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1 Introduction

The National Longitudinal Survey of Children and Youth (NLSCY) is a long-term survey designed to measure child development and well-being. The first cycle of the survey, developed jointly by Human Resources Development Canada and Statistics Canada, was conducted in 1994-95. The second cycle of the survey was undertaken in 1996-97. This manual has been designed to facilitate the manipulation of the micro data files and to document data quality and other analytical issues regarding the NLSCY.

The overall release strategy for cycle 2 of the NLSCY took place in several steps. The first release of data occurred in March of 1999 and covered the majority of the content from the survey with exception of those variables released in the subsequent releases. Release 2 occurred in the summer of 1999 and covered the variables related to the Teacher's Questionnaire, the Principal's Questionnaire and the Child's Questionnaire completed by children ages 10 to 13. The variables related to activities, literacy and child care and custody were also released at this time. The 3rd release of the data, occurring in November 1999 covers the variables related to legal child custody and the data collected in the Yukon and the Northwest Territories. Appendix 1 contains the complete list of the parts to be found in each of the three releases.

Although the data was released in three phases, there is only one release of the public use micro data file occurring at the same time as release 3. This public use file relates to the cross sectional cycle 2 data only. Due to confidentiality concerns it does not permit longitudinal analysis. Users are referred to Chapter 13 on confidentiality to gain an understanding of the variables available in cycle 2 and the options for accessing data not available in the public use micro data file.

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2 Background

Before the NLSCY was undertaken there were few statistical studies describing a broad range of characteristics of children in Canada. Measures of health, well-being and life opportunities are needed, however, if governments and researchers hope to learn more about the ongoing life conditions of Canadian children and youth, and their developmental experiences. Longitudinal data are central to discovering developmental changes occurring in children over time, and studying the impacts of the social environment of the child and various family-related factors.

Data on the prevalence of, and interaction among, various characteristics and conditions will assist policy makers in understanding the processes that modify risk and protect and encourage the healthy development of children. Such information will enhance the capacity of the various partners in society to develop effective strategies, policies and programs to help children succeed in our changing society.

3 Objectives

The primary objective of the NLSCY is to develop a national database on the characteristics and life experiences of children and youth in Canada as they grow from infancy to adulthood. The more specific objectives of the NLSCY are:

- to determine the prevalence of various biological, social and economic characteristics and risk factors of children and youth in Canada;
- to monitor the impact of such risk factors, life events and protective factors on the development of these children; and
- to provide this information to policy and program officials for use in developing effective policies and strategies to help young people live healthy, active and rewarding lives.

Underlying these objectives is the need to:

- fill an existing information gap regarding the characteristics and experiences of children in Canada, particularly in their early years;
- focus on all aspects of the child in a holistic manner (i.e., the child, his/her family, school, and community);
- provide national, and as far as possible, provincial-level data; and
- explore subject areas that are amenable to policy intervention and which affect a significant segment of the population.

4 Survey Methodology

The design and sampling for the NLSCY were such that it was possible to produce both cross-sectional and longitudinal estimates.

4.1 Definition of the NLSCY Population

Two populations were targeted by the NLSCY. First, the longitudinal sample represents the population of children aged 0 to 11 living in a province[1] in 1994. The cross-sectional sample covers the population of children aged 0 to 13 living in a province in 1996. This basic distinction has a direct impact on the weighting strategy and on the conclusions drawn from the survey data.

Obviously, there is a considerable overlap of these two populations. Consequently, the longitudinal and cross-sectional samples also overlap considerably, and are perfectly integrated.

4.2 Sample Design

The sample for Cycle 2 of the NLSCY consisted initially of the responding children drawn from the Cycle 1 sample.[2] This group of respondents makes up the longitudinal sample. It should be noted that for financial reasons, we had to cut out a number of Cycle 1 responding children. In Cycle 1, there were 22,831 responding children in 13,439 households. In each of these households, a maximum of four children were surveyed. To reduce the size of the Cycle 2 sample, certain Cycle 1 responding households were removed from the Cycle 2 sample. Also, of the households retained, up to two longitudinal children were surveyed in Cycle 2. Following these cuts, 16,897 longitudinal children (11,190 households) from the original cohort were surveyed in Cycle 2.

To ensure cross-sectional representativeness, children aged 0 to 1 were added to the sample. These newborns were recruited in two ways. First, longitudinal sisters and brothers born between Cycle 1 and Cycle 2 were included. While they belong to a household containing a longitudinal child, these newborns are not in the longitudinal sample as they do not belong to the target population of the longitudinal sample. Since the number of children recruited by this method was insufficient to meet the survey objectives, newborns were also selected from the sample of the Labour Force Survey (LFS).

[1] As the NLSCY sample is drawn from the Labour Force Survey sample, the exclusions of this survey also apply to the survey of children. For further information, see Section 4.2.1.

[2] For more information about the selection of the Cycle 1 sample, consult the user's guide for the Cycle 1 micro data file.

Finally, as part of a special project, a sample of children between 2 and 5 years old residing in the province of New Brunswick was included. This sample had to be large enough to produce good quality estimates for this target population. The sample was also selected from the LFS.

4.2.3 Selection of New Households Added to Cycle 2

For Cycle 2 of the NLSCY the requirement was to select households with children, specifically children aged 0 to 1 across Canada and between 2 and 5 years old in New Brunswick. The problem is that the majority of households do not contain children. In cycle 1 it was established that the Labour Force Survey (LFS) of Statistics Canada readily identify households with children. This frame was selected in order to avoid spending precious dollars to screen households to identify those with children.

The Labour Force Survey[3] is conducted on a monthly basis and collects basic demographic information about all household members of a representative sample of Canadian households as well as labour market information about the adults living in these households. For the NLSCY, households that were currently or had recently been in the LFS sample were examined to determine which had children in the desired age groups. This served as the basis of the new households sample for Cycle 2 of the NLSCY. Approximately 4,000 households were selected by this method.

It should be mentioned that the LFS excludes certain populations since they are not part of the LFS sample frame, specifically individuals living in the Yukon and Northwest Territories, individuals living in institutions, and finally, individuals living on Indian Reserves. It should be noted that these exclusions also apply to the longitudinal sample, as the Cycle 1 sample was selected based on the LFS.

The undercoverage that resulted for the other exclusions (institutions and Indian Reserves) represent very few children aged 0 to 1 living in the ten provinces, or children between 2 and 5 years old in New Brunswick (less than 0.5%).

4.2.4 The Child Sample

After selecting a sample of households for the NLSCY, children from households were selected.

In each household selected, one child aged 0 to 1 who lived the majority of the time in that household was chosen at random. It should be pointed out that, in the case of twins, two children were selected. However, no more than 2 children were selected in cases where three or more siblings of the same age existed. This situation was quite rare. In New Brunswick, children between 2 and 5 years old were selected at random, up to a maximum of two per household.[4]

[3] For more information on the Labour Force Survey, please refer to Appendix 2 in the Cycle 1 users guide.
[4] For reasons of response burden, it was decided that a maximum of two children per Cycle 1 household would be followed longitudinally for Cycle 2.

4.3 Sample Size

This section provides some counts for the longitudinal and cross-sectional samples. As these two samples have different target populations, some children of the original cohort are not eligible for the cross-sectional sample, but remain in the longitudinal cohort. This affects few children. For example, a child currently residing in the Territories is not eligible cross-sectionally, as he/she is no longer part of the survey domain (children living in the provinces). However, he/she is still eligible longitudinally, as in Cycle 1 of the survey he/she was in the domain studied.

4.3.1 Cross-sectional Respondents

In total, 13,248 households answered the Cycle 2 questionnaire of the NLSCY. In these households, 20,025 children 0 to 13 years old were surveyed. The following tables shows the distribution of responding households and children by the sample to which they belong:

Sample	# responding households	# responding children
Households with at least one longitudinal child	10,216	16,875
Newborns selected from the LFS	2,636	2,670
New Brunswick supplement	396	480
Total	13,248	20,025

The following tables show the distribution of these children by province and by age.

PROVINCE	RESPONDING SAMPLE SIZE
Newfoundland	1,001
Prince Edward Island	545
Nova Scotia	1,293
New Brunswick	1,664
Québec	3,757
Ontario	5,195
Manitoba	1,484
Saskatchewan	1,589
Alberta	1,827
British Columbia	1,670
TOTAL[5]	20,025

[5] Excludes Yukon and Northwest Territories.

AGE	RESPONDING SAMPLE SIZE
0	1,962
1	2,192
2	1,898
3	1,968
4	1,532
5	1,396
6	1,308
7	1,110
8	1,143
9	1,018
10	1,186
11	1,054
12	1,195
13	1,063
TOTAL	20,025

4.3.2 The Longitudinal Sample

In all, 10,261 longitudinal households (of the original cohort) answered the questionnaire of Cycle 2 of the NLSCY. In these households, 15,468 children 2 to 13 years old were surveyed. The following tables show the distribution of these children by province and by age.

PROVINCE	RESPONDING SAMPLE SIZE
Newfoundland	892
Prince Edward Island	443
Nova Scotia	1,068
New Brunswick	958
Québec	2,944
Ontario	3,899
Manitoba	1,161
Saskatchewan	1,305
Alberta	1,465
British Columbia	1,333
TOTAL[6]	15,468

[6] Excludes Yukon and Northwest Territories.

AGE	RESPONDING SAMPLE SIZE
2	1,799
3	1,855
4	1,426
5	1,271
6	1,313
7	1,116
8	1,146
9	1,023
10	1,193
11	1,056
12	1,202
13	1,068
TOTAL	15,468

4.4 Following of Longitudinal Children

To maintain the representativeness of the longitudinal sample, it was essential to put in place procedures for maximizing the response rate. One component of these procedures was aimed at tracing or screening longitudinal children who have moved. In fact, the failure to follow children who had moved could introduce a bias in the sample, as it is conceivable that children who move may have different characteristics from those that do not.

Conceptually, all longitudinal children who had moved were to be interviewed in their new home. Nevertheless, owing to operational constraints, it was not always possible to interview these children. Consequently, rules were established for following the children who move.

In concrete terms, an attempt was made to interview children who move to the Yukon, the Northwest Territories or the continental United States. The same was true of children who move to an Indian Reserve, a military barracks or live in an institution. Children who left the North American continent were excluded from the sample.

5 Data Collection

Data collection for Cycle 2 of the NLSCY took place between the fall of 1996 and spring of 1997. There were two major forums under which data were collected, namely, the household collection and the school collection.

5.1 The Household Collection

For the household collection, data were collected from a variety of respondents using different data collection instruments. Below is a brief description of each type of questionnaire used.

The Household Roster

The household roster becomes more difficult when a longitudinal survey interviews more than one longitudinal respondent per household because eligibility rules need to be defined to know when to trace and when to interview. An added complexity was added by the fact that households of the Cycle 2 sample were divided into three groups: (a) longitudinal households, that is, those that had already participated in Cycle 1 of the survey; (b) new households with children aged 0 to 23 months; and (c) supplementary New Brunswick households, with children aged 2 to 5 years.

5.1.1Longitudinal Households

About 73% of the 15,202 households contacted had already participated in the first cycle of the survey. Of the selected children in these Cycle 1 households, a maximum of two were chosen for whom data was to be collected.

The first contact was established with these households using the address and telephone number provided during Cycle 1. Next, confirmation was obtained of the presence in the household of at least one person on the list of members provided in 1994-95. If none of the individuals on the list was in the household contacted, the file for the household was transferred to the trace folder and the interview with the household was ended. If one of the individuals on the list was a member of the household contacted, the interview continued with the presentation of the survey, the confirmation or updating of the contact information (mailing address and residence, telephone number), and the updating of the list of members to confirm whether or not they were members of the household.

During this final phase, if one of the children selected was no longer part of the household, information as to why (parents' separation, departure for a foster home, etc.), the date of the child's departure and the child's new address or other relevant information for tracing them was

obtained. Then, the new members of the household were added to the list. If at least one of the selected children was no longer a member of the household, a new household file was created and transferred to tracing. This file included all household members from the first cycle who were no longer part of the contacted household.

The interview with the contacted household was discontinued if all the selected children had left, but was continued if one of the selected children was still a member of the household. For households with eligible children, basic demographic information was then gathered (age, date of birth, sex, marital status) and relationships between the members of the household members were completed.

After this step, if a new child had been born into these households since the first cycle, he/she was also selected in the sample, as well as at maximum one other child (twin or triplet), in the case of multiple births. Some questions about dwelling conditions were asked and this questionnaire ended with a question designed to select from among those individuals aged 15 or older the Person Most Knowledgeable about the selected child(ren). This person became the primary respondent and was labelled as the PMK for this household. In most cases, the PMK was the mother of the child.

5.1.2New cross-sectional households

The second group of households included 3,526 new households with children aged 2 and under while the third group consisted of 535 households in New Brunswick with children between the ages of 2 and 5. For these households, the initial contact procedures were the same, except for the fact that no tracing was done for people who has moved. Household was updated and the interviewer gathered the demographic data and relationships. After this stage, if there were no eligible children in the household the interview ended; otherwise, it continued in the same way as for the households in the first group with questions asked about dwelling conditions and the selection of the PMK.

5.1.3Instruments completed by the PMK

After the contact and demographic data questionnaire, the PMK was asked to complete a series of questionnaires: the Parent Questionnaire for this person and their spouse, if applicable; a Child's Questionnaire for each child selected in the survey; and a computerized consent form about contacting the schools attended by the children.

The Parent Questionnaire

The first part of this questionnaire was completed by both the PMK and her spouse/partner and was designed to gather socio-economic and health data about these two individuals. Topic areas included education, labour force and income. The second part of the Parent Questionnaire was

completed by and for one of the parents only, usually the PMK. The purpose was to gather information about the child's family environment, notably the mental health of the PMK and family functioning.

The Child's Questionnaire

The Child's Questionnaire was completed for selected children in the household aged newborn to 13 years. Topic areas included health, birth information, temperament, behaviour, education, activities, literacy, social relationships, parenting, and legal custody of the children.

The Informed Consent Questionnaire

For each child who attended school in 1996-97, the PMK also answered a computerized questionnaire in which her consent was requested to: (a) contact the child's teacher and the school principal, and (b) administer a test of about 45 minutes measuring the child's mathematics computation and reading comprehension skills. In this questionnaire, school contact information was also gathered (principal's name, school address, telephone number).

5.1.4 Cognitive measure administered to the child

Math and Reading Skills Indicator

School children in grade 2 or higher were given a brief mathematics and vocabulary/reading test of about 12 questions. This placement test was designed to make it possible to determine the level of the math computation and reading comprehension tests that would subsequently be administered in the schools. For grade 2 children, the interviewer read the questions and recorded the answers on an answer sheet. For children in grade 3 or above, the child read the questions and gave the interviewer the answer. More detailed information about this test is provided in Section 9.9.

The PPVT-R

The Peabody Picture Vocabulary Test - Revised (PPVT-R) was administered by the interviewer to each selected child between 4 and 5 years old as well as to children aged 6 and older who were not yet in grade 2. The oral consent of the PMK was obtained before the test was administered The purpose of the test was to assess the child's level of receptive vocabulary.

After having completed the full NLSCY interview and leaving the household, the interviewer was to complete an administrative questionnaire describing the conditions in which the test was administered, in order to identify any factors that might have influenced the child's answers and overall reaction to the test.

5.1.5 Self completed questionnaire for children aged 10-13.

Starting at aged 10, when the PMK gave permission, the interviewer provided a questionnaire to the child and encouraged the child to complete it in a private setting. Upon completion, the questionnaire was sealed in an envelope to ensure confidentiality of the information provided by the child. The PMK was not permitted to see the child's completed questionnaire and was informed of this before giving permission for the child to complete the questionnaire. It was hoped that this procedure would increase the likelihood that the child would provide accurate and honest information.

The objective of this questionnaire was to collect information directly from the child on a variety of aspects of his/her life in order to supplement, and in subsequent analyses, compare with information obtained from the parent and teacher.

The 10-11 Questionnaire
Examples of topics areas covered in the 10/11 questionnaire included friends and family, school, feelings and behaviours, smoking and drinking and activities.

The 12-13 Questionnaire
In addition to the topic areas covered in the 10-11 questionnaire; additional questions were asked about delinquent behaviour, smoking, drinking, drug use, health (general, depression and puberty) and about work and sources of money.

All of the information for the household collection (except for the 10-11 Questionnaire and the 12-13 Questionnaire) was collected in a face-to-face or telephone interview using computer-assisted interviewing (CAI).

More information about the content of these various questionnaires included in this final release of NLSCY data can be found in Section 9 of this document.

5.2 The School Collection

The school collection was another very important element of the NLSCY. For all children in the Cycle 2 sample who were attending school, the PMK was asked to give written permission to allow for information to be collected from the child's teacher and principal. In cases where the child was in grade 2 or higher the PMK was asked to give permission to allow the teacher to administer a skills test in math computation and reading comprehension to the child. The school collection involved three questionnaires. These questionnaires were mailed out to teachers and principals, who were asked to complete the questionnaires and mail them back to Statistics Canada in the envelopes provided.

The Teacher's Questionnaire

The goal of the Teacher's Questionnaire was to collect information about the child's academic achievement and behaviour at school, as well as information on characteristics of the class and the teacher's instructional practices. There were three teacher questionnaires which were completed depending on the circumstances of the child: 1) a kindergarten questionnaire completed by teachers of kindergarten children; 2) a teacher questionnaire was completed for students who had one teacher for the basic academic subjects and 3) a different teacher questionnaire was completed for students who had different teachers for the basic academic subjects.

The Principal's Questionnaire

The goal of the Principal's Questionnaire was to gather information on the school environment in order to assess how this may impact child development. Consequently, the Principal's Questionnaire collected information on school policies, resources and educational climate, rather than data about a specific child.

The Math Computation and Reading Comprehension Test

The math portion of the skills test to be administered to the child was a shortened version of the Mathematics Computation Test of the standardized Canadian Achievement Tests, Second Edition (CAT/2). CAT/2 is a series of tests designed to measure achievement in basic academic skills. Some of the test's questions on reading comprehension are taken from the CAT/2 test, and some are new questions developed for the NLSCY.

5.3 Computer-Assisted Interviewing

Data collection for the household component of the NLSCY relied heavily on computer-assisted personal interviewing (CAPI) technology. The CAPI system has two main parts; Case Management and the survey specific part.

The Case Management system controls the case assignment and data transmission for the survey. For the NLSCY, a case refers to a household selected for the NLSCY sample. The Case Management system also automatically records management information for each contact (or attempted contact) with respondents, and provides reports for the management of the collection process.

The Case Management system routes the questionnaire applications and sample file from headquarters to the regional offices, and from the regional offices to the interviewer laptops. The returning data take the reverse route. All data is encrypted for transmission, and the data are unencrypted only once resident on a separate secure computer with no external access.

The survey-specific part of CAPI includes an introductory component with procedures for contact and selection of households. Once a contact has been made and household composition

has been established, the CAPI system generates applicable questionnaire components dependent on the household composition and the outcome of the selection procedures. Some of the specific components that were generated included a Parent and General Questionnaire for the PMK and spouse/partner and Child's Questionnaire for selected children in each household. These components are discussed in greater detail in Section 5.1.

The use of CAPI technology allows for high quality collection of complex population-specific content sections. For example, the system facilitates the collection of the relationships of all household members to each other (i.e., the relationship grid). This wealth of information will enable a detailed analysis of family structures, an important concept for analysis of the child information. This type of collection would be very difficult to implement in a paper and pencil environment.

5.4 Survey Timing

There were two collection periods for the household collection, one in November and December 1996, and a second in February and March 1997. The overall sample was split fairly evenly between the two collection periods. Each of the two collection periods lasted approximately six weeks.

In order to achieve the desired response rate of at least 90%, an effort was made to recontact non-responding households to the first collection in the second collection period . For example, if in the first collection period, a household could not be reached because no one was at home, then this case was sent out again with the February sample and further attempts were made at that time to contact the household.

The school collection took place from April to June 1997. Questionnaire packages were mailed to principals with instructions on how the various instruments should be completed. The principals were then to distribute the questionnaires and tests to the teachers. Approximately one week after the initial mailing a postcard was sent out to thank all respondents and to remind those who had not yet responded to do so. Roughly two weeks later, a second questionnaire package was sent out to teachers and principals who still had not responded. Finally three weeks later non-responding teachers and principals were contacted by telephone and encouraged to participate.

5.5 Interview Length

For the household collection, the interview length for responding NLSCY households was approximately two hours.

The total amount of time that it took to complete the major questionnaires that were part of the NLSCY household collection are presented in the table below. The table gives median interview times (i.e., the time at which 50% of the cases took more time and 50% took less). It should be noted that all extreme times (high and low) were removed before these times were derived, since they often represent a problem with the time clock/procedure rather than a real interview time.

TOTAL INTERVIEW TIMES IN MINUTES

QUESTIONNAIRE	INTERVIEW TIME FOR RESPONDING HOUSEHOLDS
All questionnaires in the household interview	98
All Child Questionnaires for the household	38
All Parent Questionnaires for the household (for the PMK and spouse/partner)	17
Total for major components (Child, Parent, General & PPVT & Informed Consent)	70
Remaining Components[17]	34

The following table gives the median interview times for various family types. The number of selected children (0 to 13) in the household was the factor that had the strongest impact on interview length. For households for which the PMK had a spouse/partner and more than two selected children, the interview length was over two hours.

[7]*This is the difference between the total time and the time required for the major components. This would include time for the interviewer to introduce the survey, complete the household roster, the relationships, set-up time for the 10 to 11 Questionnaire, the 12-13 Questionnaire and the math and reading skills test, time for the computer to generate the various questionnaires, etc.*

TOTAL INTERVIEW TIMES BY FAMILY TYPE

FAMILY TYPE	TIME IN MINUTES
PMK, spouse and 1 child	71
PMK, spouse and 2 children	127
PMK, spouse, and 3 children	148
PMK, spouse, and 4 children	154
PMK, no spouse, and 1 child	76
PMK, no spouse, and 2 children	131
PMK, no spouse, and 3 children	141

5.6 Interview Training, Supervision and Control

The NLSCY was conducted by Labour Force Survey interviewers. All LFS interviewers are under the supervision of a staff of senior interviewers who are responsible for ensuring that interviewers are familiar with the concepts and procedures involved in the survey, and also for periodically monitoring their interviewers and reviewing their completed documents. Senior interviewers ensure that prompt follow-up action is taken for refusal and other non-response cases. If necessary, non-response cases are transferred to the senior and reassigned. The senior interviewers are, in turn, under the supervision of the LFS program managers, located in Statistics Canada regional offices.

For the NLSCY a combination of classroom training and self-study materials were prepared to ensure that interviewers had a proper understanding of survey concepts. The self-study involved the interviewers reading the Interviewer's Manual prepared for the survey and completing home study exercises. During the classroom portion of the training, a program manager or a senior interviewer presented an overview of the survey, went through a mock interview with the participants, gave more specific training on administering the PPVT-R and presented exercises to help interviewers minimize non-response. In total, 14 hours were devoted to these training activities for each interviewer.

8

6 Data Processing

The main output of the NLSCY is a "clean" master data file. This section presents a brief summary of some of the processing steps involved in producing this file.

6.1 CAI Editing

As discussed in Section 5.1, all of the information for the household collection (except for the 10-11 and 12-13 self-completed questionnaires) was collected in a face-to-face or telephone interview using computer-assisted interviewing (CAI). As such, it was possible to build various edits and checks into the questionnaire for the various household CAI components, in order to ensure high quality of the collected information.

Review screens were created for important and complex information. For example, the selection procedures for the PMK, a critical aspect of the survey, were based on the household roster, composed of a demographic record for each household member, and the relationships of each household member to each other household member. As these are critical items for the NLSCY, the collected information was displayed for confirmation with the respondent before continuing the interview.

Range checks were used for continuous variables, to confirm or correct unusual answers during collection. For example, a question was asked about the weight of the child at birth. If the respondent gave a weight that was either significantly high or low, the interviewer was given an instruction to confirm the answer with the respondent.

All flow patterns were automatically built into the CAI system. For example, in the Child Care Section, an opening question was asked if the PMK used daycare or babysitting for the child to allow the PMK (and spouse/partner) to work or study. If Child Care was used, the CAI system continued with a series of questions about the specific care method(s) used for the child. If not, the CAI system automatically skipped this series of questions.

