

**THE OVER-REPRESENTATION OF CHILDREN IN CARE IN THE YOUTH
CRIMINAL JUSTICE SYSTEM IN BRITISH COLUMBIA:
THEORY AND POLICY ISSUES**

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Abstract: Placement in child protection services, or becoming a child in care, is associated with a disproportionate involvement in youth and adult criminal justice systems. While there is not extensive research on this relationship, there is evidence that many children in care have risk profiles consistent with criminal justice involvement. This article provides an overview of the prevalence of exposure to risk factors related to mental health, education, and antisocial behaviour among children in care, in addition to risk factors that are distinctive to those placed in child protection services. A recent large cohort dataset from British Columbia, Canada, is utilized to examine these risk profiles. Recommendations to identify those involved in child protection services most at risk for criminal justice involvement, with the use of risk management instruments such as the Cracow Instrument, are discussed. In addition, several other important policy themes regarding diagnostic and case management challenges are explored.

Key Words: children in care, education, mental health, antisocial behaviour, criminal justice involvement

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For more than 50 years (J. McCord, W. McCord, & Thurber, 1960), it has been evident that placement in child protection services, or becoming a child in care (CIC), is associated with involvement in the youth and/or adult criminal justice systems (CJS). More recent research confirms that CIC are at greater risk of engaging in antisocial behaviour in adolescence and adulthood than those (non-CIC) who have not been placed in care (Alltucker, Bullis, Close, & Yovanoff, 2006; Barth, 1990; Davis, 2009; Jonson-Reid & Barth, 2000; Newton, Litrownik, & Landsverk, 2000; Taussig, 2002). Yet, despite the consistency of the research regarding this relationship, the question of why such a large proportion of CIC become involved in the CJS remains unclear and is an increasingly controversial policy issue.

The controversy largely involves the apparent paradox that CIC placement programs somehow are either ineffective, or worse, actually increase the likelihood of CJS involvement across both the adolescent and the adult life stages. Equally disconcerting is the fact that this negative program relationship is disproportionately evident for vulnerable minority children, primarily for example among Aboriginal children and youth in Canada and Australia, African-American children and youth in the United States, and Roma in many European countries (British Columbia, 2006; Cusick and Courtney, 2007; Lu et al., 2004; Tilbury, 2009). This disproportion has raised obvious issues about possible continued, but unofficial, systematic policy discrimination. Given the tragic official policies directed at Aboriginal families for at least two-thirds of the last century, including residential schools in Canada and forced adoption of mixed-race Aboriginal children in Australia, such unintended CIC policy consequences are even more disconcerting. Yet this discrimination-related hypothesis loses primacy in a discussion of trends over the last 20 to 30 years, primarily because of public awareness, media scrutiny, national constitutional protections, national and international human rights tribunals, and, most importantly, the strengthening of Aboriginal and racial/ethnic minority political organizations at all levels of government in liberal democratic nations generally.

Alternatively, there is the assertion that the remedy to this issue requires theories and specific empirically testable hypotheses that focus on the developmental theoretical perspective concerning serious antisocial risk factors and CIC to CJS involvement. Additionally, policy shifts will be necessary to overcome the inherent difficulties of multi-ministerial government and non-governmental agencies providing time sensitive resources to families who are at high risk of having their children placed in care. The developmental perspective includes an array of theories that posit a wide range of family-level risk and protective factors to identify families where children are at risk of engaging in antisocial behaviours across and throughout developmental stages. From a risk perspective, one hypothesis is that children and adolescents who become CIC have similar risk profiles for antisocial and/or criminal behaviour as non-CIC who become seriously involved in the youth and/or adult CJS. Another is that either entry into care itself constitutes a risk factor, or that it interacts with, or compounds, previously existing risk factors to increase the likelihood of involvement in CJS.

