E.M. (2003). The Sentencing of offenders with fetal alcohol syndrome. *Health Law Journal*, 11, 35-70.

Chudley, A.E. (2011). Genetic factors contributing to FASD. In E.P. Riley, S. Clarren, J. Weinberg & E. Jonsson (Eds.). *Fetal Alcohol Spectrum Disorder: Management and Policy Perspectives of FASD* (pp. 109-126). Germany: Wiley-Blackwell.

Chudley, A. E., Kilgour, A. R., Cranston, M. & Edwards, M. (2007). Challenges of diagnosis in fetal alcohol syndrome and fetal alcohol spectrum disorder in the adult. *American Journal of Medical Genet*ics, 145C(3), 261–272.

Chudley, A.E, Conry, J., Cook, J.L., Loock, C., Rosales, T., & LeBlanc, N. (2005). Fetal alcohol spectrum disorder: Canadian guidelines for diagnosis. *Canadian Medical Association Journal,* 172(5), 1-21.

Clark, E., Lutke, J., Minnes, P., Ouellett-Kuntz, H. (2004). Secondary disabilities among adults with fetal alcohol spectrum disorder in British Columbia. *JFAS Int.,* 2(13), 1-12.

Corbin, J. & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology,* 13(1), 3-21.

Cox, L., Clairmont, D., & Cox, S. (2008). Knowledge and attitudes of criminal justice professionals in relation to fetal alcohol spectrum disorder. *Canadian Journal of Clinical Pharmacology.* 15(2), 306-313.

Dauvergne, M. (2012). Adult correctional statistics in Canada, 2012/2011. *Canadian Centre for Justice Statistics.* Ottawa: Statistics Canada Cat no. 85-002-X Juristat.

Douglas, H. (2010). The sentencing response to defendants with foetal alcohol spectrum disorder. *Crim LJ,* 34, 221-239.

Dubienski, N. (Ed.) (1996). *Fetal alcohol syndrome/effects: Booklet 1.* Winnipeg, MB.: The Family Support Working Group of the Committee on Alcohol and Pregnancy and the Fetal Alcohol Support Network of Manitoba.

Dubienski, N. (Ed.) (1997). *Fetal alcohol syndrome/effects: Booklet 3.* Winnipeg, MB.: The Family Support Working Group of the Committee on Alcohol and Pregnancy and the Fetal Alcohol Support Network of Manitoba.

Famy, C., Streissguth, A.P. & Unis, A. (1998). Metal illness in adults with fetal alcohol syndrome or fetal alcohol effects. *Am J Psychiatry,* 155, 552-554.

Fast, D. & Conry J. (2009). Fetal alcohol spectrum disorders and the criminal justice system. *Developmental Disabilities Research Reviews.*15, 250-257.

Fast, D., & Conry, J. (2004). The challenge of fetal alcohol syndrome in the criminal legal system. *Addiction Biology,* 9, 161-166.

Fast, D., Conry, J. & Loock, C. (1999). Identifying fetal alcohol syndrome among youth in the criminal justice system. *Developmental and Behavioral Pediatrics,* 20(5), 1-3.

Fraser, C. (no date). An inventory of programming for youth and adults who have FASD and are involved with the criminal justice system. *Paths to Justice: Research in Brief.* Ottawa: Department of Justice Canada.

Fraser, C. (2008, September 17-19). The path to justice: Access to justice for individuals with fetal alcohol spectrum disorder. *Summary of a national conference hosted by the Steering Committee on Access to Justice for Individuals with FASD,*

Whitehorse, Yukon: Yukon Department of Justice. Retrieved from: http://www.justice.gov.yk.ca/pdf/Path_to_Justice_Conference_Final_Report_FINAL_Eng.pdf

Gagnier, K.R., Moore, T.E., & Green, M. (2011). A need for closer examination of FASD by the criminal justice system: Has the call been answered? *J Popul Ther Clin Pharmacol,* 18(2), 426-439.

Gelb, K. & Rutman, D. (2011). *Substance using women with FASD and FASD prevention: A literature review on promising approaches in substance use treatment and care for women with FASD.* Victoria, B.C.: Research Initiative for Social Change Unit, University of Victoria.

