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Québec



LONGITUDINAL STUDY OF CHILD
DEVELOPMENT IN QUÉBEC
(ÉLDEQ 1998-2002)

5-MONTH-OLD INFANTS

COLLECTION
**Health and
Well-Being**

Concepts, Definitions and Operational
Aspects

Volume I, Number 12

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This report was produced and published by the *Institut de la statistique du Québec*, and is distributed by *Les Publications du Québec*

Les Publications du Québec

1500-D Charest Boulevard West

Ste-Foy, Québec

G1N 2E5

National Library of Canada

Bibliothèque nationale du Québec

ISBN 2-551-19950-6

ISBN 2-551-19962-X

(*édition originale*) ISBN 2-551-19327-3

ISBN 2-551-19911-5

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November 2001

Foreword

Similar to what has been observed in the majority of industrialized nations over the past twenty years, Québec and Canada have seen a significant increase in the costs related to maladjustment, particularly in young people. The Longitudinal Study of Child Development in Québec (*l'Étude longitudinale du développement des enfants du Québec*) (ÉLDEQ 1998-2002) being conducted by *Santé Québec* (Health Québec),¹ a division of *l'Institut de la statistique du Québec (ISQ)*² (Québec Institute of Statistics) in collaboration with a group of university researchers, will provide an indispensable tool for action and prevention on the part of government, professionals and practitioners in the field, who every day must face maladjustment in children.

More precisely, a major purpose of this longitudinal study of a cohort of newborns is to give Québec a means of preventing extremely costly human and social problems, such as school dropout, delinquency, suicide, drug addiction, domestic violence, etc. Similar to what is being done elsewhere (in the UK, New Zealand, the US), *Santé Québec* and a group of researchers have designed and developed a longitudinal study of children 0 to 5 years of age (2,223 children in this study and 600 twins in a related one). It will help gain a better understanding of the factors influencing child development and psychosocial adjustment.

The general goal of ÉLDEQ 1998-2002 is to learn the PRECURSORS, PATHS and EFFECTS, over the medium and long terms, of children's adjustment to school. ÉLDEQ is the logical extension of the National

Longitudinal Study of Children and Youth (NLSCY, Canada). These Québec and Canada-wide longitudinal studies are both comparable and complementary. They employ distinct survey methods, and use different techniques to obtain the initial samples. Though many of the instruments are practically identical, about a third of those being used in ÉLDEQ are not the same.

This first report casts light on the enormous potential of the data generated by this study. From the descriptive analyses of the results of the first year of the study to the longitudinal analyses of subsequent years, there will be an enormous wealth of data. With updated knowledge on the development of the cohort of young children, the annual longitudinal follow-up will respond to the needs which the *ministère de la Santé et des Services Sociaux du Québec - MSSS* (Ministry of Health and Social Services), who financed the data collection, expressed in both the Report of the Working Group on Youth (*Rapport Bouchard, 1991, Un Québec fou de ses enfants* - the Bouchard Report, 1991, A Québec in Love with its Children) and the policy papers entitled *Politique de la santé et du bien-être, 1992* (Health and Well-Being) and *les Priorités nationales de santé publique 1997-2002* (Public Health Priorities 1997-2002).

Director General

Yvon Fortin

-
1. Certain French appellations in italics in the text do not have official English translations. The first time one of these appears, the unofficial English translation is shown immediately after it. Following this, for ease in reading, only the official French name appears in the text in italics, and it is suggested the reader refer to the Glossary for the English translation.
 2. *Santé Québec* officially became a division of the *ISQ* on April 1, 1999.

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Volume 1 of ÉLDEQ 1998-2002 was produced by:

Direction Santé Québec of the Institut de la statistique du Québec

Volume 1 Number 12 of ÉLDEQ 1998-2002 was translated by:

Joan Irving

ÉLDEQ 1998-2002 is funded by the:

Ministère de la Santé et des Services sociaux du Québec (MSSS) (Ministry of Health and Social Services of Québec)

National Health Research and Development Program of Canada (NHRDP)

Social Sciences and Humanities Research Council of Canada (SSHRC)

Conseil québécois de la recherche sociale (CQRS) (Social Research Council of Québec)

Fonds pour la formation de chercheurs et l'aide à la recherche (FCAR) (Researcher Education and Research Assistance Fund)

Fonds de la recherche en santé du Québec (FRSQ) (Health Research Fund of Québec)

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Suggested Citations:

THIBAUT, J., M. JETTÉ and H. DESROSIERS (2001). "Concepts, Definitions and Operational Aspects, Part I – Design of Phase I of ÉLDEQ, Instruments and Procedures" in Longitudinal Study of Child Development in Québec (ÉLDEQ 1998-2002), Québec, Institut de la statistique du Québec, Vol. 1, No. 12.

DESROSIERS, H., M. BOIVIN and L. DES GROSEILLIERS (2001). "Concepts, Definitions and Operational Aspects, Part II – Data and Variables" in Longitudinal Study of Child Development in Québec (ÉLDEQ 1998-2002), Québec, Institut de la statistique du Québec, Vol. 1, No. 12.

This analytical paper is also available in French. Ce numéro est aussi disponible en version française sous le titre :

THIBAUT, J., M. JETTÉ et H. DESROSIERS (2001). « Aspects conceptuels et opérationnels, section I – Conception de la phase I de l'ÉLDEQ, instruments et déroulement » dans *Étude longitudinale du développement des enfants du Québec (ÉLDEQ 1998-2002)*, Québec, Institut de la statistique du Québec, vol. 1, n° 12.

DESROSIERS, H., M. BOIVIN et L. DES GROSEILLIERS (2001). « Aspects conceptuels et opérationnels, section II – Les données et les variables dérivées » dans *Étude longitudinale du développement des enfants du Québec (ÉLDEQ 1998-2002)*, Québec, Institut de la statistique du Québec, vol. 1, n° 12.

Note: We would like to thank Lucie Gingras and Ghyslaine Neill of *Santé Québec, Institut de la statistique du Québec* (Health Québec Division, Québec Institute of Statistics) for their careful reading of and comments on an early draft of this document.

Caution

Unless indicated otherwise, "n" in the tables represents data weighted to the size of the initial sample.

Because the data were rounded off, totals do not necessarily correspond to the sum of the parts.

To facilitate readability, proportions higher than 5% were rounded off to the nearest whole unit in the text, and to the nearest decimal in tables and figures.

Symbols:

... Not applicable (N/A)
.. Data not available
– Nil or zero
p < Refers to the threshold of significance

Abbreviations

CV Coefficient of variation
Not avail. Not available
Not signif. Not significant

Acknowledgments

Santé Québec recognizes that the development and implementation of the Longitudinal Study of Child Development in Québec (ÉLDEQ 1998-2002) flows directly from the synergy of effort and professionalism of many people throughout the whole process of mounting a survey of this size. Since 1995, individuals, various groups and organizations, a survey firm and the staff of *Santé Québec* have become indispensable links in making this ambitious project a reality - the first annual longitudinal survey of Québec infants.

A major characteristic of this project is that a pretest and survey are conducted every year. To accomplish this, we must annually: 1) make two sets of instruments (pretest and survey), 2) conduct two data collections, 3) analyze two sets of data, and 4) produce two types of communications materials. The results of each pretest means fine-tuning and developing instruments for the survey, which follows 17 months later. The results are sent to the parents (highlights), published in reports, and communicated to the scientific community and the public at large. The professionals and staff involved in collecting the data, as well as those involved before and after, must put their nose to the grindstone every year. We cannot over-emphasize our profound recognition of the incredible, concerted effort they are putting into this project over an 8-YEAR period, from the first pretest in 1996 to the final report to be published in 2004!

First, it must be said that without Daniel Tremblay, Director of *Santé Québec* (now part of the *ISQ*) since 1994, Christine Colin, Assistant Deputy Minister responsible for Public Health 1993-1998, Aline Émond, Director of *Santé Québec* 1986-1993, Richard E. Tremblay, Director of the ÉLDEQ research project, and Marc Renaud, President of *le Conseil québécois de la recherche sociale - CQRS* 1991-1997. ÉLDEQ 1998-2002, also known as "In 2002...I'll Be 5 Years Old!," would have never seen the light of day. In turn and together, they developed, defended and obtained the financing for this study. Thank you for your indefatigable tenacity.

A warm thanks to all the researchers and the support staff of their respective research groups, whose determination over the years has never wavered. Putting

their research grants together every year has contributed to the development of the instruments, analysis of the data and publication of the copious results.

I would like to thank Lyne Des Groseilliers, ÉLDEQ's statistician since 1996, Robert Courtemanche, statistical advisor, and France Lapointe, ÉLDEQ's statistician 1995-1996. These three colleagues in the *Direction de la méthodologie et des enquêtes spéciales* (Methodology and Special Surveys Division) (*ISQ*) managed, with great skill, to set the signposts and navigate the somewhat winding course of this large-scale survey first.

A very special thanks to all the master designers of the National Longitudinal Study of Children and Youth (NLSCY, Canada). Without their expertise, advice and generosity, our survey would never have been accomplished. In many senses of the word "modeling," ÉLDEQ has learnt a lot from the NLSCY.

We would also like to extend out gratitude to the staff of the *Groupe de recherche sur l'inadaptation psychosociale chez l'enfant - GRIP* (Research Unit on Children's Psychosocial Maladjustment) at the University of Montréal. Without their expertise, some of our survey instruments would have never been computerized to such a high level of quality.

We would like to thank the personnel in the *Service de support aux opérations de la Régie de l'assurance-maladie du Québec - RAMQ* (Operations Support Section of the Québec Health Insurance Board). Without their efficiency, fewer letters of introduction would have found their way to the correct addresses of respondents.

Our sincerest thanks go to our survey firm, *Bureau d'interviewers professionnels (BIP)*. Since 1996, this polling company has been responsible for data collection in the pretests and surveys, and follow-up of families both inside and outside of Québec. Lucie Leclerc, President of *BIP*, has set the standard of quality for our numerous and complex data collections. Assisted by Véronique Dorison, she has instilled in her interviewers a great sense of respect for the respondent families, as well as a rigorous regard for all the norms governing this first-of-a-kind survey in Québec.

A big thank-you to the directors-general, directors of professional services, and staff of the medical records departments of some 80 hospitals in the province who accepted to collaborate in our study at a time when resources were rare and time was at a premium, and when the medical records departments in many hospitals were merging or in the process of doing so. Their support was exceptional. Birthing centres also graciously accepted to participate in this first Québec longitudinal study of children. A special thanks to Julie Martineau, medical records specialist, who contributed to the analysis of indispensable medical information by ensuring very rigorous coding of the data, which often lay concealed in the medical files of the infants and their mothers.

It goes without saying that the staff of *Santé Québec* Division directly attached to ÉLDEQ 1998-2002 are the cornerstone of its success from practically every point of view. Special thanks for their ongoing contribution and constant hard work go to Hélène Desrosiers and Josette Thibault, responsible respectively for analysis of the data and creation of the measurement instruments; Martin Boivin, Rolland Gaudet and Gérald Benoît, who constantly pushed the limits of what computer software can do in terms of programming and data processing; Suzanne Bernier-Messier and Diane Lord, who give meaning to the word versatility, who must organize, code and manage incredible quantities of data to ensure the progress of the study. Not directly attached to the team but who made extremely important contributions are: France Lacoursière, France Lozeau and Thérèse Cloutier, who put the finishing touches to the *Santé Québec* "look" in the survey instruments, reports and conference publications; Lise Ménard-Godin, who conducted fruitful literature searches and advised on many aspects of the collection instruments. The hard work, constant availability, ability to adapt, and finely-honed skills of the people working on this project match the enthusiasm that all our partners have demonstrated in making this study a resounding success.

Finally, I would like to extend a very special thank-you to the 2,223 families who responded to our survey. Thank you for the trust you have shown in *Santé Québec*, our partners and collaborators. Thanks to your participation, your children have become the veritable stars of ÉLDEQ 1998-2002, and are making it possible, in the short term, to gain a better understanding of psychosocial adjustment in children. In the medium and long terms, they will likely be in large part responsible for the establishment of early detection programs, better designed prevention programs, and more effective interventions for such an important clientele - all of Québec's children.



Mireille Jetté
Project Coordinator
Santé Québec Division, ISQ

Introduction of ÉLDEQ 1998-2002

Preventing Social Maladjustment

It suffices to consider the costs engendered by behavioural problems in children - school dropout, delinquency, alcoholism, drug addiction, family violence, mental disorders and suicide - to conclude that they largely surpass what a modern society can accept, morally and economically. Faced with the enormity of these problems, the first reflex is to provide services to these people which will, ideally, make the problems disappear, or at the very least, lessen their severity. For many years we have tried to offer quality services to children and adults who suffer from antisocial disorders, alcoholism, drug addiction, depression, and physical or sexual abuse. However, in spite of enormous investment, these curative services are far from being able to respond to the demand.

Although the idea of early intervention as a preventive measure can be traced at least as far back as ancient Greece, the second half of the 20th century will certainly be recognized as the dawn of the field of social maladjustment prevention (Coie *et al*, 1993; Mrazek & Haggerty, 1994). Numerous programs have been developed for adolescents and teenagers to prevent school dropout, delinquency, drug addiction and suicide. Scientific evaluations of these programs have been far too few in number, but they tend to demonstrate that it is extremely difficult to help those most at risk in this age group (Rosenbaum & Hanson, 1998; Rutter, Giller & Hagell, 1998; Tremblay & Craig, 1995). It is becoming increasingly clear that the factors which lead to serious adaptation problems are in place long before adolescence. Hence the idea that the prevention of social adaptation problems should start at least during childhood, and preferably right from pregnancy (Olds *et al*, 1998; Tremblay, LeMarquand & Vitaro, 1999). These principles are clearly outlined in the objectives of the *Politique de la santé et du bien-être* (Policy on Health and Well-Being) and *les Priorités nationales de santé publique* (Priorities for Public Health) set by the government of Québec (ministère de la Santé et des Services sociaux, 1992; 1997).

The Need to Understand Early Childhood Development

If the field of maladjustment prevention appeared at the end of the 20th century, it has certainly come on the heels of child development. "*Émile*," by Jean-Jacques Rousseau, needs to be re-read in light of recent studies to realize just to what degree it is impossible to understand the complexity of child development, and therefore the means of preventing deviant paths, simply by reflection or introspection. Although considerable knowledge has been acquired in the neurological, motor, cognitive, affective and social development of children, what really hits home is that Jean-Jacques Rousseau and his followers in education seemed to have had more certainty about the ways of educating children than we do today.

Progress in child development research has made us realize that things are not as simple as we can or would like to imagine. We have obviously all been children, and most of us have become parents, indeed, relatively well-adjusted ones. But we still do not clearly understand when, how and why adjustment problems appear, and above all, how to prevent and correct them.

Our ignorance is obvious when we examine the debates among specialists on the role of parents in the development of maladjustment problems in children. Some suggest that social maladjustment in children is largely determined by genetic factors (Bock & Goode, 1996; Rowe, 1994). Some accentuate economic factors (Duncan & Brooks-Gunn, 1997). Other researchers attribute a determining role to peer influence (Harris, 1998; Harris, 1995; Vitaro *et al*, 1997). These larger questions lead to narrower ones which focus on particular aspects - the role of fathers in childhood maladjustment, the impact of alcohol and cigarette consumption during pregnancy, the effect of prenatal and birthing problems, the importance of breast feeding and diet; the role of sleep, cognitive development, temperament, and so on.

The majority of these questions are at the heart of the daily concerns of parents, grandparents, educators, family service providers, and legislators. What can we do to maximize the development of our children, to prevent severe psychosocial maladjustment? What should we do when problems begin to appear, when pregnant mothers, or fathers themselves have a long history of disorders? The answers to these questions obviously have an effect on the policies put forth by Québec government Ministries such as *ministères de la Famille et de l'Enfance* (Family and Child Welfare), *de l'Éducation* (Education), *de la Santé et des Services sociaux*, *de la Solidarité sociale* (Social Solidarity - formerly Income Security (Welfare)), *de la Sécurité publique* (Public Security), *de la Justice* (Justice), and *le ministère de la Recherche, Science et Technologie* (Research, Science and Technology).

The Contribution of ÉLDEQ 1998-2002

The Longitudinal Study of Child Development in Québec (ÉLDEQ 1998-2002) was conceived in order to contribute to our knowledge of the development of children in their first 5 years of life. The main goal is to gain a better understanding of the factors, in the years of rapid growth, which lead to success or failure upon entry into the school system. The goal of the second phase (if approved) is to better understand development in elementary school, in light of development in early childhood.

We know that this survey cannot be a definitive one on child development in Québec, but it is the first representative study of a provincial cohort of children who will be measured annually from birth to entry into the school system. It specifically aims at understanding the development of basic skills needed for educational success.

Although the effort to set up this study began in 1989, the first data collection coincided with the Québec government's implementation of its *Politique Familiale* (Policy on Families). The policy has virtually the same objectives as our study:

"These services for children 5 years and under should give all Québec children, whatever the socioeconomic status of their parents, the chance to acquire and develop the skills that will allow them to succeed in school (1997, p. 10)."

On March 3 1999, in the speech opening the 36th session of the Québec legislature, Premier Lucien Bouchard confirmed that early childhood development was a priority for the government:

"The theme that will dominate our actions this year, next year, and throughout our mandate, is youth... The priority...with regards to youth in Québec, begins with the family and childhood... This massive investment in early childhood... will give our children the best chance of success in the short, medium and long terms. It is our best asset against alienation and despair. It is our best preparation for personal, social and economic success."

Because of this historic coincidence, ÉLDEQ has the potential of becoming an invaluable tool for monitoring the effects of Québec's massive investment in early childhood which began in 1997. Thanks to the data collected by the federal government's National Longitudinal Study of Children and Youth (NLSCY, Canada), we will be able to compare child development in Québec with that elsewhere in Canada, before and after the implementation of Québec's new policy on the family.

However, our initial objectives are more modest. The 12 or 13 papers in this series present the results of our first annual data collection. They describe the characteristics of the families and children when the latter were 5 months old³ They cover sociodemographic characteristics, nature of the birthing process, health and social adaptation of the parents, family and couple relations, parent-infant relations, and characteristics of the 5-month-old, such as sleep, diet, oral hygiene,

3. To simplify the text in this report, the phrase "5-month-old infants" will be used to refer to infants whose mean age was 5 months during data collection in 1998. In section 3.1.3 (Volume 1, Number 1), we explain why the infants were not all exactly the same age. As indicated in no. 2 of this series, 52% of the infants were less than 5 months, and 3.4% were 6 months of age or over.

temperament, and motor, cognitive and social development. These data will eventually be compared to those on children the same age collected by the NLSCY in 1994 and 1996.

An Interdisciplinary, Multi-University Team of Researchers

This study saw the light of day because of the collaboration of many people. In the preceding pages, Mireille Jetté thanked a number of them. I would like to take advantage of this introduction to emphasize that the survey was set up and continues forward because of the dedication and hard work of a group of researchers from a variety of disciplines and universities. I would particularly like to thank Michel Boivin, School of Psychology at *Université Laval*, and Mark Zoccolillo, Department of Psychiatry at McGill University, who have been actively involved in this project since 1992. It was in that year that we prepared our first grant application for the Social Sciences and Humanities Research Council of Canada. A second group of researchers joined the team in 1993 and 1994: Ronald G. Barr, pediatrician, Montréal Children's Hospital Research Institute, McGill University; Lise Dubois, dietitian and sociologist, *Université Laval*; Nicole Marcil-Gratton, demographer, University of Montréal and Daniel Pérusse, anthropologist, University of Montréal. Jacques Montplaisir, Department of Psychiatry, University of Montréal, joined the team in 1995. Louise Séguin, Department of Social and Preventive Medicine, University of Montréal and Ginette Veilleux, *Direction de la santé publique de la Régie régionale de la santé et des services sociaux de Montréal-Centre* (Public Health Department, Montréal-Centre Regional Health Board), joined in 1998. Three post-doctoral researchers have also made an important contribution. Raymond Baillargeon developed the task for measuring cognitive development. Christa Japel is the assistant to the scientific director for planning, analysis and presentation of the results. Heather Juby collaborates in the analysis of the data on couple and family history.

A Unique Confluence of Circumstances

A study such as this requires the coordination of many researchers over many years, enormous financial resources, and a long period of preparation. Though in the early 1990s the research team was convinced of the need for the survey, those responsible for the public purse had also to be convinced. We must therefore acknowledge the happy confluence of circumstances that allowed the players to take advantage of the opportunity at hand. When a number of civil servants in the *ministère de la Santé et des Services sociaux* understood the essential role of prevention, the creation of a committee on children and youth in 1991 led to an increased awareness of the importance of early childhood. At the same time, the president of the *CQRS*, Marc Renaud, had come to the same realization with his colleagues in the Population Health Program at the Canadian Institute for Advanced Research (CIAR). Aline Émond, the Director of *Santé Québec*, was ready to apply her formidable determination to work for the cause. For their part, Health Minister Jean Rochon and his Assistant Deputy Minister for Public Health, Christine Colin, aware of the importance and benefit of longitudinal studies on early childhood development, authorized the investment of large sums of money during a period of draconian budget cuts. This occurred at the same time as the federal government decided to create its own longitudinal study of children and youth (NLSCY). It is in this context that *ÉLDEQ 1998-2002* materialized. Our survey also came to fruition because Mireille Jetté did everything in her power to make the researchers' dreams a reality, and Daniel Tremblay gave her all the support she needed by making various resources available for the project.



Richard E. Tremblay, Ph.D., M.S.R.C.
Chair of Child Development
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Abbreviations

ALSPAC	Avon Longitudinal Study of Pregnancy and Childhood (Bristol, United Kingdom)	GRIP	Groupe de recherche sur l'inadaptation psychosociale, University of Montréal / Research Unit on Children's Psychological Maladjustment
CLSC	Centre local de services communautaires / Community Health Centre	GSS	General Social Survey (Canada)
CNCCS	Canadian National Child Care Study	ICQ	Infant Characteristic Questionnaire
ÉBSD	Étude des besoins en santé dentaire (Montréal, Canada)	LFS	Labour Force Survey
EDPS	Edinburgh Postnatal Depression Scale	LMAS	Labour Market Activity Survey (Canada)
ÉÉNFE	Évaluation de l'état nutritionnel en fer (Charlevoix Region, Québec, Canada) / Iron Nutritional Status	NCDS	National Child Development Study (Great Britain)
ÉJNQ	Étude des jumeaux nouveau-nés du Québec (Québec Study of Newborn Twins)	NHANES III-USA	The Third National Health and Nutrition Examination Survey (United States)
ÉLEM	Étude longitudinale et expérimentale de Montréal (Longitudinal and Experimental Study of Low SES Boys in Montréal)	NIMH	National Institute of Mental Health
ÉLEMQ	Étude longitudinale des enfants de maternelle au Québec (Longitudinal Study of Québec Kindergarten Children)	NIMH-DIS	National Institute of Mental Health-Diagnostic Interview Schedule (United States)
ÉPAN	Étude provinciale sur l'alimentation du nourrisson (Québec, Canada)	NLSCY	National Longitudinal Survey of Children and Youth
ESS-SQ	Enquête sociale et de santé - <i>Santé Québec</i> (Québec, Canada) / Health and Social Survey - Santé Québec (Québec, Canada)	NLSY	National Longitudinal Survey of Youth (United States)
		NPHS	National Population Health Survey
		OCHS	Ontario Child Health Study (Canada)
		PDDAM	Prétest sur les déterminants du début et de la durée de l'allaitement maternel (Québec, Canada) / Pretest on the determinants of initiation and duration of breast feeding (Québec, Canada)

PMK	Person Most Knowledgeable
PSCB	Projet de surveillance de la carie du biberon (Québec, Canada)
SLID	Survey of Labour and Income Dynamics (Canada)

Review of the Methodology

This analytical paper is one of a series presenting cross-sectional data collected on a large sample of 5-month-old infants surveyed in 1998. It reports on the first of 5 annual data collections on 2,120 children in Québec who will be studied until they are 5 years old. In the first year of data collection, the results on 2,223 infants were retained.⁴

The target population of the survey is Québec babies, singleton births only,⁵ who were 59 or 60 weeks of gestational age⁶ at the beginning of each data collection period, born to mothers residing in Québec, excluding those living in the Northern Québec, Cree, and Inuit regions, and on Indian reserves, and those for whom the duration of pregnancy was unknown. Due to variations in the duration of pregnancy and the 4 or 5 weeks allotted for each data collection wave, the infants were not all exactly the same age (gestational or chronological) at the time of the survey. Therefore, the children in Year 1 (1998) of the survey had a mean gestational age of 61 weeks - about 5 chronological months.

The survey had a stratified, three-stage sampling design, with a mean design effect for the proportions estimated at 1.3. To infer the sample data to the target population, each respondent was given a weight corresponding to the number of people he/she "represented" in the

4. Though the results for 2,223 children were retained for the first year of data collection, 2,120 will be retained for the rest of the longitudinal study; the extra 103 were part of an over-sample used to measure the effects of the January 1998 ice storm.

5. Twins (twins births) and other multiple births were not targeted by the survey.

6. Gestational age is defined as the sum of the duration of gestation (pregnancy) and the age of the baby.

population. ÉLDEQ 1998 comprised eight main collection instruments which obtained data from the person who was closest to the baby (called the Person Most Knowledgeable - PMK), the spouse (married or common-law), the infant and the absent biological parent, if applicable. Given variation in the response rates to each instrument, three series of weights had to be calculated to ensure inferences to the population were accurate. Except for the Self-Administered Questionnaire for the Absent Father (SAQFABS) and a series of questions in the Computerized Questionnaire Completed by the Interviewer (CQCI) on absent fathers - the overall or partial response rates of which were too high - the results of all the instruments could be weighted. Therefore, the data presented here have all weighted to reduce the biases.

All data that had coefficients of variation (CV) 15% or higher are shown with one or two asterisks to clearly indicate the variability of the estimate concerned. In addition, if the partial non-response rate was higher than 5%, there is a note specifying for which sub-group of the population the estimate is less accurate.

Similar to any cross-sectional population study, the Year 1 part (5-month-old infants) of ÉLDEQ 1998-2002 has certain limits. However, the vast majority of the results are valid and accurate, and provide a particularly detailed portrait, for the first time, of 5-month-old infants in Québec.

Note to the reader: For more details information on the methodology, see Volume 1, Number 1, of this collection.

Concepts, Definitions and Operational Aspects

Part I
Design of Phase 1 of ÉLDEQ
Instruments and Procedures



1. Background to the Longitudinal Study of Child Development in Québec (ÉLDEQ 1998-2002)

1.1 Brief History of the Study

Québec, like the majority of industrialized nations, has seen a steep rise over the past two decades in the human and social costs related to the maladjustment of individuals to their environment. Among other consequences of this alarming state of affairs are child negligence, family violence and school dropouts, as well as suicide and drug use among adolescents. Over the past several years, costly short-term measures have been implemented to tackle these problems, but their success has been limited.

An initial solution to these problems, which pose a real threat to future generations, must involve not merely *REACTING TO* them and attempting to allay their consequences, but rather preventing their onset in young children. To do this we must provide support to activities and programs aimed at improving our understanding of social adjustment. To this end, a group of researchers in Québec – like their Canadian, American, New Zealander and English counterparts, to name only those few – launched a longitudinal study aimed at identifying the conditions that favour the development of children, that is, factors that will enable children to enjoy physical and mental health as well as personal well-being throughout their lives. The researchers adopted a biopsychosocial approach in order to define as thoroughly as possible the principal factors that enable children to adapt well to their environment.

1.2 ÉLDEQ and Other Longitudinal Studies Worldwide

ÉLDEQ, which was almost seven years in development, was created through the joint efforts of distinguished

Québec researchers and *Santé Québec*⁷. In 1988, several of these researchers were involved in the formation of cohorts in the United States and Europe⁸, and they realized that the time was ripe for the setting up of a first cohort in Québec. The researchers would be able to draw on the expertise available in other countries as well as on the growing expertise among researchers in Québec, and ÉLDEQ could profit from the surveys in Great Britain (Power, 1992; Wadsworth, 1987), New Zealand (McGee et al, 1991) and the United States (Werner & Smith, 1977) to avoid costly problems that could erupt at any point during a lengthy survey of this kind. In addition, the launch in the spring of 1994 of the Harvard cohorts (Harvard School of Public Health, Human Development and Criminal Behavior) and the National Longitudinal Study of Children and Youth (NLSCY, first Canadian cohort) meant that the data in the Québec study could be compared to those on children from Canada or other countries. Because of the richness of this international environment, the Québec researchers decided that the ÉLDEQ cohort had to be comparable and complementary to its predecessors.

1.3 Design of ÉLDEQ

In addition to providing a wealth of documentation on the determining factors of the problems identified above, ÉLDEQ gathers in-depth data on birth and early childhood, thus furthering scientific knowledge in this field. The majority of longitudinal studies on birth to adulthood do not provide continual observation of biopsychosocial development from the first to the fifth year of life (Power et al, 1991; Wadsworth, 1991; Werner

7 *Direction Santé Québec* was named *Santé Québec* before its integration on 1 April 1999 to the *Institut de la statistique du Québec*.

8 The National Longitudinal Study of Children and Youth (NLSCY Canada) had not yet been confirmed.

& Smith, 1977). The Québec study, however, focuses on the link between development in early childhood and adjustment at school entry, a key factor in a child's adaptation to the school system and, by extension, to adolescence (Ensminger et al, 1993; Tremblay et al, 1992; White et al, 1990).

The scientific value of a longitudinal study that collects anthropometric and biological data at birth and surveys on an annual basis thereafter the biopsychosocial well-being of the child is widely recognized. Studies in the United States and New Zealand that draw on longitudinal surveys and favour a multidisciplinary approach have shown that it is possible to identify strong indicators of the physical, mental and social health of individuals beginning in childhood. Barratt (1991), Caldwell and Bradley (1984), and Howes (1988) showed that parental characteristics, family environment, child care conditions and children's characteristics in preschool, to name only a few, are predictors of children's adaptation at school entry. In addition, studies such as Barker's (1992) have shown that prenatal and neonatal biological measures are strong predictors of health problems in the adults of tomorrow. However, the vast majority of these studies were limited as to the number of subjects or variables. ÉLDEQ 1998–2002, with its over 2,000 subjects, has among other goals to verify the link between biological characteristics at birth, temperament and later social adaptation as well as the links between the parents' conjugal history and the child's cognitive and socioaffective development. In other words, this study of individual adaptation to the environment has adopted an ontogenetic approach; it examines not only characteristics unique to childhood (biological, cognitive, emotional and social) but also characteristics of the child's physical and social environment (family, child care arrangements and friends). In terms of its contribution to basic research, ÉLDEQ aims to increase our knowledge of the precursors to adaptation to the school environment, the stages in this adaptation and the short- and long-term consequences of a child's failure to adapt.

2. ÉLDEQ, a Study in Partnership

The setting up of a study of this magnitude within the borders of Québec required the development of a new model of collaboration among a broad range of partners. First, sixteen researchers associated with seven different research groups – which were themselves linked to five Québec universities – drew up an ambitious research protocol with the support of provincial and federal agencies. Second, in association with *Santé Québec*, a protocol for a longitudinal survey was developed from that research. Note that, in this early stage of the project, *Santé Québec* was called the *Centre d'enquêtes du ministère de la Santé et des Services sociaux (MSSS)* (Surveys Centre, Ministry of Health and Social Services). A paragovernmental agency, its mandate was to conduct epidemiological, social and health surveys in Québec. *Santé Québec*, which from early on formed partnerships with the Québec universities involved in the ÉLDEQ survey, then found itself mandated to transform the research protocol to a survey protocol that would fulfill the objectives of the first cohort of infants in Québec.

The survey protocol having been rigorously pretested in 1996 (see next section) it was finalized and submitted to the *ministère de la Santé et des Services sociaux du Québec (MSSS)*. After this important milestone was passed, the scientific director of ÉLDEQ and *Santé Québec* received from the MSSS an 8-year grant providing exclusive financial support for all aspects of the annual data collection – whether related to data collection for the pretest or the ÉLDEQ survey, or to publication of the biannual reports. The MSSS's decision to provide ÉLDEQ with significant financial backing corresponded to its identification in the early 1990s of several needs in the population, as outlined in the 1992 *Politique de santé et du bien-être du Québec*, the recommendations of the *Rapport Bouchard* of 1991 and *Priorités nationales de santé publique* published in 1997–2002. They identified a longitudinal study on a cohort of children in Québec as an important research priority and an essential step in creating effective preventive activities and programs for them.

At the same time, the partners in ÉLDEQ launched discussions with the Special Surveys Division of Statistics Canada about the opening up to them – several already served as consultants to the NLSCY – of the data collection instruments assembled for that national Canadian study. These discussions led to a bilateral collaboration between *Santé Québec* and Statistics Canada. Reflecting the Canadian experience, the ÉLDEQ study in Québec would use the research instruments of Statistics Canada (NLSCY) and, in return, the original instruments developed for ÉLDEQ would be made available to the NLSCY. This partnership resulted in the NLSCY study being nicknamed the "Mother Study."

