#### CHAPTER FIVE

### Supporting Secondary Analyses of the Canadian Incidence Studies of Reported Child Abuse and Neglect (CIS): Partnerships with the Child Welfare Community

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Community partnership comments by *Cindy Blackstock* 

#### INTRODUCTION

The Canadian Incidence Study of Reported Child Abuse and Neglect (CIS) (Trocmé et al. 2001; Trocmé et al. 2005; Trocmé et al., in press) is a national child maltreatment surveillance survey conducted with the Public Health Agency of Canada every five years by a team of researchers at the Universities of McGill, Toronto, and Calgary. Three study cycles have been completed: the CIS-1998, the CIS-2003, and the CIS-2008 (in publication).

The study is designed to examine the scope and characteristics of reported child abuse and neglect across Canada and to monitor the short-term outcomes of these investigations, including substantiation, placement, child welfare court usage, and criminal charges. With each cycle of the CIS, a number of specialized studies have been completed using enriched samples. These include three Ontario Incidence Studies (OIS) (Fallon et al. 2005; Trocmé et al. 1994; Trocmé et al. 2002), the Alberta Incidence Study (AIS) (MacLaurin et al. 2005), an *Étude d'incidence québécoise* (EIQ) (Tourigny et al. 2003), and Mesnmimk

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Wasatek (Trocmé et al. 2006) – a study of the overrepresentation of First Nations children in the child welfare system.

The CIS and related studies are the most comprehensive sources of information on Canadian children receiving child welfare services and, in many jurisdictions, the only source of information. This rich database provides a unique opportunity for researchers, policy makers, and service providers to understand better the profile of children and families involved with the child welfare system and to examine shortterm service outcomes.

Although researchers can apply to the Public Health Agency of Canada to request access to this database, sometimes potential users lack the resources or the statistical training required to make use of this data. To support the use of the CIS data to inform policy and practice, the CIS research team developed a secondary analysis technical support team. Funds for this support team were initially provided by the Centre of Excellence for Child Welfare as part of its Child Welfare Research Partnership grant from the Canadian Institutes of Health Research (CIHR). Subsequently, the Centre of Excellence for Child Welfare provided additional funding to the CIS secondary analysis team, and PHAC provided some funds for secondary analysis via a separate contract.

Child welfare researchers, administrators, and practitioners from across Canada have worked with the CIS study team to explore a range of research, policy, and practice questions. The topics for secondary analyses of the CIS have been as varied as the families and children served by the Canadian child welfare system. Topics included: analyzing factors driving the increase in child reports in Ontario; examining false allegations in investigations involving divorce and custody disputes; assessing the relationship between physical abuse and corporal punishment; and comparing placement decisions for First Nations and non-Aboriginal children. This chapter discusses our experiences working with a range of academic, government, and community partners within the context of the CIS secondary analysis support initiative. We begin with an overview of the CIS and of the methods used to conduct secondary analyses; we then provide examples of some of the findings that have emerged from these analyses; finally, we reflect on the benefits and challenges emerging from these secondary data analysis partnerships.

#### **RESEARCH SUMMARY**

#### Design of the CIS

The CIS collects information directly from child welfare workers about children and their families investigated for reported child maltreatment. The 2003 cycle tracked investigations in a representative selection of 63 child welfare service areas, yielding a final sample of 14,200 investigations involving children under the age of 16. The final dataset for both cycles of the CIS contain over 400 variables, including information about the investigating worker and the organization from which the investigation originated.

The CIS uses a common classification system across all jurisdictions that includes more than 20 specific forms of maltreatment. This classification reflects a fairly broad definition of child maltreatment and includes several forms of maltreatment that are not specifically included in some provincial and territorial child welfare statutes (e.g., educational neglect, and exposure to intimate partner violence). All CIS maltreatment definitions use a harm or substantial risk of harm standard that includes situations where children have been harmed, as well as situations where children have not yet been harmed but are considered to have been at substantial risk of harm. The inclusion of substantial risk of harm reflects the clinical and legislative definitions used in most Canadian jurisdictions.

To ensure that cases involving multiple forms of maltreatment were tracked, every investigation could be classified in up to three categories of maltreatment. For each form of maltreatment, the study tracked information on substantiation, duration, perpetrator's relationship to the child, physical harm, and use of punishment. A case was considered substantiated if the balance of evidence indicated that abuse or neglect had occurred. If there was not enough evidence to substantiate maltreatment but there remained a suspicion that maltreatment had occurred, a case was classified as suspected. A case was classified as unfounded if there was sufficient evidence to conclude that the child had not been maltreated.

Other child, family, and investigation-related information included: a) child age, sex, Aboriginal status, and a child functioning checklist, b) family size, structure, and housing conditions, c) caregiver age, education, ethnicity, income, and a risk factor checklist, and e) source of report, caregiver response to investigation, ongoing service status, service referrals, out-of-home placement, child welfare court application as well as police and criminal court involvement. Annual national estimates

were derived by weighting cases up to the annual volume of cases investigated in each study site and applying a further regionalization weight reflecting the relative sizes of the child population in the selected jurisdiction to the population size in its strata.

#### Reliability and Validity of the CIS Data Collection Instrument

Reliability and validity testing of the CIS data collection instrument has been undertaken during each CIS cycle. Reliability testing for the 2003 cycle included two versions of the instrument in two sites (a total of 57 families and 82 children) conducted at the initial investigation period and, on average, 4.5 weeks later (Knoke, Trocmé, MacLaurin and Fallon 2009). Although most items were found to be acceptable for their reliability, some items were problematic (such as emotional neglect or caregiver criminal activity).

Validity testing uncovered variables with a high percentage of "unknown" responses, such as education and questions relating to poverty. Many researchers wish to examine data related to poverty, education, and income, but workers are endorsing "unknown" because either they are not aware of such information in the initial period or do not ask the families they are investigating. For this reason, the high "unknown" responses present concerns for the validity for any secondary analysis conducted using these variables. Accordingly, questions regarding caregiver income and education were removed in the 2008 cycle of the study. Researchers are encouraged to create a proxy measure of poverty using other CIS variables should they wish to carry out secondary analysis that includes poverty.

Lastly, variation occurs as worker education and child welfare practices change over time and limits the comparisons between cycles. Thus, those analyzing the data across time are cautioned against making interpretations based on single or specific variables with high unknowns in the study, given the limitations noted above.

#### Secondary Analysis Methodology

The methods used for conducting secondary analyses of the CIS varied depending on the research topic. Although published data were available through the Public Health Agency of Canada, in some instances, investigators approached the research team with a more specific question about a particular population or situation that was not

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addressed by the published CIS data. Each secondary analysis began by establishing the number of reported child maltreatment cases for the population of interest, their sex and age, and the short-term service outcomes the population experienced. After the investigator reviewed these data, clarification about the sample size and what type of analysis was best suited to the study question or policy initiative took place. In many instances, the dearth of data meant that a descriptive analysis of the population provided important information and context to the Canadian child welfare community.