Grant, T., Huggins, J., Connor, P., & Streissguth, A. (2005). Quality of life and psychosocial profile among young women with fetal alcohol spectrum disorders. *Mental Health Aspects of Developmental Disabilities,* 8(2), 33-39.

Grant, T., Youngblood Pedersen, J., Whitney, N., & Ernest, C. (2011). The role of therapeutic intervention with substance abusing mothers: Preventing FASD in the next generation. In K. O'Malley (Ed.) *ADHD and Fetal Alcohol Spectrum Disorders (FASD)* (pp.95-120). New York: Nova Science Publishers, Inc.

Graneheim, U.H. & Lundman B. (2004). Qualitative content analysis in nursing research: Concepts, procedures & measures to achieve trustworthiness. *Nurse Education Today*, 24, 105-112.

Green, M., & Moore, T.E. (2004). Fetal alcohol spectrum disorder (FASD): A need for closer examination by the criminal justice system. *Criminal Reports* 19(1), 99-108.

Gold, A. (2012). *The practitioners criminal code 2012 Edition.* Markham, ON: LexisNexis.

Golden, J. (2005). *Message in a bottle: the making of fetal alcohol syndrome.* Cambridge, Massachusetts: Harvard University Press.

Hoyme, H.E., May, P.A., & Kalberg, W.O. (2005). A practical clinical approach to the diagnosis of fetal alcohol spectrum disorders: Clarification of the 1996 institute of medicine criteria. *Pediatrics,* 115, 39-47.

Hseih, H.F. & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research,* 15(9), 1277-1288.

Kerns, K.A., Don, A., Mateer, C.A., & Streissguth, A.P. (1997). Cognitive deficits in nonretarded adults with fetal alcohol syndrome. *Journal of Learning Disabilities*, 30(6), 685-693.

Koponen, A.M., Kallan, M., & Autti- Rämö, I. (2009). Caregiving environment and soci-emotional development of foster-placed FASD-children. *Children and Youth Services Review,* 31, 1049-1056.

Koren, G., Nulman, I., Chudley, A.E., & Loocke, C. (2003). Fetal alcohol spectrum disorder. *Canadian Medical Association Journal*, 169(11), 1181-1185.

Koren, G., Roifman, I. & Nulman, I. (2004). Hypothetical framework: FASD and criminality – Causation or association? The limits of evidence-based knowledge. *JFAS Int.,* 2(6), 1-5.

Lang, J. (2006). Ten brain domains: A proposal for functional central nervous system parameters for fetal alcohol spectrum disorder diagnosis and follow-up. *JFAS Int.,* 4(12), 1-11.

Laporte, A., McKee, T., Lisakowski, Z., Chudley, A.E., & Conry, J. (2003). *Fetal alcohol spectrum disorder: FASD guidebook for police officers.* Ottawa: R.C.M.P

MacPherson, P. & Chudley, A.E. (March, 2007). *FASD in a correctional population: Preliminary results from an incidence study.* PowerPoint presentation at the 2nd International Conference on Fetal Alcohol Spectrum Disorder: Research, Policy and Practice Around the World, Victoria, B.C. Available online at www.motherrisk.org/fasd6/webcast/index.html

Malbin, D.V. (2004). Fetal alcohol spectrum disorder (FASD) and the role of family court judges in improving outcomes for children and families. *Juvenile and Family Court Journal,* 55(2), 53-63.

Mann, C.J. (2003). Observational research methods. Research design II: Cohort, cross sectional, and case-control studies. *Emergency Med J.,* 20, 54-60.

Manson, A., Healy, P., Trotter, G., Roberts, J. & Ives, D. (2008). *Sentencing and penal policy in Canada: Cases, materials and commentary 2nd Ed.* Toronto: Emond Montgomery Publications Ltd.

Massey, D.S & Massey, V.J. (2007). Neuropsychological profiles of children and adolescents with fetal alcohol spectrum disorders and ADHD. In K. O'Malley (Ed.) *ADHD and Fetal Alcohol Spectrum Disorders (FASD)* (pp.95-120). New York: Nova Science Publishers, Inc.

Mattson, S. & Riley, E.P. (1998). A review of neurobehavioral deficits in children with fetal alcohol syndrome or prenatal exposure to alcohol. *Alcoholism: Clinical Experimental Research,* 22(2), 279-294.