From a policy perspective, there are several important hypotheses related to these developmental perspective theories. Most importantly, it is asserted that ministries and associated agencies (including early child care workers, public health nurses, and early childhood educators) responsible for young children and CIC are in a unique official or legal position to

become involved with families during the crucial initial developmental stages. This assertion is based on recognition that they are typically responsible for the protection of newborn children and, in some jurisdictions, vulnerable and pregnant mothers (i.e., with respect to their exposure to poverty, mental illness, self-abuse, or abusive partners). With few exceptions, developmental theories assert that early interventions (i.e., administered during pregnancy or infancy), can reduce the onset of key risk factors for antisocial behaviours such as prenatal exposure to alcohol, resulting in Fetal Alcohol Spectrum Disorder (FASD), or ineffective bonding between mother and child. Yet an important related policy hypothesis is that there is a pervasive failure of CIC agencies to provide appropriate interventions not only in the initial development stages, but also throughout subsequent stages up to and including young adulthood. It is typically asserted that this occurs because these agencies' programs lack the necessary diagnostic capabilities and corresponding required resources (Corrado, Roesch, Hart, & Gierowsky, 2002).

In addition, there is the ministerial "silo" hypothesis, which argues that government agencies do not share information, resources, or case plans. Accordingly, even when family-focused resources are available, other non-family risk factors (e.g., school, housing, special education needs, income/employment assistance, and/or criminal justice involvement) are often present and require corresponding resources. However, these resources may not be routinely or easily accessible across ministries, and, therefore, despite the critical nature of coordination of services to many CIC case managers, access to coordinated services is not always feasible. In other words, it is inherently difficult to obtain routine individual planning and resources across the numerous ministries and agencies mandated to respond to the wide range of risk factors.

The recent publication of a series of reports by the politically independent Office of the Representative of Children and Youth in British Columbia on indicators of health (British Columbia, 2006), education (British Columbia, 2007), and criminal justice involvement (British Columbia, 2009) of a cohort of British Columbia youth forms the empirical basis for an examination of several of the above theory and policy themes. This data permits a comparison of health and education risk factors for criminal justice involvement, and differences between CIC and non-CIC in criminal justice involvement. Because of restrictions in accessing the original data sets, it is not possible to examine key hypotheses about health and education with non-descriptive statistical analyses. Nonetheless, there is a sufficient theoretical and research literature that allows for tentative policy inferences to be drawn from descriptive data. Also, these reports constitute one of the few multi-ministry data sets based on a rare large population cohort beginning in childhood.

As mentioned above, a pre-eminent hypothesis about the strong relationship between CIC and CJS involvement is that CIC have similar risk profiles for antisocial behaviour as those non-CIC who are most likely to become seriously involved in the CJS. While there are numerous risk factors for antisocial behaviour, several are predominant among children in care, and thus will be the focus of this discussion.

Mental Health and Substance Abuse

Mental Health Issues among CIC

Mental health factors are a major developmental theme for understanding the relationship between CIC and the CJS. Their immediate impact involves parental reaction to the mental

health issues of children, and the reaction of children to mental health issues of their parents. The reaction of parents to their children during the initial stages of infancy and early childhood is extremely important in preventing or reducing exposure to risk factors for placement in care, and for the early onset of serious antisocial behaviour. The mental health profiles of parents and children are also important in understanding how children are likely to react in various residential placements (e.g., foster family, group home, or adoptive family). There are numerous policy-related issues; however, given that many children return to live with their parents after entry into care, an assessment of the safety of the parental home is of prime importance. Treatment concerns also require immediate attention. In late childhood and early adolescence, substance abuse is usually an additional concern affecting treatment and placement decisions.

In the B.C. health cohort study, CIC were more likely to be exposed to perinatal risk factors than non-CIC (12% compared to 3% non-CIC). There is a substantial and rapidly growing body of research that supports causal links between perinatal exposure to risk factors and mental disorders such as FASD and those involving learning deficits and/or hyperactivity (Mick, Biederman, Faraone, Saye, & Kleinman, 2002; Needleman, Riess, Tobin, Biesecker, & Greenhouse, 1996; Streissguth et al., 2004). The practical mental health concern is the nearly two-thirds (65%) of CIC with diagnosed mental disorders, compared slightly less than one-sixth (17%) of non-CIC.