A discussion of the production of the *Mesnmimk Wasatek – Catching a Drop of Light* report provides a specific research example. The report was written for the First Nations Child and Family Caring Society of Canada (FNCFCS) and focused on investigations involving First Nations children in the CIS-2003 dataset. The CIS-2003 used a multi-stage sampling design, first to select a representative sample of 55 child welfare service areas (CWSAs) across Canada, and then to sample cases within these CWSAs. A total of eight First Nations CWSAs were included in the representative sample of CWSAs selected in Canada. In this report, First Nations children are those children identified by the investigating workers as either First Nations status or First Nations non-status in either a First Nations' CWSA or a non-First Nations' Child Welfare Service Area (CWSA). Children with other forms of Aboriginal heritage were removed from the dataset, including Métis, Inuit, and other Indigenous cultures.

The purpose of the Mesnmimk Wasatek analysis was to build on the findings from the CIS-1998 study, which provided a first opportunity in Canada to compare child welfare services to First Nations children to services provided to non-Aboriginal children. The CIS-1998 found dramatic differences in household and caregiver risk factors for First Nations children and families. Investigations involving First Nations children were more likely to be substantiated and placed in out-of-home care than investigations involving non-Aboriginal children.

The 2003 analyses began with a series of descriptive bi-variate tables, comparing non-Aboriginal children with First Nations children on various child, household and case characteristics. The statistical significance between these two groups was calculated by using a Pearson chi-square, which was derived using a sample weight. The sampling weight maintains the influence of the final CIS weight while reducing the actual number of cases to the original sample size. This weight is used

during statistical analyses to avoid inflating the significance of statistics as a result of the high number of cases.

The bi-variate analyses revealed similar differences to the CIS-1998 data between First Nations and non-Aboriginal children and families. A series of multi-variate analyses were undertaken in order to explore whether these differences remained significant when controlling for the clinical concerns of the investigation. The predictors in the multi-variate models were selected based on the empirical literature and through consultation with the FNCFCS.

A description of one of these multi-variate models provides further elaboration. The logistic regression model that best predicted placement entered the investigated child's First Nations heritage first in the model, and then examined whether the increased likelihood of placement among First Nations children was explained by differences in the nature of the maltreatment they experienced or by characteristics of the children (e.g. greater functioning concerns), their caregivers, or household circumstances. This involved running a series of regression models. In the fifth and final model, the probability of an investigation resulting in a placement in care remains much higher for First Nations children than non-First Nations children. The adjusted odds ratio for children of First Nations heritage is 2.54 (p<.001), which suggests that when differences between First Nations and Non-Aboriginal children are taken into account, the probability of the child investigation resulting in a placement in child welfare care for First Nations children is approximately 2.54 times the probability of non-Aboriginal children being placed in care.

The production of the Mesnmimk Wasatek report was similar to other analyses undertaken. As the investigator progressed with the study, additional substantive and empirical questions would arise.

The immediacy of the response from the CIS research team was particularly important for data used to inform child welfare policy. For example, planning for the transformation of Ontario child welfare services was occurring shortly after the 2003 Ontario Incidence Study of Reported Child Abuse and Neglect (OIS-2003; Fallon et al. 2005) data became available. Information of the type and severity of maltreatment, as well as the short-term service responses, was provided to support the Ontario provincial planning process that was undertaken shortly after the study was published. Further details of this initiative are described in the results section of the paper.

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As in the example above, the investigator would send an early draft of the paper or policy response to the research team, providing another opportunity for clarification and additional data requests. If the study was submitted for publication, the CIS study team would also assist with the response to the reviewer's comments regarding the paper. If the analysis was to inform a policy initiative or a response to a specific query from the child welfare field, the process was also iterative, as inevitably additional questions and clarifications would arise before the final analysis was complete (see Figure 5.1).



Figure 5.1. The iterative collaborative research process.

CIS research team members provided critical contextual and methodological information to analysts who were less familiar with the study. Clarification around the unit of analysis for the CIS studies was provided if required. For instance, if using the weighted estimates, the unit of analysis is the maltreatment investigation and not the child because the annualization weight may contain children who have been reported more than once to a CWSA, or primary sampling unit (PSU), during the calendar year.

A related issue was when to use the weighted estimates for an analysis. The sample can be weighted using both annualization and regionalization weights to derive national estimates. Annualization weights estimate the annual volume of cases investigated by each study site. Regionalization weights account for the non-proportional sampling design, which reflect the relative size of the population served by the selected agency. Investigators who wanted to generalize their findings to Canadian child welfare services had to use software for complex survey design analysis to estimate standard error. The software used by the CIS study team was WesVar (version 5.1), which is a statistical program that calculates variance estimates taking into consideration the stratified cluster sampling design of the CIS using the replicate weights method with the WesVar PC jackknife (JKn) procedure (Efron 1982). The WesVar RS2 adjusted chi-square statistic can be used to take into account variance estimates (Morganstein and Brick 1996).

#### Selected Results

Summary findings from three secondary analyses using CIS datasets are presented here as examples of the analyses conducted. The first two analyses are those of independent researchers who accessed CIS data, and the last analysis informed Ontario's child welfare transformation policy in 2005. Each of the examples illustrates the ability of the CIS datasets to describe an aspect of reported child abuse and neglect that was previously not well understood, or for which there were no existing data prior to the CIS.

#### Child maltreatment and punishment

The association between investigated maltreatment and punishment has been a concern for a number of researchers and advocacy groups who have made use of the CIS. In the 2003 cycle of the study, a question about punishment as a form of maltreatment was added to the data collection instrument. Analysis of this relationship was conducted under the direction of Dr. Joan Durrant, University of Manitoba, with funding from PHAC (Durrant et al. 2009). The analyses found that punishment accounted for 75% of substantiated incidents in which physical abuse was the primary category for investigation. In contrast, only 13% of emotional maltreatment, 2% of sexual maltreatment, 2% of neglect, and 1% of exposure to domestic violence occurred in a punitive context (see Figure 5.2). Although physical abuse accounted for most of the substantiated investigations involving punishment, 23% of substantiated physical abuse investigations did not involve punishment (an estimated 6,285 child maltreatment investigations).



Figure 5.2. Substantiated child maltreatment involving punishment in Canada, excluding Quebec, in 2003.

#### Child welfare response to exposure to domestic violence

The CIS dataset was also used to assist Dr. Ramona Alaggia, University of Toronto, in developing a proposal for a provincially funded study examining the child welfare response to children exposed to domestic violence. The analysis provided vital context for the proposed study, indicating a differential service trajectory for cases substantiated solely because of exposure to domestic violence. These cases remained open for on-going services less often (36%) compared to substantiated investigations involving other forms of maltreatment (45% open for ongoing services), and to cases involving co-occurring domestic violence and other forms of maltreatment (67% open for on-going services). Children were placed in out-of-home care in only 2% of investigations involving substantiated exposure to domestic violence on its own compared to 10% for all other cases. Applications were made to child welfare court in 2% of substantiated exposure to domestic violence cases compared to 8% for other forms of maltreatment, and 14% for cases of exposure to domestic violence co-occurring with other forms of maltreatment (see Figure 5.3).



# Figure 5.3. Estimated child welfare services in cases of substantiated maltreatment in Canada, excluding Quebec, in 2003.

### Understanding the increase in child welfare investigations in Ontario

Analysis of the CIS dataset played a vital role in shaping a province-wide initiative to develop more flexible and responsive child welfare policies in Ontario. In 2005, CIS analysts were embedded in Ontario's Ministry of Children and Youth Services, Child Welfare Secretariat, to assist the Secretariat in developing the Ministry's Child Welfare Transformation policy.