Some consistency edits were included as part of the CAI system, and interviewers were able to "slide back" to previous questions to correct for inconsistencies. Instructions were displayed to interviewers for handling or correcting problems such as incomplete or incorrect data. For example, in the collection of the Labour Force Section, the number of weeks working, not working, and looking for work should not total more than 52 weeks. If this was the case, the system informed the interviewer of the error and instructed the interviewer to slide back to the appropriate fields to confirm the data and make corrections as required.

For this second cycle of the NLSCY edits were also performed to ensure consistency between cycles for data that was not expected to change. Data from the previous cycle (feedback variables) were included in the CAI system for the current cycle. When inconsistencies were identified, the interviewer was asked by the system to confirm the Cycle 2 data with the

respondent through a series of questions. For example, for the Chronic Conditions questions, if a chronic condition such as asthma was reported in the previous cycle but not indicated as being present in the current cycle, the system prompted the interviewer to ask questions to determine if the current data was in fact correct, or if the condition had changed since the previous cycle.

6.2 Data Capture

There were some questionnaires for the NLSCY that did not make use of computer-assisted interviewing; namely the 10-11 and 12-13 Self-Completed Questionnaires, the Teachers' Questionnaires and the Principals' Questionnaire. All of these questionnaires were completed directly by a survey respondent. A brief description of these questionnaires was given in sections 5.1 and 5.2.

Capture of data for these questionnaires was accomplished through scanning at a centralized area at Statistics Canada's Head Office. Prior to scanning, the documents were groomed and verified for completeness. During this process, any document containing at least one respondent-completed item was scanned and a file containing each record was provided to Head Office processing staff for further processing. As part of the scanning system, some quality checks were built in to flag unusual entries to warn the operators of potentially incorrect entries. The operator visually reviewed the questionnaire responses and manually entered the correct values. In cases where more than one response was checked off by the respondent, the operators were instructed to accept the first response. Errors remaining within the questionnaires were then edited at a later stage.

6.3 Minimum Completion Requirements

One of the first steps in the NLSCY processing was to define the requirements for a responding household.

In some cases there was no NLSCY information collected for a sampled household. This happened, for example, when an interviewer was unable to make contact with a selected household for the entire collection period, in other cases the household refused to participate in the survey, special circumstances such as an illness or death in a family or extreme weather conditions sometimes prevented an interview from taking place. For these cases where no information was collected for a household, the household was dropped from the NLSCY file and the sampling weights for responding households were inflated to account for these "dropped" households. This procedure is discussed in detail in Section 7.

In other cases it was possible to carry out some of the interview, but a complete interview was not obtained for a variety of reasons. Some respondents were willing to give only a certain amount of time to the completion of the survey. In some cases an interviewer completed a portion of the survey with the respondent and made an appointment to continue at another time but was unable to recontact the respondent.

It was necessary to come up with a criteria for deciding what to do with these "partial" interviews. If the majority of the survey had been completed, obviously the preference was to keep this case and label it as a responding household. However if only very minimal information was collected the decision was made to drop the household and treat it as a non-responding household. In order to make this assessment the data collected for each selected child in the household were examined. This was done by looking at certain key questions across the Child Questionnaire. An assessment was made as to whether or not there was an adequate amount of information collected for at least one child in each household. If there was, this household was maintained in the responding sample. All missing variables for this household were set to not-stated or imputed. If there was not adequate information for at least one child then the household was dropped from the responding sample and treated as a non-response.

A child response code was formed for each child record on the NLSCY file by looking at key questions across the Child's Questionnaire. The questions that were considered were dependent on age since content varied considerably by age. There were 7 to 8 "key" questions chosen for each age group.

The child response code can be used as a measurement of data quality and was used to determine which child records were complete enough to be kept.

The child response code should be interpreted in the following way:

CHILD RESPONSE CODES

RESPONSE CODE	DESCRIPTION
000	the record has a valid value for all key fields
001	the record has an invalid code (refusal, don't know or not answered) to at least one key field but there is enough information on the record to consider it to be "acceptable"
002	the record has at least one valid value for the key fields but there is **not** enough information to consider the record as "acceptable"
003	the record does not have a valid value on any key fields but the child record was started
004	the record was not started

"Acceptable" and "non-acceptable" were defined as follows.

Calculate:

$$R = \frac{(\text{\# of valid responses to key questions}) + (\text{\# of don't know's to key questions})}{\text{number of key questions}}$$

D = # of don't knows to key questions
number of key questions

If R>50% and D<30% the record was deemed to be acceptable. For a household to be considered a responding NLSCY household there had to be at least one acceptable child record.

The following are the number of child records by response code:

LONGITUDINAL CHILDREN RESPONSE CODES		**CROSS-SECTIONAL CHILDREN RESPONSE CODES**	
RESPONSE CODE	# CHILD RECORDS	RESPONSE CODE	#CHILD RECORDS
000	15,252	000	19,751
001	99	001	195
002	6	002	7
003	6	003	11
004	42	004	61

In total 15,351 longitudinal child records and 19,946 cross-sectional child records were determined to be complete enough to be kept (codes 000 and 001). These children came from 13,257 cross-sectional and 10,217 longitudinal households, which is the number of households maintained on the Cycle 2 NLSCY files. All of the appropriate questionnaires were maintained for these responding households. Variables on missing components for the household were imputed or set to not-stated. There were 20,039 child records for the responding cross-sectional households and 15,405 child records for the responding longitudinal households. Out of these, there were 93 cross-sectional child records and 54 longitudinal child records that were "not acceptable" but were kept because there was at least one "acceptable" child record for the household.

The longitudinal file also contains 61 records that were created for some longitudinal children for whom no data was collected in this cycle. These are children who are now deceased or who have moved out of the country, but who will be kept on the longitudinal file for weighting purposes. For these records, all variables except for the longitudinal weight (BWTCW01L) have been set to ‘not stated’.

6.4 Head Office Editing

For the CAI questionnaires for the NLSCY two stages of editing were conducted.

6.4.1 Pre-edit

The purpose of the Pre-edit was to carry out some basic formatting and preliminary editing. The following are some of the procedures that were carried out:

Step 1 (These steps were done on the complete Adult and Child files):

• Non-response values from the CAI system were recoded to standard non-response codes for refusals,
don't know and not-stated. These codes are discussed in detail in Section 6.5.4.
• 'Mark All That Apply' questions were destrung and values converted to Yes (1) or No (2) responses.
• Databases files were created for each section of the Adult and Child questionnaires.

Step 2 (These steps were done on the separate DBF files from Step 1)

•Small data base files were created for each section of each questionnaire. A record was kept for the section only if the section was applicable. For example, the section on temperament was only applicable for children 3 months to 3 years old. Therefore a temperament record was only created for children in this age group.

•Within several sections, different wording was used for different age groups. For example, in the Activities section, Question 3 asks "In the past 12 months, outside of school hours, how often has (the child) taken part in any clubs, groups or community programs with leadership....". The wording for 4 to 5 year-olds (BAACQ3D1) was "such as Beavers, Sparks or church groups?". The wording for 6 to 9 year olds (BAACQ3D2) was "such as Brownies, Clubs or church groups?" Initially these questions were stored as separate variables. As part of the pre-edit the two variables were collapsed into one output variable BAACQ3D.The various wordings are given for these types of questions in the data dictionary in Appendix 4.

•The flow patterns for each section were processed and valid skips were assigned 'not applicable' codes (6, 96, 996..).

6.4.2 Consistency Editing

After the pre-edit, consistency editing was carried out. The goal of consistency editing is to verify the relationship between two or more variables. For example, in the Socio-Demographic Section, for children who were not born in Canada, there was a question on what year they first immigrated to Canada (BSDCQ2B). There was a consistency edit which compared this question to the year of birth of the child. If the year of immigration was before year of birth then year of immigration was set to not-stated in the edit. Some of the other consistency editing that was done for the various sections of the questionnaire and any data quality concerns that were noted as a result of this editing are discussed in detail in Section 9 of this document.

Editing was also performed to ensure consistency between cycles. For example, the child's height in Cycle 2 should not be less than the height reported in Cycle 1. For inconsistencies, a flag was set and these variables appear on the Secondary data file (Appendix 5) and contain 'Z' in the variable name. For PMK and Spouse variables, the data was linked using a unique person identifier, allowing the comparison to be made if the PMK was the same in both cycles or if the PMK was the spouse in the previous cycle and vice versa.

For the questionnaires that were collected using a paper version, essentially the same steps of editing were carried out. In the pre-edit, however there was an additional requirement. In some cases a value was captured that was not allowable for a particular item. This was possible due to the fact the scanning operator was given the ability to overwrite the edits. These invalid entries were set to a "not stated" values in the pre-edit. As well, editing for flow patterns was carried out at the consistency editing stage for the paper questionnaires.

One data file was produced for the 10-11 and 12-13 questionnaires. For questions that did not apply to an age group, the variables were set to 'not applicable' codes (6,96,996..).

In this cycle there were 3 Teachers' questionnaires with many of the same questions on each; these variables were combined to produce one Teachers' file. Questions that were not asked from a teacher were set to 'not applicable' codes (6,96,996..).

6.5 Naming Convention and Coding Structure for NLSCY Variables

The NLSCY microdata file documentation system has employed certain standards to label variable names and values. The intent is to make interpretation of the data more straight-forward for the user.

6.5.1 Naming Convention for Variables

A naming convention has been used for each variable on the NLSCY data file in order to give users specific information about the variable. All variable names are at most eight characters long so that these names can easily be used with analytical software packages such as SAS or SPSS.

The variable names are of the following format:

B SE C Q nnx or **B SE C b Q nnx**

where:

B:refers to the NLSCY cycle. "A" indicates the first cycle, "B" the second, "C" the third etc. Obviously for this second cycle all variable names start with a "B".

SE:refers to the section of the questionnaire where the question was asked or the section from which the variable was derived. The table in Section 6.5.2 gives the acronyms which are used for Cycle 2 data. More information about the content for each of these sections can be found in Section 9.

C:refers to the collection unit or the unit to which the variable refers. There are four possibilities:[9]

C means the variable refers to the child
P means the variable refers to the PMK
S means the variable refers to the spouse/partner
H means the variable refers to the household

b: the lower case letter refers to the NLSCY cycle in which the variable first appeared on the file. "b" indicates the variable was new in cycle 2. In subsequent cycles, new variables will also be identified using the lowercase letter representing the cycle. For example, new variables in cycle 3 will contain a "c", in cycle 4 a "d" , etc . Some revisions were made to the content of the questionnaire between cycles. If the revision resulted in a change to the meaning or the values of a question, the variable was treated as new and contains a "b".

Q: refers to the variable type. There are six possibilities:

Q means the variable refers to a question that was asked directly on one of the NLSCY questionnaires
S means that the variable refers to a score calculated for one of the scales used on the questionnaire (See Section 9.1)
D means the variable was derived from other questions that were asked on the questionnaire (See Section 6.8)
I means the variable is a flag created to indicate that an item has been imputed

[9] *It should be noted that while variables do exist for various units of analyses (i.e., the PMK, the spouse/partner and the household), it will only be possible to produce "child estimates" from the NLSCY file. The characteristics of the PMK, spouse/partner and household can be used to describe attributes of the child. For example it will be possible to estimate the number of children living in a household with low income, or the number of children for whom the PMK has scored high on the depression scale etc. However it will* ***not*** *be possible to produce estimates of the number of low income households or depressed PMKs. This issue is discussed further in Section 8.2.*

(See Section 6.7)

X means the variable is a flag created to indicate an inconsistency in reported data between the current and previous cycles

nnx: refers to the question or variable identification. Generally nn is a sequential number assigned to the variable; and x is a sequential alphabetic indicator for a series of variables of a similar type

6.5.2 Naming Acronym Names for Questionnaire Sections

The following table gives the acronym names that were used for each section of the various NLSCY questionnaires. This acronym is embedded in the variable name for all variables on the NLSCY data file. The acronym is the second and third characters of the variable name.

ACRONYM	SECTION
GE	Geographic Variables: - derived from sample information.
HH	Household variables: -These questions relate to the dwelling characteristics
MM	Variables collected as part of the household roster. Basic demographic variables were collected for each household member. These variables are included on the NLSCY data file for the child, the PMK and the spouse/partner.
DM	Demographic variables derived to explain the living arrangements of the child: - derived from information of the household roster and relationship grid.
SD	Socio-demographic variables: - collected for the child on the Child's Questionnaire and for the PMK and spouse/partner on the Adult Questionnaire.
HL	Health variables: - collected for the PMK and Spouse on the Adult questionnaire, and for the Child on the Child questionnaire
CH	Adult Chronic Conditions variables: -asked of the PMK and Spouse in the Health section of the Adult questionnaire
RS	Restriction of Activities variables: -asked of the PMK and Spouse in the Health section of the Adult questionnaire
DP	Depression scale variables: - this scale was administered to the PMK, on the Parent Questionnaire.
ED	Education variables. - asked for children 4 to 13 years old on the Child's Questionnaire and about the PMK and spouse/partner on the Adult Questionnaire.
LF	Labour force variables: - collected for both the PMK and spouse/partner on the Adult Questionnaire.
IN	Income variables: - household income and personal income of the PMK, collected on the Adult Questionnaire.
FN	Family functioning scale variables: - this scale was administered to the PMK or spouse/partner on the Adult Questionnaire, to measure how family members relate to each other.
MD	Medical/biological variables: - asked for children 0 to 3 years of age on the Child's Questionnaire.

TM	Temperament variables. - asked for children aged 3 months to 3 years old, on the Child's Questionnaire.
LT	Literacy variables: - asked for children 0 to 6, on the Child's Questionnaire
AA	Activities variables: - asked for children 0 to 13, on the Child's Questionnaire.
BE	Behaviour variables: - asked for children 0 to 13 years, on the Child's Questionnaire.
MS	Motor and social development variables: - asked for children 0 to 3 years old, on the Child's Questionnaire.
RL	Social relationship variables: - asked for children 4 to 9 years old, on the Child's Questionnaire.
PR	Parenting style variables: - asked for children 0 to 13 years old on the Child's Questionnaire.
CR	Child care variables: - collected for children 0 to 13 years old on the Child's Questionnaire.
PP	Variables from the PPVT test: - administered to children 4 to 6 years old or older than 6 if in grade 1 or less.
PA	Variables from the PPVT assessment: - answered by the interviewer to describe the conditions under which the PPVT was administered to the child.
FF	Friends and Family variables from the 10 to 13 Self-complete Questionnaires: - Section A on the 10-11 and 12-13 questionnaires
SC	School variables from the 10 to 13 Self-complete Questionnaires: -Section B on the 10- 11 and 12-13 questionnaires
AM	About Me variables from the 10 to 13 Self-complete Questionnaires: -Section C on the 10-11 and 12-13 questionnaires
FB	Feelings and Behaviour variables from the 10 to 13 Self-complete Questionnaires: -Section D on the 10- 11 and 12-13 questionnaires
PM	My Parents and Me variables from the 10 to 13 Self-complete Questionnaires: -Section E on the 10-11 questionnaire, Section G on the 12-13 questionnaire.
PU	Puberty variables from the 10 to 13 Self-complete Questionnaires: Section F on the 10-11 questionnaire; for 12-13 year olds these questions are included with the Health questions in Section H of the questionnnaire
DR	Smoking, drinking and drugs variables from the 10 to 13 Self-complete Questionnaires: Section G on the 10-11 questionnaire, Section F on the 12-13 questionnaire
AT	Activities variables from the 10 to 13 Self-complete Questionnaires: -Section H on the 10-11 questionnaire, Section E on the 12-13 questionnaire
HT	Health variables from the 12-13 Self-complete Questionnaire: -Section H 12-13 questionnaire
WK	Work and Sources of Money variables from the 12-13 Self-complete Questionnaire: -Section I on the 12-13 questionnaire

DA	Dating variables from the 12-13 Self-complete Questionnaire: -Taken from questions in the Family and Friends and the Health Sections on the 12-13 questionnaire
EP	Principal's Education variables: -Asked of the Child's Principal about the school and the resources available to the staff
ET	Teacher's Education variables: -Asked of the Child's Teacher about the child and the classroom environment
RE	Reading test variables: - administered to children in grade 2 and over.
MA	Math computation test variables: - administered to children in grade 2 and over.
CN	Census variables: Based on a link to the Census, these variables describe the neighbourhood (based on the Enumeration Area) composition

6.5.3 Examples of Variable Names

In order to illustrate the naming convention used for variables included on the NLSCY data file the following examples are given.

BLFSQ2 This refers to Q2 in the Labour Force Section for the spouse/partner.
The "B" indicates it is a Cycle 2 variable.
The "LF" indicates the Labour Force Section.
The "S" indicates it refers to the spouse/partner.
The "Q" indicates it was an item asked directly on the questionnaire.
The "2" is the ID of the item.

BPRCS03 This is a positive interaction score on the parenting scale for a 2 to 13 year-old child.
The "B" indicates it is a Cycle 2 variable.
The "PR" indicates the Parenting Section.
The "C" indicates it refers to the child.
The "S" indicates the variable refers to a score.
The "03" is the ID of the variable.

BDRCbQ9A This is a new question from the 10-13 self completed questionnaire.
The "B" indicates it is a Cycle 2 variable.
The "DR" indicates the Smoking, Drinking and Drugs Section from the 10-13 questionnaire.
The "C" indicates it refers to the child.
The "b" indicates it is a new variable in Cycle 2.
The "Q" indicates the variable refers to a question.

The "9A" is the ID of the variable
BHLCbZ3 This is a flag that indicates an inconsistency in the child's height between the current and previous cycles.
The "B" indicates it is a Cycle 2 variable.
The "HL" indicates the Health Section.
The "C" indicates it refers to the child.
The "b" indicates it is a new variable in Cycle 2.
The "Z" indicates the variable is a longitudinal flag.
The "3" is the ID of the variable

6.5.4 Coding Structure for NLSCY Variables

Some standards have been developed for the coding structure of NLSCY variables in order to explain certain situations in a consistent fashion across all variables. The following describes these various situations and the code used to describe the situation.

Refusal: During a CAI interview, the respondent may choose to refuse to provide an answer for a particular item. The CAI system has a specific function key that the interviewer presses to indicate a refusal. This information is recorded for the specific item refused and transmitted back to Head Office.

On the NLSCY data file an item which was refused is indicated by a code "8".
For a variable that is one digit long the code will be "8", for a 2 digit variable "98" for a three digit variable "998" etc.

Don't Know: The respondent may not know the answer to a particular item. Again the CAI system has a specific function key to describe this situation.

On the NLSCY data file, the code used to indicate that the respondent did not know the answer to an item is "7". For a variable that is one digit long the code will be "7", for a two-digit variable "97" for a three-digit variable "997" etc.

Not Applicable: In some cases a question was not applicable to the survey respondent. A code "6", "96" "996" ... has been used on the data file to indicate that a question or derived variable is not applicable.

1) In some cases a single question or series of questions was not applicable. For example, the question on number of hours per week the child is cared for in a daycare centre (BCRCQ1G1) is only applicable for children for whom this type of care is used (BCRCQ1G=1). Otherwise there will be a code 996 for this question.

2) In other cases an entire section of the questionnaire was not applicable or even an entire questionnaire. For example, the Motor and Social Development

Section was applicable only to children 0 to 3 years old. For all children outside of this age group (i.e., 4 years and older) the motor and social development variables have been set to not-applicable ("6", "96", "996" etc.).

For cases where the PMK did not have a spouse or common-law partner residing in the household, all "spouse" variables (e.g., the Labour Force Section and the Education Section for the spouse) have been set to not applicable.

Not-Stated: In some cases, as part of Head Office processing the answer to an item has been set to not-stated. The not-stated code indicates that the answer to the question is unknown. Not-stated codes were assigned for three main reasons.

1) As part of the CAI interview, the interviewer was permitted to enter a refusal or don't know code, as described above. When this happened the CAI system was often programmed to skip out of this particular section of the questionnaire. In the case of refusal, it was assumed that the line of questioning was sensitive and it was likely that the respondent would not answer any more questions on this particular topic area. In the case of a don't know it was assumed that the respondent was not well enough informed to answer further questions. As part of the NLSCY processing system, it was decided that all of these subsequent questions should be assigned a not-stated code. A not-stated code means that the question was not asked to the respondent. In some cases it is not even known if the question was applicable to the respondent.

2) In some cases a specific questionnaire was not started or it was started but ended prematurely. For example, there may have been some kind of an interruption, or the respondent decided that she/he wished to terminate the interview. If there was enough information collected to establish this household as a responding household, then all remaining items on the questionnaire (and on questionnaires that had not yet been started) were set to not-stated. The one exception was that if it was known that a certain section or a certain questionnaire was not applicable, then these questions were set to not applicable.

3) The third situation in which not-stated codes were used was as a result of consistency edits. When the relationship between groups of variables was checked for consistency, if there was an error, often one or more of the variables was set to not-stated.

For derived variables if one or more of the input variables to the derived variable had a refusal, don't know or not-stated code, then the derived variable was set to not-stated.

6.6 Coding of Open-ended Questions

A few data items on the NLSCY questionnaire were recorded by interviewers in an open-ended format. For example, in the Labour Force Section, a PMK who had worked in the previous 12 months was asked a series of open-ended questions about the current or most recent job:

What kind of business, service or industry is/was this?

What kind of work are/were you doing?

At this work, what are/were your most important duties or activities?

The interviewer recorded in words the answer provided by the PMK. At Head Office, these written descriptions were coded into industry and occupation codes to describe the nature of the work of the PMK. Similar information was collected for the spouse/partner and codes assigned to describe the nature of the work.

The coding systems used were the 1980 Standard Occupational Classification codes (SOC) and the 1980 Standard Industrial Classification codes (SIC). Grouped versions of these codes are available on the data file (BLFPD07 and BLFPD08 for the PMK, and BLFSD07 and BLFSD08 for the spouse/partner).

6.7 Imputation

For various reasons there are certain variables that may be missing for responding households on the NLSCY file. This is usually referred to as item non-response. In Section 6.5.4, the various codes that have been used to describe the reason for the item non-response ("refusal", "don't know", "not stated") are described.

For some variables on the NLSCY file, however, rather than using a special non-response code, imputation has been carried out. Imputation is the process whereby missing or inconsistent items are "filled in" with plausible values. For the NLSCY, imputation was carried out for household income and PMK income. The methods used for imputation for these variables are described in detail in Section 9. Imputation flags have been included on the NLSCY file so that users will have information on the extent of imputation and what specific items have been imputed on what records. All imputation flags on the NLSCY data file have an "**I**" as the fifth character of the variable name. For example, the name of the imputation flag for household income (BINHQ03) is BINH**I**03.

6.8 Creation of Derived Variables

A number of data items on the data file have been derived by combining items on the questionnaire in order to facilitate data analysis. For example, in the section on child care, the PMK was asked a series of questions about the types of care used for the child to allow the PMK and spouse/partner to work or study. For each type of care there was a question on the number of hours per week the child was in that type of care. Using this information, a variable was formed to indicate the primary care arrangement used to allow the PMK and spouse/partner to work or study. It was derived by looking at the number of hours for each care arrangement and setting it to the method for which the number of hours was the greatest.

Longitudinal derived variables were created to indicate changes between data reported in the current and previous cycles for family structure and PMK and Spouse changes.

All derived variables on the NLSCY data file have a "**D**" as the fifth character of the variable name. The name of the variable for the primary care arrangement is BCRC**D**01.

7 Weighting

The principle behind estimation in a probability sample such as the NLSCY is that each person in the sample "represents," besides himself or herself, several other persons not in the sample. For example, each child in the NLSCY sample represents about 300 children in the population.

The weighting phase is a step which calculates, for each record, what this number is (i.e., the number of individuals in the population represented by this record). As the target population is not the same for the cross-sectional sample and the longitudinal sample, the number of persons each child represents is not the same. Consequently, two series of weights must be calculated: one for the cross-sectional sample, and one for the longitudinal sample. These weights appear on the NLSCY data files (BWTCW01C for cross sectional weight, BWTCW01L for longitudinal weight), and must be used to derive meaningful estimates of the characteristics measured by the survey. In concrete terms, only the cross-sectional weight is used when doing analysis on the cross-sectional BWTCW01C sample, and only the longitudinal weight (BWTCW01L) is used when doing analysis on the longitudinal sample. For example, if the number of children living in single-parent families in 1996 is to be estimated, it is done by selecting the records in the cross-sectional sample of Cycle 2 with that characteristic and summing the weights found on those records.

