RESILIENCE AND ENCULTURATION AMONG ADOLESCENTS AND YOUNG ADULTS WITH FETAL ALCOHOL SPECTRUM DISORDER IN THE CRIMINAL JUSTICE SYSTEM

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Billie Joe Rogers
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Name:	**Billie Joe Rogers**
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Examining Committee:

Chair:

Dr. Robert McMahon
Professor

Dr. Ronald Roesch
Senior Supervisor
Professor

Dr. Jodi Viljoen
Supervisor
Associate Professor

Dr. Raymond Corrado
Professor
School of Criminology
Simon Fraser Universityado, PhD

Date Defended/Approved: 9 December 2011

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ABSTRACT

Fetal Alcohol Spectrum Disorder (FASD) is a lifelong disorder with no cure and is accompanied by neurological deficits. There are also secondary disabilities such as behavioural and psychosocial deficits that can often result in trouble with the law and substance problems. Literature has identified an association between delinquency and prenatal alcohol exposure. This study looked at resilience factors for justice-involved youth and addressed questions regarding the association between enculturation and resilience, and whether offence histories differ based on differing resilience factors and moderating factors. Ninety-four justice-involved youth between 12 and 23 years of age participated, 47 diagnosed with FASD and 47 with no diagnosis. The Multigroup Ethnic Identity Measure (MEIM) and Child and Youth Resilience Measure (CYRM) measured enculturation and resilience respectively. Analyses included a correlation matrix, independent-sample t-tests, and ordinary least squares regression analyses. Results showed a positive relationship between the CYRM and the MEIM. Neither group differed in their rates on the CYRM or the MEIM. While the CYRM was not significantly associated with official conviction data it did demonstrate significant associations with self reported offending data. Finally, no significant results emerged to suggest that FASD had an influence on the relationship between the CYRM and offence history or the MEIM and offence history. Findings from this study suggest the importance of incorporating cultural components into services targeted to produce resilience and that different groups may have different service needs.

Keywords: fetal alcohol spectrum disorder; strength-based research; resilience; enculturation, justice-involved youth.

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1: INTRODUCTION

Fetal alcohol spectrum disorder (FASD) is a health concern that is increasingly gaining attention within the justice system. The intersection between FASD and the justice system is of particular interest because, as a result of primary and secondary disabilities associated with FASD, individuals with a diagnosis can often experience difficulties while navigating through the system (Cunningham, Mishibinijima, Mohammed, Mountford, & Santiago, 2010). Incarceration rates for juveniles and adults with FASD are a current concern. Unfortunately, identifying prevalence rates of FASD within the correctional setting is challenging and rates are unavailable due to the lack of reliable and valid screening tools (Boland, Chudley, & Grant, 2002; Cunningham et al., 2010). Fast, Conry, and Loock (1999) estimate that 60% of those with FASD have some sort of contact with the legal system and that of the youth remanded to forensic psychiatric facilities for inpatient assessments, 23.3% and 1% met criteria for FAS/FAE and full FAS respectively. Though exact rates of FASD within a correctional setting are unavailable, Burd, Selfridge, Klug and Juelson (2003) estimate prevalence rates for offenders to be between 0.33 (a conservative estimate for FAS) and 9.1 (a liberal estimate for FAS and FAE/pFAS) per 1,000. In their study, Burd et al. (2003) found that out of 148,797 inmates (taken from 11 of the 13 provinces and territories), only 13 offenders had a diagnosis of FASD, which resulted in a prevalence rate of 0.087 per 1,000 (Burd et al., 2003). This finding suggests that FASD is under-diagnosed and that proper diagnosis requires the use of FASD screening measures in correctional facilities (Burd et al., 2003).

1.1 Overview of Fetal Alcohol Spectrum Disorder

The first documented case of what is now termed *Fetal Alcohol Spectrum Disorder* (FASD) was in 1968 by French doctors Lemoine and his colleagues. The French doctors noticed a pattern of facial features in young children who were born to mothers who drank during pregnancy (Astley 2004; Streissguth, Barr, Koga, & Bookstein, 1997; Tait, 2003). In 1973 the term *Fetal Alcohol Syndrome* (FAS) emerged after a group of individuals from the University of Washington's School of Medicine noticed the same pattern of facial features, as well as patterns of growth deficiencies and developmental delays in eight young children (Jones, Smith, Ulleland, & Streissguth, 1973). Shortly following this report, an additional report on FAS surfaced by Jones and Smith (1973) in which they described three more cases of FAS among American Aboriginal infants. In their examination of the 11 cases in total, the authors termed the disorder Fetal Alcohol Syndrome (Jones & Smith, 1973).

Following the discovery of FAS, the term *Fetal Alcohol Effects* (FAE) was introduced to explain FAS without the full range of diagnostic features (Streissguth, 2007). More specifically, FAE includes those who have some but not all of the physical characteristics and confirmed alcohol exposure (Burgess & Streissguth, 1992).

More recently the term FASD was implemented. FASD is an umbrella term that consists of a range of behavioural, physical and cognitive deficits resulting from prenatal alcohol exposure (Caley, Kramer, & Robinson, 2005; Chudley et al., 2005; Health Canada, 2003; Poole, 2008). Effects of FASD can include growth delays, dysmorphic facial features, and central nervous system (CNS; brain) impairments (Caley et al., 2005; Pacey, 2008). Effects of FASD are variable and can range in type, combination and

severity depending on frequency, amount and timing of alcohol consumption, as well as maternal ability to metabolize alcohol (Nicholson, 2008; Health Canada, 2003; Healthy Child Manitoba and Manitoba Education, Citizenship and Youth, 2009). The literature notes that ethanol from alcoholic beverages crosses the placental barrier and enters the bloodstream of the fetus through amniotic fluid and fetal tissues (Jones et al., 1973; Jones & Smith, 1975, Streissguth, 1979). Since the initial introduction of FAS, additional cases of FAS have been identified where individuals have shown similar signs and symptoms (Jones & Smith, 1975; Christoffel & Salafsky, 1975; Qazi et al., 1979).

In 1974, the Seattle Prospective Longitudinal Study on Alcohol and Pregnancy (SPLS) was funded. SPLS researchers initially interviewed 1529 expectant mothers in their fifth month of pregnancy who were accessing prenatal care. Over the course of 32 years, the SPLS followed a cohort of 500 offspring on 11 occasions beginning at day 1 or 2 after birth and up until age 25 (Streissguth, 2007). Results from the SPLS showed interesting and measurable findings at varying stages of lifetime development; in infancy those affected by FASD experience poor habituation; in childhood they experience learning and behavioural problems such as attention and memory impairments; in adolescence they experience neuropsychological deficits such as reasoning and following directions; and in adulthood they can experience mental illnesses (Streissguth, 2007). The effects of FASD manifest differently at different stages of human development and the adverse effects continue throughout the stages of development into adulthood (Wemigwans, 2005; Streissguth et al., 1997; Streissguth, 2007).

1.1.1 Effects of Fetal Alcohol Spectrum Disorder

Growth Delays

A small birth weight-height is the main growth delay characteristic of FASD (Caley et al., 2005; Pacey, 2008; Streissguth, 1979). A small birth weight-height is defined as being at a ratio below the 10th percentile and this is controlled for gestational age. Other growth delays include small head circumference (neonatal microcephaly; Jones et al., 1973; Jones & Smith, 1973, 1975) and being slow to catch up in growth as they age (Streissguth, 1979).

Dysmorphic Facial Features

Four dysmorphic facial features can be found in those who have been diagnosed with FASD. To begin, the area between the nose and the lips called the philtrum is smooth and flat. A thin upper lip and raised palate are also key features (Nicholson 2008; Jones & Smith, 1975). The lengths of the individual's eyes, known as the palpebral fissures, are short giving the appearance of small eyes. Finally, epicanthal folds are present (Caley et al., 2005; Pacey, 2008; Streissguth, 1979).

Research using structural magnetic resonance imaging (MRI) by Andrews (2010) has demonstrated changes is the corpus callosum and cerebellum of those diagnosed with FASD as well as correlations among the severity of facial dysmorphology and decreased frontal lobe volume. In the same study, Andrews (2010) also found that there was less activity in the prefrontal cortex when the complexity of a task increased.

Central Nervous System Impairments

When it comes to neurobehavioural outcomes, the literature notes the following as prevalent: lack of fear response, either a very low or very high pain tolerance, learning problems (Caley et al., 2005; Nicholson, 2008; Pacey, 2008), slow development, borderline mental ability, hyperactivity, being easily distractible, fine motor problems,

and irritable (Streissguth, 1979), as well as having executive functioning impairments which include inhibition, impulse control, memory, understanding cause and effect, logic, foresight, decision making and planning, and emotional regulation (Nicholson, 2008). Research has shown that neurobehavioural outcomes are better indicators of the effects of prenatal alcohol exposure than are the growth deficiencies such as being smaller in size (Streissguth, 2007). A neuropsychological study that looked at the abilities of those affected by FASD compared to their non-affected counterparts found that those with FAS performed more poorly on complex tasks than those with a *Partial Fetal Alcohol Syndrome* (pFAS) diagnosis, where complex tasks included more cognitive processes and simple tasks included less cognitive processes (Aragon et al., 2008). In this same study, results suggested a graduated difficulty of task discriminated between the levels of diagnoses where the more severe the diagnosis of FASD (i.e., FAS versus pFAS versus control group), the more difficult the task was; pFAS performed worse than controls, and FAS performed worse than pFAS (Aragon et al., 2008). In another study by Green et al. (2009), they found that the only differences across diagnostic domains included the number of problems solved. Those with a diagnosis of FAS solved fewer problems when compared to those with a diagnosis of pFAS or *Alcohol Related Neurodevelopmental* (ARND; characterized by central nervous system deficits and confirmed maternal alcohol exposure only). When a neurological test battery measuring four domains (attention, planning, strategy use, spatial working memory) of executive functioning was administered to a group of kids with FASD, results showed that those with FASD performed poorly on all four domains, however they performed the worst in the spatial working memory task (Green et al., 2009). Burgess and Streissguth (1992) add that those

with a diagnosis of FASD have poor judgment, lying, stealing and little remorse. They also show discrepancies between tested level of language use and their actual ability to communicate where their actual communication seems normal but their tested level of language is poor (Burgess & Streissguth, 1992).

In assessing for central nervous system impairments with those with FASD, Andrew (2010) notes the following eight cognitive functions as key areas examined to understand how the brain is operating: intellectual functioning, academic achievement, attention, sensory/motor/visual/spatial skills, communication, memory, executive functioning, and adaptive functioning such as daily functioning.

Primary Disabilities and Secondary Disabilities

Primary disabilities are functional deficits that result from CNS dysfunction (Streissguth et al., 1997). Primary disabilities include, but are not limited to, compromised executive functioning, memory impairments, and problems with judgment, communication, and understanding abstract concepts. Secondary disabilities are "defensive behaviours that develop over time when there is a chronic 'poor fit' between the person and his environment…these are preventable when a good fit is provided" (Wemigwans, 2005, p.6). As a result of a request for proposals, Streissguth et al. (1997) initiated their study on primary and secondary disabilities. After a life history interview, 415 affected individuals above age six were sampled to gain information on secondary disabilities. A total of six disabilities were identified. Mental health problems were the most prevalent secondary disability with 90% of their sample experiencing this disability. This is followed by disrupted school experience such as expulsions, suspensions and dropping out, and trouble with the law with 60% of their sample experiencing these

disabilities. Experiencing a form of confinement, whether in-patient treatment or incarceration for criminal behaviours, was found in 50% of the sample. Like confinement, exhibiting inappropriate sexual behaviours was also found in 50% of the sample. Finally, 30% of the sample had experienced alcohol and/or drug problems. For those aged 21 and older, two additional secondary disabilities were found with high rates, as 80% of the sample had experienced problems with employment and had problems around independent living (Streissguth et al., 1997). Additional examples of secondary disabilities include inappropriate humor, frustration, anger, destructive, poor self-concept, and suicidal ideation/actions (Wemigwans, 2005). In terms of how secondary disabilities affect individuals, results from Streissguth et al. (1997) study showed that males feel the effects of secondary disabilities more than females when it comes to problems with school, law, confinement, and older youth have higher rates of secondary disabilities, except mental health problems, which does not show this trend. Finally, those who lack the dysmorphic facial features were found to have higher rates of secondary disabilities than those with FAS, but again, this excludes mental health problems (Streissguth et al., 1997).

1.1.2 Diagnosis of Fetal Alcohol Spectrum Disorder

Institute of Medicine (IOM)

The Institute of Medicine (IOM) has outlined five diagnostic categories of FASD: Fetal Alcohol Syndrome (FAS) with a history of maternal alcohol exposure, FAS without a confirmed history of maternal alcohol exposure, partial FAS (pFAS), Alcohol Related Birth Defects (ARBD) and Alcohol Related Neurodevelopment (ARND; IOM, 1996). To receive a diagnosis of FAS with maternal alcohol exposure, four criteria must be met:

confirmed maternal alcohol exposure, dysmorphic facial features, at least one growth delay, and at least one structural CNS impairment. If there is no confirmed maternal alcohol exposure but the rest of the criteria are met, the individual would receive a diagnosis of FAS without confirmed alcohol exposure. To receive a diagnosis of pFAS 5 criteria are to be met: confirmed alcohol exposure in utero, some facial abnormalities, growth delays **or** structural CNS impairments **or** cognitive behavioural abnormalities (functional CNS impairments). A diagnosis of alcohol related neurodevelopment (ARND) is characterized by structural CNS impairments **or** cognitive behavioural abnormalities (functional CNS impairments). There is also a category called alcohol related birth defects (ARBD) that includes a list of congenital anomalies (IOM, 1996).