Data from the Ontario portions of the 1998 and 2003 studies, the OIS-1998 and the OIS-2003, were used to examine changes in the profile of cases being referred to Ontario Children's Aid Societies (CAS) and changes in service responses. This data indicated that the rate of substantiated maltreatment had increased 320% (see Figure 5.4). Our analyses showed that the increase was driven primarily by improved and expanded reporting and investigation procedures such as: 1) changes in case substantiation practices, 2) more systematic identification of victimized siblings, 3) greater awareness of emotional maltreatment and exposure to domestic violence, and 4) a shift in the way child welfare workers classified cases, with a much smaller proportion of cases being classified as suspected, 10% in 2003 compared to 22% in 1998.

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Figure 5.4. Categories of substantiated primary maltreatment in Ontario in 1998 and 2003.

#### PARTNERSHIP: VIEW OF THE AUTHORS-RESEARCHERS

#### Nature of the Partnership

As illustrated in the three previous examples, the CIS dataset has proven to be a critical source of data for a host of child welfare researchers, administrators, and practitioners across Canada. The CIS has been used in over 100 reports, scientific articles, conference presentations, and information sheets produced in collaboration with a network of over 50 academics, service providers, and policy makers. These collaborations generally fell into three categories: academic papers and presentations; use of the CIS data to guide child welfare policy initiatives; and responding to specific questions from the child welfare community and other related sectors.

#### **Academic Papers and Presentations**

Academic led collaborations were interdisciplinary in nature. Secondary analyses benefited from a reciprocal exchange of ideas among social workers, psychologists, lawyers, and health specialists. The unique skills and knowledge of collaborators from different disciplines produced papers that reflected the complexity of the issues facing children and families served by the child welfare system. For the CIS-1998, collaborations among child welfare researchers focused on topics that were of mutual interest. Collaborations for secondary analyses of the CIS-2003 became more intricate. The ability to look at changes to the Canadian child welfare system through the analysis of two datasets meant a more difficult set of methodological and statistical questions. Because of this, collaborations expanded to include consultations with statisticians for a number of papers.

Many of the preliminary findings of academic papers have been presented at conferences and community forums. Presentation of initial results enabled researchers to have feedback from the child welfare community regarding the analysis. The ability to present important findings to the field without the time delay associated with publication was an important feature in this collaboration. Some academic papers have also been summarized as 2-3 page fact sheets, which highlight their findings for child welfare service providers and the general public (for a list of available fact sheets see Appendix A).

#### **Policy Initiatives**

In addition to the Mesnmimk Wasatek report, data from the CIS pertaining to First Nations children and their families were used for the landmark Wen'de Report. The Wen'de Report provided empirical support for a review of the funding formula for child welfare services provided to First Nations children and families living on reserves. In 2000, the Joint National Policy Review of First Nations Child and Family Services (NPR) had confirmed that the Indian and Northern Affairs Canada (INAC) funding formula, Directive 20-1, did not provide sufficient funding for First Nations Child and Family Service Agencies (FNCFSA) to deliver culturally based and statutory child welfare services on reserve to a level comparable to that provided to other Canadians. A National Advisory Committee (NAC) was formed to implement the NPR recommendations. In September of 2004, the NAC commissioned the First Nations Child and Family Caring Society of Canada to complete a comprehensive research project aimed at providing evidence based recommendations to improve the current INAC funding formula for FNCFSA. Data from the CIS-1998 and CIS-2003 provided important context and information for this project.

#### **Response to Queries from Service Providers**

Response to practice questions from child welfare and other related sectors followed the same procedures as the academic collaborations, although the time to complete the analyses was shorter. The types of requests were uni-variate or bi-variate in nature. For example, the CIS research team conducted a short study to assist a Toronto Public Health Department focus on child health. The CIS was able to provide information about the number of children six years of age and under who were reported to child welfare authorities in Canada in 2003, their primary maltreatment types, and whether there was physical and emotional harm.

Another request involved an agency researcher from an Ontario Children's Aid Society who approached the team for an analysis regarding the changing family constellation for children reported to child protection authorities between 1998 and 2003. Data were provided for this query and were published by the researcher in an Ontario child welfare journal distributed widely to Ontario practitioners.

A child welfare practitioner noticed many families on her caseload struggled with housing instability. The practitioner was curious about an association between the frequency of moves and child functioning issues associated with mental health (e.g., depression/anxiety, selfharm, or psychiatric diagnosis), as well as caregiver functioning issues such as substance abuse, domestic violence, few social supports, and parental mental health. The CIS study team was able to provide analyses regarding transiency, child functioning, and caregiver risk factors. The results were used in a policy brief for the National Children's Alliance regarding mental health for the latency-aged children (ages 6-12).

Service provider requests were characterized by a need for an expedient response. The results of the analysis were used to inform agency initiatives, programs, or policies soon to be implemented.

#### Challenges

The CIS provides rich and previously unavailable information about children and families referred to child protection services; however, it also has a number of limitations. Supporting secondary analysis of this dataset involves clarifying what questions the data can and cannot answer. One of the most important roles the CIS study team members perform is to ensure that the questions emanating from the collaboration with other researchers and practitioners are answerable within the limitations of the study design. There is always a tension between giving meaning to data and keeping conclusions within the scope of the findings and design limitations.

The question referred to above, concerning changes in family constellation and housing status between 1998 and 2003 for reported maltreatment in Ontario, provides an interesting illustration. Initially, the CIS study team conducted an analysis of this question using the investigation as the unit of analysis and provided it to the researcher at the child welfare agency. Upon reflection, the CIS research team decided that a family level analysis was more appropriate for this question. Timelines required the analysis to be published without this additional level of analysis. The data as published were not incorrect; however, a more lengthy consulting process would have resulted in a more meaningful analysis.

Any analysis using the CIS datasets is constrained by the limitation of the study design. The data collected are limited to the contents of the questionnaire used during the information-gathering process—no additional instruments were used to collect information from children or families. Moreover, the data was gathered from child welfare workers, and thus CIS data reflects the judgment of the investigating worker.

Procedures in collecting CIS information have changed slightly with each cycle in accordance with changes in legislation, improvements to the data collection instrument, and differing worker practices over time. This is noted as one of the limitations of carrying out a secondary analysis that compares CIS data over cycles. Additionally, CIS data collection did not include cases that were already open for investigation by a child welfare authority, nor did it track screened-out reports. Thus, questions arising about children in the long-term care of child welfare authorities or families who do not meet initial eligibility criteria cannot be addressed with the CIS data. Finally, the study only tracked case activity that occurred during the initial two-month investigation period. Critical questions about potential unknowns in the data and the longerterm service trajectory of children cannot be addressed by the CIS.

Canadian child welfare researchers, administrators, and practitioners are struggling to find information about children and families referred to the child welfare system. This paucity of data can lead to an overinterpretation of some of the variables contained in the CIS dataset. For example, the CIS tracks a list of child functioning concerns that a worker must endorse as confirmed, suspected, not present, or unknown for each child for whom there is an allegation or suspicion of maltreatment. Because the data collection instrument is completed approximately one month into the investigation, workers may not yet be aware of specific child functioning problems or may indicate a suspicion of a problem that is not borne out following further assessment. Over-reliance on single items from this checklist could be misleading.

