

**INTRODUCTION TO THE SPECIAL ISSUE ON  
EARLY DEVELOPMENTAL PREVENTION OF  
ANTISOCIAL BEHAVIOUR**

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In her recent 2010 report to the British Columbia provincial legislature, the Representative for Children and Youth, Judge Mary Ellen Turpel-Lafond, reported that the government of this province had failed to implement key provisions of the 2006 Hughes Royal Commission Report (Leyne, 2010). This failure, she asserted, put too many children at risk for abuse – or even death – especially within the most vulnerable families, such as those headed by impoverished, ill-housed, young and/or single mothers with little of the social capital typically needed to raise healthy children within B.C. communities. Further, a recently released federal report stated the Canada had among the highest rates of child poverty among the leading advanced industrial countries (UNICEF, 2010). Finally, while incarceration rates for young offenders in Canada, generally, have dropped substantially during the last decade, those youth in custody disproportionately have been from the above multi-problem families, especially Aboriginal families (e.g., Doob & Cesaroni, 2004).

Two key policy issues among many others emerge from this Canadian context: First, provincial governments, and, to a lesser degree, successive federal governments, have restructured their child welfare protection laws and policies, along with criminal law and youth justice systems, to respond to the needs of these multi-problem families. Yet, despite noted successes (e.g., reducing the number of incarcerated young offenders from these backgrounds), serious and violent young offenders continue to emerge disproportionately from these disadvantaged families. Second, despite the enormous advances in theories and empirical research on delinquency and serious, violent offending, there remain fundamental difficulties translating these advances into effective policies and related programs.

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As editors of this special edition, we have requested articles from distinguished scholars from Canada, Europe, and the United States who have engaged in innovative theorizing and research concerning the above two issues. Of course, it is far beyond the scope of this special edition to address the full range of theoretical, empirical, and policy themes intricately involved in these complex issues. In addition to discussing themes specific to these issues in the following articles, we will discuss some themes not included but essential to the challenges involved in developing policies to reduce serious and violent young offending generally, particularly within the most vulnerable marginalized groups such as Aboriginal families and families headed by impoverished single-parent mothers.

### ***Theories and Research to Policies: Too Big a Challenge?***

For most of the 20th century, the dominant theories and research on delinquency, and serious violent offending, focused on their relationship to or association with poverty, family conflict or non-prosocial bonding, neighbourhood social disorganization, gangs, education problems, deviant and violent subcultures, low social capital (i.e., little access to family and friends or neighbours for assistance), gender, and poor self-control. Accordingly, in most liberal democratic countries until the late 1960s, juvenile justice laws and related juvenile justice systems emphasized welfare justice model principles such as informal judicial processing, family- and community-based rehabilitation programs, training and industrial schools, Head Start early education programs, and child care or foster families. Even when the initial classic cohort studies, beginning with Wolfgang, Figlio, and Sellin (1972), revealed that a small group of delinquents committed a disproportionate amount of serious and violent offending while most delinquents simply matured away from criminality in their late teens, the laws and related policies focused primarily on traditional family and community programs, and individual counselling. However, the United States was a major exception since of many of its states introduced criminal justice laws based on several crime control principles such as punishment, deterrence, and adult sentences to protect society from the “hard core” serious and violent young offenders. Yet, it was and still is this group of young offenders that cause the greatest public, media, political, theoretical, research, policy, and program concerns (e.g., Howell, 1997; Loeber & Farrington, 1998).

Not surprisingly, researchers conducting subsequent cohort studies in the U.S. and also from Canada, Scandinavian and other European countries, as well as, notably, New Zealand, increased the sophistication of their research designs to include risk and protective factors for serious and violent offending far beyond the traditional variables listed above (e.g., Arseneault, Tremblay, Boulerice, & Saucier, 2002; Capaldi & Patterson, 1996; Le Blanc & Fréchette, 1989; Loeber et al., 2003; Moffitt, Caspi, Harrington, & Milne, 2002). By the mid-1980s, this cohort research had instigated intense and often complex theoretical, empirical, and statistical debates (see Farrington, 2005, for a review). These debates concerned the following issues: the existence of “career criminals”; the utility of longitudinal versus cross-sectional research designs to study differences in types of youth and adult offending patterns; the ability to diagnose psychopathic young offenders; the presence of significant differences in risk factors

associated with frequent or chronic offending and violent offending; the effect sizes or positive changes caused by intervention programs for minor, moderate, and serious offenders respectively. By the 1990s, subsequent research detailed the identification of multiple pathways and fundamental types of young offenders, such as the life course persisters (LCP) and adolescent-limited (AL) described by Moffitt (1993), as well as the validity of gender-based offending types and related theories of female serious and violent young offenders.