Children in care are more commonly – and for longer periods of time – prescribed medications to treat depression, anxiety, neurosis, tension, and attention deficit hyperactivity disorder (ADHD). For example, CIC were prescribed respiratory and cerebral stimulants (i.e., Ritalin and similar medications) 8.5 to 12 times more and psychotherapeutic medications (i.e., anti-depressants and tranquilizers) 5.5 to 8.5 times more than non-CIC (British Columbia, 2006). It is not evident whether these varied pharmacological treatment approaches reflect differences in the seriousness of the disorders being treated or a greater reliance on medications for CIC. Additionally, when compared to non-CIC who have been hospitalized for mental health issues, CIC are more commonly admitted to hospitals for mental health issues, albeit for shorter periods of time, potentially due to an increased reliance on medications for these youth (British Columbia, 2006).

Evidence of disproportionate mental health issues among CIC was observed in a study involving nearly 40,000 children and youth in the United States. Children in care in this sample were significantly more likely than non-CIC to be diagnosed with depression, ADHD, conduct disorder, and oppositional defiant disorder (Harman, Childs, & Kelleher, 2000). Another American study found that CIC were more likely to have experienced psychiatric symptoms, particularly those relating to conduct disorder, within the year preceding data collection than non-CIC. Disturbingly, a higher degree of suicidal ideation was also evident among the children in care and, not surprisingly, there were four times more suicide attempts by CIC than non-CIC (Pilowsky & Wu, 2006). With regard to the relationship between mental disorders, other mental health factors, and criminal justice involvement, Arseneault, Moffitt, Caspi, Taylor, and Silva (2000) found that young adults (21 years of age) meeting the diagnostic criteria for schizophrenia or substance dependence committed violent acts with greater frequency and intensity compared to those who did not meet these diagnostic criteria. In addition, a relationship has been observed between symptoms of conduct disorder presenting before 15 years of age and violent offences,

wherein an increasing number of symptoms was associated with an increased risk of being convicted of a violent crime (Hodgins, Cree, Alderton, & Mak, 2007).

Not surprising, mental disorders have been found to be more prevalent among samples of incarcerated adolescents than the general population. In a large study of youth in Chicago's Cook County juvenile facility, nearly two-thirds of incarcerated boys and three-quarters of incarcerated girls had a psychiatric disorder, excluding the pervasive symptoms of conduct disorder so common among samples of incarcerated youth. Disruptive disorders, affective disorders, and substance addictions were particularly prevalent (Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). In their meta-analysis of studies on mental disorders among adolescents, Fazel, Doll, and Långström (2008) confirmed that youth with mental disorders were vastly over-represented in custodial settings. Specifically, incarcerated adolescents were nearly 10 times more likely to suffer from psychosis than those in the general population.

Family History of Mental Health Problems among CIC

A family history of mental health issues, particularly among parents, is related to an increased risk of child abuse and therefore an increased likelihood of being placed in care. Maternal depression in the postpartum period is common, even pervasive to some degree, given the stresses on mothers as primary caregivers. This is of concern because parental depression is associated with an increased likelihood of abuse in both single- and two-parent households (Berger, 2005). In particular, persistent maternal depression is associated with more diverse and serious types of child and adolescent violence (Hay, Pawlby, Angold, Harold, & Sharp, 2003). As mentioned above, the bonds formed between parents and children in the early developmental stages can have long-lasting impacts on behaviour. Specifically, mental disorders experienced by parents may contribute to poor bonding between parents and children and, subsequently, increase the likelihood of children engaging in externalizing and internalizing behavioural problems such as self-harm and aggression towards others (Campbell, Cohn, & Myers, 1995).

Canadian statistics of child abuse indicate approximately one-quarter (24%) of abused children had at least one parent who was diagnosed with, or suspected of having, a mental disorder (Trocmé et al., 2001). In addition to increasing the risk of abuse, mental health issues among family members increase the risk of behavioural problems among children and youth. Chronic maternal depressive disorder has been linked to poor behavioural outcomes among children (Murray, Cooper, Wilson, & Romaniuk, 2003). As children exposed to maternal depression aged, for example, there was a greater propensity for these behaviours to develop into more severe and diverse types of violence (Hay et al., 2003).