The 4 Digit Diagnostic Code

The 4 Digit Diagnostic Code operates on a 4-point Likert scale where the four diagnostic features of FASD (growth deficiency, dysmorphic facial features, CNS impairments, and prenatal alcohol exposure) are rated based on severity where 1 is an absent feature and 4 is an extreme presence of a feature (Chudley et al., 2005).

The first edition of the 4 Digit Diagnostic Code was developed in 1997 by Astley and Clarren and was created to overcome limitations of previous approaches put forward by the IOM. With the conventional gestalt approach used by the IOM, there were guidelines but no standardized operational definitions. The IOM states that a number of criteria must be satisfied for a diagnosis of FAS, pFAS, or ARND, but this is simply a descriptive guideline versus an accurate description that includes severity of outcomes (Astley, 2004). The 4-digit code overcomes this lack of severity by using the 4-point Likert scale of severity on the 4 diagnostic features of FASD: (1) growth delays, (2)

dysmorphic facial features, (3) functional CNS impairment, and (4) prenatal alcohol exposure. A 1111 would indicate normal growth, no dysmorphic facial features, no CNS impairments and no prenatal alcohol exposure, whereas a 4444 would indicate the opposite, significant growth delays, all of the facial features, CNS impairments and confirmed prenatal alcohol exposure (Astley, 2004).

The Canadian Guidelines for Diagnosis

The Canadian guidelines for diagnosing FASD are an integration of the IOM and 4 Digit Diagnostic Code (Chudley et al., 2005). Though not a diagnostic term itself, different diagnoses can be made under the term FASD. As with the IOM, the same four categories exist: FAS, pFAS, and ARND. A diagnosis of FAS requires at least one growth delay, three dysmorphic facial features, and three CNS impairments with confirmed or unconfirmed prenatal alcohol use by mother (Chudley et al., 2005; Poole, 2008). A diagnosis of pFAS requires two of the three dysmorphic facial features, three CNS impairments, and confirmed prenatal alcohol. However, growth delays are not necessary for pFAS (Nash et al., 2006; Poole, 2008). A diagnosis of ARND requires three functional CNS impairments, and confirmed prenatal alcohol use, but does not require growth delays or dysmorphic facial features (Poole, 2008). ARND presents the highest risk of being misunderstood because in ARND, which totals as many as 90% of diagnoses (Nash et al., 2006), physical deficits are not present and effects are less severe (Healthy Child Manitoba and Manitoba Education, Citizenship and Youth, 2009).

Ideally the process of diagnoses under FASD should include a multidisciplinary team and include psychologists, speech-language pathologists, physicians trained in FASD diagnoses, and a case manager (Chudley et al., 2005). Chudley et al. identify key

steps that involve the process for diagnoses. First, screening should take place with appropriate and valid screening tools, abstinence should be recommended to pregnant women, and when dysmorphic facial features present or prenatal alcohol exposure is known to have occurred a referral for diagnosis should be made. Following screening and referral, those referred undergo a physical exam and differential diagnosis. The physical exam assesses for dysmorphic facial features, growth delays, all while ruling out syndromes with similar patterns of symptoms/signs (i.e., Fetal anticonvulsant syndrome, Aarskog syndrome, or maternal phenylketonuria [PKU]; Chudley et al., 2005). A neurobehavioural assessment should be conducted to assess adaptive behaviour, executive functioning, communication, cognition and brain structure. In addition, treatment, follow up and detailing maternal alcohol history should also be completed where those affected should receive education regarding the disorder, and resources should be provided (Chudley et al., 2005).

1.1.3 Fetal Alcohol Spectrum Disorder and the Justice System

Lynch, Coles, Corley, and Falek (2003) acknowledge that an association exists between delinquency and prenatal alcohol exposure. Of the possible diagnoses under the umbrella term FASD, it is thought that the less severely affected adolescents, the ARND adolescents who lack the facial dysmorphological features, are more likely to experience delinquency and related behaviour problems. In addition to the physical and neurological effects of FASD, as mentioned earlier, there are also secondary (preventable) disabilities that accompany FASD. Though the manner in which impairments manifest often change as the individual ages, the impairments continue to exist into adulthood (Burd et al., 2003). Individuals with FASD may have secondary disabilities such as attention deficit

hyperactivity disorder (ADHD; Nash et al., 2006; Nicholson, 2008), unemployment, sexual and educational problems, and deficits in behavioural and psychosocial areas which can result in trouble with the law, legal confinement, alcohol and drug problems (Caley et al., 2005; Chudley et al., 2005; Lynch et al., 2003). Though comorbidity occurs between FASD and ADHD, Nash et al. (2006) found that unlike the ADHD adolescents, those with FASD alone are more likely to lie and steal, exhibit cruel behaviours, and experience a lack of guilt. Coggins, Timler, and Olswang (2007) explain that adolescents with a diagnosis along the FASD spectrum experience difficulties with empathy and foresight in terms of possible consequences of their actions. When corrective measures are used on youth with FASD, it can result in frustration as oftentimes these individuals have a hard time dealing with cause and effect (Healthy Child Manitoba and Manitoba Education, Citizenship and Youth, 2009). Other psychological and social-behavioural disabilities include mood and anxiety disorders, attachment disorders, ODD, addictions, suicidality, poor relationship and social skills (Nicholson, 2008). Jones et al. (1973) found that those affected by FAS had social and motor performance that was better reflective of their mental age rather than their chronological age – and that they all underperformed. The learning disorders and cognitive deficits make it particularly difficult for those affected by FASD to excel in programming such as mental health and addiction programs, they require specific and individualized treatment programs (Nicholson, 2008)

1.2 Identity

1.2.1 Fetal Alcohol Spectrum Disorder, Culture and Identity

Chudley et al. (2005) explain that a common misconception regarding FASD is that it is an ethnic problem, implying that FASD is a genetic risk for those with Aboriginal[1] ancestry. Though First Nation communities are at high risk for FASD, it is not a genetically-based ethnic problem. Such comments do not consider the social determinants of health that increase the risk for Aboriginal populations and should include context including colonization efforts and effects. The high risk for FASD among Aboriginal people can in part be contributed to colonization (i.e., residential school system, sixties scoop[2], etc.) and its effects on subsequent generations (Tait, 2003) including mental health, educational, socioeconomic and general health problems (Wemigwans, 2005). As Wemigwans (2005, p. 9) notes "Aboriginal communities are particularly sensitive to the stigma associated with FASD because it is not often contextualized as the product of a social problem but as a racial stereotype related to the evils of 'Indians and Drinking.'" Colonization of Aboriginal people has had dramatic and calamitous effects on Aboriginal families and communities. This includes the traumas of forcibly attending residential schools, being torn from family, and having one's culture and language taken. Communication has been altered in how Aboriginal people think, behave, and feel about life. Change is inevitable and necessary for growth and development. However, many of the cultural changes were not the result of an inevitable

[1] The term Aboriginal is inclusive of First Nations, Inuit, and Métis peoples. These terms will be used interchangeably and will all be intentionally capitalized. This terminology will be used to define the first inhabitants in Canada, the United States, Australia and New Zealand. It is not the intention to group First Nations peoples into one homogenous group (van der Woerd & Cox, 2003).

[2] The sixties scoop represented a period of time (1960-1970's) where large amounts of Aboriginal children were removed from their families and placed in the child welfare system and non-Aboriginal foster homes (Tait, 2003).

change, nor were they examples of growth. Rather, these changes can be viewed as breakdown in Aboriginal culture. Much of this change can be linked to the cumulative traumas Aboriginal people have experienced since European settling, specifically with the introduction of the residential school system. In residential school, children had one primary means of communication – their Indigenous language. Many had internalized the idea that Indigenous communication was wrong because school authorities punished it. Having no alternative means of communication led to difficulties communicating with their families (Ing, 2006). Berry (1999) explains that language is one of the most important aspects of tradition that Aboriginal individuals hold central to Aboriginal identity. Those who have had their language taken from them say that regaining their language is of top priority; while those who have been language keepers and have maintained linguistic knowledge say that they are proud to have held onto it (Berry, 1999). Many Aboriginal people may have lost their ability to appropriately express emotions due to internalizing the idea that Indigenous communication equalled punishment. The absence of Indigenous languages, and consequently the absence of communication have had traumatic impacts on Aboriginal families (Ing, 2006). Many turned to maladaptive forms of communicating emotions through the use of punishment, violence, avoidance and neglect, which ultimately resulted in mental health problems and alcohol abuse (Tait, 2003).

1.2.2 Aboriginal Identity

Some people argue that Aboriginal identity has been lost and altered during the process of acculturation and assimilation efforts (Berry, 1999; Christjohn, Young, & Maraun, 2006). Christjohn et al. (2006) explain that a primary effect of the residential

school system is the loss of one's overall identity. This includes the loss of traditions, languages and ways of knowing. Residential schools did not generate a new self—a European version of the original self. Rather, the system created a lack of self in which there is no identity. In some instances, those who were forced into the residential schools while they were really young may have failed to even develop a self (Christjohn et al., 2006). On the other hand, some people believe that Aboriginal people have fought to maintain their culture and preserve their identity. "Despite extensive and systematic assaults by colonialist forces on the identity and cultures of Aboriginal people, many individuals found ways in which to survive and resist against these assaults" (Tait, 2003. p. 77). If identity loss can result in negative effects, it is plausible that ethnic identity can serve as a protective factor.

1.3 Enculturation

Tajfel and Turner (1986) define social identity as a group of individuals who perceive themselves as part of a homogeneous social group with definitional and emotional commonalities. Enculturation can be defined as the process of an ethnic individual learns about their own ethnic culture as well as the extent to which they connect with their ethnic culture (Zimmerman & Ramirez-Valles, 1996). Ethnic identity can be considered as both a component of the larger construct of social identity (Phinney, Chavira, & Tate, 1993), as well as analogous to enculturation (Zimmerman & Ramirez-Valles, 1996).

1.3.1 Identity and Enculturation

Ethnic identity has many components and the construct can be variable, however there are some central components. The first component is self-identification. This can be thought of as a self-label; it allows for differentiation between self-identification of ethnic identity (what ethnic identity an individual identifies with) and ethnicity (biological ethnic identity regardless of self label). Another central component to ethnic identity includes affect. This includes feelings a sense of belonging, attitudes, and pride. Cognitions are also important to the construct of ethnic identity. This includes knowledge regarding the ethnic group's history, and traditions. Another component includes behaviours and practices. This refers to individualism versus collectivism, gender roles, social activities, and cultural traditions. (Phinney,1992, 2000).

Given the common misconceptions and high risk for FASD diagnosis, Aboriginal ethnic identity is of particular interest. Berry (1996) explains that both symbolic and behavioural elements are central to Aboriginal cultural identity. The symbolic component includes internal factors such as cognitions and perceptions, whereas the behavioural components include external factors such as their desire and expression of their Aboriginal identity.

Berry (1999) found that identity is highest among Inuit and lowest among Metis, while residence on or off reserve fell in the middle. Findings also showed that adults had stronger identities than children and adolescents (Berry, 1999). These findings are relevant because identity acquisition, whether it is social or ethnic identity, is an important part of adolescent development (Erikson, 1968). In adolescence, youth are more interested in how they are viewed by their peers and fitting in with the subculture

rather than identity formation (Erikson, 1968). Identity acquisition in adolescence involves a process of exploration that ultimately results in a commitment to an identity. Identity commitment varies as individuals age; as an individual transitions out of adolescence their identity may be more clear than what it was as they entered adolescence (Roberts et al., 1999). Adolescence is a developmental transition in which individuals may experience confusion while trying to form their identity (Berry, 1999). In Berry's (1999) study, he found that of the 114 participants, 37 expressed identity confusion, which he attributed to their being marginalized as individuals and as a group. When ethnic identity is attacked, individuals with a strong sense of their ethnic identity deal with the negative discrimination in more active ways compared to those with weaker identities (Phinney et al., 1993). Ethnic identity is stronger and more salient for ethnicities that encounter a lot of discrimination. The amount of discrimination brings them together as a way of dealing with the attacks and preserving self-esteem (Phinney, 2000).

1.4 Resilience

1.4.1 Resilience Definition

Of particular interest in the present study are factors that are associated with resilience and the relationship to offending patterns and histories. In its original meaning as it relates to physical health, resilience can be understood as being healthy despite experiencing substantial risk (Ungar, 2005a). This basic definition has an important qualifier of substantial risk because without acknowledgement of this qualifier the word resilience can become meaningless. Rutter (1987) explains that resilience is the different ways in which individuals respond to risk. It is not a fixed attribute, but rather the manner

in which individuals respond to stress can wax and wane with time and situations. Ungar (2005a) explains that many understand resilience as something innate to the individual, a special intrinsic quality within the person that helps them overcome adversity. However, it is important to understand resilience as something more than an internal quality; understanding resilience should involve contextual, environmental, societal, and cultural aspects as well as relationships and opportunities that present (Ungar, 2005a, b). In their study, Greene, Galambos, and Lee (2003) found that factors that contribute to resilience identified by health-related professionals could be compartmentalised into three themes. The first theme includes internal factors such as attitudes, sense of humour, intelligence and problem solving. Furthermore, just over a third of those interviewed understood resilience as a developmental process in which resilience begins in childhood and continues as you interact with the environment. The second theme includes circumstances related to external characteristics and includes how relationships between individuals and their environments are affected by multiple levels/forms of attachments (e.g., families, communities and schools). The third theme included strategies to enhance resilience in the context of experiencing trauma. Such strategies included, but are not limited to, telling individuals they are capable and able to get through the trauma, acknowledging that the individual may feel as though things are no longer normal, as well as working on interpersonal connections (Greene et al., 2003).