For those researchers asked to advise government ministries or departments about laws, policies, and programs to deal with serious and violent offenders, the chief challenge was too often how to translate the above debates into information relevant to policy. Typically, many theoretical propositions or their derived hypotheses utilize apparently abstract constructs distinctive to various academic disciplines such as psychology, criminology, sociology, the philosophy of science, or economics. Certain complex constructs (e.g., social capital) and their related theories are not easily converted by policy officials into programs despite government policy and research divisions staffed by professionals from many of these same disciplines. Another challenge is the tentativeness of the related empirical research. Tests of statistical significance and complex statistical analyses, for example, are essential in academic debates and publications, as are the nuanced theoretical inferences made from these analyses. Yet, policy officials can see the language of probabilistic findings as limiting their practical use. Furthermore, the low effect size for single risk, as opposed to multiple risk factors, represents a real challenge for the development of comprehensive prevention policies. Other concerns include: key variables not being measured fully or being absent completely; major research sample design limits (e.g., samples too small for appropriate statistical analyses); and low base rate phenomena such as serial arsonists, rapists, and killers.

By the 1990s, these limitations resulted in a small but growing movement among social sciences researchers involved with criminal justice program evaluations to, first, conduct meta-analytical work by combining findings from several research studies, and second, to employ experimental designs, long a mainstay of research in psychology. The birth of the *Journal of Experimental Criminology* around 2005 is a testimony to this movement. These designs avoid many of the above-mentioned tentativeness issues in advising policy-makers. While this movement is encouraging, there are fundamental obstacles in expanding the use of experimental designs including ethical or legal issues and high research costs, especially when programs designed for serious and violent offenders are being studied or evaluated.

By the millennium, all the above themes and challenges for translating research on serious and violent offending into policy-relevant information became compounded by the revolutionary advances in genetics, epigenetics, as well as animal model and human brain research, much of the latter attributed to microscope and scanning technologies at the molecular and cellular levels. Regarding genetics, the key breakthrough involved the Dunedin, New Zealand, prospective population cohort study led by Terrie Moffitt and Avshalom Caspi. Caspi et al. (2002) reported that they had identified a gene variant

involving the enzyme MAOA that is essential in production of the key hormone for suppressing excitability generally, and specifically the often related emotions and behaviours such as anger, aggression, impulsivity, and violence. These researchers found that if only 12% of their male birth cohort had been exposed to severe maltreatment *and* had the low-activity MAOA gene, this group accounted for more than 40% of the entire cohort's violent convictions up to age 26. This seminal research has been followed by several attempts to validate this key finding with mixed results (e.g., Haberstick et al., 2005). However, there continues to be important, and more recent, genetic and epigenetic research with fundamental implications for the policy themes involving serious and violent young offenders. This research, though, has not only added to the complexity of the theories discussed above but also to their translation into laws, policies, and programs. Nonetheless, laws such as Canada's Youth Criminal Justice Act (2003) and many innovative policies recommended by the U.S. federal agency, the Office of Juvenile Justice Programs (OJJDP), reflect attempts to incorporate key policy themes from these theories of delinquency and serious or violent offending (e.g., Farrington & Welsh, 2006).

### ***From Developmental Models of Offending to Intervention and Treatment***

The original developmental models concerning transitions from childhood to adolescence to adulthood are relatively less complicated than the most recent models, which include additional risk factors from not only recent genetic and epigenetic research but also more recent research on perinatal risk and protective factors. For example, Loeber's earliest pathway model (Loeber et al., 2003), Moffitt's (1993) dual trajectory model, along with Le Blanc's (2005) control theory model, include two to three offender types with few risk factors from the earliest developmental stages (i.e., in utero, infancy, and early childhood). Richard Tremblay and colleagues, though, proposed a developmental model based on earlier factors by including a set of risk factors in his Montréal cohort study that concentrated on physical aggression and violence in early childhood (e.g., Tremblay & Japel, 2003). Critically, these models assisted in the development of innovative treatment programs as well as violence risk prediction instruments and violence risk management instruments (e.g., Lussier et al., 2011). Three central treatment themes are evident in all these models: (a) identifying the complete risk/protective profile; (b) utilizing (refining or developing) treatment programs appropriate to the developmental stage; and, (c) addressing risk and protective factors as early as possible increases the likelihood that targeted antisocial behaviours will not occur, particularly serious and violent offending.