Mattson, S., Roesch, S., Fagerlund, A., Auttie-Rämö, I., Jones, K., May, P., Adnams, M. Konovalova, V. & Riley, E.P. (2010). Toward a neurobehavioral profile of fetal alcohol spectrum disorders. *Alcoholism: Clinical Experimental Research,* 34(9), 1640-1650.

May, P.A. (2011). Researching the prevalence and characteristics of FASD in international settings. In E.P. Riley, S. Clarren, J. Weinberg & E. Jonsson (Eds.). *Fetal Alcohol Spectrum Disorder: Management and Policy Perspectives of FASD* (pp. 17-25). Germany: Wiley-Blackwell.

May, P.A, & Gossage, J.P. (2001). Estimating the prevalence of fetal alcohol syndrome: A summary. *Alcohol Res. Health*, 25, 159-167.

McCormack, N., Popadopoulos, J. & Cotter, C. (2010). *The practical guide to Canadian legal research 3rd edition.* Canada: Carswell Thomson Reuters.

Mertens, D.M. (2010). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative and mixed methods.* Thousand Oaks, CA: Sage.

Mitten, R. (2004, January). *Section 9: Fetal alcohol spectrum disorders and the justice system.* Retrieved November 4th, 2008, from http://www.justicereformcomm.sk.ca/volume2/12section9.pdf

Moansfield, M. (2006). Accommodating the fetal alcohol spectrum disorders in the diagnostic and statistical manual of mental disorders (DSM V). *JFAS Int.,* 4(23), 1-10.

Moore, T.E. & Gagnier, K. (2008). "You can talk if you want to": Is the police caution on the right to silence comprehensible? *Criminal Reports*, 51 C.R.(6th), 233-249.

Moore, T.E. & Green, M. (2004). Fetal alcohol spectrum disorder (FASD): A need for closer examination by the criminal justice system. *Criminal Reports,* 19(1), 99-108.

Morse, J.M. (2003). Principles of mixed methods and multimethod research design. In A. Tashakkori & C. Teddlie (Eds.) *Handbook of mixed methods in social and behavioral research* (pp. 189-208). Thousand Oaks, CA: Sage.

Nguyen, T., Coppens, J., & Riley, E.P. (2011). Prenatal alcohol exposure, FAS, and FASD: An introduction. In E.P. Riley, S. Clarren, J. Weinberg & E. Jonsson (Eds.). *Fetal alcohol spectrum disorder: Management and policy perspectives of FASD* (pp. 1-13). Germany: Wiley-Blackwell.

Novick-Brown, N. (2007). Sexually inappropriate behavior in patients with fetal alcohol spectrum disorders. In K. O'Malley (Ed.) *ADHD and Fetal Alcohol Spectrum Disorders (FASD)* (pp.143-178). New York: Nova Science Publishers, Inc.

O'Malley, K. (2007). Fetal alcohol spectrum disorders: An overview. In K. O'Malley (Ed.) *ADHD and Fetal Alcohol Spectrum Disorders (FASD)* (pp.1-23). New York: Nova Science Publishers, Inc.

O'Malley, K. (2007b). Pathophysiology of ADHD in patients with ADHD and fetal alcohol spectrum disorders: The role of medication. In K. O'Malley (Ed.) *ADHD and Fetal Alcohol Spectrum Disorders (FASD)* (pp.51-67). New York: Nova Science Publishers, Inc.

Olson, H.C., Feldman, J.J., Streissguth, A.P., Sampson, P.D. & Bookstein, F.L (1998). Neuropsychological deficits in adolescents with fetal alcohol syndrome: clinical findings *Alcoholism Clinical and Experimental Research*, 22(9), 1998-2012.

Olson, H.C., Streissguth, A.P., Sampson, P.D., Barr, H.M., Bookstein, F.L. & Thiede, K. (1997). Association of prenatal alcohol exposure with behavioral and learning problems in early adolescence *Journal of the American Academy of Child and Adolescent Psychiatry*, 36(9), 1187-1194.

Pacey, M. (2009). Fetal alcohol syndrome and fetal alcohol spectrum disorder among Aboriginal peoples: A review of prevalence. *National Collaborating Centre for Aboriginal Health,* Retrieved from http:///www.nccah,ca , pp. 1-37.