1.4.2 Theories of Resilience

Across the literature, operational definitions of resilience appear to be inconsistent (Fougere & Darrern, 2011) and two prominent conceptualizations of resilience include resilience as a trait and resilience as a process.

The conceptualization of resilience as a trait can be understood as characteristics that a person has that allows success in the face of adversity (Fougere & Daffern, 2011; Jacelon, 1997; Richardson, 2002). Throughout the literature on resilience as a trait, researchers have come to agreement on a triad of resilient traits (Greene et al., 2003; Jacelon, 1997; Richardson, 2002). The first in the triad includes personal characteristics such as autonomy, social responsivity, an ability to reflect, tolerance, easy temperament and good planning and problem solving skills (Fougere & Daffern, 2011; Jacelon, 1997; Richardson, 2002). The second component of the triad includes family characteristics such as having a warm and supportive family environment with a caring family (Jacelon, 1997). Finally, the third in the triad of resilient traits includes community characteristics where there are external supports such as positive role models (Fougere & Daffern, 2011; Jacelon, 1997). Though researchers have reached relative agreement on the three prominent traits of resilience, this level of agreement is not present when thinking of resilience as a process (Jacelon, 1997). Some have noted resilience as a process of acquiring resilient traits (Richardson, 2002), while others have imposed a process on the three components of the triad mentioned earlier. This framework operates in a nested fashion; "protective processes (resources, competencies, talents, skills) … sit within the individual (individual-level factors) within the family ad peer network (social level factors) and within the whole school environment and the community (societal-level factors) " (Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003, p. 3). It has also been argued that a continuum exists with resilience and vulnerability on opposing ends. When faced with adversity, people respond through a dynamic process and depending on the response, they will end up at some point on the continuum (Jacelon, 1997).

1.4.3 Resilience and Crime

Strengths of individuals in justice settings are rarely examined, but it has been shown that resilience is a factor that reduces recidivism. Studies have shown that life course persistent offenders are different from adolescent-limited offenders in terms of resilience. Moffit (1993) delineated two distinct groups of delinquent pathways. The first, adolescence-limited offenders, represents delinquent youth that demonstrate time-limited antisocial behaviour. Youth who fit this category show abrupt onset and desistence with no history of delinquent behaviours and little to no continuation of such behaviours in adulthood. The second, life-course-persistent offenders, represents delinquent youth who demonstrate continuity and heterogeneity in their antisocial behaviours across their lifetime. In addition, these antisocial behaviours are present across all domains of life (work, home, school, etc.). Adolescent limited offenders show comparable characteristics of resilience as other individuals identified as resilient (Fougere & Daffern, 2011). This finding is echoed by Ungar (2001) who explains that youth labelled as vulnerable or at risk show similarities to youth labelled as resilient because they both use the same mechanisms to maintain their sense of well being; though some cases involve effective yet deviant pathways through the system. With the goal to be healthy, individuals who are raised in environments where resources are lacking, the delinquent behaviour may be their method of acquiring what is needed (Ungar, 2005b). Ungar (2001) explains that young people may gravitate towards deviant peers and take part in deviant behaviours as a way to fill a void; these individuals are acquiring something they need via the delinquent behaviours. To echo this view, Greene et al. (2003) found that health related professionals believed that individuals would do whatever it takes to survive. For example, those who have home environments that are not supportive or are unhealthy

may join gangs to get a sense of belonging. In a gang, they may have a sense of family; they are adapting to get what they need.

2: RESEARCH QUESTIONS AND HYPOTHESES

2.1 Research Questions

There is a paucity of research that focuses on resilience and FASD. As part of a larger study that is examining psycholegal abilities among FASD justice involved youth, this portion of the study will target identifiable resilience factors for justice-involved youth that can be later used in developing and implementing intervention and prevention programs. This study is the first in a program of research focusing on the relationship between FASD, justice involved youth, enculturation and resilience. The overarching goal of this study aims to move beyond psychopathologizing FASD justice-involved youth and towards a strength-based examination of the association between resilience traits and various moderators. Research questions this study will address include:

Q1. What is the association between enculturation and resilience for:
- All individuals in the study?
- Individuals with a diagnosis of FASD in the study?

Q2. What are the similarities and differences between FASD and non-FASD groups for:
- Resilience factors?
- Enculturation rates?

Q3. For offence history:
- Are specific resilient factors associated with offence history?
- Is FASD a moderator for the association between resilient factors and offence history?
- Is FASD a moderator for the association between enculturation rates and offence history?

2.2 Hypotheses

Q1. What is the association between enculturation and resilience for:

A: All individuals in this study?

Hypothesis: there will be a positive correlation between enculturation and resilience

B: Individuals with a diagnosis of FASD in this study?

Hypothesis: there will be a positive correlation between enculturation and resilience

It is hypothesized that there will be a positive correlation between enculturation and resilience for each question; as enculturation increases, resilient traits will as well. Prior literature on resilience and culture explains that the two are intricately connected. Rooted in culture are protective factors including traditions, rituals, ceremonies and strength of one's ethnic identity (O'Dougherty, Wright, & Masten, 2005). Theories on identity explain that there is a positive correlation between individuals with stronger ethnic identities and psychological well being (Roberts et al., 1999).

The resilience measure used in this study, the Child and Youth Resilience Measure (Ungar et al., 2008), includes three items on cultural identification in the construct definition (i.e., do you enjoy your communities traditions?). Looking at FASD as it relates to the association between enculturation and resilience is of particular interest because one's cognitive ability is a solid predictor for youth resilience (Deater-Deckard, Ivy, & Smith, 2005). Though cognitive ability is central to resilience, the content and details of an individual's cognitions are also important to resilience, especially self-referent cognitions which protect the individual when the self is threatened (Deater-Deckard et al., 2005). The resilience literature notes that there are internal and external

protective factors. Internal protective factors are composed of the same cognitive abilities that can be impaired in individuals with FASD[3] (i.e., executive functioning: impulse control, decision making, foresight, cause/effect reasoning, etc.; Caley et al., 2005; Pacey, 2008). External protective factors are characterized by forces outside of the self, such as positive relationships, families, and communities (Taub & Pearrow, 2005).

Q2. What are the similarities and differences between FASD and non-FASD groups for:

A: Resilience factors[4]

Hypothesis: non-FASD individuals will have higher rates of resilience

B: Enculturation Rates

Hypothesis: non-FASD individuals will have higher rates of enculturation

Given the cognitive difficulties individuals with FASD encounter, it is hypothesized that individuals with no diagnosis of FASD will demonstrate higher rates of resilience and enculturation. As stated earlier, individuals with FASD have problems with insight among other cognitive deficits, which may affect identification of enculturation/resilient traits. Given the focus of the Child and Youth Resilience Measure (CYRM) on resources that bolster resilience, an additional measure of resilience, as it relates to traits, will be included in analyses: a resilient personality item on the Structured Assessment of Violence Risk in Youth (SAVRY; Borum, Bartel, & Forth, 2003).

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[3] Though individuals with FASD experience deficits in cognitive functioning, this statement should not be taken that *all* cognitive functioning is impaired, rather there may be variability in their level of functioning.

[4] Concerns have been raised regarding the low levels of resilience for both FASD and non-FASD groups given their status as youth offenders. Normative data on resilience have been attached in the appendix to aid in making relative comparisons between the FASD and non-FASD groups (See Table 12).

Resilient personality traits that are in the SAVRY include the following: average intellectual ability and cognitive skills (e.g., reasoning skills, planning), as well as an individual's ability to develop thoughtful solutions to conflict and problems.

Q3. Looking at Offence Severity

A: Are specific resilient factors (individual, relational, community and cultural domains) associated with offence severity?

Hypothesis: this question is exploratory, however it is hypothesized that the lack of resilient traits will correspond to increased numbers of crime and a negative correlation will be present.

B: Is FASD a moderator for the association between resilience factors and offence severity?

Hypothesis: a diagnosis of FASD may have a moderating effect on the association between resilience and severity/number of criminal behaviour; the presence of FASD will result in an increased negative correlation between resilience and offence severity.

C: Is FASD a moderator for the association between enculturation rates and offence severity?

Hypothesis: FASD may have a moderating effect on the association between enculturation and severity/number of criminal behaviour; the presence of FASD will result in an increased negative correlation between enculturation and offence severity.

For each part of question three, the Crime Severity Index (CSI) from Statistics Canada (2009) will be used as an index of offence severity. The CSI considers both the

number and seriousness of offences using a weight system. Higher scores indicate more serious criminal behaviours. This index of offence severity will utilize an individual's official criminal record. However, the current study will also obtain detailed police statements surrounding the juvenile's offences in order to accrue more information about the juvenile's pattern of offending. In addition to the use of the CSI, each part of question three will also use the lifetime SRO data to examine offences for which the individuals may not have been caught for or convicted of.

Part A of question three will be exploratory in nature. Interest in this question is rooted in previous literature, which theorizes that some individuals display their resilience in delinquent ways (Ungar, 2005b). For example, an individual may be faced with adversity and choose the less favourable path, all while demonstrating resilient traits.

For part B, it is hypothesized that having a diagnosis of FASD may have a moderating effect on the association between resilience and severity of criminal behaviour. That is, the presence of FASD will result in an increased negative correlation between resilience and offence history. This hypothesis stems from literature on the cognitive deficits and secondary disabilities individuals with FASD face. Again, many of the cognitive abilities (planning, impulse control, reasoning, etc.) that have been identified as impaired or absent in individuals with FASD serve as resiliency factors in individuals without these impairments (O'Dougherty et al., 2005). FASD is of interest because of the deficits to cognitive functioning it often creates. It is important to note that FASD affects individuals differently, such that there are many unique combinations of cognitive dysfunction, which can arise as a result of exposure to alcohol in utero. These

various combinations of cognitive deficits can therefore possibly result in unique patterns of criminal behaviour, which this study is hoping to discover.

For part C, it is hypothesized that FASD may also have a moderating effect on the association between enculturation and offence history; the presence of FASD will result in an increased negative correlation between enculturation and offence history. There is a paucity of research on the association between ethnic identity and offence history. However, past literature has explained that some youth act out with problematic behaviour (i.e., alcohol, drug use) as a way to cope with identity loss or confusion (Berry, 1999).

3: METHOD

3.1 Participants

Participants were 94 justice-involved adolescents between 13 and 23 years of age (N = 94, 77 male, 17 female). Forty-seven of the participants had a confirmed diagnosis of FASD based on Canadian diagnostic guidelines (Chudley et al., 2005), whereas the other 47 participants served as the comparison group and did not have a diagnosis of FASD, nor were they suspected of having FASD. Participants were recruited within the provinces of British Columbia and Manitoba. Recruitment of the British Columbia FASD sample was, in part, done in collaboration with the Asante Centre in Maple Ridge via the Youth Justice Evaluation Program. Additional recruitment efforts included contacting probation officers in the Lower Mainland. Probation officers were informed about the study and were asked if they had any youth on their caseload with a diagnosis of FASD. If probation officers indicated they had youth with a confirmed diagnosis on their caseload, they asked the youth if they were interested in hearing about a study and if they assented to have the probation officer provide the researcher with their contact information. If assent was provided by the youth, researchers for the project contacted the individual to describe the study, obtain parental consent (if necessary; see appendix A), and schedule an interview. Recruitment of the Manitoba FASD sample was done in collaboration with the FASD Youth Justice Program in Winnipeg. Clinic staff at the Asante Centre as well as the FASD Youth Justice Program participated in the recruitment efforts to facilitate confidentiality. Their participation included making initial contact

with youth and their families via telephone, mail or in person, and requesting permission that researchers contact them regarding participation in the study. Recruitment of the non-FASD sample was done in collaboration with probation offices in metro-Vancouver and Winnipeg. Recruitment of the comparison sample included efforts to match the samples on age, gender, offences and geographical region. Youth were only excluded from the comparison group if there was suspicion of FASD. As with the recruitment of the FASD sample, probation staff at the probation offices participated in the recruitment efforts to facilitate confidentiality. Their participation included making initial contact with youth and their families via telephone, mail or in person, and requesting permission that researchers contact them regarding participation in the study.

3.2 Measures

3.2.1 The Multigroup Ethnic Identity Measure (MEIM)

The Revised (12-item) Multigroup Ethnic Identity Measure (MEIM; Roberts et al., 1999, see Appendix B) was used to measure enculturation/cultural identity. This 12-item measure of ethnic identity is designed to assess enculturation and is based on Erickson's (1968) Developmental Theory and Tafjel and Turner's (1986) Social Identity Theory and focuses on three core areas of enculturation (ethnic identity achievement, affirmation and belonging, and ethnic behaviours). A factor analysis yielded two factors resulting from the MEIM (See Table 1). The first factor, which includes five of the items, is a developmental cognitive component that is termed ethnic identity search. The second factor, including seven items is an affective component that is termed affirmation, belonging, and commitment. Sample items from this measure include "I have a strong sense of belonging to my own ethnic group" or "I participate in cultural practices of my

own group, such as special food, music, or customs" (Roberts et al., 1999). Psychometrics for this measure demonstrated adequate reliability (.81 in high school students and .90 in college students; Roberts et al., 1999).

As this is a self-report measure, youth answered questions on the MEIM using a 4-point Likert scale (strongly agree, agree, disagree, strongly disagree) where higher scores indicate higher ethnic identity. Scoring this measure includes using a mean of the 12 items as the total score in which there can be a range from 1 to 4. In addition to an overall mean score, mean sub-scores can also be obtained for the two factors (Roberts et al., 1999).