Historically, most of the development of risk assessment instruments has occurred in clinical psychology and so have the related treatment programs (e.g., Le Blanc, 2002; Lösel, 2002). The obvious focus of these instruments and programs has been on traditional personality traits and childhood disorders such as Oppositional Defiant (ODD) and Attention Deficit Hyperactive (ADHD), and adolescent disorders such as Conduct Disorder (CD). Learning disorders – Autistic Spectral Disorder, Fetal Alcohol Spectral Disorder, and Attachment Disorders – have also become central to risk assessments and treatment for serious and violent young offending. More recently, and controversially,

there have been concerted attempts to measure key psychopathic traits such as callousness and unemotionality as well as the full personality disorder, primarily with the Psychopathy Check List: Youth Version (PCLY), in samples of children and adolescents, specifically, incarcerated young offenders. Part of this controversy is the extreme negative labelling associated with the adult psychopathy construct by the public generally and by the criminal justice system specifically. With regard to the criminal justice context, it is the problematic use of the Psychopathy Check List by adult criminal courts, primarily in the U.S., to justify lengthy incarceration sentences to protect the public. Much of this negative labelling and fear is based on the widespread perception that psychopathic violent criminals have an untreatable personality disorder.

Moreover, there is the broader and very recent issue concerning the use of adult psychiatric constructs to explain child and adolescent aggression and violence and, consequently, the related use of adult psychotropic drugs to treat “childhood” versions of certain hypothesized psychotic disorders. For example, there is considerable debate among researchers and clinicians about the onset of the bipolar psychosis disorder. Traditionally, this disorder presents itself in early adulthood. However, several psychiatrists have asserted that it can manifest in childhood, and can therefore explain uncontrollable episodes of self-harm and violence towards parents, siblings, and peers, followed by severe depression and brief periods of calm. The drug therapy part of the broader controversy stems, in part, from the purported over-diagnosis of ADHD and its treatment with drugs such as Ritalin during the last several decades (e.g., Mayes, Bagwell, & Erkulwater, 2009). When these drugs do not mediate aggression and violence and when depressive withdrawals also occur, then there is the presumption that a hyperactivity-related aggression and violence masks deeper embedded psychoses such as the bipolar disorder. While enormously controversial regarding children, comorbidity is less so for adolescents. As has long been evident in studies of adult incarcerated criminal offenders, Teplin et al. (2005) in their Chicago Cook County Juvenile Jail study and Cesaroni and Peterson-Badali (2005) in their Ontario youth detention study found disproportionately high levels of psychoses, often comorbid with personality and substance abuse disorders, within samples of adolescent incarcerated young offenders.

While the research on child and adolescent onset of psychotic disorders remains clearly tentative, there is a growing consensus that there are, at least, predisposing temperaments such as Kagan’s (1997) high reactive and low reactive, as well as certain personality traits such as callousness, that begin in early childhood. When these traits interact with family and community risk factors, they increase the likelihood of the early onset of aggression and violence, as well as during later development stages if left untreated (e.g., Frick, Cornell, Barry, Bodin, & Dane, 2003). Again, despite the attendant controversies associated with utilizing this tentative development-based research from psychology and psychiatry, the most recent pathway models have begun to incorporate related childhood risk factors such as types of temperament and personality traits, though not personality disorders. For example, Corrado and Freedman (in press) maintain that temperament and certain sets of personality traits need to be considered as the starting points for separate or distinctive pathways, each with their own treatment strategies. Part of the support for using more controversial psychology-based constructs as the basis for

separate pathways or as risk factors incorporated into existing pathway models is the recent genetic research on aggressive and violent phenotypes.

***Risk Factors: Trauma, Child-in-Care Programs, Gender, and Marginalized Families***

A poorly researched though commonly identified risk factor, early childhood trauma, remains an important theoretical and policy theme. For example, a common and all too often tragic policy theme is the inability of government agencies to protect children, especially infants and children under five, from traumas resulting from abusive caregivers, be they parents, foster parents, or extended family members. The vulnerabilities of early developmental stages are obviously related to the inability of these victims to either comprehend their situation or to communicate with adults who would typically protect them from the abuse or trauma. Neglect in particular is difficult to identify yet it is by far the most common form of abuse. Neglect can also promote the development of several subsequent risk factors for aggression and violence in later age stages. By contrast, physical and sexual abuse are typically more visible thus increasing the likelihood of detection by responsible adults such as other family members, the family doctor, and especially social workers when the risk for abuse already is being monitored.