A related issue emerges in trying to analyze low frequency events. For instance, while shaken baby syndrome and non-organic failure to thrive are two fairly high profile maltreatment types, such cases are rarely reported to the child welfare system. As a result, the estimates produced by the CIS for these maltreatment types were not reliable because of an inadequate sample size. The CIS analysis team would caution against using low frequency events, recommending that estimates under 100 not be published.

Another restriction of the dataset that requires clarification is that regional comparisons are generally not possible since the study was primarily designed to provide national estimates. Several provinces and one territory funded oversampling in order to derive their own provincial or territorial estimates, but to date they have not initiated comparisons between regions, and the CIS team has undertaken not to conduct such analyses without the agreement of the oversampling provinces and/or territories. In addition, provincial, territorial, and agency-level identifiers have been removed from the public use dataset. Despite these limitations, the most common request to the CIS study team is to compare a geographic area of interest to another region or to the rest of Canada.

#### Benefits

The CIS study team consists of a core group of researchers who have worked extensively on the CIS studies and understand the study methodology, results, and intricacies of the dataset. The CIS represents considerable effort from over 1,000 child welfare workers, hundreds of administrators, dozens of researchers, as well as funding from the Public Health Agency of Canada and oversampling provinces and territories. The return on these collective efforts and funds is contingent on ensuring that the data are used extensively to advance policy, service, and scholarship.

Partnerships have included local, regional, and national collaborations. Working collaboratively with researchers not directly involved with the CIS benefits both the study team and other researchers. By assisting researchers in tailoring their research question, study team members continue to develop their analytical expertise. This accumulated expertise

has resulted in an economy of scale for secondary analyses of the CIS data. Some complicated variables can take days to derive correctly, an effort that can have greater return when the variable is used in multiple analyses. The partnerships have been characterized by a fluid, supportive, and reciprocal exchange of ideas as questions are continually reframed within the limitations of the study.

This process also informs the next iteration of the CIS data collection instrument. For example, the complicated derivation of the perpetrator variable in the CIS-1998 dataset resulted in a more streamlined perpetrator variable in the CIS-2003. Collecting information about the Aboriginal status of the child and not just the caregiver(s) on the CIS-2003 data collection instrument was also a result of recognizing an inability to comment on the Aboriginal status of the child in the CIS-1998 study if only the caregiver status was known.

#### Conclusion

In Canada, most child abuse and neglect statistics are kept by provinces and territories. However, because of differences among provincial and territorial definitions of maltreatment, and in methods for counting cases, it is not possible to aggregate provincial and territorial statistics. The lack of comparability of provincial and territorial data has hindered the ability of governments and social service providers to improve policies and programs that address the needs of maltreated children. The 1998 Canadian Incidence Study of Reported Child Abuse and Neglect (CIS-1998) was the first study in Canada to estimate the incidence of child abuse and neglect reported to and investigated by the Canadian child welfare system. The study was repeated in 2003 and the Public Health Agency of Canada is committed to continuing a 5-year cycle of data collection. Data from the most recent cycle, CIS-2008, was made available in the fall of 2010. Existing partnerships will continue and new ones will develop as this cycles of data become available.

The CIS is a rich dataset that provides researchers, policy makers, and practitioners the opportunity to describe many important aspects of child welfare services for which ten years ago there were no existing data. The collaborations described in this chapter have been beneficial to all concerned, most importantly for the children and families served by the child welfare system. There are still many issues that have not been examined, and as the network of people using the CIS data grows, the potential for its usefulness is unlimited.

#### PARTNERSHIP: A PRACTITIONER'S POINT OF VIEW

#### **Cindy Blackstock**

## First Nations Children Count and So Does Integrity and Spirit in Research

The outcomes of non-Aboriginal child care systems have more often been tragic than helpful for First Nations children (Assembly of First Nations 2007; Blackstock 2007; Royal Commission on Aboriginal Peoples 1996). Beginning with the deaths and abuses of tens of thousands of children in residential schools (Milloy 1999; Royal Commission on Aboriginal Peoples 1996), before moving to a practice of mass child welfare removals in the 1960s that Judge Edwin Kimmelman (1985) called cultural genocide, and finally with the record numbers of First Nations children in child welfare care in 2007 (Amnesty International 2006; Assembly of First Nations 2007; Blackstock et al. 2005), many First Nations understandably view non-Aboriginal child welfare as an instrument of harm rather than one of protection. Although the overrepresentation of First Nations children in child welfare care has been broadly acknowledged since the 1960s (Blackstock et al. 2005; Kimmelman 1985; McDonald and Ladd 2000; Royal Commission on Aboriginal Peoples 1996), child welfare researchers and policy makers paid little attention to the problem until the Canadian Incidence Study on Reported Child Abuse and Neglect (Trocmé et al. 2001) captured data on First Nations, Métis and Inuit children (Blackstock 2007).

The lack of data on First Nations children was particularly problematic. Provincial/territorial child welfare systems and the federal government relied on national surveillance studies to inform children's public policy, but First Nations were either excluded from the studies or included in a way that compromised the cultural validity of the findings. The capacity of public child welfare policy to respond to the unique needs of First Nations children, therefore, was severely eroded.

The turn of the millennium brought a number of "firsts" for First Nations child welfare. It was the first time a First Nations person delivered a keynote address at a national child welfare conference; the volunteers at the First Nations Child and Family Caring Society received their first funding grant in the amount of \$10,000 from the JW McConnell Foundation; and it was the first time a group of First Nations child welfare experts had an opportunity to see preliminary results from

CIS-1998. I remember sitting with my First Nations colleagues Joan Glode and Elsie Flette as Nico Trocmé and Barbara Fallon advanced through the presentation slides describing the situation of children reported to child welfare authorities in Canada. We all looked at each other and almost simultaneously said, "Those are 'our kids'." Hours later we were telling Nico about the historic, and current, mass removals of First Nations children by child welfare authorities in Canada. At the time, many in the First Nations communities could have described the impacts of poverty, inequitable services, and the devastation wrought by colonization on Aboriginal families, but there was no national research data to support our observations at a community level.

As First Nations people, we had a healthy skepticism about non-Aboriginal research projects (especially government funded ones) as our past experiences could more often be characterized as knowledge extraction and appropriation instead of aiding communities to understand and respond to the challenges facing them. This is where the personal integrity of the principal investigator, Dr. Trocmé, really counted. Despite our diversity, First Nations share a belief that ethics are something you are rather than something you put on for a profession or a project. We saw in Dr. Trocmé someone who had the capacity to lead a good research study and, equally important, someone who respected our knowledge and was willing to work with us to make sure this research made a positive difference for First Nations children and families. We agreed to work with the CIS team to analyze the First Nations data in the 1998 dataset and to plan the 2003 cycle. There is no way around it—when it comes to doing research with Aboriginal peoples—personal integrity and respect for others counts and so does following through to ensure results have an impact for community members.

I remember seeing the results of the first runs on the First Nations CIS data from 1998. First Nations were overrepresented among substantiated reports; First Nations were overrepresented among reports of neglect (although not for other types of child maltreatment); First Nations families faced more structural problems than their non-Aboriginal peers; and First Nations children went into child welfare care at higher rates than their non-Aboriginal peers (Blackstock, Trocmé, and Bennett 2004; Trocmé, Knoke, and Blackstock 2004). Even though First Nations had been reporting this for years, it was important to have it show up in a well designed scientific study because the reality was, and is, that mainstream child welfare pays more attention to traditional academic research than it does to equally valid Aboriginal forms of knowledge and research.