3.2.2 The Child and Youth Resilience Measure (CYRM)

The Child and Youth Resilience Measure (CYRM; Ungar et al., 2008; see appendix C) was used to measure resources available that work to enhance resilience. This 28-item measure of resilience is a culturally sensitive measure of resources enhancing resilience among youth. The CYRM was developed to allow for a cross-cultural measure of resilience that could account for general and unique factors affecting resilience among cultures. The development of this measure included 1451 youth in 11 countries to examine factors affecting resilience without a western bias while examining culturally embedded factors affecting resilience (Ungar & Liebenberg, 2009). This measure focuses on individual, relational/familial, community and cultural domains/attributes that reflect resilience (See Table 2). Sample items from the survey include "Are you aware of your own strengths?" or "Do you enjoy your communities traditions?" (Ungar et al., 2008, pp. 173). Psychometrics for this measure of resilience demonstrates adequate reliability (Ungar et al., 2008).

Youth answered questions on the CYRM using a 5-point Likert scale (untrue, somewhat untrue, neither true nor untrue, somewhat true, true) where higher scores are indicative of increased access to resources known to bolster resilience (Ungar & Liebenberg, 2009). Scoring this measure includes using a mean of the 28 items as the total score in which there can be a range from 1 to 5. In addition to an overall mean score, mean sub-scores can also be obtained for the four subdomains (individual, relational/familial, community and cultural; Roberts et al., 1999**).**

3.2.3 The Structured Assessment of Violence Risk in Youth (SAVRY)

The SAVRY (Borum et al., 2003) is a 30-item structured guide for evaluating risk for violence in adolescents aged 12-18. The SAVRY covers three risk-based domains: Historical Risk Factors, Social/contextual Risk Factors, and Clinical Risk Factors, as well as a domain that assesses Protective Factors. Each risk item is given a rating of low, medium, or high risk based on scoring criteria contained in the manual. The protective factors are rated as either present or absent. The SAVRY includes 24 risk factors and 6 protective factors, one of which is the resilient personality traits. A sample item from the risk items on the SAVRY includes "Risk Taking/Impulsivity", whereas a sample item from the protective factors on the SAVRY includes "Resilient Personality Traits." Psychometrics for this assessment guide demonstrates adequate reliability (.82 in for offenders) and validity. The SAVRY demonstrates concurrent validity with other risk instruments, and the protective factors of the SAVRY are negatively correlated with the same risk instruments.

3.2.4 The Crime Severity Index (CSI)

The Crime Severity Index (CSI; Statistics Canada, 2009) is a method of measuring crime in Canada. The CSI differs from the traditional crime rate in that the CSI accounts for severity (number and seriousness) by utilizing weights relative to other crimes, whereas the traditional crime rate only accounts for the total number of crimes and not severity. For example, 1st or 2nd degree murder is given a weight of 7,042 and pointing a firearm is given a weight of 194 (for a list of weights see Appendix D; Wallace, Turner, Matarazzo, & Babyak, 2009). The weights used in the CSI are generated based on sentencing data collected by Statistics Canada's surveys of adult and youth criminal courts. More specifically, each weight is based on the incarceration rate for those convicted and sentenced for the particular offence and the average length of prison sentence in days. These two components are multiplied to produce the weight. Using this formula allows for modification of weights as sentencing patterns change over time. Multiplying the number of times a particular offence occurs by the weight and adding all weighted offences will produce the calculated crime severity index. For example, if there are two 1st degree murder convictions and three pointing a firearm convictions for an individual, they would receive a score of 14666 (7,042 x 2 + 194 x 3). The particular set of weights used for the purposes of this study is based on sentencing/incarceration from 2002 to 2007 (Wallace et al., 2009).

3.2.5 Self Report of Offending

The Self Report of Offending (SRO) questionnaire (Huizinga, Esbensen, & Weiher, 1991; Knight et al., 2004) was used as an additional method of measuring offence history. The SRO, as it's title suggests, is an instrument that collects information about

self-reported offending behaviour. The information collected from the SRO may include offences that have not resulted in criminal convictions, and offences for which the individual has not been caught. The SRO includes aggressive, income related and public order offences. A sample aggressive offence item from the questionnaire includes "Taken something from another person by force, using a weapon?" Youth answered questions on the SRO using a 5-point Likert scale (never, 1 time, 2 or 3 times, 4 times, 5 or more times) where higher scores are indicative of increased self reported activity of offending. Scoring this measure results in a proportion where the number of acts endorsed is divided by the number of offences in the questionnaire. For example, there are 10 income related offences in the questionnaire, if an individual endorsed 6 of the 10; it would result in a proportion score of 0.6. Proportion scores can range from 0 to 1, where a score of 1 would indicate a greater amount of offences endorsed. In addition to the overall proportion score, proportion sub-scores can be obtained for the aggressive and income related offences. This questionnaire has good psychometrics and is equivalent across genders and cultures (Knight et al., 2004).

3.3 Procedure

As mentioned earlier, participants were contacted by their respective service providers (probation officers, program staff, clinic staff) and asked if they would like to hear about a study in which they would receive a $25 gift card. Following recruitment, those who expressed an interest in participating in the study were informed about the purpose of the study; to learn about the experiences and needs of different groups of youth involved in the justice system. Youth under the age of 18 in Winnipeg, Manitoba and youth under the age of 19 in the Lower Mainland, British Columbia were asked for

parental consent and written assent. Those 18 and older in Manitoba and those 19 and older in British Columbia were asked for informed consent (See Appendix E). Age 18 in Manitoba and age 19 in British Columbia were used based on the age of majority for each province. The consent form outlined the purpose of the study and informed participants that they can refuse to participate or withdraw at any time without penalty indicating the voluntary nature. Included in the consent form was information regarding confidentiality and limitations to confidentiality (i.e., subpoena, risk of harm to self or others, any abuse to self or others). All participants were orally read the consent form. After discussing the limitations to confidentiality, participants were asked if they understood and then were asked to explain it back to the researcher to ensure they understood. For participation in the study, participants were awarded with an entertainment gift certificate to be used locally (i.e., movies, mall, food vendor, etc). Participants in British Columbia were met at the Asante Centre in Maple Ridge, at probation offices in the lower mainland, detention facilities, as well as Simon Fraser University campus libraries and public libraries. Participants in Manitoba were met at the FASD youth justice program in Winnipeg, at probation offices, detention/prison facilities, as well as public libraries. Prior to administering the interview, consent (as described above) was obtained from guardians and written assent from participants. Instructions were provided orally and participants were asked to complete the interview questions as honestly as possible.

As part of a larger study, participants were administered a battery of tests and an interview in addition to the two questionnaires in this study. The total interview session lasted approximately three hours. Upon completion of the interview, tests, and questionnaires, participants were assessed for self-harm (See Appendix F), debriefed and

compensation was awarded. All interview sessions were led by one of three examiners: a PhD student with a Master's level education in psychology, a Master's student with a Bachelor's level education in psychology, and an undergraduate psychology research assistant. All examiners underwent criminal record checks and were trained on project materials.

4: STATISTICAL ANALYSIS

Variables and Assessment

This study was a between-groups design; the two groups consisted of those with a diagnosis of FASD, and those without. Comparisons were made between the two groups on the following measures: factors affecting resilience, resilient traits, and enculturation. The predictor variables include resilience and enculturation, while the outcome variable is crime severity. The constructs of interest are (1) Resilience, which on the CYRM the total mean score can range from 1 to 5, in which a higher score indicates access of more resources that bolster resilience and on the SAVRY either resilient traits are rated as present or absent; and (2) Enculturation, which the total mean score can range from 1 to 4, in which a higher score indicates higher enculturation, and (3) crime severity in which, again, higher scores indicate more severe crimes. Statistical analyses were done using SPSS 19.0 for Mac OS X (SPSS INC, Chicago, IL). Descriptive statistics were done to characterize the group as a whole. The file was then split into FASD or Comparison and descriptive statistics were computed to get a sense of each group. Following the descriptive statistics, Pearson product--moment correlation coefficients were calculated for each predictor variable and the outcome variables. Independent sample t tests were used to detect differences between the FASD and the comparison group on the CYRM and MEIM. A QQ probability plot of residuals was used to check the assumption of normality of errors. The QQ probability plot of residuals fell along the regression line on the QQ plot indicating a normal distribution for both variables of interest. Finally, to

determine whether or not FASD had an influence on the relationship between the predictor variables and the outcome variables, a moderated regression analysis was performed. The outcome variable violated the assumption of normal distribution and therefore a transformation was conducted to correct this violation. For the moderated regression analysis, the continuous variables were first centered. After centering the variables, an interaction term was created. Finally, the outcome variables were regressed on the centered variables and the centered interaction term.

5: RESULTS

5.1 Descriptive Statistics

Prior to running analyses the issue of missing data was dealt with. Seven participants failed to complete the CYRM entirely as they left one or two items unanswered. In particular, participants neglected to answer six questions (4,13,16, 23, 25 and 28). In order to deal with missing data, scores for missing items were imputed based on mean substitution of specific domains. For example, item 4 falls within the relational domain and when this item was missing the mean was calculated based on answers in the relational domain.

Descriptive statistics were calculated for both samples (see Table 3), as well as for each predictor variable, and the dependent variable (see Table 4). The study included 94 adolescents and young adults, 47 with a diagnosis of FASD and 47 without. Descriptive statistics of the 94 youth showed that a majority were males (81.9%), of Aboriginal heritage (71.3%), and an average age of 17.5 (SD = 1.61). Of those who identified as Aboriginal, 59.7% indicated they have Indian Status, which includes any individual registered under the federally governed Indian Act, 29.2% did not have Indian status, and 11.1% were unsure of their status. In terms of ethnicity, five individuals indicated ethnicities other than Caucasian, Aboriginal, Asian, East Indian and African. Those who identified as other identified themselves as one of the following: Canadian, Hispanic-Philippine, Mulatto, Philippine, or Portuguese. In terms of social demographics, 55.3% of the youth in this study were in custody at the time of the baseline, and the remaining

44.7% were in the community. A total of 53.2 of the youth in the study had pre-adjudicated (unresolved and open) charges, and 46.8% had post-adjudicated (closed) charges. Of those in living in the community, a majority of the youth (17%) lived with a birth parent or both, while 11.7% lived in a foster home, 3.3% lived with their step parent, relative, or sibling, 7.4% lived independently, 6.4% lived in a group home, and 3.2% lived with friends, treatment or had no fixed address. Of those who were in custody at the time of the baseline interview, their living arrangements prior to custody status was that a majority of the youth (25.5%) lived with a birth parent or both, while 1.1% lived with adoptive parents, 6.4% lived in a foster home, 8.6% lived with relatives, stepparents, or siblings, 4.3% lived independently, 8.5% lived in a group home, while 3.2% identified other or no fixed address. A total of 70.2% of the youth have had contact with the ministry of child and family development (MCFD) at some point in their life. Of the 70.2% with MCFD involvement, the average age at first placement was 9.41 (*S.D.* = 16.67), and the average number of placements was 7.5 (*S.D.* = 7.41). 30.9% of the youth indicated that they have been homeless at some point in their life, with the average age the first time being 16.93 (*S.D.* = 15.74) and average number of times being homeless at 7.10 (*S.D.* = 18.16). Of the 94.6% of youth ever in custody, the average number of days spent in a custody centre is 356.40 (*S.D.* = 378.55). Finally, only 31.9% of the youth were attending school at the time of the interview (this included classes while in custody). For all youth in the study, 78.7% had attended alternative school at some point in their life, and the average grade last completed was 8.71 (*S.D.* = 1.70), where a majority of the youth last completing either grade 8 or grade 9, with a range from grade 5 to grade 12. See Table 5 for comparisons between the two groups.

5.2 Hypothesis 1

The first set of hypotheses was that there would be a positive correlation between enculturation and resilience for all individuals in this study, and for those with a diagnosis of FASD in this study.

Pearson product-moment correlation coefficients (Pearson's *r*) were computed to assess the relationship between resilience and enculturation. Further, Pearson's *r* correlations were computed on the domains of the CYRM and the factors of the MEIM.

Correlations between CYRM and MEIM

Consistent with predictions, a positive correlation was present between CYRM and MEIM mean scores for all individuals in the study. As shown in Table 6 resilience was positively correlated to enculturation ($r = .465$, $p < .001$). This means that as one variable (enculturation for example) increases so does the other (resilience) and vice versa, as one decreases so does the other.

The positive correlation between CYRM and MEIM showed similar relationships for the FASD group ($r = .487$, $p = .001$) and comparison group ($r = .414$, $p = .004$).

Correlations between CYRM Domains and MEIM

Significant positive correlations were also found between CYRM domains and MEIM mean scores: individual domain ($r = .310$, $p = .002$), relational domain ($r = .279$, $p = .007$), community domain ($r = .225$, $p = .029$), and cultural domain ($r = .607$, $p < .001$).

In comparing the comparison and FASD groups, small differences were present in the correlations between the CYRM domains and the MEIM mean scores. As shown in Tables 7 and 8, differences between the FASD and comparison groups were primarily between the CYRM individual and relational domain and their correlations with MEIM mean scores. For the comparison group, a significant positive correlation was found

between the overall MEIM and individual domain (r = .315, p = .031), but not the relational domain (r = .184, p = .215). However the opposite was found in the FASD group with no significant correlation between the overall MEIM and individual domain (r = 286, p = .051), but a significant correlation was found with the relational domain (r = .334, p = .022). As can be seen in Tables 7 and 8, for both groups, no significant correlation was found between total MEIM and community domain of the CYRM.

Correlations between CYRM and MEIM Factors

Significant positive correlations were also present between CYRM mean scores and the MEIM factors E.I.S. (r = .419, p < .001), and A.B.C. (r = .443, p < .001). As seen in Tables 7 and 8, both the comparison group and the FASD group showed significant positive correlations.