Page, K. (2007). Adult neuropsychology of fetal alcohol spectrum disorders. In K. O'Malley (Ed.) *ADHD and Fetal Alcohol Spectrum Disorders (FASD)* (pp.121-142). New York: Nova Science Publishers, Inc.

Page, K. (2001). Prenatal alcohol damage: Hidden epidemic in the courts. *Juvenile and Family Court Journal* 52(21), 21-36.

Pandit, N. (1996). The creation of theory: A recent application of the grounded theory method. *The Qualitative Report,* 2(4), 1-15.

Public Health Agency of Canada. (2005). *Fetal Alcohol Spectrum Disorder: Knowledge and attitudes of health professionals.* BC: Government of Canada.

Queens University Library. *LexisNexis Quicklaw & Westlaw Canada*. Retrieved from http://library.queensu.ca/law/lederman/quicklaw

Roach, K. & Bailey, A. (2009). The relevance of fetal alcohol spectrum disorder in Canadian criminal law from investigation to sentencing. *University of British Columbia Law Review,* 41(1), 1-68.

Roberts, J.V. & Cole, D.P. (1999). *Making sense of sentencing.* Toronto: University of Toronto Press.

Robinson, G.C., Conry, J.L. & Conry, R.F. (1987). Clinical profile and prevalence of fetal alcohol syndrome in an isolated community in British Columbia. *Canadian Medical Association Journal,* 37(3), 203-207.

Ruby, C., Chan, G., & Hassan, N. (2012). *Sentencing 8th Ed.* Canada: LexisNexis.

Schonfeld, A.M, Mattson, S.N., & Riley, E.P. (2005). Moral maturity and delinquency after prenatal alcohol exposure. *Journal of Studies on Alcohol,* 66, 545-554.

Stade, B., Ali, A., Bennett, D., Campbell, D., Johnston, M., Lens, C., Tran, S., & Koren, G. (2009). The burden of prenatal exposure to alcohol: Revised measurement of cost. *Canadian Journal of Clinical Pharmacology* 16(1), 91-102.

Streissguth, A. (2012). Sex differences in prenatal alcohol abuse in humans. In M. Lewis, & L. Kester (Eds.), *Gender differences in prenatal substance exposure* (pp.139-154). Washington, D.C.: American Psychological Association.

Streissguth, A. & Kanter, J. (Eds.) (1997). *The challenge of fetal alcohol syndrome: overcoming secondary disabilities*. Seattle Washington: University of Washington Press.

Streissguth, A., Barr, H., Kogen, J., & Bookstein, F. (1997). Primary and secondary disabilities in fetal alcohol syndrome. In A. Streissguth & J. Kanter (Eds.), *The challenge of fetal alcohol syndrome: Overcoming secondary disabilities* (pp. 25-39). Seattle Washington: University of Washington Press.

Spohr, H.L., & Steinhausen, H.C. (1994). The fetal alcohol syndrome in adolescence. *Acta Paediatric Suppl,* 404, 19-26.

Spohr, H.L, Steinhausen, H.C., & Willms, J. (1993). Prenatal alcohol exposure and long-term developmental consequences. *Lancet,* 341, 907-910.

Thanh, N.X., & Jonsson, E. (2009). Costs of fetal alcohol spectrum disorder in Alberta Canada. *Canadian Journal of Clinical Pharmacology* 16(1), 80-90.

Tait C (2003a). *Fetal alcohol syndrome among Aboriginal people in Canada: Review and Analysis of intergenerational links to residential school.* Ottawa Ontario: Anishinabe Printing.

Tait, C (2003b). "The tip of the iceberg": The "making" of fetal alcohol syndrome in Canada. *Doctoral Dissertation* Obtained from Proquest dissertation catalogue.

Thanh, N.X, Jonsson, E., Dennett, L., & Jacobs, P. (2011). Costs of FASD. In E.P. Riley, S. Clarren, J. Weinberg & E. Jonsson (Eds.). *Fetal Alcohol Spectrum Disorder: Management and Policy Perspectives of FASD* (pp. 45-69). Germany: Wiley-Blackwell.

Tough, S.C. & Jack, M. (2011). Frequency of FASD in Canada, and what this means for prevention efforts. In E.P. Riley, S. Clarren, J. Weinberg & E. Jonsson (Eds.). *Fetal alcohol spectrum disorder: Management and policy perspectives of FASD* (pp. 27-43). Germany: Wiley-Blackwell.