2.1 From ÉLDEQ 1998–2002 to "In 2002... I'll Be 5 Years Old!"

In collaboration with the researchers, *Santé Québec* and the *Bureau de la statistique du Québec*⁹ drew up a preliminary protocol for the study and devised data collection tools that would meet a large majority of the research objectives. A pretest or pilot study based on the various elements was undertaken in the fall of 1996, and a detailed preliminary report was written and published the following year (*Santé Québec, Jetté et al, 1997*). The pretest, comprising 572 families from the greater Montréal region and Québec City, was used by *Santé Québec* as the basis for its modifications to the initial protocol and the test instruments. The modifications were integral to the fine-tuning of the design for the survey and to ensuring that the budgets set for it could be met.

The modified protocol and instruments were then submitted to the ÉLDEQ Advisory Committee and Planning Committee as well as to the *Santé Québec* Ethics Committee. These three committees verified that

9. The *Bureau de la statistique du Québec* was the name of *Direction de la méthodologie et des enquêtes spéciales* (Methodology and Special Surveys Division) prior to its integration on 1 April 1999 to the *Institut de la statistique du Québec* (Québec Institute of Statistics).

the original objectives of the study would be achieved and that the new collection instruments were valid, from administrative as well as data collection perspectives. The committees also submitted the proposal to an ethics review. A final proposal and grant request were then submitted to the MSSS. The proposal outlined four rounds of data collection for the pretest and five for the study itself. These would take place between 1997 and 2002. In addition, it called for the publishing of three biannual reports on the study – one cross-sectional and two longitudinal reports – from 2000 to 2004¹⁰.

Santé Québec had never before conducted a longitudinal study, although it had initiated several important surveys between 1988 and 1997. For ÉLDEQ, *Santé Québec* decided to create several promotional tools to foster a positive "initial" contact with the families that would be interviewed annually for at least five years. Although it was anticipated that the acronym ÉLDEQ would become important to researchers and health and social service professionals in Québec, its appeal to Québec families might be limited. Another way had to be found to encourage their participation in the study. Thus, for 2,223 families in Québec, ÉLDEQ became "*En 2002... J'aurai 5 ans!*" (In 2002... I'll Be 5 Years Old!). A brochure explaining the study and a folder for storing documents about it were created as presentation items for the parents.

To encourage families to take part annually over the 5-year term of the study it was decided to: 1) plan an annual follow-up with the families; 2) compensate families with an annual \$20 payment for the time they devoted to the study; and 3) give all participating families a personalized souvenir album at the end of the first 5-year study period.

With respect to the annual follow-up, families are contacted three times throughout the year using various communication strategies. They receive: an annual letter

announcing an upcoming call from the survey firm to set up an appointment for the interview; spring and fall issues of the newsletter *Communiqués*, addressed to parents and providing them with information on studies of this type as well as the preliminary results of ÉLDEQ; and each year on the birthday of the child, he or she receives a birthday card from *Santé Québec*.

With each contact, the families also receive a change-of-address card. Thus, at least five times a year (including during the interview), the families are advised of the importance of informing *Santé Québec* of any upcoming move.

To date, the incentive of \$20 has generally been perceived as adequate compensation for the annual 2-hour interview. Some low-income families have even come to rely on it. However, we believe that the souvenir album, which will include personalized annual results for the child, has been the greatest incentive for retaining families in the study, especially because each year the parents are reminded that the folders are getting bigger!

2.2 The Terms of Reference and Collection Parameters of the Pretest and Survey

Once the essential components of ÉLDEQ were determined, the Terms of Reference were written. Subsequent to a public invitation to tender, the *Bureau d'interviewers professionnels (BIP)* was awarded the contract for data collection in the pretests and surveys. The Terms of Reference also served as the basis for the contract between this private-sector survey firm and *Direction Santé Québec* of the *Institut de la statistique du Québec (ISQ)*. The former outlines, among other things, all the rights and obligations of the two signatories of the contract as well as the rules for each step in the data collection process: preparation of the collection, recruitment and training of the interviewers, data collection, reception/verification and coding/processing of the instruments, as well as initial validation of the data files. Because ÉLDEQ includes a

10. For detailed information on ÉLDEQ 1998-2002 and the instruments used in the 1998 data collection wave, see Vol. 1, No. 1, of this collection.

computerized questionnaire, the Terms of Reference called for *BIP* to transmit by modem encrypted data on a weekly basis to *Santé Québec*. Finally, the Terms of Reference outlined in detail *Santé Québec*'s implication in and close supervision of the data collection process and related activities.

The collaboration between *BIP* and *Santé Québec* began, as in all surveys, with the recruiting of interviewers. The partners decided after the first pretest that only women (mothers) would be selected as interviewers in the annual survey of the infants' development. This was because some respondents in the pretest had expressed reticence about being interviewed by a man while alone with a 5-month-old baby. After the recruitment of about 30 interviewers in 14 regions of Québec, the partners worked on the data collection and follow-up instruments. These would, in effect, constitute a second annual collaboration between them. *Santé Québec* agreed to provide training related to all data collection and follow-up, given that it had conceived the instruments in collaboration with the researchers and it was charged with the production, publishing and translation, etc. of all related reports. *BIP*, on the other hand, assumed responsibility for several administrative instruments; for example, it is solely responsible for managing its staff.

In general, training took place only a few days before the start of data collection. This ensured that the newly acquired knowledge of the interviewers was rapidly put to use. *Santé Québec* implemented various quality control measures related to data collection; these included listening in ("fly-on-the wall") to calls placed to set up interviews or as quality control; on-site, unannounced validation of the coding of some of the paper-based instruments; examination of the results for bias due to interviewer input; follow-up on the computerized questionnaires and verification of the collection files, to name a few.

2.3 Data Management

During the collection phase of the survey, *BIP* regularly sends data to *Santé Québec*. Data collected from the questionnaires are transmitted weekly, thus ensuring stringent verification of the contents of this phase of the interview and continual coding by staff. In addition, every 2 weeks, the paper-based instruments coordinated by *Santé Québec* (consent form, computerized follow-up forms, authorization forms for medical records) or coded by its partners (result sheets of the psychometric tests), are gathered together and verified, as needed, before being redirected to the researchers. Halfway through the process, that is, after the first 3 months of the annual data collection, *BIP* transmits to *Santé Québec* the database comprising the results from approximately half the coded, verified and entered data from the paper questionnaires; a preliminary validation is also done on these data. After a second validation by the *Santé Québec* team, this partial data is made available to the researchers, who then begin their initial analyses for the biannual report¹¹. About 3 months after the end of each annual data collection, the final database is sent to *Santé Québec*. The complete database is once again validated. It is organized into files and derivative variables which are created so that all the different research teams may use the data.

It is important to note that for ÉLDEQ the data are never available simultaneously. The data taken from the medical reports and the psychometric tests require specialized analysis, which takes longer. Because of this, the 12 or 13 reports in Volume 1 of the ÉLDEQ collection were not issued together, but will be published over a 2-year period. Nonetheless, the first cross-sectional database includes 1,350 variables, of which 90 are derivative variables.

11. The mid-term databases are sent to the analysts only every 2 years because *Santé Québec* must prepare the biannual reports.

This ends our brief look at the background to ÉLDEQ. For more detailed information on this topic please consult Volume 1, Number 1, of the collection. The next section examines the themes (sources and justifications) and the questions and scales for the first data collection year of the longitudinal survey. The second part examines various factors related to measures, from data validation to the creation of derivative variables.

3. Sources and Justifications of Questions, Scales, Forms and Tests

This section describes the sources and justifications of the questions, scales in the questionnaires, and forms and tests used in the 1998 ÉLDEQ survey.

The instruments are discussed in the following order:

- 3.1 Computerized Questionnaire Completed by the Interviewer (CQCI), filled out by the person who best knows the child or the PMK (Person Most Knowledgeable);
- 3.2 Paper Questionnaire Completed by the Interviewer (PQCI), filled out by the PMK;
- 3.3 Questionnaire on the Ice Storm of January 1998, completed by the PMK;
- 3.4 Self-Administered Questionnaire for the Mother (SAQM), which is filled out by the biological mother or the spouse/partner of the biological father and by the absent biological mother if she can be contacted;
- 3.5 Self-Administered Questionnaire for the Father (SAQF), which is filled out by the biological father or spouse/partner of the mother. Biological fathers who are absent from the household but have contact with the child at least once a month are also asked to fill out the questionnaire;
- 3.6 Observations of Family Life (OFL), which is filled out by the interviewer;
- 3.7 Imitation Sorting Task (IST) or 1, 2, 3 Hands Game: this test is conducted with the target child by the interviewer;
- 3.8 Baby Diary (BD), which may be completed by the mother, father or anyone else who looks after the child, for example, the babysitter;

- 3.9 Authorization Form to Access Mother's and Infant's Medical Records: this form is used to obtain access to the medical records of the biological mother and her baby. The biological mother must sign this document.

These instruments are used to gather information on infants approximately 5 months of age, the household, the family and the couple (the biological mother and father or her/his spouse/partner), or the biological parent not living in the household.

3.1 Computerized Questionnaire Completed by the Interviewer (CQCI)

The CQCI is drawn in large part from the questionnaire developed for Cycle 2 of the National Longitudinal Study of Children and Youth (NLSCY), conducted by Statistics Canada and Human Resources Development Canada in 1996. We used the justifications in the document titled *Overview of Survey Instruments for 1994–95 Data Collection, Cycle 1* (Statistics Canada and Human Resources Development Canada, 1995). Following the publication of that document, the NLSCY or ÉLDEQ researchers added questions or adapted others. These changes were taken into account when the justifications for the 1998 ÉLDEQ survey were finalized.

The questionnaire comprises 4 sections:

- 3.1.1 Sociodemographic Questionnaire
- 3.1.2 Parents' Questionnaire
- 3.1.3 Child's Questionnaire
- 3.1.4 Absent Biological Parent's Questionnaire

3.1.1 Sociodemographic Questionnaire

This section of the questionnaire examines the household, that is, the relationships among its members as well as their housing conditions.

3.1.1.1 Household – CONT et DEM¹² (completed for all members of the household)

Objective

To obtain information on the members of the household and their age, sex and civil status.

Measure (CONT-Q8, 13 to 16, 19 and 20 and DEM-Q1)

These questions are identical to those of NLSCY (Cycle 2). The questions on the members of the household (CONT-Q13 to 16) and those on the date of birth and sex of the individual members (DEM-Q1) are drawn from the Enquête sur la population active (Labour Force Survey), which is conducted by Statistics Canada. The question on current marital status (DEM-Q1) is drawn from the National Population Health Survey. The response items were, however, modified for the present survey.

Questions CONT-Q19 and 20 are original; they were developed by *Santé Québec* to obtain a more precise description of the survey families (number of children living in and apart from the household).

3.1.1.2 Relationships – REL (completed for all members of the household)

Objective

To gather information on the relationships between all members of the household. This information makes it possible to obtain, as in the case of the NLSCY, a precise picture of the household for purposes of analysis or future activities related to the survey.

Measure (REL-Q1)

The question on relationships is identical to the one used in Cycle 2 of the NLSCY. It was drawn from the Survey of Labour and Income Dynamics conducted by Statistics

Canada. The question provides a means to establish a grid of the relationships of all members of the household, in contrast to understanding only the relationship of each of these members to one person in the household such as the mother or father. Given the rapidity of change in young families, this information is essential both for the NLSCY and ÉLDEQ.

3.1.1.3 Housing Conditions - HHL (completed by the PMK or the respondent for the household)

Objective

To determine the housing conditions of the household. These data provide information on whether the dwelling is owned by the occupants or, if not, it is subsidized housing, as well as on its state of repair and the number of bedrooms it contains. With this information, the researchers can describe the home environment of the infant.

Measure (HLD-Q1 to 8)

Questions HHL-Q1, 2, 2b, 3 and 6 to 8 are identical to those in Cycle 2 of the NLSCY. Questions 4, 5 and 5a are drawn from the Cycle 1 survey and were not included in the Cycle 2 survey.

Question HHL-Q1, on the ownership of the dwelling, is a modified version of a question in the 1991 Census (Statistics Canada).

Question HHL-Q2, on subsidized housing, is drawn from the Ontario Child Health Study (OCHS).

The question on the state of repair of the dwelling (HHL-Q2b) is drawn from the 1991 Census (Statistics Canada).

Question HHL-Q3 covers the number of bedrooms; it was formulated by Canada Mortgage and Housing. Information acquired from this question may serve, among other things, to determine a scale of overcrowding.

12. These abbreviations indicate sections of the CQCI.

Questions HHL-D-Q4, 5 and 5a are used to indicate whether there is a family pet and thus to complete the description of the child's home environment. They are drawn from the National Population Health Survey (NPHS), the purpose of which is to produce reliable estimates of the physical and mental health of Canadian residents and to identify their determining factors.

For question HHL-D-Q6, the interviewer must describe the type of dwelling visited (e.g., single detached house, duplex, etc.).

This section ends with questions HHL-D-Q7 and 8, which identify the respondent and the language of the interview. Let us now examine the section of the questionnaire addressed to parents.

3.1.2 Parents' Questionnaire

The theme of this part of the questionnaire is the parents of the target child, that is, the mother and father or the spouse/partner of this parent residing in the household. For the 1998 survey, in almost every case, these were the child's biological parents. The questions in this section cover education, employment, income, health status, family functioning, neighbourhood and sociodemographic characteristics.

3.1.2.1 Education Level – EDA (completed for the PMK and his/her spouse/partner)

Objective

To determine the number of years of schooling, the educational level attained and whether the respondent or the spouse/partner is currently enrolled in an educational institution.

Some studies – for example, OCHS and the National Longitudinal Survey of Youth (NLSY) in the United States – have shown that there is a relationship between the mother's level of education, family environment and the development of the child. The question on full- and part-time schooling is an indicator of the respondent's and his/her partner's main activities.

Measure (EDA-Q1 to EDUC-Q6)

The questions on level of education (EDA-Q1 to 4) are drawn from the General Social Survey on work and education (GSS) conducted by Statistics Canada in 1994, and questions EDA-Q5 and 6 on current school enrollment were formulated by the NLSCY project team.

All the questions in this section are identical to those in Cycle 2 of the NLSCY.

3.1.2.2 Employment Activity – LFS (completed for the PMK and her/his spouse/partner)

Objective

Describe the employment activity of the parents during the preceding 12 months and at the time of the survey.

The parents' employment status affects the living conditions of the family in terms of family income and other factors such as stress. Research from OCHS has shown that unemployment of the parents may have a detrimental effect on the mental health of children. Data on work schedules and type of work provide additional information on the parents and may be compared with data on child care.

Measure (LFS-Q1 to LFS-Q12d)

The questions cover main activity (Q1), paid work (Q2, 8 and 9a), number of weeks worked in the year (Q3), hours worked each week (Q4), work schedule – for example, working a regular shift (Q5) and weekends (Q6) – type of work (Q10a, 11a, 12a) and number of jobs worked during the 12 months preceding the survey.

All the questions are identical to those in Cycle 2 of the NLSCY, except question 9a, which comprises two parts (9a et 9b), and questions 12c and 12d. The latter, which are original, were added by the ÉLDEQ researchers to ascertain how many jobs the parents held during the 12 months preceding the survey, given that young parents are often precariously employed.

As with Cycle 2 of the NLSCY, the most detailed information covers the principal employment of the parents in the year prior to the survey. These questions are drawn from the Labour Force Survey (LFS) and Survey of Labour and Income Dynamics (SLID) conducted by Statistics Canada.

3.1.2.3 Income – INC (completed for the household)

Objective

To determine the sources and level of income during the 12 months preceding the survey.

This information provides an overview of the economic status of the household, a significant factor in the child's standard of living.

Measure (INC-Q1, 2, 3, 3a to 3g)

The questions on the household's sources and level of income before taxes and deductions are similar to those in other surveys and in the 1991 Census of Canada. Two approaches to gathering the information were used. If the respondent refused or was reluctant to provide precise figures, he/she was asked a cascade question, that is, questions on the range of income. These are similar to the questions in Cycle 2 of the NLSCY. The response items for questions 1 and 2 were, however, modified to take into consideration the context in Québec. For the 1999 ÉLDEQ survey, a question was added on the PMK's income (before taxes) in the 12 months preceding the survey. This question is also drawn from the NLSCY.

3.1.2.4 Parents' Health – HLA (completed for the PMK and her/his spouse/partner)

Objective

To gather information on the parents' health status, long-term health conditions, smoking and the consumption of alcohol and drugs. The questions on smoking are included because research has shown that second-hand smoke may be detrimental to the health of

children. The questions on alcohol and drug consumption are included because these activities may affect the parents' physical and mental health as well as the economic status of the household and family relationships.

Measure (HLA-Q1 to Q7c)

Questions HLA-Q1 to 7 are drawn from Cycle 2 of the NLSCY. The questions on general health, smoking and the consumption of alcohol are drawn from the National Population Health Survey (NPHS).

Questions HLA-Q7a, b and c were proposed by ÉLDEQ researcher Mark Zoccolillo. Modified from the Diagnostic Interview Schedule (DIS), version III-A, these questions reveal whether the PMK and the spouse/partner consumed certain drugs during the 12 months preceding the survey. These questions are not in the NLSCY.

Depression (completed only for the PMK)

Objective

To gather information on the mental health of the PMK, especially regarding symptoms of depression.

Several members of the Expert Advisory Group of the NLSCY have proposed that, for a longitudinal survey, the best procedure is to measure one aspect of the respondent's mental health and not to try to measure that individual's overall mental health. We proposed that depression be the subject of the section for the following reasons: it is a prevalent condition; it has been shown that depression in a parent affects the children; most current research on the topic is based on small groups rather than on representative population samples; and we believe that the adoption by government of programs and policies related to depression could have a significant impact.

Measure (HLA-Q12a to 12l and 12m)

Questions 12a to 12l comprise an abridged version of the Depression Scale (CES-D) developed by L.S. Radloff of the Center for Epidemiological Studies of

the National Institute of Mental Health (NIMH) in the United States. They measure the frequency of symptoms of depression in the general population as well as the presence and severity of symptoms associated with depression in the week prior to the survey. M. Boyle of Chedoke-McMaster Hospital at McMaster University proposed an abridged version of this scale.

Question HLA-12m, taken from the Edinburgh Postnatal Depression Scale (EPDS), was proposed by Richard E. Tremblay as a means of obtaining an additional measure of postnatal depression in the PMK when the infant is approximately 5 months old. Louise Seguin adapted the EPDS into French and it was validated by Jean-François Saucier of Ste-Justine Hospital with a sample of 369 mothers in Québec, 6 months after the birth of their babies. Thus it appears in neither Cycle 1 nor Cycle 2 of the NLSCY.

All the questions were also addressed to the biological father or the spouse/partner of the mother living in the same household as well as to absent biological fathers eligible to be included in the survey. They are part of the Self-Administered Questionnaire for the Father (SAQF, Q40 to 51a).

3.1.2.5 Family Functioning – FNC (completed by the PMK for the family)

Objective

To obtain a global assessment of family functioning and an indication of the quality of the relationship between the parents/spouses.

Studies have shown that the relationships among family members have a significant impact on the children. For example, the OCHS revealed a significant association between dysfunctional families and some mental health problems in children.

Measure (FNC-Q1a to FNC-Q1m)

This set of questions on family functioning, which was developed by researchers at Chedoke-McMaster Hospital at McMaster University, has been widely used not only in Canada but also around the world. The purpose of the scale is to measure problem solving, communication, parenting roles, emotional receptivity, emotional participation and behavioural control.

Question FNC-Q1m, drawn from the OCHS, was added to the initial scale to determine if alcohol consumption has an impact on family dynamics.

All the questions are identical to those in Cycle 2 of the NLSCY.

3.1.2.6 Neighbourhood – SAF (completed only for the PMK)

Objective

To gather information on the PMK's level of satisfaction with the neighbourhood as a place to bring up children; this includes an assessment of the degree of dangers and problems as well as social cohesion or "community spirit." Recent research by Jacqueline Barnes of the Judge Baker Children's Center at Harvard University has shown that parents' experience of danger and perception of social problems in the neighbourhood affect their sense of belonging to it and their disciplinary approaches with their children.

Information on parents' perceptions of the neighbourhood in which they live (HHLQ-Q6) is coupled with the interviewer's observations on the type of dwelling the respondent lives in. This information may eventually be compared with ecological data from other sources – for example, percentage of single-parent families or crime rates in the neighbourhoods or public housing complexes where the respondents live.

Measure (SAF-Q1, SAF-Q2, SAF-Q5a to SAF-Q7f and SAF-Q3)

These questions cover how long the family has lived in the neighbourhood, satisfaction with the neighbourhood as a place to bring up children and neighbourhood safety, social cohesion and social problems. They were adapted from the sections of the Simcha-Fagan Neighbourhood Questionnaire used by Jacqueline Barnes in her studies of neighbourhoods in Boston and Chicago. With the agreement of Jacqueline Barnes, we modified the questions to facilitate, among other things, factorial analysis.

The question on volunteer involvement (SAF-Q3) is drawn from the NPHS.

All the questions are identical to those in the NLSCY (Cycle 2).

3.1.2.7 Sociodemographic Characteristics – SOC (completed for the PMK and his/her spouse/ partner)

Immigration and Ethnic Origin

Objective

To gather information on the immigration and ethnic origin of the parents. These data provide a means to describe the parents' ethnocultural affiliation.

Measure (SOC-Q1 to Q4a)

The questions on the place of birth, citizenship, immigration status, year of immigration and ethnic origin are drawn from the 1991 Census (Statistics Canada). For the questions on ethnic origin, some response items were added to take into account the context in Québec.

Language

Objective

To determine the first language of the respondent and his/her spouse/partner as well as the other languages they know. First language may be used along with other information (birthplace and ethnic origin) to identify members of visible minorities.

Measure (SOC-Q5, 6 and 6a)

Question SOC-Q5 on the language(s) of conversation is drawn from the NPHS while the one on the first language (mother tongue) (SOC-Q6) is drawn from the 1991 Census (Statistics Canada). To these questions has been added one (SOC-Q6a) on the language(s) spoken most often at home; it is drawn from the Survey of Labour and Income Dynamics and the 1991 Census (Statistics Canada).

Religion

Objective

To determine the respondent's religious affiliation and participation rate in religious activities. It is well known that religion and especially the frequency with which one engages in religious activities may influence health and individual well-being.

Measure (SOC-Q8 and Q9)

The question on religious affiliation (SOC-Q8) is drawn from the General Social Survey (GSS) conducted by Statistics Canada in 1994. The one on how often the respondent participates in religious activities (SOC-Q9) is taken from the NPHS.

This ends the section of the questionnaire on parents. Other questions concerning parents are found in the paper-based instruments. They will be examined after a brief review of the sections of the CQCI entitled "Child's Questionnaire" and "Absent Biological Parent's Questionnaire."

3.1.3 Child's Questionnaire

This section provides data on a target population of infants of approximately 5 months of age. The information is given to the interviewer by the person with the most knowledge of the infant, that is, the PMK.

3.1.3.1 Health – HLT

Objective

To gather information on the physical health of the infant (general health, injuries, disabilities, chronic health problems) and on the use of health services.

Health is both a dependent and an independent variable. It is an intrinsic characteristic that may influence different aspects of an infant's life; it is also an element of the infant's life that is easily influenced by other factors. Health is thus fundamental to the development and well-being of children, and information on this aspect of children's lives must be gathered if we are to plan policies and programs of benefit to them.

Measure (HLT-Q1, HLT-Q3, HLT-Q4 and HLT-Q37 to HLT-Q42, HLT-Q45 and HLT-Q2, HLTQ48a to HLT-Q48i, HLT-Q49 and 50)

The questions on general health (HLT-Q1), height (HLT-Q3), weight (HLT-Q4) and injuries (Q37 to 42) are drawn from the NPHS. The questions on injuries were somewhat modified to better adapt them to very young children and to ensure they conformed with other data sources such as the Canadian Hospitals Injuries Reporting and Prevention Program.

The questions on chronic health problems and on consultations with health professionals (HLT-Q45 and HLT-Q48a to i) were developed by the project team at the NLSCY. They are drawn from the questions addressed to adults in the NPHS.

The question covering recent health status (HLT-Q2) was provided to the NLSCY project team by J.-F. Saucier from the Ste-Justine Hospital in Montréal.

Question Q49, on whether the infant has spent at least one night in hospital, was developed by the NLSCY project team from a question in the OCHS. Question Q50, about the reasons for this hospitalization, was proposed by the project team in consultation with Denise Avard of Canadian Institute of Child Health.

All these questions are identical to those in Cycle 2 of the NLSCY.

3.1.3.2 Medical and Biological (Perinatal) Information – MED (the questions are asked only if the respondent is the infant's biological mother [MED-Q3 to 31] or biological father [MED-Q13a to 31])

Objective

To gather information on factors such as weight at the time of delivery and smoking and drug usage during the pregnancy. Studies have shown that these factors have a direct influence on the growth and development of infants. For example, babies with low birth weight are at higher risk of experiencing ill health and developmental problems.

Measure (MED-Q3 to MED-Q10b, MED-Q13a, MED-Q23a to MED-Q24b and MED-Q29, 30a to 31)

The questions on the mother's drug and alcohol consumption and smoking during pregnancy are the same as those added to the supplementary survey of the NPHS (MED-Q3 to MED-Q10b).

The questions on the infant's birth weight (MED-Q13a) and the mother's health at delivery (MED-Q23a to MED-Q24b) were formulated by the NLSCY project team from questions provided by J.-F. Saucier of Ste-Justine Hospital in Montréal.

All these questions are identical to those in Cycle 2 of the NLSCY.

The three questions covering the mother's employment after her baby's birth (MED-Q29, 30a and 31) were added to Cycle 2 of the NLSCY and adopted without any changes for the 1998 ÉLDEQ survey.

3.1.3.3 Temperament – TMP

Objective

To measure the temperament of the target child by asking the parents to assess how difficult they find the child to be. This measure is based on the fact that a child's temperament is associated not only with biological factors but also with the perceived difficulty of that child by its parents.

Measure (TMP-Q1, 3, 5 to 8, 17, 19, 20 and 33)

The temperament scale known as the Infant Characteristics Questionnaire (ICQ), which was developed by John Bates of the University of Indiana, is a well-known scale that has been used in several large studies. It is considered by experts as the best instrument for population studies.

Because of the age of the target children in ÉLDEQ, only 10 questions are addressed to the PMK. They are identical to those in the NLSCY (Cycle 2), except for question 3, which was removed from the Cycle 2 survey. Some of these questions (TMP-Q5, 6, 7, 8, 19, 20 and 33) are also answered by the father in the Self-Administered Questionnaire for the Father (SAQF-Q2 to 12).

3.1.3.4 Literacy – LIT

Objective

To measure the exposure of the children to reading. This section enables the researchers to acquire, over the course of the survey, indices of how well prepared the children are to enter school and the effect this preparation may have on their success in school.

Measure (LIT-Q1 to LIT-Q3)

These questions were developed by B. DeBaryshe of the University of Hawaii, based on the US National Assessment of Educational Progress. The questions

vary according to the age of the child. Three questions from this source were adopted for ÉLDEQ 1998. They are identical to those in Cycle 1 and Cycle 2 of NLSCY.

3.1.3.5 Activities – ACT

Objective

To measure the children's participation in educational activities. This section provides information on how children use their time. In particular, we wish to know if they are involved in, for example, Mom and Tot program and Infant stimulation programs.

Measure (ACT-Q1 to ACT-Q2b)

The questions on pre-school activities were formulated by the NLSCY team from sources such as the Canadian National Child Care Study (NCCS) and the Better Beginnings, Better Futures Project sponsored by the government of Ontario. These questions are identical to those in Cycle 2 of the NLSCY.

3.1.3.6 Motor and Social Development – MSD

Objective

To measure motor, social and cognitive development in young children.

Measure (MSD-Q8 to MSD-Q22 and MSD-Q22a to MSD-Q22k)

The scale of motor and social development was fine-tuned by Gail Poe of the National Center for Health Statistics in the United States. This scale comprises 15 questions (MSD-Q8 to MSD-Q22) that measure aspects of motor, social and cognitive development in young children, from birth to age 3. The questions vary according to the age of the child. This scale was used to collect data for the National Longitudinal Survey of Youth (NLSY) in the United States and for recent versions of the National Child Development Survey (NCDS) in England.

MSD-Q22A to MSD-Q22k

Eleven questions from the Vineland Adaptive Behaviour Scales (Sparrow et al, 1984) were used in ÉLDEQ, on the recommendation of Richard E. Tremblay. Since there were relatively few questions aimed at measuring the social adaptation of infants, these questions (MSD-Q22a to MSD-Q22k) helped complete the social dimension of the survey. The questions are similar to those in the source scale, but they were reformulated for use in face-to-face interviews. They were translated into French by *Santé Québec* and verified by the researcher.

3.1.3.7 Parental Roles – PAR

Objective

To measure parenting practices and aspects of the basic care of the children. This section of the survey covers topics such as the parents' positive interaction with and hostility towards the infant.

The way in which children are raised has a significant influence on their behaviour and development. This is an area in which support policies and programs for families are needed.

Measure (PAR-Q1 to PAR-Q6 and PAR-Q7a)

The questions on parenting practices were provided to the NLSCY by M. Boyle of Chedoke-McMaster Hospital from work done by Ken Dodge at Vanderbilt University and adapted from the Parent Practices Scale by Strayhorn and Weidman.

The seven questions used in the 1998 collection wave of ÉLDEQ measure the frequency of certain parental behaviours towards the child and comprise two scales of parenting practice. The first measures positive interactions (PAR-Q1, 2, 3, 6 and 7) and the second assesses hostile interactions (PAR-Q4 and 5).

The questions in the first year of ÉLDEQ are identical to those in Cycle 2 of the NLSCY, except for questions

PAR-Q4 and 5; after the pretest, the French versions of the questions were modified to take into account the context in Québec.

3.1.3.8 Family and Custody History – CUS

Objective

To gather information on the family of the target child, including on transitions in the family before and after the birth, by examining the conjugal history of the biological parents.

Numerous clinical studies have shown a link between family instability, that is, parental conflict, separation, divorce and family reconstitutions, and the emergence of problems such as low self-esteem, adjustment problems and mediocre success at school. In documenting, from a representative sample, changes in the families of children, the data from the NLSCY and ÉLDEQ 1998-2002 provide a means to understand the impact of marital dissolution on the development of children.

Measure (CUS-Q1 to CUS-Q23)

This section of the survey brings together innovative data on family transitions experienced by children and on changes in child-care arrangements after parental separation or divorce. The questions were developed for the NLSCY by Nicole Marcil-Gratton of the Department of Demography at the University of Montréal and used without adaptation for the first data collection wave of ÉLDEQ. In the NLSCY, as in ÉLDEQ, the respondent (PMK) must be one of the child's biological parents.

Beginning with the ÉLDEQ 1999 survey, some new questions, proposed by *Santé Québec*, were added to those addressed to the biological parents (SAQM or SAQF). They provide a means to understand the circumstances surrounding the break-up, if indeed that is the case, and the relationship between the non-custodial parent and the target child. Questions are also addressed to the absent biological parent, if it is possible to get in contact with that person (see the discussion below).

3.1.3.9 Child Care – CAR

Objective

To gather basic information on child care for parents who work or study, as well as retrospective information on child care. These questions provide a means to ascertain how much time the child spends in a child-care environment and the nature of that child-care service. In addition, information is gathered on how often in the preceding 12 months the child-care arrangement changed and on the nature and reason for those changes. The questions also provide a means to determine if the daycare services used are non-profit or profit-based and whether or not the home daycare centres are licensed.

Measure (CAR-Q1a to CAR-Q5)

The questions on daycare centres were formulated by the NLSCY project team from the Canadian National Child Care Study, conducted in 1988 and improved after discussions with experts in the field. Some were adapted for specific age groups (0–11 months, 1–3 years, 4–5 years, 6–11 years and 12–13 years). For the first data collection period of ÉLDEQ, 21 questions pertaining to the age group of the target children (approximately 5 months) were retained. They are identical to the questions in Cycle 2 of NLSCY.

3.1.3.10 Sociodemographic Information – SOC – Child

Questions SOC-Q4, 4a 8 and 9 on the ethnic origin, race and religion of the child are the same as those addressed to parents in both Cycle 2 of the NLSCY and the 1998 ÉLDEQ survey (see the section entitled "Parents' Questionnaire").

This ends our examination of the section of the questionnaire entitled "Child's Questionnaire". Let us now examine the final section, "Absent Biological Parent's Questionnaire."

3.1.4 Absent Biological Parent's Questionnaire

This section of the questionnaire was designed for ÉLDEQ 1998–2002. It must be completed by the PMK if the other biological parent is not living in the household.

The questions cover the name and date of birth of the absent biological parent as well as his/her level of education (EDA-Q2, 3 and 4) and employment (LFS-Q1: main activity; Q2, 8, 9a: paid work; Q10a and 11a: type of work). The questions are identical to those in the section on the CQCI entitled "Parents' Questionnaire."

This ends the examination of the Computerized Questionnaire Completed by the Interviewer. The next section will examine the two paper questionnaires, the Paper Questionnaire Completed by the Interviewer (PQCI) and Questionnaire on the Ice Storm of January 1998, which are completed by the interviewer during a face-to-face interview with the PMK. This will be followed by an examination of the Self-Administered Questionnaire for the Mother (SAQM) and the Self-Administered Questionnaire for the Father (SAQF) as well as the Observations of Family Life (OFL) questionnaire that is filled out by the interviewer after meeting with the parents.