Correlations between CYRM Domains and MEIM Factors

Significant positive correlations were found between the two MEIM factors and four CYRM domains with the exception of the relationship between E.I.S. and the community domain of the CYRM, which showed non-significant results (r = .137, p = .187).

When comparing the two groups, small differences were present between the comparison and FASD groups in correlations between MEIM factors and CYRM domains. As shown in Tables 7 and 8, differences between the FASD and comparison groups were primarily between the CYRM individual and relational domain and their correlations with MEIM mean scores and MEIM factors. The individual domain of the CYRM showed opposite patterns between the two groups. For the FASD group, the individual domain was only significantly correlated with the E.I.S. factor of the MEIM (r

= .328, *p*= .024) and not with the total MEIM (*r* =.286, *p* = .051) or A.B.C. factor of the MEIM (*r* = .225, *p* = .128), whereas the comparison group, the individual domain of the CYRM was significantly correlated with the total MEIM score (*r* = .315, *p* = .031), and the A.B.C. factor of the MEIM (*r* = .323, *p* = .027), but not the E.I.S. factor (*r* =.250, *p* = .090) which is the exact opposite of the FASD group.

5.3 Hypothesis 2

The second set of hypotheses was that the comparison sample would demonstrate higher rates of a) resilience, as well as b) enculturation.

Inconsistent with predictions, neither group demonstrated higher total rates of resilience or enculturation than the other. An independent-samples t-test was conducted to compare resilience in FASD and comparison groups. There was not a significant difference in the scores for the FASD (*M* = 3.747, *SD* = .647) and comparison (*M* = 3.901, *SD* = .511) groups; *t*(92*)* = -1.283, p = .203. An independent-samples t-test was also conducted to compare enculturation in FASD and comparison groups. There was not a significant difference in the scores for the FASD (*M* = 2.599, *SD* = .7559) and comparison (*M* = 2.775, *SD* = .674) groups; *t(*92*)* = -1.188, p = .238.

Table 13 compares CYRM normative data with the current project's data. As can be seen in the table, normative data has been reported for all youth who participated, which includes both complex needs youth, and low risk youth. Complex needs youth are characterized by youth at risk and youth with poor social outcomes. The complex needs sample was made up of youth who utilized two or more mandated services (i.e., mental health, justice, social welfare).

5.4 Hypothesis 3

Hypothesis 3a: First hypothesized was that there would be a negative correlation between resilience and offence history; lower resilience rates will correspond to increased numbers and seriousness of crime. Pearson's r correlations were computed to assess the relationship between resilience and offence history. As shown in Table 9, significant correlations were only found between resilience and 1) total LSRO, 2) LSRO aggressive offences, 3) LSRO income offences.

Correlations between CYRM and Total Frequency of Lifetime SRO

A negative correlation was present between resilience and total frequency of lifetime self reported offending for all individuals in the study (r = -.292, p = .006). This negative correlation was also present for the FASD group (r = -.332, p = .028) and the comparison group in the study (r = -.355, p = .017).

Correlations between CYRM and Lifetime SRO Aggressive Offences

A negative correlation was present between resilience and aggressive related lifetime self reported offending for all individuals in the study (r = -.278, p = .008). This negative correlation was also present for the FASD group (r = -.332, p = .028) and the comparison group in the study (r = -.319, p = .030).

Correlations between CYRM and Lifetime SRO Income Offences

A negative correlation was present between resilience and income related lifetime self reported offending for all individuals in the study (r = -.261, p = .012). This negative correlation was not present for the FASD group (r = -.232, p = .120), however was present for the comparison group in the study (r = -.400, p = .006).

Hypotheses 3b and 3c: Additional hypotheses hypothesized that the presence of a diagnosis of FASD would result in an increased negative correlation between a) resilience and offence history and b) enculturation and offence history. That is, a diagnosis of FASD may have a moderating effect on the association between resilience and severity of criminal behaviour and enculturation and severity of criminal behaviour. In order to examine the hypotheses that a diagnosis of FASD may influence the relationship between predictor and criterion variables, regression analyses were conducted.

Resilience and Offence History

CSI Convictions

To test the influence of FASD as a moderator, the criterion variables (CSI convictions, LSROs) were regressed on the grouping variable (FASD versus comparison), CYRM mean score, and the interaction between CYRM and the grouping predictors. No evidence exists that a diagnosis of FASD moderates or influences the impact of resilience on total CSI convictions, $R^2 = .163$, F (3,90) = 5.829, $p = .001$, standardized $\beta = .573$, t(3,90) = 1.952, $p = .054$.

LSRO Total

No evidence exists that a diagnosis of FASD moderates or influences the impact of resilience on LSRO total. Though the overall model showed significance, $R^2 = .163$, F (3,85) = 5.529, $p = .002$, the model examining the moderation showed non-significance results, standardized $\beta = -.192$, t(3,85) = -.633, $p = .528$.

LSRO Aggressive Offences

No evidence exists that a diagnosis of FASD moderates or influences the impact of resilience on LSRO aggressive offences. Though the overall model showed significance, $R^2 = .141$, $F\ (3,86) = 4.711$, $p = .004$, the model examining the moderation showed non-significance results, standardized $\beta = -.161$, $t(3,86) = -.525$, $p = .601$

LSRO Income Offences

No evidence exists that a diagnosis of FASD moderates or influences the impact of resilience on LSRO income offences. Though the overall model showed significance, $R^2 = .158$, $F\ (3,88) = 5.498$, $p = .002$, the model examining the moderation showed non-significance results, standardized $\beta = -.365$, $t(3,88) = -1.224$, $p = .224$

Enculturation and Offence History

To test the influence of FASD as a moderator, the criterion variables (CSI convictions, LSROs) were regressed on the grouping variable (FASD versus comparison), MEIM mean score, and the interaction between MEIM and the grouping predictors.

CSI Convictions

No evidence exists that a diagnosis of FASD moderates or influences the impact of enculturation on total CSI convictions, $R^2 = .118$, $F\ (3,90) = 4.002$, $p = .010$, standardized $\beta = .459$, $t(3,90) = 1.495$, $p = .138$.

LSRO Total

No evidence exists that a diagnosis of FASD moderates or influences the impact of enculturation on LSRO total, $R^2 = .059$, $F\ (3,85) = 1.791$, $p = .155$, standardized $\beta = .256$, $t(3,85) = .785$, $p = .435$.

LSRO Aggressive Offences

No evidence exists that a diagnosis of FASD moderates or influences the impact of enculturation on LSRO aggressive offences, $R^2 = .042$, F (3,86) = 1.245, $p = .298$, standardized $\beta = .120$, t(3,86) = .367, $p = .714$.

LSRO Income Offences

No evidence exists that a diagnosis of FASD moderates or influences the impact of enculturation on LSRO income offences, $R^2 = .067$, F (3,88) = 2.094, $p = .107$, standardized $\beta = .270$, t(3,88) =.845, $p = .400$.

5.5 Exploratory Analyses

To examine the unique contribution of each predictor (resilience and enculturation), predictor variables were simultaneously entered into a multiple regression model predicting criminal severity.

An ordinary least squares multiple regression analysis was run in which the outcome variable, LSRO total offences, was regressed on three predictor variables, resources to resilience, resilient traits, and enculturation, and showed an R^2, the proportion of variance in the outcome variable that can be explained by the predictor variables, of .128, F (3,84) = 4.092, $p = .009$. This means that 12% of the variability in crime severity is accounted for by the predictor variables. Though the overall model predicted LSRO total offences, of the three predictor variables, only the CYRM's resources that enhance resilience significantly predicted LSRO total offences $\beta = -.391$, t(3,84) = -3.314, $p = .001$; while the partial regression coefficient for resilience traits included a standardized $\beta = .170$, t(3,84) = 1.625, $p = .108$; and the partial regression coefficient for enculturation included a standardized $\beta = .196$, t(3,84) = 1.642, $p = .104$.

Independent-sample t-tests were conducted to examine group differences in offence histories. For LSRO aggressive offences there was not a significant difference in the scores for the FASD (M = 1.1318, SD = .76059) and comparison (M = 1.4630, SD = .87543) groups; $t(88) = -1.912$, $p = .059$, however it did approach significance. For LSRO income offences there was a significant difference in the scores for the FASD (M = 1.5457, SD = .86171) and comparison (M = 1.9652, SD = .88414) groups; $t(90) = -2.304$, $p = .024$. For LSRO total offences there was a significant difference in the scores for the FASD (M = 33.773, SD = 18.173) and comparison (M = 44.422, SD = 19.863) groups; $t(87) = -2.142$, $p = .035$.

For CSI total convictions there was no significant difference in the scores for the FASD (M = 72.714, SD = 51.839) and comparison (M = 193.416, SD = 512.366) groups; $t(92) = -1.607$, $p = .112$.

6: DISCUSSION

6.1 Findings

A substantial amount of research on youth involved in the justice system is conducted using a psychopathologizing lens. That is, much of the research focuses on deficits in adolescents and there is a disproportionate focus on what is wrong rather than on their strengths, which can serve as protective factors. The current study sought to target factors that affect resilience for justice-involved youth that can be later used in developing and implementing intervention and prevention programs.

The Relationship Between the CYRM and the MEIM

Results from the current study demonstrate a positive relationship between resources that work to enhance resilience and overall ethnic identity. Not only was this pattern found among all participants, but also this pattern was found in both the FASD group and the comparison group. The relationship between access to resources to enhance resilience and ethnic identity is in line with previous literature explaining that the two concepts are intricately connected. This relationship is particularly important because it speaks to the need for a focus on cultural aspects when trying to build resilience capacity and positive outcomes.

Results from this study also indicated various associations between the domains of the CYRM and the MEIM. Neither of the groups found a significant correlation between the overall MEIM mean score and the community domain of the CYRM, while both groups found a significant positive correlation between overall MEIM and the cultural

domain of the CYRM. Though a non-significant finding was found between community resources enhancing resilience and ethnic identity (total MEIM), it should not be taken to mean that the two are not related, rather these findings may be a result of a small sample size as it approached significance. What these results may suggest is that the community resources that are being accessed that enhance resilience may not be fully incorporating culturally relevant or appropriate components. On the other hand, the finding that the overall MEIM mean score was significantly correlated with the cultural domain of resilience for both groups (as was expected) suggests two possibilities. First, those who have an increased sense of ethnic identity may seek out the culturally relevant resources that work towards resilience. Second, those who access the cultural resources may gain a sense of ethnic identity in the process of using the cultural resources. These results support the importance of culturally appropriate and relevant components in resources targeted for both groups. This idea is further supported in the correlations found between CYRM scores and MEIM factors. For both groups, the overall CYRM mean scores showed positive correlations with both MEIM factors (A.B.C. and E.I.S.). This may mean that for both groups, those who accessed the resources for resilience demonstrated a search for ethnic identity and an emotional commitment to ethnic identity. Alternatively, those who did not search or commit to their ethnic identity might not have sought out resources that enhance resilience. Both the comparison and FASD groups had significant positive correlations between the cultural domain of the CYRM and the two factors of the MEIM (A.B.C. and E.I.S.). This further demonstrates the importance of incorporating cultural components into services targeted to produce resilience.

There was also a significant positive correlation between the MEIM mean score and the relational domain for the FASD group, however this finding was not true of the comparison group. In contrast, a significant positive correlation was found between the MEIM mean score and the individual domain for the comparison group, but not for the FASD group. This inverse pattern could speak to the different needs of each group. For example, these results suggest that those in the FASD group may require resources that work on relationship skills (i.e., social interactions), while the comparison group may require services that address individual behaviours (i.e., anti-social behaviours). As can be seen in the literature, those with a diagnosis of FASD tend to have social skills that are reflective of their mental age rather than their chronological age (Jones et al., 1973). The idea that each group in this study may require different foci within services is further supported in the correlations between CYRM domains and MEIM factors as further differences were found. For example, positive correlations were found for the FASD between the ethnic identity search factor of the MEIM and the individual and relational domain of the CYRM, yet not the community domain. The FASD group also showed a correlation between the affirmation, belonging and commitment factor and the community domain, yet not with the relational or individual domain. On the other hand, the comparison group found that only the affirmation, belonging and commitment factor of the MEIM was correlated with the individual domain of the CYRM, while no other factors were correlated with any other domain. These results suggest that when incorporating cultural components to the varying types of services (e.g., individual, community, and relational services), it is important to think critically about how the cultural components will be incorporated. For example, the FASD group could benefit

from individual services that work towards developing a sense of ethnic identity, while services that are relational in nature could focus on solidifying that sense of ethnic identity. In sum, results suggest that for the FASD group, an initial focus on developing a sense of ethnic identity in a one-on-one capacity followed by a group effort with other youth in a community setting could be beneficial in solidifying ethnic identity.

Rates of Resilience and Enculturation

CYRM

Neither group differed in their rates of resilience or enculturation (see Figure 1 for group profiles of CYRM mean and domain scores). As can be seen in Table 12, the CYRM normative data has been reported for all individuals, complex needs youth, and low risk youth. When looking at the means and standard deviations for each group, there are little differences between them. All individuals in the current study scored relatively on par with all of the youth in the normative data. In comparing the complex needs youth with the FASD youth, the same pattern is true. When drawing comparisons between CYRM normative data and the current study's data, everything aligns well. All youth in the project have similar comparable mean scores to the normative data. In considering the normative data, it is not unreasonable to find that there were no differences between the FASD and comparison group as there were no differences between the complex needs youth and the low risk youth. These results, along with the correlations mentioned earlier, suggest that youth affected by FASD demonstrate comparable rates of resilience as their non-affected counterparts, yet they may access and require different types of resources that enhance resilience.