7.1 Longitudinal Sample or Cross-sectional Sample?

The choice of which sample to use depends on the type of analysis to be done. The longitudinal sample pertains to the child population at the time this sample was selected (i.e., 1994-95). The sum of the longitudinal weights is equal to the available demographic estimates for January 1995. Only the longitudinal children, i.e., those selected in 1994, are given a longitudinal weight other than 0. For each cycle, the longitudinal weight of the panel is recalculated to take into account the further erosion (non-response) that occurs between the two cycles of the survey, i.e., about two years. It is this one that is usually better suited to longitudinal analysis based on a comparison of the data for more than one year, as it allows for the life courses of the children to be quantified over time.

The cross-sectional sample makes it possible to do estimates based on data from a single cycle. A separate cross-sectional weight is calculated for each cycle. For Cycle 1, the longitudinal sample and the cross-sectional sample have the same target population. As the target populations are identical, only one series of weights was needed for this cycle.

Flows may be calculated using cross-sectional estimates produced for two cycles. However, the flows thus measured are net flows. They are calculated based on a snapshot taken for each reference period. As a result, they mask all transitions that cancel each other out. Here is an example to illustrate this phenomenon. A researcher wishes to know whether the number of young people who smoke increased between 1994 and 1996. He can therefore calculate the number of smokers in 1994 using the Cycle 1 sample, and a second estimate for 1996 using the cross-sectional sample for Cycle 2. By comparing these two estimates, he can determine whether the number of smokers increased or decreased. However, this comparison conceals the fact that a number of young people quit smoking in the interim. From this analysis, it would therefore not be possible to verify whether a program designed to reduce the number of young people who smoke is effective. Again using our example, the cross-sectional sample would make it possible to quantify each transition, and therefore to calculate the gross flows.

7.2 Weighting Procedures for the Cross-sectional and Longitudinal Samples

The NLSCY weighting strategy is based on a series of cascaded adjustments applied to a basic (or initial) weight. Conceptually, the basic weight of each child is approximately equal to the inverse of the child's probability of selection. In the case of the selected households of the LFS in 1996, the basic weight was the sub-weight calculated by this survey. For the longitudinal children, that is, those sampled in 1994, the basic weight was determined using the weight calculated for Cycle 1. The final weight, cross-sectional or longitudinal, was obtained by multiplying the basic weight by many adjustments.

This section explains the various corrections made to the basic weight and the procedures used to weight the cross-sectional and longitudinal samples.

7.2.1 Weighting of the Cross-sectional Sample

As explained in Section 4, the cross-sectional sample is comprised of children selected in 1994 and children selected in 1996. In the following paragraphs, we present the correction factors which, when applied to the basic weights, make it possible to calculate the weights of the cross-sectional sample. These correction factors differ according to whether the child was selected in 1994 or in 1996.

First of all, cross-sectional weights were calculated separately for the children selected in 1994 and those selected in 1996 (sections 7.2.1.1 to 7.2.1.3). Thereafter, each of these two components represents its respective target population. However, these target populations are not entirely separate. It is therefore necessary to apply other correction factors to take this overlap into account (Section 7.2.1.4).

Some corrections were made at the household level. These corrections were the same for all children in a given household. The other corrections vary for each selected child in a household depending on his/her age group and sex.

7.2.1.1 Cross-sectional Weights for the Children of Households Added to Cycle 2

The weighting strategy applied to these children is similar to that used for Cycle 1.

Correction 1: Correction for number of rotation groups

The LFS sample is made up of six "rotation groups," each of which is a representative sub-sample of the LFS target population. In the NLSCY plan, a different number of rotation groups was selected which varied according to the target population. Consequently, the first correction factor depends on the target population.

- Sample of newborns: - child with brother or sister: 5 groups (adjustment=6/5)
  - child with no brother or sister: 9 groups (adjustment=6/9)
- New Brunswick sample: - 10 groups (adjustment=6/10)

Correction 2:Correction for household non-response

In surveys such as the NLSCY, some households do not provide responses[10] for a variety of reasons: refusal, special circumstances, language problems, temporary absence. This non-response is usually compensated for by proportionally correcting the sub-weights of the responding households. The correction is made by multiplying the sub-weight of the responding households by the following factor:

sum of adjusted weights of households sampled
within a stratum of the NLSCY

sum of adjusted weights of responding households
within a stratum of the NLSCY

The adjusted weight is the sub-weight multiplied by the first correction factor. A different correction was made in each of the strata specially defined for non-response. The strata were defined using the following information: *province, economic region, census metropolitan area, type of sector (urban, rural), apartment frame, whether special region or not*. Each of the strata had at least 30 children and a response rate of at least 70%.[11] Strata that were too small or had a response rate of less than 30% were grouped until these restrictions were met.

[10] Following the survey, it is possible that information is gathered only for one child in a household, although two children are in the sample. According to the NLSCY release strategy, both these children are considered respondents, as we have considerable information about their parent(s). For this reason, it is not necessary to apply a correction factor for the non-response of the children.
[11] These restrictions are designed to ensure that the adjustment factor is relatively stable and not too large.

Correction 3: Correction for households with more than one economic family

Sometimes a household included more than one economic family. When this occurred, the child selection procedure required the selection of one of these families at random. This correction was the inverse of the selection probability of the family in the household in question. This correction affected only two households.

Correction 4: Correction for households with more than two eligible children

For the second cycle, a maximum of 2 children were to be interviewed in the new households. If the economic family had more than 2 eligible children, 2 children were chosen at random. This correction took this selection process into account in economic families and affected only 133 households.

7.2.1.2 Weighting of children sampled in 1994

It is not necessary to apply all the corrections described in the previous section to these children, as this was done during Cycle 1. The basic weight we use is therefore the weight obtained in Cycle 1 after the adjustment for non-response and before post-stratification. Only two corrections were necessary for these children.

Correction 1: Correction for household non-response

Whether or not they responded in Cycle 2, we gathered a large amount of information during Cycle 1 about these children. The non-response correction strategy makes use of this information. It is based on the homogeneous response group (HRG) method. In this method, an attempt is made to group individuals who have the same propensity to respond. These groups are formed using the characteristics reported in Cycle 1. A correction factor is then derived for each HRG. This factor is derived as follows:

sum of adjusted weights of the HRG

sum of adjusted weights of respondents in the HRG

As for the non-response correction for children selected in 1996, restrictions were imposed on the form of the HRG in order to obtain reasonable correction factors (see Section 7.2.1.1, Correction 1).

Correction 2: Correction for inter-provincial migrations

Some children selected in 1996 moved or changed province between Cycle 1 and Cycle 2. This can sometimes distort weights for the new province of residence. For example, the weight of a child selected in Ontario is far greater than that for a child selected in Prince Edward Island. When a child selected in Ontario moves to Prince Edward Island, this will have an enormous impact on the estimates for Prince Edward Island if he/she retains his/her original weight. Moreover, this type of migration is very rare among the target population. In this context, it is

not reasonable to assume that the sampled child who has moved from Ontario to Prince Edward Island represents a large number of children in the target population who have followed the same life course. The weight of these children has therefore been corrected downward.

7.2.1.3 Weight of Longitudinal Brothers and Sisters Born Between Cycle 1 and Cycle 2

Brothers and sisters of longitudinal children born between Cycle 1 and Cycle 2 and introduced into the sample during the Cycle 2 data collection are a special case. Their weight is calculated using the weight-sharing method.[12] In our particular case, this method consisted of assigning the weight of the longitudinal child of the household to the newborn.

7.2.1.4 Weight Integration

Using the three weight calculation methods presented in the previous stages it is possible to produce estimates for their respective target population. In some cases, however, these target populations are not unconnected. It is therefore necessary to derive a correction factor that takes this overlap into account. In addition, one final factor is needed to ensure that these weights produce estimates consistent with the demographic estimates produced from other sources.

Correction 1: Correction for overlaps of target populations

We are dealing with two types of households: those selected in Cycle 1, and those selected in Cycle 2. These two groups overlap. In fact, the selected newborns of the LFS in 1996 cover the same target population as the newborn brothers and sisters of the longitudinal children. Similarly, the children in the supplementary New Brunswick sample cover the same target population as the longitudinal children of the same age group selected in 1994 in New Brunswick. These overlaps must be taken into account in order to ensure that our sample does not systematically overestimate the characteristics of the population.

To take the relative contribution of each into account, we identified a series of multiplier factors for each province and type of household. An example will illustrate this approach. Let us suppose that 40 longitudinal children aged 2 to 5 were sampled in New Brunswick in 1994. In addition, 10 children in the same age group were selected in the supplementary New Brunswick sample. In this case, the correction factor for the longitudinal children would be 40/(40+10)=0.8, while the correction factor for the supplementary sample would be 10/(40+10)=0.2. Note that the sum of the two adjustment factors is 1.

Correction 2: Correction for post-stratification

Post-stratification was carried out on the weights thus far to ensure that the national and provincial estimates agreed with the January 1997 demographic estimates of the population of

[12] For more information about this method, see Lavallée, Pierre (1995) "Pondération transversale des enquêtes longitudinales menées auprès des individus et des ménages à l'aide de la méthode de partage de poids" in *Technique d'enquête*, 21, 27-35.

children aged 0 to 13. For Cycle 2, post-stratification was done by province, age group and sex. This correction factor was derived for each post-stratification, as follows.

demographic estimate

sum of weights in the post-strata

This correction ends the weighting process of the cross-sectional sample for the second cycle of the NLSCY.

7.2.2 Weighting of the Longitudinal Sample

The longitudinal weighting process is a subset of the weighting process used for the cross-sectional sample. First of all, a correction for non-response was calculated. The method used for the longitudinal weighting was identical to that described in Section 7.2.1.2. Finally, an adjustment was made to ensure consistency between the estimates produced from the survey and the demographic estimates (post-stratification). As the target population of the longitudinal sample is all children between the ages of 0 and 11 at the start of 1995, the post-stratification of the longitudinal weighting uses January 1995 demographic estimates.

8 NLSCY Concepts and Definitions

There are many variables and concepts which are critical to the analysis of the NLSCY data. In this section there is a brief discussion regarding the types of analyses that are possible with the NLSCY data. This is followed by a description of key variables which have been derived to explain the living arrangements of the child and the socio-economic conditions under which the child lives.

The content areas for each section of the various questionnaires used for the first cycle of the NLSCY are presented in the next section.

8.1 Cross-sectional and Longitudinal Estimates

The NLSCY design and sample has been constructed so that it will be possible to produce both **cross-sectional** and **longitudinal** estimates. At present, it is possible to obtain cross-sectional estimates with Cycle 1 data, and more recently with Cycle 2 data. It is also possible to obtain longitudinal information from the longitudinal file.

The allocation of the Cycle 1 and 2 sample was such that it is possible to produce estimates at the national level for the specific age cohorts and at the provincial level for aggregated age groups. This is true for cross-sectional data as well as longitudinal data.

The **longitudinal** sample is comprised of all children sampled for Cycle 1 of the survey in responding households (excluding those from the integrated sample (NPHS) and the 3rd and 4th child of each family). The plan is to follow these children over time every two years. Analyses of these children will permit researchers the opportunity to perform in-depth studies of the long-term impact of risk factors (such as divorce or the onset of a health condition) and protective factors (such as positive interactions with parents or academic success at school) on these children as they move into adulthood. If a child moves out of the household where he or she was sampled at Cycle 1, that child will be traced to wherever he or she resides at future cycles of the survey. From a longitudinal perspective, the child, not the household, is the statistical unit of analysis.

It should be noted that some children who were participants in Cycle 1 of the NLSCY did not participate in the second cycle or may not participate in subsequent cycles due to a variety of reasons. This is usually referred to as attrition. The numbers of these children is being carefully monitored and we are making every effort to keep these numbers at a minimum. The Cycle 1 sample and its allocation were designed with this in mind and as long as future response rates are not lower than expected the sample will still permit longitudinal research by age cohort at the national level.

In the second and subsequent cycles, it is intended that the NLSCY will add children belonging to age groups no longer covered in the longitudinal sample. For example, for Cycle 2 a panel of children 0 and 1 years of age was added to the Cycle 2 sample. This augmented sample will allow for ongoing **cross-sectional** analyses to supplement the primary longitudinal research. As such, at each cycle it will be possible to get a snapshot of Canadian children of all ages. At the present time, it is not planned that this augmented component of the sample will be followed longitudinally, or it will be on a limited scope.

It should be noted the children who immigrate to Canada at any point in time after the Cycle 1 sample was selected and who are in the age cohorts covered in the Cycle 1 sample, will not be included in either cross-sectional or longitudinal estimates at this time the number of children excluded by this is small. Estimates of the number of children immigrating to Canada will be monitored and a decision may be made in the future to introduce a new sample into the NLSCY to cover these children.

8.2 NLSCY Units of Analyses

The unit of analysis for the NLSCY is intended to be the child and eventually the young adult. For each cycle of the NLSCY, extensive information will be gathered on the child's family, parent(s), and neighbourhood.

It is true that families or households are relatively straightforward units of analysis with cross-sectional data but the situation becomes quite problematic with longitudinal data. Households change composition frequently, due to divorce of parents, or children leaving the parental nest. Attempts have been made in other studies to define "longitudinal households" but the implementation of this concept has never been straightforward. No single definition has been found to be appropriate for most analytic tasks, and many definitions exclude the portion of the population that has undergone the change. Unfortunately, this is often a significant as well as interesting population to study. It has been suggested that a superior alternative is to use the individual as the unit of analysis and present family and household variables as a characteristic of the individual.[13]

Thus the files which have been constructed for all NLSCY data consist of child records. In order to understand the family situation, estimates such as of the number of children in single parent families, or the number of children living in low-income households, can be produced.

[13]*For a more complete discussion of units of analyses for longitudinal studies see Duncan, G.D. and Hill M.S. (1985). Conceptions of Longitudinal Households: Fertile or Futile? Journal of Economic and Social Measurement, 13:361-375.*

8.3 PMK and Spouse

In each NLSCY household for Cycle 1, one child 0 to 11 years of age was selected at random and a question was asked about who in the household was the **p**erson **m**ost **k**nowledgeable about this child. This person was labelled as the **PMK**. The intention was that the PMK would provide the information for all selected children in the household and then give socio-demographic information about herself and her spouse/partner. In some rare cases it might have been appropriate to label two different people in a household as PMKs. For example, in the case of a step family, it may have been appropriate to label the mother as the PMK for one child and the father for another. However, in order to simplify the interview procedures, only one PMK was selected per household.

The following is the breakdown of the relationship of the PMK to the NLSCY children for Cycle 2.

- for 91.5% of responding children, the PMK was the mother
  (90.2% the biological mother and 1.3% the step, adoptive or foster mother)
- for 7.8% of the children the PMK was the father
- for 0.6% of children the PMK was not a parent.[14]

When the PMK was not a parent, for the majority of cases the child had a parent living in the household but the parent was not selected as the PMK. For the most part this situation occurred when a child had a very young mother living with her own parents, i.e., the child's grandparents, and the grandmother was selected as the PMK.

If the PMK had a partner residing in the household at the time of the interview, then this person was labelled as the **spouse**. Spouses included both married and common-law partners. Detailed socio-economic information was collected about the spouse/partner in order to describe the family situation of the child.

The following is the breakdown of the relationship of the spouse/partner to the NLSCY children.

- for 14.5% of the children, the PMK did not have a spouse/partner residing in the household
- for 78.4% of children the spouse/partner was the father
  (73.6% the biological father and 4.8% the step, adoptive or foster father)
- for 6.6% of children the spouse/partner was the mother (biological, step, adoptive or foster)
- for the remaining 0.3% of children, the spouse/partner was not a parent.

[14] *These numbers for the PMK and spouse/partner are based on unweighted data.*

In the second cycle of the survey, a PMK was again designated. For several reasons, the PMK and his/her spouse could be two different people in the first and second cycles. For this reason, a variable flagging the change in individual on the longitudinal file was created (see BDMPbD27 for the PMK change and BDMSbD28 for the change in spouse). This new variable indicates whether there was any change in the PMK from one cycle to the other. It is therefore highly recommended that this variable be used when doing longitudinal analyses involving the characteristics of the parents.

Here is a breakdown of the consistency of the relationship between the NLSCY children and the PMK and his/her spouse:

PMK
- for 90.8% of the children, the PMK was the same person in both cycles;
- for 7.9% of children, the Cycle 2 PMK was simply the spouse of the PMK in Cycle 1;
- for 1.2% of children, the PMK was a new individual.

Spouse of the PMK
- for 10.8% of the children, the PMK had no spouse living in the household for either of the two survey cycles;
- for 73.7% of children, the spouse of the PMK was the same person for both cycles of the survey;
- for 7.0% of children, the spouse of the PMK for Cycle 2 had been the PMK for Cycle 1 of the survey;
- for 4.9% of children, the PMK had a spouse for Cycle 1, but not for Cycle 2;
- for 3.0% of children, the PMK had no spouse for Cycle 1, but did have a spouse for Cycle 2;
- for 0.6% of children, the PMK was the same person for both survey cycles, but had a different spouse.

8.4 Family Derived Variables

Using NLSCY data, a child's family may be described in several different ways. Many of the family variables that have been used to describe the NLSCY children were derived from what is known as the relationship grid. As part of the household roster some basic demographic information was collected for all members of the child's household. As part of this questionnaire, the relationship of everyone in the household to everyone else was asked. Using this information it was possible to create an extensive set of variables to describe the child's family situation.

The following are some of the family derived variables for the child that exist on this second micro data file for the NLSCY. The names of the derived variable are given in brackets.

Single-parent family

There are two ways of describing the parental situation of children using NLSCY data.

Using the relationship grid, a child's **single-parent status** was derived. There were 85.3% of children living with two parents, 14.5% with one parent and 0.2% without a parent[15] (BDMCD04).

A child's parent status can also be defined in terms of the PMK. There were 85.5% of the NLSCY children living in a household where the PMK had a spouse/partner; and for 14.5% of children the PMK did not have a spouse/partner (BDMPD06A).

The two ways of describing the child's family are very similar. The only reason for the small differences is a result of the few cases where the child lived with a parent, but the parent was not selected to be the PMK.

Step, Blended and Intact Families

Children living with two parents are classified as being members of intact, step and/or blended families based on the relationship of these children to the parents.[16]

Intact family

An intact family consists of a married or common-law couple where **all** children are the natural and/or adopted offspring of both members of the couple.

For the NLSCY children, 76.1% were a member of an intact family (BDMCD16).

Step family

A step family consists of a married or common-law couple residing in the same household, with at least one step child living with them who is the biological or adopted child of one parent but not the other parent. It should be noted that a child who is the biological child of both parents is said to belong to a step family if at least one of these parents has a step child residing in the household.

For the NLSCY children, 4.9% were step children themselves (BDMCD03) and 9.1% lived in a step family (BDMCD15).

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[15]*These estimates for family derived variables are based on weighted data.*

[16]*Foster children and children living with only one parent are not included in step, blended or intact families. In the derivation of blended, intact and step families, if a child was the adoptive child of one parent and the biological child of the other parent, then this child was treated like a step child, and thus the family labelled as a step family. In other Statistics Canada publications children of this type are treated as if they were biological children of both parents.*

Blended family

Blended families combine children who have different relationships with their parents. A **blended family** consists of a married or common-law couple living with at least two children, one of whom does not share the same natural and/or adoptive parents as the other child(ren). The following are examples of blended families:

- a couple with biological children of the female partner as well as biological children of the male partner (i.e., hers and his)

- a couple with biological children of the female partner as well as children out of the new union (i.e., hers and theirs).

The blended family is a sub-set of the step family. For the NLSCY children, 6.3% were members of a blended family (BDMCD14).

Economic Family

For the NLSCY, an economic family is defined as all family members related by blood, marriage, common-law relationship or adoption; foster children are considered to be part of the economic family. For example, if a woman lives in a household with her spouse and two children as well as her sister and her sister's child then all of these individuals would be part of one economic family. If a boarder also resided in the household with her child then this would constitute a second economic family.

Siblings

For the NLSCY data, siblings include full, half, step, adopted and foster siblings. Only siblings residing in the household have been included in the calculation of the sibling derived variables included on the micro data file. In the case of common-law relationships, if both members have brought their own children into the relationship then these children are considered as siblings. It should be noted that the classification of siblings was age independent. If an NLSCY child had an adult sibling (for example, 21 years of age) living in the household then this sibling was included in the calculation of the sibling derived variables. The sibling derived variables include total siblings, as well as number of older siblings, younger siblings and siblings of exactly the same date of birth; i.e., twins (BDMCD08, 09, 10 and 11).

8.5 Socio-Economic Derived Variables

There were two derived variables produced from Cycle 1 data to assist analysts in understanding and explaining the socio-economic situation of the child's family: socio-economic status, and income ratio.

In the second cycle of the survey, two distinct measures of socio-economic status were calculated: one longitudinal, and one cross-sectional. The derivations of cross-sectional SES and of longitudinal SES differ with regard to the standardization of the components only. The derivation of the non-standardized components of SES (i.e., parents' education level, parents' occupational prestige and household income) was the same for both SES measures.

Socio-Economic Status (BINHD08 and BINHbD8L)

Sociologists often use the term "socio-economic status" (SES) to refer to the relative position of a family or individual in an hierarchical social structure, based on their access to, or control over, wealth, prestige and power. In studies of children's academic and social-emotional development, SES is often operationally defined through measures describing the occupational prestige, educational levels, and economic positions of children's parents.

The measure of SES is calculated for each household assigned to each selected child in that household.[17] It was derived from five sources: the level of education of the PMK, the level of education of the spouse/partner, the prestige of the PMK's occupation, the prestige of the occupation of the spouse/partner, and household income. The method of constructing each component of SES, and the construction of the overall cross-sectional and longitudinal SES measure are described below.

[17]*This particular definition of SES was proposed by Dr. Douglas Willms, Atlantic Centre for Policy Research in Education. University of New Brunswick.*

Education - Years of School

The education variable used in the construction of SES was years of schooling. Two such variables were derived independently; one for the PMK and one for the spouse/partner (BED**P**D04 for the **P**MK and BED**S**D04 for the **S**pouse/partner). For the PMK the years of schooling variable was derived based on items BEDPQ01 (years of elementary and high school) and BEDPQ04 (highest level of education attained beyond high school). To create a somewhat continuous interval-level education variable, these two items were recoded to form years of schooling in the following manner:[18]

BEDPD04	**Condition**
00	BEDPQ01=1 (no schooling)
03	BEDPQ01=2 (1 to 5 years)
06	BEDPQ01=3 (6 years)
07	BEDPQ01=4 (7 years)
08	BEDPQ01=5 (8 years)
09	BEDPQ01=6 (9 years)
10	BEDPQ01=7 (10 years)
11	BEDPQ01=8 (11 years)
12	BEDPQ01=9 (12 years)
13	BEDPQ01=10 (13 years)
16	BEDPQ04=6 (BA/BSC)
18	BEDPQ04=7 (Masters)
20	BEDPQ04=8 or 9 (MD/PHD)

An extra year was then added to BEDPD04 if the PMK had a diploma from a trade school or community college (i.e., if BESPDQ04= 4 or 5 then BEDPD04 = BEDPD04+1).

The same procedure was used to set up a years of schooling variable for the spouse/partner (BEDSD04).[19]

Occupational Prestige

Occupational status is an important indicator of SES. The occupation variable used in the derivation of SES was a modified version of a scale developed by Pineo, Porter and McRoberts (1977). The classification system groups occupations described in Statistics Canada's *1980 Standard Occupational Classification* into 16 somewhat homogeneous categories, ordered from 1 to 16, where code 1 represents the highest level of occupation and code 16 the lowest. The 16-category scale provides a ranking of occupations according to their social standing or prestige.

[18] In cases where the PMK had not graduated from high school but had completed a post-secondary degree or certificate, then the post-secondary degree or certificate took precedence. For example, if the PMK had completed only grade 10, but had masters, then AEDPD04 was set to 18.