3.2 Paper Questionnaire Completed by the Interviewer (PQCI)

Like the CQCI, the respondent for the Paper Questionnaire Completed by the Interviewer (PQCI) is the person who best knows the child, the PMK. This questionnaire complements the CQCI and is divided into three sections: the grandparents, the perception of the socioeconomic situation and the infant's diet and oral hygiene.

Section 1 – The Grandparents

Objective

To acquire information on the reproductive behaviour of the grandparents of the target child from the point of view of intergenerational reproduction.

Measure

Questions 1 to 6 cover the current age of the target child's maternal and paternal grandparents or, if they are deceased, the date of death as well as the age of the eldest child in that family (the aunt or uncle of the target child). These questions are drawn from the *Étude longitudinale et expérimentale de Montréal* (Longitudinal and Experimental Study of Low SES Boys in Montréal) and the *Étude longitudinale des enfants de maternelle au Québec* (Longitudinal Study of Québec Kindergarten Children), two studies conducted in Québec by the *Groupe de recherche sur l'inadaptation psychosociale* (Research Unit on Children's Psychosocial Maladjustment) at the University of Montréal (GRIP), in 1984 covering 1,037 boys and 1986, 3,018 boys and girls.

Section 2 – Perception of the Socioeconomic Situation

Objective

To measure the respondents' perception of the financial situation of the household at the time of the interview.

Measure

Questions 7, 8, 9 and 10 measure the respondents' perception of the financial situation of the household. Question 9 examines how long the perceived financial situation has lasted. These questions are drawn from the *Enquête sociale et de santé 1992–1993* (Health and Social Survey) conducted by *Santé Québec* and covering more than 16,000 households in Québec. The questions were included in this study upon the recommendation of Christine Colin, former Assistant Deputy Minister for Public Health in the *ministère de la Santé et des Services sociaux du Québec – MSSS*.

Question 11 is original. It covers the total annual income of the household in the year preceding the mother's maternity leave. It aims at discerning the economic mobility of the household during the period before the arrival of the infant.

Section 3 – Diet

Objective

To gather information on the dietary patterns of infants. An expert advisory group on nutrition (see Annex Part I for a list of members) was formed to gather information on the diet of babies. The subject of breast feeding, in particular, was incorporated in ÉLDEQ 1998-2000 upon the request of the *ministère de la Santé et des Services sociaux du Québec (MSSS)*, one of the principal sources of funding for this survey.

This section comprises questions on the mother's choice of mode for feeding the infant, its duration, social support related to breast feeding, the introduction of solid foods, nutritional supplements, etc.

Studies have shown that there is an association between dietary patterns, infant development and behavioural problems (Beaudry et al, 1995; D'Amours, 1990). Iron deficiency and the quality of the mother-infant relationship have also been linked.

The main risk factors associated with iron deficiency are poverty, low birth weight and rapid growth in the infant, use of non-iron-enriched formulas, breast feeding for longer than 6 months by the mother if she does not take iron supplements, use of cow's milk and dietary allergies. It is these factors that were surveyed in ÉLDEQ.

With respect to the mother-child relationship, it has been shown, for example, that breast feeding the infant from birth is important in creating a bond between the mother and child.

Measure

Questions 12 and 13 provide a means to ascertain the breast feeding pattern during the first 5 months of the child's life. They were recommended by:

- Lise Dubois of *Université Laval*, who based them on questions in the Avon Longitudinal Study of Pregnancy and Childhood (ALSPAC, 1990). This longitudinal study was initiated in 1990 and continued for at least 7 years in the county of Avon, which includes the city of Bristol, in Great Britain. The sample, comprising 13,995 mothers and 14,138 children, is representative of children born in the country between 1991 and 1992.
- Marie-Claire Lepage, from the team working with *Adaptation familiale et sociale* of the *Direction de la santé publique (Public Health Department)* for the Quebec region, who was associated with the *Étude provinciale sur l'alimentation du nourrisson (ÉPAN)* conducted in the fall of 1994 among primiparous women in Québec by means of post-partum interviews in hospitals as well as telephone interviews.
- Louise Séguin and Louise Desjardins of the University of Montréal following a pretest on the *déterminants du début et de la durée de l'allaitement maternel (PDDAM)* (determinants of initiation and duration of breast feeding) that they conducted in 1994-1995 among 22 Québec women living in low-income households in the course of a preliminary study on nutrition.

Questions 14, 16a and 16b cover the consumption of infant formula or cow's milk. They were recommended by Michèle Houde-Nadeau of the Nutrition Department of the University of Montréal and by Lise Dubois, who also found inspiration in the ALSPAC study.

Questions 16a, 16b, 21a and 21b, on the infant's age when the mother introduced or ceased to use one type of milk, are drawn from The Third National Health and Nutrition Examination Survey (NHANES III-USA, 1988-1991, 1991-1994). The data for this cross-sectional study with longitudinal follow-up were collected in two waves, that is, from 1988 to 1991 and from 1991 to 1994 for a non-institutionalized civilian population aged 2 months and older (34,000 persons).

As in the case of questions 12 and 13, questions 16 and 21 aim to discern dietary patterns in bottle feeding during the infant's first 5 months as well as the impact on his/her health of the various types of milk used.

Questions 17 and 19 provide a means to assess when the mother decided to use the feeding method. Then, during the analysis of the data and cross-tabulation, we can ascertain if there is a link between the time of the decision and the preferred choice at the time of birth. Questions 15, 18 and 20 cover the main reason why the mother chose to breast or bottle feed the infant. These questions are drawn from the ÉPAN and PDDAM.

Question 22 comes from the NHANES III (1988-1991) and was adapted to account for the context in Québec. The question provides information on the proportion of mothers receiving an allowance from the government to breast feed their infants or to purchase commercial formulas. It was recommended by Lise Bertrand, nutritionist with the *Direction de la santé publique* for the Montréal-Centre region.

Questions 23 and 24, which aim at providing information on how long the infant took nutritional supplements, come from the *Évaluation de l'état nutritionnel en fer d'un groupe d'enfants (ÉÉNFE) (Iron Nutritional Status)*, a study conducted in a sample of infants aged 12 to 20 months and living in the Charlevoix region of Québec. The study, under the direction of Huguette Turgeon-O'Brien, was conducted in 1992-1993 by the *Groupe de recherche en nutrition humaine* (Human Nutrition Research Group) from *Université Laval* among 22 boys and 25 girls. The questions had been pretested. This information is needed, according to Michèle Houde-Nadeau of the University of Montréal, because it is very important to supplement the diet with iron as well as other nutrients such as Vitamin D, in particular for babies born in fall or winter.

The responses to question 24, on the consumption of vitamin or mineral supplements, are also analyzed by the team of consulting dentists of the *Direction de la santé publique, Montréal-Centre*, headed by Ginette Veilleux (see the following section on dental health).

Question 25, on the sequence of introduction of solid foods, provides a glimpse of the extent to which the recommendations of the Canadian Paediatric Society¹³ are followed by parents. This question was drawn from the following studies and modified to some extent: NHANES III-USA (1988–1991), ÉÉNFE and ÉPAN.

Question 28 is asked to learn if the attitude to breast feeding of the mother's family, friends and professional contacts influenced her choice of feeding method. The question is drawn from the ÉPAN and PDDAM.

Section 4 – Oral and Dental Health

Objective

To increase knowledge of the evolution of habits in infancy relating to fluoride intake, dietary practices, dental hygiene, non-nutritive sucking and use of dental services. The associations between some of the above named habits related to oral and dental health and socioeconomic and psychosocial aspects of the development of very young children must be better documented if we are to design appropriate prevention programs.

The period from age 0 to 5 years is when the process of infection that leads to dental caries first sets in. A particular manifestation of morbidity, called baby bottle or early childhood caries, has been observed in very young children. It is characterized by very rapid destruction of tooth structure. Although multiple factors are known to cause the condition, many observers suggest it results from ignorance of the negative effects of constantly letting a child fall asleep with a bottle containing milk or juice. Caries in young children may affect speech, including pronunciation, and facial aesthetics, which in turn have a psychological impact on the child and lead to difficulties with speaking or smiling and mastication, possibly resulting in poor diet and stunted growth. With regard to non-nutritive sucking habits (of a finger, a pacifier or other object), the effect most often observed in primary dentition is the

13. These recommendations are found in the booklet *From Tiny Tot to Toddler* (Doré & Le Hénaff, 1997) given free of charge to all mothers who give birth in a hospital or birthing centre in Québec.

displacement of dento-alveolar structures in the anterior segment of the maxilla. For this reason, it may affect appearance, swallowing and speech in some children.

The ÉLDEQ survey has, for the first time in Québec, provided data on habits related to dental health in very young children.

Measure

To gather information on infants approximately 5 months of age, questions 26a, b, c and 27a, b, c, which cover what bottle-fed infants are imbibing and over what period, were included in the section on diet. These questions were provided by a 6-member team of consulting dentists associated with the *Direction de la santé publique* for *Montréal-Centre* (see Annex Part I for a list of members). They were adapted from two sources.

The first is the questionnaire for the *Étude des besoins en santé dentaire (ÉBSD)*, developed by Martin Généreux and Ginette Veilleux of the *Direction de la santé publique* for *Montréal-Centre*. The questionnaire was administered by telephone in February and March 1990 to a sample of 106 parents of 12- to 18-month old infants who had attended an immunization clinic at a CLSC (Community Health Centre) in Montréal East.

The second source is the *Projets de surveillance de la carie du biberon (PSCB)*, which is associated with the *Directions de la santé publique* for *Montréal-Centre* and the Laurentians. Michel Lévy and Paul Massicotte developed a questionnaire for this project based on the training manual from the Center for Disease Control and Prevention and entitled *How to organize a baby bottle tooth decay program*. Data collection took place from 1997 to 1998 in a sample of 200 children associated with seven CLSCs in the Laurentians¹⁴.

Questions 24a and 24b cover the type of vitamin and/or mineral supplement(s) taken by the infant. The purpose of these questions is to estimate the intake among

14. The report was not available when the present volume was published.

infants of supplements containing fluoride, a factor known to provide protection against caries. These questions are also analysed by the expert advisory team on diet that is working under the direction of Lise Dubois of the *Département de médecine sociale et préventive de l'Université Laval* (Department of Social and Preventive Medicine of *Université Laval*).

Question 14 of the SAQM (Self-Administered Questionnaire for the Mother), which is found in Section 2, "Sleep," deals with whether the infant has a particular object in the bed before going to sleep. It provides a means to study non-nutritive sucking, that is, whether the infant uses a pacifier to go to sleep. The responses to this question are also analysed by Jacques Montplaisir of the Centre d'étude du sommeil (Center for the Study of Sleep) of Sacré-Coeur Hospital, University of Montréal.

Note that the separate section on oral and dental health was introduced in the PQCI with the 1999 ÉLDEQ survey.

3.3 Questionnaire on the Ice Storm of January 1998

The short questionnaire entitled Questionnaire on the Ice Storm of January 1998 is filled out by the interviewer with the PMK. Its completion brings to an end the face-to-face interview.

Objective

To determine the impact of the ice storm that hit Montréal and the surrounding regions in January 1998 on diverse variables related to the development of the infants in view of their age during the event (babies in the 2nd or 3rd trimester of pregnancy or up to 3 months of age).

Measure

Questions 1 and 2 cover the period during which family members lived without electricity or telephone service. They provide a means of ascertaining the proportion of families who were affected by the storm and the number

of hours or days they lived with neither electricity nor telephone service during the coldest months of a Québec winter.

Questions 3, 4 and 7 deal with the type and location of shelter, if any, used by the families.

Questions 5 and 6 aim to provide information on losses in revenue and stored food experienced by the families as well as on damage to their homes.

Question 8 covers the respondent's perception of the consequences of the storm for the family.

All the questions come from the 1998 *Enquête sociale et de santé (ESS-SQ)* coordinated by *Santé Québec* of the ISQ. They were designed by a committee set up by *Santé Québec*. The results of the preliminary analysis of the data for ÉLDEQ are presented in Volume 1, Number 1, of this collection.

3.4 Self-Administered Questionnaire for the Mother (SAQM)

The Self-Administered Questionnaire for the Mother (SAQM) must be completed by the biological mother of the target child or the spouse/partner of the father (if the biological mother is absent from the household) and by the absent biological mother if it is possible to contact her. It comprises seven sections on the following themes: experiences during pregnancy, sleeping habits of the infant, the mother-child relationship, financial support provided to the mother by the father or the current spouse/partner, prior antisocial behaviours in the mother and biological father, if the latter is absent from the household, and leisure activities.

Section 1 – Experiences During Pregnancy

Objective

To obtain a profile of the mother's reproductive history from the perspective of intergenerational reproduction. In the long term, the responses to these

questions could be examined in relation to the child's onset of puberty and her/his sexual compartment and reproductive profile.

Measure

Questions 2 to 6 cover the biological mother's age at onset of menstruation, her first pregnancy, first child, first abortion and the number of pregnancies and abortions she has had. These questions are new; they were developed by Richard E. Tremblay of GRIP at the University of Montréal.

Section 2 – Sleep

Objective

To assess the role of genetic and environmental factors on the circadian sleep-wake rhythm of infants. Identifying the environmental factors (temperature, light levels) or parental behaviours that enhance or impede the consolidation of the sleep-wake rhythm in infants is one step in formulating for parents recommendations on how they can foster normal sleep rhythms early in their children's lives. In the short term, this section of the survey provides a means to examine the links between infants' sleep patterns and various aspects of their development.

Measure

The questionnaire on sleep was specially designed for the *Étude des jumeaux nouveau-nés du Québec (ÉJNQ)* (Québec Study of Newborn Twins) and the sample of singleton babies of ÉLDEQ 1998–2002 by Jacques Montplaisir of the *Centre d'étude du sommeil* of Sacré-Coeur Hospital at the University of Montréal. The questions are thus original and were not drawn from existing questionnaires. They were translated into English and counter-verified by the researcher.

Questions 7 and 7a provide a means to verify the consolidation of the sleep-wake rhythm and to identify the age at which the infant started sleeping through the night.

Questions 8, on how long it takes the infant to fall asleep, and 9, on difficulties in falling asleep, aim to measure the mother's perception of the ease or difficulty with which the infant falls asleep.

Questions 10 and 11, on sleep consolidation during the night and day, provide a means to determine the onset of the sleep-wake cycle in the baby and whether it is reversed.

Question 12 deals with the circumstances surrounding going to bed; specifically, the behaviours adopted by parents to get their infants to go to sleep.

Question 13, on where the infant sleeps, provides information on the sleep environment and factors that might contribute to sleep problems.

Question 14 covers the infant's sleep habits, in particular, whether a transitional object (e.g., pacifier, bottle, stuffed animal) is present when the infant is falling asleep. As mentioned, responses to this question are also analyzed from the point of view of non-nutritional sucking (use of a pacifier) by the team of consulting dentists at the *Direction de la santé publique, Montréal-Centre*, lead by Ginette Veilleux (see the sections "Diet" and "Oral and Dental Health" of the CQCI).

Question 15 addresses the parents' behaviour at night awakenings. It provides information on parental reaction when babies do not sleep through the night. Question 16, dealing with the number of sleep interruptions experienced by the mother, aims to assess the degree of sleep fragmentation.

Question 17 deals with the temperature of the room in which the baby sleeps, and question 18 deals with the light level. They aim to determine the influence of the

physical environment on the quality of the infant's sleep consolidation.

Question 19, on the infant's breathing, aims to discern breathing patterns that could influence the infant's sleep, while question 20, on the smoking habits of the parents or others in the household, provides information on the influence of second-hand smoke on the infant's sleep.

Section 3 – The Mother-Child Relationship (*ÉCOPAN- Échelle des cognitions et des conduites parentales*) Parental Perceptions and Behaviours Regarding the Infant Scale (PPBS)

Objective

To obtain an assessment of the mother's attitudes and behaviours regarding her child.

Numerous studies reveal an association between maternal attitudes and behaviours and various indices of child adjustment. For example, several studies suggest that infants whose parents show them little affection or are overprotective are more likely to develop internalizing problems during their development. The literature also seems to show that maternal behaviours are associated with the mother's perception of her efficacy as a mother and the impact of her behaviours on her child's development.

This scale, entitled the *ÉCOPAN (Échelle des cognitions et des conduites parentales)*, Parental Perceptions and Behaviours Regarding the Infant Scale (PPBS) is also administered to the biological father (living in the household or absent from it) or the current spouse/partner in the Self-Administered Questionnaire for the Father.

Measure

Six dimensions are measured using the following questions:

Feeling of self-efficacy: questions 23, 25, 27, 29, 32, 47

Perception of impact: questions 22, 31, 37, 42, 45

Tendency to coercion: questions 26, 28, 30, 33, 36, 40, 43

Affection: questions 22a, 22b, 46a, 46b, 46c

Overprotection: questions 34, 38, 39, 41, 44

Perception of the child's qualities: questions 21, 24, 35, 46

For each question, the mother indicates the degree to which the statement accurately describes her actions, thoughts or feelings towards the child. To reply, the mother selects a response on a Likert-type scale ranging from "Not at all" to "Exactly."

The questions related to the dimension "feeling of self-efficacy" are drawn from a scale developed in 1991 by Teti and Gelfand and adapted by Michel Boivin and Christiane Piché of the *Laboratoire de recherche de l'École de psychologie de l'Université Laval* (Research Laboratory at the School of Psychology of *Université Laval*) to take into consideration the age of the infants. Question 47, recommended by Michael Lamb, comes from the questionnaire Being a Parent developed by Joe Pleck of the University of Illinois. All the other questions are original and were developed by Michel Boivin and Christiane Piché. A list of initial items was drawn up and the validity of their contents was verified by 15 specialists in the field of mother-child interactions. The list was finalized after the items were pretested in a sample of francophone and anglophone mothers in the ÉJNQ-1995 and the pilot study of ÉLDEQ, which took place in 1996 (Santé Québec, Jetté et al, 1997).

Section 4 – Support Provided by the Current Spouse/Partner

Objective

To assess the emotional and instrumental support provided to mothers by the spouse/partner. The questions provide a means to explore various situations, including overall conjugal support, support in infant caregiving, in household chores, during periods of feeling overwhelmed and during periods of sadness.

Numerous studies have shown an association between a mother's behaviours and the instrumental and emotional support provided to her by her spouse/partner. For example, certain studies have demonstrated that mothers are better adjusted when fathers participate in household chores and in caring for the baby (Levitt et al, 1986), while others reveal that maternal behaviours such as anger, rejection and punishment are less frequent in mothers who are satisfied with their spouse/partner's emotional support (Crockenberg, 1987).

Measure

The first question (48) is directed to the mother and serves to verify what relation the spouse/partner is to the target child (infant approximately 5 months old).

Questions 49 to 53 of the scale for instrumental and emotional support are original and were developed by Valérie Saisset, Michel Boivin and Christiane Piché of the *Laboratoire de recherche de l'École de psychologie de l'Université Laval*.

This scale comprises five questions that provide an assessment of the spouse/partner's instrumental and emotional support in a variety of situations. Questions 49 and 50 address in particular the father's instrumental support, while questions 51 and 52 assess his emotional support and question 53 assesses his overall support.

To reply, the mother selects a response on a Likert-type scale ranging from "Not at all" to "Totally."

Section 5 – Overview of the Childhood, Adolescence and Adult Life of the Mother

Objective

To assess the psychopathology (particularly problems related to antisocial behaviour) of mothers of infants approximately 5 months old.

Canadian, American and British studies have shown that children with behaviour problems are more likely to have been born to parents with a history of conduct problems or of antisocial personality. Questions similar to those addressed to biological fathers, living in the household or absent from it, are addressed to mothers of the infants to assess the prevalence of antisocial behaviours that can be manifested in childhood or adulthood.

Measure

The questions in this section were modified from the most commonly used structured psychiatric interview in the world: the National Institute of Mental Health-Diagnostic Interview Schedule (NIMH-DIS), developed by Helzer and Robins (1988), and are based on the DSM-III (American Psychiatric Association, 1980) criteria. They also reflect DSM-IV criteria for the diagnosis of Conduct Disorder and Antisocial Personality Disorder (American Psychiatric Association, 1994). They were adapted and translated into French by Arthur BIYesn and pretested in ÉLEMQ, a longitudinal study directed by Richard E. Tremblay and Frank Vitaro of GRIP at the University of Montréal.

For the 1998 ÉLDEQ survey, the questions were adapted for use in a self-administered questionnaire. The response items "refuses, doesn't know" were removed and "before the end of secondary 5" was modified to "before the end of high school" as a way to define what we mean by "childhood."

To avoid making the interview too long, some questions were regrouped. Readers should take note that certain problems of specificity exist for all the ÉLEMQ questions that combine questions from DIS and that measure more than one symptom from DSM-III or DSM-IV (Diagnostic and Statistical Manual of Mental Disorders).

Questions 55 and 56 (adapted from questions R12 and R6 of the ÉLEMQ) on stealing and fighting represent one part of the scale of antisocial behaviours (criteria B11, B12 and B3) of DSM-III-R. These questions are found in the SAQF (questions 53 and 54), although in a somewhat different form, to take into account the antisocial behaviours of men.

Questions 54, 58, 60 and 65, on participation in clubs or organized sports teams, are new and were added to the questionnaire to give it a positive tone and to prevent respondents from adopting a certain resistance to it. They are similar to questions 52, 57, 58 and 63 of the SAQF.

Question 57 is drawn from the ÉLEMQ (question R18), with two modifications: 1) "when he was a minor" is replaced by "before the end of high school" in order to make it consistent with the questions on the mother's childhood; 2) "appeared in youth court" was changed to "in trouble with Youth Protection because of misbehaviour" to take into account the context in Québec. In addition, this rewording makes the criterion a bit less formidable than the case of a court appearance. The question is similar to question 55 of the SAQF.

Question 59 is adapted from question R5 of the ÉLEMQ. This question, on trouble at school, that is, on "skipping school" is used for mothers only because such behaviour seems more pertinent to them. It differs from question 56 of the SAQF, which refers to having been "expelled or suspended from school."

The next question (Q59a) deals with running away from school. It comes from question R10 of the ÉLEMQ and is addressed only to mothers because it attempts to evaluate a symptom associated more frequently with antisocial behaviour in women.

Question 61 is drawn from question R50 of the ÉLEMQ. It also appears in the SAQF (question 59). We changed the term "let go" to "fired" (excluding layoffs resulting from lack of work). The theme "problems at work" corresponds to the DSM-III-R criterion C1, which is used to diagnosis Antisocial Personality Disorder.

Question 62 comes from question R19 of the ÉLEMQ. This question, about arrests, relates to criterion C2 of the DSM-III-R and is almost identical to question 60 of the SAQF.

Question 63, on physical aggression exhibited in adulthood ("hit or threw objects"), is from the ÉLEMQ (R43). It corresponds to criterion C3 of the DSM-III-R and is addressed only to mothers, the formulation being more appropriate to the behaviour of women. For men, the survey seeks information on physical aggression towards others (e.g., fights, assault), whether or not the violence is directed against the spouse/partner (Q61 of the SAQF and Q74 of the SAQM – "About your baby's biological father...").

Question 64 deals with problems related to drugs and alcohol. It combines three questions – M-14, P-18 and M-17 – of the ÉLEMQ. The part "been in trouble at work, with the police or with your family..." comes from question M-14. Combining aspects of questions P-18 and M-17, we listed "alcohol" with "drugs" as causes of the symptom and included the part of question M17 on car accidents to identify another potential problem related to drugs or alcohol. This question is similar to question 62 of the SAQF.

As mentioned, we encountered a problem of specificity for all the questions in which we combined more than one of the DIS questions measuring more than one symptom of DSM-III. The strategy was nevertheless retained to make filling out the questionnaire less onerous.

Section 6 – Overview of Childhood, Adolescence and Adult Life of the Absent Biological Father

Objective

To assess the psychopathology (particularly problems related to antisocial behaviour) of absent fathers of infants approximately 5 months old.

Certain studies suggest that infants are more likely to exhibit conduct problems or antisocial personality if the

father, more specifically than the mother, exhibited such problems himself. This association is valid even if the child has few or no contact with the father during childhood. The data on absent fathers are provided by proxy by the infant's mother (SAQM). Absent fathers who are eligible and whose address is provided by the mother receive the Self-Administered Questionnaire for the Absent Father (SAQFABS) so that they may answer the questions as do the biological fathers or spouse/partners living in the household (see SAQF, above).

Measure

As with Section 5 of the SAQM on the mother's prior life, all the questions in this section come from the NIMH-DIS (Helzer & Robins, 1988). They were adapted and translated into French then pretested in the ÉLEMQ. On the basis of this French version, the questions were set in the third person singular for inclusion in the proxy questionnaire.

For all the questions on adolescence, "before finishing Secondary 5" was changed to "before the end of high school." We also added "Do not know" to the response items, given that the mother/ spouse might not know the answer to some of the questions.

Questions 66 and 67 provide a means to assess the involvement of the absent biological father in the life of his infant of approximately 5 months old. Question 66 has been modified. We ask how much contact the biological father has had with his baby rather than inquiring about his presence in the household (as was done earlier in the survey). This question comes from the antisocial behaviour scale (criterion C4 of the DSM-IIIIR) for diagnosing Antisocial Personality Disorder. It is adapted from question A5 of the ÉLEMQ.

To discern if the absent father provides financial support (question 67), we adapted question R60 of the ÉLEMQ. This question is another component of the antisocial behaviour scale (criterion C4 of the DSM-IIIIR).

Questions 68 and 69, adapted from questions R12 and R6 of the ÉLEMQ and covering stealing and fighting, correspond to criteria B11, B12 and B3 of the DSM-IIIIR. These questions are also found in the questionnaire on antisocial behaviours given to the mother (questions 55 and 56).

Question 70, on involvement with the Department of Youth Protection, is identical to question 57 of the SAQM (see preceding section).

Question 71, which is adapted from question R4 of the ÉLEMQ, is about "problems at school"; it also is part of the scale of antisocial behaviour (DSM-III). This question appears in the SAQP (question 56), but is not in the mother's self-administered questionnaire.

Question 72, on problems at work, and question 73, on arrests, are similar to questions 61 and 62 addressed to the mother. The justifications for the latter were presented in the preceding section. With respect to the father, however, question 72 asks if he has been fired from "more than one job."

Question 74 deals with physical aggression manifested in adulthood; it combines two questions from the ÉLEMQ (R42 and R44) to reduce the number of questions in this somewhat lengthy survey. We therefore had to eliminate or adapt the parts of the original questions that were redundant or contradictory or would have made the question too long or not appropriate for a proxy questionnaire. For example, we replaced "it came to blows" to "assaulted or physically hurt anyone" and "hit his partner" to "including yourself"; as well, we removed "except for disputes with his partner or those related to his work" and "thrown objects."

This question on the antisocial behaviour scale corresponds to criterion C3 of the DSM-IIIIR for diagnosing Antisocial Personality Disorder. It is similar in part to question 61 of the SAQF (see below).

Note that this question on general physical aggression is not found in the questionnaire on antisocial behaviours addressed to the mother (Section 5).

Section 6 of the questionnaire ends with question 75, which deals with problems related to drugs and alcohol and is identical to question 64 in the mother's questionnaire.

Section 7 – Leisure Time

Objective

To gather data on the time the mother devotes to leisure. Certain analyses may be undertaken associating the health and well-being of the mother and the questions on the rhythm of daily life that will be added to subsequent data collections of this longitudinal study.

Measure

Question 76 is adapted from the study *Ados, familles et milieu de vie* (1994) conducted by a research team led by Richard Cloutier of the *Centre de recherche sur les services communautaires* at *Université Laval* and from the preliminary questionnaire of the *Enquête sociale et de santé auprès des enfants et adolescents* undertaken by *Santé Québec* in 1997. The question was added to the current survey to end it on a positive note. And, for the same reason, a page inviting the mother to write her comments was also placed at the end.

3.5 Self-Administered Questionnaire for the Father (SAQF)

The above-named questionnaire is completed by the biological father living in the household or by the mother's spouse/partner if the biological father is absent. It may also be completed by the absent biological father if he is eligible to do so and if he can be contacted. It comprises five sections on the following themes: temperament of the infant, the father-child relationship (PPBS), the well-being of the father (depression scale),

prior antisocial behaviours and leisure time. Some sections are taken in whole or in part from the CQCI or the SAQM.

Section 1 – Temperament of the Infant

Objective

To measure the temperament of the infant by asking the father to assess his/her degree of difficulty.

This measure is based on the fact that an infant's temperament is not only biological in origin, but also influenced by the two parents' perception of the degree of difficulty of the infant's temperament. The data gathered from fathers provide a means to examine the link between the father's perception of it and the infant's temperament, as well as inter-observer reliability (i.e., mother in the CQCI and father in the SAQF).

Measure

Questions 2 to 12 inclusively are drawn from the Infant Characteristics Questionnaire (ICQ) created in 1979 by J. E. Bates of the University of Indiana and used in Cycle 1 of the NLSCY (1994-1995). The latter pan-Canadian study was conducted in a sample of 22,831 anglophone and francophone respondents. The questions, as well as the translation of them, were pretested in a sample of 2,721 francophones from across Canada.

This scale provides a means to measure the parent's perception of the degree of difficulty of the infant, that is, how irritable or fussy it is as well as how well it adapts. Some questions in the SAQF also appear in the CQCI, which is addressed to the PMK. In the SAQR, the items "Refusal" and "Does not know" were deleted.

**Section 2 – Father-Child Relationship (*ÉCOPAN - Échelle des cognitions et des conduites parentales*)
Parental Perceptions and Behaviours Regarding the
Infant Scale (PPBS)**

Objective

**To assess the behaviours and attitudes manifested
by the father in his relationship with his child.**

There has been little research on the father's perceptions of his role and behaviours towards his infant, though such knowledge is essential if we are to better understand the influence fathers have on the development of their children. Recall that the PPBS is also administered to the mother in the SAQM.

Measure

Six dimensions are measured using the following questions:

Feeling of self-efficacy : questions 15, 17, 19, 21, 24, 39

Perception of impact: questions 14, 23, 29, 34, 37

Tendency to coercion: questions 18, 20, 22, 25, 28, 32, 35

Affection: questions 14a, 14b, 38a, 38b, 38c

Overprotection: questions 26, 30, 31, 33, 36

Perception of the child's qualities: questions 13, 16, 27, 38

For each question, the father indicates the extent to which the statement describes his feelings or actions towards his child. To reply, the father selects a response on a Likert-type scale ranging from "Not at all" to "Exactly."

The questions related to the dimension "feeling of self-efficacy" are from Teti and Gelfand's 1991 scale; they

were adapted to make them more appropriate for infants approximately 5 months old by Michel Boivin and Christiane Piché of the *Laboratoire de recherche de l'École de psychologie de l'Université Laval*. Question 39, recommended by Michael Lamb, comes from the questionnaire Being a Parent developed by Joe Pleck of the University of Illinois. All the other questions are original; they were developed by Michel Boivin and Christiane Piché. An initial list of items was produced and the content of the items was verified by 15 specialists in the field of parent-child interactions. The list was finalized after the items were pretested in a sample of francophone and anglophone mothers in the ÉJNQ-1995 and the pilot study ÉLDEQ-1996 (Santé Québec, Jetté et al, 1997).

Section 3 – Well-Being of the Father

Objective

To gather information on the mental health of the respondent, mainly with regard to symptoms of depression.

Depression is relatively widespread. It has been shown that maternal depression has repercussions on the psychosocial adjustment of the infant. There has, however, been little research on the relationship between paternal depression and problems related to behavioural or cognitive development in the infant.

Measure

Questions 40 to 51 are from the Depression Scale (CES-D) developed by L.S. Radloff of the Center for Epidemiological Studies of the National Institute of Mental Health in the United States to measure the frequency of symptoms of depression in the general public. The presence and severity of symptoms associated with depression are measured in the week preceding the survey. An abridged version of this scale was developed by M. Boyle of Chedoke-McMaster Hospital at McMaster University and used in the Parent Questionnaire of Cycle 1 of the NLSCY in 1994-1995

(questions HLA-Q12a to 12l). The survey was conducted in a sample of 22,831 francophone and anglophone respondents. The questions, as well as the translation of them, were pretested in a sample of 2,721 francophones from across Canada.

Question 51a, recommended by Richard E. Tremblay as a means of obtaining an additional measure of postnatal depression in parents when the infants are approximately 5 months old, is from the Edinburgh Postnatal Depression Scale (EPDS). The French adaptation of the EPDS by Louise Séguin was validated by Jean-François Saucier of Ste-Justine Hospital in a sample of 369 Québec mothers 6 months after the birth of their baby. Other studies (Areias et al, 1996; Ballard et al, 1994) used it for mothers and fathers. This question does not appear in Cycles 1 and 2 of the NLSCY.

All the questions are found in CQCI of ÉLDEQ (HLA-Q12a-12m), which is conducted with the person who best knows the child – in the majority of cases, the mother. Nonetheless, in the SAQF we removed the response items "Do not know" and "Refuses" and added the instruction "Circle only one answer" to adapt them for the type of questionnaire (self-administered).

Section 4 – Overview of the Childhood, Adolescence and Adult Life of the Father

Objective

To assess the psychopathology (particularly problems related to antisocial behaviour) of fathers of infants approximately 5 months old.