MEIM

Though no normative data on the MEIM or its factors has been acquired for comparison, the results from this study indicate that no significant differences were found on the MEIM or among any of the factors between the FASD and comparison groups. As can be seen in Figure 2 the MEIM mean and MEIM factor profiles are relatively similar for both groups as no significant differences were found. These results could potentially be affected by the overrepresentation of Aboriginal youth in this study. Roughly 82% of the combined samples were of ethnic heritage (with 71.3% being of Aboriginal descent), whereas 18% were Caucasian. Those of ethnic heritage were roughly similar across groups, which could also contribute to the results. Finally, another factor that may contribute to the findings in this study could be that those of Caucasian ethnicity may not acknowledge how much they value their ethnicity or how it affects them. A study by Jaret and Reitzes (1999) examined those of African heritage, Caucasian heritage and those of mixed racial heritage. Their results indicated that individuals of African or mixed heritages valued racial ethnic identity in relation to self-concept more than Caucasians. On the other hand, when compared to African and mixed racial individuals, those of Caucasian descent indicated with higher frequencies that ethnic identity was not important at all to their self-concept.

Correlations between CYRM and Offence History

In this project, resources that operate to enhance resilience were not significantly associated with official conviction data (e.g., official record data), however results showed some significant associations with SRO data based on lifetime offences (LSRO). The association between LSRO and the CYRM domains showed between group

differences. The FASD group and comparison group both found significant negative correlations between two types of LSRO (total frequency, aggressive offences) and mean CYRM scores and the relational domain of the CYRM. The CYRM means score and relational domain both displayed opposite correlations with the proportion of offences and income related offences as the FASD group demonstrated negative correlations with the proportion of offences and not the income related offences, while the comparison group showed the opposite. Both the FASD group and comparison group found that the total frequency and aggressive LSRO offences displayed negative correlations with the community domain of resilience. Further, the comparison group was negatively correlated with the remaining LSRO offences (income and proportion), yet the FASD group did not display this correlation. In contrast, the comparison group found that the total frequency, aggressive offences, and income offences were negatively correlated with the individual domain of resilience, while the FASD group was not. Examining the relationships between LSRO and the domains of resilience highlights the fact that differing groups may require different types of services. In terms of attempts to curb offending, the negative correlations between the community domain of resilience and offending patterns for the FASD and comparison groups speak to a possible area to focus when dealing with these groups; this might include activities centered on community centres and mentorship programs.

Moderation Results

FASD on CYRM-Offence History and MEIM-Offence History Relationships

Though there were some main effects for self-reported offending, no significant results emerged to suggest that FASD had an influence on the relationship between

resources to enhance resilience and offence history. Like the CYRM data, no significant results emerged to suggest FASD had a moderating effect on MEIM associations with offence history. One explanation for the non-significant results may be attributable to the correlational similarities between groups on the resilience-offence history relationship. Though the two groups differed significantly with respect to LSRO income and total offending rates, and crime severity total and index convictions, no significant differences were found when these were correlated with rates of resilience.

6.2 Limitations

It is important to recognize that following data analyses, several problems and limitations may exist. Limitations in this study may include that this study was limited by the exclusion of non-justice involved comparison groups (FASD and non-FASD). With the inclusion of non-justice involved comparison groups additional questions could be examined. For example, with the inclusion of non-justice involved comparison groups, normative data could be obtained for both samples (FASD and control). As this study included self-report questionnaires, it is possible that participants were dishonest and did not report accurately in efforts to demonstrate social desirability. Also, due to the central nervous system deficits in areas such as logic, reasoning, and insight, it is possible that FASD participants had difficulty with the questions asked or lacked the insight to appropriately answer. There is also the concern of diagnosed versus non-diagnosed youth in each group as there are some issues surrounding reliability of diagnosing FASD. The diagnoses of the youth were made by professionals who are qualified to assess and diagnose FASD, though given the issues surrounding reliability of diagnosis, there is no way to be completely sure that each individual in the study received a correct diagnosis

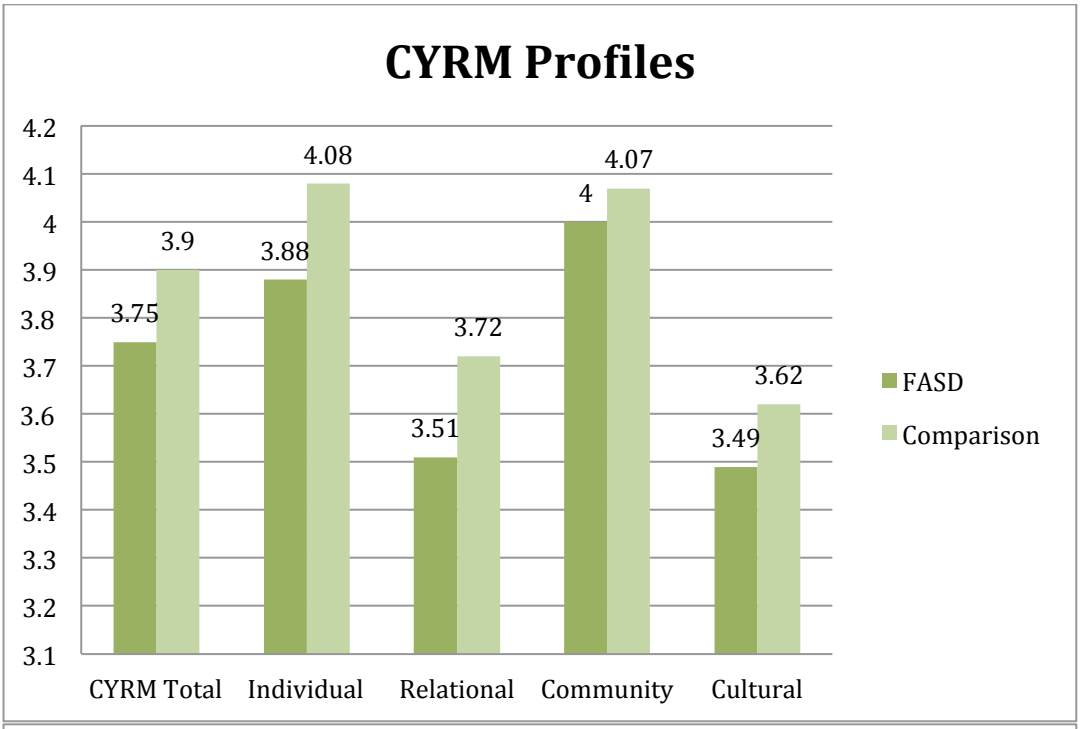
or lack of diagnosis which would ultimately result in misdiagnosis. Furthermore, issues surrounding logic and insight may be a product of the age group focused on. A limitation of the MEIM is that some of the individuals who identified as "Caucasian" felt that the measure was not relevant to them and these individuals expressed that they had a hard time answering the questions because they did not consider being Caucasian (often expressed as "white" or "Canadian" by participants) an ethnicity. In their attempt to be a culturally relevant and sensitive measure, they may have overcompensated and made the measure irrelevant for majority populations (i.e. Caucasian). Another limitation to this study is that not all questions were read aloud to all participants. A select few participants were given the opportunity to answer the questionnaire packet by reading question items themselves. Further, as this study was part of a larger study, participants were given the questionnaires after 2.5 hours of participating in the larger study.

6.3 Future Directions and Implications

Though limitations exist, there are also strengths to this study. This is the first step in a program of research and will contribute to a body of research that is lacking. Research on FASD and the secondary disabilities as it relates to the justice system is limited. More specifically, there is a paucity of research that focuses on protective factors. This research project will be the foundation upon which future research can build. Future studies could look into the association between resilience, condition adherence, and success with staying in school among FASD justice involved youth, identifying the pathways of resilience in which the process of being resilient could be examined and investigating the notion of deviant resilient pathways, and examining other protective factors as there may be factors specific to those affected by FASD that may be

unique and were not examined in this particular study. An examination of family systems and dynamics in relation to offending could provide information useful for building strengths. It would also be beneficial to examine more thoroughly the association between social determinants of health in Aboriginal populations and FASD, which could provide context to the stigmatizing comments of FASD being an Aboriginal problem. Finally, an examination of what service providers can do to help this population avoid future justice involvement would be beneficial.

Figure 1: Child and Youth Resilience Measure Group Profiles



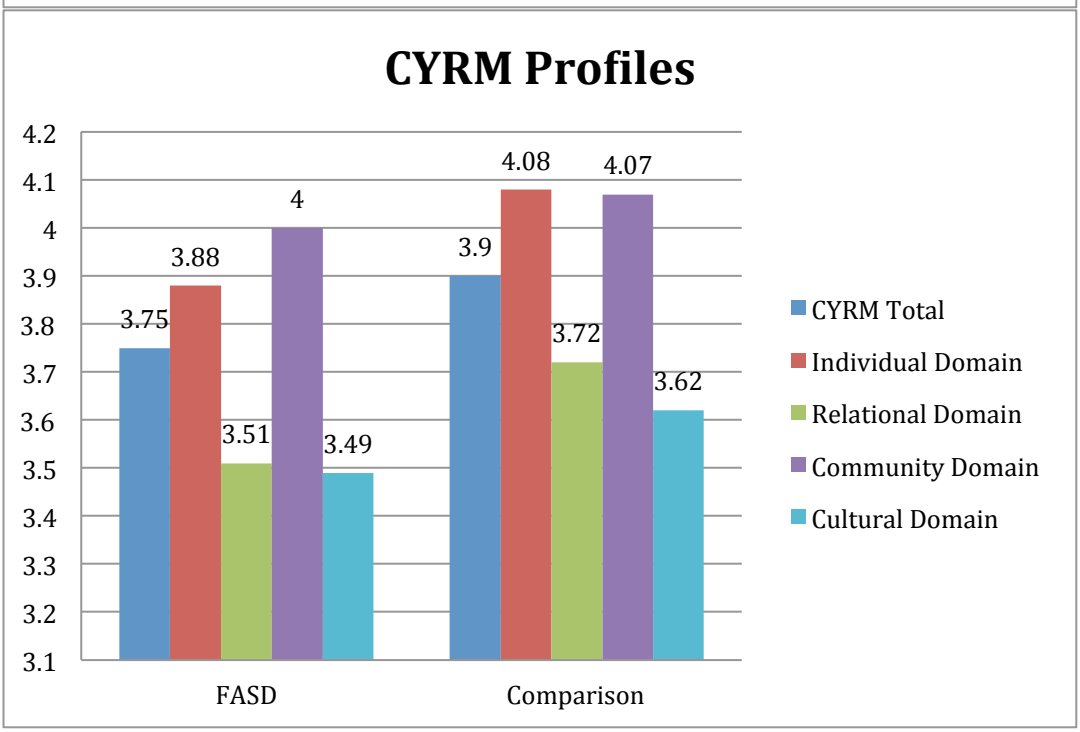


Figure 2: Multigroup Ethnic Identity Measure Group Profiles

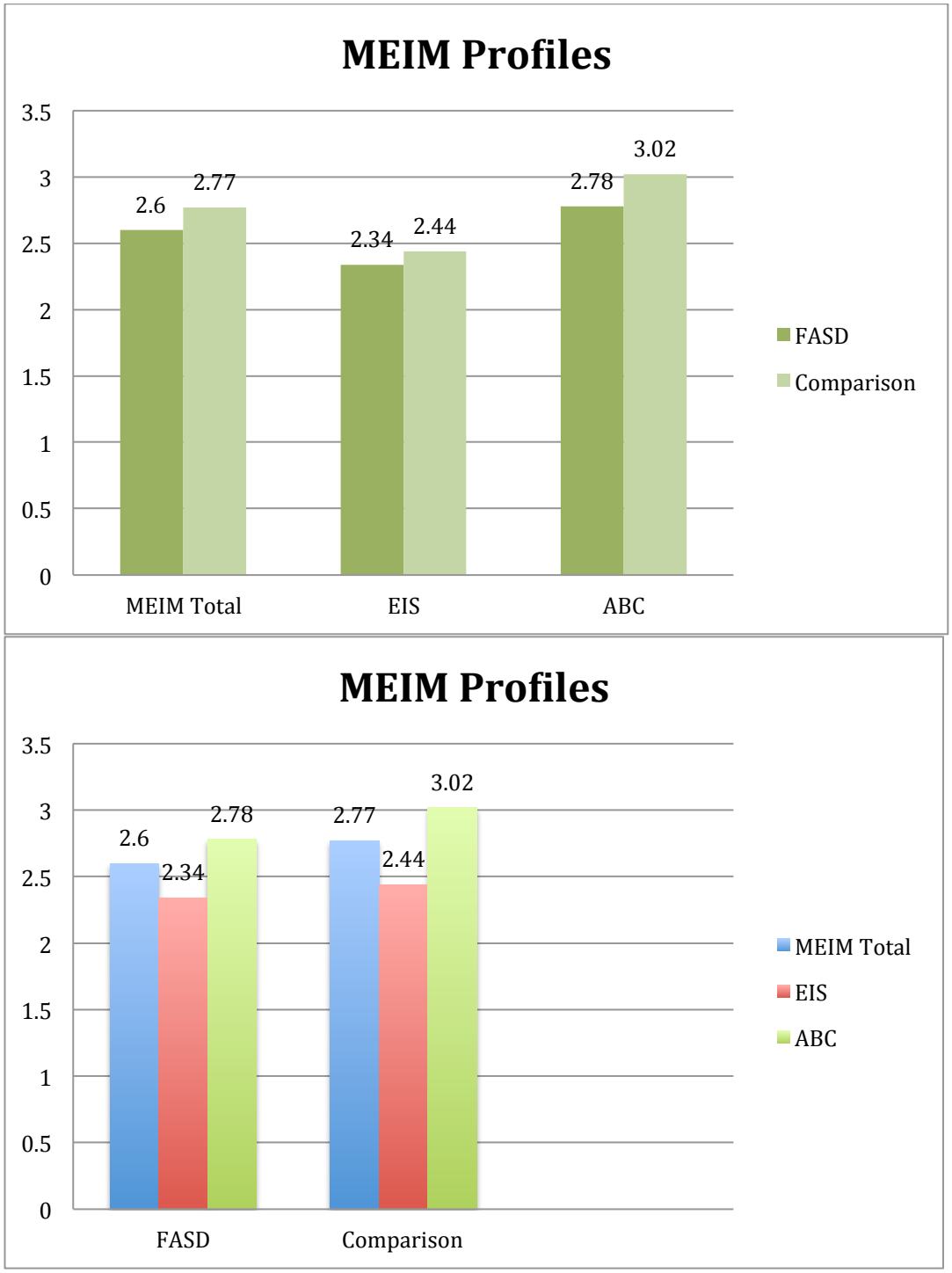


Table 1: Factor Items for the Multigroup Ethnic Identity Measure

Multigroup Ethnic Identity Measure	
Factor	***Items***
Ethnic Identity Search (E.I.S.)	1,2,4,8,10
Affirmation, Belonging, Commitment (A.B.C.)	3,5,6,7,9,11,12