[19] *It was decided that years of schooling was an interesting derived variable itself and therefore this variable has been included on the NLSCY master file for the PMK and spouse/partner (BEDPD04 and BEDSD04).*

For the NLSCY, for both the PMK and the spouse/partner, a detailed description was taken of the job considered to be his or her main job during the previous 12 months. The information was used to code occupations into the 1980 classification, and in turn into the 16 prestige categories. For the purposes of deriving both SES, the order of the Pineo-Porter-McRoberts scale was reversed. The final scale used in the derivation of both SES had the following values:

01	Farm labourer
02	Unskilled manual
03	Unskilled Clerical/sales/service
04	Semi-skilled manual
05	Semi-skilled clerical/sales
06	Farmer
07	Skilled crafts and trade
08	Skilled clerical/sales/service
09	Foreman/forewoman
10	Supervisor
11	Middle manager
12	Technician
13	Semi-professional
14	High-level management
15	Employed professional
16	Self-employed professional
96	Not-applicable - this was assigned for the Spouse/partner for cases where the PMK did not have a spouse/partner
99	Not stated

This ordinal scale can be used to rank individuals into the various occupation groups but one cannot assume that the intervals between ranks are equal interval. For example, in this scale a middle manager (code 11) is ranked higher than a supervisor (code 10), which in turn ranked higher than a foreman (code 09). However, this does not imply that the difference in occupation between the middle manager and a supervisor is equivalent to the difference between a supervisor and a foreman. By assuming that the underlying latent construct has a particular distribution, one can assign intervals to the various categories. Mosteller and Tukey (1977) propose a logit transformation to re-express ordinal data on an interval scale. To do this, the percentage of individuals in each occupation group is considered a piece of the logistic distribution. The code assigned to each occupation is the centre of its piece in the logistic distribution. This transformation was employed to scale the 16 occupations.

For each occupation group *x*, the following values were computed:

p	=	the percentage of individuals with an occupation less than occupation *x* (based on the Pineo-Porter-McRoberts category)
pp	=	the percentage of individuals with an occupation less than or equal to occupation *x* (based on the Pineo-Porter-McRoberts category)

$$\text{phi}(p) = p*\ln(p) + (1-p)*\text{In}\ (1-p)$$

$$\text{phi}(pp) = pp*\ln(pp) + (1-pp)*\ln(1-pp)$$

The recoded (logit) value for occupation *x* was assigned to be:

$$\text{PINEOLOG} = \frac{\text{phi}(pp) - \text{phi}(p)}{pp-p}$$

PINEOLOG (for both the PMK and spouse/partner) was then used in the derivation of both SES.

Household Income

The last variable used in the derivation of SES was household income. More detail regarding the collection of household income and data quality issues can be found in Section 9.17. To derive SES, income was coded in $1,000s of dollars, and a few outliers with incomes greater than $150,000 were recoded to $150,000.

Final Derivation of Cross-sectional and Longitudinal SES

Thus the five variables that were used to derive both SES were:

- BEDPD04 (years of schooling for the PMK),
- BEDSD04 (years of schooling for the spouse/partner),
- PINEOLOG-PMK (the pineo occupation code for the PMK transformed to the logit distribution),
- PINEOLOG-SP (the pineo occupation code for the spouse/partner transformed to the logit distribution) and
- HHINC (household income in thousands of dollars)

Final Derivation of Cross-sectional SES

Each of the five variables was standardized to have a mean of zero and a standard deviation of one.

Consideration of Missing Data for the Derivation of Cross-Sectional SES

In the case of cross-sectional SES, the components were standardized using the means and standard deviations of the variables for all households as observed in Cycle 2. Thus, new standards were established based on the data for Cycle 2 families with selected children aged 0 to 13. Given the change in age of the selected children between Cycle 2 and Cycle 1 (0-11 years) it is expected that our sample allowing for the production of Cycle 2 standards consists of slightly older families. This characteristic difference is of some importance, as older families are generally expected to present more favourable socio-economic characteristics than younger families. From one cycle to the next, this difference might not be felt, but over the long term or

over several cycles, differences will likely be noticeable. The income variable which is utilized to derive SES is expressed in current dollars. Thus, the cost-of-living increase and the subsequent adjustment of salary and income level will also, over the long term, have a significant impact on the value of the means and standard deviations used to standardize the components of cross-sectional SES. The variable for cross-sectional SES is labelled BINHD08.

Final Derivation of Longitudinal SES

The final derivation of longitudinal SES is based on the standards calculated for the first cycle of the survey. The same raw values of the components helpful in deriving cross-sectional SES are used, but the standardization differs in this way. Thus, unlike cross-sectional SES, the standardization is not expected to produce for each of the variables a mean of zero and a standard deviation of one. By definition, the use of longitudinal SES is relevant only for analyses based on longitudinal children.

The initial standards of the first cycle which were used to derive longitudinal SES were created based on the characteristics specific to households having children aged 0 to 11. These same families, in the second cycle of the survey, have children aged 2 to 13. The value of longitudinal SES therefore allows us to calculate the net progression of each child in relation to the initial characteristics of his/her household.

A child living in a household where the income has improved appreciably (all things being equal), will see the value of his/her longitudinal SES improve as well. However, in the same circumstances, the value of cross-sectional SES may decline. This would be the case, notably, if all children were living in households that experienced on average an improvement in socio-economic status.

It is therefore essential to be familiar with the rules used to derive the two SES values in order to use the variables properly in the analyses. The differences observed from one cycle to the other for the standards of both SES are not yet very pronounced. Therefore, the use of one measure rather than another, in the short term, should not produce significant differences in research results. But over the long term, the proper use of both measures should become more important. Normally, it is recommended that cross-sectional SES be used to accurately measure the relative position of a child in relation to other children in a given cycle, whereas the use of longitudinal SES provides a better indication of the progression of an individual's situation from one cycle to the other.

Consideration of missing data

Missing values (i.e., not-stated values) were ignored in the standardization. In the standardization of the spouse/partner variables (BEDSD04 and PINEOLOG-SP), if the PMK did not have a spouse/partner these records were ignored. The SES composite was then calculated by taking the (unweighted) average of the five standardized variables. If one of the five variables had missing data due to non-response (refusal, don't know, etc.) then the average was taken over the remaining non-missing items. If there was no spouse/partner in the household (i.e., the PMK had no spouse/partner) then the average was taken over the three applicable variables (BEDPD04,

PINEOLOG-PMK, and HHINC).[20] For two-parent families (i.e., for cases where there was a PMK and a spouse/partner), if two or more out of the five input variables were missing, then SES was set to "not-stated." For single-parent families (i.e., there was no spouse/partner), if one or more out of the three input variables were missing, then SES was set to "not-stated."

Examples of SES

The values for SES range from -2.000 to +1.750. The distribution of SES scores is as follows for children on the file.

SES SCORE RANGE % CHILDREN WITH SCORE IN RANGE

	Cross-Sectional	Longitudinal
1.5 or over	2.3%	2.3%
1.0 to less than 1.5	5. 1%	4.9%
0.5 to less than 1	11.7%	11.2%
0 to less than 0.5	23.3%	23.3%
-0.5 to less than 0	29.9%	30.1%
-1.0 to less than -0.5	17.0%	17.5%
-1.5 to less than -1.0	7.5%	7.6%
Less than -1.5	2.8%	2.7%
Not-stated	0.4%	0.3%

Note: These numbers are based on unweighted data.

In order to give a flavour for the types of families associated with various SES scores the following examples are given for illustration purposes. It should be noted that the SES scores given in these examples are approximate and do not correspond to actual records on the NLSCY file. Many more examples are possible for each score involving both one and two parent families.

[20]*With this procedure, the SES score for single-parent families will tend to be lower because household income, on average, will be lower. However, the SES score will properly reflect the level of education and the occupational prestige of the single parent. Nevertheless, for most regression analyses where SES is used as a control variable, it would be useful to include a dummy variable denoting whether the family was a single- or two-parent family.*

SES SCORE - Cross-sectional **EXAMPLE**

1.5	A family in which: •both the PMK and spouse have a university degree (BA/BSC) •they are both employed professionals •the household income is $80,000
0.5	A family in which: •the PMK has a university degree (BA/BSC) and the spouse has grade 13 •the PMK is employed as a semi-professional and the spouse is employed in a semi-skilled clerical position •household income is approximately $65,000
0.0	A family in which: •the PMK has grade 13 and the spouse grade 12 •the spouse is employed in a semi-skilled manual position and the PMK has a semi-skilled clerical position, is not in the labour force •household income is approximately $55,000
-0.5	A family in which: •the PMK and spouse have both completed grade 12 •the PMK is employed in a semi-skilled manual position and the spouse in an unskilled manual position •household income is approximately $30,000
-1.0	A family in which: •neither the PMK nor the spouse have completed high school •the PMK is employed in an unskilled manual position and the spouse is employed in an unskilled manual position •household income is approximately $25,000
-1.5	A family in which: •neither the PMK nor the spouse have completed high school •neither the PMK nor the spouse are in the labour force •household income is approximately $15,000
-2.0	A family in which: •there is no spouse •the PMK has not completed high school •the PMK is not in the labour force •the household income is less than $10,000

9 Content and Validation of NLSCY

The NLSCY was designed to follow an ecological or holistic approach to measuring child development. The survey captures the diversity and dynamics of the factors affecting children. To ensure that all relevant topic areas affecting child development were adequately addressed by the survey, a multidisciplinary consultation was carried out at the inception of the survey. The selection of specific subject areas, priorities and survey questions was very much a group effort with input and advice from:

- the NLSCY expert advisory group which consists of researchers in the area of child development and the social sciences;
- federal departments;
- representatives from the provinces and territories responsible for child development programs.

It was recommended that the NLSCY cover a broad range of characteristics and factors affecting child growth and development. Extensive information was gathered about the child, as well information on the child's parent(s), characteristics of the family and the neighbourhood. This section provides an outline of the content for each section of the questionnaire included in the NLSCY data.

As part of the NLSCY processing system, there were some basic quality checks performed for each section of the questionnaire. Any items for which there was a high level of non-response or which were frequently involved in edit failures were looked at in detail. Where appropriate, comparisons were made to external data sources and analyses were carried out to investigate possible reasons for differences from these other sources. Any concerns about potential data quality problems for any items in a particular section of the questionnaire are discussed in this section of the documentation.

Before the section-by-section discussion of content and validation results, the general validation procedures used for the "scale" data are presented.

9.1Validation of Scale Data

For some of the concepts that were deemed to be important to measure in the NLSCY it was decided that the concept would most appropriately be measured through the use of a scale. A scale is simply a group of questions or items that measure a certain concept when the answers to the items are put together.

For example, on the child’s questionnaire it was determined that it was important to have an assessment of certain parenting behaviours. The Parenting Scale that was employed was one that was proposed by Dr. M. Boyle at Chedoke-McMaster Hospital, based on work by Dr. Ken Dodge (Vanderbilt University) which was an adaptation of Strayhorn and Weidman’s Parent

Practices Scale. The scale is intended to measure three different constructs or factors related to parenting; positive interaction, hostile/ineffective parenting and consistent parenting.

For each factor measured by a scale, a score is calculated. The score for a particular factor can be used to give an ordering of individuals. For example, for the Parenting Scale, for children with higher scores for the "positive interaction" factor, the PMK reported having more positive encounters with the child (e.g., laughed with them more, praised them more etc.). The score for a particular factor is usually based on a series of items, since one single item usually cannot measure the factor or construct with adequate precision.

During the development of the NLSCY, when consideration was being made of what specific scales should be used to measure a particular concept, as much as possible, scales were selected that had been used in other studies where the psychometric properties of the measures produced by the scale were available with complete references.

However, in many instances the wording of certain questions was modified and in some cases new questions were added. Sometimes the scale that was used had not previously been used for children in Canada or had only been used for very small samples. Given these concerns and further concerns regarding interviewing conditions, it was felt that the factor structures of the scales used in the NLSCY could be different from the ones given in the literature. Therefore the project team felt the need to carry out an extensive evaluation of the scale data to ensure that the psychometric properties found to exist in other studies were also true for the NLSCY experience.

There were three major steps in the analyses of the scale data. First a new factor analysis was performed on all scales to determine the constructs or factors inherent in each scale. Then scale scores were calculated based on this factor structure. Finally reliability measures were produced. The general procedures that were followed for each of these steps are described in detail on the following pages.

The specific details for each scale are discussed later in this section in the appropriate sub-section.

9.1.1 Factor Analyses

The factor structure of each scale was determined based on data from the first cycle. The factor structure imposed on the scales already used in the first cycle and repeatedly utilized in the second cycle of the survey was the result of analyses of data from the first cycle.
The following is a summary of the procedures used in the factor analysis for each scale.

1/ The sample of respondents for each scale (and age group, if the scale used different questions for different groups), was randomly divided into two half-samples. This was done to find out whether different samples would yield the same results.

2/ Principal component analysis was carried out separately on each half-sample to find out how many factors should be extracted in the factor analysis performed subsequently. In

principle, the same number of factors as was found in the literature was expected. In practice, however, some scales showed a different number of factors because in some cases factors combined while in others new factors emerged.

3/ Factor analysis was done on each half-sample and the factor structure and loadings of each factor were compared across the half-samples.

4/ In the factor analysis, the items for each child in the appropriate age group were used, multiplied by the child's normalized weight. An individual's statistical weight is normalized by dividing his/her weight (AWTCW01) by the average weight for all individuals. Thus, the sum of the normalized weights is equal to the sample size.

5/ Once the factor structures were analysed and the items included in each factor were determined, scores were calculated. To produce the scores, 1 was subtracted from each item so that the lowest possible score would be 0. A score of 0 indicates that the child has no problems for all factors in the behaviour scale except for the Prosocial factor, where a score of 0 indicates the absence of prosocial behaviour. Some items were imputed. The imputed values were computed by a procedure (the SAS PRINQUAL procedure) that determines which of the possible values for an item is the most plausible for an individual in view of his/her response profile, the response profiles of others in the sample, and the number of factors included in the analysis.

6/ The score for each factor on the scale was arrived at by totalling the values of the items that made up that factor (including imputed values). The score was set to "missing" if too many of the values of an items included in the factor were unreported. A value may be missing if the parent refused to answer or did not know the answer to the item.

Factor analysis requires that the data have the property of interval or ratio data, that is the distance between each answer category of the question should be the same. For example, in scales where the answer choices are: Never, Sometimes, Often, and Always, one must assume that the distance between Never and Sometimes is the same as that between Sometimes and Often in the respondent's perception. It was felt that this was not necessarily true in the case for the scales used in the NLSCY.

Therefore before performing the factor analysis for each of the NLSCY scales, the data were transformed using optimal scaling. The method used was one proposed by Young and several associates (Young, 1981) which is a variant of Fisher's optimal scaling technique. The method is presented as a means of transforming data which are fundamentally nominal or ordinal in nature to interval or ratio level data so that statistical techniques which are appropriately applied only to interval and ratio data may be utilized.

Initially the factor analysis for each scale to be included in the NLSCY data was carried out using unweighted data. At that point in time the final weights had not yet been calculated. Once the weights were available, work started on repeating the factor analyses using the weighted data. (See Section 7 for a description of the weighting procedures.) With the weights, the same factor

structure was not always observed. When there was a discrepancy, results emerging from the weighted analysis were used.

9.1.2 Calculation of Scores and Item Imputation

The results of the factor analyses were used to determine what items "loaded" into each factor (i.e., were a part of each factor). The next step was to calculate a score for each factor. This was done by summing the values for each individual item that made up the factor. In some cases some rescaling of values was done before the final score was calculated. The following example illustrates how factor scores were computed.

Example:

One of the constructs that emerged in the factor analysis for the Parenting Scale on the Child's Questionnaire was the hostile/ineffective parenting factor. In the factor analysis seven items were found to load into this factor.

APRCQ04	How often do you get annoyed with your child for saying or doing something he/she is not supposed to?
APRCQ08	Of all the times you talk to your child about his/her behaviour, what proportion is praise?
APRCQ09	Of all the times you talk to your child about his/her behaviour, what proportion is disapproval?
APRCQ13	How often do you get angry when you punish your child?
APRCQ14	How often do you think the kind of punishment you give your child depends on your mood?
APRCQ15	How often do you feel you have problems managing your child in general?
APRCQ18	How often do you have to discipline your child repeatedly for the same thing?

The answer categories for these items were of two types:

1 - never	1 – never
2 - about once a week or less	2 - less than half the time
3 - a few times a week	3 - about half the time
4 - one or two times a day	4 - more than half the time
5 - many times each day	5 - all the time

In the calculation of the score for this hostile/ineffective parenting factor, the categories were rescaled to 0 to 4 (i.e., the category "never" was scored as 0, the category "about once a week or less/less than half the time" was scored as 1, ... and the category "many times each day/all the time" was scored as 4). In order to compute the score these values were summed across the seven items involved in the factor resulting in a hostile/ ineffective parenting score in the range 0 to 28. A score of 0 represents the absence of a problem and a score of 28 is the highest possible score with respect to problems. For most of the scores calculated for the NLSCY, a score of 0 represents the absence of a problem. However there are exceptions to this which are noted in the documentation for each particular scale.

Note that the second item that loaded into the hostile/ineffective parenting factor, APRCQ08 (Of all the times you talk to your child about his/her behaviour, what proportion is praise?) is in the opposite direction compared to the other items. In fact the item loaded "negatively" into the factor. Therefore when computing the score the values for this item were reversed - all the time was scored as 0, more than half the time as 1, ... and never as 4.

In the documentation for each scale any item that was reversed for the scoring algorithm due to a negative loading is indicated.

The score for the hostile/ineffective parenting factor is labelled as APRC**S**04 on the record layout for the micro data file. An "**S**" in the 5th position of the variable name indicates a score.

When the score was being calculated for each factor there was a possibility that one or more of the items making up the score had a non-response code (don't know, refusal or not-stated). If the number of items with a non-response code was above a certain threshold, the factor score was set to not-stated. Generally this threshold value was set at 10% of the items. If less than 10% of the items had a missing value then the items with non-response codes were imputed before the score was computed. The procedure used to impute these missing items is a routine available in SAS in the procedure called PRINQUAL. This procedure indicates, among valid item values, the one that seems the most plausible for a given record. It considers the response profile of the record with the missing item, the response profile of other responding records in the sample as well as the number of factors considered in the analyses.

A flag was created for many of the items for which values have been imputed to indicate the records for which imputation has taken place. Where these exist, the flags have been included on the micro data file. The flag on the file which corresponds to an item has the same name as the item itself except that the **Q** (question indicator) in the variable name is replaced by **I**. For example some imputation was carried out for APRCQ04 (How often do you get annoyed with

your child for saying or doing something he/she is not supposed to?). The imputation flag for this item is labelled APRCI04.

It should be noted that in addition to the scores, the raw items for each scale are included on the micro data file. This will permit researchers to have the ability to consider alternate factor structures if desired. For the raw items the original values (in the 1 to 5 range for the parenting scale) have been retained before any rescaling or reversal of values took place.

9.1.3 Reliability Measures for Scales

Reliability refers to the accuracy, dependability, consistency or repeatability of score results. In more technical terms, reliability refers to the degree to which the scores are free of measurement errors. There are many ways to measure reliability.

One of the most commonly used reliability coefficients is **Cronbach's alpha** (Cronbach, 1951). Alpha is a measure of the internal consistency of the items within the factor. It is based on the average covariance of items within the factor. It is assumed that items within a factor are positively correlated with each other because they are attempting to measure, to a certain extent, a common entity or construct.

Cronbach's α has several interpretations. It can be viewed as the correlation between this scale or factor and all other possible scales containing the same number of items, which could be constructed from a hypothetical universe of items that measure the characteristic of interest. In the hostile/ineffective parenting factor, for example, the seven questions actually used for inclusion on the scale can be viewed as a sample from the universe of many possible items. Parents could also have been asked: "How often do you raise your voice when you discipline your child?" or "How often do you threaten punishment more often than you use it?" Cronbach's α tells how much correlation can be expected between the scale which was used and all other possible seven-item scales measuring the same thing.

Another interpretation of Cronbach's α is the squared correlation between the score an individual obtains on a particular factor (the observed score) and the score he/she would have obtained if questioned on all possible items in the universe (the true score). Since α can be interpreted as a correlation coefficient, it ranges from 0 to 1.

It has been shown that in general, α is a lower bound to the reliability of a scale of n items (Novick and Lewis, 1967). In other words in most situations, α provides a conservative estimate of a score's reliability.

What is a satisfactory level of reliability? It is difficult to specify a single level that should apply in all situations. Some researchers believe that reliabilities should not be below 0.8 for widely used scales. At that level, correlations are affected very little by random measurement error. At the same time, it is often very costly in terms of time and money to obtain a higher reliability coefficient. It should be noted that for some of the factors for which scores were computed for

the NLSCY, the reliability are below this level. The Cronbach α is given in the documentation for each score which has been calculated. Researchers can determine for themselves whether or not the score has adequate reliability for their specific purposes.

Finally it should be mentioned that for the NLSCY the Cronbach α for each factor score was computed using SAS. Typically the α coefficients calculated using SAS are lower than those calculated using SPSS.

9.2 Parent-Reported Scales

9.2.1 Temperament Scale

Introduction

Temperament scales are used to measure the temperament of young children (up to and including the age of three) based on the parents' answers to questions about the degree of difficulty their child presents for them. This measure is founded on the assumption that a child's temperament is not solely dependent on biological factors, but is also influenced by the parents' perception of the difficulty of the child.

The temperament scale used in the NLSCY for children 3 to 5 months old was developed by Dr. John Bates of the University of Indiana. This well-established scale, originally known as the Infant Characteristics Questionnaire (ICQ), has been used in large-scale studies and is considered by specialists to be the best available measure for use in household surveys.

The ICQ has been adapted for use in other surveys covering different age groups: 6 to 11 months, 12 to 23 months and two-year-olds. A revised version of the scale, devised by Dr. Jo-Anne Finegan at Toronto's Hospital for Sick Children, is used for three-year-olds.

For children aged 3 to 5 months, the scale made up of questions ATMCQ01 to ATMCQ12, ATMCQ14 to ATMCQ20, ATMCQ23 and ATMCQ33 is intended to measure the extent to which the child is fussy, unadaptable, unpredictable and dull. For children 6 to 11 months old, the foregoing list was expanded to include ATMCQ13 and ATMCQ24 to ATMCQ27. The expanded list of questions measures the same four aspects of temperament as for children 3 to 5 months old.

For children between 1 and 3 years-old, questions ATMCQ1 to ATMCQ15 and ATMCQ17 to ATMCQ33 should theoretically measure the degree to which the child is difficult, irregular, unadaptable, affectively negative and persistent/unstoppable.

The respondent, in most cases a parent, is required to answer each question in the scale by assigning a rating between 1 and 7. For all questions except ATMCQ14, a 1 means that the child has a favourable response or usually exhibits the specified behaviour, while a 7 indicates that the

child reacts negatively or seldom displays the behaviour in question. If the child is in the middle, a 4 is assigned. In question ATMCQ14, the meanings of the ratings are reversed.

9.2.2 Education (Child)

The objective of this section was to get some basic information about the child's educational experiences.

The amount and type of information collected varied depending upon the age of the child, with more information being collected for the older children who have had greater school experience.

Basic information was collected for all age groups, such as: the child's grade level, type of school and language of instruction, whether the child looks forward to school, behaviour problems at school, absenteeism, parental hopes for the child's educational outcomes, number of school changes and residential moves.

For children in grade 1 or higher, additional questions were asked concerning other aspects such as skipping and repeating grades, achievement, special education, parents' perception of school climate and importance of good grades to parents.

The Teacher's and Principal’s Questionnaire provides additional information about the child and his/her school achievement and behaviour.[21]

At the data collection stage, six different questions were asked to determine the child's grade. This was because of the different ways of classifying grade for each province. At the processing stage, these six questions were collapsed into one variable. On the record layout an indication is given as to what the code means for each province. For example, if the grade code (BEDCD01) is 10, this refers to secondary 1 for Québec and grade 7 for all other provinces. A similar procedure was carried out for grade skipped (BEDCD02) and grade repeated (BEDCD03).

The child's grade was also collected on the Teacher's Questionnaire. There was not always consistency across the data collection units on what the correct grade was. In the edit, priority was placed on what the teacher said in the case of discrepancies.