As mentioned above, the association between maternal mental disorder and child antisocial behaviour can be understood in terms of the barriers that maternal depression can create for parent-child bonding (Campbell et al., 1995), but it also may be related to the physical environment, since parental mental illness is associated with children committing serious violence after exposure to community violence (Preski & Shelton, 2001). This association appears to be exacerbated by the role that parental mental disorders play in impeding the ability of parents to effectively monitor their offspring, thereby increasing the risk that children in socially disorganized neighbourhoods will witness and participate in violence and informal

antisocial networks. There are, therefore, multiple pathways and explanations for the relationship between parental mental disorders and the increased risk for being placed in care, and in turn, an elevated risk for being involved in serious and violent offending and the CJS.

Substance Abuse among CIC

Substance abuse is prevalent among CIC according to two American studies: Nearly half (40%) of CIC had a recent history of substance abuse (Thompson & Auslander, 2007) while CIC were five times more likely to have been diagnosed with either symptoms of substance abuse disorders or the full disorders (Pilowsky & Wu, 2006). As with the mental health risk factors discussed in the preceding sections, the relationship between substance abuse, CIC, and CJS involvement is complex. One explanatory perspective is that substance abuse, for a substantial proportion of children and adolescents, is a form of self-medication in response to severe, often familial trauma, that they have experienced directly or vicariously as a witness (e.g., intimate partner violence). The attraction to substances as a mechanism for self-medication can also occur subconsciously at a biological level. Serious neglect in the early life stages may disrupt the development of healthy neurotransmitter circuitry (i.e., the dopamine receptors in the midbrain and frontal lobe), which is associated with substance abuse. In effect, major substance use neurochemically and temporally mitigates poor dopamine production (Blanc et al., 1980; Meaney, Brake, & Gratton, 2002). Early childhood relationships with caregivers can also negatively influence the development of the brain structures that respond to stress, which, in turn, can increase the likelihood of engaging in substance abuse to moderate unmanaged stress (Perry & Pollard, 1998).

Another perspective involves the abuse of substances to mitigate abnormal arousal levels involved in certain mental disorders such as extreme expressions of ADHD (Putnins, 2006). As well, truancy and associations with substance abusing peers are related to substance abuse among CIC (Thompson & Auslander, 2007). Within a sample of incarcerated Aboriginal young offenders in B.C., more than half of whom with at least some past contact with child care services if not a CIC placement, the use of hard drugs such as heroin and cocaine was associated with physical and sexual abuse, mental illness, and family criminality. This high prevalence of drug use was evident as early as 11 years of age for many of these incarcerated young offenders (Corrado & Cohen, 2002). Substance abuse is an important risk factor for serious delinquency among children and for serious and violent offending among youth in general (Arseneault et al., 2000; Farrington, Loeber, Jolliffe, & Pardini, 2008; Margo, 2008; Neff & Waite, 2007). It is also possible to argue that this risk factor then increases the probability of being placed in care, in part when it attenuates parental inability to respond to delinquent and violent behaviours, especially when family abuse and/or related major family mental health problems are also evident. As discussed previously, the higher rates of mental health problems among CIC appears to reflect in part the pervasiveness of depressive disorders within families generally, as well as other disorders such as substance abuse (Berger, 2005).

Special Education Needs

Children in care in B.C. are disproportionately more prone to special education needs than non-CIC; one-quarter of CIC in the province had special education needs compared to less

than one-tenth (8%) of non-CIC. These needs involved disabilities that impact learning because of either intellectual, physical, sensory, emotional, or behavioural impairments, learning disabilities and exceptional educational talents. In particular, the special educational needs of CIC most commonly involved behavioural difficulties or serious mental health problems, while non-CIC needs most commonly involved exceptional educational talents. A major developmental learning difference is that CIC are substantially less likely to have school-readiness skills entering kindergarten, which unintended, fundamentally inhibits the establishment of foundational learning skills necessary for future school success. By Grade 4, for example, CIC with special education needs are less likely to develop the foundational reading, writing, or numeracy skills eventually needed to complete high school. As such, it is not surprising that by Grade 9, a large proportion of CIC with special education needs are held back, and by Grades 11 and 12, they begin to drop out in large numbers. Even those CIC who graduate from high school are more likely have grade point averages one letter grade below non-CIC (British Columbia, 2007).