As was discussed above, numerous studies have shown that children with behaviour problems are more likely to have a parent who presents a history of behaviour problems or antisocial personality. Intergenerational transmission of the symptoms is more frequent when the father, in contrast to the mother, experienced such problems himself, even if he maintained little or no contact with the child. The data collected for ÉLDEQ in

the sample of fathers living in the household or absent from it will therefore be very useful to researchers.

Measure

The majority of questions are from the NIMH-DIS (Helzer & Robins, 1998). They were translated into French and pretested in the ÉLEMQ.

This section is similar to the one in the Self-Administered Questionnaire for the Mother (SAQM – Sections 5 and 6: questions on the mother's antisocial behaviour and questions answered by the mother on the antisocial behaviours of the absent biological father). Readers may thus refer to the justifications for these sections, which are presented above.

Questions 53 and 54, which deal with stealing and fighting, appear as well in the SAQM (questions 55 and 56 of Section 5 and questions 68 and 69 of Section 6). Like question 69 in the SAQM, question 54 in the SAQF on the behaviour of fathers was adapted to some extent: Instead of asking "Were you implicated on more than one occasion in a fight," the father is asked if he "often got into fights...."

Questions 52, 57, 58 and 63, on participation in clubs or organized sports teams, are similar to questions 54, 58, 60 and 65 of the SAQM, Section 5 only.

Question 55, on involvement with the Department of Youth Protection, is similar to questions 57 (Section 5) and 70 (Section 6) of the SAQM.

Question 56 is about problems at school. It is similar to question 71, about the absent biological father's school problems, in the SAQM, although the question does not appear in Section 5 (mother's behaviour) of that questionnaire.

Question 59 asks about having been fired more than once (not taking into account layoffs from lack of work). It is almost identical to question 61, which is addressed to the mother, and is similar to question 72, about the absent biological father, in the SAQM.

Question 60 on arrests is identical to question 62 of the SAQM and corresponds to question 73 in Section 6 of that questionnaire "About Your Baby's Biological Father...."

Question 61 covers physical aggression manifested during adulthood. It is different from SAQM question 63, which addresses the mother's experience, but similar in part to question 74 of the SAQM, which is about the absent biological father. In the SAQF, we omitted the specific reference to conjugal violence to mitigate resistance to the question by the respondents.

Finally, question 62, on problems related to drug and alcohol consumption, corresponds to questions 64 and 75 of the SAQM.

Section 5 – Leisure Time

Objective

To gather information on the time the father devotes to leisure. Certain analyses may be undertaken associating the health and well-being of the father and the questions on the rhythm of daily life that will be added to subsequent data collections of the longitudinal study. This section is the same as the one included in the SAQM (Section 7).

Measure

Question 64 is adapted from *Ados, familles et milieu de vie* (1994), a study developed by the research team led by Richard Cloutier of the *Centre de recherche sur les services communautaires* at *Université Laval*, and from the preliminary questionnaire of the *Enquête sociale et de santé auprès des enfants et adolescents* conducted by *Santé Québec* in 1997. The question was added to the current survey to end it on a positive note. And for the same reason, a page inviting the father to write his comments was also placed at the end of the SAQF.

3.6 Observations of Family Life (OFL)

Objective

To assess the quantity and quality of stimulation and support provided to the child in its home environment.

The sensitivity of the parents and quality of the home environment have a significant impact on the development of the child. Studies have shown that family environment is associated with the health, growth and temperament of the child as well as with its development of language, cognitive and social skills (Bradley, 1993).

Measure

The questions in this scale are taken from the Home Observation for Measurement of the Environment (revised edition), developed by Caldwell and Bradley in 1984. The scale was adapted and translated by the *Laboratoire d'écologie humaine et sociale* of the University du Québec à Montréal.

The scale measures the emotional and verbal skills of the mother, use of restrictions or punishment, organization of the physical and temporal environment of the child, number and quality of appropriate toys, mother's involvement with her child, and opportunities taken during the interviewers' visit to diversify the stimulation and behaviour of the child.

This instrument is the only one completed by the interviewer not in the presence of the parents. The interviewers were given special training on filling out this instrument.

This ends the discussion of the sources and justifications of the questionnaires. The following sections provide information on the 1, 2, 3 Hands Game and the Baby Diary as well as the Authorization Form to Access Mother's and Infant's Medical Records.

3.7 Imitation Sorting Task (IST), 1, 2, 3 Hands Game

Objective

To measure the child's attention capacity (Alp, 1994; Baillargeon & Pascual-Leone, 1998; Pascual-Leone & Baillargeon, 1994) as well as its behavioural inhibition capacity (Barkley, 1997; Pennington & Ozonoff, 1996; Quay, 1997; Schachar, Tannock & Logan, 1993). This task is a variation on the imitation Sorting Task developed by Uzgiris and Hunt (1989).

Measure

The 1, 2, 3 Hands Game comprises two situations. In the first, the infant must grasp an object placed in front of him/her at eye level. To do so, the infant must coordinate two elements: sight and prehension (hand-eye coordination). The number of elements that the infant can coordinate simultaneously in a single action towards one goal constitutes a measure of the infant's attention capacity. Hand-eye coordination represents a key step in the second stage of sensorimotor cognitive development described by Piaget (1973, 1975). In the second situation tested, the task remains one of grasping an object, but this time an object is placed beforehand in each of the infant's hands and he/she must grasp a third object presented to him/her by first letting go of one or both of the objects already in hand. Thus, an infant with hand-eye coordination (and who has therefore attained the second stage of sensorimotor development) will not necessarily be able to grasp the object being held up, unless he/she exhibits behavioural inhibition. The capacity to inhibit behaviour may also be associated with the inhibition of inappropriate emotional responses such as fits of anger.

3.8 Baby Diary

Objective

To measure the frequency and duration of certain behaviours of the child as well as the time devoted to basic child care by the adults responsible for him/her.

Measure

This agenda-style logbook for noting the behaviours of the infant and the parents was developed for a study done in 1986 by Ronald G. Barr and his colleagues at the Montréal Children's Hospital Research Institute, McGill University, in a sample of 300 francophone and anglophone respondents (Barr et al, 1988; Hunziker et al, 1986). The data are collected over a 48-hour period.

The following behaviours of the infant are measured:

1. Crying (including related behaviours such as fussiness and unsoothable crying)
2. Sleeping
3. Feeding (sucking/bottle)
4. Awake and content

The responsible adult (mother or father) or another caregiver (eg., babysitter) indicates on a ruler-like scale when during two 24-hour periods and for how long the infant exhibited each behaviour, with the smallest unit of measure being 5 minutes.

The responses are mutually exclusive and complete: only one code may be used for each period and at least one code must be assigned in every time slot. Thus, the response "Cannot remember or absent" was added so that the respondent could honestly fill in the form without inhibition for all time periods.

The behaviours are measured over 2 consecutive days. The respondent must indicate whether the days covered were typical, thus helping to ensure that the information gathered reflects the baby's normal behaviour.

The parent's behaviours, that is, two types of parental contact with the child, are also measured for the same 2 days. The contacts measured are:

1. Body contact (carrying, rocking)
2. Care (changing diapers, bathing, dressing).

As in the case of the target child, the parent or caregiver indicates on the ruler-like scale when during the time period and for how long she/he engages in each activity, with the smallest time unit being 5 minutes. These behaviours are also mutually exclusive, but incomplete: the respondent indicates by a blank space the times she/he was not engaged in either activity, with the code thus indicating "no contact."

Secondary variables may be identified by juxtaposing the data for the parental and the infant behaviours (e.g., the person who cares for the baby makes physical contact with him when he cries).

The variables **in bed**↓ and **out of bed**↑ were added to the Baby Diary on the recommendation of Jacques Montplaisir of the *Centre d'étude du sommeil* (Center for the Study on Sleep) at Sacré-Coeur Hospital in Montréal who heads the research activities related to sleep in ÉLDEQ 1998-2002. These variables provide a means to assess how the mother defines sleeping through the night as well as how much time the baby spends in bed. The variables provide complementary data on sleep to that gathered with the SAQM.

A description and example (Annex 1) of the Baby Diary may be found in Volume 1, Number 1, of the collection ÉLDEQ 1998-2002.

3.9 Authorization Form to Access Mother's and Infant's Medical Records

Objective

To gather information from the medical records for the mother and infant.

Medical information on the pregnancy and delivery provide an important means to discover the prenatal, natal and postnatal factors that may be associated with health and developmental problems in children.

The form used in this data collection has a legal duration of 90 days from the date it was signed by the biological mother of the target child. It is adapted from a form developed by the *ministère de la Santé et des Services sociaux* of Québec. The latter is similar to the form used by members of the public who wish to consult or acquire a copy of their own medical record. For the purposes of the present survey, the researchers obtain a copy of the following sections of the mother's record, covering only the period during which she was in hospital for the delivery:

Mother: Complete obstetrical file

Anatomy/pathology report on the placenta

Short-term hospital admission form

Infant: Summary of the complete medical file

Results of the blood test done on the umbilical cord

The variables below were selected by Louise Séguin of the Department of Social and Preventive Medicine at the University of Montréal as a means to assess the conditions at birth affecting the physical and mental health of the mother and infant based on a preliminary examination of 40 medical files.

Obstetrical file (mother):

Date of birth of infant; sex

Duration of the pregnancy (number of weeks of gestation)

Gravidity (total number of pregnancies)

Number of children born at term; born premature

Parity (number of children born before the current pregnancy)

Number of induced or spontaneous abortions

Number of children born live

Total duration of labour

Induction

Anaesthetic

Episiotomy

Tearing

Type of delivery

Instruments used to assist delivery

Type of presentation

Baby's weight at birth

Apgar (1, 5, 10 minutes)

Summary form (mother):

Duration of hospitalization

Diagnoses

Interventions

Summary form (newborn):

Duration of hospitalization

Diagnoses

Interventions

Transfer to another institution

Ventilation

Intensive or specialized care

Physical examination of the newborn:

Height, weight at birth

Circumference of the head

Anomaly(ies)

This terminates Part I, covering the sources and justifications of the survey questions, of Volume 12 of the ÉLDEQ collection. Part II examines the data, variables and scales of the 1998 ÉLDEQ survey.

Annex – Part I

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Concepts, Definitions and Operational Aspects

Part II Data and Variables



1. Survey Instruments and Respondents: A Brief Review

As mentioned in the preceding pages and in Volume 1, Number 1, of this collection, *Étude longitudinale du développement des enfants du Québec (ÉLDEQ)* (Longitudinal Study of Child Development in Québec) comprises several data collection instruments: the Computerized Questionnaire Completed by the Interviewer (CQCI, drawn in large part from the NLSCY) and the paper questionnaires, that is, the Paper Questionnaire Completed by the Interviewer (PQCI), Observations of Family Life (OFL), Self-Administered Questionnaire for the Mother (SAQM), Self-Administered Questionnaire for the Father (SAQF), Questionnaire on the Ice Storm of January 1998 and Baby Diary. Finally, there is the 1, 2, 3 Hands Game, a test administered directly to the infant. In addition, information on the birth is taken from the medical records of the mother and target child.

At the start of the face-to-face interview, the interviewer must identify the person who best knows the child, the PMK (Most Knowledgeable Person). In this survey, over 99% of PMKs are the biological mother of the target child (infants 5 months old). For the remainder of the interview, the PMK answers all the questions on the CQCI for herself, the baby, her spouse/partner¹⁵ and for the other members of the household as well as for the biological father absent from the household. One unusual feature of ÉLDEQ is that it collects information from biological fathers absent from the household, either by proxy or by means of a questionnaire directed to him. The paper questionnaires are completed by the mother (SAQM), father (SAQF) and the interviewer (OFL, PQCI and Questionnaire on the Ice Storm), while the Baby Diary is filled out by one of the parents or by the person who looks after the baby (e.g., grandparent, babysitter).

The latter instrument and the OFL are not filled out during the interview but at some later time. The SAQM and SAQF are, if possible, completed during the interviewer's visit, but immediately after the face-to-face meeting; they may also be filled out and returned by mail in the month after the visit.

The following pages provide important information for those using the data collected during the 1998 ÉLDEQ survey and for readers wishing to know more about the derivative data, variables and scales that are the basis for the analyses presented in the collection. Among topics discussed are the steps that led to the creation of the database for this first survey of ÉLDEQ, including the validation of the data on the 2,223 infants in the sample, organization of the information into 9 separate files and the naming convention for the variables, as well as the contents of the files in the database for the first survey period. Comments on and cautions about some of the variables are also presented. The definitions of the principal derivative variables created for this survey are presented in Section 7. By derivative variable we mean either a simple combination of items in a question, or a more elaborate structure based on more than one question.

At the time of writing, the derivative variables related to the child's cognitive development (as measured by the 1, 2, 3 Hands Game), the data collected by means of the Baby Diary – which focus on the behaviours of the child and the person who looks after him/her – and the perinatal information taken from the medical records had not yet been incorporated into the ÉLDEQ database. Those data are examined in Volume 1, Numbers 3, 8 and 13 of the collection, and the technical documentation for these data will be published at the same time.

15. For the 1998 ÉLDEQ survey, of the fathers or partners living with the mother, 1 in 6 answered for himself the questions about the father.

2. Data Validation: An Essential Step

The validation of the data is an important, indeed, an essential step in any statistical survey. The data used in the statistical analyses must be reliable and valid if erroneous conclusions are to be avoided.

Taking into account the logistical organization of data collection in a sample of infants 5 months old, a preliminary summary validation of the data could be carried out after the first three waves of data collection. This validation was completed at the end of the first year of data collection.

Two types of validation were carried out at each stage: 1) basic validation and 2) logical validation.

The basic validation is a detailed checking of the main elements of the data collection process (to ensure that codes are valid, filters were correctly used, etc.) while logical validation involves an in-depth examination of the contents of the questionnaires. In the latter, the consistency of the responses is ascertained by cross-tabulation against information from other sections of the questionnaire or from another survey instrument. Consistency is also verified when the derivative variables are created.

Basic validation:

This step ensures, in particular, the validity of the codes. For example:

- 1) Does the response correspond to one of the choices provided? If not, it may be necessary to create new codes.
- 2) Is the response appropriate given the minimum and maximum cut-offs, in particular for open-ended questions such as those on weight or height?

- 3) Were the filters correctly used, that is, were questions or their parts omitted when the response to the preceding question justified it?

With respect to the respondent's eligibility, it was determined based on factors such as the residential status of the biological father; this criterion was used to distinguish for the SAQF whether the biological father lived in the household or was absent from it. Likewise for identification of the mother eligible to answer certain questions about the absent biological father (CQCI – Absent Biological Parent; Section 6 of the SAQM). This was necessary since we had no reliable means to distinguish *a priori* and without error the SAQF completed by the biological fathers who lived in the chosen household from those who did not.

The next two sections will examine, with examples, the main steps in the data validation process for the Computerized Questionnaire Completed by the Interviewer (CQCI), on the one hand, and the paper questionnaires, on the other hand.

2.1 The Computerized Questionnaire Completed by the Interviewer

The validation of the survey data collected by means of the CQCI starts with a complete reading of the data using statistical software. This step aims to create a set of files that are easier to work with and that contain fewer variables than the original files¹⁶. It is during this step that certain errors due to simple data entry are corrected and the comments written by the interviewer on the computerized follow-up sheet are taken into account. The latter source of information is very

16. It is at this time that certain data (e.g., weight and height of the infant) are converted to a single unit and items not relevant to the final database are eliminated: administrative variables such as the interviewer's number, start and finish time of the interview and variables related to the execution of the CQCI interview.

important because the comments may result in essential corrections to the survey data: the addition or omission of a member of the household, correction of a response error detected after data entry by the interviewer on her laptop computer, checking of complementary information related to a question, etc.

The second step involves the examination of the variables one by one to detect aberrant values. Variables that may contain errors are cross-checked to identify potential inconsistencies due to a data entry error or lack of understanding of the question by the respondent. These variables may come from the same instrument (intra-instrument validation) or from different instruments (inter-instrument validation), for example, the CQCI and SAQF. This type of checking is lengthy because each element of all the cases in which inconsistencies are detected is examined. Anomalies are examined by comparing them to the responses for other available variables. For certain variables such as weight, where the respondent chooses from among different units of measurement, it was sometimes necessary to refer back to the questionnaire to see if an error was made while entering the unit of measurement. Only at the end of this process are the aberrant responses rejected (see below).

Finally, for the variables used to construct the scales and for data that proved difficult or impossible to cross-check, only one frequency of each was executed. The absence of invalid codes was deemed an adequate criterion of acceptance.

2.2 The Paper Questionnaires

Unlike the responses to the CQCI, which are entered directly into the interviewer's laptop computer, the data collected from the paper questionnaires are coded and entered after the visit to the household. This task is undertaken by the survey firm; double data entry is done, then validated by cross-checking. The survey firm is also responsible for the basic validation of the paper questionnaires (rejecting ineligible codes, validating the filters).

In addition to this basic validation, there is an inter-instrument validation. *Santé Québec* is responsible for this step, which is essential in distinguishing between the refusals to answer and "non-applicable" answers in questions addressed to a sub-group of respondents or when the questions are preceded by instructions rather than a filter question. Responses collected by means of the other instruments are examined to ensure whether the respondent is eligible to answer (e.g., for the section of the SAQM on the absent biological father and the CQCI grid of the relationships between everyone in the household). Thus, the data for the SAQF and SAQM were reorganized (recoded) so that respondents who were not eligible to answer a question or series of questions were all assigned a code signifying: "Not applicable."

For the SAQF, it was necessary to check the respondent's residential status in order to distinguish between the SAQF-father or spouse/partner present in the household and the SAQF-absent biological father. This process was lengthy because we were often given contradictory information about the residential status of the father and therefore had to check various sources (e.g., the computerized follow-up sheet completed by the interviewer, CQCI, SAQM) to determine if the biological father was or was not living in the designated household.

2.3 Correcting Errors

Errors (aberrant values, inconsistencies) detected during the validation process were examined. As stated earlier, the first step involved cross-checking contradictory information against information held elsewhere in the database. Sometimes this was sufficient to identify the necessary modification.

E.g., SAQM (Q48) How is your current spouse related to your baby? He/she is ...
... biological father

SAQM The respondent replied to Section 6 on the absent biological father and stated that she was still in contact with him.

CQCI (ARE1Q3) The codes identifying the relationships of members of the household indicate that the spouse is not present in the household.

Question 48 of the SAQM seems to have been interpreted incorrectly and, from the responses to other questions, we can confirm that the correct response for the first question is "You do not have a spouse" (see Table 2.2).

E.g., CQCI - Section CAR The respondent states that child care is provided 35 hours a week in someone else's home by a non-relative (Q1b1).

The respondent states that child care is provided 35 hours a week in a daycare centre (Q1g1).

After examining the work schedule of the parents (CQCI - Section LFS), it seems that the responses are double answers resulting from confusion between the concepts "daycare" and "care in someone else's home by a non-relative." So, the responses had to be changed: We recoded a "No" to Q1b and "Not applicable" to Q1b1.

E.g., CQCI - Section INC Some PMKs indicated their main source of income was the Child Tax Benefit and gave social assistance as their only other income source. In such cases, the main source of income was

coded as being "social assistance" since recipients of social assistance often confuse these two sources of income; the schedule for social assistance is adjusted for the amount received from the Child Tax Benefit.

If there was still some doubt about the response, but it was impossible to ascertain there was an error in it, the response was not changed, that is, the information provided by the respondent was taken as valid. This type of situation arose during the creation of the variable for family type; in some cases it was impossible to identify the exact residential status of the father because the information provided was insufficient or contradictory. The derivative variable was coded as "Missing" and the information provided was not changed.

If it was possible to confirm that the response was incorrect but no other question provided a means to determine the correct response, an unknown value was assigned.

E.g., CQCI - Section HLT What is the weight of ...?

For an aberrant answer, the value "Unknown" (code "Does not know," "Refusal" or "Missing") is used.

Given the large amount of data collected for ÉLDEQ, it is not possible to examine all the verifications carried out during the data validation process. Examples of the validations for each instrument or between instruments are provided in Tables 2.1 and 2.2.

Table 2.1

Examples of Validations by Instrument, ÉLDEQ 1998

INSTRUMENT(S) AND SECTION(S)	DESCRIPTION	VALIDATION
CQCI – Sections CONT and REL	ACOFQ19 <i>Number of children living full- or part-time in the household</i>	The variable ACOFQ19 was compared to the derivative variable AREED01 (number of brothers and sisters, biological or not, usually living in the household) created from data in the section REL. The few cases (n=13) where AREED01 + 1 (target child) did not equal ACOFQ19 were examined one by one to determine if there were children from outside the family living there (e.g. child of a co-renter, child of the mother's sister, that is, a cousin, etc.).
CQCI – Section LFS	ALFMQ03 <i>Number of weeks worked by the mother (preceding 12 months)</i> ALFMQ03 <i>Number of weeks worked by the current spouse/partner (preceding 12 months)</i>	Must fall between 1 and 52.
CQCI – Section INC	AINFD03 <i>Household income</i> AINFD02 <i>Main source of household income</i>	The declared income (coded by category) was compared to main source of income for the household (coded by category). Ambiguous cases were validated using information on weeks worked and the presence or not of other adults in the household.
CQCI – Sections INC and LFS	AINFQ01A to AINFQ01N <i>Sources of household income</i> ALFMD01B <i>Employment status of mother (preceding 12 months)</i> ALFJD01B <i>Employment status of biological father or current spouse/partner (preceding 12 months)</i>	The employment status of the parents was verified when the PMK declared income from “wages and salaries” or “self-employment” as one of the main income sources for the household. In ambiguous cases, the number of other adults living in the household was verified.

Table 2.1

Examples of Validations by Instrument, ÉLDEQ 1998 (cont'd)

CQCI – Infant (Section HLT)	AHLEQ03 <i>Height at time of survey</i> AHLEQ04 <i>Weight at time of survey</i>	Extreme values were examined one by one.
CQCI – Sections SOC and CUS	ASTAT_1 <i>Matrimonial status of the mother</i> ASTAT_3 <i>Matrimonial status of the father or current spouse/partner</i>	Verify the consistency between matrimonial status of the parent and his/her conjugal (Section CUS of the CQCI). For example, if the parent has never been married and is living common law with the partner, the matrimonial status is “single” (never married).
CQCI – Sections MD and LFS	AMDEQ29 <i>Mother's employment after the infant's birth</i> ALFMD01A <i>Employment status at time of the survey</i> ALFMD01B <i>Employment status (preceding 12 months)</i>	Verify the consistency.
SAQM	AQMMQ48 <i>Relationship between current spouse/partner and target child</i> SAQM – Section 6	Eligibility to reply to questions in this section depends on the absent biological father. Section 6 on the absent biological father must not be answered if Q48 is equal to 1 (“biological father”).
OFL	AIFFQ31A <i>Number of persons present during the interview</i> AIFFQ32 <i>Status of child at time of interview</i>	If the child is present during the interview (Q32 is not equal to 5), the number of persons present during the interview (Q31a) must be greater than 1.

Table 2.2

Examples of Inter-instruments Validations, ÉLDEQ 1998

INSTRUMENT(S) AND SECTION(S)	DESCRIPTION	VALIDATION
Master Birth Register, CQCI (Sections CONT, REL and CUS) and SAQM	AREED01 <i>Birth rank of the child</i> Excluding stillbirths (500 g. and over)	Verify the consistency. We compared the variable from the Master Birth Register ("number of children born of previous pregnancies [exclude current pregnancy]"), to which was added 1 for the target child, to the other related variables: number of children living in the same household born to the biological mother and number of her children living outside the household (Sections CONT [Q19 and Q20] and Section REL of the CQCI, questions on previous children from the Section CUS for the CQCI [CUS-Q1D, Q6E and CUS-Q6H] and the questions in the SAQM covering the fecundity of the mother [AQMMQ03A, AQMMQ03B, AQMMQ04, AQMMQ05, AQMMQ06]). As a result of these verifications, about 1% of cases had to be corrected. ¹
SAQM and CQCI (Sections REL, CUS and "Absent Biological Parent")	AQMMQ48 <i>Relationship between the current spouse, if applicable, and target child</i>	Verify the consistency. The responses to question 48 of the SAQM were examined in relation to whether the biological father was present in the household (Sections REL, CUS and Section "Absent biological parent" of the CQCI, Section 6 of the SAQM on the absent biological father). Some mothers answered "biological father" to question 48 of the SAQM despite not living with him at the time of the interview. Because the question was intended to focus on the notion of cohabitation, such cases were recoded "no spouse" when other information indicated the biological father was not living in the household. Nonetheless, some mothers may have had a non-cohabiting couple relationship with the biological father at the time of the interview. The question was modified for later data collection to take this type of situation into account.

Table 2.2

Examples of Inter-instruments Validations, ÉLDEQ 1998 (cont'd)

INSTRUMENT(S) AND SECTION(S)	DESCRIPTION	VALIDATION
SAQM and CQCI - Section REL	AQMMQ01 <i>Relationship between the respondent and the target child</i> ARE1Q2 <i>Relationship between Person 2 and Person 3</i>	Verify the consistency.
SAQF and CQCI - Section REL	AQPJQ01 <i>Relationship between the respondent and the target child</i> ARE2Q3 <i>Relationship between Person 2 and Person 3</i>	Verify the consistency.

1. The inconsistencies observed are attributable to two main factors. First, during data entry from the Life Birth Registration form, the code "1" was attributed when the information was missing. In addition, it appears that some respondents included the current pregnancy in the figure for the number of children born previously. Note that in certain cases we could observe an under-estimation of the number of live births because some biological children of the mother were not reported (e.g., children given up for adoption or who died after birth that the mother did not wish to indicate in the Life Birth Registration form or acknowledge during the interview).

2.4 Updating the Database

The first version of the complete database (n=2,223) was distributed to the ÉLDEQ researchers in March 1999. During the data analysis process, some errors were detected, however. *Santé Québec* agreed to make the necessary changes to the indexes or variables affected by these errors. *Errata* notices were sent to those using the database to ensure that they were aware of the modifications, and users who so desired were provided with the new version of the variable(s). Finally, a revised and updated version of the database for the 1998 ÉLDEQ survey was sent to the affiliated research groups in July 2000, along with the database for the 1999 ÉLDEQ survey. All the data published in Volume 1 of the ISQ report were verified taking into account the corrections made after the first release of the database.

3. Composition of the Database of ÉLDEQ 1998

The composition of the database of ÉLDEQ 1998 relies on two main criteria: the logical basis of data collection, on the one hand, and the response rates of the different instruments or sections of the questionnaires, on the other. Nine data files were created from the information collected in the sample of 2,223 infants in the 1998 collection: SOCIO101, MOTHER101, FATHER101, CHILD101, BIO101, PMK101, SAQF101, SAQFABS101 and INDI101. To these files are added the data taken from the Baby Diary and the medical records of the mother and infant as well as the data collected during the 1, 2, 3 Hands Game; because these data required special handling, they were not integrated in the first release of the database.

The file SAQF101 comprises variables generated by the SAQF (Self-Administered Questionnaire for the Father); it was given to the *biological father or the spouse/partner of the mother living in the household*, while the file SAQFABS101 contains the variables generated by biological fathers *not living in the survey household*. Because the response rate for the SAQF (biological fathers or current spouse/partner) is lower, a special weighting was ascribed and the variables of the SAQF are included in a separate file, FATHER101. The variables for the SAQF, addressed to absent biological fathers, were not weighted due to the low response rate. Therefore, the results cannot be inferred for all the absent biological fathers, and the variables in the file SAQFABS101 may serve only for descriptive purposes. Detailed information on the data collected on fathers, whether or not they lived in the household, and on the response rates for those questionnaires may be found in Volume 1, Numbers 1 and 2 of this collection.

The database also contains a file of derivative variables developed by *Santé Québec* and the partners in ÉLDEQ (INDI101) in order to facilitate the analyses. In it are found the different sociodemographic indicators as well as the index scores provided by the research partners. These variables are described in detail in Section 7 of this document.

Table 3.1 provides an overview of the 9 files of ÉLDEQ 1998, which were created using the software program SAS. The files are available in SAS format (versions 6.12 and 8) as well as in SPSS for Windows.

3.1 Description of the Files in the Database of ÉLDEQ 1998

Each file contains the variable IDME (the household number), which is used during the merging of 2 or more files. All of the files are in the form "one line per household." The majority also contain a variable indicating who responded to the questionnaire or to each section of the CQCI. These variables are ascribed the values "mother," "father" or a number from 4 to 12, if someone other than the mother or father/spouse/partner was the respondent. Table 3.2 presents the data file and the variable designating the respondent for each instrument or, in the case of the CQCI, each section.

Table 3.1

Composition of the 9 Files in the Database of ÉLDEQ 1998, 5-Month Old Infants¹

FILES QUESTIONNAIRES AND SECTIONS ²	(1) SOCIO101	(2) MOTHER 101	(3) CHILD101	(4) FATHER 101	(5) PMK101	(6) SAQF101 (APOIQAP, APOIQAPM)	(7) SFABS101 (not weighted)	(8) BIO101 (not weighted)	(9) INDI101 (2 weights) ³
CQCI – SOCIODEMO									
<i>CONT</i>									
<i>DEM</i>									
<i>REL</i>									
<i>HHL D</i>									
CQCI – PARENT									
<i>SOC</i>									
<i>EDA</i>									
<i>LFS</i>									
<i>INC</i>									
<i>HLA</i> ⁴									
<i>FNC</i>									
<i>SAF</i>									
CQCI – ABSENT BIO. PARENT									
<i>EDA</i>									
<i>LFS</i>									

Table 3.1

Composition of the 9 Files in the Database of ÉLDEQ 1998, 5-Month Old Infants (cont'd)¹

FILES QUESTIONNAIRES AND SECTIONS²	(1) SOCIO101	(2) MOTHER 101	(3) CHILD101	(4) FATHER 101	(5) PMK101	(6) SAQF101 (APOIQAP, APOIQAPM)	(7) SFABS101 (not weighted)	(8) BIO101 (not weighted)	(9) INDI101 (2 weights)³
CQCI – CHILD									
<i>SOC, DVS, HLT, MED, TMP, LIT, ACT, MSD, PAR, CUS, CAR</i>									
PQCI									
SAQM (except Section 6)									
SAQM (Section 6)									
SAQF (bio. Father/current spouse/partner)									
SAQF (“absent” bio. father)									
OLF									
ICE STORM									
DERIVATIVE VARIABLES									

1. Unless otherwise indicated, all files come with population and sample weights: APOIPCM and APOIPCMM. For more information on the concept of weighting and its use in the analyses, see Volume 1, Number 1, of this collection.
2. The names of the sections of the CQCI are taken from the original English version of the NLSCY questionnaire.
3. The derivative variables combine information taken from files 1 to 6; two types of weights are ascribed, that is, APOIPCMM (APOIPCM) and APOIQAPM (APOIQAP).
4. HLA-Q1 to HLA-Q7C: file MOTHER101 and FATHER101.
HLA-Q12a to HLA-Q12m: file MOTHER101 only.

Table 3.2

Profile of the Respondents to ÉLDEQ 1998 by Instrument, Questionnaire or Section of Questionnaire

INTRUMENT AND QUESTIONNAIRE	FILE	n (not weighted)	VARIABLE DESIGNATED RESPONDENT
CQCI – SOCIODEMO	SOCIO101	2,223	A_PCM
CQCI – MOTHER	MOTHER101	2,221 ¹	ARPMQ01
CQCI – BIO. FATHER/CURRENT SPOUSE	FATHER101	2,049 ²	ARPJQ01
CQCI – Sections PMK	PMK101	2,223	A_PCM
CQCI – ABSENT BIO. FATHER	BIO101	132 ³	A_PCM
CQCI– CHILD	CHILD101	2,223	ARPEQ01
PQCI	PMK101	2,223	AQIFQ00
SAQM (Except Section 6)	MOTHER101	2,146	AQMMQ01
SAQM – Section 6	BIO101	165	AQMMQ01
SAQF – BIO. FATHER/CURRENT SPOUSE	SAQF101	1,855	AQPJQ01
SAQF – ABSENT BIO. FATHER	SFABS101	45	AQPAQ01
OFL	SOCIO101	2,221	... completed by interviewer
ICE STORM	PMK101	2,219	... completed by interviewer
1, 2, 3 HANDS GAME	Not avail.	1,851 ⁴	... completed by interviewer
MEDICAL REPORT FOR MOTHER AND INFANT	Not avail.	2,192	...
BABY DIARY	Not avail.	1,422 ⁵	Not avail.

1. Two questionnaires for the mother (CQCI) are missing: in one household the biological mother was absent; in the other, the grandmother of the target child was the respondent. For the latter, the Parents' Questionnaire was not generated in E1.
2. That is, 2,042 biological fathers, 5 spouses/partners who are not the bio. father, and 2 fathers in foster homes. One questionnaire is missing for a biological father (it could not be opened or exported due to a technical problem).
3. Of a total of 180 households where the biological father is absent. For 178 of those households, only the biological father is absent, while in 2 households the biological father and biological mother are absent (foster homes). In one other household, only the biological mother is absent. The file BIO101 does not contain information on the 3 absent mothers.
4. Although 2,120 children played the game, only those children who had completed the 3 tasks in each of the 2 experimental situations, or 1,851 children, were retained for purposes of analysis (for more details, see Volume 1, Number 8, of this collection).
5. Of a total of 1,787 Baby Diaries returned by parents. Of these, 365 were not retained for analysis: 6 were unusable (e.g., sick child), 225 were determined to be too incomplete and 134 were lost (see Volume 1, Number 13).