On the micro data file the variables on language of instruction (BEDCQ12A) and type of school (BEDCQ08) were set to not-stated because of confidentiality concerns.

In the Education Section, there was one question (BEDCQ13) which asked the number of days the child had missed since the beginning of the school year. The answer to this question obviously depends on the collection date which has not been included on the micro data file because of confidentiality concerns. Therefore this variable has been suppressed and a derived

[21] *These sections have been suppressed from the public file for confidentiality reasons.*

variable was created (BEDCD04) to indicate the percent of days missed since the beginning of the school year.

9.2.3 Behaviour Scale

The objective of the behaviour scale is to assess aspects of the behaviour of children two years of age and over.

Initially, an attempt was made to measure the following behaviours for children aged 2 and 3:

- hyperactivity,
- emotional disorder,
- anxiety,
- physical aggression,
- inattention,
- prosocial behaviour,
- separation anxiety and
- opposition.

For children between 4 and 11 years of age, an attempt was made to measure similar behaviours; separation anxiety and opposition were omitted, and indirect aggression and some aspects of conduct disorder were added.

The following indicates the items that were included on the questionnaire to measure these various constructs of behaviour. As discussed in Section 9.1, a complete factor analysis was carried out for the behaviour scale to assess the psychometric properties of this scale for the NLSCY population. As part of this analyses the items that loaded into each construct or factor were compared to the expected result described below. The results of this analysis are presented later on in this section.

Theoretical Constructs

Below are the theoretical constructs used for the factor analysis. The actual scales which emerged from the analysis vary from these constructs.

Two- and three-year-olds:

- **Conduct disorder**
  Items include BBECQ6G from the Ontario Child Health Study (OCHS).

- **Hyperactivity**
  Items include BBECQ6B, Q6I, Q6N, Q6P, Q6S and Q6W from the OCHS and ABECQ6HH from the Montreal Longitudinal Survey.

- **Emotional disorder**

Items include BBECQ6F, Q6K, Q6Q, Q6V, Q6CC, Q6MM and Q6RR from the OCHS.

- **Anxiety**
  Items include several of the OCHS emotional disorder questions (BBECQ6F, Q6Q, Q6V and Q6CC).

- **Physical aggression**
  Items include BBECQ6X from the Montreal Longitudinal Survey and BBECQ6G from the OCHS.

- **Inattention**
  Items include BBECQ6P from the OCHS and ABECQ6EE, Q6KK and Q6QQ from the Montreal Longitudinal Survey.

- **Prosocial behavior**
  Items include BBECQ6D, Q6U, Q6BB, Q6SS and Q6UU from the Montreal Longitudinal Survey; the last four items are from a scale developed by K. Weir and G. Duveen.

- **Separation anxiety**
  Items include BBEC6DD1, 6LL1, 6PP1 and Q6TT1 from Achenbach's Child Behavior Checklist (CBCL).

- **Opposition**
  Items include BBECQ6E1, Q6J1, Q6R1 and Q6T1 also drawn from Achenbach's CBCL.

Children aged 4 to 11:

- **Conduct disorder**
  Items include BBECQ6C, Q6E, Q6G, Q6L, Q6O (this item is coded "not applicable" for children not in school), Q6T, Q6AA, Q6DD, Q6FF, Q6JJ and Q6PP from the Ontario Child Health Study (OCHS).

- **Hyperactivity**
  Items include BBECQ6B, Q6I, Q6N, Q6P, Q6S and Q6W from the OCHS and Q6HH from the Montreal Longitudinal Survey.

- **Emotional disorder**
  Items include BBECQ6F, Q6K, Q6Q, Q6V, Q6CC, Q6MM and Q6RR from the OCHS.

- **Anxiety**

Items include BBECQ6Y and Q6II from the Montreal Longitudinal Survey along with several of the OCHS emotional disorder items (BBECQ6F, Q6Q, Q6V and Q6CC).

- **Indirect aggression**
  Items include BBECQ6J, Q6R, Q6Z, Q6LL and Q6TT from Lagerspetz, Bjorngvist and Peltonen of Finland.

- **Physical aggression**
  Items include BBECQ6X from the Montreal Longitudinal Survey and BBECQ6G, Q6AA and Q6NN from the OCHS.

- **Inattention**
  Items include BBECQ6P from the OCHS and BBECQ6EE, Q6KK and Q6QQ from the Montreal Longitudinal Survey.

- **Prosocial behaviour**
  Items include BBECQ6A, Q6H, Q6M, Q6GG and Q6OO from the OCHS and ABECQ6D, Q6U, Q6BB, Q6SS and Q6UU from the Montreal Longitudinal Survey; the last four items are from a scale devised by K. Weir and G. Duveen.

Results

Two- and three-year-olds:

There were 3,909 two- and three-year-olds in the sample. The group was split into two sub-samples of 1,932 and 1,977 individuals, and the analysis for this age group was performed separately for each sub-sample. The non-response rate for most items was about 2.2%. Some individuals were excluded from the analysis that produced the factors. The exclusion criteria were as follows: individuals with eight or more items coded "missing," individuals with one or more refusals, individuals with two or more missing items under hyperactivity and emotional disorder, and individuals with one or more missing items for the other theoretical factors. After the criteria were applied, there were 1,742 and 1,773 individuals left in the sub-samples to be analysed. Data were imputed for only 12 items. The number of imputations ranged between 1 and 8 for those 12 items. A total of 34 values were imputed.

The factor analysis derived five factors for this age group: hyperactivity-inattention (ABECS01), prosocial behaviour (ABECS02), emotional disorder-anxiety (ABECS03), physical aggression-opposition (ABECS04) and separation anxiety (ABECS05). The items making up each factor are listed in the table below.

BEHAVIOUR SCALE FOR 2- AND 3-YEAR-OLDS

FACTOR	SCORE	ITEMS
Hyperactivity – inattention	ABECS01	ABECQ6B, 6I, 6N, 6P, 6S, 6HH, 6QQ
Prosocial behaviour	ABECS02	ABECQ6D, 6U, 6BB, 6SS, 6UU
Emotional disorder – anxiety	ABECS03	ABEQC6F, 6K, 6Q, 6V, 6MM, 6RR
Physical aggression – opposition	ABECS04	ABECQ6G, 6W, 6X, 6E1, 6R1, 6T1, 6Z1, 6NN
Separation anxiety	ABECS05	ABECQ6CC, 6DD1, 6PP1, 6LL1, 6TT1

Cronbach's alpha (raw value) was computed with SAS using normalized weighted data (in general, Cronbach's alphas computed by SAS are lower than those produced by SPSS). For hyperactivity-inattention (ABECS01), Cronbach's alpha was 0.798. The item that had the greatest effect on this factor was ABECQ6P; removing it lowers Cronbach's alpha to 0.762. The table below shows the Cronbach's alpha for each factor, first including all items, then excluding the item having the greatest effect.

CRONBACH'S ALPHA FOR THE BEHAVIOUR SCALE FOR 2- AND 3-YEAR-OLDS

FACTOR	CRONBACH'S ALPHA (RAW)	ITEM THAT LOWERS CRONBACH'S ALPHA THE MOST IF IT IS EXCLUDED	CRONBACH'S ALPHA IF THE ITEM IS EXCLUDED
Hyperactivity-inattention (ABECS01)	0.798	ABECQ6P	0.761
Prosocial behaviour (ABECS02)	0.847	ABECQ6SS	0.795
Emotional disorder-anxiety (ABECS03)	0.593	ABECQ6MM	0.539
Physical aggression-opposition (ABECS04)	0.754	ABECQ6Z1	0.717
Separation anxiety (ABECS05)	0.561	ABECQ6DD1	0.431

Once the factors were identified, the next step was to compute the scores for each factor. The scores for ABECS01, ABECS02, ABECS03, ABECS04 and ABECS05 could not be calculated for 123, 393, 108, 159 and 99 individuals respectively because of unreported values for the items included in the factors.

Children aged 4 to 11:

There were 14,226 children in the 4 to 11 age group. Two sub-samples of 7,073 and 7,153 were created for analysis. The item non-response rate was approximately 2.1% for most of the 47 items involved in the analysis. Individuals were excluded from the analysis on the basis of the following criteria: individuals with eight or more items coded "missing," individuals with one or more refusals; individuals with two or more missing items under prosocial behaviour, conduct disorder, hyperactivity, anxiety and emotional disorder; and individuals with one or more missing items for the other factors. After the criteria were applied, 6,620 and 6,683 individuals remained in the sub-samples to be analysed. Data were imputed for 26 items. The number of imputations ranged between 1 and 159 for those 26 items. A total of 363 values were imputed.

Six factors were identified for this age group: hyperactivity-inattention (ABECS06), prosocial behaviour (ABECS07), emotional disorder-anxiety (ABECS08), physical aggression-conduct disorder (ABECS09), indirect aggression (ABECS10) and a new factor, property offence (ABECS11). The items making up each factor are listed in the table below.

BEHAVIOUR SCALE FOR 4- TO 11-YEAR-OLDS

FACTOR	SCORE	ITEMS
Hyperactivity – inattention	ABECS06	ABECQ6B, 6I, 6N, 6P, 6S, 6W, 6HH, 6QQ
Prosocial behaviour	ABECS07	ABECQ6A, 6D, 6H, 6M, 6U, 6BB, 6GG, 6OO, 6SS, 6UU
Emotional disorder – anxiety	ABECS08	ABECQ6F, 6K, 6Q, 6V, 6CC, 6II, 6MM, 6RR
Physical aggression – conduct disorder	ABECS09	ABECQ6G, 6X, 6AA, 6FF, 6JJ, 6NN
Indirect aggression	ABECS10	ABECQ6J, 6R, 6Z, 6LL, 6TT
Property offence	ABECS11	ABECQ6C, 6E, 6L, 6T, 6DD, 6PP

Cronbach's alphas for these factors are given in the table below. Normalized weighted data were used in the computations.

CRONBACH'S ALPHA FOR THE BEHAVIOUR SCALE FOR 4-TO 11-YEAR-OLDS

FACTOR	CRONBACH'S ALPHA (RAW)	ITEM THAT LOWERS CRONBACH'S ALPHA THE MOST IF IT IS EXCLUDED	CRONBACH'S ALPHA IF THE ITEM IS EXCLUDED
Hyperactivity-inattention (ABECS06)	0.838	ABECQ6I	0.810
Prosocial behaviour (ABECS07)	0.816	ABECQ6BB	0.789
Emotional disorder – anxiety (ABECS08)	0.794	ABECQ6II	0.756
Physical aggression – conduct disorder (ABECS09)	0.770	ABECQ6AA	0.716
Indirect aggression (ABECS10)	0.781	ABECQ6LL	0.733
Property offence (ABECS11)	0.637	ABECQ6C	0.553

The scores for these factors could not be computed in 338, 647, 324, 358, 814 and 310 cases respectively because of unreported values.

9.2.4 Motor and Social Development

The Motor and Social Development Section of the Child's Questionnaire was completed for children in the 0 to 3 age group. The objective was to measure motor, social and cognitive development of young children. A scale was used to assess these concepts (BMSCQ01 to BMSCQ48).

The Motor and Social Development (MSD) Scale was developed by Dr. Gail Poe of the U.S. National Center for Health Statistics. The MSD scale consists of a set of 15 questions that measure dimensions of the motor, social and cognitive development of young children from birth through 3 years; the questions vary by age of the child. Each item asks whether or not a child is able to perform a specific task. The scale has been used in collections of the National Longitudinal Survey of Youth in the United States and in recent versions of the National Child Development Survey in England.

A score was calculated for each child by summing the number of "yes" answers to each item in the scale (BMSCS01). Although there were different sets of questions depending on the age in months of the child, differences were observed when comparing score within these age bands. For example, there was a specific set of questions for children 4 to 6 months old. It was found that children who were 6 months old had scores that were on average higher than those 4 months old. Therefore a decision was made to produce standardized scores. Each child was assigned a standard score so that the mean MSD score was 100 and the standard deviation was 15 for all age groupings of Cycle 1. This standardization had been done by 1 month age groups. Therefore children who are 0 months old had in Cycle 1 an average MSD score of 100, children who are 1 month old had an average MSD score of 100, ..., and children 47 months old had an average MSD score of 100. Using standards established in the first cycle, a standardized score (BMSCS02) was calculated and makes it possible to compare scores of children across the 0 to 3 age group, not controlling for age.

9.2.5 Relationships

The Relationships Section of the Child's Questionnaire was completed for all children 4 years of age and older. The objective was to provide information about the child's relationships with others. Positive relationships with other children and adults may help to counteract other factors which place a child at risk.

The section collects information about how the child gets along with parents, brothers and/or sisters, teachers, friends, and classmates, with some variation by age of the child. Parents' knowledge of the names of the friends of 8- to 13-year-olds is also investigated, along with their perception of these other children's behaviour, and whether their own child is shy or outgoing.

The questions on number of days spent doing things with friends, number of friends, and getting along with friends, parents, teachers and siblings (BRLCQ01, Q02, Q06-Q09) are based on those in the Ontario Child Health Study.

9.2.6 Parenting Scale

The objective of this scale is to measure certain parenting practices. Specifically, two scales were used. The first was designed to measure the positive interaction, hostility/ ineffectiveness and consistency of the parenting of the child. The second scale was designed to measure parental practices that may or may not provoke aversion.

The questions from the Child's Questionnaire used to measure these aspects of parenting are identified in the following paragraphs. As mentioned in Section 9.1, complete factor analyses were done on the parenting scales to evaluate the psychometric properties of these scales for the NLSCY population. The make-up of each factor obtained during these analyses was compared to that which had been indicated in the literature. The results of these analyses are presented later in this section.

QUESTIONS

For the 0-11 age groups:

Questions BPRC-Q1 to BPRC-Q18 on positive interaction, hostility or ineffectiveness and on coherence were provided by Dr. M. Boyle of the Chedoke-McMaster Hospital, based on the work of Dr. Ken Dodge (Venderbilt University) and an adaptation of the Parent Practices Scale of Strayhorn and Weidman. (For children ages 0 to 23 months, only questions APRCQ1 to APRCQ7 were asked.)

For children ages 2 to 11 years:

Questions BPRC-Q19 to BPRC-Q25 which measure parental practices which may or may not cause aversion were provided by Dr. M. Boyle.

ANALYSIS OF NLSCY DATA

The factor structure of each scale was determined based on data from the first cycle. The factor structure imposed on the scales already used in the first cycle and repeatedly used in the second cycle of the survey was the result of analyses done based on data from the first cycle.

To conduct the analysis on the parenting scales for the NLSCY data, a factor analysis was conducted on the scale for the 0 to 23 months age group and the two scales for the 2 to 11 age

group separately. New factor structures emerged which are described in the Results Section below.

Once the factor structures were analysed and the items included in each factor were determined, scores were calculated. To produce the scores, 1 was subtracted from each item so that the lowest possible score value would be 0. For each of the four factors, a score of 0 indicates:

- the absence of positive interaction for the positive interaction factor;
- the absence of hostile/ineffective interaction for the hostile/ineffective factor;
- the absence of consistent parenting for the consistency factor;
- the absence of punitive interaction or aversion producing practices for the hostility/ineffective parenting factor.

Results (Cycle 1)

Children aged 0 to 23 months:

There were 4,696 children in the sample for the age group 0 to 23 months. The group was split into two sub-samples of 2,311 and 2,385 individuals, and the analysis for this age group was performed separately for each sub-sample. The non-response rate for the seven items ranged from 1.9 to 2.5%. Some individuals were excluded from the analysis that produced the factors. The exclusion criterion was as follows: individuals with one or more missing items. After the criterion was applied, there were 2,245 and 2,307 individuals left in the sub-samples to be analysed. No imputation was done. The factor analysis derived two factors for this age group: positive interaction (APRCS01), and ineffective (APRCS02). The items making up each factor are listed in the table below.

PARENTING SCALE FOR CHILDREN AGED 0 TO 23 MONTHS

FACTOR	SCORE	ITEMS
Positive interaction	APRCS01	APRCQ1, 2, 3, 6, 7
Ineffective	APRCS02	APRC4, 5

Cronbach's alpha (raw value) was computed with SAS using normalized weighted data. (In general, Cronbach's alphas computed by SAS are lower than those produced by SPSS.) For the positive interaction factor (APRCS01), Cronbach's alpha was 0.727. The item that had the greatest effect on this factor was APRCQ7; removing it lowers Cronbach's alpha to 0.656. For the hostile/ineffective factor (APRCS02), Cronbach's alpha was 0.394. (It should be noted that there were only two items for this factor, and the alpha can only be derived if one of the 2 items is removed.) After identifying the two factors, the next step was to calculate scores for each.

Scores could be calculated for only 132 individuals for the positive interaction factor, and for only 124 individuals for the hostile/ineffective factor because of missing values for the items for these factors.

Children aged 2 to 11:

There were 18,135 children in the sample for the age group 2 to 11. The group was split into two sub-samples of 9,090 and 9,045 individuals, and the analysis for this age group was performed separately for each sub-sample. The non-response rate for each of the eighteen items ranged from 2.1 to 2.7%. Some individuals were excluded from the analysis that produced the factors. The exclusion criteria were as follows: individuals with two or more items coded "missing" under positive interaction and hostility, and individuals with a single missing item under consistency. After the criteria were applied, there were 8,815 and 8,772 individuals left in the sub-samples to be analysed. Data were imputed for 12 items. The number of imputations ranged between 1 and 16. A total of 91 values were imputed. The factor analysis derived three factors for this age group: positive interaction (APRCS03), and hostility (APRCS04), and consistency (APRCS05). The items making up each factor are listed in the table below.

PARENTING SCALE FOR CHILDREN AGED 2 TO 11

FACTOR	SCORE	ITEMS
Positive interaction	APRCS03	APRC Q1, 2, 3, 6, 7
Ineffective	APRCS04	APRC Q4, 8*, 9, 13, 14, 15, 18
Consistency	APRCS05	APRC Q10, 11, 12*, 16*, 17*

* Item inverted when computing the score.

Cronbach's alphas for these factors are given in the table below. Normalilzed weighted data were used for the computations.

CRONBACH'S ALPHA FOR THE PARENTING SCALE FOR 2- AND 3-YEAR-OLDS

FACTOR	CRONBACH'S ALPHA (RAW)	ITEM THAT LOWERS CRONBACH'S ALPHA THE MOST IF IT IS EXCLUDED	CRONBACH'S ALPHA IF THE ITEM IS EXCLUDED
Positive interaction (APRCS03)	0.808	APRCQ2	0.749
Ineffective (APRCS04)	0.706	APRCQ13	0.654
Consistency (APRCS07)	0.660	APRCQ12	0.569

The scores for these factors could not be computed in 408, 482 and 534 cases respectively because of unreported values.

Parenting scale for children aged 2 to 11:

There were 18,135 children in the sample for the age group 2 to 11. The group was split into two sub-samples of 9,090 and 9,045 individuals, and the analysis for this age group was performed separately for each sub-sample. The non-response rate for the seven items analysed was about 2.5%. The exclusion criterion was as follows: individuals with one or more items coded "missing" were excluded. After this criterion was applied, there were 8,848 and 8,801 individuals left in the sub-samples to be analysed. No unreported values were imputed.

A factor was derived for this age group: rational (APRCS06). The items making up this factor are APRCQ21, 22, 23 and 24. Items 21 and 23 were inverted when computing the scores. The factor weights of variables APRCQ19, 20 and 25 were insufficient to be included.

Cronbach's alpha for this factor was 0.569. The item that had the greatest effect on this factor was APRCQ22; removing it lowers Cronbach's alpha to 0.377. (Normalized weighted data were used in the computations.)

The score for this factor could not be computed in 478 cases because of unreported values.

9.2.7 Depression Scale (PMK)

Introduction

The depression scale was administered to the PMK as part of the Parent Questionnaire. Questions for this scale (BDPPQ12A to BDPPQ12L) are a shorter version of the depression rating scale (CES-D), comprising 20 questions, developed by L. S. Radloff of the Epidemiology Study Center of the National Institute of Mental Health in the United States. This rating scale is used to measure the frequency of symptoms in the public at large. The occurrence and severity of symptoms associated with depression during the previous week are measured. The rating scale was reduced to 12 questions by Dr. M. Boyle of the Chedoke-McMaster Hospital of McMaster University.

This rating scale is aimed at gathering information about the mental health of respondents, with particular emphasis on symptoms of depression. Several members of the NLSCY advisory group of experts pointed out that the best way of proceeding was to measure one particular aspect of the PMK's mental health instead of trying to measure overall mental health. It was proposed that this section focus on depression for the following reasons: depression is a prevalent condition; it has been demonstrated that depression in a parent affects the children; present research on this subject is generally based on demonstration groups and not on population samples; and it is felt that introducing policies in this area could make a difference.

The depression rating scale includes twelve questions, each of which contains four response categories. In order that the lowest score value be 0, the value for each question was reduced by 1 in calculating the score. As well, the answer categories were reversed for questions having a negative loading (BDPPQ12F, Q12H, and Q12J). The total score (BDPPS01) may therefore vary between 0 and 36, a high score indicating the presence of depression symptoms.

Results

The factor structure of each scale was determined based on data from the first cycle. The factor structure imposed on the scales already used in the first cycle and repeatedly used in the second cycle of the survey was the result of analyses done based on data from the first cycle.

In analysing this scale, unweighted data[22] were used. The sample size was 13,439 PMKs. However, once the observations containing mostly missing values were eliminated, the analysis dealt with only 13,140 PMKs. The non-response rate for the various questions in the rating scale was roughly 2.0%, whereas for the total score, a non-response rate of 2.2% was obtained. There was no imputation for the variables in this rating scale.

[22] *Weighted data could not be used since the weights developed for the NLSCY are for children only, and not for parents.*

In spite of the possibility of extracting more than one factor from the depression rating scale, single-factor analysis was used since the interest was in developing a global depression index. Following the analysis, the 12 variables of the scale were all kept as components of this factor since all 12 loading values met the established threshold. The Cronbach alpha coefficient (calculated using SAS software) was 0.82. The variable ADPPQ12D showed the highest correlation (0.68) with the total score (once the variable was removed), whereas the variable showing the lowest correlation was ADPPQ12L with a correlation of 0.33. The Cronbach alpha coefficient calculated by omitting one variable was between 0.79 and 0.82 for the 12 variables.

9.2.8 Family Functioning Scale (Parent)

Introduction

Questions related to family functioning, i.e., BFNHQ01A to BFNHQ01L, were developed by researchers at the Chedoke-McMaster Hospital of McMaster University and have been used widely both in Canada and abroad. This scale is used to measure various aspects of family functioning, e.g. problem solving, communications, roles, affective involvement, affective responsiveness and behaviour control.

Question BFNHQ01M, drawn from the Follow-up to the Ontario Child Health Study, was added to the original scale to determine whether alcohol consumption had an effect on global family dynamics. However, it was not used in the analysis of the scale.

This scale is aimed at providing a global assessment of family functioning and an indication of the quality of the relationships between parents or partners. For this reason and because of the small number of questions, no attempt was made to measure the various aspects of family functioning.

Other surveys have shown that the relationship between family members has a considerable effect on children. The results of the Ontario Child Health Study have shown, for example, that there is an important link between family dysfunction and certain mental conditions in children.

The family functioning scale was administered to either the PMK or spouse/partner as part of the Parent Questionnaire. The unit of analysis for the scale is the family. The scale includes twelve questions, each of which contains four response categories. In order that the lowest score value be 0, the value of the categories was reduced by 1 in calculating the score. The order of the categories was reversed for questions having a negative loading (BFNHQ01A, Q01C, Q01E, Q01G, Q01I, and Q01K). The total score (BFNHS01) may therefore vary between 0 and 36, a high score indicating family **dysfunction**.

Results

The factor structure of each scale was determined based on data from the first cycle. The factor structure imposed on the scales already used in the first cycle and repeatedly used in the second cycle of the survey was the result of analyses done based on data from the first cycle.

In analysing this scale, unweighted data[23] were used. The sample size for the scale was 13,439 families. However, once the observations containing missing values were eliminated, the analysis dealt only with 13,190 families. The non-response rate for the different variables was between 1.3 and 1.4%, whereas for the total score, a non-response rate of 1.9% was obtained. There was no imputation for the variables in this scale.