Part of the explanation for the disproportionate special education needs of CIC is child maltreatment since it is a strong predictor of special education needs. While there are several forms of child maltreatment, the general theme observed is that severe maltreatment negatively impacts physiological and emotional well-being and may result in trauma-related disorders (Perry & Pollard, 1998). The impact of the associated physiological and emotional strain may extend to the point where normative education skills development and school performance are impaired (Jonson-Reid, Drake, Kim, Porterfield, & Han, 2004). A wide array of other disorders, including those related to prenatal and perinatal exposure to toxins that impede infant development, those directly caused by birth complications, and learning and education deficit factors associated with low socioeconomic status (SES), affect both school readiness and subsequent designations of special education needs.

Birth complications, including anoxia (insufficient oxygen), forceps delivery, pre-eclampsia (i.e., hypertension leading to anoxia), can cause brain damage and subsequent antisocial behaviour throughout the life course if untreated (Raine, 2004). This damage can be evident in low verbal and/or performance IQ in the early childhood developmental stage when learning trajectories are their steepest and are foundational for success in the more complicated learning stages that follow. Verbal IQ is particularly important for initial positive school performance and experiences, because it involves general factual knowledge, vocabulary, memory, abstract thinking, social comprehension, and judgement. It is critical for antisocial behaviour because children with low verbal IQs have difficulty expressing themselves, remembering information, and conducting abstract reasoning. In turn, it is more difficult to develop and maintain the prosocial relationships that typically require accurately processing social information and cues. Instead of weighted or reasoned decisions being routinely made in peer and authority relationships, fundamental difficulties in communicating result in frustration, hostile attributions, and aggressive responses, which can impede school success (Agnew, 2008).

Low general IQ, too, is linked to the antisocial/delinquency dynamic relationship with poor school performance (Koolhof, Loeber, Wei, Pardini, & D'escury, 2007; McGloin, Pratt, & Maahs, 2004). As well, the emotional difficulties not uncommon with birth complications can be related to maternal rejection especially in unwanted pregnancies. Maternal rejections,

characterized by unwanted pregnancy, unsuccessful abortion, or the infant being institutionalized for four or more months in first year of life, compounded by birth complications, are associated with offspring who are substantially more violent (Raine, Brennan, & Mednick, 1997).

FASD is characterized by persistent difficulties or deficits in: applying abstract reasoning, anticipating negative consequences, controlling pronounced impulsivity, developing normative language skills, and the presence of general learning ability (Center for Disabilities, 2002; Streissguth et al., 2004). Children with learning disabilities in general are at heightened risk for emotional distress, disruptive behaviours, and violence (Baker & Ireland, 2007; Sundheim & Voellere, 2004; Svetaz, Ireland, & Blum, 2000). FASD exacerbates the frustrations typically experienced by those with learning disabilities and milder expressions of learning difficulties, giving rise to extreme impulsivity and more frequent violent behaviours (Chartrand & Forbes-Chilibeck, 2003). Not surprisingly, FASD children will very likely be categorized as having special education needs. FASD has been found to be disproportionately evident within a CIC sample that was also found to be at an increased risk of presenting with social and learning needs (Kvigne et al., 2004). In addition, children with FASD are more likely to enter into care by 2 to 3 years of age and remain in care for at least five years (Ernst, Grant, Streissguth, & Sampson, 1999; Habbick, Nanson, Snyder, Casey, & Schulman, 1996).