3.2 Convention for Designating the Variables

As was stated in Part I of this document, the key instrument of ÉLDEQ 1998-2002, that is, the Computerized Questionnaire Completed by the Interviewer (CQCI), was taken in large part from the National Longitudinal Study of Children and Youth (NLSCY), conducted by Statistics Canada since 1994 in a sample of more than 20,000 children. Because of this, the convention of designating the variables of ÉLDEQ corresponds to that used in the NLSCY.

The variables are named:

A SE C Q nnx

where:

A: indicates the collection year of the survey

"A" corresponds to the 1998 (5 months) collection year

"B" corresponds to the 1999 (17 months) collection year

"C" corresponds to the 2000 (29 months) collection year and so on

SE: indicates the section of the questionnaire (see Table 3.3).

C: indicates the person signified by the variable:

"E" signifies that the variable relates to the child

"M" signifies that the variable relates to the mother

"J" signifies that the variable relates to the father/current spouse

"F" signifies that the variable relates to the household

"A" signifies that the variable relates to the absent biological father

In the Sociodemographic Questionnaire (for the questions in Section REL only) the PMK is questioned about the relationships between all members of the household. These details are required in order to identify the variable for each person. The following notation is used:

"1" if the variable relates to the mother

"2" if the variable relates to the target child

"3" if the variable relates to the father/current spouse

"4" if the variable relates to the 4th person

"5" if the variable relates to the 5th person

"6" if the variable relates to the 6th person

"7" if the variable relates to the 7th person

"8" if the variable relates to the 8th person

"9" if the variable relates to the 9th person

"10" if the variable relates to the 10th person

"11" if the variable relates to the 11th person

"12" if the variable relates to the 12th person

Q: indicates the type of variable. Where:

"Q" signifies that the variable relates to a question asked in one of the questionnaires;

"S" signifies that the variable relates to a score calculated for a scale used in the questionnaire;

"D" signifies that the variable was calculated on the basis of other questions asked in the questionnaire;

"M" signifies information related to a date (by month);

"A" signifies information related to a date (by year).

nnx : corresponds to the identification of the question. In general, "nn" is a sequential number attributed to the variable and "x" is the sequential alphabetical indicator for a series of similar variables.

PLEASE NOTE: In certain cases, the 3 last characters of the variable are not sufficient to correctly identify a question (e.g., questions comprising more than one response item). In such cases, the four last characters were used to identify the variable (most often by replacing the letter "Q").

Example : Section HLT question 45 (9 possible responses) => AHLE**Q45A** to AHLE**Q45I**

Section HLT question 45A (11 possible responses) => AHLE4**5AA** to AHLE4**5AK**

We thus replaced the "Q" in the fifth place.

Table 3.3

Sections of the CQCI and the Paper Questionnaires

QUESTIONNAIRE AND SECTIONS	LETTER INDICATING THE SECTION (2 nd AND 3 rd COLUMNS OF THE VARIABLE NAMES) ¹	CONTENT
CQCI (Computerized Questionnaire Conducted by the Interviewer):		
CQCI – SOCIODÉMO.		
CONT	CO	Contact (language of the interview, members of the household)
DEM	-- (AAGE_?, ASEX_?, ASTAT_?)	Basic sociodemographic data (for all members of the household)
REL	RE	Relationships between household members
HHLD	HH	Housing conditions
CQCI – PARENTS		
SOCIO	SD	Sociodemographic information
EDA	ED	Education
LFS	LF	Occupation and employment
INC	IN	Income (household)
HLA	HL	Health and lifestyle habits
FNC	FN	Family functioning
SAF	SF	Neighbourhood safety
CQCI – ABSENT BIOLOGICAL PARENT		
EDA	ED	Education
LFS	LF	Occupation and employment
CQCI – CHILD		
SOCIO	SD	Sociodemographic information
DVS	DS	Relationship with the respondent
HLT	HL	Health (general health, height, weight, weight at birth and current weight, injuries, chronic conditions, medical consultations and hospitalizations)
MED	MD	Perinatal information (mother's lifestyle habits during the pregnancy, postnatal depression, mother's health care use, mother's employment after the infant's birth)

Table 3.3

Sections of the CQCI and Paper Questionnaires (cont'd)

QUESTIONNAIRE AND SECTIONS	LETTER INDICATING THE SECTION (2nd AND 3rd COLUMNS OF THE VARIABLE NAMES)¹	CONTENT
TMP	TM	Temperament
LIT	LT	Reading to the child
ACT	AC	Educational Activities
MSD	MS	Motor and social development
PAR	PR	Parenting practices
CUS	CS	Family and custody history
CAR	CR	Child care methods
PQCI (Paper Questionnaire Completed by the Interviewer)	QI	Information on the grandparents, perception of the current socioeconomic situation, household income before the birth, feeding methods, introduction of solid foods, attitudes of others (relatives, friends) to breast feeding, habits relating to oral and dental health, consumption of vitamins and minerals
SAQM (Self-Administered Questionnaire for the Mother)	QM	Pregnancies and fecundity, mother-child relationship, infant's sleep, behavioural history, conjugal support, leisure, data on the absent biological father (visits, financial support, behavioural history)
SAQF (Self-Administered Questionnaire for the Father) – Biological Father or Current Spouse/Partner	QP	Father-child relationship, perception of the child's temperament, psychological well-being, behavioural history, leisure
SAQF (Self-Administered Questionnaire for the Father) – Absent Biological Father	QA	Father-child relationship, perception of the child's temperament, psychological well-being, behavioural history, leisure
OFL (Observations of Family Life)	IF	Behaviour of the child, mother-child relationship, housing conditions
Ice Storm	QV	Consequences of the ice storm if January 1998.

1. Excluding variables the data for which are drawn from other sources (e.g.: Master Birth Register) or derivative variables for which a convention was developed for ÉLDEQ proper.

3.3 Content of Files

File SOCIO101

This file contains the questionnaire titled Observations of Family Life (n=2,221) as well as the sociodemographic variables of the CQCI (Sections CONT, DEM, REL and HHLD), that is, age, sex, marital status of household members, relationships of the members to each other as well as some information on the dwelling (Table 3.1).

Section REL (relationships of the household members) was not recoded according to the convention due to the complexity of its structure. To correctly represent these relationships, the variables have been redefined as: AREIQJ

where A = collection year (1998)

RE = indicates the Section RELATION

I = indicates the first person defined by this relationship I=1,2,...,12

Q = (as per the convention)

J = indicates the second person defined by this relationship J=1,...,12

For example, ARE1Q2 indicates the relationship between the 1st person (mother) and the 2nd person (target child) of the household.

Note: In this section, we asked about the interpersonal relationships for only $I < J$. For example, we wish to discern the relationship (ARE1Q2) between the mother (I=1) and the target child (J=2), but we do not ask about the relationship (ARE2Q1) between the target child (I=2) and the mother (J=1); the computer automatically applies only the inverse relationship. The variables in which I is larger than J are therefore of no use and are not included in the database.

Note that the 1st person is almost always the biological mother¹⁷, the 2nd person is **always** the target child and the 3rd person is the biological father/spouse. The persons numbered 4 to 12 are others living in the household.

This file designates the age, sex and civil status (matrimonial status) of all persons living in the household, including other relatives (uncle, aunt, grandparent, etc.) or unrelated persons. The variables used are AAGE_?, ASEX_? and ASTAT_? where ? is replaced by the number of the person (1=mother, 2=target child, 3=father, 4 to 12=other persons) and A indicates time 1 (1998 collection year).

File MOTHER101

This file comprises the SAQM questions (n=2,146), except for those for Section 6 covering the absent biological father (see BIO101) and the questions for the CQCI on the mother (n=2,221). Note that Sections INC, FNC and SAF are included in the file PMK101 because they cover the household and not, directly, the mother.

File CHILD101

This file contains the sections of the Child's Questionnaire (n=2,223) of the CQCI covering the target infant (aged 5 months).

File FATHER101

This file contains the data of the Parents' Questionnaire (father/current spouse) of the CQCI (n=2,049).

File BIO101

This file contains sociodemographic information on the absent biological father, if applicable, collected from the respondent. The information is complemented by information from the Absent Biological Parent

17. In two cases only, this was the foster mother.

Questionnaire of the CQCI, which was developed specifically for this study¹⁸. Included also are the data from the history of the absent biological father collected by proxy from the mother in the SAQM. Due to the low rate of response, this file contains no weighting and the data may be used only for descriptive purposes (n=175).¹⁹

File PMK101

This file contains the PQCI (Paper Questionnaire Completed by the Interviewer; n=2,223), the questionnaire on the ice storm (n=2,129) and the sections of the Parents' Questionnaire (CQCI) addressed specifically to the PMK, who is, in almost all cases, the biological mother of the target child.

File SAQF101

This file contains the SAQF (Self-Administered Questionnaire for the Father) for fathers, whether or not they are the biological father, living in the household (n=1,855)²⁰ or whose primary residence is the target household.

Thus, fathers who are *temporarily* absent due to work (e.g., business trip), studying or another reason are considered to be living in the household.

File SFABS101

This file contains the SAQF for biological fathers who are NOT CURRENTLY living in the household, that is, whose primary residence is not the household (n=45). Because too few of these questionnaires were returned, the file contains no weighting and the variables must be used only for descriptive purposes.

File INDI101

This file contains several derivative variables (sociodemographic indices, index scores, etc.) developed by *Santé Québec* and the research groups affiliated with the survey. The variables are examined in detail in Section 7.

18. This file originally contained information on the 3 absent biological mothers. The information was omitted from the file BIO101 because there were too few absent mothers in the survey sample.

19. That is, the number of absent fathers for whom information was acquired from one or the other source (CQCI-Absent Biological Parent or the SAQM). Five biological fathers on whom no information was found were excluded from the file.

20. In addition to biological fathers/spouses present in the household, 5 *non-cohabiting* partners of the mother filled out the SAQF. These questionnaires were retained and integrated in the file SAQF – "current" biological fathers/spouses.

4. Comments and Cautions on Some Variables and Scales

Scale on Family Functioning (CQCI)

Santé Québec and the ÉLDEQ researchers decided, subsequent to data collection on the 5-month old infants, that this scale was not pertinent to single parents whose eldest child was younger than 4 years old. A filter was introduced for the 1999 collection (children about 17 months old) so that PMKs living in this type of family were not asked the questions for this scale.

Consumption of drugs and non-prescription medications (CQCI)

Questions HLT-Q7A and HLT-Q7B cover drugs and non-prescription medications of all types (e.g., Tylenol, Maalox) taken during the 12 months preceding the survey.

Smoking during the pregnancy (CQCI)

Respondents who indicated that they had smoked at least 1 cigarette a day during the pregnancy were given the value 0 of the variable AMDEQ04.

Employment and Income (CQCI)

Certain variables relating to the parents' professional situations were recoded because of a filter error at the start of Section LFS of the CQCI. The variables in question are: ALFMD01, ALFMD02, ALFMD08 for the mother (file MOTHER101) and ALFJD01, ALFJD02 and ALFJD08 for the father/spouse (FATHER101).

The data on the type of business, service or industry (LFS-Q10A) were coded in 13 categories based on the 1980 Standard Industrial Classification Structure published by Statistics Canada (1985) (ALFMD10, for the mother; ALFJD10, for the father/spouse). The type of employment held by the individual (LFS-Q11a) was

coded according to the 1980 Standard Occupational Classification and the codes were then regrouped in 16 categories according to the Pineo Socioeconomic Classification of Occupations for the Census (1985) (APIMD01, for the mother, and APIJD01, for the father/spouse). The 16 groups were then regrouped in 5 categories proposed by researchers associated with *Enquête sociale and de santé* conducted by *Santé Québec* in 1992 (APIMD02 and APIJD02). Only the regrouped data are available in the database. Likewise, the detailed information on household income was removed from the data file distributed to researchers to ensure confidentiality. The file contains only household incomes regrouped in categories. The data on income and main source of employment were used to create the derivative socioeconomic variables (file IND1101).

Section on child care (CQCI)

To the questions: "When did you start using this method of child care?", some PMKs gave a date before the birth of the target child because an older brother or sister had been cared for using this method. In such cases, it was not possible to determine when the target child started receiving this form of child care.

In addition, question CAR-Q1D, on child care provided by a brother or sister, seems to have led to some confusion. It was not possible to distinguish the "Not applicable" responses (i.e., not applicable because the infant didn't have a brother or sister) from the "No"s, so the 2 categories were regrouped (ACRED01D).

Variables for the multiple-choice questions (CQCI)

Special attention must be paid to the CQCI questions with several response items, for example, question SOC-Q5: "In which language(s)...can you/he/she conduct a conversation?" This general question generates 19 variables for each person interviewed. These variables tell us that, yes or no, the person can conduct a conversation in each of the 19 languages listed. One must therefore pay close attention when creating the indices or doing an analysis based on these variables, since one person may have replied yes to more than 1 variable.

Abortions (SAQM)

The information on abortions (SAQM04 and SAQM05) was removed from the file because Question 5 in the SAQM failed to state "excluding miscarriages." Consequently, some, but not all, mothers may have included miscarriages (spontaneous abortions) in their answers.

Age of the grandparents and their eldest child (the parents) (PQCI)

The variables from Section 1 of the PQCI were recoded to facilitate analysis. The variables AQIED01A, D03A, D04A and D06A refer to the ages of the maternal and paternal grandparents of the target child, whether or not they are living. The variables AQIED01B, D03B, D04B and D06B refer to the status of the maternal and paternal grandparents (living or deceased). The variables AQIED02 and AQIED05 correspond to the age of the eldest child in the families into which the mother and father were born. Nonetheless, care must be taken when interpreting the variables on the family of the father of the target child because of the relatively high rate of partial non-response for these variables.

In addition, though the question on this subject had explicit instructions, it is not possible to determine if the respondent indicated his/her biological parents and biological siblings.

Variables relating to "date"

To facilitate the analysis of the data, 2 variables were created for each "date"-type response. They indicate the month and year, using the letter "M" (for month) or "A" (for *année*, or year) in the fifth position of the name of the variable.

5. Data Analysis for ÉLDEQ 1998: Methodological Considerations

5.1 Use of Weighting and Sample Design in the Analysis

The target population of the survey is Québec babies, singleton births only, who were 59 or 60 weeks of gestational age at the beginning of each data collection period, born to mothers residing in Québec²¹. As discussed in Volume 1, Number 1, of this collection, to infer from the sample data to the target population, each respondent was given a weight corresponding to the number of people he/she "represented" in the population.

For this survey, three series of weights had to be calculated: one for the Self-Administered Questionnaire for the Father present in the household (SAQF), one for the 1, 2, 3 Hands Game, and one for the following instruments: CQCI, PQCI, SAQM, OFL and medical records, even though the number of respondents for certain instruments did not attain 2,223 (see Table 3.2). In contrast, Self-Administered Questionnaire (SAQF) for the absent biological father, the data in the file BIO101 (CQCI-Absent Biological Father and Section 6 of the SAQM) as well as the data from the Baby Diaries were not weighted due to insufficient overall or partial response rates, on the one hand, and the specific characteristics of the non-respondents to these instruments, on the other hand.²² Thus, only certain descriptive analyses focusing specifically on the babies whose parents filled out the questionnaire may be carried out for these data.

For the other instruments, the population weights and sample weights are provided in the database for the 1998 collection of ÉLDEQ. However, only the sample weights are used in the analyses presented in this document. Table 5.1 gives the sample weight for each instrument or questionnaire of ÉLDEQ as well as the name of the corresponding data file. In general, for models comprising variables from several files the following rule may be applied: When a variable for the SAQF is involved, use the weight APOIQAPM. Otherwise, use the weight APOIPCMM. If an unweighted variable is used, only certain descriptive analyses specifically focusing on babies whose parent responded to the questionnaire may be carried out using the data, even when the variables involved could be weighted.

In addition to weighting, the effect of the complex sample design must be taken into account in data analyses. ÉLDEQ has a stratified, three-stage sampling design. During data analysis, if one proceeded on the basis that this was a simple random sample, one would risk engendering biases in the results and under-estimating their variance. Number 1 of this collection examines different methods for correcting the sampling design effect based on the type of data analysis envisaged for researchers who do not have access to the detailed parameters of the sample design. For the chi-square test, for example, a mean design effect estimated at 1.3 may be used. This proportion is calculated by dividing the sample weight (mean weight of 1) by the mean design effect. With this procedure, researchers may use a software program such as SAS or SPSS.

However, when the threshold observed is close to that set for the chi-square test and certain other types of analysis, we suggest the use of a program such as SUDAAN (Survey Data Analysis) that can calculate estimates of variance taking into account a complex sample design. For analyses not available through SUDAAN, we suggest the use of a more conservative

21. Excluding mothers living in the following administrative regions of the health ministry: 10 (Northern Québec), 17 (Cree "territory") and 18 (Inuit "territory") and mothers living on Indian reserves.

22. For example, the absent biological fathers who returned the SAQF tended to be better educated and have more contact with their child than the absent biological fathers who did not fill out the questionnaire. With respect to the Baby Diary, respondent parents seemed to be better educated, more often primiparous and French- or English-speaking in greater proportion than the non-respondent parents (for more details, see Number 13 of this collection).

threshold and that the estimate of variance be accompanied by a statement of caution. Note that a preliminary exploration of the possibility of using bootstrap weights is underway; this would enable users to calculate the variance of their estimates for themselves and without recourse to specialized software.

Finally, the coefficient of variation (CV) provides a means of quantifying the precision of a result (estimate). In this document, all the data with a coefficient of variation (CV) higher than 15% are shown with one or two asterisks as a means of clearly indicating that the variability of the estimates is acceptable (CV between 15% and 25%) or low (CV higher than 25%). (For more details on this, see Volume 1, Number 1, in this collection.)

Table 5.1

Sample Weight for Each Instrument, Questionnaire or Section of Questionnaire, ÉLDEQ 1998

INSTRUMENT AND QUESTIONNAIRE	FILE	SAMPLE WEIGHT
CQCI – SOCIODEMO.	SOCIO101	APOIPCMM
CQCI – MOTHER	MOTHER101	APOIPCMM
CQCI – BIO. FATHER/CURRENT PARTNER	FATHER101	APOIPCMM
CQCI – Sections PMK	PMK101	APOIPCMM
CQCI – ABSENT BIO. FATHER	BIO101	No weighting due to the high rate of partial non-response for most of the variables
CQCI – CHILD	CHILD101	APOIPCMM
PQCI	PMK101	APOIPCMM
SAQM (Except Section 6)	MOTHER101	APOIPCMM
SAQM – Section 6	BIO101	No weighting due to the high rate of partial non-response for most of the variables
SAQF – BIO. FATHER/CURRENT PARTNER	SAQF101	APOIQAPM
SAQF – ABSENT BIO. FATHER	SFABS101	No weighting due to the low global response rate for this instrument
OFL	SOCIO101	APOIPCMM
ICE STORM	PKM101	APOIPCMM
1, 2, 3 HANDS GAME	Not avail.	Special weighting (variables are not distributed) (See No. 8 in the collection)
MEDICAL RECORDS	Not avail.	APOIPCMM (See No. 3 in the collection)
BABY DIARY	Not avail.	No weighting due to the low global response rate for this instrument (see No. 13 of the collection)

5.2 Partial Non-Response and Imputation

Most of the questionnaires were well filled out. Partial non-response was therefore not a significant problem in terms of potential biases in the results. However, some questions in the SAQM, CQCI and PQCI had a partial non-response rate higher than 5%.²³ In this report, estimates affected by a non-response rate higher than 5% are accompanied by a note specifying for which population sub-group they are less accurate.

Because of low rates of partial non-response, in particular for the questions such as those on income, which generally have a high non-response rate, no imputation has been done on the 1998 data.

23. For more detailed information, see Annex 6 of Number 1 Partial Non-Response Exceeding 5%.

6. Distribution

The denormalized database of the 1998 collection of ÉLDEQ, excluding the detailed data on income and employment, was distributed to all the research groups affiliated with ÉLDEQ.²⁴ These groups are made up mainly of university-based researchers and professionals in the health and social service network.

The 9 files that make up the complete database were distributed in March 1999, that is, about one year before the publication of the first reports in this collection. As stated, all the data published in these reports were verified by *Santé Québec* and *Direction de la Méthodologie et des enquêtes spéciales* (Methodology and Special Surveys Division) of the *Institut de la statistique du Québec*.

24. All affiliated research groups must complete in advance a confidentiality form in which they agree not to distribute or copy the database. They must also sign and return a form agreeing to abide by an embargo on the data before their publication in the ISQ report.

7. Derivative Variables

This section describes the indices and regroupings in the database file INDI101 for the 1998 ÉLDEQ collection. This file contains the main derivative variables examined in the reports published in 2000²⁵ in Volume 1 of the collection. The sociodemographic variables were developed by *Santé Québec*. Several of them were based on the results of the National Longitudinal Study of Children and Youth, Cycle 1 (Statistics Canada and Human Resources Development Canada, 1996). Most of the scales were recommended by the research groups affiliated with ÉLDEQ.

To facilitate consultation, the detailed description of the indices and regroupings is presented in the following order, those related to: the target child, the mother living in the household, the father/spouse living in the household and, finally, the household. A table summarizing these variables (Table A.2) is presented in the Annex.

In the detailed description of the derivative variables below, the following information is provided:

POPULATION: Identifies the reference population used in calculating the index or regrouping.

25. Excluded are certain indices, such as those covering feeding of the infant, that were not included in the general release of the file INDI101, as well as some derivative variables examined in Numbers 3, 8 and 13 of the ÉLDEQ collection. Readers interested in obtaining information on the construction of the indices not included in this report on methodology may contact the *Santé Québec* division of the ISQ.

WEIGHTS: The weights that may have been used to obtain a frequency table for the index. The first is the population weight or the value (weight) ascribed to each child or respondent that corresponds to the number of persons she/he represents in the population. The second is the sample weight, that is, the adjusted weight whose sum is equal to the number of children or respondents in the survey. The sample weight (in bold-face type) was the one used to obtain the frequencies in the table accompanying the description.

Volume 1, Number 1, of this collection and Section 5.1 of this document provide more information on how to use these weights.

DESCRIPTION: Definition of the index or regrouping.

QUESTIONS: Questions and instruments used in creating the index or regrouping. The instruments are identified by:

<i>OFL</i>	Observations of Family Life
<i>SAQM</i>	Self-Administered Questionnaire for the Mother
<i>SAQF</i>	Self-Administered Questionnaire for the Father
<i>CQCI</i>	Computerized Questionnaire Completed by the Interviewer

VARIABLES OR

INDICES: Other indices used in creating the index under discussion, if applicable.

DERIVATION: The information shows how the index was constructed, without the reader having to know a programming language. The designations of the variables correspond to those in the database; they are also consistent with those listed in Part II, Section 3.2, Convention of Designating the Variables.

A simple frequency table is presented for each index. In these tables, the total represents the weighted total of respondents to the index, excluding the UNKNOWNs. The category UNKNOWN represents the weighted number of persons who refused to answer (REFUSAL) or who did not know the answer (DOES NOT KNOW). This number is indicated under the total, if applicable.²⁶

For continuous variables, only the minimal and maximal observed values are presented.

26. Note that some variables or categories of variables had low prevalence (less than 3%). We did not regroup the information when it seemed appropriate for the orientation of the analyses. Caution in using these variables is, nonetheless, recommended.

CHARACTERISTICS RELATED TO THE CHILD

BIRTH RANK OF THE CHILD - ARGED01

- Population: All children targeted by ÉLDEQ
- Weight: APOIPCM, **APOIPCMM**
- Description: Number of children born live to the mother
- Question: This variable comes from the Life Birth Registration Form filled out upon admission for childbirth at a hospital or birthing centre. Stillbirths of 500 g or more are excluded.
- Derivation: Variable “Number of children born from past pregnancies” taken from the Master Birth Register + 1 (target child). The attributed code was validated on the basis of other information collected during the survey (for more detailed information, see the section on validation).

Code	Category	n weighted	%
1	1	975	43.9
2	2	875	39.3
3	3	252	11.4
4	4	74	3.3
5	5 and +	47	2.1
	Total	2,223	100.0

GESTATIONAL AGE – AGTED01

- Population: All children targeted by ÉLDEQ
- Weights: APOIPCM, **APOIPCMM**
- Description: Sum of the duration of the pregnancy and the chronological age of the child.
- Variables: ADGED01 (duration of the pregnancy in weeks, taken from the Master Birth Register and ASMED01 (age of the target child in weeks based on the birth date given during the interview).
- Derivation: ADGED01 + ASMED01

Code	Category	n weighted	%
56 to 59 ¹	56 to 59 weeks	182	8.2
60	60 weeks	793	35.7
61	61 weeks	711	32.0
62	62 weeks	366	16.4
63	63 weeks	140	6.3
64 and 65 ¹	64 or 65 weeks	31	1.4
	Total	2,223	100.0

1. The data here were regrouped due to small numbers.

PREMATURITY - APEED01

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Children born at a gestational age of less than 37 weeks

Variable: ADGED01 (duration of the pregnancy taken from the Master Birth Register)

Derivation: APEED01= 1 if ADGED01 is known and less than 37
If not and if APEED01 is known ADGED01=2

Code	Category	n weighted	%
1	Yes	138	6.2
2	No	2,085	93.8
	Total	2,223	100.0

LOW BIRTH WEIGHT - AMDED13

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Children whose birth weight (as reported by the PMK) is less than 2,500 g

Question: CQCI-Child, MED-Q13

Variable: AMDEQ13

Derivation: AMDED13= 1 if AMDEQ13 is known and less than 2,500 g
If not, if AMDEQ13 is known AMDED13=2

Code	Category	n weighted	%
1	Yes	95	4.3
2	No	2,115	95.7
	Total	2,210	100.0
	Unknown	13	

NUMBER OF BROTHERS/SISTERS - AREED01

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Number of brothers or sisters of the target child who usually live in the household, regardless of their age. Included are brothers- and sisters-german, half-brothers and half-sisters as well as adopted and/or foster brothers and sisters.

Question: CQCI, REL-Q1A

Variables: ARE2Q4 to ARE2Q12

Derivation: To construct this variable, the relationship of the target child to the other members of the household is examined

areed01=0

if are2q4 = F1 or F2 or F3 or F4 or F5 then areed01=areed01+1

if are2q5= F1 or F2 or F3 or F4 or F5 then areed01=areed01+1

if are2q12= F1 or F2 or F3 or F4 or F5 then areed01=areed01+1.

Children with 4 or more brothers/sisters are regrouped due to small numbers.

Note: Some cases had to be recoded *a posteriori* (n=15) in part because a code other than F1 to F5 (e.g., "LO" for relative) was used to describe the relationship between the target child and the "brother/sister."

Code	Category	n weighted	%
0	0	927	41.7
1	1	888	39.9
2	2	273	12.3
3	3	93	4.2
4	4 and +	42	1.9
	Total	2,223	100.0

CANADIAN ETHNIC ORIGIN - ASDED4AA

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify children of Canadian ethnic origin, regardless of other stated origins. The variables ASDED4AA to ASDED4AG are not exclusive.

Question: CQCI-Child, SOC-Q4

Variable: ASDEQ04A

Derivation: ASDED4AA =1 if ASDEQ04A=1
If not, if SOC-Q04 is known ASDED4AA=0

Code	Category	n weighted	%
0	No	713	32.3
1	Yes	1,493	67.7
	Total	2,206	100.0
	Unknown	17	

FRENCH ETHNIC ORIGIN - ASDED4AB

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify children of French ethnic origin, regardless of other stated origins. The variables ASDED4AA to ASDED4AG are not exclusive.

Question: CQCI-Child, SOC-Q4

Variable: ASDEQ04B

Derivation: ASDED4AB =1 if ASDEQ04B=2
If not, if SOC-Q04 is known ASDED4AB=0

Code	Category	n weighted	%
0	No	1,528	69.3
1	Yes	678	30.7
	Total	2,206	100.0
	Unknown	17	

BRITISH ETHNIC ORIGIN - ASDED4AC

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify children of British ethnic origin (that is, English, Scottish, or Irish), regardless of other stated origins. The variables ASDED4AA to ASDED4AG are not exclusive.

Question: CQCI-Child, SOC-Q4

Variables: ASDEQ04C, ASDEQ04E, ASDEQ04F

Derivation: ASDED4AC =1 if ASDEQ04C=3 or ASDEQ04E=5 or ASDEQ04F=6
If not, if SOC-Q04 is known ASDED4AC=0

Code	Category	n weighted	%
0	No	2,042	92.6
1	Yes	164	7.4
	Total	2,206	100.0
	Unknown	17	

OTHER EUROPEAN ETHNIC ORIGINS - ASDED4AD

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify children of a European ethnic origin other than French or British, that is, Dutch, German, Italian, Jewish, Polish, Portuguese, Ukrainian or Spanish, regardless of other stated origins. The variables ASDED4AA to ASDED4AG are not exclusive.

Question: CQCI-Child, SOC-Q4

Variables: ASDEQ04D, ASDEQ04G, ASDEQ04H, ASDEQ04I, ASDEQ04K, ASDEQ04L, ASDEQ04M, ASDEQ04S

Derivation: ASDED4AD =1 if ASDEQ04D=4 or ASDEQ04G=7 or ASDEQ04H=8 or ASDEQ04I=9 or ASDEQ04K=11 or ASDEQ04L=12 or ASDEQ04M=13 or ASDEQ04S=19
If not, if SOC-Q04 is known ASDED4AD=0

Code	Category	n weighted	%
0	No	1,974	89.5
1	Yes	232	10.5
	Total	2,206	100.0
	Unknown	17	

ABORIGINAL ETHNIC ORIGIN - ASDED4AE

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify children of aboriginal ethnic origin, regardless of other stated origins. The variables ASDED4AA to ASDED4AG are not exclusive.

Question: CQCI-Child, SOC-Q4

Variable: ASDEQ04P

Derivation: ASDED4AE =1 if ASDEQ04P=16
If not, if SOC-Q04 is known ASDED4AE=0

Code	Category	n weighted	%
0	No	2,144	97.2
1	Yes	62	2.8
	Total	2,206	100.0
	Unknown	17	

AFRICAN/HAITIAN ETHNIC ORIGIN - ASDED4AF

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify children of African or Haitian ethnic origin, regardless of other stated origins. The variables ASDED4AA to ASDED4AG are not exclusive.

Question: CQCI-Child, SOC-Q4

Variables: ASDEQ04O, ASDEDQ04T

Derivation: ASDED4AF=1 if ASDEQ04O=15 or ASDEDQ04T=20
If not, if SOC-Q04 is known ASDED4AF=0

Code	Category	n weighted	%
0	No	2,128	96.5
1	Yes	78	3.5
	Total	2,206	100.0
	Unknown	17	

OTHER ETHNIC ORIGINS - ASDED4AG

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCM**

Description: This variable provides a means to identify children of ethnic origins other than those in variables ASDED4AA to ADSDED4AG. The following origins, regrouped due to small numbers, are included: Chinese or South Asian, Métis, Inuit/Eskimo,²⁷ as well as those given as "Arabic-speaking of Maghreb and of Middle East," "Spanish-speaking of the Americas" and other unspecified origins. The variables ASDED4AA to ASDED4AG are not exclusive.

Question: CQCI-Child, SOC-Q4

Variables: ASDEQ04J, ASDEQ04N, ASDEQ04Q, ASDEQ04R
ASDEQ04U, ASDEQ04V, ASDEQ04W

Derivation: ASDED4AG=1 if ASDEQ04J=10 or ASDEQ04N=14
or ASDEQ04Q=17 or ASDEQ04R=18 or
ASDEQ04U=21 or ASDEQ04V=22 or
ASDEQ04W=23

If not, if SOC-Q04 is known ASDED4AG=0

Code	Category	n weighted	%
0	No	1,828	82.9
1	Yes	378	17.1
	Total	2,206	100.0
	Unknown	17	

27. Eskimo is an older term that has the same meaning as Inuit. The term appeared in the NLSCY instruments but not in the later texts.

**PERCEPTION OF CHILD'S DEGREE OF DIFFICULTY BY MOTHER-
ATMES01**

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCM**

Description: Degree of difficulty of the child according to the PMK. A high score shows that the PMK perceives the child's temperament to be difficult.

Questions: CQCI-Child, TMP-Q5 to Q8, TMP-Q19, TMP-Q20, TMP-Q33

Variables: ATMEQ05, ATMEQ06, ATMEQ07, ATMEQ08, ATMEQ19, ATMEQ20, ATMEQ33

Derivation: If the number of valid responses to ATMEQ05, ATMEQ06, ATMEQ07, ATMEQ08, ATMEQ19, ATMEQ20 and ATMEQ33 is equal to or greater than 5 then:

- the missing variables were replaced by the mean of the valid variables;
- $ATMES01 = \text{sum of (ATMEQ05, ATMEQ06, ATMEQ07, ATMEQ08, ATMEQ19, ATMEQ20, ATMEQ33)} - 7$.