Following single-factor analysis, all 12 variables of the scale were kept since the loading values were well above the established threshold. The Cronbach alpha coefficient (calculated using SAS software) was 0.88. The variable AFNHQ01L showed the highest correlation (0.66) with the total score (once the variable was removed), whereas the variable showing the lowest correlation was AFNHQ01A with a correlation of 0.51. The Cronbach alpha coefficient calculated by omitting one variable was stable at about 0.87 for the 12 variables.

When the values for the factor score for the family functioning scale are examined for the NLSCY children, the distribution that is observed is not a continuous one. In fact the most common score is 12. This is a result of the fact that there are 12 items in the scale and four possible rescaled values (0 to 3). Many respondents had a rescaled score of 1 for every item in the scale and thus an overall score of 12. This means that the respondent answered "agree" to all of the items in the scale which were positive and "disagree" to all of the negative items, as opposed to the more extreme answers of "strongly agree" or "strongly disagree." Basically this artifact in the scale score is due to the fact than many respondents were consistent in their answering pattern across items.

9.2.9 Activities

Activities Scale-10/13 Years (BACCS6)

The object of the activities scale is to measure the child's participation in home responsibilities. In Cycle 2, the factor scores were derived based on the factorial structure identified in Cycle 1.

Below is a description of the items that were included on the questionnaire to measure activities, the analysis used to construct the scale and the results of these analyses, all from Cycle 1.

Questionnaire Items

In Cycle 1, questions ACCSQ6A- ACCSQ6F were tested and questions ACCSQ6A- ACCSQ6E were used to construct the scale. Only Children aged 10 and 11 years answered these questions. This set of questions on responsibilities are from the Home Observation for Measurement of the Environment-Short Form questionnaire in the National Longitudinal Survey of Youth, Ohio State University.

[23] *Weighted data could not be used since the weights developed for the NLSCY are for children only, and not for families.*

Analysis of the NLSCY Data

To construct the Activities Scale for the NLSCY, a factor analysis was conducted to test the theoretical construct. In the factor analysis the items were multiplied by the child's normalized weight. An individual's statistical weight is normalized by dividing his/her weight (AWTCW01) by the average weight of all individuals. Consequently, the sum of the normalized weights is equal to the sample size.

Once the factor structures were analysed and the items included in the factor was determined, the score was calculated. No imputation was done on the values. If any values were missing the final score was set to missing. A value may be missing if the child refused to answer or did not know the answer to the question.

To produce the score, 1 was subtracted from each item so that the lowest score would be 0. The final score was derived by totalling the values of all items with non-missing values. The score ranges from 0 to 15. A score of 0 indicates the respondent does not participate in home responsibilities.

Results

In the sample there were 3,434 children aged 10 or 11 years. They were divided into two sub samples of size 1,705 and 1,729 and analysis was done on each sample. The non-response rates for the 5 items was 1.3%. Individuals with missing values were excluded from the analysis conducted for the purpose of constructing the factor. After these exclusions. The sub-samples contained 1,680 and 1,709 individuals respectively, for analysis purposes. No imputation took place. As a result of factor analysis, one factor was identified: the activities factor (AACCS6). Items AACCQ6A-AACCQ6E loaded into the factor.

Cronbach's alpha coefficients (raw values) were calculated with SAS, using the normalized weighted data. Please note that, in general, Cronbach's alphas calculated with SAS are lower than those produced by the SPSS software package. The Cronbach alpha for the activities score was 0.778. The item that affects the factor the most is AACCQ6B. If it were removed from the analysis, the Cronbach's alpha would drop to 0.705. The final activities score could not be calculated for 45 (1.3%) individuals, due to missing values for the items comprising this factor.

9.2.10 My Parents and Me Scale (BPRCbS07 and BPRCbS08) - Parent

The objective of the My Parents and Me scale is to measure the parent's perception of his/her relationship with his/her child. This was asked only for children 12 or 13 years of age. Below is a description of the items that were included in the My Parents and Me section of the parent

report questionnaire to measure family relations, the analysis used to construct the scale and the results of these analyses.

Questionnaire Items

Questions BPRCQ29A to BPRCQ29R were taken from the Western Australia Child Health Survey. The scale was developed by Lempers et al. (1989) based on work of Schaefer (1965) and Roberts et al. (1984) and measures parental nurturance, rejection and monitoring.

Analysis of the NLSCY Data

To construct the My Parents and Me Scale for the NLSCY, a factor analysis was conducted to test the theoretical construct. In the factor analysis the items were multiplied by the child's normalized weight. An individual's statistical weight is normalized by dividing his/her weight (BWTCW01C) by the average weight of all individuals. Consequently, the sum of the normalized weights is equal to the sample size.

Once the factor structures were analysed and the items included in each the factor were determined, the scores was calculated. Imputation was done for missing values. The imputed values were imputed using the SAS PRINQUAL procedure that determines which of the possible values for an item is the most plausible for an individual in view of his/her response profile, the response profiles of others in the sample, and the number of factors included in the analysis.

If too many values were missing the final score was set to missing. To produce the final scores, 1 was subtracted from each item so that the lowest score would be 0. The final score was derived by totaling the values of all items with non-missing values. A score of 0 indicates the following for the two factors that were found to exist in the My Parents and Me scale:

-a low degree of parental nurturance for the parental nurturance score;.
-a low degree of parental rejection for the parental rejection score; and

Results

In the sample there were 2,258 children aged 12 or 13 years. They were divided into two sub samples and analysis was done on each sub-sample. Individuals with missing values were excluded from the analysis conducted for the purpose of constructing the factor. After these exclusions the sub-samples contained 1,076 and 1.146 individuals respectively. As a result of the factor analyses, two factors were identified: the parental nurturance factor and the parental rejection factor. The items that comprised each factor are described in the following table.

MY PARENTS AND ME SCALE FOR CHIDLREN AGED 12 AND 13 YEARS OLD (PARENT REPORT).

FACTOR	SCORE	ITEMS
Parental Nurturance	BPRCbS07	BPRCQ29A, BPRCQ29H, BPRCQ29I, BPRCQ29L, BPRCQ29N, BPRCQ29R
Parental Rejection	BPRCbS08	BPRCQ29C, BPRCQ29G, BPRCQ29J, BPRCQ29K, BPRCQ29M, BPRCQ29P, BPRCQ29Q

Cronbach's alpha coefficients (raw values) were calculated with SAS, using the normalized weighted data. Please note that, in general, Cronbach's alphas calculated with SAS are lower than those produced by the SPSS software package. Cronbach's alphas for these factors are given in the table below.

CRONBACH'S ALPHA VALUES FOR MY PARENTS AND ME SCALE: 12/13 YEAR OLDS (PARENT REPORT)

FACTOR	CRONBACH'S ALPHA	ITEMS THAL LOWERED CRONBACH'S ALPHA THE MOST IF EXCLUDED	CRONBACH'S ALPHA IF THE ITEM IS EXCLUDED
Parental Nurturance (BPRCbS07)	0.780	BPRCQ29N	0.729
Parental Rejection (BPRCbS08)	0.747	BPRCQ29M	0.710

9.3 Child Scales from Self-completed Questionnaire

9.3.1 Friends and Family (self-complete, 10-13)

Friends and Family was one of the sections on the questionnaire completed by children in the 10 to 13 age group. The objective was to determine how well the child felt he/she was getting along with others.

The section collected information on numbers of close friends, time spent with friends, presence of someone the child can confide in, and the quality of relationships with others, such as parents, peers and teachers. This information is important in identifying the extent and quality of the child's social support network. To allow for comparison, the section includes questions which are also included on the Child's Questionnaire completed by the PMK.

There was one group of questions in this section which were part of a scale. Items BFFCQ01, BFFCQ02, BFFCQ03 and BFFCQ04 are intended to measure how well the child gets along with peers. It is part of the Peer Relations Sub-scale from the Marsh Self-Description Questionnaire, developed by H.W. Marsh.

Friends Scale (BFFCS01)

The object of the friends scale is to measure how well the child feels he/she gets along with his/her peers. In order to understand how the factorial structure was determined in Cycle 1, below is a description of the items that were included on the questionnaire in Cycle 1 to measure peer relations, the analysis used to construct the scale and the results of these analyses.

Questionnaire Items
In Cycle 1, questions AA1CQ01 to AA1CQ04 were used to construct the scale. This set of questions on getting along with peers is the Peer relations Subcale from the Marsh Self-Description Questionnaire.

Analysis of the NLSCY Data
To construct the Friends Scale for the NLSCY, a factor analysis was conducted to test the theoretical construct. In the factor analysis the items were multiplied by the child's normalized weight. An individual's statistical weight is normalized by dividing his/her weight (AWTCW01) by the average weight of all individuals. Consequently, the sum of the normalized weights is equal to the sample size.

Once the factor structures were analysed and the items included in the factor was determined, the score was calculated. No imputation was done on the values. If any values were missing the final score was set to missing. A value may be missing if the child refused to answer or did not know the answer to the question.

To produce the score, 1 was subtracted from each item so that the lowest score would be 0. The final score was derived by totalling the values of all items with non-missing values. The score ranges from 0 to 16. A score of 0 indicates the respondent does not have a lot of friends and does not have positive relations with other children.

Results

In the sample in Cycle 1 there were 3,434 children aged 10 or 11 years. They were divided into two sub samples of size 1,705 and 1,729 and analysis was done on each sample. The non-response rates for the 4 items ranged from 10.9% to 11.5%. Individuals with missing values were excluded from the analysis conducted for the purpose of constructing the factor. After these exclusions. The sub-samples contained 1,508 and 1,529 individuals respectively, for analysis purposes. No imputation took place. As a result of factor analysis, one factor was identified: the friends factor (AA1CS01). All items - AA1CQ01 to AA1CQ04 - loaded into the factor.

Cronbach's alpha coefficients (raw values) were calculated with SAS, using the normalized weighted data. Please note that, in general, Cronbach's alphas calculated with SAS are lower than those produced by the SPSS software package. The Cronbach alpha for the friends score was 0.779. The item that affects the factor the most is AA1CQ04. If it were removed from the analysis, the Cronbach's alpha would drop to 0.689. The final friends score could not be calculated for 397 (11.6%) individuals, due to missing values for the items comprising this factor.

9.3.2 Feelings and Behaviour (self complete, 10-13)

This section was part of the self-complete questionnaire given to children in the 10 to 13 age group. The objective of this section was to determine the child's perception of his/her general behaviour and the child's engagement in risk-taking behaviours.

This section replicates the behaviour checklist included on the Child's Questionnaire completed by the PMK for those aged 10-11 (Section 9.6) and the one on the Teacher's Questionnaire. It is intended to provide indicators of the following behaviours: conduct disorder, hyperactivity, inattention, physical aggression, indirect aggression, emotional disorder, anxiety and prosocial behaviours. In Cycle 2, the factor scores were derived based on the factorial structure identified in Cycle 1.

Analysis of the NLSCY Data

The following indicates the constructs or factors that the behaviour scale was intending to measure, the items that were included in the factor and the sources for the items.

- **Conduct disorder**:
  Items include AD1CQ01C, E, G, L, O, T, AA, DD, FF, JJ, and PP from the Ontario Child Health Study (OCHS).

- **Hyperactivity**
  Items include AD1CQ01B, I, N, P, S and W from the Ontario Child Health Study and AD1CQ1HH from the Montreal Longitudinal Survey.

- **Emotional disorder**
  Items include AD1CQ01F, K, Q, V, CC, MM, and RR from the Ontario Child Health Study.

- **Anxiety**
  Items include AD1CQ01Y and AD1CQ1II from the Montreal Longitudinal Survey and several of the OCHS emotional disorder items - AD1CQ01F, Q, V and CC.

- **Indirect aggression**
  Items include AD1CQ01J, R, Z, LL and TT from Lagerspetz, Bjorngvist and Peltonen of Finland.

- **Physical aggression**
  Items include AD1CQ01X from the Montreal Longitudinal Survey and AD1CQ01G, AA and NN from the Ontario Child Health Study.

- **Inattention**
  Items include AD1CQ01P from the Ontario Child Health Study and AD1CQ1EE, KK, QQ from the Montreal Longitudinal Survey.

- **Prosocial behaviour**
  Items include AD1CQ01A, H, M GG and OO from the Ontario Child Health Study and AD1CQ01D, U, BB, SS, and UU from the Montreal Longitudinal Survey.

In Cycle 1, to construct the Behaviour Scale for the NLSCY, a factor analysis was conducted to test the theoretical construct. ***In order to be consistent with the behaviour scale created from the parent questionnaire, the factor structure which emerged from the 4-11 behaviour scale was imposed on the 10/11 behaviour scale.***

In the factor analysis the items were multiplied by the child's normalized weight. An individual's statistical weight is normalized by dividing his/her weight (AWTCW01) by the average weight of all individuals. Consequently, the sum of the normalized weights is equal to the sample size.

Once the factor structures were analysed and the items included in each the factor were determined, the scores was calculated. Some items were imputed. The imputed values were imputed using the SAS PRINQUAL procedure that determines which of the possible values for an item is the most plausible for an individual in view of his/her response profile, the response profiles of others in the sample, and the number of factors included in the analysis.
To produce the final scores, 1 was subtracted from each item so that the lowest score would be 0. The score for each factor on the scale was arrived at by totalling the values of the items that made up the factor (including imputed values). The score was set to 'missing' if too many of the values of any items included in the fator were unreported. A value may be missing if the child refused to answer the item. A score of 0 indicates that the child has no problems for any of the factors in the behaviour scale with the exception of the prosocial factor, where a score of 0 indicates the absence of prosocial behaviour.

Results

In the sample there were 3,434 children aged 10 or 11 years. They were divided into two sub samples of size 1,705 and 1,729 and analysis was done on each sample. The non-response rates for the 8 items ranged from 13.6% to 16.7%. Individuals with missing values were excluded from the analysis conducted for the purpose of constructing the factor. After these exclusions. The sub-samples contained 1,352 and 1,398 individuals respectively, for analysis purposes. As a result of imposed factor analysis, five factors were identified: hyperactivity-inattention, prosocial behaviour, emotional-disorder-anxiety, physical aggression-conduct disorder, and indirect aggression. The items that comprised each factor are described in the following table.

BEHAVIOUR SCALE FOR 10 AND 11 YEARS OLD.

FACTOR	SCORE	ITEMS
Indirect aggression	AD1CS01	AD1CQ01J, AD1CQ01R, AD1CQ10Z, AD1CQ10LL, and AD1CQ01TT
Emotional disorder	AD1CS02	AD1CQ1F, AD1CQ1K, AD1CQ1Q, AD1CQ1V, AD1CQ1CC, AD1CQ1II, AD1CQ1MM, and AD1CQ1RR
Conduct disorder and physical aggression	AD1CS03	AD1CQ1G, AD1CQ1X ,AD1CQ1AA, AD1CQ1FF, AD1CQ1JJ, and AD1CQ1NN
Hyperactivity/inattention	AD1CS04	AD1CQ1B, AD1CQ1I, AD1CQ1N, AD1CQ1P, AD1CQ1S, AD1CQ1W, AD1CQ1HH and AD1CQ1QQ
Prosocial behaviour	AD1CS05	AD1CQ1A , AD1CQ1D, AD1CQ1H, AD1CQ1M, AD1CQ1U, AD1CQ1BB, AD1CQ1GG, AD1CQ1OO, AD1CQ1SS, and AD1CQ1UU

Cronbach's alpha coefficients (raw values) were calculated with SAS, using the normalized weighted data. Please note that, in general, Cronbach's alphas calculated with SAS are lower than those produced by the SPSS software package. Cronbach's alphas for these factors are given in the table below.

CRONBACH'S ALPHA VALUES FOR BEHAVIOUR SCALE: 10/11 YEAR OLDS

FACTOR	CRONBACH'S ALPHA	ITEMS THAL LOWERED CRONBACH'S ALPHA THE MOST IF EXCLUDED	CRONBACH'S ALPHA IF THE ITEM IS EXCLUDED
Indirect aggression (AD1CS01)	0.728	AD1CQ1LL	0.657
Emotional disorder (AD1CS02)	0.760	AD1CQ1II	0.717
Conduct disorder and physical aggression (AD1CS03)	0.738	AD1CQ1AA	0.678
Hyperactivity/inattention (AD1CS04)	0.751	AD1CQ1QQ	0.717
Prosocial behaviour (AD1CS05)	0.766	AD1CQ1SS	0.741

The scores for these factors could not be computed in, 566 (16.5%), 597 (17.4%), 585 (17%), 621 (18.1%) and 587 (17.1%) cases respectively because of unreported values.

9.3.3 My Parents and Me (self-complete 10-13)

This section was part of the self-complete questionnaire given to children in the 10 to 13 age group. The objective was to complement the Parenting Section on the Child's Questionnaire completed by the PMK by gathering information directly from the child regarding his/her perception of his/her relationship with parents. For the self-completed questionnaire, it also was considered important to obtain a measure of parental supervision (i.e., monitoring), as this has been shown to be linked to child outcomes - there is a correlation between a lack of supervision and negative outcomes, such as juvenile delinquency and other risk-taking behaviours.

The scale that was used was also used in the Western Australia Child Health Survey. It was developed by Lempers et al (1989) based on work of Schaefer (1965) and Roberts et al (1984) and measures parental nurturance, rejection and monitoring. This information will complement the constructs measured in the parent-completed Child's Questionnaire (positive child-parent interaction, hostile/ineffective child-parent interaction, and consistent child-parent interaction, aversive and non-aversive parent management techniques.)

My Parents and Me Scale (BPMCbS1A, BPMCbS2A, BPMCbS1B, BPMCbS2B)

The objective of the My Parents and Me scale is to measure the child's perception of his/her relationship with his/her parents and parental supervision. Below is a description of the items that were included on the 10/11 year old and 12/13 year old questionnaire to measure family relations, the analysis used to construct the scale and the results of these analyses.

Questionnaire Items

On the 10/11 year old questionaire, questions BPMCQ1A to BPMCQ1Q were taken from the Western Australia Child Health Survey. In addition to these questions, on the 12/13 year old questionnaire, questions BPMCbQ1R and BPMCbQ1S were also used. The scale was developed by Lempers et al. (1989) based on work of Schaefer (1965) and Roberts et al. (1984) and measures parental nurturance, rejection and monitoring.

Analysis of the NLSCY Data

To construct the My Parents and Me Scale for the NLSCY, a factor analysis was conducted to test the theoretical construct. In the factor analysis the items were multiplied by the child's normalized weight. An individual's statistical weight is normalized by dividing his/her weight (BWTCW01C) by the average weight of all individuals. Consequently, the sum of the normalized weights is equal to the sample size.

Once the factor structures were analysed and the items included in each the factor were determined, the scores was calculated. Imputation was done for missing values. The imputed values were imputed using the SAS PRINQUAL procedure that determines which of the possible values for an item is the most plausible for an individual in view of his/her response profile, the response profiles of others in the sample, and the number of factors included in the analysis.

If too many values were missing the final score was set to missing. To produce the final scores, 1 was subtracted from each item so that the lowest score would be 0. The final score was derived by totaling the values of all items with non-missing values. A score of 0 indicates the following for the two factors that were found to exist in the My Parents and Me scale:

-a low degree of parental nurturance for the parental nurturance score;.
-a low degree of parental rejection for the parental rejection score; and

Results (Cycle 2)

The factor analysis for 10/11 year olds and 12/13 year olds was done separately, as there were slightly different items for the two groups. In the sample of 10/11 year olds there were 2,115 children, while there were 2,154 children in the 12/13 year old sample . For both age groups, the sample was divided into two sub samples and analysis was done on each sample. Individuals with missing values were excluded from the analysis conducted for the purpose of constructing the factor. After these exclusions the sub-samples for the 10/11 year olds

contained 838 and 895 individuals respectively, while the sub-samples for the 12/13 year olds contained 891 and 938 individuals.

As a result of the factor analyses, two factors were identified for both the 10/11 and 12/13 year olds: the parental nurturance factor and the parental rejection factor. The items that comprised each factor are described in the following table.

MY PARENTS AND ME SCALE FOR CHIDLREN AGED 10 AND 11 YEARS OLD.

FACTOR	SCORE	ITEMS
Parental Nurturance	BPMCbS1A	BPMCQ1A, BPMCQ1H, BPMCQ1I, BPMCQ1K, BPMCQ1M, BPMCQ1Q
Parental Rejection	BPMCbS2A	BPMCQ1C, BPMCQ1G, BPMCQ1J, BPMCQ1L, BPMCQ1O, BPMCQ1P

MY PARENTS AND ME SCALE FOR CHILDREN AGED 12 AND 13 YEARS OLD.

FACTOR	SCORE	ITEMS
Parental Nurturance	BPMCbS1B	BPMCQ1A, BPMCQ1H, BPMCQ1I, BPMCQ1K, BPMCQ1M, BPMCQ1Q
Parental Rejection	BPMCbS1B	BPMCQ1C, BPMCQ1G, BPMCQ1J, BPMCbQ1R, BPMCQ1L, BPMCQ1O, BPMCQ1P

Cronbach's alpha coefficients (raw values) were calculated with SAS, using the normalized weighted data. Please note that, in general, Cronbach's alphas calculated with SAS are lower than those produced by the SPSS software package. Cronbach's alphas for these factors are given in the table below.

CRONBACH'S ALPHA VALUES FOR MY PARENTS AND ME SCALE: 10/11 YEAR OLDS

FACTOR	CRONBACH'S ALPHA	ITEMS THAL LOWERED CRONBACH'S ALPHA THE MOST IF EXCLUDED	CRONBACH'S ALPHA IF THE ITEM IS EXCLUDED
Parental Nurturance (BPMCbS1A)	0.804	BPMCQ1M	0.763

Parental Rejection (BPMCbS2A)	0.561	BPMCQ1O	0.504

CRONBACH'S ALPHA VALUES FOR MY PARENTS AND ME SCALE: 12/13 YEAR OLDS

FACTOR	CRONBACH'S ALPHA	ITEMS THAL LOWERED CRONBACH'S ALPHA THE MOST IF EXCLUDED	CRONBACH'S ALPHA IF THE ITEM IS EXCLUDED
Parental Nurturance (BPMCbS1B)	0.857	BPMCQ1Q	0.826
Parental Rejection (BPMCbS1B)	0.703	BPMCbQ1R	0.660

9.3.4 About me (self-complete 10-13)

About Me Scales (BAMCS01, BAMCS02)

The objective of the about me scale is to measure the child's overall self-esteem and perception of physical appearance. Specifically, two scales were used: one was designed to measure overall self-esteem and the other was designed to measure perceptions of physical appearance.

In Cycle 2, the factor scores were derived based on the factorial structure identified in Cycle 1. Below is a description of the items that were included on the questionnaire to measure these scales, the analysis used to construct the scale and the results of these analyses, all from Cycle 1.

Questionnaire Items

In Cycle 1, questions AA1CQ01A to AA1CQ01D on overall self esteem were taken from the General-Self Scale of the Marsh Self Description Questionnaire developed by H.W Marsh. Questions AA1CQ01E to AA1CQ01H on perceptions of physical appearance were taken from the Physical Appearance Scale of the Marsh Self Description Questionnaire developed by H.W Marsh

Analysis of the NLSCY Data

To construct the About me Scale for the NLSCY, a factor analysis was conducted to test the theoretical construct. In the factor analysis the items were multiplied by the child's normalized weight. An individual's statistical weight is normalized by dividing his/her weight (AWTCW01) by the average weight of all individuals. Consequently, the sum of the normalized weights is equal to the sample size.

Once the factor structures were analysed and the items included in each the factor were determined, the scores was calculated. No imputation was done for missing values. If any values were missing the final score was set to missing. To produce the final scores, 1 was subtracted from each item so that the lowest score would be 0. The final score was derived by totalling the values of all items with non-missing values. A score of 0 indicates the following for the two factors that were found to exist for in the About Me scales:

-a lack of general self esteem for the general self scale.
-a negative perception of physical appearance for the physical appearance score.

Results

In the sample there were 3,434 children aged 10 or 11 years. They were divided into two sub samples of size 1,705 and 1,729 and analysis was done on each sample. The non-response rates for the 8 items ranged from 14% to 15.8%. Individuals with missing values were excluded from the analysis conducted for the purpose of constructing the factor. After these exclusions. The sub-samples contained 1,371 and 1,413 individuals respectively, for analysis purposes. As a result of factor analysis, two factors were identified: the general self factor and the physical appearance factor. The items that comprised each factor are described in the following table.