Tucker, S.E. (2009). Instability within stability: Conflicting trends beneath Canada's aggregate incarceration rate. Ottawa: Unpublished MA Thesis, University of Ottawa.

Uban, A., Bodnar, A., Butts, A., Sliwowska, A., Comeau, A., Weinberg, A. (2011). Direct and indirect mechanism of alcohol tetrogenesis: Implications for understanding alterations in brain and behavior in FASD. In E.P. Riley, S. Clarren, J. Weinberg & E. Jonsson (Eds.). *Fetal Alcohol Spectrum Disorder:*

Management and Policy Perspectives of FASD (pp. 73-108). Germany: Wiley-Blackwell.

Verbrugge, P. (2003). *Fetal alcohol spectrum disorder and the youth criminal justice system: A discussion paper.* Ottawa: Department of Justice Canada.

Verdun-Jones, S. & Butler, A. (2013). Sentencing neurocognitively impaired offenders in Canada. *Canadian Journal of Criminology and Criminal Justice,* 55(4), 495-512.

Warner, R.H & Rosett, H.L. (1975). The effects of drinking on offspring: An historical survey of the American and British literature. *Journal of Studies on Alcohol,* 36(11), 1395-1420.

Warren, K.R. & Foudin, L.L. (2001). Alcohol-related birth defects—the past, present, and future. *Alcohol Research & Health,* 25(3), 153–158.

Warren, K.R., & Hewitt, B.G. (2009). Fetal alcohol spectrum disorders: When science, medicine, public policy, and laws collide. *Developmental Disabilities Research Reviews,* 15, 170-175.

Webster C. M., Doob A. N. & Myers N. M. (2009). The parable of Ms. Baker: Understanding pretrial detention in Canada. *Current Issues in Criminal Justice,* 21(1), 79-102.

Williams, R.J., Odaibo, F.S., McGee, J.M (1999). Incidence of fetal alcohol syndrome in northeastern Manitoba. *Can J. Public Health*, 90(3), 192-194.

Yukon Courts (no date). *Department of justice facts 2011*. Yukon: Department of Justice Government of Yukon. Retrieved from: http://www.justice.gov.yk.ca

Statutes, Legislation and Cases

Criminal Code, RSC 1985, c C-46 s 745. s. 672.11, s. 672.14, s.718.2

Youth Criminal Justice Act, SC 2002, c 1, s. 34

R v. K(T,) 2006, NUCJ No. 15 (QL)

R v. Gray, 2002, BCSC No. 1192 (QL)

Appendix A

List of FASD Cases Studied By Province and Offence

Ontario

Robbery
R v. WTK [2012] OJ No 1783 (QL) (ONCJ).
R v. Oates [2012] OJ No. 3320 (QL) (ONCJ).
R v. Peters [2011] OJ No 1659 (QL) (ONSC).
R v. Sisco [2008] OJ No. 157 (QL) (ONCJ).
R v. Dayfoot [2007] OJ No 2869 (QL) (ONCJ).

Assault
R v. JS [2011] OJ No 3234 (QL) (ONCJ).
R v. Wilson [2009] OJ No. 5819 (QL) (ONCJ).
R v. Brown [2009] OJ No.979 (QL) (ONSC).
R v R.L [2004] OJ No. 384 (QL) (ONSC).
R v. Boyd [2004] OJ No. 3735 (QL) (ONCJ).

Sexual Assault
R v. Mustard [2007] OJ No 1786 (QL) (ONSC).
R v. X.W [2002] OJ No. 488) (QL) (ONCJ.
R v. Edwards [2005] OJ No. 6340 (QL) (ONSC).
R v. D.B [2002] OJ No. 4183 (QL) (ONCJ).

British Columbia

Robbery
R v. C.J.M [2006] BCJ No. 2714 (QL) (BCPC).
R v. Pickerill [2005] BCJ No. 1685 (QL) (BCPC).
R v. D.B [2003] BCJ No. 1735 (QL) (BCPC).
R v. C.J.M [2000] BCJ No. 1536 (QL) (BCPC).
R v. Steeves [1998] BCJ No. 3135 (QL) (BCPC).