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In the second cycle of the CIS, researchers became active advocates for expanding the participation of First Nations child welfare agencies from the three included in 1998 to eight in the 2003 cycle. The inclusion of a wider range of agencies meant the CIS team was also obligated to take part in First Nations community research ethics boards that were developed to protect cultural knowledge, maintain the integrity of participants, and ensure that research made a difference. This was an important step for CIS researchers, as they had to "earn" their way into communities by demonstrating (not just verbalizing) respect for community experts, the importance of cultural knowledge, and a commitment to help change things on a ground level for First Nations children. It is absolutely critical that non-Aboriginal researchers not underestimate First Nations knowledge about their own situation or western research. Dr. Trocmé would later comment that some of the best and most detailed questions about research methods and analysis came from First Nations organizations participating in the CIS.

At the end of the 2003 cycle, and at the request of the First Nations Child and Family Caring Society of Canada, CIS researchers produced a separate report focusing on the First Nations findings to inform the development of a national funding formula for First Nations child welfare. As one of the agencies that participated in CIS-2003, Mi'kmaw Family and Children's, found the data so helpful that they gifted the study with a name and artwork for the 2003 report: Mesnmimk Wasatek (Trocmé et al. 2006), which translates to English as "catching a drop of light."

Dr. Trocmé and other members of the CIS team have carried through on their commitment to work with us to ensure the CIS made a difference at a community level by repeatedly presenting the data to First Nations leaders, child welfare experts, and provincial/territorial and federal authorities who impact First Nations child welfare. As a result, CIS has been used extensively by First Nations to inform reports to the United Nations, and to Canada's Parliament and Senate. As well, the CIS data was used to develop a national funding formula for First Nations child welfare and to amend training and practice in First Nations child welfare agencies.

I have read a great deal of material developed for non-Aboriginal researchers on how to work with Aboriginal peoples. Some of it is quite good such as the Ownership, Control, Access and Possession (OCAP) principles on indigenous intellectual property developed by the National Aboriginal Health Organization (Schnarch 2004). Although enshrining

OCAP principles is important, there is little written on how these important principles get reflected in a real life research relationship.

Many First Nations Elders know that the most important values are often expressed in the simplest and smallest of actions. This was true of the CIS as well. When I look back on what made this research relationship between non-Aboriginal researchers and First Nations so successful, I think of several things: the shared vision to ensure child welfare better supported First Nations children; the personal integrity and good nature of everyone involved; their shared investment in the relationships; and how small things like having good coffee and treats at all our meetings helped us weather the stresses and misunderstandings that are endemic to any research endeavour.

I wish I could say that any research team could work as effectively with First Nations but I do not believe this is so. The most important ingredients to making the CIS partnership work were the people involved—their training and knowledge were essential, but not overriding, ingredients. An Elder recently told me that you will be successful as long as you have a passionate cause grounded in spirit. If you get overwhelmed and distracted by the cause or by the mechanics of just doing the work, he warned, the spirit will leave you and passion alone can not accomplish the most important of missions, such as improving child welfare outcomes for First Nations children. I think that is true of the CIS research team as well. We had the shared vision and expertise and we kept the spirit by caring for, and respecting, the First Nations who participated in the study as well as one another.

This type of advice would never make it into a research methods textbook but, just as in starting a new job, the most important knowledge to doing a job right is learned around the water cooler and coffee pot. As for integrity, Elder Bea Shawanda (2007) described it best: it is doing the right thing when no one is looking. Integrity is in action not in rhetoric.

Dr. Trocmé and the CIS research team did the right thing when we were not looking. They donated research funds to ensure the respectful inclusion of First Nations in the 2008 cycle, and they shared the data with the non-Aboriginal community to underscore the importance of working respectfully with First Nation to address the overrepresentation of First Nations children. They rebuffed the skeptics who continue to believe, despite mounting evidence, that current child welfare approaches are adequate to meet the needs of First Nations children. That is what acting with integrity looks like in real terms. For our part, we tried to act with integrity too. We actively supported the study by providing information, funded the 2003 report, facilitated relationship-building with First Nations leaders and agencies, and worked cooperatively to collect and analyze the data and inform design modifications.

The First Nations component was expanded in CIS-2008 to include a First Nations advisory team and a larger number of agencies. We were able to build on our prior success although we, and members of the current CIS team, must continue to view spirit and integrity as equally important to doing the work well.

#### **ENDNOTES**

- i. Please see http://www.cwrp.ca/cis-2008
- ii. The CIS technical support team consisted of Nico Trocmé, Bruce MacLaurin, Barbara Fallon, Della Knoke, Tara Black, Caroline Felstiner and Martin Chabot.
- iii. Health Canada (contract # HT091-020001/001/SS); Public Health Agency of Canada (Center of Excellence for Child Welfare (contribution agreement #6792-15-2000/3150006); Canadian Institutes for Health Research, (contract # CAR-43277).
- iv. Québec is not included in the CIS-2003 Public dataset. Québec did not collect data directly from investigating workers. Only a few variables were selected from the administrative dataset in order to complete two tables in the CIS-2003 Major Findings report.
- v. Data on Aboriginal identity were not collected for cases investigated in Québec for the CIS-2003.
- vi. The Government of Ontario provided funds to oversample in Ontario as part of the CIS-1998, CIS-2003, and CIS-2008 studies. In Ontario, data about the incidence of reported child abuse and neglect exists for 1993, 1998 and 2003.

#### PUBLICATIONS USING THE CANADIAN INCIDENCE STUDY OF REPORTED CHILD ABUSE AND NEGLECT (1998 & 2003)

#### Peer-Reviewed Journal Articles (24)

- Bala, N., M. Mitnick, N. Trocmé, and C. Houston (2007). Sexual abuse allegations and parental separation: Smokescreen or fire? *Journal of Family Studies*, 3(1), 26-56.
- Black, T., N. Trocmé, B. Fallon, and B. MacLaurin. (in press). The Canadian child welfare system response to exposure in domestic violence investigations. *Child Abuse & Neglect.*
- Blackstock, C., N. Trocmé, and M. Bennett. (2004). Child maltreatment investigations among Aboriginal and non-Aboriginal Families in Canada: A comparative analysis. *Violence Against Women*, 10(8), 901-916.
- De Marco, R., L. Tonmyr, B. Fallon, and N. Trocmé. (2007). The effect of maltreatment co-occurrence on emotional harm among sexually abused children. *Victims and Offenders*, 2, 45-62.
- Dufour, S., C. Lavergne, M-C. Larrivée, and N. Trocmé. (2008). Who are these parents involved in child neglect? A differential analysis by parent gender and family structure. *Children and Youth Services Review*, 30(2), 141-156.
- Durrant, J., N. Trocmé, B. Fallon, C. Milne, and T. Black. (2009). Protection of children from physical maltreatment in Canada: An evaluation of the Supreme Court's definition of reasonable force. *Journal of Aggression*, *Maltreatment & Trauma*, 18, 1-24.
- Gonzalez, M., J-E Durrant, J. Brown, N. Trocmé, and M. Chabot. (in press). What predicts injury from physical punishment? A test of the typologies of violence hypothesis. *Child Abuse and Neglect*.
- Knoke, D., N. Trocmé, B. MacLaurin, and B. Fallon. (2009). Reliability of the Canadian Incidence Study Data Collection Instrument. *Canadian Journal* of Program Evaluation 23(1), 87-112.
- Larrivée, M.-C., C. Lavergne, S. Dufour, and N. Trocmé. (submitted). L'abus physique avec ou sans autres formes de mauvais traitements: Deux réalités? *Revue de psychoéducation.*
- Lavergne, C., S. Dufour, N. Trocmé, and M-C Larrivée. (submitted). Visible minority, Aboriginal and Caucasians children investigated by Canadian child protective services. *Child Welfare.*
- Marziali, E., T. Damianakis, and N. Trocmé. (2003). Nature and consequences of personality problems in maltreating caregivers. *Families in Society*, 84(4), 530-538.