GENERAL SELF SCALE FOR CHIDLREN AGED 10 AND 11 YEARS OLD.

FACTOR	SCORE	ITEMS
General Self	AC1CS02	AC1CQ01A, AC1CQ01B AC1CQ01C AC1CQ01D
Physical Appearance	AC1CS01	AC1CQ01E, AC1CQ01F AC1CQ01G AC1CQ01H

Cronbach's alpha coefficients (raw values) were calculated with SAS, using the normalized weighted data. Please note that, in general, Cronbach's alphas calculated with SAS are lower than those produced by the SPSS software package. For the general self score the Cronbach alpha was 0.728. The item that affects the factor the most is AC1CQ01C. If it were removed from the analysis, the Cronbach's alpha would drop to 0.629. For the physical appearance score the Cronbach alpha was 0.874. The item that affects the factor the most is AC1CQ01E. If it were removed from the analysis, the Cronbach's alpha would drop to 0.811. Once the factors were determined, the next step was to calculate the scores for each of the two factors. For the general self factor, scores could not be calculated for 555 individuals (16.2%), due to missing values for the items comprising this factor. For the physical appearance factor, scores could not be calculated for 589 individuals (17.2%), due to missing values for the items comprising this factor.

9.3.5 Depression Scale (self-complete 12-13)

Depression Scale (BHTCbS1B)

In order to be consistent with the depression scale created from the parent questionnaire, the factor structure which emerged from the parental scale for PMK depression was imposed on the 12/13 depression scale.

In order to produce the score, 1 was subtracted from each item so that the lowest score would be 0. The final score was derived by totaling the values of all items with non-missing values. As well, the answer categories were reversed for questions having a negative loading (BHTCb11F, 11H, and 11J). The total score (BHTCbS1B) may therefore vary between 0 and 36, a high score indicating the presence of depression symptoms.

In order to understand how the factorial structure was determined in Cycle 1 for the PMK, please see Section 9.11 for a description of the items that were included on the questionnaire in Cycle 1 to measure depression, the analysis used to construct the scale and the results of these analyses.

9.4 Education (Parent)

The Education Section was completed for both the PMK and spouse/partner. The objective was to gather information on the years of school completed, educational attainment, and current attendance at an educational institution.

Research (for example, the Ontario Child Health Study and the National Longitudinal Survey of Youth in the United States) has indicated a link between maternal educational attainment, the home environment and child development. The questions on full-time and part-time school attendance provide an indicator of the main activities of the PMK and the spouse/partner.

The variables (BEDPD02 for the PMK and BEDSD02 for the spouse/partner) have the following values.

- less than secondary
- secondary school graduation
- beyond high school
- college or university degree (including trade).

The other education variable included is current school status and whether attendance is full-time or part-time.

9.5 Socio-demographic Characteristics

The objective of the Socio-demographic Section was to gather information on immigration, ethnic background and the language profile of household members. This will allow analysis for various components of the Canadian population and will permit identification of visible minorities.

As well, there were questions on religious affiliation and frequency of attendance at religious services. Religion, particularly frequency of attendance, is acknowledged as having a positive influence on a child's development.

It was necessary to suppress many of the variables in this section on the micro data file due to confidentiality concerns. The questions on country of birth, ethnicity and religion have all been suppressed while frequency of attendance at religious services has been included.

The questions on mother tongue and language of conversation are included on the micro data file but only with aggregated answer categories:

- English only
- French only
- English and French only
- at least one "other" language indicated.

The aggregated variables for language of conversation are labelled ASD**P**D05B, ASD**S**D05B, and ASD**C**D05B, for the **P**MK, **S**pouse/partner and **C**hild on the micro data file. The mother tongue variables are ASDPD06B, ASDSD06B and ASDCD06B.

For the immigrant population, a derived variable was created to indicate number of years since first immigrating to Canada. It was possible to put a grouped version of this derived variable on the micro data file (ASDPD02B, ASDSD02B, ASDCD02B).

Since there are many variables in this section which have been suppressed for the micro data file, researchers who are particularly interested in conducting analyses on socio-demographic variables are encouraged to consider making use of the remote access service described in Section 13.3.

9.6 Labour Force (Parent)

Employment stability impacts the home environment, both in terms of income and stress levels. Research, conducted for the Ontario Child Health Study, indicates that parental unemployment can adversely impact child mental health.

The Labour Force Section was completed for both the PMK and spouse/partner. The main objective of the section was to determine employment stability as an indicator of the continuity

of employment income. Questions included, periods of absence from work, reason for the most recent absence, hours worked, and work arrangements (e.g. shifts) during the previous year. Information was collected on the main job and on all jobs for a one-year period.

Respondents were asked to identify what they considered to be their main job over the previous year (if they had more than one job). A complete description was recorded for this main job and industry and occupation coding was carried out (using 1980 Standard Industrial Classification codes and 1980 Standard Occupational Classification codes).

Data on wages and salaries for this main job were collected. Wage rate data provides an additional source of information on income. This data will be useful in analysing choices which parents, particularly mothers, face in deciding to stay at home or to return to the labour force.

9.6.1 Work Duration Derived Variables

With the data collected in the Labour Force Section it was possible to create a series of derived variables to describe the stability of work for the PMK and spouse/partner over the previous year.

As mentioned above, a series of questions were asked about all jobs the PMK and spouse/partner held during the previous year. As well, in order to address absences within a job the following question was asked as the initial lead-in question to a job:

Did you have that job one year ago, without a break in employment since then?

There is, moreover, a derived variable (BL FPD33) for indicating the number of weeks worked by the PMK in a job or company the previous year.

In the first cycle of the survey, an employment vector of 53 weeks was established based on information about each job held, to a maximum of six jobs. To reduce the respondent's response burden, this collection method was abandoned in favour of a more general section. A good many variables derived from Cycle 1 were reproduced, but it should be noted that while considerable effort was made to keep the same definitions, the collection tool was changed substantially.

With the current collection tool, it is still possible to gather labour force data for the previous year, but in a more general way. A series of questions was used to determine the number of weeks worked in the 12 previous months, the number of weeks the individual was absent from work, the number of weeks the individual was without work but seeking employment, and so on. Moreover, the tool focuses on the current main job or, if applicable, the most recent job. A detailed description of this job was obtained (employer, type of company, nature of the work, main duties, status, hours worked, salary).

This release includes other derived variables which describe the employment picture over the reference year, such as number of weeks worked part-time, number of weeks worked full time, etc.

9.7 Demographic Variables

The demographic variables discussed in this section refer to variables collected on the household roster. As part of the household roster some basic demographic information (e.g., age, gender, marital status) was collected for all members of the child's household. The relationship grid was also completed as part of this questionnaire i.e., the relationship of everyone in the household to everyone else. Using this information it was possible to create an extensive set of variables to describe the child's family situation. Most of these derived variables are critical to the analyses of NLSCY data and are described in Section 8 (NLSCY Concepts and Definitions).

If was necessary to perform an extensive series of edits on the data that were collected as part of the relationship grid. There were some edits that were carried out as part of the CAI system during collection. However in the data that were received at Head Office there were still inconsistencies.

The following are some examples of the types of editing that was carried out:

- in all relationships reported, a person could not have more than two parents
- the difference in age between a husband and wife had to be less than 29 years.

In total there were over 30 relationship edits performed. Some of the edits were what is known as "**soft**" edits and some were "**hard.**" The first example was a hard edit and the second a soft edit. For all edit failures, the records for the entire household were reviewed manually for obvious mistakes. A correction **had** to be made for the **hard** edit failures. For the **soft** edit failures a correction was made if it was deemed appropriate to do so.

As well there were edits carried out comparing the relationship grid to information collected in the Custody Section. For the most part, in the case of discrepancies, priority was placed on the custody information, since this was collected from the PMK and the information was more detailed. The roster was completed by a knowledgeable household member, not necessarily a parent.

The major source of error for relationship data had to do with step children. There were several cases where a female parent was living with a biological child and a spouse or common-law partner. The relationship of the male partner to the child was coded as "unrelated." For questionnaires completed in French this relationship was often coded as "in-law." In the edit, the relationship code was changed to step child for these cases. As a result of the relationship edits the number of children in step families increased by close to 40%.

Due to confidentiality concerns it was necessary to suppress some of the demographic variables on the micro data file.

- Detailed age in years for the child has been included, i.e., age for up to four children in the household. As a result of including detailed age, it was necessary to suppress collection date. Collection for the NLSCY took place over an eight-

month period. By suppressing collection date this casts some doubt on the exact ages of the children.

- For the PMK it was only possible to have age in ranges (15 to 24, 25 to 29, 30 to 34, 35 to 39, and 40+). Age for the spouse/partner has been suppressed entirely. For male PMKs not living with a spouse/partner age group has been set to not-stated. For female PMKs not living with a spouse/partner age group has been set to not-stated for some cases. In total age group of the PMK was set to not-stated for 486 children on the micro data file.

- There were 36 families where a child did not live with a parent. For the PMK and spouse of these children: age, marital status, highest level of education and main source of household income have been set to not stated.

- Cases where the PMK was male and there was no spouse/partner caused some concerns with respect to confidentiality. For these cases age group, highest level of education, main source of household income and the province code have all been set to "not-stated." There were 76 households and 255 children on the file in this category.

- Family status has been collapsed such that male lone parents and children who do not live with a parent have been collapsed into one category.

- 224 households had a child who was either a twin or triplet. For triplets, the age of one of these children has been suppresed. For both groups, province has been set to not stated.

9.8 Medical/Biological

The Medical /Biological Section was completed for children in the 0 to 3 age group. The major objective was to collect information on factors such as gestational age and birth weight. These factors have been shown to have a direct impact on a child's growth and development. For example, in the long term, underweight babies face higher risks of poor health as well as longer-lasting developmental difficulties.

For each child under two, the nature of the delivery, general health of the child at birth and the use of specialized services following the birth were collected in this section. The NLSCY also investigated the biological mother's pregnancy and delivery history, topics such as the mother's breast-feeding experiences and prenatal lifestyle.

Since birth weight is such an important variable, caution was taken in editing this variable. The records for children with very low birth weights (< 1.5 kilograms) were examined to verify that the response was legitimate. Other variables considered in the edit were the length of the baby at birth, the number of days early of the delivery, the conditions of the delivery (e.g., multiple birth and special medical care) and the health of the child at birth. If there was nothing to corroborate the low birth weight it was set to "not-stated."

On the micro data file it was necessary to cap birth weight at the lower end at 2.5 kilograms and less for confidentiality reasons. As well, for multiple births the variable was capped at the upper end at two or more (i.e., twins).

There were a couple of derived variables created for this section that bear note. Two variables were derived to indicate the gestational age of the child. AMDCD06 gives the gestational age in days and AMDCD07 indicates if the child was born prematurely (gestational age 258 days or less), in the normal range (gestational age 259 to 293 days) or late (gestational age 294 days or later). For children in the 0 to 3 age group 9.7% were born early, 89.0% were born in the normal range and 1.2% were born late.

A variable was derived (AMDCD08) to indicate if the child was of normal birth weight (2500 grams), moderately low birth weight (1500 to 2499 grams) or very low birth weight (< 1500 grams). For children in the 0 to 3 age group 94.3% were of normal birth weight, 4.9% were of moderately low birth weight and 0.8% were of very low birth weight.

These estimates of premature babies and low birth weight babies are in line with what is found in the literature.

9.9 Mathematics and Reading Comprehension Tests

In cycle 2, three changes were done relating to the NLSCY testing strategy:

1) The reading comprehension test was introduced in Cycle 2 of the survey, while the mathematics test was already part of Cycle 1. These tests are administered to children in grade 2 and above and they are administered in the school. During the household interview, parents were asked to agree to the tests being administered to the child at school.

2) A new indicator of mathematics and reading skill was administered at the home to help identify more precisely the child's academic level. The indicator consists of five vocabulary questions and five questions on mathematical concepts and applications with multiple choice answers: the questions were taken from the second edition of the Canadian Achievement tests (CAT/2). The CAT/2 is a series of tests to measure basic skills in a variety of subject areas taught in schools.

3) In Cycle 2 of the NLSCY, there are separate versions of the mathematics and reading comprehension tests for each academic grade level, a total of seven in all. Thus, students in Grade 2 completed the level 2 test, students in Grade 3, the level 3 test, and so on to level 8 for students in Grade 8 or above. In some instances, students were given a higher level test. Seventy-five per cent of the children who scores 9 or 10 out of a total of 10 on the skills indicator were given a higher level test than their actual level. This approach was used to offset the serious problem of the ceiling effect encountered during Cycle 1 with the mathematics test, especially in Grades 3 and 5.

The mathematics and reading comprehension tests were administered from the same booklet by the child's teacher, in class, using a multiple-choice questionnaire.

Mathematics test

This test was a short version of the CAT/2 mathematical operations test. The CAT/2 mathematical operations test measures the student's ability to do addition, subtraction, multiplication and division operations on whole numbers, decimals, fractions, negatives and exponents. Problem solving involving percentages and the order of operations are also measured. The short version of the test developed for the purposes of the NLSCY now consists of 15 questions at each level.

Each child who took the mathematics test was given a gross score and a scaled score. The gross score is obtained simply by adding the number of correct answers. The scaled score is derived from standards established by the Canadian Test Centre (CTC). The CTC developed these standards from a sample of Canadian children from all 10 provinces (however, the test has been developed in French only and so in Quebec, the sample represents only the English schools), which is referred to as the normative sample. The children from the normative sample received the complete test. The scaled scores are units of a single scale with equidistant intervals that covers all of the grade levels. The scale was developed using a Thurstone procedure derived from the classical testing theory. The scaled CTC scores range from 1 to 999. The advantage of using a scaled score is that it makes it possible to follow a child's progress over the years by comparing his/her scaled score to the average scaled score calculated for the grade level, as well as by examining individual growth curves.

The fact that a short test was used for children in the NLSCY sample meant that it was not possible to directly associate the CTC scaled scores with the gross scores obtained in the survey. For this reason, the CTC normative sample was used to calculate the percentile rank for each gross score but using only the 15 questions of the short NLSCY test. The normative score was then interpolated by inserting the percentile rank obtained with the 15 questions of the short test between the percentiles of the complete test. For example, using level 6, we find in the short test a percentile rank of 2.2% for a gross score of 1. On the complete test, the percentile ranks of 2.0% and 3.7% correspond to gross scores of 5 and 6 and to scaled scores of 332 and 348 respectively. After linear interpolation, we obtain a scaled score of 334 for the gross score of 1 on the short version of the test.

The table below shows the correlation between the gross scores and the scaled scores by grade for the NLSC mathematics test. The scaled scores for this test range from 200 to 800 for Cycle 2.

Correlation between gross scores and scaled scores by grade for the Cycle 2 mathematics test

Gross scores	Scaled scores						
	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
0	204	238	264	293	314	330	362
1	215	264	281	321	334	349	384
2	232	281	312	349	364	389	417
3	249	300	336	372	388	427	448
4	259	315	357	390	408	457	477
5	268	326	376	407	428	484	499
6	277	338	392	421	446	506	519
7	286	348	405	434	460	526	537
8	294	358	417	445	476	546	561
9	302	368	428	458	490	563	583
10	310	379	439	471	505	580	603
11	320	391	451	484	520	602	625
12	331	405	466	498	537	620	649
13	345	420	487	516	562	644	673
14	368	442	515	539	585	665	712
15	402	479	550	569	624	701	794

The next table compares the distribution of children with a perfect score on the mathematics test between Cycle 1 and Cycle 2. Note that the ceiling effect encountered in Cycle 1 has been significantly reduced, especially in Grades 3 and 5. The measures taken (a separate test for each grade level, the use of 15 questions for each test and the skills indicator) definitely went a long way to improving the results. However, a ceiling effect still remains at the Grade 2 level. This is due in part to the fact that the locator was not used for grade 2. There will be some more modifications to the test in cycle 3. As for the other grade levels, the distribution tends to be asymmetrical to the right, except for Grades 7 and 8, which have a normal distribution.

Comparison of the distribution of children with a perfect score in Cycle 1 and Cycle 2 by grade

	Percentage of children with a perfect score in Cycle 1	Percentage of children with a perfect score in Cycle 2
Grade 2	10.6%	9.3%
Grade 3	38.0%	5.6%
Grade 4	3.2%	2.8%
Grade 5	14.7%	4.2%
Grade 6	4.5%	3.1%
Grade 7	NA	0.9%
Grade 8	NA	1.8%

Reading comprehension test

The reading comprehension test, like the mathematics test, was also developed in part from the CAT/2. However, since the CAT/2 contain only English passages, French passages had to be chosen from another source by educators at Sherbrooke University. The test is designed to measure basic reading skills. The test's objectives cover information recall, analysis of passages, identification of the main idea, interpretation of various types of writing and critical evaluation. For each grade level, the test developed for the NLSC consists of four reading passages totalling 20 questions. Each test consists of two original English passages and two original French passages in order to make the test as fair as possible. In addition, between two consecutive grades, there are always two common passages or 10 items.

Each child who took the reading test was given a gross score and a scaled score. The gross score is obtained in the same way as for the mathematics test by adding the number of correct answers. However, the scaled score is calculated differently than for the mathematics test. Since the CTC did not have standards for this test, we had to develop our own. The approach of the item response theory (IRT) seemed indicated. Unlike the approach of the classical theory, the IRT makes it easier to scale the scores in order to

ensure comparability from year to year because there are common items linking two grades. Among the single dimension models, the two-parameter logistical model was chosen for the reading test. This model takes into consideration both the difficulty and the discrimination of the item. In this way, the IRT takes into consideration the pattern of responses. Two children with the same gross score will not have the same scaled score unless they answered exactly the same questions correctly. For example, a child who answered the 5 easiest questions correctly would have a lower scaled score than the one who answered the 5 hardest questions correctly. The scaled scores of the Cycle 2 reading comprehension test ranged from 100 to 400.

A factor analyse was done for each grade, which confirmed that there was only one dominant factor. A differential item functioning analysis (DIF) was also done for the two languages, namely, English and French. This analysis identified those items on which children of equal skill, but who speak different languages, would have a different probability of answering the item correctly. From the analysis, it was possible to identify potentially problematic items and to exclude them from the calculation of the scaled score. In some cases, the bias could be caused by a problem with translation. Items showing a negative biserial correlation coefficient were also eliminated. Numerous corrections will be made to the English and French passages in Cycle 3 in order to improve the translation. The Bilog-MG software was used for the DIF analysis, as well as to calculate the scaled scores.

10 Data Quality

The estimates derived from this survey are based on a sample of children. Somewhat different values might have been obtained if a complete census had been taken using the same questionnaires, interviewers, supervisors, processing methods, etc. The difference between the estimates obtained from the sample and the results from a complete count taken under similar conditions is called the sampling error of the estimates.

Errors which are not related to sampling may occur at almost any phase of a survey. Interviewers might misunderstand the instructions, respondents might make errors while answering the questions, the answers might be incorrectly entered on the questionnaire, and errors might be introduced while processing and tabulating the data. These are all examples of non-sampling errors.

In this section some of the non-sampling errors that occurred in the NLSCY are discussed. Non-response for the various components of the NLSCY is discussed in detail. Further information regarding data quality in the various sections of the NLSCY questionnaire will be found in Section 9.

Defining the Term Respondent

In certain circumstances, it is not possible to gather all the data about a child. In such cases, it is necessary to implement an operational definition to distinguish children for whom there is sufficient information for them to be entered into the microdata file, from other children. The definition of the term respondent used in cycle 1 was again used for cycle 2. According to this definition, a child is a respondent if there is enough information about at least one child in his household (see Section 6.3 for more details).

10.1 Response Rates

Cross-Sectional Response Rate

The cross-sectional response rate (or collection rate), at the household level, is shown in the following table. Note that this is the response rate observed for all households which we attempted to contact in cycle 2. This rate does not provide an indicator of the quality of cross-sectional estimates. In fact, such an indicator would take into consideration the non-response rate of cycle 1. Instead, the rates shown in this table reflect the collection efficiency reached during the second cycle.

NLSCY - Cross-Sectional Response Rate by Province

PROVINCE	SAMPLED HOUSE-HOLDS[24]	RESPONDING HOUSEHOLDS	RESPONSE RATE
Newfoundland	738	688	93.2%
Prince Edward Island	388	362	93.3%
Nova Scotia	953	859	90.1%
New Brunswick	1,371	1,187	86.6%
Quebec	2,757	2,543	92.2%
Ontario	3,815	3,441	90.2%
Manitoba	1,025	959	93.6%
Saskatchewan	1,056	983	93.1%
Alberta	1,232	1,128	91.6%
British Columbia	1,210	1,098	90.7%
TOTAL[25]	14,545	13,248	91.1%

The cross-sectional sample included longitudinal households sampled during cycle 1, as well as households contacted for the first time during cycle 2 (newborn children selected from the LFS and New Brunswick supplement). Since longitudinal households had agreed to cooperate in the first cycle of the survey[26], the response rate observed for these households was slightly higher than for households contacted for the first time.

[24]*Including households with at least one child 0 to 11 years of age at the time of the NLSCY interview.*

[25]*Excluding Yukon and the Northwest Territories.*

[26]Only respondents to the first cycle were again contacted for the second cycle (see Section 4.2).

NLSCY - Cross-Sectional Response Rate by Sample Source

	SAMPLED HOUSEHOLDS	RESPONDING HOUSEHOLDS	RESPONSE RATE
Longitudinal households	11,144	10,216	91.7%
Newborn children selected from the LFS	2,915	2,636	90.4%
New Brunswick supplement	486	396	81.5%
Total	14,545	13,248	91.1%

As well, the reason for household non-response will be different depending on whether the household is longitudinal or not. In fact, longitudinal households are usually more apt to take part in the survey (having already done so in cycle 1). However, some households may have moved between the first and second collection cycles. As a result, it is sometimes necessary to track down the longitudinal children before proceeding with collection. This operation is not always successful. Longitudinal children who move may thus lead to some erosion of our longitudinal sample.

The following tables show the distribution of non-responding, longitudinal and new households, by reason for not responding.

NLSCY– New Households Added to Cycle 2
Non-Respondents by Reason for Not Responding

	NON-RESPONDING HOUSEHOLDS	%
Refusal	245	66.4%
No one at home	12	3.2%
Language barrier	12	3.2%
Special circum-stances (sickness, weather conditions, etc.)	58	15.7%
Partial response (rejected for lack of information)	16	4.3%
Other or reason unknown	26	7.0%
Total	369	100%

NLSCY– Longitudinal Households Not Responding to Cycle 2, by Reason for Not Responding

	NON-RESPONDING HOUSEHOLDS	%
Refusal	458	49.3%
Not tracked down	179	19.3%
No one at home	49	5.3%
Language barrier	7	0.8%
Special circum-stances (sickness, weather conditions, etc.)	112	12.1%
Partial response (rejected for lack of information)	59	6.4%
Other or reason unknown	64	6.9%
Total	928	100%

Longitudinal Response Rate

Given the survey method applied to the first two collection cycles, it was unfortunately impossible to obtain an exact longitudinal response rate taking into consideration all the components of erosion. Ideally, this rate would be the simple ratio of the number of longitudinal children responding to the second cycle to the number of children contacted for the first cycle. However, the number of children present in non-responding households during the first cycle is unknown. The number of children present in households not responding to the LFS is also unknown. It is therefore impossible to compute an exact rate since the exact denominator of this rate is unknown.

Nevertheless, a number of approximations can be provided. A first approximation consists in measuring the response rate for longitudinal children in cycle 2, and multiplying this rate by the response rate for the first cycle. Again, we are faced with the problem described in the previous paragraph, since the response rate at the child level is not known for the first cycle. The response rate at the household level for the first cycle must therefore be used for this first approximation.

A second approximation of the response rate at the child level can be obtained by multiplying the household response rate for the first cycle by the household response rate for the second cycle. Since few households split up from one cycle to the other, and since

the propensity to respond does not seem to depend on the number of children in the household, this approximation would be fairly precise.

A third and last approximation would be to estimate the number of children that would have been selected if the non-responding households had decided to take part in the survey during the first cycle. This yields an estimate of the denominator of the longitudinal response rate. It turns out that these three methods lead essentially to the same results. We therefore submit the response rate obtained using the simplest and most intuitive approximation, i.e. the first one.