Socioeconomic status may also play a role in the higher prevalence of special education needs among CIC samples. For example in B.C., nearly all CIC (88%) received income assistance before 19 years of age (British Columbia, 2009). Across Canada, slightly more than one-third (36%) of parents with children who had been abused or neglected relied upon social assistance or unemployment insurance as a primary source of income, while a similar proportion (39%) of these parents, even with full-time jobs, could be classified in the low SES category (Trocmé et al., 2001). It is of particular relevance that socioeconomic status has been linked to the development of communication skills. Specifically, toddlers raised in low SES households were found to make fewer hand gestures, typically copied from parents, than higher SES households; these gestures are extremely important communication skills used by non-verbal children and are precursors to developing normative verbal and reasoning skills (Rowe & Goldin-Meadow, 2009). In addition, lower paid, less educated parents expose their children to more television and engage in fewer discussions with their children (Hoff, 2003; Huttenlocher, Vasilyeva, Waterfall, Vevea, & Hedges, 2007; Pan, Rowe, Singer, & Snow, 2005; Schmidt, Rich, Rifas-Shirman, Oken, & Taveras, 2009). In effect, from the earliest developmental stage, lower SES households are less likely to expose their children to stimulating opportunities to develop the language and communication skills necessary for normative school readiness. As mentioned above, without remedial programming exposure, the children lacking normative communication and learning skills are more likely to accumulate learning deficits in each successive grade, independent of learning disorders and other disorders discussed.

There is a strong relationship between special education needs and antisocial behaviour (Farrington et al., 2008; Hemphill, Toumbourou, Herrenkohl, McMorris, & Catalano, 2006). For example, in a recent Dutch study, students who misbehaved in the classroom were more likely to engage in antisocial behaviour outside the classroom as well (Weerman, Harland, & van der Laan, 2007). Misbehaviour in the classroom, poor school performance, and antisocial behaviour have each been linked to poor self-control or the inability to regulate behaviour (Felson & Staff,

2006). The widespread prevalence of poor school performance among a sample of incarcerated serious and violent young offenders in B.C. was evident because, at the time of the offence for which they were incarcerated, only slightly more than half of the young offenders were enrolled in school (Corrado & Cohen, 2002), and many of them were already at least one academic year behind other students their age (Corrado, Cohen, & McCormick, 2008; Corrado, Cohen, & Watkinson, 2008).

For CIC in B.C., the relationship between special education needs and involvement in the CJS is especially pronounced: Nearly all (87%) of CIC involved in the CJS have been identified as having special education needs (other than exceptional talents) compared to less than two-thirds (62%) of CJS-involved youth not placed in care. A far greater and disturbing disparity regarding special education needs and serious mental illness, and/or behavioural problems more generally, for CIC involved in the CJS is overwhelmingly evident: Nearly three-quarters (72%) of CIC involved in the CJS had educational special needs as a result of intense behavioural problems or serious mental illness compared to a negligible 2% of youth who had been neither in care nor in the criminal justice system (British Columbia, 2009).

Exposure to Maltreatment and Antisocial Parents

Children in care who have experienced abuse are at a higher risk of engaging in antisocial behaviours compared to those placed in care who did not experience abuse (Grogan-Kaylor, Ruffolo, Ortega, & Clarke, 2008; Simmel, 2007). Children and youth who have been abused, particularly those abused recurrently or exposed to harsh parenting, are more likely to be extremely aggressive, seriously antisocial, and violent (Benzies, Keown, & Magill-Evans, 2009; Berger, 2005; Farrington, 1996; Lansford et al., 2007; Mulvaney & Mebert, 2007; Ryan & Testa, 2005). However, important qualifications to note are: (a) that aggressive children may be more likely to elicit harsh disciplinary practices from their parents, thereby perpetuating a cycle of abuse; and (b) that abusive parents may wrongly view their children's behaviours as aggressive. In effect, parents may misinterpret the actions of their children, view their behaviours as aggressive, and, therefore, intensify and also perpetuate their children's violent behaviour (Berger, 2005).