Related to trauma, a second research and policy theme is the impact of child-in-care programs on serious and violent offending. Paradoxically, there is evidence that multiple placements are correlated with substantially higher likelihoods of serious and violent offending. The obvious and troubling issue is whether child-in-care programs are the cause of the increased risk or, at the very least, why these programs do not reduce the risk. A third related policy theme is the disproportionate levels of abuse and child-in-care placements for marginalized families with low social capital, especially from either colonized (e.g., Aboriginal), formerly enslaved (e.g., African-American), or geographically transient (e.g., Roma or Gypsy) ethnic groups. While poverty and the destruction of cultures are obvious distilled causes for both the marginalization of families and the related higher child-in-care placements, there is enormous variability among the families from these respective ethnic groups. This variability suggests that proximate causes likely consist of other risk and protective factors, especially the latter.

More recently, protective factors have been the focus of conceptual discussion and research, most importantly in contexts where youth from high-risk profiles, such as multi-problem families, do not engage in serious and violent offending across developmental stages. Central to this discussion are the attempts to conceptually and operationally distinguish between risk and protective factors, and between the latter two concepts and so-called “promotive” factors, that is, factors that prevent the development of the initial risk factors in the first place. These conceptual distinctions are important partly because they are associated with the empirical debate concerning optimal programming (Loeber, Farrington, Stouthamer-Loeber, & White, 2008): Why are prevention or “primary” programs designed for all children and youth typically less effective in mitigating the likelihood of serious and violent offending than protective or “secondary” programs targeted for children and youth already at risk but not yet serious

and violent offenders? Further, why are tertiary programs that target serious and violent offenders more likely to reduce these behaviours than primary and secondary programs?

Another theoretical and policy issue involves the existence of distinctive gender pathways for serious and violent offending, and the need for distinctive gender treatment programs. This issue has intensified since Moffitt and Caspi (2001) asserted that effectively there are no gender pathway differences regarding the most serious and violent offenders despite the continued confirmation of long observed and significant gender disparities in the rates for these offences. While there is a continuing debate about whether the boy-to-girl ratio of serious and violent offending is declining dramatically, and why, the more immediate and independent policy issue is the cost challenge of providing distinctive treatment programs for the still much smaller number of female young offenders, especially in custody settings.

### **Overview of Articles in the Special Edition**

It is impossible to review all the theoretical and policy themes or issues regarding multi-problem families and serious and violent young offenders in an introductory article. However, we had the above themes in mind when we approached colleagues to submit articles based on their research. The article by DeLisi and Vaughn addresses several of the themes concerning revolutionary genetic and epigenetic discoveries related to traditional risk factors, most importantly impulsivity and recklessness, and to protective factors such as high verbal skills and empathy. Equally important, treatment programs involving a fuller understanding of the genesis of these risk factors are also discussed.

The article by Lussier and colleagues reviews pre/perinatal risk factors for early childhood aggression and provides important preliminary data about this relationship from the Vancouver Longitudinal Study on the psychosocial development of children. Of importance, the study is showing evidence that the pre/perinatal environment may not only impact the development of aggression, but also the development of sexual behaviours. The authors also discuss diagnostic issues regarding a wide array of risk factors from the perinatal and early childhood developmental stages.

Kazemian, Widom, and Farrington utilize the classic Cambridge Study in Delinquent Development to examine the relationship between childhood neglect and serious delinquency while controlling for a broad array of other risk factors. Descormiers, Bouchard, and Corrado go beyond the traditional risk factor approach by employing the long-standing and imminent strain theory from criminology to assess whether, in a small Canadian sample of incarcerated serious and violent young offenders, these offences are a means of alleviating strain. In other words, does working with other offenders provide criminal social capital that enhances “lucrative “ criminal opportunities? Intervention strategies based on their analysis are provided as well.

Corrado, Freedman, and Blatier focus on a related theme of the disproportionate number of children-in-care in the youth criminal justice system and use information from a very large cohort study in the Canadian Province of British Columbia to identify the

risk profiles for serious and violent offending of children in care versus children not in care. In a similar vein, van der Put and her co-authors utilize a major U.S. study to assess the differences in profiles of risk and promotive factors for males and females across different age groups and provide suggestions concerning potential optimal intervention strategies for each stage.

Finally, the article by Moretti and colleagues reviews the literature on child maltreatment and violence while employing several of their Canadian and U.S. data sets to also consider interpersonal beliefs and risky behaviours generally, and regarding girls specifically. Based on their research findings, they assert the need for gender-sensitive risk assessment tools and developmentally appropriate treatment programs.

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