Table 2: Domain Items for the Child and Youth Resilience Measure

Child and Youth Resilience Measure	
Domain	***Items***
Individual	2, 8, 11, 13, 17, 18, 21, 23
Relational	1, 4, 5, 6, 12, 14
Cultural	9, 10, 22, 26, 27, 28
Communal	3, 7, 15, 16, 19, 20, 24, 25

Table 3: Sample Descriptive Statistics

	All (*n* = 94)		FASD (*n* = 47)		Comparison (*n* = 47)	
	$\bar{x}$	*S.D.*	$\bar{x}$	*S.D.*	$\bar{x}$	*S.D.*
Age	17.50	1.605	17.53	1.852	17.47	1.333
	Frequency	%	*Frequency*	%	*Frequency*	%
Gender						
Male	77	81.9	39	83	38	80.9
Female	17	18.1	8	17	9	19.1
Ethnicity						
Caucasian	17	18.1	6	12.8	11	23.4
Aboriginal	67	71.3	40	85.1	27	57.4
Asian	1	1.1	1	2.1	-	-
African	3	1.1	-	-	3	6.4
E.Indian	1	3.2	-	-	1	2.1
Other	5	5.3	-	-	5	10.6

Table 4: Variable Descriptive Statistics

	All		FASD		Comparison	
	Mean	*S.D.*	*Mean*	*SD*	*Mean*	*SD*
MEIM	2.69	.718	2.60	.756	2.77	.674
E.I.S.	2.39	.778	2.34	.800	2.44	.762
A.B.C.	2.90	.765	2.78	.812	3.02	.704
CYRM	3.82	.585	3.75	.647	3.90	.511
Individual	3.98	.609	3.88	.692	4.08	.500
Relational	3.61	.835	3.51	.872	3.72	.792
Communal	4.03	.595	4.00	.663	4.07	.521
Cultural	3.55	.998	3.49	1.08	3.62	.913
C.S.I.	133.07	367.23	72.71	51.84	193.42	512.37
LSRO	40.15	19.43	35.77	18.17	44.42	19.86
Agg.	1.30	.834	1.13	.761	1.46	.875
Inc.	1.76	.894	1.55	.862	1.97	.885
Prop.	.567	.209	.555	.216	.578	.204

Bolded Items indicate total scores

Italicized items indicate domain and factor scores: E.I.S: ethnic identity search; A.B.C: affirmation, belonging, commitment

Table 5: Demographic Descriptive Statistics

	FASD (n = 47)		Comparison (n = 47)	
	Frequency	*%*	*Frequency*	*%*
Custody	25	53.2	27	57.4
Community	22	46.8	20	42.6
Accommodation Prior to Custody				
Birth Parent(s)	8	30.8	16	55.1
Foster Home	3	11.5	3	10.3
Step Parent(s)	-	-	2	6.8
Adoptive Parents	-	-	1	3.4
Relative	5	19.2	-	-
Sibling	-	-	1	3.4
Independent	1	3.8	3	10.3
Group Home	7	26.9	1	3.4
No Fixed Address	1	3.8	-	-
Other	1	3.8	1	3.4
Community Youth Accommodation				
Birth Parent(s)	6	12.8	10	21.3
Foster Home	8	17	3	6.4
Step Parent(s)	1	2.1	-	-
Relative	-	-	1	2.1
Sibling	-	-	1	2.1
Independent	3	6.4	4	8.5
Group Home	5	10.6	1	2.1
No Fixed Address	1	2.1	-	-
Other	-	-	1	2.1
Ever MCFD	43	91.5	23	48.9
Ever Homeless	15	31.9	14	30.4
Ever Custody	45	95.7	43	93.5
School Now	12	25.5	18	38.3
Ever Alt. School	41	87.2	33	70.2
	$\bar{x}$	*S.D.*	$\bar{x}$	*S.D.*
Age 1st Apprehended to MCFD	5.047	5.459	17.565	25.635
# MCFD Placements	8.381	7.889	5.818	6.231
# Times Homeless	5.133	6.468	9.214	25.604
Age 1st Homeless	13.733	2.219	20.357	22.449
Total Days in Custody (*lifetime*)	352.711	382.347	360.256	279.021
Last Grade Completed	8.553	1.679	8.872	1.715

Table 6: Correlations Between Predictors - *All Individuals*

	ALL							
	MEIM	*E.I.S.*	*A.B.C.*	**CYRM**	*Individual*	*Relational*	*Communal*	*Cultural*
MEIM	1	.905**	.951**	.465**	.310**	.279**	.225*	.607**
E.I.S.	.905**	1	.729**	.419**	.299**	.265**	.137	.573**
A.B.C.	.951**	.729**	1	.443**	.281**	.256*	.262*	.561**
CRYM	.465**	.419**	.443**	1	.849**	.787**	.786**	.762**
Individual	.310**	.299**	.281**	.849**	1	.600**	.679**	.467**
Relational	.279**	.265**	.256*	.787**	.600**	1	.471**	.453**
Communal	.225*	.137	.262*	.786**	.679**	.471**	1	.410**
Cultural	.607**	.573**	.561**	.762**	.467**	.453**	.410**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 7: Correlations Between Predictors - *FASD Group*

	FASD							
	MEIM	*E.I.S.*	*A.B.C.*	**CYRM**	*Individual*	*Relational*	*Communal*	*Cultural*
MEIM	1	.909**	.956**	.487**	.286	.334*	.273	.621**
E.I.S.	.909**	1	.746**	.460**	.328*	.359*	.183	.565**
A.B.C.	.956**	.746**	1	.452**	.225	.281	.306*	.593**
CRYM	.487**	.460**	.452**	1	.829**	.807**	.847**	.740**
Individual	.286	.328*	.225	.829**	1	.557**	.727**	.417**
Relational	.334*	.359*	.281	.807**	.557**	1	.629**	.455**
Communal	.273	.183	.306*	.847**	.727**	.629**	1	.417**
Cultural	.621**	.565**	.593**	.740**	.417**	.455**	.417**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 8: Correlations Between Predictors - *Comparison Group*

	COMPARISON							
	MEIM	*E.I.S.*	*A.B.C.*	**CYRM**	*Individual*	*Relational*	*Communal*	*Cultural*
MEIM	1	.903**	.943**	.414**	.315*	.184	.142	.585**
E.I.S.	.903**	1	.710**	.360*	.250	.144	.068	.581**
A.B.C.	.943**	.710**	1	.402**	.323*	.191	.181	.511**
CRYM	.414**	.360*	.402**	1	.877**	.754**	.689**	.795**
Individual	.315*	.250	.323*	.877**	1	.652**	.595**	.543**
Relational	.184	.144	.191	.754**	.652**	1	.244	.442**
Communal	.142	.068	.181	.689**	.595**	.244	1	.393**
Cultural	.585**	.581**	.511**	.795**	.543**	.442**	.393**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 9: Correlations Between Predictors and Criterion - *All Individuals*

	ALL							
	MEIM	*E.I.S.*	*A.B.C.*	**CYRM**	*Individual*	*Relational*	*Communal*	*Cultural*
MEIM	1	.905**	.951**	.465**	.310**	.279**	.225*	.607**
E.I.S.	.905**	1	.729**	.419**	.299**	.265**	.137	.573**
A.B.C.	.951**	.729**	1	.443**	.281**	.256*	.262*	.561**
CRYM	.465**	.419**	.443**	1	.849**	.787**	.786**	.762**
Individual	.310**	.299**	.281**	.849**	1	.600**	.679**	.467**
Relational	.279**	.265**	.256*	.787**	.600**	1	.471**	.453**
Communal	.225*	.137	.262*	.786**	.679**	.471**	1	.410**
Cultural	.607**	.573**	.561**	.762**	.467**	.453**	.410**	1
CSI	.138	.074	.168	.165	.132	.127	.104	.152
LSRO	-.016	-.013	-.016	-.292**	-.186	-.283**	-.320**	-.167
Agg.	.031	.044	.017	-.278*	-.217*	-.288**	-.275**	-.131
Inc.	-.038	-.062	-.015	-.261**	-.125	-.271**	-.232*	-.203

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 10: Correlations Between Predictors and Criterion - *FASD Group*

	FASD							
	MEIM	*E.I.S.*	*A.B.C.*	**CYRM**	*Individual*	*Relational*	*Communal*	*Cultural*
MEIM	1	.909**	.956**	.487**	.286	.334*	.273	.621**
E.I.S.	.909**	1	.746**	.460**	.328*	.359*	.183	.565**
A.B.C.	.956**	.746**	1	.452**	.225	.281	.306*	.593**
CRYM	.487**	.460**	.452**	1	.829**	.807**	.847**	.740**
Individual	.286	.328*	.225	.829**	1	.557**	.727**	.417**
Relational	.334*	.359*	.281	.807**	.557**	1	.629**	.455**
Communal	.273	.183	.306*	.847**	.727**	.629**	1	.417**
Cultural	.621**	.565**	.593**	.740**	.417**	.455**	.417**	1
CSI	-.034	-.056	-.015	-.004	-.099	.026	.031	.027
LSRO	-.121	-.137	-.097	-.332*	-.173	-.308*	-.316*	-.284
Agg.	-.010	-.034	.009	-.332*	-.237	-.319*	-.305*	-.229
Inc.	-.161	-.206	-.111	-.232	-.056	-.183	-.204	-.286

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 11: Correlations Between Predictors and Criterion - *Comparison Group*

	COMPARISON							
	MEIM	*E.I.S.*	*A.B.C.*	**CYRM**	*Individual*	*Relational*	*Communal*	*Cultural*
MEIM	1	.903**	.943**	.414**	.315*	.184	.142	.585**
E.I.S.	.903**	1	.710**	.360*	.250	.144	.068	.581**
A.B.C.	.943**	.710**	1	.402**	.323*	.191	.181	.511**
CRYM	.414**	.360*	.402**	1	.877**	.754**	.689**	.795**
Individual	.315*	.250	.323*	.877**	1	.652**	.595**	.543**
Relational	.184	.144	.191	.754**	.652**	1	.244	.442**
Communal	.142	.068	.181	.689**	.595**	.244	1	.393**
Cultural	.585**	.581**	.511**	.795**	.543**	.442**	.393**	1
CSI	.185	.101	.226	.236	.199	.158	.149	.220
LSRO	.037	.081	-.002	-.355*	-.339*	-.357*	-.405**	-.080
Agg.	.025	.096	-.033	-.319*	-.323*	-.338*	-.318*	-.065
Inc.	.036	.056	.015	-.400**	-.337*	-.459**	-.334*	-.148

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 12: Table of Normative and Project Data

Normative Data			Project Data		
	Mean	*SD*		*Mean*	*SD*
All Youth (n=2198)	108.60	18.66	***All (n=94)***	107.08	16.38
Complex Needs Youth (n=1071)	103.85	20.18	***FASD (n=47)***	104.92	18.11
Low Risk Youth (n=1128)	113.12	15.82	***Comparison (n=47)***	109.24	14.32

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APPENDICES

Appendix A: Study Information Sheet & Parental Consent

Parent/Guardian Study Information and Consent Form

What is this Study About?

This study is run by researchers at Simon Fraser University. This study is about the experiences and needs of different groups of youth in the legal system. The information that we learn from this study, such as about their experiences, challenges, and needs, will help us to make recommendations about the services that might be helpful for these youth and their families.

What Does this Study Involve?

If your child/ward participates in the study, we will ask him/her questions about school, peers, health, risky behaviours, feelings, legal issues, and youth justice involvement. We would like to meet with participants three times during a one-year period.

The first time we meet with your child/ward he/she will complete an interview and questionnaires during a 3-hour session. We can take as many breaks as necessary, or complete the materials over a few different sessions. This meeting will take place at the clinic or office where your child was invited to participate in the study. At this time we will review your child/ward's probation and legal records to get a sense of his or her legal difficulties.

We would then meet with your child/ward 6 and 12 months after the first interview, either in person or by phone. We will ask about how things have changed since the last time we met and have them to repeat a few questionnaires from the first meeting. These sessions would be shorter (around 45 minutes). We would review legal records again at this time to get a sense of how things have been going for your child/ward. We will also review legal records 2 years following the original interview, but will not need to meet with your child/ward at this time.

Are there Benefits if My Child Participates?