- Mayer, M., S. Dufour, C. Lavergne, M. Girard, and N. Trocmé. (2006). Structures familiales, paternité et négligence : des réalités à revisiter. *Revue de psychoéducation*, 35(1), 157-181.
- Tourigny, M., M. Mayer, J. Wright, C. Lavergne, and N. Trocmé.(in press). Child maltreatment: Quebec Incidence Study. *Child Abuse & Neglect.*
- Trocmé, N. and N. Bala. (2005). False allegations of abuse when parents separate: Canadian Incidence Study of Reported Child Abuse and Neglect, 1998. *Child Abuse & Neglect, 29*(12), 1333-1345.
- Trocmé, N. and J. Durrant. (2003). Physical punishment and the response of the Canadian child welfare system: Implications for legislative reform. *Journal of Social Welfare and Family Law*, 25(1), 1-18.
- Trocmé, N. and M. Tourigny. (2000). Facteurs associés aux décisions d'engager des poursuites pénales après enquêtes sur des abus physiques ou sexuels infligés à des enfants. *Criminologie*, 33(2), 7-30.
- Trocmé, N., B. Fallon, and B. MacLaurin. (2005). What is driving increased child welfare caseloads in Canada?: Analysis of the 1993 and 1998 Ontario Incidence Studies of Reported Child Abuse and Neglect, *Child Welfare*, 84(3), 341-362.
- Trocmé, N., D. Knoke, and C. Blackstock. (2004). Pathways to the overrepresentation of Aboriginal children in Canada's child welfare system. *Social Service Review*, 78(4), 577-600.
- Trocmé, N., D. Knoke, B. Fallon, and B. MacLaurin. (in press). Differentiating between substantiated, suspected and unfounded maltreatment in Canada. *Child Maltreatment.*
- Trocmé, N., B. MacLaurin, J. Fallon, M. Daciuk, M. Tourigny, and D. Billingsley. (2001). The Canadian incidence study of reported child abuse and neglect: Methodology. *Canadian Journal of Public Health*, 92(4), 259-263.
- Trocmé, N., H. MacMillan, B. Fallon, and R. DeMarco. (2003). Nature and severity of physical harm caused by child abuse and neglect: Results from the Canadian Incidence Study. *Canadian Medical Association Journal*, 169(9), 911–915.
- Trocmé, N., M. Tourigny, B. MacLaurin, and B. Fallon. (2003). Major findings from the Canadian Incidence Study of Reported Child Abuse and Neglect. *Child Abuse and Neglect*, 27(12),1427-1439.
- Wein, F., C. Blackstock, J. Loxley, and N. Trocmé. (2007). Keeping First Nations children at home: A few federal policy changes could make a big difference. *The First Peoples Child and Family Review*, 3(1), 10-14.
- Wekerle, C., A-M Wall, N. Trocmé, and E. Leung. (2007). Cumulative stress and substantiated maltreatment: The importance of caregiver vulnerability and adult partner violence. *Child Abuse & Neglect*, 31(4), 427-443.

#### **Book Chapters (10)**

- Fallon, B., B. MacLaurin, N. Trocmé, and C. Felstiner. (2003). The Canadian Incidence Study of Child Abuse and Neglect: A profile of a national sample of child protection workers. In K. Kufeldt & B. MacKenzie (Eds.), *Child welfare: Connecting research, policy and practice* (pp.41-52). Waterloo, ON: Wilfred Laurier University Press.
- Hayes, J., N. Trocmé, and A. Jenney. (2006). Children's exposure to domestic violence. In R. Alaggia & C. Vine (Eds.), *Cruel but not unusual: Violence in Canadian families. A sourcebook of history, theory & practice* (pp. 201-235). Waterloo, ON: Wilfrid Laurier University Press.
- MacLaurin, B. and N. Trocmé., (2005). Child maltreatment in Canada. In J. Winderdyk (Ed.), *Issues and perspectives of young offenders in Canada* (3<sup>rd</sup> ed.) (pp. 289-310). Toronto, ON: HBJ-Holt Canada.
- MacLaurin, B., N. Trocmé, and B. Fallon. (2003). Characteristics of investigated children and families referred to out-of-home placement. In K. Kufeldt & B.MacKenzie (Eds.), Child welfare: Connecting research, policy and practice (pp.27-40). Waterloo, ON: Wilfred Laurier University Press.
- Tonmyr, L., N. Trocmé, and B. Fallon. (2006). Overview of the Canadian Incidence Study of Reported Child Abuse and Neglect (CIS), 2003. In G. Phaneuf (Ed.), *Family violence in Canada: A statistical profile 2006.* (9 pages in Catalogue no. 85-224). Ottawa, ON: Statistics Canada.
- Trocmé, N. (2005). Child Maltreatment and its impact on psychosocial child development epidemiology / Maltraitance chez les enfants son impact sur l'épidémiologie du développement psychosocial. In R. Tremblay, R. G. Barr, & R. V. Peters (Eds.), *Encyclopedia of early childhood development*, (pp. 1-5 online). Montreal, QC: Centre of Excellence for Early Child Development.
- Trocmé, N., D. Knoke, C. Shangreaux, B. Fallon, and B. MacLaurin. (2005). The experiences of First Nations children coming into contact with the child welfare system in Canada. In *Wen:De, We are coming to the light of day.* (pp. 60-86). Ottawa, ON: First Nations Child and Family caring Society.
- Trocmé, N., G. Phaneuf, S. Scarth, B. Fallon, and B. MacLaurin. (2003). The Canadian Incidence Study of Reported Child Abuse and Neglect: Methodology and major findings. In K. Kufeldt & B. MacKenzie (Eds.), *Child welfare: Connecting research, policy and practice* (pp.27-40). Waterloo, ON: Wilfred Laurier University.
- Trocmé. N. and D. Wolfe, D. (2001). The Canadian Incidence Study of Reported Child Abuse and Neglect. In G. Phaneuf (Ed.), *Family violence* in Canada: A statistical profile 2001. (10 pages in Catalogue no. 85-224). Ottawa, ON: Statistics Canada.

#### Chapter 5

Vine, C., N. Trocmé, and J. Finlay. (2006). Children abused, neglected & living with violence: An overview. In R. Alaggia & C. Vine (Eds.), *Cruel but not unusual: Violence in Canadian families. A sourcebook of history, theory & practice.* (pp. 147-176). Waterloo, ON: Wilfrid Laurier University Press.