Assault
R v. Louie [2012] BCJ No. 866 (QL) (BCPC).
R v. JER [2012] BCJ No 766 (QL) (BCPC).
R v. DAH [2010] BCJ No 2459 (QL) (BCPC).
R v. SLN [2010] BCJ No 547 (QL) (BCSC).
R v. D.L [2002] BCJ No. 1987 (QL) (BCSC).

Sexual Assault
R v. Alkenbrack [2011] BCJ No 2612 (QL) (BCPC).
R v. Tsekouras [2011] BCJ No 2247 (QL) (BCPC).
R v. Clement [1994] BCJ No. 1247 (QL) (BCPC).

R v. J.L.H [2000] BCJ No 2820 (QL) (BCPC).
R v. Baptiste [1992] BCJ No. 2512 (QL) (BCPC).

Yukon

Robbery
R v. FC [2011] YJ No 139 (QL) (YKTC).
R v. R.W.L [2004] YJ No. 82 (QL) (YKTC).
R v. McLeod [1996] YJ No. 150 (QL) (YKSC).

Assault
R v. Blanchard [2011] YJ No 138 (QL) (YKTC).
R v. Kendi [2011] YJ No 63 (QL) (YKTC).
R v. Elias [2009] YJ No 83 (QL) (YKTC).
R v. Kendi [2010] YJ No 111 (QL) (YKTC).
R v. Moses [1991] YJ No. 272 (QL) (YKTC).

Sexual Assault
R v. Quash [2011] YJ No 143 (QL) (YKTC).
R v. Quash [2009] YJ No 72 (QL) (YKTC).
R v. Harper [2009] YJ No. 14 (QL) (YKTC).
R v. Clark [2010] YJ No.57 (QL) (YKTC).
R v. D.C. [2005] YJ No. 54 (QL) (YKSC).

Appendix B

List of Control Cases Studied by Province and Offence

Ontario

Robbery
R v. Rose [2011] OJ No. 1183 (QL) (ONSC).
R v. Strelocke [2009] OJ No. 2796 (QL) (ONSC).
R v. Chung [2012] OJ No. 2072 (QL) (ONCJ).
R v. Chau [2010] OJ No. 5442 (QL) (ONCJ).
R v. Bedard [2011] OJ No. 2698 (QL) (ONSC).

Assault
R v. Mattison [2011] OJ No. 982 (QL) (ONCJ).
R v. G.S.J. [2007] OJ No. 5079 (QL) (ONSC).
R v. Cameron [2005] OJ No. 5061 (QL) (ONCJ).
R v. King [2007] OJ No 3805 (QL) (ONCJ).
R v. Williams [2006] OJ No 5037 (QL) (ONCJ).

Sexual Assault
R v. F.N. [2005] OJ No. 3594 (QL) (ONCJ).
R v. Dee [2009] OJ No. 3638 (QL) (ONCJ).
R v. J. M. [2005] OJ No 5649 (QL) (ONSC).
R v. Cottrell [2005] OJ No. 5809 (QL) (ONCJ).
R v. Cordeiro [2006] IJ No. 2722 (QL) (ONCJ).

British Columbia

Robbery
R v. T.R.P [2003] BCJ No. 2860 (QL)(BCPC).
R v. Smith [2003] BCJ No. 268 (QL)(BCPC).
R v. S.K.S [2003] BCJ No. 2956 (QL)(BCPC).
R v. Gilbert [2006] BCJ No. 215 (QL)(BCPC).
R v. Gelfont [2003] BCJ No 2541 (QL)(BCPC).

Assault
R v. Moozhayi [2004] BCJ No. 1499 (QL)(BCSC).
R v. Ross [2009] No. 2695 (QL)(BCSC).
R v. Spencer [2005] BCJ No. 2349 (QL)(BCPC).
R v. Valente [2010] BCJ No. 1717 (QL)(BCPC).
R v. Dawson [2009] BCJ No 1974 (QL)(BCPC).

Sexual Assault
R v. S.K.A [2004] BCJ no. 2961 (QL)(BCPC).
R v. M.W.H [2001] BCJ No. 2827 (QL)(BCPC).

R v. A.T.R [2011] BCJ No. 1986 (QL)(BCPC).
R v. L.M.J.H. [1993] BCJ No 2648 (QL)(BCPC).
R v. K.L. [2004] BCJ No. 1226 (QL)(BCSC).