Extreme maltreatment is particularly damaging when it causes potentially permanent neurological changes that increase the development of impulsive and aggressive behaviours. Traumatized individuals who act on impulsive and aggressive tendencies rooted in neurological changes as a result of trauma in adolescence and/or adulthood, may essentially be punished for their trauma when they are incarcerated for engaging in violent behaviours. Yet, even extreme forms of maltreatment, especially when it involves severe emotional neglect in infancy and early childhood, are too often undetected. Severe forms of maltreatment can result in a cycle of violence and even intergenerational transmission of violence when the abused child, as a parent, repeats the violence against their children (Perry, 1997).

Parental antisocial attitudes and related behaviours are also an important risk factor for both being placed in care and CJS involvement. In a Canadian study, approximately one-tenth (11%) of children in care, who had in any way been abused, had at least one parent who had been incarcerated, and nearly two-thirds (34%) had at least one parent who had been diagnosed

with, or was suspected of having a substance abuse problem (Trocmé et al., 2001). Criminal behaviour by any family member is strongly predictive of antisocial behaviours among adolescents generally, although the antisocial behaviours of the father are the most predictive (Farrington, Jolliffe, Stouthamer-Loeber, & Kalb, 2001; Preski & Shelton, 2001). Additionally, family criminality has been found to predict early onset antisocial behaviours (Alltucker et al., 2006), and substance abuse among incarcerated boys appears to be more common among those whose fathers also engage in substance abuse (Preski & Shelton, 2001). The intergenerational transmission of antisocial behaviours is related to the continuity of risk factors. Successive family generations replicate the profile of risk factors including poverty, single-parenthood, and use of harsh and/or ineffective parenting styles (Farrington et al., 2001).

Risks Unique to CIC

Part of the disproportional CIC involvement in the CJS can be explained by the presence of many of the key risk factors for serious antisociality in childhood and serious and violent behaviour in adolescence and adulthood. However, there are unique factors as well, most importantly multiple placements in care (Jonson-Reid & Barth, 2000). Even for those who entered care without the standard attitudinal and behavioural risk factors, placement instability contributed to harmful internalizing and aggressive externalizing behaviours (Newton et al., 2000), particularly among boys (Ryan & Testa, 2005). Unfortunately, there are few studies of why or how placement instability increases the likelihood for CJS involvement. However, residential mobility may partially explain the impact of placement instability since adolescents in general exhibit higher rates of violent behaviour and are at an increased likelihood of associating with antisocial peers (Haynie & South, 2005). This relationship has been linked to disruptions in parent-child bonding and resultant negative attachment styles associated with antisocial behaviour (Ainsworth, 1969, 1991; Bowlby, 1951, 1969, 1973; Moretti & Peled, 2004; Vando, Rhule-Louie, McMahon, & Spieker, 2008).

In addition, CIC are at an increased risk of developing attachment problems because their parents are less available for a variety of reasons. These may include major mental health problems, frequently compounded by substance abuse, and physical absences due to incarceration (Davis, 2009). Conversely, CIC who develop stronger relationships with caregivers are at less risk for developing antisocial behaviours, but the likelihood of forging strong bonds may diminish as youth experience multiple placement shifts (Grogan-Kaylor et al., 2008). Part of the disruptive social experiences caused by multiple placements is the sense of rejection, unworthiness, and negative labelling, whereby the child or youth may be considered “bad”, “difficult”, or “disruptive”. Importantly, some CIC are placed in care not because of abuse or neglect, but because they have been kicked out of their family homes. Higher rates of geographic and school mobility are likely to cause further social and related emotional disruptions because of the inherent difficulties of maintaining old friendships and establishing new ones. Antisocial peers within school contexts as well as “street kid” contexts can then become important alternative sources of friendships or surrogate families (Baron & Hartnagel, 1998; Hagan & McCarthy, 1997). Finally, while rare, indifferent or, worse, abusive care placements, are obvious in-care risk factors (G.Hobbs, C. Hobbs, & Wynne, 1999).