#### Reports (19)

- Black, T., F. Chaze, B. Fallon, and B. MacLaurin. (2005). Canadian Incidence Study of Reported Child Abuse and Neglect – 2003. *Canada's Children: Child Welfare League of Canada*, 11(2), 9-10.
- Black, T., B. Fallon, A. Fudge Schormans, D. Knoke, B. MacLaurin, M. McCormack, L. Pitman, and N. Trocmé. (2007). New findings from the Canadian incidence study of reported child abuse and neglect-2003. *Canada's Children, 13*(1), 8-12.
- Chaze, F., T. Black, B. Fallon, B. MacLaurin, and N. Trocmé. (2006). Canadian incidence, study of reported child abuse and neglect (CIS-2003): Selected findings. *Canada's Children*, 12(1), 10-13.
- Fallon, B., N. Trocmé, B. MacLaurin, D. Knoke, T. Black, J. Daciuk et al. (2005). Ontario incidence study of reported child abuse and neglect, OIS 2003: Major findings report. Toronto, ON: Centre of Excellence for Child Welfare.
- Fast, E., C. Felstiner, and T. Black. (2007). 2008 Canadian incidence study of reported child abuse and neglect. *Canada's Children*, 13(3), 7-11.
- Knoke, D., H. Kiang, N. Trocmé, B. Fallon, J. Daciuk, and B. MacLaurin. (2004). *Reliability of the Canadian Incidence Study data collection instrument*. Toronto, ON: Centre of Excellence for Child Welfare, Faculty of Social Work, University of Toronto.
- Leslie, B. (2007). Changing household demographics: Ontario incidence studies of reported child abuse and neglect 1998 and 2003. *Ontario Association of Children's Aid Societies Journal*, 51(3), 24-25.
- MacLaurin, B., M. McCormack, N. Trocmé, C. Blackstock, B. Fallon, D. Knoke, T. Black, T., and L. Pitman. (2007). Understanding the overrepresentation of First Nations children in Canada's child welfare system: An analysis of the Canadian Incidence Study of Reported Child Abuse & Neglect (CIS-2003). *Canada's Children*, 13(1), 19-23.
- MacLaurin, B., N. Trocmé, B. Fallon, J. Daciuk, L. Pitman, and M. McCormack. (2006). Northwest Territories incidence study of reported child abuse and neglect, (NWTIS-2003): Major findings report. Calgary, AB: University of Calgary.
- MacLaurin, B., N. Trocmé, B. Fallon, M. McCormack, L. Pitman, N. Forest et al. (2005). Alberta incidence study of reported child abuse and neglect, AIS-2003: Major findings. Calgary, AB: University of Calgary.

- Parker, J., T. Black, and N. Trocmé. (2007). Adolescent childbearing and child neglect: What's the connection? *Canada's Children*, 13(2), 9-12.
- Tonmyr, L., B. Fallon, B. MacLaurin, T. Black, and N. Trocmé. (2007). Surveillance and research through child welfare agencies. *Canada's Children* 13(2), 38-41.
- Tourigny, M., M. Mayer, J. Wright, C. Lavergne, N. Trocmé, S. Hélie et al. (2003). Québec incidence study of reported child abuse, neglect, abandonment and serious behaviour problems (QIS): Highlights and final report. Montréal, QB: Centre de liaison sur l'intervention et la prevention pyschosociale (CLIPP).
- Trocmé, N., B. Fallon, B. MacLaurin, J. Daciuk, S. Bartholomew, J. Ortiz et al. (2002). 1998 Ontario incidence study of reported child abuse and neglect (OIS 1998). Toronto, ON: Centre of Excellence for Child Welfare, Faculty of Social Work, University of Toronto.
- Trocmé, N., B. Fallon, B. MacLaurin, J. Daciuk, C. Felstiner, T. Black et al. (2005). Canadian incidence study of reported child abuse and neglect – 2003: Final report. Ottawa, ON: Minister of Public Works and Government Services Canada.
- Trocmé, N., B. MacLaurin, B. Fallon, J. Daciuk, D. Billingsley, M. Tourigny et al. (2001). *Canadian Incidence Study of Reported Child Abuse and Neglect: Final report.* Ottawa, ON: Minister of Public Works and Government Services Canada.
- Trocmé, N., B. MacLaurin, B. Fallon, D. Knoke, L. Pitman, and M. McCormack, M. (2005). Mesnmimk Wasatek, catching a drop of light: Understanding the overrepresentation of First Nations children in Canada's child welfare system: An analysis of the Canadian incidence study of reported child abuse and neglect (CIS-2003). Toronto, ON: Centre of Excellence for Child Welfare.
- Trocmé, N., D. McPhee, K. Tam, and T. Hay. (1994). Ontario Incidence Study of Reported Child Abuse and Neglect: Final report. Toronto, ON: Institute for the Prevention of Child Abuse.

#### Fact Sheets (15)

- Black, T., N. Trocmé, B. Fallon, B. MacLaurin, C. Roy, C., and J. Lajoie. (2005). Children's exposure to domestic violence in Canada. CECW Information Sheet #28E. Montreal, QC: School of Social Work, McGill University.
- Brown, I. and A. Fudge Schormans. (2004). *Maltreatment rates in children with developmental delay*. CECW Information Sheet #9E, Disabilities Series.
- Brown, I. and A. Fudge Schormans. (2004). *Physical harm and family composition: Maltreated children with developmental delay.* CECW Information Sheet #11E, Disabilities Series.

- Fallon, B., J. Lajoie, N. Trocmé, F. Chaze, B. MacLaurin, and T. Black. (2005). Sexual abuse of children in Canada. CECW Information Sheet #25E. Montreal, QC: School of Social Work, McGill University.
- Fudge Schormans, A. and I. Brown. (2004). Single mothers of children with developmental delay: Maltreatment and life stressors. CECW Information Sheet #16E.
- Knott, T., N. Trocmé, and N. Bala. (2004). False allegations of abuse and neglect. CECW Information Sheet #13E.
- MacLaurin, B., N. Trocmé, B. Fallon, F. Chaze, T. Black, and J. Lajoie. (2005). Physical abuse of children in Canada. CECW Information Sheet #24E. Montreal, QC: School of Social Work, McGill University.
- Montgomery, V. and N. Trocmé. (2004). *Injuries caused by child abuse and neglect.* CECW Information Sheet #10E.
- Roy, C., T. Black, N. Trocmé, B. MacLaurin, and B. Fallon. (2005). *Child neglect in Canada*. CECW Information Sheet #27E. Montreal, QC: School of Social Work, McGill University.
- Trocmé, N., B. MacLaurin, B. Fallon, T. Black, and J. Lajoie. (2005). Child abuse and neglect investigation in Canada: Comparing 1998 and 2003 data. CECW Information Sheet #26E. Montreal, QC: McGill University, School of Social Work.
- Trocmé, N., J. Durrant, I. Marwah, and R. Ensom. (2004). *Physical abuse of children in the context of punishment*. CECW Information Sheet #8E.
- Trocmé, N., B. Fallon, B. MacLaurin, T. Black, and C. Roy. (2005). *Child emotional maltreatment in Canada*. CECW Information Sheet #29E.
- Trocmé, N., T. Neves, B. Fallon, B. MacLaurin, and S. Sullivan. (2002). Ontario Incidence Study of Reported Child Abuse and Neglect – 1993/1998: Sources of referrals. CECW Information Sheet, OIS Series #3.
- Trocmé, N., J. Siddiqi, B. Fallon, B. MacLaurin, and S. Sullivan. (2002). Ontario Incidence Study of Reported Child Abuse and Neglect – 1993/1998: Maltreatment rates. CECW Information Sheet, OIS Series #1.
- Trocmé, N., J. Siddiqi, B. Fallon, B. MacLaurin, and S. Sullivan, S. (2002). Ontario Incidence Study of Reported Child Abuse and Neglect – 1993/1998: Outcomes of investigations. CECW Information Sheet, OIS Series #2.