If not, ATMES01 is undefined.

Note: The variable ATMES01 was not derived when the respondent to CQCI-Child was the father because he had already filled out these questions in the SAQF (see ATMES03).

Scores vary from 0 to 36.

**PERCEPTION OF CHILD'S DEGREE OF DIFFICULTY BY
BIOLOGICAL FATHER/SPOUSE LIVING IN THE HOUSEHOLD -
ATMES03**

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIQAP, **APOIQAPM**

Description: Degree of difficulty of the child according to the PMK. A high score shows that the PMK perceives the child's temperament to be difficult.

Questions: SAQF, Q2 to Q5, Q7, Q8, Q12

Variables: AQPJQ02, AQPJQ03, AQPJQ04, AQPJQ05, AQPJQ07, AQPJQ08, AQPJQ12

Derivation: If the number of valid responses to AQPJQ02, AQPJQ03, AQPJQ04, AQPJQ05, AQPJQ07, AQPJQ08 and AQPJQ12 is equal to or greater than 5 then:

- the missing variables were replaced by the mean of the valid variables;
- $ATMES03 = \text{sum of (AQPJQ02, AQPJQ03, AQPJQ04, AQPJQ05, AQPJQ07, AQPJQ08, AQPJQ12)} - 7$.

If not, ATMES03 is undefined.

Scores vary from 0 to 35.

POSITIVE PARENTING PRACTICES (according to PMK) - APRES01

- Population: All children targeted by ÉLDEQ
- Weights: APOIPCM, **APOIPCMM**
- Description: The scale of positive parenting practices: A high score reflects a high level of positive interactions between the person who best knows the child (PMK) and the target child approximately 5 months old.
- Questions: CQCI-Child, PAR-Q1 to Q3, Q6, Q7A
- Variables: APREQ01, APREQ02, APREQ03, APREQ06, APREQ07A
- Derivation: If the number of valid responses to APREQ01, APREQ02, APREQ03, APREQ06 and APREQ07A is equal to or greater than 5 then:
- the missing variables were replaced by the mean of the valid variables;
 - APRES01 = sum of (APREQ01, APREQ02, APREQ03, APREQ06, APREQ07A) – 5.

If not, APRES01 is undefined.

Scores vary from 7 to 20.

CHARACTERISTICS RELATING TO THE MOTHER

AGE GROUP OF THE MOTHER- AAGMD01

- Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household
- Weights: APOIPCM, **APOIPCMM**
- Description: The mother's age is established on the basis of the date of birth she provides during the interview.
- Question: CQCI, DEM-Q2
- Variable: AAGE_1
- Derivation: Regrouped in 6 categories of the variable AAGE_1.

Code	Category	n weighted	%
1	Less than 20 years	74	3.3
2	20-24 years	440	19.8
3	25-29 years	678	30.5
4	30-34 years	723	32.6
5	35-39 years	253	11.4
6	40 years and +	54	2.4
	Total	2,222	100.0
	Unknown	1	

HIGHEST LEVEL OF EDUCATION ATTAINED BY THE MOTHER - AEDMD01

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable deals with the highest level of education attained, regardless of diplomas/degrees obtained. Thus, persons who did not obtain a high school diploma but who did study at the university level are placed in the category "some university."

Questions: CQCI-Mother, EDA-Q1 to Q4

Variables: AEDMQ01, AEDMQ02, AEDMQ03, AEDMQ04

Derivation: AEDMD01=1 if AEDMQ01=1 or (AEDMQ02=2 and AEDMQ03=2)

AEDMD01=2 if AEDMQ02=1 and AEDMQ03=2

AEDMD01=3 if AEDMQ04=1 or AEDMQ04=2 or AEDMQ04=10

AEDMD01=4 if AEDMQ04=4

AEDMD01=5 if AEDMQ04=5

AEDMD01=6 if AEDMQ04=3

AEDMD01=7 if AEDMQ04=6 or AEDMQ04=7 or AEDMQ04=8 or AEDMQ04=9

Note: Cases where the respondent answered "Other (specify)" to question AEDMQ04 were examined one by one (n=41) and placed in another category on the basis of the available information (e.g., for "diploma in massage therapy," AEDMD01=4; for "college (Junior) diploma," AEDMD01=3; for "BA in French," AEDMD01=5, etc.).

Code	Category	n weighted	%
1	No high school diploma	398	17.9
2	High school diploma	252	11.4
3	Some post-secondary study	392	17.7
4	Vocational/Technical school diploma	238	10.7
5	College (Junior) diploma	281	12.6
6	Some university	112	5.1
7	University degree	546	24.6
	Total	2,219	100.0
	Unknown	4	

HIGHEST DIPLOMA/DEGREE ATTAINED BY THE MOTHER - AEDMD02

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable corresponds to the highest diploma/degree obtained.

Questions: CQCI-Mother, EDA-Q1 to Q4

Variables: AEDMQ01, AEDMQ02, AEDMQ03, AEDMQ04

Derivation: AEDMD02=1 if AEDMQ01=1 or AEDMQ02=2

AEDMD02=2 if AEDMQ02=1 and (AEDMQ04=-4 or AEDMQ04=1 or AEDMQ04=2 or AEDMQ04=10)

AEDMD02=3 if AEDMQ02=1 and (AEDMQ04=3 or AEDMQ04=4 or AEDMQ04=5)

AEDMD02=4 if AEDMQ04=6 or AEDMQ04=7 or AEDMQ04=8 or AEDMQ04=9

AEDMD02= missing if AEDMQ01= "Don't know"

Cases where the respondent answered "Other (specify)" were placed in one of the above categories after consideration of the response.

Note: For persons who answered "Some post-secondary study" to question EDA-Q4 "What is the highest level of education that you have attained?" the data provide no means to determine with precision the highest level obtained. We used the information on whether the person obtained a high school diploma to classify the case in the first or second category. For persons who said they had some university, we again determined the classification in relation to whether the person received a high school diploma. Thus, we presumed that those who obtained a high school diploma had followed the normal path and obtained a college (Junior) diploma. Those who did not have a high school diploma were placed in the first category, that is, no high school diploma.

Code	Category	n weighted	%
1	No high school diploma	448	20.2
2	High school diploma	597	26.9
3	Post-secondary level study	628	28.3
4	University degree	546	24.6
	Total	2,219	100.0
	Unknown	4	

PAID WORK AT THE TIME OF THE SURVEY (MOTHER) - ALFMD1A

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable aims to identify mothers who were working when the survey was conducted, regardless of the type of employment.

Questions: CQCI-Mother, LFS-Q1, LFS-Q8

Variables: ALFMD01, ALFMD08

Derivation: ALFMD1A = 1 if ALFMD01=2 or ALFMD01=3 or ALFMD08=1

If not, if ALFMD01 and ALFMD08 are known, ALFMD1A=0

Note: Filter errors introduced during programming made it necessary to restructure *a posteriori* the information collected for Section LFS. The data for Section MED on the mother's employment since the birth were used to verify the accuracy of the responses. We ensured, for example, that mothers who answered "No" to question LFS-Q08 "Are you currently working at a job or a business?" also declared that they had not worked since the birth of the child (AMDEQ29=NO).

Code	Category	n weighted	%
0	No	1,812	82.7
1	Yes	378	17.3
	Total	2,190	100.0
	Unknown	33	

PAID WORK IN THE YEAR PRECEDING THE SURVEY (MOTHER) - ALFMD1B

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Employment status over the 12 months preceding the survey. In contrast to the preceding variable, this derivative variable focuses on the type of work. Considered to have held a job during the year preceding the survey are mothers who answered "Working for pay or profit" or "Caring for family, paid parental leave" to question LFS-Q1 "What do you consider to be your main activity currently? (For example, working for pay, caring for family.)" as well as mothers who answered in the affirmative to question LFS-Q2 "Have you worked for pay or profit at any time in the past 12 months?".

Questions: CQCI-Mother, LFS-Q1, LFS-Q2

Variables: ALFMD01, ALFMD02

Derivation: ALFMD1B=1 if ALFMD01=2 or ALFMD01=3 or ALFMD02=1

If not, if ALFMD01 and ALFMD02 are known, ALFMD1B=0

Code	Category	n weighted	%
0	No	719	32.6
1	Yes	1,487	67.4
	Total	2,206	100.0
	Unknown	17	

MAIN EMPLOYMENT STATUS OF THE MOTHER - ALFMD1C

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Mother's main work status during the 12 months preceding the survey.

Questions: CQCI-Mother, LFS-Q1, LFS-Q2, LFS-Q4

Variables: ALFMQ04, ALFMD1B

Derivation: ALFMD1C=-4 (not applicable) if ALFMD1B=0

ALFMD1C=1 if ALFMQ04=1 or ALFMQ04=2 or ALFMQ04=3

ALFMD1C=2 if ALFMQ04=4 or ALFMQ04=5 or ALFMQ04=6

Code	Category	n weighted	%
-4	Not applicable (not employed)	719	32.7
1	Part time	359	16.4
2	Full time	1,119	50.9
	Total	2,197	100.0
	Unknown	26	

IMMIGRANT STATUS (MOTHER) - ASDMD3A

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: The immigrant status corresponds to the typology developed by Chen et al (1996). The first category covers persons born in Canada, regardless of their ethnic origin. The second category includes persons born in the United States, Australia, New Zealand or in Europe. The third category includes those born in all other countries.

Questions: CQCI-Mother, SOC-Q1, SOC-Q2

Variables: ASDMQ01, ASDMQ2AA

Derivation: ASDMQ01=COUNTRY OF BIRTH and ASDMQ2AA=CITIZENSHIP

ASDDMD1A=1 if ASDMQ01=1 (born in Canada) or ASDMQ2AA=1 (Canadian citizen by birth)

ASDMD1A=2 if ASDMQ01=3, 4, 5, 8, 10, 12, 14, 15, 16, 17

ASDMD1A=3 if ASDMQ01=2, 6, 7, 9, 11, 13, 18, 19

Code	Category	n weighted	%
1	Not an immigrant	1,877	84.5
2	European immigrant	73	3.3
3	Non-European immigrant	271	12.2
	Total	2,221	100.0
	Unknown	2	

NUMBER OF YEARS SINCE FIRST IMMIGRATION (MOTHER) - ASDMD3A

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Number of years since immigrating for the first time to Canada

Question: CQCI-Mother, SOC-Q3

Variable: ASDMQ03

Derivation: Not an immigrant if ASDMQ03=-4 (not applicable)
 Otherwise, if SOC-Q3 is known, the value 1998-ASDMQ03 is regrouped in three categories.

Code	Category	n weighted	%
-4	Not an immigrant	1,877	84.5
1	Less than 5 years	119	5.3
2	5-9 years	107	4.8
3	10 years and over	118	5.3
	Total	2,221	100.0
	Unknown	2	

CANADIAN ETHNIC ORIGIN (MOTHER) - ASDMD4AA

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify mothers of Canadian ethnic origin, regardless of other stated origins. The variables ASDMD4AA to ASDMD4AG are not exclusive.

Question: CQCI-Mother, SOC-Q4

Variable: ASDMQ04A

Derivation: ASDMD4AA =1 if ASDMQ04A=1 if not ASDMD4AA=0

Code	Category	n weighted	%
0	No	893	40.5
1	Yes	1,312	49.5
	Total	2,205	100.0
	Unknown	18	

FRENCH ETHNIC ORIGIN (MOTHER) - ASDMD4AB

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify mothers of French ethnic origin, regardless of other stated origins. The variables ASDMD4AA to ASDMD4AG are not exclusive.

Question: CQCI-Mother, SOC-Q4

Variable: ASDMQ04B

Derivation: ASDMD4AB =1 if ASDMQ04B=2 if not ASDMD04B=0

Code	Category	n weighted	%
0	No	1,590	72.1
1	Yes	615	27.9
	Total	2,205	100.0
	Unknown	18	

BRITISH ETHNIC ORIGIN (MOTHER) - ASDMD4AC

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify mothers of British ethnic origin (English, Scottish or Irish), regardless of other stated origins. The variables ASDMD4AA to ASDMD4AG are not exclusive.

Question: CQCI-Mother, SOC-Q4

Variables: ASDMQ04C, ASDMQ04E, ASDMD04F

Derivation: ASDMQ4AC=1 if ASDMQ04C=3 or ASDMQ04E=5 or ASDMQ04F=6 if not ASDMQ4AC=0

Code	Category	n weighted	%
0	No	2,027	91.9
1	Yes	179	8.1
	Total	2,205	100.0
	Unknown	18	

OTHER EUROPEAN ETHNIC ORIGINS (MOTHER) - ASDMD4AD

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify mothers whose ethnic origin is other than French or British, that is, of Dutch, German, Italian, Jewish, Polish, Portuguese, Ukrainian or Spanish, regardless of other stated origins. The variables ASDMD4AA to ASDMD4AG are not exclusive.

Question: CQCI-Mother, SOC-Q4

Variables: ASDMQ04D, ASDMQ04G, ASDMQ04H, ASDMQ04I, ASDMQ04K, ASDMQ04L, ASDMQ04M, ASDMQ04S

Derivation: ASDMD4AD=1 if ASDMQ04D=4 or ASDMQ04G=7 or ASDMQ04H=8 or ASDMQ04I=9 or ASDMQ04K=11 or ASDMQ04L=12 or ASDMQ04M=13 or ASDMQ04S=19 if not ASDMD4AD=0

Code	Category	n weighted	%
0	No	2,024	91.8
1	Yes	181	8.2
	Total	2,205	100.0
	Unknown	18	

ABORIGINAL ETHNIC ORIGIN (MOTHER) - ASDMD4AE

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify mothers of aboriginal ethnic origin, regardless of other stated origins. The variables ASDMD4AA to ASDMD4AG are not exclusive.

Question: CQCI-Mother, SOC-Q4

Variable: ASDMQ04P

Derivation: ASDMD4AE=1 if ASDMQ04P=16 if not ASDMD4AE=0

Code	Category	n weighted	%
0	No	2,136	96.9
1	Yes	69	3.1
	Total	2,205	100.0
	Unknown	18	

AFRICAN/HAITIAN ETHNIC ORIGIN (MOTHER) - ASDMD4AF

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify mothers whose ethnic origin is African or Haitian, regardless of other stated origins. The variables ASDMD4AA to ASDMD4AG are not exclusive.

Question: CQCI-Mother, SOC-Q4

Variables: ASDMQ04O, ASDMQ04T

Derivation: ASDMD4AF=1 if ASDMQ04O=15 or ASDMQ04T=20 if not ASDMD4AF=0

Code	Category	n weighted	%
0	No	2,147	97.4
1	Yes	58	2.6
	Total	2,205	100.0
	Unknown	18	

OTHER ETHNIC ORIGINS (MOTHER) - ASDMD4AG

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify mothers whose ethnic origin is other than those included in the variables ASDMD4AA to ASDMD4AG. The following origins, regrouped due to small numbers, are included: Chinese or South Asian, Métis, Inuit as well as those given as "Arabic-speaking of Maghreb and of Middle East," "Spanish-speaking of the Americas" and other unspecified origins. The variables ASDED4AA to ASDED4AG are not exclusive.

Question: CQCI-Mother, SOC-Q4

Variables: ASDMQ04J, ASDMQ04N, ASDMQ04Q, ASDMQ04R, ASDMQ04U, ASDMQ04V, ASDMQ04W

Derivation: ASDMD4AG=1 if ASDMQ04J=10 or ASDMQ04N=14 or ASDMQ04Q=17 or ASDMQ04R=18 or ASDMQ04U=21 or ASDMQ04V=22 or ASDMQ04W=23

Code	Category	n weighted	%
0	No	1,866	84.6
1	Yes	339	15.4
	Total	2,205	100.0
	Unknown	18	

LANGUAGE(S) OF CONVERSATION (MOTHER) - ASDMD05

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Question: CQCI-Mother, SOC-Q5

Variables: ASDMQ05A to ASDMQ05S

Derivation: ASDMD05=1 if ASDMQ05A=1 or ASDMQ05B=2 and ASDMQ05C to ASDMQ05S=0

ASDMD05=2 if ASDMQ05A=1 and ASDMQ05B=2 and ASDMQ05C to ASDMQ05S=0

ASDMD05=3 if ASDMQ05A=1 and ASDMQ05B=2 and (ASDMQ05C=3 or ASDMQ05D=4 or ASDMQ05S=19)

ASDMD05=4 if ([ASDMQ05A=1 and ASDMQ05B=0] or (ASDMQ05A=0 and ASDMQ05B=2]) and (ASDMQ05C=3 or ASDMQ05D=4 or ASDMQ05S=19)

ASDMD05=UNKNOWN if one of the variables ASDMQ05A to ASDMQ05S is missing.

Code	Category	n weighted	%
1	French or English only	1,035	46.6
2	French and English only	785	35.3
3	French and English + other language(s)	217	9.8
4	French or English + other language(s)	184	8.3
	Total	2,221	100.0
	Unknown	2	

FIRST LANGUAGE(S) LEARNED BY THE MOTHER - ASDMD06

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Question: CQCI-Mother, SOC-Q6

Variables: ASDMQ06A to ASDMQ06S

Derivation: ASDMD06=1 if ASDMQ06B=2

ASDMD06=2 if ASDMQ06A=1 and ASDMQ06B=0

ASDMD06=3 if ASDMQ06A=0 and ASDMQ06B=0 and (ASDMQ06C=3 or ASDMQ06D=4 or ASDMQ06S=19)

ASDMD6A= UNKNOWN if one of the variables ASDMQ06A to ASDMQ06S is missing

Code	Category	n weighted	%
1	French	1,695	76.3
2	English (no French)	193	8.7
3	Neither French nor English	333	15.0
	Total	2,221	100.0
	Unknown	2	

Note : The categories are exclusive. The first category includes mothers for whom one of the first languages learned was French. The second category comprises mothers who learned English only or English and some other language (not including French). Mothers whose maternal language (first language learned) is neither French nor English are regrouped in the third category.

LANGUAGE(S) SPOKEN MOST OFTEN AT HOME BY THE MOTHER - ASDMD6A

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Question: CQCI-Mother, SOC-Q6A

Variables: ASDMQ6AA, ASDMQ6AB, ASDMQ6AC

Derivation: The three variables used to calculate this index have the values 0 or 1; 0 or 2 and 0 or 3, respectively. To calculate this variable, the following equation may be used:

First, if ASDMD6A=missing

$$\text{LANGUEM} = \text{ASDMQ6AA} + (10 * \text{ASDMQ6AB}) + (100 * \text{ASDMQ6AC})$$

Thus,

ASDMD6A=1 if LANGUEM=20

ASDMD6A=2 if LANGUEM=1

ASDMD6A=3 if LANGUEM=300

ASDMD6A=4 if LANGUEM=21

ASDMD6A=5 if LANGUEM=301 or LANGUEM=320 or LANGUEM=321

Otherwise ASDMD6A=UNKNOWN

Code	Category	n weighted	%
1	French only	1,689	76.0
2	English only	249	11.2
3	Neither French nor English	198	8.9
4	French and English only	40	1.8
5	French or English + other language(s)	45	2.0
	Total	2,221	100.0
	Unknown	2	

CONJUGAL SUPPORT PERCEIVED BY THE MOTHER - ASOMS01

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Scale from 0 (Not at all) to 10 (Totally)

Questions: SAQM, Q49 to Q53

Variables: AQMMQ49 to AQMMQ53

Derivation: If the number of valid responses to AQMMQ49, AQMMQ50, AQMMQ51, AQMMQ52, AQMMQ53 is equal to or greater than 3 then:

ASOMS01 = mean of (AQMMQ49, AQMMQ50, AQMMQ51, AQMMQ52, AQMMQ53).

If not, ASOMS01 is undefined.

Scores vary from 0 to 10.

REPORTED LEVEL OF SYMPTOMS OF DEPRESSION (MOTHER) - ADPMS01

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Scale from 0 to 36

Questions: CQCI-PMK, HLA-Q12A to HLA-Q12M

Variables: AHLMQ12A to AHLMQ12M

Derivation: If AHLMQ12F=1, 2, 3 or 4 then
AHLMQ12F=5 - AHLMQ12F

If AHLMQ12H=1, 2, 3 or 4 then
AHLMQ12H=5 - AHLMQ12H

If AHLMQ12J=1, 2, 3 or 4 then
AHLMQ12J=5 - AHLMQ12J

If the number of valid responses to AHLMQ12A, AHLMQ12B, AHLMQ12C, AHLMQ12D, AHLMQ12E, AHLMQ12F, AHLMQ12G, AHLMQ12H, AHLMQ12I, AHLMQ12J, AHLMQ12K, AHLMQ12L and AHLMQ12M is equal to or greater than 6 then:

- the missing variables were replaced by the mean of the valid variables;

- ADPMS01= sum of (AHLMQ12A, AHLMQ12B, AHLMQ12C, AHLMQ12D, AHLMQ12E, AHLMQ12F, AHLMQ12G, AHLMQ12H, AHLMQ12I, AHLMQ12J, AHLMQ12K, AHLMQ12L and AHLMQ12M) - 13.

If not, ADPMS01 is undefined.

Note: The variable ADPMS01 was not derived when the PMK was the father because he answered these questions in the SAQF (see ADPJS01).

Scores vary from 0 to 36.

FEELING OF SELF-EFFICACY (MOTHER) - APAMS01

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Scale from 0 (Not at all) to 10 (Exactly)

Questions: SAQM, Q23, Q25, Q27, Q29, Q32, Q47

Variables: AQMMQ23, AQMMQ25, AQMMQ27, AQMMQ29, AQMMQ32, AQMMQ47

Derivation: If the number of valid responses to AQMMQ23, AQMMQ25, AQMMQ27, AQMMQ29, AQMMQ32 and AQMMQ47 is equal to or greater than 4 then:

APAMS01 = mean of (AQMMQ23, AQMMQ25, AQMMQ27, AQMMQ29, AQMMQ32, AQMMQ47).

If not, APAMS01 is undefined.

Scores vary from 0.8 to 10.

PERCEPTION OF PARENTAL IMPACT (MOTHER) - APAMS02

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Scale from 0 (Not at all) to 10 (Exactly)

Questions: SAQM, Q22, Q31, Q37, Q42, Q45

Variables: AQMMQ22, AQMMQ31, AQMMQ37, AQMMQ42, AQMMQ45

Derivation: If the number of valid responses to AQMMQ22, AQMMQ31, AQMMQ37, AQMMQ42 and AQMMQ45 is equal to or greater than 3 then:

APAMS02=10 - mean of (AQMMQ22, AQMMQ31, AQMMQ37, AQMMQ42, AQMMQ45).

If not, APAMS02 is undefined.

Scores vary from 0 to 10.

COERCIVE TENDENCIES (MOTHER) - APAMS03

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Scale from 0 (Not at all) to 10 (Exactly)

Questions: SAQM, Q26, Q28, Q30, Q33, Q36, Q40, Q43

Variables: AQMMQ26, AQMMQ28, AQMMQ30, AQMMQ33, AQMMQ36, AQMMQ40, AQMMQ43

Derivation: If the number of valid responses to AQMMQ26, AQMMQ28, AQMMQ30, AQMMQ33, AQMMQ36, AQMMQ40 and AQMMQ43 is equal to or greater than 4 then:

$APAMS03 = \text{mean of (AQMMQ26, AQMMQ28, AQMMQ30, AQMMQ33, AQMMQ36, AQMMQ40, AQMMQ43)}$.

If not, APAMS03 is undefined.

Scores vary from 0 to 8.8.

PARENTAL AFFECTION/PLEASURE (MOTHER) - APAMS04

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Scale from 0 (Not at all) to 10 (Exactly)

Questions: SAQM, Q22A, Q22B, Q46A, Q46B, Q46C

Variables: AQMMQ22A, AQMMQ22B, AQMMQ46A, AQMMQ46B, AQMMQ46C

Derivation: If the number of valid responses to AQMMQ22A, AQMMQ22B, AQMMQ46A, AQMMQ46B, AQMMQ46C is equal to or greater than 3 then:

$APAMS04 = \text{mean of (AQMMQ22A, AQMMQ22B, AQMMQ46A, AQMMQ46B, AQMMQ46C)}$.

If not, APAMS04 is undefined.

Scores vary from 1 to 10.

PARENTAL OVERPROTECTION (MOTHER) - APAMS05

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Scale from 0 (Not at all) to 10 (Exactly)

Questions: SAQM, Q34, Q38, Q39, Q41, Q44

Variables: AQMMQ34, AQMMQ38, AQMMQ39, AQMMQ41, AQMMQ44

Derivation: If the number of valid responses to AQMMQ34, AQMMQ38, AQMMQ39, AQMMQ41 and AQMMQ44 is equal to or greater than 3 then:

APAMS05 = mean of (AQMMQ34, AQMMQ38, AQMMQ39, AQMMQ41 and AQMMQ44).

If not, APAMS05 is undefined.

Scores vary from 0 to 10.

PERCEPTION OF CHILD'S QUALITIES (MOTHER) -APAMS06

Population: All children targeted by ÉLDEQ whose mother, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Scale from 0 (Not at all) to 10 (Exactly)

Questions: SAQM, Q21, Q24, Q35, Q46

Variables: AQMMQ21, AQMMQ24, AQMMQ35, AQMMQ46

Derivation: If the number of valid responses to AQMMQ21, AQMMQ24, AQMMQ35 and AQMMQ46 is equal to or greater than 3 then:

APAMS06= mean of (AQMMQ21, AQMMQ24, AQMMQ35 and AQMMQ46).

If not, APAMS06 is undefined.

Scores vary from 0 to 10.

CHARACTERISTICS RELATING TO THE FATHER OR SPOUSE/PARTNER LIVING IN THE HOUSEHOLD

AGE GROUP OF FATHER/CURRENT PARTNER - AAGJD01

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: The age of the father or current spouse/partner is based on the date of birth provided during the interview.

Question: CQCI, DEM-Q2

Variable: AAGE_3

Derivation: Regrouped in 6 categories of the variable AAGE_3 (file SOCIO101)

Code	Category	n weighted	%
1	Less than 25 years	173	8.6
2	25-29 years	545	27.0
3	30-34 years	693	34.3
4	35-39 years	437	21.6
5	40 years and +	173	8.6
	Total	2,021	100.0
	Unknown	202	

HIGHEST LEVEL OF EDUCATION ATTAINED BY THE FATHER/CURRENT SPOUSE - AEDJD01

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable deals with the highest level of education attained, regardless of diplomas/degrees obtained. Thus, persons who did not obtain a high school diploma but who did study at the university level are placed in the category "some university study."

Questions: CQCI-Father, EDA-Q1 to Q4

Variables: AEDJQ01, AEDJQ02, AEDJQ03, AEDJQ04

Derivation: AEDJD01=1 if AEDJQ01=1 or (AEDJQ02=2 and AEDJQ03=2)

AEDJD01=2 if AEDJQ02=1 and AEDJQ03=2

AEDJD01=3 if AEDJQ04=1 or AEDJQ04=2 or AEDJQ04=10

AEDJD01=4 if AEDJQ04=4

AEDJD01=5 if AEDJQ04=5

AEDJD01=6 if AEDJQ04=3

AEDJD01=7 if AEDJQ04= 6 or AEDJQ04=7 or AEDJQ04=8 or AEDJQ04=9

Note: Cases where the respondent answered "Other (specify)" to question AEDMQ04 were examined one by one and placed in another category on the basis of the available information (e.g., for "diploma in massage therapy," AEDMD01=4; for "college (Junior) diploma," AEDMD01=3; for "BA in French," AEDMD01=5, etc.).

Code	Category	n weighted	%
1	No high school diploma	351	17.6
2	High school diploma	254	12.7
3	Some post-secondary study	337	16.8
4	Vocational/Technical school diploma	231	11.5
5	College (Junior) diploma	242	12.1
6	Some university	92	4.6
7	University degree	493	24.7
	Total	2,000	100.0
	Unknown	223	

HIGHEST DIPLOMA/DEGREE ATTAINED BY THE FATHER/CURRENT PARTNER - AEDJD02

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable corresponds to the highest diploma/degree obtained.

Questions: CQCI-Father, EDA-Q1 to Q4

Variables: AEDJQ01, AEDJQ02, AEDJQ03, AEDJQ04

Derivation: AEDJD02=1 if AEDJQ01=1 or AEDJQ02=2

AEDJD02=2 if AEDJQ02=1 and (AEDJQ04=-4 or AEDJQ04=1 or AEDJQ04=2 or AEDJQ04=10)

AEDJD02=3 if AEDJQ02=1 and (AEDJQ04=3 or AEDJQ04=4 or AEDJQ04=5)

AEDJD02=4 if AEDJQ04=6 or AEDJQ04=7 or AEDJQ04=8 or AEDJQ04=9

AEDJD02= missing if AEDJQ01= "Don't know"

Cases where the respondent answered "Other (specify)" were placed in one of the above categories after consideration of the response.

Note: For persons who answered "Some post-secondary study" to question EDA-Q4 "What is the highest level of education that you have attained?" the data provide no means to determine with precision the highest level obtained. We used the information on whether the person obtained a high school diploma to classify the case in the first or second category. For those who said they had some university, we again determined the classification in relation to whether the person received a high school diploma. Thus, we presumed that those who obtained a high school diploma had followed the normal path and obtained a college (Junior) diploma. Those who did not have a high school diploma were placed in the first category, that is, no high school diploma.

Code	Category	n weighted	%
1	No high school diploma	414	20.7
2	High school diploma	529	26.4
3	Post-secondary level diploma	563	28.2
4	University degree	494	24.7
	Total	2,000	100.0
	Unknown	223	

PAID WORK AT THE TIME OF THE SURVEY (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - ALFJD1A

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify fathers or current spouse/partners who were working when the survey was conducted, regardless of the type of employment.

Questions: CQCI-Father, LFS-Q1, LFS-Q8

Variables: ALFJD01, ALFJD08

Derivation: ALFJD1A=1 if ALFJD01=2 or ALFJD01=3 or ALFJD08=1 if not, if ALFJD01 and ALFJD08 are known, ALFJD1A=0

Code	Category	n weighted	%
0	No	257	12.8
1	Yes	1,760	87.2
	Total	2,017	100.0
	Unknown	206	

PAID WORK DURING 12 MONTHS PRECEDING THE SURVEY (FATHER/CURRENT SPOUSE) - ALFJD1B

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Employment status over the 12 months preceding the survey. In contrast to the preceding variable, this derivative variable focuses on the type of work. Considered to have held a job during the year preceding the survey are fathers or current spouse/partners who answered "Working for pay or profit" or "Caring for family, paid parental leave" to question LFS-Q1 "What do you consider to be your main activity currently? (For example, working for pay, caring for family)" as well as fathers or spouses/partners who answered in the affirmative to question LFS-Q2 "Have you / has he worked for pay or profit at any time in the past 12 months?".

Questions: CQCI-Father, LFS-Q1, LFS-Q2

Variables: ALFJD01, ALFJD02

Derivation: ALFJD1B=1 if ALFJD01=2 or ALFJD01=3 or ALFJD02=1 if not, if ALFJD01 and ALFJD02 are known, ALFJD1B=0

Code	Category	n weighted	%
0	No	119	5.9
1	Yes	1,892	94.1
	Total	2,011	100.0
	Unknown	212	

EMPLOYMENT STATUS OF THE PRINCIPAL EMPLOYMENT OF THE FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - ALFJD1C

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Work status of the principal employment during the 12 months preceding the survey.

Questions: CQCI-Father, LFS-Q1, LFS-Q2, LFS-Q4

Variables: ALFJQ04, ALFJD1B

Derivation: ALFJD1C=-4 (not applicable) if ALFJD1B=0

ALFJD1C=1 if ALFJQ04=1 or ALFJQ04=2 or ALFJQ04=3

ALFJD1C=2 if ALFJQ04=4 or ALFJQ04=5 or ALFJQ04=6

Code	Category	n weighted	%
-4	Not applicable (not employed)	119	5.9
1	Part time	73	3.7
2	Full time	1,811	90.4
	Total	2,003	100.0
	Unknown	220	

IMMIGRANT STATUS (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) – ASDJD1A

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: The immigrant status corresponds to the typology developed by Chen et al (1996). The first category covers persons born in Canada, regardless of their ethnic origin. The second category includes persons born in the United States, Australia, New Zealand or in Europe. The third category includes those born in all other countries.

Questions: CQCI-Father, SOC-Q1, SOC-Q2

Variables: ASDJQ01, ASDJQ2AA

Derivation: ASDJQ01=COUNTRY OF BIRTH AND ASDJQ2AA=CITIZENSHIP

ASDJD1A=1 if ASDJQ01=1 (born in Canada) or ASDJQ2AA=1 (Canadian citizen by birth)

ASDJD1A=2 if ASDJQ01=3, 4, 5, 8, 10, 12, 14, 15, 16,17

ASDJD1A=3 if ASDJQ01=2, 6, 7, 9, 11, 13, 18,19

Code	Category	n weighted	%
1	Not an immigrant	1,698	84.1
2	European immigrant	65	3.2
3	Non-European immigrant	255	12.7
	Total	2,018	100.0
	Unknown	205	

NUMBER OF YEARS SINCE FIRST IMMIGRATION (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - ASDJD3A

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: Number of years since the first immigration to Canada

Question: CQCI-Father, SOC-Q3

Variable: ASDJQ03

Derivation: Not an immigrant if ASDJQ03=-4 (not applicable)

Otherwise, if SOC-Q3 is known, the value 1998-ASDJQ03 is regrouped in three categories.