Your child's/ward's participation in this study may help lead to future improvements in the services that are provided for youth in legal settings with different sorts of difficulties. He/she will receive a **$25 gift certificate** for a local entertainment venue like the mall, Famous Players, or I-tunes for completing the first interview and a **$10** gift certificate for the two shorter interviews. Youth will also be provided with snacks while during the sessions, and will be allowed to play video games during breaks (as available).

Are there Any Downsides to Allowing my Child to Participate?
Some youth may find the questions a little tiring or boring. Others may have a hard time concentrating. There is a small chance some of the questions could make your child/ward feel a little upset. In the unlikely event that your child/ward appears to be very upset, we will stop the interview and check how he/she is feeling. We will provide your child/ward with referrals to appropriate services, such as counseling. We can also contact you and provide you with referrals for counseling or other support services in this event. Your child/ward can choose not to answer any questions and can choose to stop participating at any time.

Would the Information Collected in this Study be Confidential?
All information collected in this study will remain **confidential to the fullest extent permitted by law**. We would only disclose information about your child/ward if we have concerns that he/she is at risk of being harmed by themselves or by others, or if someone else was at risk of being seriously harmed. We would also need to disclose information if we learn that he/she has been, or is in danger of being abused. Also, there is a small chance that courts might subpoena study records, but this is unlikely.

To protect your child/ward's privacy, all participants will be identified with a number and personal information will be stored in a separate location. You should be aware that information about your child's individual results will not be available. Only averages will be reported; individual results will be strictly confidential. No identifying information about your child would be disclosed in any report about the study.

All research materials will be stored in a locked cabinet, within a locked office at Simon Fraser University for 5 years. During that time, Ms. Kaitlyn McLachlan will be responsible for security of the data. After that time, the data will be destroyed. You will not be contacted about this study again, unless you request a copy of the results or provide consent for us to contact you about future studies.

How Can My Child Participate?
If your child/ward would like to participate in the study and you are willing to give your permission, you can sign the attached consent form and send it along to his/her interview session. You can also return the form by mail. We must receive written consent from a parent/guardian for youth 19 and under to participate in the study.

What if My Child Doesn't Want to Participate or to Answer Certain Questions?
Your child/ward does not have to participate in this study if he/she does not want to. Also, your child may choose to stop the study at anytime, or to refuse to answer any questions. His/her legal status will not be impacted at all by this decision.

What if I Don't Want My Child to Participate?
Your child is NOT required to participate in this study. It will NOT affect his or her legal status (probation/corrections/courts). If you do not wish your child to participate, please

just let us know and your decision will be respected. Simply complete the attached form and mail it to us in the enclosed envelope OR give us a call at (604) 417-8514.

What Should I Do If I Have Questions or Concerns About this Study?

If you have any questions about the study or wish to obtain results you may contact the lead researcher Kaitlyn McLachlan at 604-417-8514 (Email: kaitlyn_mclachlan@sfu.ca), or the supervisor of the research, Dr. Ronald Roesch at 778-782-3370 (email: roesch@sfu.ca). We realize that this is a lot of information and would be happy to talk about any questions or concerns you might have! If you have any concerns about your rights as a research participant, please call the Director, Office of Research Ethics at Simon Fraser University, Dr. Hal Weinberg, at 778-782-6593, (hweinber@sfu.ca).

****

Are you willing to permit your child/ward to participate in this study? (Check the box that applies.)

❑Yes
❑ No

YOUR NAME (PRINTED):

_____

NAME OF YOUR CHILD/WARD (PRINTED):

_____

YOUR SIGNATURE:

_____

DATE: _____

Appendix B: MEIM

In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of the names of ethnic groups are First Nations/Aboriginal, Asian-Canadian, Hispanic-Canadian, African-Canadian, and White. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in: In terms of ethnic group, I consider myself to be

_____

	Strongly agree	Agree	Disagree	Strongly disagree
1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.	❑4	❑3	❑2	❑1
2. I am active in organizations or social groups that include mostly members of my own ethnic group.	❑4	❑3	❑2	❑1
3. I have a clear sense of my ethnic background and what it means for me.	❑4	❑3	❑2	❑1
4. I think a lot about how my life will be affected by my ethnic group membership.	❑4	❑3	❑2	❑1
5. I am happy that I am a member of the group I belong to.	❑4	❑3	❑2	❑1
6. I have a strong sense of belonging to my own ethnic group.	❑4	❑3	❑2	❑1
7. I understand pretty well what my ethnic group membership means to me.	❑4	❑3	❑2	❑1
8. To learn more about my ethnic background, I have often talked to other people about my ethnic group.	❑4	❑3	❑2	❑1
9. I have a lot of pride in my ethnic group and its accomplishments.	❑4	❑3	❑2	❑1
10. I participate in cultural practices of my own group, such as special food, music, or customs.	❑4	❑3	❑2	❑1
11. I feel a strong attachment towards my own ethnic group.	❑4	❑3	❑2	❑1
12. I feel good about my cultural or ethnic background.	❑4	❑3	❑2	❑1

Appendix C: CYRM

To what extent . . .

	Untrue	Somewhat Untrue	Neither True nor Untrue	Somewhat True	True
Do you have people you look up to?	❑	❑	❑	❑	❑
Do you cooperate with people around you?	❑	❑	❑	❑	❑
Is getting an education important to you?	❑	❑	❑	❑	❑
Do you know how to behave in different social situations?	❑	❑	❑	❑	❑
Do you feel that your parent(s) watch you closely?	❑	❑	❑	❑	❑
Do you feel that your parent(s) know a lot about you?	❑	❑	❑	❑	❑
Do you eat enough most days?	❑	❑	❑	❑	❑
Do you strive to finish what you start?	❑	❑	❑	❑	❑
Are spiritual beliefs a source of strength for you?	❑	❑	❑	❑	❑
Are you proud of your ethnic background?	❑	❑	❑	❑	❑
Do people think you are fun to be with?	❑	❑	❑	❑	❑
Do you talk to your family about how you feel?	❑	❑	❑	❑	❑
Are you able to solve problems without using illegal drugs and/or alcohol?	❑	❑	❑	❑	❑
Do you feel supported by your friends?	❑	❑	❑	❑	❑
Do you know where to go in your community to get help?	❑	❑	❑	❑	❑
Do you feel you belong at your school?	❑	❑	❑	❑	❑
Do you think your family will always stand by you during difficult times?	❑	❑	❑	❑	❑
Do you think your friends will always stand by you during difficult times?	❑	❑	❑	❑	❑
Are you treated fairly in your community?	❑	❑	❑	❑	❑
Do you have opportunities to show	❑	❑	❑	❑	❑

	Untrue	Somewhat Untrue	Neither True nor Untrue	Somewhat True	True
others that you are becoming an adult?					
Are you aware of your own strengths?	❑	❑	❑	❑	❑
Do you participate in organized religious activities?	❑	❑	❑	❑	❑
Do you think it is important to serve your community?	❑	❑	❑	❑	❑
Do you feel safe when you are with your family?	❑	❑	❑	❑	❑
Do you have opportunities to develop job skills that will be useful later in life?	❑	❑	❑	❑	❑
Do you enjoy your family's traditions?	❑	❑	❑	❑	❑
Do you enjoy your community's traditions?	❑	❑	❑	❑	❑
Are you proud to be (Nationality: _____)?	❑	❑	❑	❑	❑

Appendix D: Crime Severity Index Weights

Offence	Weight
Murder 1st degree	7,042
Murder 2nd degree	7,042
Manslaughter	1,822
Attempted murder	1,411
Hostage-taking	1,278
Trafficking in persons	1,278
Sexual assault - level 3 with injuries	1,047
Discharge firearm with intent	988
Criminal negligence causing death	688
Sexual assault - level 2 with weapon no injuries	678
Incest	678
Criminal organization - instruct offence for	643
Dangerous op. evading police - causing death	640
Street racing - death - criminal negligence	640
Street racing - dangerous operation - death	640
Impaired operation - causing death	636
Impaired operation (drugs) - causing death	636
Conspire to commit murder	611
Robbery	583
Robbery of firearms	583
Dang. op. evading police - causing bod. harm	497
Criminal organization - commit offence for	486
Explosives causing death/bodily harm	478
Kidnapping	477
Assault - level 3	405
Criminal negligence causing bodily harm	399
Trap Likely to or Causing Bodily Harm	399
Prostitution < 18 - living off the avails	396
Proceeds of crime (CC)	362
Corrupting Morals	359
Criminal organization - participate in activities of	349
Arson - disregard for human life	322
Street racing - negligence - bodily harm	316
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Invitation to sexual touching	211
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Offence	Weight
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Offences against the person and reputation	66
Other related violations causing death	62
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Other Criminal Code traffic violations (Fed.)	52
Disordely houses, gaming and betting	50
Offences against public order	50
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Terrorism - participate in activity of terrorist group	50
Terrorism - harbour or conceal terrorist	50
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Offence	Weight
Offensive weapons: prohibited	48
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Mischief - general	30
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Uttering threats against property/animals	29
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Infanticide	23
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Fail to appear	16
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Impaired operation (drugs) vehicle,vessel,aircraft	13

Offence	Weight
Other CDSA - possession	11
Restricted drugs - possession	11
Excise Act	11
Heroin - possession	11
Cocaine - possession	11
Possession - Crystal Meth (Methamphetamines)	11
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Cannabis - production	11
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Other violations rel: gaming/betting	2.3
Betting house	1.2
Gaming house	1.2

Appendix E: Informed Consent Comparison & FASD (Comparison)

Study Information Sheet for Participants

This study is being run by researchers at Simon Fraser University. We are doing this study to learn about the knowledge, experiences, and challenges of different groups of youth in the justice system. We want to know more about this to figure out ways to help. Your participation may help others with the same difficulties.

What Happens in this Study?

If you decide to participate we will ask you questions about school, peers, health, risky behaviours, feelings, legal issues, and justice involvement. Our meeting will take about 3 hours. This may seem like a long time, but we can take lots of breaks or meet a couple of times if you want. Over the next year we'll want to meet with you 2 more times. These meetings will be shorter, around 45 minutes, and can be done by phone. We will ask some questions about how things have been going since our first meeting.

We would like your permission to look at your probation and legal records. We will use this information from everyone in the study to recommend things that may be helpful for youth who in the justice system. We will also be checking in on how things are going by looking at records about new legal charges or convictions over the next two years. We will get this information from a couple of sources (e.g., Manitoba Justice).

Is The Information About Me Private?
All information about you will remain confidential (private) to the fullest extent permitted by the law. This means that, **i**n general, we will not tell anyone about the stuff we talk about. We will not tell case managers, probation officers, parents, or lawyers. But if we find out that you or someone else may be in serious danger we have to tell. For example, if you tell us you are going to hurt yourself or someone else, we would have to tell. Also, if you tell us that you have been, or are in danger of being abused, we will have to tell someone. There is also a small chance that judges or the court might ask for information from this study, but this is very rare. No identifying information about you would be given out in any report from the study.

What are the Good Things About Being in the Study?
You will get a $25 gift certificate for a local shopping mall, Famous Players, or I-tunes for finishing the first interview. You will get $10 gift certificates for both follow-up interviews. You will also be given snacks while you are doing the study and get a chance to play video games during the breaks (where possible).

Are there Bad Things About Being in this Study?
Some people may find the questions tiring or a little boring. Others may have a tough time paying attention. There is a small chance some of the questions could make you feel a little upset. You can choose not to answer any question and you can stop participating at any time. We can also take breaks any time, or meet later on to finish up the interview.

You Do Not Have to Take Part.
No one has to be in this study. Your probation officer will not make you take part in this study and it will not affect your legal status. If you decide to do the study, you can change your mind later. If there is a question you don't want to answer, that is okay, you don't have to answer it.

Do My Parents or Guardians Know About this Study?
Yes, your parent/guardian needs to know about this study. We need his/her permission for you to participate. Your parent/guardian has received an information package about this study that you should review together. If you'd like to talk more with your parents before deciding whether you'd like to be in this study, you can do that.

What If My Parents or I Have Questions About the Study?
If you have any questions about the study or wish to obtain results you may contact Kaitlyn McLachlan - Phone: (604) 417-8514, Email: kaitlyn_mclachlan@sfu.ca, or the project Supervisor, Dr. Ronald Roesch – Phone: (778) 782-3370, Email: roesch@sfu.ca. If you have any concerns about your rights as a research participant, please call the Director, Office of Research Ethics, Dr. Hal Weinberg at Simon Fraser University, at 778-782-6593 (hweinber@sfu.ca).

Participant Consent Form - (Comparison Group – Youth 12-19)

"I have decided to take part in this project. This project is run by Kaitlyn McLachlan and Dr. Ronald Roesch at Simon Fraser University. I have been told about this study, and I have gone through the above consent form. I had a chance to ask questions about the information, and I know I can change my mind, and decide not to take part. If I have any questions or concerns, I can call Kaitlyn McLachlan, Dr. Roesch, or Dr. Hal Weinberg."

PARTICIPANT SIGNATURE

_____

DATE _____

SIGNATURE OF WITNESS

_____

DATE _____

Appendix F: Debriefing, Study Wrap Up

Study Wrap-Up

How are you feeling right now?

_____

_____

Are you feeling a need to talk to anyone, like a counselor, about things that came up during the interview? __ No __ Possibly __ Yes

Are you feeling sad or depressed? __ No __ Possibly __ Yes

> **If yes:** Right now, are you having any thoughts about hurting yourself? __ No __ Yes
>
> **If yes:** Right now, do you have any plans to hurt yourself? __ No __ Yes

Thank you so much for participating in the study! The information you have shared with us today will be really helpful in learning more about the difficulties different groups of youth in the justice system are having. We will be using this information to help make recommendations about ways to improve the process and experience for youth like you.

Instructions to Interviewer: Provide youth with services and resources sheet appropriate to community and study group.