#### Other CIS-1998 related documents (4)

Sedlak, A. and M. Winglee. (2001). Comparing the CIS and the NIS: Design implications and strategies. Prepared for the Centre of Excellence for Child Welfare Research Forum on the CIS and EIQ, November 28-29, 2001.

- Trocmé, N., H. MacMillan, B. Fallon, and R. De Marco. (2003). Nature and severity of physical harm caused by child abuse and neglect: Results from the 1998 Canadian Incidence Study. Ottawa, ON: Canadian Medical Association Journal.
- Ward, M. G. K. and M. Bennet. (2003). *Studying child abuse and neglect in Canada: We are just at the beginning*. Ottawa, ON: Canadian Medical Association Journal.
- Zuravin, S. (2001). Secondary analysis of data from the 1998 Canadian Incidence Study of Reported Child Abuse and Neglect. Prepared for the Centre of Excellence for Child Welfare Research Forum on the CIS and EIQ, November 28-29, 2001.

#### REFERENCES

- Amnesty International. 2006. It is a matter of rights: Improving the protection of economic, social and cultural rights in Canada. Ottawa, ON: Amnesty International Canada.
- Assembly of First Nations. 2007. *Leadership action plan on First Nations child welfare*. Ottawa, ON: Assembly of First Nations.
- Blackstock, C. 2007. Residential schools: Did they really close or just morph into child welfare? *Indigenous Law Journal* 6 (1): 71-78.
- Blackstock, C., N. Trocmé, and M. Bennett. 2004. Child welfare response to Aboriginal and Caucasian children in Canada: A comparative analysis. *Violence Against Women* 10 (8): 901-916.
- Blackstock, C., T. Prakash, J. Loxley, and F. Wien. 2005. Wen:de We are coming to the light of day. Ottawa, ON: First Nations Child & Family Caring Society of Canada.
- Durrant, J., N. Trocmé, B. Fallon, C. Milne, and T. Black. 2009.. Protection of children from physical maltreatment in Canada: An evaluation of the Supreme Court's definition of reasonable force. Submitted to *Journal of Aggression, Maltreatment & Trauma*.
- Efron, B. 1982. *The jackknife, the bootstrap and other resampling plans*. Philadelphia: Society for Industrial and Applied Mathematics.
- Fallon, B., N. Trocmé, B. MacLaurin, D. Knoke, T. Black, J. Daciuk, J. et al. 2005. Ontario incidence study of reported child abuse and neglect, OIS 2003: Major findings report. Toronto, ON: Centre of Excellence for Child Welfare.
- Kimmelman, E. 1985. No quiet place: Manitoba review on Indian and Métis adoptions and placements. Winnipeg, MB: Manitoba Ministry of Community Services.

- Knoke, D., N. Trocmé, B. MacLaurin, and B. Fallon. (2009). Reliability of the Canadian Incidence Study Data Collection Instrument. *Canadian Journal* of Program Evaluation 23 (1): 87-112.
- MacLaurin, B, N. Trocmé, B. Fallon, M. McCormack, L. Pitman, N. Forest et al. 2005. Alberta incidence study of reported child abuse and neglect, AIS-2003: Major Findings. Calgary, AB: University of Calgary.
- McDonald, R. J., and P. Ladd. 2000. First Nations child and family services joint national policy review: Final Report. Ottawa, ON: Assembly of First Nations.
- Milloy, J. 1999. A national crime: The Canadian government and the residential school system 1879-1986. Winnipeg, MB: University of Manitoba Press.
- Morganstein, D. and J. M. Brick 1996. WesVarPC: Software for computing variance estimates from complex designs. In *1996 Annual Research Conference Proceedings*, ed. US Census Bureau, 861-866. Washington, DC: US Census Bureau.
- Royal Commission on Aboriginal Peoples. 1996. *Report of the Royal Commission* on Aboriginal Peoples. Ottawa, ON: Indian and Northern Affairs Canada.
- Schnarch, B. 2004. Ownership, control, access and possession or self determination applied to research. Ottawa, ON: National Aboriginal Health Organization.
- Shawanda, B. 2007. Personal conversation, Wee chi ti win Child and Family Services, Fort Francis Ontario.
- Tourigny, M., M. Mayer, J. Wright, C. Lavergne, N. Trocmé, S. Hélie et al. 2003. Québec incidence study of reported child abuse, neglect, abandonment and serious behaviour problems (QIS): Highlights and final Report. Montréal, QB: Centre de liaison sur l'intervention et la prévention psychosociale (CLIPP).
- Trocmé, N., B, Fallon, B. MacLaurin, J. Daciuk, S. Bartholomew, J. Ortiz et al. 2002. 1998 Ontario incidence study of reported child abuse and neglect (OIS 1998). Toronto, ON: Centre of Excellence for Child Welfare.
- Trocmé, N., B. Fallon, B. MacLaurin, J. Daciuk, C. Felstiner, T. Black, L. Tonmyr, C. Blackstock, K. Barter, D. Turcotte, and R. Cloutier. 2005. *Canadian Incidence Study of Reported Child Abuse and Neglect—2003 Major Findings*. Ottawa, ON: Minister of Public Works and Government Services Canada.
- Trocmé, N., D. Knoke, and C. Blackstock. 2004. Pathways to the overrepresentation of Aboriginal children in Canada's child welfare system. *Social Service Review* 78 (4): 577-601.
- Trocmé, N., B. MacLaurin, B. Fallon, J. Daciuk, D. Billingsley, M. Tourigny et al. 2001. Canadian incidence study of reported child abuse and neglect: Final report. Ottawa, ON: Minister of Public Works and Government Services Canada.

- Trocmé, N., B. Maclaurin, B. Fallon, J. Daciuk, M. Tourigny, and D. Billingsley. 2001. Canadian Incidence Study of Reported Child Abuse and Neglect: Methodology, *Canadian Journal of Public Health* 92 (4): 259-263.
- Trocmé, N., B. MacLaurin, B. Fallon, D. Knoke, L. Pitman, and M. McCormack. 2006. Mesnmimk Wasatek — Catching a drop of light. Understanding the over-representation of First Nations children in Canada's child welfare system: An analysis of the Canadian incidence study of reported child abuse and neglect (CIS-2003). Ottawa, ON: First Nations Child & Family Caring Society of Canada.
- Trocmé, N., D. McPhee, K. Tam, and T. Hay. 1994. *Ontario incidence study of reported child abuse and neglect: Final report.* Toronto, ON: Institute for the Prevention of Child Abuse.