Yukon

Robbery
R v. Laquant [2002] YJ No. 84 (QL)(YKTC).
R v. Smarch [2010] YJ No. 117 (QL)(YKTC).
R v. Lee [1998] YJ No. 194 (QL)(YKTC).
R v. Wagner [2003] YJ No. 92 (QL)(YKTC).
R v. Anderson [1997] YJ No. 139 (QL)(YKTC).

Assault
R v. Wiersema [2009] YJ No 18 (QL)(YKTC).
R v. Stewart [1992] YJ No. 1115 (QL)(YKTC).
R v. Freeman [1992] YJ No. 197 (QL)(YKSC).
R v. D.B.M. [2002] YJ No. 96 (QL)(YKTC).
R v. Krebs [2010] YJ No. 116 (QL)(YKTC).

Sexual Assault
R v. Peters [2005] YJ No. 124 (QL)(YKSC).
R v. C.D.S [2010] YJ No. 103 (QL)(YKTC).
R v. S.R.S [2010] YJ No 38 (QL)(YKTC).
R v. R.A. [2010] YJ No. 108 (QL)(YKTC).
R v. Joe [2010] YJ No. 136 (QL)(YKTC).

Appendix C

Table 1
Frequency Distribution of the Purposes of Sentencing

Purposes	N	%
Protection	7	8%
Denunciation	5	5.7%
Deterrence	4	4.6%
Rehabilitation	1	1.2%
Pro. & Den.	1	1.2%
Pro. & Det.	2	2.3%
Pro. & Rehab	5	5.7%
Den. & Det.	17	19.5%
Den. & Rehab.	0	0%
Det. & Rehab.	1	1.2%
Pro., Den. & Det.	5	5.7%
Pro., Den. & Rehab.	0	0%
Pro., Det., & Rehab.	3	3.5%
Den., Det. & Rehab.	13	14.9%
Pro., Den., Det. & Rehab.	8	9.2%
Not Given	15	17.2%
Total	87	100%

Note. Pro. = Protection, Den. = Denunciation, Det. = Deterrence, Rehab. = Rehabilitation

Appendix D

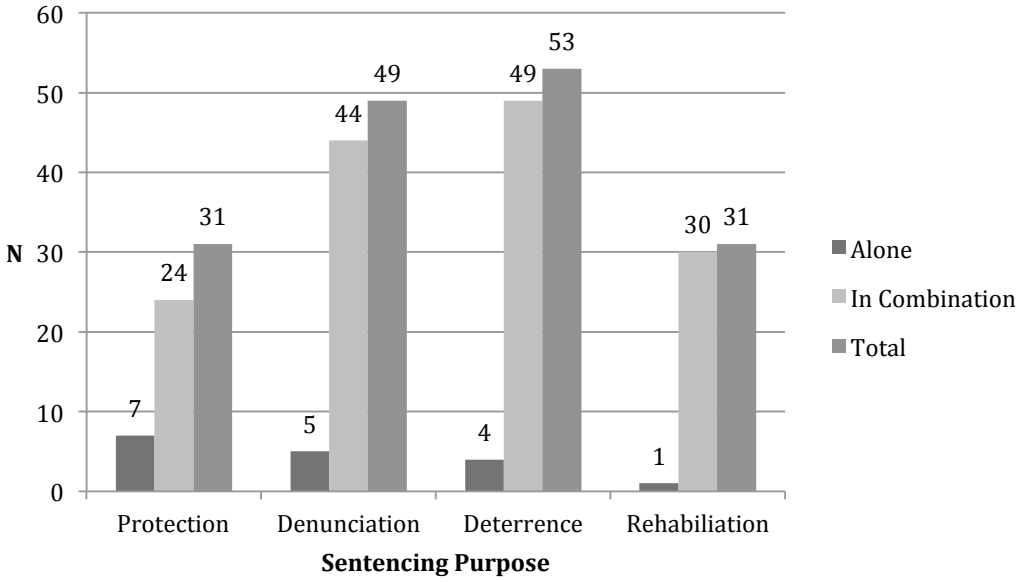

Figure 1. Distribution of Sentencing Purposes. The first (dark grey) bar in each category represents how many times the sentencing purpose was used alone. The second (light grey) bar in each category represents how many times that purpose was used in combination with other sentencing purposes. The third (medium grey) bar represents the total number of times the sentencing purpose was used (i.e. both alone and in combination).