Code	Category	n weighted	%
-4	Not an immigrant	1,698	84.4
1	Less than 5 years	88	4.4
2	5-9 years	78	3.9
3	10 years and +	148	7.3
	Total	2,012	100.0
	Unknown	211	

CANADIAN ETHNIC ORIGIN (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - ASDJD4AA

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify fathers of Canadian ethnic origin, regardless of other stated origins. The variables ASDJD4AA to ASDJD4AG are not exclusive.

Question: CQCI-Father, SOC-Q4

Variable: ASDJQ04A

Derivation: ASDJD4AA =1 if ASDJQ04A=1 if not ASDJD4AA=0

Code	Category	n weighted	%
0	Non	758	38.0
1	Yes	1,239	62.0
	Total	1,997	100.0
	Unknown	226	

FRENCH ETHNIC ORIGIN (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - ASDJD4AB

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify fathers of French ethnic origin, regardless of other stated origins. The variables ASDJD4AA to ASDJD4AG are not exclusive.

Question: CQCI-Father, SOC-Q4

Variable: ASDJQ04B

Derivation: ASDJD4AB =1 if ASDJQ04B=2 if not ASDJD04B=0

Code	Category	n weighted	%
0	No	1,427	71.5
1	Yes	570	28.5
	Total	1,997	100.0
	Unknown	226	

BRITISH ETHNIC ORIGIN (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - ASDJD4AC

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify fathers of British ethnic origin (that is, English, Scottish or Irish), regardless of other stated origins. The variables ASDJD4AA to ASDJD4AG are not exclusive.

Question: CQCI-Father, SOC-Q4

Variables: ASDJQ04C, ASDJQ04E, ASDJQ04F

Derivation: ASDJQ4AC=1 if ASDJQ04C=3 or ASDJQ04E=5 or ASDJQ04F=6 if not ASDJQ4AC=0

Code	Category	n weighted	%
0	No	1,874	93.8
1	Yes	123	6.2
	Total	1,997	100.0
	Unknown	226	

OTHER EUROPEAN ETHNIC ORIGINS (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - ASDJD4AD

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify fathers of European ethnic origin other than French or British, that is, Dutch, German, Italian, Jewish, Polish, Portuguese, Ukrainian or Spanish, regardless of other stated origins. The variables ASDJD4AA to ASDJD4AG are not exclusive.

Question: CQCI-Father, SOC-Q4

Variables: ASDJQ04D, ASDJQ04G, ASDJQ04H, ASDJQ04I, ASDJQ04K, ASDJQ04L, ASDJQ04M, ASDMQ04S

Derivation: ASDJD4AD=1 if ASDJQ04D=4 or ASDJQ04G=7 or ASDJQ04H=8 or ASDJQ04I=9 or ASDJQ04K=11 or ASDJQ04L=12 or ASDJQ04M=13 or ASDJQ04S=19

If not ASDJD4AD=0

Code	Category	n weighted	%
0	No	1,843	92.3
1	Yes	154	7.7
	Total	1,997	100.0
	Unknown	226	

ABORIGINAL ETHNIC ORIGIN (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - ASDJD4AE

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify fathers of aboriginal origin, regardless of other stated origins. The variables ASDJD4AA to ASDJD4AG are not exclusive.

Question: CQCI-Father, SOC-Q4

Variable: ASDJQ04P

Derivation: ASDJD4AE=1 if ASDJQ04P=16 if not ASDJD4AE=0

Code	Category	n weighted	%
0	No	1,943	97.3
1	Yes	54	2.7
	Total	1,997	100.0
	Unknown	226	

AFRICAN/HAITIAN ETHNIC ORIGIN (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - ASDJD4AF

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify fathers of African or Haitian ethnic origin, regardless of other stated origins. The variables ASDJD4AA to ASDJD4AG are not exclusive.

Question: CQCI-Father, SOC-Q4

Variables: ASDJQ04O, ASDJQ04T

Derivation: ASDJD4AF=1 if ASDJQ04O=15 or ASDJQ04T=20
If not ASDJD4AF=0

Code	Category	n weighted	%
0	No	1,951	97.7
1	Yes	46	2.3
	Total	1,997	100.0
	Unknown	226	

OTHER ETHNIC ORIGINS (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - ASDJD4AG

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify fathers whose ethnic origin is other than those included in the variables ASDMD4AA to ADSMD4AG. The following origins, regrouped due to small numbers, are included: Chinese or South Asian, Métis, Inuit as well as those given as "Arabic-speaking of Maghreb and of Middle East," "Spanish-speaking of the Americas" and other unspecified origins. The variables ASDED4AA to ASDED4AG are not exclusive.

Question: CQCI-Father, SOC-Q4

Variables: ASDJQ04J, ASDJQ04N, ASDJQ04Q, ASDJQ04R, ASDJQ04U, ASDJQ04V, ASDJQ04W

Derivation: ASDJD4AG=1 if ASDJQ04J=10 or ASDJQ04N=14 or ASDJQ04Q=17 or ASDJQ04R=18 or ASDJQ04U=21 or ASDJQ04V=22 or ASDJQ04W=23

Code	Category	n weighted	%
0	No	1,703	85.3
1	Yes	294	14.7
	Total	1,997	100.0
	Unknown	226	

LANGUAGE(S) OF CONVERSATION OF FATHER/SPOUSE LIVING IN THE HOUSEHOLD - ASDJD05

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Question: CQCI-Father, SOC-Q5

Variables: ASDJQ05A to ASDJQ05S

Derivation: ASDJD05=1 if ASDJQ05A=1 or ASDJQ05B=2 and ASDJQ05C to ASDJQ05S=0

ASDJD05=2 if ASDJQ05A=1 and ASDJQ05B=2 and ASDJQ05C to ASDJQ05S=0

ASDJD05=3 if ASDJQ05A=1 and ASDJQ05B=2 and (ASDJQ05C=3 or ASDJQ05D=4 or ASDJQ05S=19)

ASDJD05=4 if ([ASDJQ05A=1 and ASDJQ05B=0] or (ASDJQ05A=0 and ASDJQ05B=2]) and (ASDJQ05C=3 or ASDJQ05D=4 or ASDJQ05S=19)

ASDJD05= UNKNOWN if one of the variables ASDJQ05A to ASDJQ05S is missing

Code	Category	n weighted	%
1	French or English only	851	42.2
2	French and English only	805	39.9
3	French and English + other language(s)	238	11.8
4	French or English + other language(s)	124	6.1
	Total	2,018	100.0
	Unknown	205	

FIRST LANGUAGE(S) LEARNED BY THE FATHER/SPOUSE LIVING THE HOUSEHOLD - ASDJD06

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Question: CQCI-Father, SOC-Q6

Variables: ASDJQ06A to ASDJQ06S

Derivation: ASDJD06=1 if ASDJQ06B=2

ASDJD06=2 if ASDJQ06A=1 and ASDJQ06B=0

ASDJD06=3 if ASDJQ06A=0 and ASDJQ06B=0 and (ASDJQ06C=3 or ASDJQ06D=4 or ASDJQ06S=19)

ASDJD06= UNKNOWN if one of the variables ASDJQ06A to ASDJQ06S is missing

Note : The categories are exclusive. The first category includes fathers/spouses for whom one of the first languages learned was French. The second category includes fathers/spouses who learned only English or English and one other language (excluding French). Fathers/spouses whose maternal language (first language learned) is neither French nor English are regrouped in the third category.

Code	Category	n weighted	%
1	French	1,534	76.0
2	English (not French)	168	8.3
3	Neither French nor English	316	15.7
	Total	2,018	100.0
	Unknown	205	

LANGUAGE(S) SPOKEN MOST OFTEN AT HOME (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - ASDJD6A

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIPCM, **APOIPCMM**

Question: CQCI-Father, SOC-Q6A

Variables: ASDJQ6AA, ASDJQ6AB, ASDJQ6AC

Derivation: The 3 variables used to calculate this index have the values 0 or 1; 0 or 2 and 0 or 3, respectively. To calculate this variable, the following equation may be used:

First ASDJD6A=missing

$LANGUEP = ASDJQ6AA + (10 * ASDJQ6AB) + (100 * ASDJQ6AC)$

Thus

ASDJD6A=1 if LANGUEP=20

ASDJD6A=2 if LANGUEP=1

ASDJD6A=3 if LANGUEP=300

ASDJD6A=4 if LANGUEP=21

ASDJD6A=5 if LANGUEP=301 or LANGUEP=320 or LANGUEP=321

Otherwise, ASDJD6A= Unknown

Code	Category	n weighted	%
1	French only	1,571	77.9
2	English only	217	10.7
3	Neither French nor English	161	8.0
4	French and English only	28	1.4
5	French or English + other language(s)	41	2.0
	Total	2,018	100.0
	Unknown	205	

**REPORTED LEVEL OF SYMPTOMS OF DEPRESSION
(FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - ADPJS01**

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household.

Weights: APOIQAP, **APOIQAPM**

Description: Scale from 0 to 36

Questions: QAAP, Q40 à Q51A

Variables: AQPJQ40 à AQPJQ51A

Derivation: If AQPJQ45=1, 2, 3 or 4 then
AQPJQ45=5 - AQPJQ45

If AQPJQ47=1, 2, 3 or 4 then
AQPJQ47=5 - AQPJQ47

If AQPJQ49=1, 2, 3 or 4 then
AQPJQ49=5 - AQPJQ49

If the number of valid responses to AQPJQ40, AQPJQ41, AQPJQ42, AQPJQ43, AQPJQ44, AQPJQ45, AQPJQ46, AQPJQ47, AQPJQ48, AQPJQ49, AQPJQ50, AQPJQ51 and AQPJQ51A is equal to or greater than 6 then:

- the missing variables were replaced by the mean of the valid variables;
- ADPJS01 = sum of (AQPJQ40, AQPJQ41, AQPJQ42, AQPJQ43, AQPJQ44, AQPJQ45, AQPJQ46, AQPJQ47, AQPJQ48, AQPJQ49, AQPJQ50, AQPJQ51 and AQPJQ51A) - 13.
- If not, ADPJS01 is undefined.

Scores vary from 0 to 30.

FEELING OF SELF-EFFICACY (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - APAJS01

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIQAP, **APOIQAPM**

Description: Scale from 0 (Not at all) to 10 (Exactly)

Questions: SAQF, Q15, Q17, Q19, Q21, Q24, Q39

Variables: AQPJQ15, AQPJQ17, AQPJQ19, AQPJQ21, AQPJQ24, AQPJQ39

Derivation: If the number of valid responses to AQPJQ15, AQPJQ17, AQPJQ19, AQPJQ21, AQPJQ24 and AQPJQ39 is equal to or greater than 4 then:

APAJS01 = mean of (AQPJQ15, AQPJQ17, AQPJQ19, AQPJQ21, AQPJQ24 and AQPJQ39).

If not, APAJS01 is undefined.

Scores vary from 1 to 10.

PERCEPTION OF PARENTAL IMPACT (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - APAJS02

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIQAP, **APOIQAPM**

Description: Scale from 0 (Not at all) to 10 (Exactly)

Questions: SAQF, Q14, Q23, Q29, Q34, Q37

Variables: AQPJQ14, AQPJQ23, AQPJQ29, AQPJQ34, AQPJQ37

Derivation: If the number of valid responses to AQPJQ14, AQPJQ23, AQPJQ29, AQPJQ34 and AQPJQ37 is equal to or greater than 3 then:

APAJS02=10- mean of (AQPJQ14, AQPJQ23, AQPJQ29, AQPJQ34 and AQPJQ37).

If not, APAJS02 is undefined.

Scores vary from 0 to 10.

COERCIVE TENDENCES (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - APAJS03

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIQAP, **APOIQAPM**

Description: Scale from 0 (Not at all) to 10 (Exactly)

Questions: SAQF, Q18, Q20, Q22, Q25, Q28, Q32, Q35

Variables: AQPJQ18, AQPJQ20, AQPJQ22, AQPJQ25, AQPJQ28, AQPJQ32, AQPJQ35

Derivation: If the number of valid responses to AQPJQ18, AQPJQ20, AQPJQ22, AQPJQ25, AQPJQ28, AQPJQ32 and AQPJQ35 is equal to or greater than 4 then:

APAJS03=mean of (AQPJQ18, AQPJQ20, AQPJQ22, AQPJQ25, AQPJQ28, AQPJQ32 and AQPJQ35).

If not, APAJS03 is undefined.

Scores vary from 0 to 9.4.

PARENTAL AFFECTION/PLEASURE (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - APAJS04

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIQAP, **APOIQAPM**

Description: Scale from 0 (Not at all) to 10 (Exactly)

Questions: SAQF, Q14A, Q14B, Q38A, Q38B, Q38C

Variables: AQPJQ14A, AQPJQ14B, AQPJQ38A, AQPJQ38B, AQPJQ38C

Derivation: If the number of valid responses to AQPJQ14A, AQPJQ14B, AQPJQ38A, AQPJQ38B and AQPJQ38C is equal to or greater than 3 then:

APAJS04 = mean of (AQPJQ14A, AQPJQ14B, AQPJQ38A, AQPJQ38B and AQPJQ38C).

If not, APAJS04 is undefined.

Scores vary from 1.2 to 10.

PARENTAL OVERPROTECTION (FATHER/SPOUSE LIVING IN THE HOUSEHOLD) - APAJS05

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIQAP, **APOIQAPM**

Description: Scale from 0 (Not at all) to 10 (Exactly)

Questions: SAQF, Q26, Q30, Q31, Q33, Q36

Variables: AQPJQ26, AQPJQ30, AQPJQ31, AQPJQ33, AQPJQ36

Derivation: If the number of valid responses to AQPJQ26, AQPJQ30, AQPJQ31, AQPJQ33 and AQPJQ36 is equal to or greater than 3 then:

APAJS05 = mean of (AQPJQ26, AQPJQ30, AQPJQ31, AQPJQ33 and AQPJQ36).

If not, APAJS05 is undefined.

Scores vary from 0 to 10.

PERCEPTION OF CHILD'S QUALITIES (FATHER/SPOUSE LIVING IN THE HOUSEHOLD - APAJS06

Population: All children targeted by ÉLDEQ whose father, biological or not, is living in the household

Weights: APOIQAP, **APOIQAPM**

Description: Scale from 0 (Not at all) to 10 (Exactly)

Questions: SAQF, Q13, Q16, Q27, Q38

Variables: AQPJQ13, AQPJQ16, AQPJQ27, AQPJQ38

Derivation: If the number of valid responses to AQPJQ13, AQPJQ16, AQPJQ27 and AQPJQ38 is equal to or greater than 3 then:

APAJS06= mean of (AQPJQ13, AQPJQ16, AQPJQ27 and AQPJQ38).

If not, APAJS06 is undefined.

Scores vary from 0 to 10.

CHARACTERISTICS RELATING TO THE HOUSEHOLD

SIZE OF THE HOUSEHOLD– AREFD01

Population: All children targeted by ÉLDEQ.

Weights: APOIPCM, **APOIPCMM**

Description: Number of persons living in the household

Question: CQCI, DEM-Q2

Variables: AAGE_1 to AAGE_12

Derivation: As there are no missing values (UNKNOWN) to the variable AAGE_X for household members who are present, the derivative variable AREFD01 = number of AAGE_X for which the value is known.

Code	Category	n weighted	%
2	2	50	2.2
3	3	837	37.6
4	4	887	39.9
5	5	291	13.1
6	6	103	4.6
7+	7+	55	2.5
	Total	2,223	100.0

INCOME SUFFICIENT LEVEL – AINFD3A

Population:	All children targeted by ÉLDEQ.
Weights:	APOIPCM, APOIPCMM
Description:	Categorization of children based on whether the income of the household falls below the low-income cut-off defined by Statistics Canada for the reference year 1997 (1992 baseline). The low-income cut-off takes into account the size of the household and size of the area inhabited (see Table A.1 in the Annex).
Questions:	CQCI-PMK, INC-Q3, INC-Q3A to INC-Q3G and complementary derivative variables for the size of the household and size of the area inhabited (see below).
Variables:	AREFD01, AINFD03 (gross income recoded) AINFQ03 (gross household income, not recoded: this variable is not distributed out of respect for confidentiality) POP_TOT (total population), RUR_PC (percentage of the population living in a rural area; these variables are not distributed) To obtain the preceding two variables, each survey household was first given a code signifying the municipality – a long and complex procedure. To do so, we used the <i>Tables officielles de données territoriales du ministère de la Santé and des Services sociaux (Système d'information territoriale M22)</i> (MSSS, 1998). They provided a means to identify the connection between the postal code and municipal code. However, for a relatively large

number of households – 10 of them – we were unable to identify the municipal code using this strategy, notably, when the postal code encompassed more than one municipality or when the information available to us made no distinction between a "village" and a "parish." The attributions were then done manually using other strategies, for example, by referring to the *Directory of Canadian Postal Codes* issued by Canada Post, which allows cross-referencing by the postal code as well as the house number and street name.

After assigning to each household a municipal code, a second round of matching was undertaken using a file from the 1996 Census to obtain the size of the area inhabited (POP_TOT) and the percentage of the population living in a rural area (RUR_PC); these are necessary in calculating the low-income cut-off.

Derivation: The programming details for this index are very complex and will not be presented here. Rather, let us examine the method by which the income level was attributed for each household.

For recorded household size (AREFD01), according to the size of the area in which the child lived (POP_TOT), household income is compared to the low-income cut-off defined by Statistics Canada for 1997 (1992 baseline). For example:

AINFD3A = 2 if AREFD01 = 2 and POP_TOT is between 30,000 and 99,999 persons and AINFQ03 is less than \$18,534.

Some adjustments were made to take into account the following:

- 1) Income is expressed as a range rather than as an exact figure (i.e., AINFQ03=UNKNOWN but AINFD03=known). As recommended by Wilms and Shields (1996), in calculating the level of socioeconomic status (see variable AINFD02), we used the middle point of the income category to define the household's "exact" income. Approximately 4% of households were affected. Note that the households (fewer than 1%) for which AINFQ03 is UNKNOWN and AINFD03 is greater than \$80,000 are all considered to have adequate income, regardless of the size of the household and area inhabited.
- 2) The size of the inhabited area is fewer than 30,000 persons and household income is set at the cut-off for an urban area of fewer than 30,000 persons and a rural area, for the size of household reported. For example, the household comprises 3 persons, the population of the inhabited area is 16,548 and the income ranges between \$18,703 and \$21,448 (see Table A.1).

In these cases (approximately 2% of households), we must determine if the household is in a urban or rural area.²⁸ As there is no consensus between offices of statistics in Québec and Canada on the concepts "urban" and "rural" and the method of measuring them (Cunningham et al, 1997) and, taking into consideration the data for ÉLDEQ, we decided to use the following criteria: if more than 50% of the population lives in a rural area (RUR_PC greater than 50), we use the cut-off defined for a rural area. Note that for three-quarters of ambiguous cases, the percentage of the population living in a rural area is equal to 0 or 100. There were thus few children (less than 0.5%) living in a "mixed" area of fewer than 30,000 persons.

For more information on the concept "low income" and the basis of its calculation in ÉLDEQ, see Number 2 of this collection.

Code	Category	n weighted	%
1	Yes	1,577	72.5
2	No	599	27.5
	Total	2,176	100.0
	Unknown	47	

28. Statistics Canada defines an urban area as one with a minimum population concentration of 1,000 persons and a population density of at least 400 persons per square kilometre, based on the previous census population counts. In contrast, rural areas are sparsely populated lands. According to Statistics Canada, any area situated outside an urban area is considered to be rural (Cunningham et al, 1997).

MAIN INCOME SOURCE OF THE HOUSEHOLD– AINFD2A

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Main source of income from all declared sources

Questions: CQCI-PMK, INC-Q1, INC-Q2

Variables: AINFQ01A to AINFQ01N, AINFQ02

Derivation: AINFD2A=1 if (AINFQ01A=1 and AINFQ02=-4) or AINFQ02=1

AINFD2A=2 if (AINFQ01B=2 and AINFQ02=-4) or AINFQ02=2

AINFD2A=3 if (AINFQ01J=10 and AINFQ02=-4) or AINFQ02=10

AINFD2A=4 if (AINFQ01D=4 and AINFQ02=-4) or AINFQ02=4

AINFD2A=5 if (AINFQ01C=3 and AINFQ02=-4) or AINFQ02=3 or

(AINFQ01C=5 and AINFQ02=-4) or AINFQ02=5 or

(AINFQ01C=6 and AINFQ02=-4) or AINFQ02=6 or

(AINFQ01C=7 and AINFQ02=-4) or AINFQ02=7 or

(AINFQ01C=8 and AINFQ02=-4) or AINFQ02=8 or

(AINFQ01C=9 and AINFQ02=-4) or AINFQ02=9 or

(AINFQ01C=11 and AINFQ02=-4) or AINFQ02=11 or

(AINFQ01C=12 and AINFQ02=-4) or AINFQ02=12 or

(AINFQ01C=13 and AINFQ02=-4) or AINFQ02=13 or

(AINFQ01C=14 and AINFQ02=-4) or AINFQ02=14 or

AINFD2A=UNKNOWN if AINFQ01A=REFUSAL, DON'T KNOW or MISSING or AINFQ02=REFUSAL, DON'T KNOW or MISSING

Code	Category	n weighted	%
1	Wages and salaries	1,671	76.1
2	Income from self-employment	164	7.5
3	Social assistance	254	11.6
4	Employment insurance	41	1.9
5	Other	64	2.9
	Total	29	100.0
	Unknown	2,223	

SOCIOECONOMIC STATUS – AINFD08

Population:	All children targeted by ÉLDEQ
Weights:	APOIPCM, APOIPCMM
Description:	Socioeconomic status of the household based on level of education of the PMK and her/his spouse, if applicable, the occupational prestige score of the PMK and spouse and the gross income of the household.
Questions:	CAID-INT ("Who is the person best informed on the subject of ...?") CQCI-Mother, EDA-Q1, EDA-Q4 CQCI-Father, EDA-Q1, EDA-Q4 CQCI-PMK, INC-Q3, INC-Q3A to INC-Q3G and complementary derivative variables.
Variables:	A_PCM AEDMQ01, AEDMQ04, APIMD01, ALFMD1B AEDJQ01, AEDJQ04, APIJD01 ²⁹ , ALFJD1B AINFQ03, AINFD03, AFAFD02

Derivation: The programming for this index is very complex and is therefore not presented here. To create it we used the method proposed by Wilms and Shields (1996; see also Statistics Canada and Human Resources Development Canada, 1995). However, some adjustments were made in the calculation of the years of schooling completed by the PMK and his/her spouse to take into account the specific characteristics of the school system in Québec. Thus, individuals who had some university and held a high school diploma were attributed 14 years of schooling rather than the sum of the years of primary and secondary schooling successfully completed, in accordance with the method developed by Wilms and Shields (1996). For more information on the modifications to level of schooling, please refer to the section on the derivative variables AEDMD02 and AEDJD02: "Highest diploma/degree attained."

Scores vary between – 2.8 and 3.7 (mean = 1 and s.d. = 0)

Note: Given the method of calculating this index, the socioeconomic status (SES) of single-parent families tends to be lower than that of other family types because household income is, in general, also lower. For these families, the SES nonetheless takes into account the single parent's level of schooling and occupational prestige score. In the majority of regression analyses for which the SES is used as the control variable, Wilms and Shields (1996) recommend the inclusion of a dichotomous variable to indicate whether it is a single- or two-parent family.

29. Regrouping of occupations into 16 categories according to the Pineo Socioeconomic Classification of Occupations for the Census (1985). The variable APIMD01 is included in the file MOTHER101 while the variable APIJD01 is in the file FATHER101.

TYPE OF FAMILY AT THE TIME OF THE SURVEY (6 categories) – AFAFD01

Population:	All children targeted by ÉLDEQ
Weights:	APOIPCM, APOIPCMM
Description:	Type of family the child is living in at the time of the survey (6 categories).
Questions:	CQCI, REL-Q1A; CQCI-Child, CUS-Q6E, Q6G, Q7E, Q7G; SAQM, Q48
Variables:	ARE2Q3, ARE1Q3 to ARE1Q12, ARE3Q4 to ARE3Q12, ACSEQ06E, ACSEQ6GE, ACSEQ07E, ACSEG7GE, AQMMQ48,
Derivation:	The programming for this index is very complex and is therefore not presented here. In addition, the programming did not apply to all cases; some had to be classified manually. The families were categorized according to the definitions below.

Family type is determined based on the relations of the children and adults *present* in the household. This typology provides a description of the infant's family type. Intact two-parent families are only those in which the child lives with his/her two biological parents, regardless of the type of conjugal relationship (marriage or common-law). Reconstituted families are composed of a couple, married or common-law, living with at least one child not born to them. Single-parent families are those in which the children live with one parent. Note that only children living at least part of the time in the household, as described in the section CUSTODY, or whose normal residence is the household, as described in the section REL of the CQCI, are considered to be present. Thus, an infant is considered to be living in an "intact" two-parent family if one or the other

of the parents has children from a previous relationship, but none of these children live in the household.

Once the family is identified, the reconstituted families are classified according to the source of the children who are living in it. Four types of reconstituted family have been retained for the survey:

reconstituted families composed of, in addition to the children of the infant's biological parents, children born to the mother in a previous relationship (reconstituted – CPU mother);

reconstituted families composed of, in addition to the children of the infant's biological parents, children born to the father in a previous relationship (reconstituted – CPU father);

reconstituted families composed of, in addition to the children of the infant's biological parents, children born to the father and to the mother in previous relationships (reconstituted – CPU mother and father);

reconstituted families composed of the infant's biological parent and the brothers and/or sisters, if applicable, born to that parent and his/her new spouse.

Because, for the 1998 collection of the survey, the single parent is in almost all cases the biological mother, single-parent families are not identified here by the sex of the parent.

Not considered part of this typology are persons outside the immediate family circle formed by the single parent and her/his children or the couple and their children. Others who might be related (e.g., grandparents, aunt, cousin, etc.) or not related (e.g., boarders) to the infant are nonetheless counted as members of the household (see AREFD01).

The residual category “UNKNOWN” includes children living in foster homes and those whose family situation is not known.

Code	Category	n weighted	%
1	Intact	1,771	80.0
2	Reconstituted – CPU mother	134	6.0
3	Reconstituted – CPU father	82	3.7
4	Reconstituted – CPU mother and father	20	0.9
5	Reconstituted – new spouse of biological parent	4	0.2
6	Single-parent	203	9.2
	Total	2,214	100.0
	Unknown	9	

Note : CUP signifies children of a previous union.

FAMILY TYPE AT THE TIME OF THE SURVEY (3 categories) – AFAFD02

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Type of family the child is living in at the time of the survey

Variable: AFAFD01

Derivation: Regrouped in 3 categories of the variable AFAFD01

AFAFD02=1 if AFAFD01=1

AFAFD02 =2 if AFAFD01=2, 3, 4 or 5

AFAFD02=3 if AFAFD01=6

Code	Category	n weighted	%
1	Intact	1,771	80.0
2	Reconstituted	240	10.8
3	Single-parent	203	9.2
	Total	2,214	100.0
	Unknown	9	

TWO BIOLOGICAL PARENTS LIVING IN THE HOUSEHOLD – AREFD02

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to identify children whose two biological parents are living together.

Question: CQCI, REL-Q1A

Variables: ARE1Q3 and ARE2Q3

Derivation: For the 1998 ÉLDEQ collection, person 1 is the mother, biological or not, present in the household and person 3 is the biological father or the spouse of person 1.

Thus, it is possible to identify households formed by a couple, that is, those for whom the relationship between person 1 and person 3 is "spouse," "common-law partner" or "unrelated person" *and* where the relationship between the target child and person 3 is "biological child."

AREFD02=1 if (ARE1Q3= "A0" or ARE1Q3= "B0" or ARE1Q3= "Y1") and ARE2Q3= "E1"

and those where the relationship between the target child and person 3 is not one of a biological child.

AREFD02=2 if ARE2Q3 is not equal to "E1."

The other households in which the two biological parents do not live together are those formed by the father only, that is, those for which ARE1Q3=MISSING and ARE2Q3= "E1" (identified manually).

After inter-instrument validation some cases were classified UNKNOWN.

Code	Category	n weighted	%
1	Yes	2,008	90.6
2	No	209	9.4
	Total	2,217	100.0
	Unknown	6	

BIOLOGICAL FATHER LIVING IN THE HOUSEHOLD – AREFD2A

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Presence of the biological father in the household in which the child is living at the time of the survey

Question: CQCI, REL-Q1A

Variable: ARE2Q3

Derivation: AREFD2A=1 if ARE2Q3="E1"
 Otherwise, AREFD2A=2
 After inter-instrument validation some cases were classified UNKNOWN.

Code	Category	n weighted	%
1	Yes	2,009	90.6
2	No	208	9.4
	Total	2,217	100.0
	Unknown	6	

BIOLOGICAL FATHER PRESENT IN THE HOUSEHOLD (if biological mother is present) – AREFD03

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: This variable provides a means to distinguish children living with their two biological parents from those living with only their biological mother. Excluded from this typology are, for example, children living with their single father or children living in foster homes. This variable is useful in identifying mothers eligible to answer the questions about the absent biological father (SAQM - Section 6).

Question: CQCI, REL-Q1A

Variables: ARE1Q3 and ARE2Q3 or AREFD02

Derivation: AREFD03=AREFD02
 except foster families and single fathers, which are excluded from this typology (some manually identified cases)

Code	Category	n weighted	%
1	Yes	2,007	90.7
2	No	206	9.3
	Total	2,213	100.0
	Unknown and excluded from typology	10	

CONJUGAL SITUATION OF THE PARENTS AT BIRTH OF THE CHILD – ACSED01

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Conjugal history of the parents

Questions: CQCI, CUS-Q3A, CUS-Q3B, CUS-Q5A, CUS-Q5B

Variables: ACSEQ03A, ACSEQ03B, ACSEQ05A, ACSEQ05B

Derivation: ACSED01=1 if ACSEQ03B=2

ACSED01=2 if ACSEQ03B=1

ACSED01=3 if ACSEQ03A is equal to or greater than 2

ACSED01=4 if ACSEQ05B=1 or ACSEQ05B=3

ACSED01=5 if ACSEQ05A=2 or ACSEQ05B=2

Code	Category	n weighted	%
1	Married	413	18.6
2	Married preceded by common-law union	562	25.4
3	Common law	1,055	47.6
4	Separated	84	3.8
5	Never lived together	103	4.6
	Total	2,217	100.0
	Unknown	6	

TYPE OF FAMILY AT BIRTH OF THE CHILD – ACSED02

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Type of family that the child lived in at the time of birth

Questions: CQCI, CUS-Q4, CUS-Q5B, CUS-Q6E, CUS-Q6G, CUS-Q7E, CUS-Q7G, CUS-Q20B, CUS-Q20C, CUS-Q21B, CUS-Q21C

CQCI-DEM (child's date of birth)

Variables: ACSEQ04, ACSEQ05B, ACSEQ06E, ACSEQ6GE, ACSEQ07E, ACSEQ7GE, ACSEQ20B, ACSEQ20C, ACSEQ21B, ACSEQ21C

ADNED01

Derivation: ACSED02=1 if ACSEQ06E=2 and ACSEQ07E=2 or ACSEQ07E=-2

ACSED02=2 if ACSEQ6GE is greater than 0 or ACSEQ7GE is greater than 0

ACSED02=3 if ACSEQ6GE=0 and ACSEQ7GE is different from 0 or ACSEQ6GE=0 and ACSEQ7GE=0

ACSED02=4 if ACSEQ6GE is different from 0 and ACSEQ07GE=0

ACSED02=6 if ACSEQ04 is between 1 and 4

Two cases were manually classified in the third category (reconstituted families comprising a spouse other than the biological father at the child's birth). They correspond to the following conditions:

ACSEQ04=3 and (ACSEQ20B or ACSEQ20C is less than the child's date of birth).

Code	Category	n weighted	%
1	Intact	1,730	78.0
2	Intact - CPU	61	2.8
3	Reconstituted – CPU mother	155	7.0
4	Reconstituted – CPU father only	85	3.8
6	Single-parent	185	8.4
	Total	2,217	100.0
	Unknown	6	

Note: CPU signifies children of a previous union. Code 5, initially attributed to households that included the CPUs of both spouses, was eliminated, and these households were included in the third category.

