

The CRABE Project

Maps of Child Maltreatment and Associated Factors—An Interactive Diagnostic Tool for Communities¹

Sarah Dufour, Patrice Pitre, Micheline Mayer, Jean Carrière, and Karina Massicotte

For close to three years, a multidisciplinary team has been working to develop an interactive diagnostic tool for communities with the aim of helping them mobilize effectively to prevent child maltreatment. The goal of the CRABE project (*Cartes sur les risques, les abus et les besoins des enfants*) is to develop a geographic information system (GIS) capable of simply, reliably and uniformly providing partners with information on risk factors and protective factors in their communities, as well as information about the location of resources and services.

Background

Child maltreatment is a major social problem in Quebec. Studies on the subject confirm that a great many children are maltreated and that provincial statistics conceal significant local variations. But although there are significant geographic variations, communities rarely have access to local data on the scope of the problem and the presence of risk and protective factors. A common understanding of the situation, based on comprehensive, reliable data, could facilitate the job of local stakeholders mobilizing to prevent abuse and neglect. More specific diagnoses could enable communities to plan their preventive action more effectively.

Project goal and users

CRABE is a new tool that can support such a community diagnosis: a geographic information system (GIS), which maps factors relat-

ing to the safety of children in their communities. CRABE analyses geographically referenced information, allowing users to query it and display it in several forms, including maps, tables and charts. GISs are often designed for academics and researchers who wish to influence public policies. The goal of this project is to extend the use of a GIS to other stakeholders in local communities, with a view to disseminating information and mobilizing communities. More precisely, CRABE is intended for local groups within communities. Within the framework of local initiatives, such groups may be made up of parents, concerned citizens and representatives of many spheres of activity who join together to ensure that children are protected as far as possible against threats to their development.

The objective of the CRABE project is to develop, implement and assess a thorough, flexible, relevant, user-friendly GIS on children's safety in communities within Quebec. CRABE users access the system over a password-protected intranet. CRABE offers a number of advantages to local stakeholders, including:

- Access to scientifically valid local data,
- A visual or statistical representation of child maltreatment and associated factors,
- A common information base,
- A diagnosis of their community,
- An opportunity to build capacity, and
- A capability to track child maltreatment and associated factors over time.

Topics Covered by CRABE

The information available through CRABE is organized around four topics:

1. Maltreatment rates

There is information on maltreatment rates in the target areas. To ensure uniformity, the project only includes physical abuse and neglect. In fact, researchers generally consider that the causal factors and impact of sexual abuse are different from those of other types of abuse. Rates are estimates of the annual proportion of children with at least one investigated report for neglect or physical abuse as well as the annual proportion of children receiving protective services for the same problems.

2. Local risk factors *and*

3. Local protective factors

There are also data on the local presence of risk and protective factors. Risk factors are personal or environmental conditions, circumstances or characteristics, such as poverty, that increase the probability of child maltreatment. Conversely, protective factors are personal or environmental conditions, circumstances or characteristics that decrease the probability of child maltreatment, such as a stable, supportive parental relationship.²

A review of the literature determined the most solidly documented risk and protective factors in empirical studies of maltreatment.³ This strategic yet conservative choice meant leaving out emerging knowledge in the causal factors of maltreatment. The list of factors available to CRABE users is notable more for its selectiveness and scientific rigour rather than its exhaustiveness.

4. Other community characteristics

CRABE also provides complementary data that, although not directly related to maltreatment, give users a better understanding of their communities. This is information on socioeconomic characteristics (e.g., employment rates, mean household income) and sociodemographic characteristics (e.g., number of two-parent families, and the mean number of children per two-parent and single-parent family).

The Quebec Department of Health and Social Services (Ministère de la Santé et des Services sociaux) child protective services-*Youth Protection Act* database, the most recent Canadian census, and published reports and statistics, including the 2001 health profile by the Quebec public health institute (INSPQ) are the data sources currently being used in CRABE.

Implementation

Three workshops were held to familiarize CRABE users with its content and functionality:

1. Basic concept and use of territorial profiles
2. Customization
3. Uploading customized data

The initial goals of the three-year project were to develop and implement CRABE in a limited number of communities. The results of the pilot project assessment in six Quebec communities were quite favourable. Training, achievement of objectives and the intranet were all highly rated. Participants also identified a number of strengths, including the project's scientific credibility and theoretical robustness, but said that there were not as much data, and especially not as much "local" data, as they would have liked. In response to the assessment, the project will be enhanced and made available more widely throughout the province.

The CRABE project relies on a variety of highly committed partners all working together through a steering committee, scientific committee and partners' committee to ensure that the project runs smoothly.

Issues

Some significant issues have arisen during project development and implementation. Ethics and confidentiality are already ensured by a number of means (making users aware of the issues, data processing, agreements with data suppliers, etc.) and remain central concerns of the designers. Integrity is also an issue, in terms of both use of the data (e.g., ensuring that they are used for the purposes for which they were gathered) and dissemination (e.g., avoiding stigmatizing certain communities). Furthermore, the available data are limited, which means that not all topics can be documented to the same extent. Another challenge is making CRABE user friendly, including explaining the concepts in plain language. Finally, the question is, will the communities actually use the GIS for their own purposes or will it be perceived as a creation of researchers for researchers?

Conclusion

CRABE is an innovative project that offers an interactive diagnostic tool for groups working to prevent child maltreatment and improve child welfare in their communities. The data cover maltreatment rates as well as the presence of risk

and protective factors. The goal of the project is to develop and implement the tool in a limited number of communities before a Quebec-wide rollout. The process also involves some other issues that are far from negligible, including ethical concerns and the ways that the communities themselves use the tool.

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- 1 This information sheet has been reviewed by experts in the field of child welfare.
 - 2 Peirson, L., Laurendeau, M.-C., & Chamberland, C. (2001). Context, contributing factors, and consequences. In L. Prilleltensky, G. Nelson, & L. Peirson (Eds.), *Promoting family wellness and preventing child maltreatment: Fundamentals for thinking and action* (pp. 41-123). Toronto: University of Toronto Press.
 - 3 Dufour, S., Massicotte, K., & Mayer, M. (2005). *Inventaire des facteurs de risque, des facteurs de protection et des facteurs associés aux mauvais traitements intrafamiliaux envers les enfants*. Research report. Montreal: GRAVE-ARDEC.

About the authors: Sarah Dufour is a professor at the School of Psychoeducation, University of Montreal; Patrice Pitre is a research officer and Jean Carrière is a professor in the Geography Department, University of Quebec, Montreal; Micheline Mayer is a researcher (retired) with the IRDS (Institute for Research on Children's Social Development); Karina Massicotte is a research assistant in the Psychology Department, University of Quebec, Montreal.

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