CIC and CJS Involvement

Given the prevalence among CIC of so many risk factors for antisocial behaviour generally, and serious and criminal offending specifically, it is not surprising that the British Columbia study (2009) confirmed the disproportional CJS involvement of CIC: Nearly half (41%) of CIC had been recommended for charges versus approximately one-twentieth (6%) of those who were never in care. In other words, CIC are nearly seven times more likely to be charged with criminal offences than non-CIC. Additionally, CIC are recommended for more charges by police on an individual basis, with CIC being recommended for charges an average of ten times in adolescence compared to 4.5 times for non-CIC. Even more disturbing, approximately one-tenth (10.4%) of CIC were sentenced to custody, compared to a minuscule 0.5% of non-CIC. From another perspective, a greater proportion of CIC in British Columbia entered the CJS than graduated from high school. On average, CIC also become involved in the CJS approximately one year earlier than non-CIC. The majority of CIC involved in the CJS had their first contact with police after being placed in care or the same year that they entered into care. This early CJS onset evident among CIC in B.C. is consistent with the observed early onset of delinquency among CIC in a recent U.S. study (Alltucker et al., 2006). In addition, a disproportionate number of either CIC, or former CIC, who had been in subsidized independent living as older adolescents, had high likelihood for involvement in the adult CJS. Moreover, this likelihood of adult CJS involvement is higher for those young adults who had serious mental health problems and related needs for continuous mental health/health services, housing, income assistance, and appropriate employment (Courtney & Heuring, 2005; Doyle, 2006; Lawrence, Carlson, & Egeland, 2006; Sweetman, Warburton, & Hertzman, 2007).

Conclusion

The British Columbia reports confirm that children in care have disproportionate health, mental health, and special education needs, and greater involvement in the youth criminal justice system. Even without the multivariate analysis of cross-sectional data and time series analysis of this cohort data, arguably, there is sufficient empirical support to make several theoretical and policy inferences concerning key outstanding policy issues related to the link between CIC and the CJS. Regarding the over-representation of CIC who have similar risk profiles for serious and violent behaviours as non-CIC youth who become involved with the CJS, there is convincing evidence for the need to utilize diagnostic instruments that cover the broad range of identified risk factors across developmental stages.

While risk management instruments for children, adolescents, and adults exist for a variety of aggressive and violent behaviours, such as sexual aggression and repeated physical assaults, there are few risk management instruments that cover the complete range of risk factors for all the developmental stages discussed in this article. There have been recent developments such as the EARL-20B and the EARL-21G risk management instruments for the late childhood stage of 8 to 12 years old. These tools provide valid assessments and related intervention strategies to assist government and non-government agencies in responding to aggressive and violent children who are either not subject to the jurisdiction of the youth CJS because they are 12 years of age or under, or engage in minor aggression and/or violent behaviours that typically

do not warrant youth CJS intervention. Yet these behaviours are, nonetheless, important risk factors for more serious and violent behaviours.

Because there were no risk management instruments for children and adolescents that covered the complete set of developmental stages, the Cracow risk management instrument for multi-problem children and youth at risk for serious and violent behaviour was created in 2002. This computer-based instrument is designed to provide information on risk factors from all service providers across ministries and agencies that have the responsibility to assess risk factors, and to devise and implement a service plan (Corrado et al., 2002).

For example, public health nurses often have the responsibility to visit pregnant mothers to assess their general health and provide vital health information. Family doctors, along with obstetricians and paediatricians, have similar health-related responsibilities regarding the pregnant mother and newborn. In addition, social workers and, less frequently, police officers too, have the responsibility to monitor families with histories of conflict and abuse that may put family members, particularly children, at risk for their safety. Teachers at the preschool, kindergarten, elementary, middle school, and high school levels also have a responsibility to provide information to appropriate school officials (i.e., counsellors and administrators) to respond to school-related risk factors. Each of these service providers would complete the sections of the Cracow instrument that pertains to their individual legally mandated responsibility to identify risk factors and then devise appropriate service plans. Strict confidentiality mechanisms must be in effect to ensure that shared information in preparing individual case plans do not violate privacy rights. It is beyond the scope of this article to expand on the privacy concerns about sharing information among agencies. Nonetheless, a main policy theme of this article is that without more complete information on CIC, specifically those who are disproportionately involved in the CJS, effective case planning to reduce this involvement is diminished.

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