WORKFORCE ACTIVITY OF THE PARENTS – ALFFD01

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Number of parents who worked during the 12 months preceding the survey

Questions: CQCI, REL-Q1A and complementary derivative variables

Variables: ARE1Q3, ALFMD1B, ALFJD1B

Derivation: ALFFD01=1 if ALFMD1B=1 and ALFJD1B=1

ALFFD01=2 if (ALFMD1B=1 and ALFJD1B=0) or (ALFMD1B=0 and ALFJD1B=1)

ALFFD01=3 if ALFMD1B=0 and ALFJD1B=0

ALFFD01=4 if (ALFMD1B=1 and ARE1Q3 is missing) or (ALFJD1B=1 and ARE1Q3 is missing)

ALFFD01=5 if (ALFMD1B=0 and ARE1Q3 is missing) or (ALFJD1B=0 and ARE1Q3 is missing)

Code	Category	n weighted	%
1	Two-parent – 2 parents working	1,394	63.3
2	Two-parent – 1 parent working	525	23.8
3	Two-parent – no parent working	87	3.9
4	Single-parent – 1 parent working	62	2.8
5	Single-parent – no parent working	136	6.2
	Total	2,204	100.0
	Unknown	19	

**LANGUAGE(S) SPOKEN MOST OFTEN AT HOME BY THE PARENTS
– ASDFD6A**

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Language(s) spoken most often at home by the parents or the single parent

Questions: CQCI-Mother, SOC-Q6A; CQCI-Father, SOC-Q6A

Variables: ASDMQ6AA, ASDMQ6AB, ASDMQ6AC
ASDJQ6AA, ASDJQ6AB, ASDJQ6AC

Derivation: To calculate this variable, the following method of counting may be used:

First, set ASDFD6A=missing

If ASDMQ6AA=1 or ASDJQ6AA=1 then LANGUAGE=1

If ASDMQ6AB=2 or ASDJQ6AB=2 then LANGUAGE= LANGUAGE+20

If ASDMQ6AC=3 or ASDJQ6AC=3 then LANGUAGE= LANGUAGE+300

Thus

ASDFD6A=1 if LANGUAGE=20

ASDFD6A=2 if LANGUAGE=1

ASDFD6A=3 if LANGUAGE=300

ASDFD6A=4 if LANGUAGE=21

ASDFD6A=5 if LANGUAGE=301 or LANGUAGE=320 or LANGUAGE=321

Otherwise ASDFD6A=Unknown

Code	Category	n weighted	%
1	French only	1,669	75.2
2	English only	224	10.1
3	Neither French nor English	179	8.1
4	French and English only	76	3.4
5	French or English and other language(s)	71	3.2
	Total	2,219	100.0
	Unknown	4	

FAMILY FUNCTIONING – AFNFS01

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Scale from 0 to 36. A low score signifies a family that is functional.

Questions: CQCI-PMK, FNC-Q1 to FNC-Q1L

Variables: AFNFQ01 to AFNFQ01L

Derivation: If AFNFQ01A=1, 2, 3 or 4 then AFNFT01A=4 - AFNFQ01A;

If AFNFQ01B=1, 2, 3 or 4 then AFNFT01B=AFNFQ01B - 1;

If AFNFQ01C=1, 2, 3 or 4 then AFNFT01C=4 - AFNFQ01C;

If AFNFQ01D=1, 2, 3 or 4 then AFNFT01D=AFNFQ01D - 1;

If AFNFQ01E=1, 2, 3 or 4 then AFNFT01E=4 - AFNFQ01E;

If AFNFQ01F=1, 2, 3 or 4 then AFNFT01F=AFNFQ01F - 1

If AFNFQ01G=1, 2, 3 or 4 then AFNFT01G=4 - AFNFQ01G;

If AFNFQ01H=1, 2, 3 or 4 then AFNFT01H=AFNFQ01H - 1;

If AFNFQ01I=1, 2, 3 or 4 then AFNFT01I=4 - AFNFQ01I;

If AFNFQ01J=1, 2, 3 or 4 then AFNFT01J=AFNFQ01J - 1;

If AFNFQ01K=1, 2, 3 or 4 then AFNFT01K=4 - AFNFQ01K;

If AFNFQ01L=1, 2, 3 or 4 then AFNFT01L=AFNFQ01L - 1;

If the number of missing variables to AFNFT01A, AFNFT01B, AFNFT01C, AFNFT01D, AFNFT01E, AFNFT01F, AFNFT01G, AFNFT01H, AFNFT01I, AFNFT01J, AFNFT01K and AFNFT01L is less than or equal to 3 then:

$AFNFS01A = 12 * (\text{mean of } [AFNFT01A, AFNFT01B, AFNFT01C, AFNFT01D, AFNFT01E, AFNFT01F, AFNFT01G, AFNFT01H, AFNFT01I, AFNFT01J, AFNFT01K, AFNFT01L])$.

If not, AFNFS01A is undefined.

Scores vary from 0 to 36.

Note: The questions in Section FNC of the CQCI are formulated as positives or negatives, on an alternating basis. For the 6 scale items formulated in the negative, the following calculations were used "AFNFT01A=4 - AFNFQ01A." They provide a means to recode the responses in such a way that a high value corresponds to a higher degree of dysfunctional family. The minimum value of each of the 12 items in the scale was set at 0, and the maximum value was set at 3. The final calculation combines the 12 variables to create the index AFNFSOIA, which varies from 0 to 36.

**UNSAFE NEIGHBOURHOOD / PEOPLE DON'T HELP EACH OTHER
(according to the PMK) – ASFFS01A**

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Scale from 1 to 4

Questions: CQCI-PMK, SAF-Q5A, SAF-Q5B, SAF-Q6A to SAF-Q6E

Variables: ASFFQ05A, ASFFQ05B, ASFFQ06A to ASFFQ06E

Derivation: If the number of valid responses to ASFFQ05A, ASFFQ05B, ASFFQ06A, ASFFQ06B, ASFFQ06C, ASFFQ06D and ASFFQ06E is equal to or greater than 4 then:

ASFFS01A=mean of (ASFFQ05A, ASFFQ05B, ASFFQ06A, ASFFQ06B, ASFFQ06C, ASFFQ06D and ASFFQ06E).

If not, ASFFS01A is undefined.

Scores vary from 1 to 4.

SOCIAL PROBLEMS IN THE NEIGHBOURHOOD (according to the PMK) – ASFFS01B

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Scale from 1 to 3

Questions: CQCI-PMK, SAF-Q7A to SAF-Q7F

Variables: ASFFQ07A to ASFFQ07F

Derivation: If the number of valid responses to ASFFQ07A, ASFFQ07B, ASFFQ07C, ASFFQ07D, ASFFQ07E and ASFFQ07F is equal to or greater than 4 then:

ASFFS01B=mean of (ASFFQ07A, ASFFQ07B, ASFFQ07C, ASFFQ07D, ASFFQ07E and ASFFQ07F).

If not, ASFFS01B is undefined.

Scores vary from 1 to 3.

**LEVEL OF VERBALIZATION OF THE MOTHER DURING THE VISIT
(according to the interviewer) – AIFFS01A**

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Scores for this scale vary from 11 to 49.

Questions: OFL, Q1, Q2, Q4 to Q11

Variables: AIFFQ01, AIFFQ02, AIFFQ04 to AIFFQ11

Derivation: If the number of valid responses to AIFFQ01, AIFFQ02, AIFFQ04, AIFFQ05, AIFFQ06, AIFFQ07, AIFFQ08, AIFFQ09, AIFFQ10 and AIFFQ11 is equal to or greater than 7 then:

- the missing variables were replaced by the mean of the valid variables;
- $AIFFS01A = \text{sum of (AIFFQ01, AIFFQ02, AIFFQ04, AIFFQ05, AIFFQ06, AIFFQ07, AIFFQ08, AIFFQ09, AIFFQ10 and AIFFQ11)}$.

If not, AIFFS01A is undefined.

Scores vary from 11 to 49.

**LEVEL OF STIMULATION OF THE CHILD DURING THE VISIT
(according to the interviewer) – AIFFS01C**

Population: All children targeted by ÉLDEQ

Weights: APOIPCM, **APOIPCMM**

Description: Scores for this scale vary from 5 to 25.

Questions: OFL, Q26 to Q30

Variables: AIFFQ26 to AIFFQ30

Derivation: If the number of valid responses to AIFFQ26, AIFFQ27, AIFFQ28, AIFFQ29 and AIFFQ30 is equal to or greater than 3 then:

- the missing variables were replaced by the mean of the valid variables;
- $AIFFS01C = \text{sum of (AIFFQ26, AIFFQ27, AIFFQ28, AIFFQ29 and AIFFQ30)}$.

If not, AIFFS01C is undefined.

Scores vary from 5 to 25.

Annex – Part II

Table A.1

Low-Income Cut-Off (1992 Baseline) as Defined by Statistics Canada for the Reference Year 1997 by Size of Family Unit and Size of Area Inhabited

Size of Family Unit	Size of Area Inhabited				
	Urban areas				Rural areas
	500,000 inhabitants and over	100,000 to 499,999	30,000 to 99,999	Less than 30,000 inhabitants ¹	
1 person
2 persons	21,760	18,664	18,534	17,245	15,038
3 persons	27,063	23,213	23,050	21,448	18,703
4 persons	32,759	28,098	27,903	26,964	22,639
5 persons	36,618	31,409	31,191	29,023	25,307
6 persons	40,479	34,720	34,478	32,081	27,975
7 persons or more	44,339	38,032	37,766	35,140	30,643

1. Includes cities between 15,000 and 30,000 inhabitants and small urban areas (less than 15,000 inhabitants).

Source: Statistics Canada (1998).

Table A.2

Summary of Derivative Variables for ÉLDEQ Included in the General Release Data File (INDI101), 1998¹

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the target child			
Soriables sociodémographiques ARGED01 <i>Birth rank of the child</i>	<i>Master Birth Register - ISQ</i>	1 to 5+	For the 1998 collection, this variable was also collected using the medical records. A file comprising the data drawn from these records will be distributed in 2001.
AGTED01 <i>Gestational age</i>	<i>Master Birth Register - ISQ</i>	56 to 65 weeks	
APEED01 <i>Prematurity</i>	<i>Master Birth Register - ISQ</i>	1) Yes 2) No	Duration of pregnancy < 37 weeks. For the 1998 collection, this variable was also collected using the medical records. A file comprising the data drawn from these records will be distributed in 2001.
AMDED13 <i>Low birth weight (< 2,500 g)</i>	CQCI - Section MED amdeq13	1) Yes 2) No	For the 1998 collection, this variable was also collected using the medical records. A file comprising the data drawn from these records will be distributed in 2001.
AREED01 <i>Number of brothers/sisters</i>	CQCI – Section REL are2q4 to are2q12	0 to 4+	Includes siblings, biological or not, living in the same household (full or part time) as the child.
ASDED4AA <i>Ethnic origin: Canadian</i>	CQCI – Section SOC asdeq04a	0) No 1) Yes	
ASDED4AC <i>Ethnic origin: British</i>	CQCI – Section SOC asdeq04c,4e,4f	0) No 1) Yes	Includes persons of English, Scottish or Irish origin.

1. This table of the derivative variables was created to facilitate data analysis for those using the ÉLDEQ database (1998 collection, children 5 months old). The variables are regrouped and placed in the following order, those related to: the target child, the mother, the father/spouse living in the household, the household. The second column, "Source(s)," identifies the instruments and variables used to calculate the index. To see the specific questions used, please refer to Section 7 of this document.

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the target child			
ASDED4AD <i>Ethnic origin: other European origins</i>	CQCI - Section SOC asdeq04d,4g,4h,4i,4k,4l,4m,4s	0) No 1) Yes	Includes persons of Dutch, German, Italian, Jewish, Polish, Portugese, Ukrainian and Spanish origins.
ASDED4AE <i>Ethnic origin: Aboriginal</i>	CQCI – Section SOC asdeq04p	0) No 1) Yes	
ASDED4AF <i>Ethnic origin: African/Haitian</i>	CQCI – Section SOC asdeq04o, 4t	0) No 1) Yes	
ASDED4AG <i>Ethnic origin: other</i>	CQCI – Section SOC asdeq04j,4n,4q,4r,4u,4v,4w	0) No 1) Yes	Given their low representation, persons of Chinese or South-Asian, Métis, Inuit, Arabic-speaking of Maghreb and of Middle East, Spanish-speaking of the Americas and others were regrouped.
Temperament			
ATMES01 <i>Perception of child's difficult temperament by mother</i>	CQCI – Section TMP atmeq05,06,07,08,19,20,33		
ATMES03 <i>Perception of child's difficult temperament by bio. father/spouse living in the household</i>	SAQF aqjq02,03,04,05,07,08,12		The convention used is based on that in the CQCI (Section TMP) but the information is drawn from the SAQF.
Parenting practices			
APRES01 <i>Positive parenting practices (as reported by the PMK)¹</i>	CQCI – Section PAR apreq01,02,03,06,07a	Scale from 7 to 20	A high score indicates a high level of positive interactions.

1. No derivative variable was retained for hostile parenting practices (2 items only).

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the mother			
Sociodemographic variables AAGMD01 <i>Age group of the mother</i>	CQCI – Section DEM aage_1	1) Less than 20 years 2) 20-24 years 3) 25-29 years 4) 30-34 years 5) 35-39 years 6) 40 years and +	
AEDMD01 <i>Highest level of education attained by the mother</i>	CQCI – Section EDA aedmq01 to 04	1) No high school diploma 2) High school diploma 3) Some post-secondary study (not including university) 4) Vocational/Technical school diploma 5) College (Junior) diploma 6) Some university 7) University degree	This variable identifies the highest level of schooling attained. Persons who did not obtain a high school diploma but did complete post-secondary studies were classified according to the highest level of schooling attained.
AEDMD02 <i>Highest diploma/degree obtained by the mother</i>	CQCI – Section EDA aedmq01 to 04	1) No high school diploma 2) High school diploma 3) Post-secondary diploma (not including university) 4) University degree	
ALFMD1A <i>Paid work at the time of the survey</i>	CQCI - Section LFS alfmd01,08	0) No 1) Yes	Variable indicates if the person is working at the time of the study (n.b. does not include persons on parental leave, for example).

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the mother			
ALFMD1B <i>Paid work during preceding 12 months</i>	CQCI - Section LFS alfmd02, 08	0) No 1) Yes	Variable indicates if the person worked (part- or full-time) some time during the preceding 12 months.
ALFMD1C <i>Employment status of the principal employment</i>	CQCI – Section LFS alfmq04	-4) Not applicable (not working) 1) Part time (< 30 hours) 2) Full time	
ASDMD1A <i>Immigrant status</i>	CQCI - Section SOC asdmq01,2aa	1) Not an immigrant 2) European immigrant 3) Non-European immigrant	The first category refers to persons born in Canada, regardless of ethnic origin. The second category includes persons born in the United States, Australia, New Zealand or in Europe. The third category incorporates persons born in all other countries.
ASDMD3A <i>Number of years since first immigration</i>	CQCI - Section SOC asdmq03	-4) Not an immigrant 1) Less than 5 years 2) 5-9 years 3) 10 years and +	
ASDMD4AA <i>Ethnic origin: Canadian</i>	CQCI – Section SOC asdmq04a	0) No 1) Yes	
ASDMD4AB <i>Ethnic origin: French</i>	CQCI – Section SOC asdmq04b	0) No 1) Yes	
ASDMD4AC <i>Ethnic origin: British</i>	CQCI - Section SOC asdmq04c,4e,ef	0) No 1) Yes	Includes persons of English, Scottish or Irish origins.
ASDMD4AD <i>Ethnic origin: other European origins</i>	CQCI - Section SOC asdmq04d,4g,4h,4i,4k,4l,4m,4s	0) No 1) Yes	Includes persons of Dutch, German, Italian, Jewish, Polish, Portugese, Ukrainian and Spanish origins.

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the mother			
ASDMD4AE <i>Ethnic origin: Aboriginal</i>	CQCI – Section SOC asdmq04p	0) No 1) Yes	
ASDMD4AF <i>Ethnic origin: African/Haitian</i>	CQCI – Section SOC asdmq04o,4t	0) No 1) Yes	
ASDMD4AG <i>Ethnic origin: other</i>	CQCI – Section SOC asdmq04j,4n,4q,4r,4u,4v,4w	0) No 1) Yes	Given their low representation, persons of Chinese or South-Asian, Métis, Inuit, Arabic-speaking of Maghreb and of Middle East, Spanish-speaking of the Americas and other origins were regrouped.
ASDMD05 <i>Language(s) of conversation of mother</i>	CQCI – Section SOC asdmq05a to 05	1) French or English only 2) French and English only 3) French and English + other language(s) 4) French or English + other language(s)	
ASDMD06 <i>First language(s) learned</i>	CQCI – Section SOC asdmq06a to 06	1) French 2) English (not French) 3) Neither French nor English	
ASDMD6A <i>Language(s) spoken most often at home</i>	CQCI - Section SOC asdmq6aa,6ab,6ac	1) French only 2) English only 3) Neither French nor English 4) French and English only 5) French or English + other language(s)	

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the mother			
Conjugal support			
ASOMS01 <i>Conjugal support perceived by the mother</i>	SAQM aqmmq49 to q.53	Scale from 0 to 10	
ADPMS01 <i>Reported level of symptoms of depression</i>	CQCI - Section HLA ahlmq12a to q12m	Scale from 0 to 36	
Maternal perceptions and cognitions			
APAMS01 <i>Feeling of self-efficacy</i>	SAQM aqmmq23,25,27,29,32,47	Scale from 0 to 10	
APAMS02 <i>Perception of parental impact</i>	SAQM aqmmq22,31,37,42,45	Scale from 0 to 10	
APAMS03 <i>Coercion</i>	SAQM aqmmq26,28,30,33,36,40,43	Scale from 0 to 10	
APAMS04 <i>Parental affection/pleasure</i>	SAQM aqmmq22a,22b,46a,46b,46c	Scale from 0 to 10	
APAMS05 <i>Oversprotection</i>	SAQM aqmmq34,38,39,41,44	Scale from 0 to 10	
APAMS06 <i>Perception of child's qualities</i>	SAQM aqmmq21,24,35,46	Scale from 0 to 10	

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the father/spouse living in the household			
Sociodemographic variables AAGJD01 <i>Age group of biological father/spouse living in the household</i>	CQCI - Section DEM agge_3	1) Less than 25 years 2) 25-29 years 3) 30-34 years 4) 35-39 years 5) 40 years and +	The categories less than 20 years and 20-24 years were regrouped due to small numbers in the category less than 20 years.
AEDJD01 <i>Highest level of education attained by the father/spouse living in the household</i>	CQCI – Section EDA aedjq01 to 04	1) No high school diploma 2) High school diploma 3) Some post-secondary study (not including university) 4) Vocational/Technical school diploma 5) College (Junior) diploma 6) Some university 7) University degree	This variable identifies the highest level of schooling attained. Persons who did not obtain a high school diploma but did complete post-secondary studies were classified according to the highest level of schooling attained.
AEDJD02 <i>Highest diploma/degree attained by the father/spouse living in the household</i>	CQCI – Section EDA aedjq01 to 04	1) No high school diploma 2) High school diploma 3) Post-secondary diploma (not including university) 4) University degree	
ALFJD1A <i>Paid work at the time of the survey</i>	CQCI – Section LFS alfjd01,08	0) No 1) Yes	This variable indicates if the person is working at the time of the survey (n.b., excluding those on parental leave, for example).

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the father/spouse living in the household			
ALFJD1B <i>Paid work during preceding 12 months</i>	CQCI – Section LFS alfjd02, 08	0) No 1) Yes	Variable indicates if the person worked (part- or full-time) at some time during the preceding 12 months.
ALFJD1C <i>Employment status of the principal employment</i>	CQCI – Section LFS alfjq04	-4) Not applicable (not working) 1) Part time (< 30 hours) 2) Full time	This variable identifies the person's work status in the principal employment in the preceding 12 months.
ASDJD1A <i>Immigrant status</i>	CQCI –Section SOC asdj01, 2aa	1) Not an immigrant 2) European immigrant 3) Non-European immigrant	The first category refers to persons born in Canada, regardless of their ethnic origin. The second category includes persons born in the United States, Australia, New Zealand or in Europe. The third category incorporates persons born in all other countries. ¹
ASDJD3A <i>Number of years since first immigration</i>	CQCI – Section SOC asdj03	-4) Not an immigrant 1) Less than 5 years 2) 5-9 years 3) 10 years and +	
ASDJD4AA <i>Ethnic origin: Canadian</i>	CQCI – Section SOC asdj04a	0) No 1) Yes	
ASDJD4AB <i>Ethnic origin: French</i>	CQCI – Section SOC asdj04b	0) No 1) Yes	
ASDJD4AC <i>Ethnic origin: British</i>	CQCI - Section SOC asdj04c,4e,ef	0) No 1) Yes	
ASDJD4AD <i>Ethnic origin: other European origins</i>	CQCI - Section SOC asdj04d,4g,4h,4i,4k,4l,4m,4s	0) No 1) Yes	Includes persons of Dutch, German, Italian, Jewish, Polish, Portugese, Ukrainian and Spanish origins.

1. For more information on this topic, see Chen et al (1996)

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the father/spouse living in the household			
ASDJD4AE <i>Ethnic origin: Aboriginal</i>	CQCI – Section SOC asdj04p	0) No 1) Yes	
ASDJD4AF <i>Ethnic origin: African/Haitian</i>	CQCI – Section SOC asdj04o, 04t	0) No 1) Yes	
ASDJD4AG <i>Ethnic origin: other</i>	CQCI - Section SOC asdj04j,4n,4q,4r,4u,4v,4w	0) No 1) Yes	Given their low representation, persons of Chinese or South-Asian, Métis, Inuit, Arabic-speaking of Maghreb and of Middle East, Spanish-speaking of the Americas and other origins were regrouped.
ASDJD05 <i>Language(s) of conversation of the father/partner</i>	CQCI – Section SOC asdj05a to 05s	1) French or English only 2) French and English only 3) French and English + other language(s) 4) French or English + other language(s)	
ASDJD06 <i>First language(s) learned</i>	CQCI – Section SOC asdj06a to 06s	1) French 2) English (not French) 3) Neither French nor English	
ASDJD6A <i>Language(s) spoken most often at home</i>	CQCI – Section SOC asdj06aa,6ab,6ac	1) French only 2) English only 3) Neither French nor English 4) French and English only 5) French or English + other language(s)	
Depression			
ADPJS01 <i>Reported level of symptoms of depression</i>	SAQF aqjq40 to q.51a	Scale from 0 to 36	

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the father/spouse living in the household			
Parental perceptions and cognitions			
APAJS01 <i>Feeling of self-efficacy</i>	SAQF aqjq15,17,19,21,24, 39	Scale from 0 to 10	
APAJS02 <i>Perception of parental impact</i>	SAQF aqjq14,23,29,34,37	Scale from 0 to 10	
APAJS03 <i>Coercion</i>	SAQF aqjq18,20,22,25,28,32,35	Scale from 0 to 10	
APAJS04 <i>Parental affection/pleasure</i>	SAQF aqjq14a,14b,38a,38b,38c	Scale from 0 to 10	
APAJS05 <i>Overprotection</i>	SAQF aqjq26,30,31, 33,36	Scale from 0 to 10	
APAJS06 <i>Perception of child's qualities</i>	SAQF aqjq13,16,27, 36	Scale from 0 to 10	

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the household			
Sociodemographic variables AREFD01 <i>Household size</i>	CQCI – Section REL aage_1 to aage_12	2 to 7+	
AINFD3A <i>Income sufficient level</i>	CQCI – Section INC ainfq03, ainfd03 CQCI – Section REL Arefd01 (derivative variable size of household) Conversion files for postal codes Total population and percentage of the rural population	1) Yes 2) No	Variable based on Statistics Canada's low-income cut-off for the reference year 1997 (1998 collection) (1992 baseline). These cut-offs take into account the size of the household and of the area inhabited.
AINFD2A <i>Main source of household income</i>	CQCI – Section INC (subgroup of the variable ainfd02 based on ainfq01a to ainfq01n and ainfq02)	1) Salaries and wages 2) Income from self-employment 3) Social assistance 4) Employment insurance 5) Other	

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the household			
AINFD08 <i>Socioeconomic status</i>	CQCI – CAID A_PCM CQCI- Section INC ainfq03 and ainfd03 AFAFD02 (derivative variable <i>family type</i>) MOTHER CQCI - Section EDA aedmq01, aedmq04 CQCI - Section LFS alfmd1b, apimd01 FATHER/SPOUSE CQCI - Section EDA aedjq01, aedjq04 CQCI - Section LFS alfjd1b, apijd01	E1: Scores vary from -2,8 (lower SES) to 3.7 (higher SES)	Combination of measurements describing the occupational prestige score, education level, and economic status of the parents of the child. This measurement is calculated on the basis of five sources: the level of education of the PMK, the level of education of the spouse, the prestige of the PMK's occupation, the prestige of the spouse's occupation and the level of household income. ¹

1. For more information on the calculation and interpretation of this variable, see Statistics Canada and Human Resources Development (1995) and Wilms and Shields (1996).

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the household			
AFAFD01 <i>Family type at the time of the survey (6 categories)</i>	CQCI - Section REL are2q3, are1q3 to are1q12, are3q4 to are3q12 CQCI - Section CUS acseq06e, acseq06ge, acseq07e, acseq07ge SAQM aqmmq48	1) Two-parent intact 2) Reconstituted (mother) 3) Reconstituted (father) 4) Reconstituted (mother + father) 5) Reconstituted (new spouse of the parent biological) 6) Single-parent	The second category regroups families that include children of only the mother's previous union. The third, the children of only the father's previous union, while the fourth category includes children from previous unions of the mother <i>and</i> the father. The few cases of biological parent living with a spouse who is not the biological parent of the target child make up the fifth category. Foster families and other families in which neither of the biological parents of the target child is present are not included in this typology.
AFAFD02 <i>Family type at the time of the survey (3 categories)</i>	AFAFD01 (derivative variable <i>family type at time of the survey – 6 categories</i>)	1) Two-parent intact 2) Reconstituted 3) Single-parent	The second category includes families in which at least one of the children living the household is from a previous union of one or the other of the spouses. Foster families and other families in which neither of the biological parents of the target child is present are not included in this typology.
AREFD02 <i>Two biological parents living in the household (at the time of the survey)</i>	CQCI - Section REL are1q3, are2q3	1) Yes 2) No	
AREFD2A <i>Biological father living in the household</i>	CQCI – Section REL are2q3	1) Yes 2) No	

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the household			
AREFD03 <i>Biological father living in the household (if mother biological present)</i>	CQCI – Section REL are1q3, are2q3	1) Yes 2) No	This variable provides a means to identify from among the biological mothers who responded those who were not living with the biological father at the time of the survey. Excluded are families in which the biological mother is absent (e.g., single-parent families headed by the father and foster families in which neither the biological mother nor biological father lived in the household). This variable may thus be used to identify, among the mothers who responded, those who are eligible to answer the questions on the absent father biological.
ACSED01 <i>Conjugal situation of the parents at the birth of the child</i>	CQCI - Section CUS acseq03a, 03b, 05a, 05b	1) Married 2) Married after living common law 3) Common law 4) Separated 5) Never lived together	
ACSED02 <i>Family type at the birth of the child</i>	CQCI – Section CUS acseq04, 05b, 06e, 06ge, 07e, 07ge, 20b, 20c, 21b, 21c CQCI- Section DEM adned01 (date of birth of the child)	1) Two-parent intact without CPU* 2) Two-parent intact with CPU* not living in the household 3) Reconstituted (mother or m+f) 4) Reconstituted (father only) 7) Single-parent * CPU indicates children of a previous union	

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the household			
ALFFD01, BALFFD01 <i>Workforce activity of the parents (preceding 12 months)</i>	MOTHER CQCI – Section LFS aflmd1b FATHER/SPOUSE CQCI- Section LFS alfd1b CQCI - Section REL are1q3	1) Two-parent family, 2 parents working 2) Two-parent family, 1 parent working 3) Two-parent family, neither parent working 4) Single-parent family, parent working 5) Single-paernt family, parent not working	
ASDFD6A <i>Language(s) spoken most often at home – two- or single-parent household</i>	CQCI - Section SOC asdmd6a, asjd6a CQCI – Section REL are1q3	1) French only 2) English only 3) Neither French nor English 4) French and English only 5) French or English + other language(s)	
Family functioning AFNFS01 (as reported by the PMK)	CQCI – Section FNC afnfq01a to 01	Scale from 0 to 27	A low score indicates a functional family.
Neighbourhood ASFFS01A <i>Perception of unsafe neighbourhood/people don't help each other (according to the PMK)</i>	CQCI - Section SAF asffq05a,05b, 06a to 06e	Scale from 1 to 4	

Table A.2

Summary of Derivative Variables of ÉLDEQ Included in the General Release Data File (INDI101), 1998 (cont'd)

Name of the variable	Source(s)	Categories	Remarks
Characteristics related to the household			
ASFFS01B <i>Perception that the neighbourhood has few social problems (according to the PMK)</i>	CQCI – Section SAF asffq07a to asffq07f	Scale from 1 to 3	
Observations of family life			
AIFFS01A <i>Level of verbalization of mother during the visit (according to the interviewer)</i>	OFL Aiffq01, 02,04 to 11	Scale with scores varying from 11 to 49	
AIFFS01C <i>Level of stimulation of the child during the visit (according to the interviewer)</i>	OFL aiffq26 to 30	Scale with scores varying from 5 to 25	

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Glossary

<i>Formulaire Bulletin de naissance vivante</i>	Life Birth Registration form
<i>Centre d'étude du sommeil</i>	Centre for the Study of Sleep
<i>Centre de la petite enfance</i>	Child-care centre
<i>Direction de la santé publique de la Régie régionale de la santé et des services sociaux de Montréal-Centre</i>	Public Health Department, Montréal-Centre Region
<i>Direction de la santé publique de la Régie régionale de la santé et des services sociaux de Québec</i>	Regional Health Board Public Health Department, Québec Region Regional Health Board
<i>Commission d'accès à l'information du Québec – CAI</i>	Québec Access to Information Commission
<i>Conseil québécois de la recherche sociale (CQRS)</i>	Social Research Council of Québec
<i>Département des sciences des aliments et de nutrition, Université Laval</i>	Department of Food Sciences and Nutrition, Université Laval
<i>Département de médecine sociale et préventive, Université Laval</i>	Department of Social and Preventive Medicine Université Laval
<i>Direction de la méthodologie et des enquêtes spéciales, ISQ</i>	Methodology and Special Surveys Division, ISQ
<i>Direction de la technologie et des opérations statistiques, ISQ</i>	Technology and Statistical Operations Division, ISQ
<i>Direction des normes et de l'information, ISQ</i>	Standards and Information Division, ISQ
<i>Direction Santé Québec, ISQ</i>	Health Québec Division, ISQ
<i>Étude des jumeaux nouveaux-nés au Québec – ÉJNQ</i>	Québec Study of Newborn Twins
<i>Fichier maître des naissances</i>	Master Birth Register
<i>Fonds de la recherche en santé du Québec (FRSQ)</i>	Health Research Fund of Québec
<i>Fonds pour la formation de chercheurs et l'aide à la recherche (FCAR)</i>	Researcher Education and Research Assistance Fund
<i>Groupe de recherche en nutrition humaine</i>	Human Nutrition Research Group
<i>Groupe de recherche sur l'inadaptation psychosociale chez l'enfant – GRIP</i>	Research Unit on Children's Psychological Maladjustment
<i>Institut de la statistique du Québec</i>	Québec Institute of Statistics
<i>Laboratoire de recherche de l'École de psychologie de l'Université Laval</i>	Research Laboratory at the School of Psychology of Université Laval
<i>La Politique Familiale</i>	Policy on Families
<i>Le Rapport Bouchard (1991) « Un Québec fou de ses enfants »</i>	The Bouchard Report, 1991: A Québec In Love with its Children
<i>Les Priorités nationales de santé publique</i>	Priorities for Public Health
<i>ministère de l'éducation</i>	Ministry of Education
<i>ministère de la Famille et de l'Enfance</i>	Ministry of Family and Child Welfare
<i>ministère de la Justice</i>	Ministry of Justice
<i>ministère de la Recherche, Science et Technologie</i>	Ministry of Research, Science and Technology
<i>ministère de la Santé et des Services sociaux du Québec (MSSS)</i>	Ministry of Health and Social Services of Québec
<i>ministère de la Sécurité publique</i>	Ministry of Public Security
<i>ministère de la Solidarité sociale</i>	Ministry of Social Solidarity – formerly Income Security (Welfare)
<i>Politique de la santé et du bien-être</i>	Policy on Health and Well-Being
<i>Service la recherche</i>	Research services
<i>Service de support aux opérations de la Régie de l'assurance-maladie du Québec – RAMQ</i>	Operations Support Section of the Québec Health Insurance Board

"The mission of the Institut is to provide reliable and objective statistical information on the situation of Québec as regards all aspects of Québec society for which such information is pertinent. The Institut shall be the central authority for the production and dissemination of statistical information for the government departments and bodies, except information produced for administrative purposes. The Institut shall be responsible for the carrying out of statistical surveys of general interest."

Act respecting the Institut de la statistique du Québec (R.S.Q., c. I-13.011), passed by the National Assembly of Québec on 19 June 1998.

This volume, which complements Volume I, Number 1 of this collection, provides useful information on the conceptual, logistical and statistical aspects of ÉLDEQ 1998-2002. It is divided into two parts: The first provides an overview of the stages of the survey, its position with respect to other international longitudinal surveys as well as the conception and outcomes of the first data collection of ÉLDEQ. The sources and justifications of the survey questions are also presented. The second part, in the form of a guide to microdata, provides essential information for users of the data in the 1998 collection. Among topics examined are the validation of the data, the contents of the general release database and the creation of the derivative variables. Some methodological considerations for those involved in data analysis are also examined.



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Québec



ISBN : 2-551-19962-X

\$ 7,95
Website : www.stat.gouv.qc.ca
Printed in Québec, Canada