NLSCY - Longitudinal Response Rate by Province

PROVINCE	Response rate for cycle 1 (household level)	Response rate for longitudinal children (cycle 2)	Longitudinal response rate[27]
Newfoundland	91.2%	93.8%	81.3%
Prince Edward Island	87.6%	94.4%	78.6%
Nova Scotia	87.6%	89.8%	74.8%
New Brunswick	88.2%	89.4%	74.9%
Quebec	88.2%	92.4%	77.4%
Ontario	82.8%	89.9%	70.7%
Manitoba	87.9%	94.4%	78.8%
Saskatchewan	89.1%	92.6%	78.4%
Alberta	89.2%	92%	78%
British Columbia	81.7%	91.7%	72.2%
Canada	86.4%	91.6%	75.2%

Note that, in the literature, the longitudinal response rate is often calculated without considering the non-response for the first collection process. The rates corresponding to this second definition for the NLSCY are provided in the "Response rate for longitudinal children (cycle 2)" column of the above table.

[27] This includes a 95% response rate for the LFS since the NLSCY sample is selected from LFS respondents.

Non-Response Bias

Non-response is a type of error that can result in bias in survey estimates. Biased estimates can occur when the characteristics of non-respondents differ significantly from those of survey respondents.

Bias resulting from non-response during the first contact was dealt with in the manual for the first cycle. As few households were added for the second cycle, and since similar results would be obtained, this study is not taken up for the second cycle. We will be dealing here with the evaluation of potential bias caused by non-response during the second cycle for longitudinal children.

A considerable amount of information is available to evaluate this potential bias. Longitudinal children are, by definition, children who responded to the first cycle. As a result, we attempted to model the "non-response to cycle 2" event using variables obtained during the first collection cycle. In this context, the non-response event may have two causes: (a) the decision made by the respondent not to cooperate; (b) our inability to contact the respondent. This second cause may be the result of a move or of a temporary absence when attempts at contact were made. The model must therefore include two distinct phenomena: mobility and cooperation.

Separate models have been developed for each region in the country in order to take into consideration the characteristics of each one. Note that the decision to cooperate or not in a survey is made by an adult. As a result, the explanatory variables for these models are in fact characteristics of adults.

Without entering into the details of each regional model, here are some of the conclusions that were drawn:

> People with a lower income show lower response rates than people with a higher income.
>
> People with a lower level of education show lower response rates than people with a higher level of education.
>
> People living in a large city show lower response rates than people living in smaller cities.
>
> The presence of a spouse in the household is associated with better response rates.

This is not a comprehensive list. The models include other variables, which may interact with each other.

In order to minimize the risk associated with this potential bias, the models were used for the weighting process (see Section 7). This technique helps correct the sampling weights taking into account the identified non-response bias. However, it does not guarantee that

there is no bias induced by non-response. There remains a latent risk, and we must remain watchful. That is why there is considerable effort to minimize and study non-response, during both collection and processing.

Other Sources of Bias

All children covered by the NLSCY have been selected among households having already taken part in the Labour Force Survey. This method of selection leads to three problems which might produce bias in our estimates. Note that the impact of these potential problems is chronic, i.e. it will not disappear since the survey is longitudinal.

The first problem stems from the fact that only respondents to the LFS have been considered for the NLSCY sample. It could be that some of the LFS non-respondents had children in the appropriate age group. These households were not included in the NLSCY sample, which could be a source of bias. The LFS response rate was approximately 95% in the time period in which the NLSCY sample was selected. Few households are affected by this problem.

The second problem is due to the fact that only households having children when the LFS was conducted were included in the NLSCY sample. It could be that some households were not included in the sample because the dwelling was vacant or their members were out-of-scope for the NLSCY at the time of the LFS. Some of these households may have had children (0 to 13) living in them a few months later when the NLSCY interview took place. Since these households were not eligible to be selected, some bias may have been introduced. Again, few households are affected by this problem.

The third and last problem complements the second. In some cases, the sampled address, where a child was living at the time of selection, was no longer occupied by a family having in-scope children at the time of collection. In a way, this is a frame undercoverage issue linked to the time lag between the LFS interview and the NLSCY interview. This situation might occur when the selected occupants have moved before collection takes place. As a result, it is possible that the NLSCY sample undercovers the population of highly mobile children.

10.2 Component Non-Response

As discussed in Section 5, there were several respondents or components to the NLSCY interview. The PMK provided detailed information about each selected child. In the Parent Questionnaire and the general questionnaire, the PMK provided information about himself or herself and his or her spouse/partner. The PPVT-R test was administered to children in the 4 to 5 age group. Children in the 10 to 13 age group completed a questionnaire on their own. For school-aged children the teacher completed a questionnaire about the child, and if the child was in grade 2 or above, a Math Test was administered. There was a potential for non-response for each of these components.

It should be noted, however, that when a household was deemed to be a responding household, then all required components were created for that household, even if there were no data provided for a particular component. For example, if there was a 10 year-old in a responding household who did not complete the 10 to 11 Questionnaire, then this component still exists for the child, with all variables set to not-stated. Likewise if a parent completed a Child Questionnaire for one child in the household but refused to do so for a second child, then there is a record for this second child (with not-stated values for all variables).

The following sections provide information about non-response for various NLSCY components. A brief summary of the content of each component can be found in Section 5. As can be seen in the paragraphs that follow, the impact of partial non-response on data quality is minimal. The one exception to this is the Mathematics Computation Test .

10.3 Child Questionnaire Response Rates

In order to assess completeness of the child data (i.e. the information provided by the PMK about the child), we determined the rate of answered questions among those that were relevant to the child. In the sample of respondents consisting of 20,102 children:

- there were answers to all relevant questions in 63% of the cases;
- a valid answer was obtained for more than 90% of questions submitted to 98% of the children;
- less than 50% valid answers were gathered for less than 1% of the children.

10.4 Parent Questionnaire Response Rates

The PMK and his or her spouse/partner answered this questionnaire. Again, we determined the valid response rate obtained in order to assess the completeness of the data. Out of the 24,692 PMKs and their spouse/partners:

- there were answers to all relevant questions in 74% of the cases;
- a valid answer was obtained for more than 90% of questions submitted to 95% of the adults;
- less than 50% valid answers were gathered for 1.5% of the adults.

10.5 Response rate and bias to the self-administered questionnaires for the 10-13

Among the 4504 selected children, aged between 10 and 13, living in responding households, we observed that:

No data is available for 8% of them;

92% of these children answered at least 10 questions;

86% of them answered more than 100 questions.

The response rate for the 10-11 questionnaire is similar to the one observed for the 12-13 questionnaire. However, the cause for the non-response is not the same for both questionnaires. For the younger group, parents are more reluctant to give us the permission to administer the questionnaire. On the other hand, as they get older, children refused more often to collaborate than younger ones.

For both questionnaires, we also observed that the non-response rate to questions at the end of the questionnaire is larger than that of questions at the beginning of the questionnaire. This situation can be explained by two factors: a) sensitive questions are asked at the end of the questionnaire b) the child gets tired since the questionnaire is quite long. More precisely, questions on cigarette use, alcohol, drugs, puberty (for the 10-11 questionnaire), sexual experience (for the 12-13 questionnaire) have a higher non-response rate.

To evaluate the potential bias introduced by non-response, we have compared the characteristics of respondents (children that answered at least 10 questions) to those of non-respondents. For this analysis, we have looked at any characteristic that could, intuitively, have an impact on non-response. Among others, here are some of the variables studied: income, child sex, schooling of the parents, reading problems for the child, anxiety... More than 20 variables were considered.

For the 10-11 questionnaire, only the following three variables had a significant impact on the response rate: sex (boys had a lower response rate than girls), income (children living in low-income families have a lower response rate) and children with immigrant parents. For the 12-13 questionnaires, the significant variables were immigrant status of the parent, employment status of the parent, family functioning scale and the punitive interaction between the child and the parent.

11 Guidelines for Tabulation, Analysis and Release

This section of the documentation outlines the guidelines to be adhered to by users tabulating, analysing, publishing or otherwise releasing any data derived from the survey micro data file. With the aid of these guidelines, users of micro data should be able to produce the same figures as those produced by Statistics Canada and, at the same time, will be able to develop currently unpublished figures in a manner consistent with these established guidelines.

11.1 Rounding Guidelines

In order that estimates for publication or other release derived from the NLSCY micro data file correspond to those produced by Statistics Canada, users are urged to adhere to the following guidelines regarding the rounding of such estimates:

a) Estimates in the main body of a statistical table are to be rounded to the nearest hundred units using the normal rounding technique. In normal rounding, if the first or only digit to be dropped is 0 to 4, the last digit to be retained is not changed. If the first or only digit to be dropped is 5 to 9, the last digit to be retained is raised by one. For example, in normal rounding to the nearest 100, if the last two digits are between 00 and 49, they are changed to 00 and the preceding digit (the hundreds digit) is left unchanged. If the last digits are between 50 and 99 they are changed to 00 and the preceding digit is incremented by 1.

b) Marginal sub-totals and totals in statistical tables are to be derived from their corresponding unrounded components and then are to be rounded themselves to the nearest 100 units using normal rounding.

c) Averages, proportions, rates and percentages are to be computed from unrounded components (i.e. numerators and/or denominators) and then are to be rounded themselves to one decimal using normal rounding.

d) Sums and differences of aggregates (or ratios) are to be derived from their corresponding unrounded components and then are to be rounded themselves to the nearest 100 units (or the nearest one decimal) using normal rounding.

e) In instances where, due to technical or other limitations, a rounding technique other than normal rounding is used resulting in estimates to be published or otherwise released which differ from corresponding estimates published by Statistics Canada, users are urged to note the reason for such differences in the publication or release document(s).

f) Under no circumstances are unrounded estimates to be published or otherwise released by users. Unrounded estimates imply greater precision than actually exists.

11.2 Sample Weighting Guidelines for Tabulation

The sample design used for the NLSCY was not self-weighting. When producing simple estimates, including the production of ordinary statistical tables, users must apply the proper population weight (BWTCW01C for the cross sectional sample and BWTCW01L for the longitudinal sample). For the longitudinal sample, the population weight inflates the estimates produced by 15,468 respondents to the total population of children aged 0-11 years in Canada (4,673,390 as of January 1995). For the cross-sectional sample, the weight population weight inflates the estimates produced by 20,025 respondents to the total population of children aged 0 to 13 years in Canada (5, 482,536 as of January 1997).

If proper weights are not used, the estimates derived from the micro data file cannot be considered to be representative of the survey population, and will not correspond to those produced by Statistics Canada. In effect, the weight assigned to each child reflects the number of children represented by a particular respondent. For any analysis dealing with correlation analysis or any other statistics where a significance measure is required, it is recommended that a “sample” weight be used. This weight is obtained by multiplying the population weight (BWTCW01C for the cross sectional sample and BWTCW01L for the longitudinal sample) by the sample size (20,025 children for the cross sectional sample and 15,468 for the longitudinal sample) and dividing this total by the total population which we are estimating for (5,482,536 children for the cross section sample and 4,673,390 children for the longitudinal sample). This produces a mean weight of 1 and a sum of weights equal to the sample size (20,025 or 15,468). The benefit of this adjusted weight is that an over estimation of the significance (which is very sensitive to sample size is avoided while maintaining the same distributions as those obtained when using the population weight. The disadvantage is that the numerator is not weighted up to the target population and the Coefficient of Variance Tables described in section 12 and presented in Appendix 3 are no longer useful as a measure of data quality.

Users should also note that some software packages may not allow the generation of estimates that exactly match those available from Statistics Canada, because of their treatment of the weight field.

11.2.1 Definitions of Types of Estimates: Categorical vs. Quantitative

It should be pointed out that the NLSCY file has been set up so that the child is the unit of analysis. The weight that can be found on each record (BWTCW01C for the cross sectional sample and BWTCW01L for the longitudinal sample) is a "child" weight. Estimates of parents or families cannot be made from the NLSCY micro data file. A further discussion of units of analyses can be found in Section 8.2 of this document.

Before discussing how the NLSCY data can be tabulated and analysed, it is useful to describe the two main types of point estimates of population characteristics which can be generated from the micro data file for the NLSCY.

Categorical Estimates

Categorical estimates are estimates of the number, or percentage of the surveyed population possessing certain characteristics or falling into some defined category. The number of children who were born before the due date or the proportion of children who were in excellent health at birth are examples of such estimates. An estimate of the number of persons possessing a certain characteristic may also be referred to as an estimate of an aggregate.

Examples of Categorical Questions:

Q: Was (*the child*) born before, after or on the due date?

R: Before
After
On due date

Q: Compared to other babies in general, would you say the (*the child's*) health at birth was:

R: Excellent
Very good
Good
Fair
Poor

Quantitative Estimates

Quantitative estimates are estimates of totals or of means, medians and other measures of central tendency of quantities based upon some or all of the members of the surveyed population. They also specifically involve estimates of the form $\frac{\hat{X}}{\hat{Y}}$ where $\hat{X}$ is an estimate of the surveyed population quantity total and $\hat{Y}$ is an estimate of the number of persons in the surveyed population contributing to that total quantity.

An example of a quantitative estimate is the average number of days of care received by babies who required special medical care following birth. The numerator is an estimate of the total number of days for which babies required special care. The denominator is the number of babies who required special care at birth.

Examples of Quantitative Questions:

Q: For how many days, in total, was this care received?

R: Days

Q: What was the child's weight at birth in pounds and ounces?

R: Pounds Ounces

11.2.2 Tabulation of Categorical Estimates

Estimates of the number of children with a certain characteristic can be obtained from the micro data file by summing the final weights of all records possessing the characteristic(s) of interest. Proportions and ratios of the form $\frac{\hat{X}}{\hat{Y}}$ are obtained by:

(a) summing the final weights of records having the characteristic of interest for the numerator ($\hat{X}$);

(b) summing the final weights of records having the characteristic of interest for the denominator ($\hat{Y}$), then;

(c) dividing the numerator estimate by the denominator estimate.

11.2.3 Tabulation of Quantitative Estimates

Estimates of quantities can be obtained from the micro data file by multiplying the value of the variable of interest by the final weight for each record, then summing this quantity over all records of interest.

For example, to obtain an estimate of the total number of days of special care received by infants who were born prematurely

- multiply the number of days for which special care was received by the final weight,[28]

- then sum this value over all records for which the child was born prematurely

To obtain a weighted average of the form $\frac{\hat{X}}{\hat{Y}}$, the numerator ($\hat{X}$) is calculated as for a quantitative estimate and the denominator (Y), is calculated as for a categorical estimate. For example, to estimate the <u>average</u> number of days spent in special care by premature babies,

[28] *Do not include: "don't know", "refusal" and "not-stated" codes in this tabulation (i.e., records for which the number of days of special care is code 997, 998 or 999). For cases where the number of days is not-applicable (i.e., 996) because no care was received recode the number of days to 0 to perform the calculation.*

(a) estimate the total number of days as described above,
(b) estimate the number of children in this category by summing the final weights of all records for babies which were premature[29], then
(c) divide estimate (a) by estimate (b).

11.3 Guidelines for Statistical Analysis

The NLSCY is based upon a complex sample design, with stratification, multiple stages of selection, and unequal probabilities of selection of respondents. Using data from such complex surveys presents problems to analysts because the survey design and the selection probabilities affect the estimation and variance calculation procedures that should be used. In order for survey estimates and analyses to be free from bias, the survey weights must be used.

While many analysis procedures found in statistical packages allow weights to be used, the meaning or definition of the weight in these procedures differ from that which is appropriate in a sample survey framework, with the result that while in many cases the estimates produced by the packages are correct, the variance estimates that are calculated are not adequate. Variances for simple estimates such as totals, proportions and ratios (for qualitative variables) are provided in the accompanying Sampling Variability Tables.

For other analysis techniques (for example linear regression, logistic regression and analysis of variance), a method exists which can make the variances calculated by the standard packages more meaningful, by incorporating the unequal probabilities of selection. The method rescales the weights so that there is an average weight of 1.

For example, suppose that analysis of all male children is required. The steps to rescale the weights are as follows:

- select all respondents from the file with SEX=male (variable BMMCQ02)
- Calculate the AVERAGE weight for these records by summing the original person weights (BWTCW01C) from the micro data file for these records and then dividing by the number of records with SEX=male
- for each of these records, calculate a RESCALED weight equal to the original person weight divided by the AVERAGE weight
- perform the analysis for these respondents using the RESCALED weight.

However, because the stratification and clustering of the sample's design are still not taken into account, the variances calculated in this way are likely to be under-estimated.

The calculation of truly meaningful variance estimates requires detailed knowledge of the design of the survey. Such detail cannot be given in this micro data file because of confidentiality. Variances that take the complete sample design into account can be calculated for many statistics by Statistics Canada on a cost-recovery basis.

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[29] *Do not include premature babies for which the number of days was don't know, refusal, or not-stated in this calculation (i.e., 997, 998 or 999).*

11.4 C.V. Release Guidelines

Before releasing and/or publishing any estimate from the NLSCY, users should first determine the quality level of the estimate. The quality levels are *acceptable*, *marginal* and *unacceptable*. Data quality is affected by both sampling and non-sampling errors as discussed in Section 10. However for this purpose, the quality level of an estimate will be determined only on the basis of sampling error as reflected by the coefficient of variation as shown in the table below. Nonetheless users should be sure to read Section 10 to be more fully aware of the quality characteristics of these data.

First, the number of children who contribute to the calculation of the estimate should be determined. If this number is less than 30, the weighted estimate should be considered to be of unacceptable quality.

For weighted estimates based on sample sizes of 30 or more, users should determine the coefficient of variation of the estimate and follow the guidelines below. These quality level guidelines should be applied to weighted rounded estimates.

All estimates can be considered releasable. However, those of marginal or unacceptable quality level must be accompanied by a warning to caution subsequent users.

QUALITY LEVEL GUIDELINES

Quality Level of Estimate	Guidelines
1. Acceptable	Estimates have: a sample size of 30 or more, and low coefficients of variation in the range 0.0% to 16.5%. No warning is required.
2. Marginal	Estimates have: a sample size of 30 or more, and high coefficients of variation in the range 16.6% to 33.3%. Estimates should be flagged with the letter M (or some similar identifier). They should be accompanied by a warning to caution subsequent users about the high levels of error, associated with the estimates.
3. Unacceptable	Estimates have: a sample size of less than 30, or very high coefficients of variation in excess of 33.3%. Statistics Canada recommends not to release estimates of unacceptable quality. However, if the user chooses to do so then estimates should be flagged with the letter U (or some similar identifier) and the following warning should accompany the estimates: "The user is advised that . . . (specify the data) . . . do not meet Statistics Canada's quality standards for this statistical program. Conclusions based on these data will be unreliable, and most likely invalid. These data and any consequent findings should not be published. If the user chooses to publish these data or findings, then this disclaimer must be published with the data."

12 Approximate Sampling Variability Tables

In order to supply coefficients of variation which would be applicable to a wide variety of categorical estimates produced from this micro data file and which could be readily accessed by the user, a set of Approximate Sampling Variability Tables has been produced. These "look-up" tables, which can be found in Appendix 3, allow the user to obtain an approximate coefficient of variation based on the size of the estimate calculated from the survey data.

The coefficients of variation (c.v.) are derived using the variance formula for simple random sampling and incorporate a factor which reflects the multi-stage, clustered nature of the sample design. This factor, known as the design effect, was determined by first calculating design effects for a wide range of characteristics and then choosing from among these a conservative value to be used in the look-up tables which would then apply to the entire set of characteristics.

For the NLSCY the sample was constructed taking account the followinng uirements.

- a sufficient sample was required in each of the 10 provinces to allow for the production of reliable estimates for all children 2 to 13 years of age based on the sample size of the first cycle

.

- it was also necessary to have a large enough sample to produce estimates for cycle 1 at the Canada level by seven key age groupings or cohorts: 0 to 11 months, 1, 2 to 3, 4 to 5, 6 to 7, 8 to 9, and 10 to 11 years.

- in each province, a sufficient sample size was required for cycle 2 to produce reliable estimates for children aged 0 to 1 years old;

- for the province of New Brunswick, a sufficent sample size was required to produce reliable estimates for infants aged 2 to 5 years old;

The tables that follow show the design effects, sample sizes and population counts first by province and then by age groupings which were used to produce the Approximate Sampling Variability Tables for the cross sectional and longitudinal sample.

Cross sectional sample:

CROSS SECTIONAL SAMPLE			
PROVINCE	DESIGN EFFECT	SAMPLE SIZE	POPULATION
Newfoundland	2.1	1,001	100,089
Prince Edward Island	2.2	545	26,932
Nova Scotia	2.7	1,293	167,311
New Brunswick	2.5	1,664	133,481
Québec	4.4	3,757	1,275,660
Ontario	4.3	5,195	2,107,791
Manitoba	3.8	1,484	213,543
Saskatchewan	2.9	1,589	203,197
Alberta	3.1	1,827	568,358
British Columbia	3.7	1,670	686,174
Atlantic provinces	2.6	4,503	427,813
Prairies	3.7	4,900	985,098
Total[30]	4.1	20,025	5,482,536

[30]*Excludes the Yukon and Northwest Territories.*

CROSS SECTIONAL SAMPLE			
AGE GROUP	DESIGN EFFECT	SAMPLE SIZE	POPULATION
0 to 23 years	2.1	4,154	740,151
2 to 3 years	2.4	3,866	766,998
4 to 5 years	2.7	2,928	804,057
6 to 7 years	2.9	2,418	812,201
8 to 9 years	2.5	2,161	773,433
10 to 11 years	2.4	2,240	792,572
12 to 13 years	2.8	2,258	793,124
0 to 3 years	2.7	8,020	1,507,149
4 to 11 years	3.4	9,747	3,182,263
4 to 7 years	4.2	5,346	1,616,258
8 to 11 years	3.5	4,401	1,566,005
Total (0 to 13 years)	**4.1**	**20,025**	**5,482,536**

LONGITUDINAL SAMPLE			
PROVINCE	DESIGN EFFECT	SAMPLE SIZE	POPULATION
Newfoundland	2.0	892	89,533
Prince Edward Island	2.0	443	23,161
Nova Scotia	2.9	1,068	144,722
New Brunswick	2.3	958	115,913
Québec	4.9	2,944	1,099,033
Ontario	4.2	3,899	1,777,525
Manitoba	3.4	1,161	183,268
Saskatchewan	2.8	1,305	176,449
Alberta	3.2	1,465	489,604
British Columbia	3.6	1,333	574,160
Atlantic provinces	2.7	3,361	373,351
Prairies	3.6	3,931	849,321
Total[31]	5.3	15,468	4,673,390

[31]*Excludes the Yukon and Northwest Territories.*

LONGITUDINAL SAMPLE			
AGE GROUP	DESIGN EFFECT	SAMPLE SIZE	POPULATION
2 to 3 years	2.7	3,654	752,598
4 to 5 years	3.2	2,697	791,754
6 to 7 years	3.3	2,429	800,064
8 to 9 years	3.0	2,169	763,632
10 to 11 years	3.1	2,249	783,049
12 to 13 years	3.2	2,270	782,293
2 to 5 years	3.3	6,351	1,544,352
6 to 13 years	3.8	9,117	3,129,038
6 to 9 years	3.9	4,598	1,563,696
10 to 13 years	4.1	4,519	1,565,342
Total (2 to 13 years)	5.3	15,468	4,673,390

All coefficients of variation in the Approximate Sampling Variability Tables are approximate and, therefore, unofficial. Estimates of actual variance for specific variables may be obtained from Statistics Canada on a cost-recovery basis. The use of actual variance estimates would likely result in estimates with lower variances; for example it could be that estimates in the "unacceptable" category according to the Approximate Sampling Variability Tables may move up to the "marginal" category. See Section 11.4 for more information on c.v. release guidelines.

Remember: if the number of observations on which an estimate is based is less than 30, the weighted estimate should be classified as "unacceptable" regardless of the value of the coefficient of variation for this estimate. This is because the formulas used for estimating the variance do not hold true for small sample sizes.

12.1How to Use the C.V. Tables for Categorical Estimates

The following rules should enable the user to determine the approximate coefficients of variation from the Sampling Variability Tables for estimates of the number, proportion or percentage of the surveyed population possessing a certain characteristic and for ratios and differences between such estimates. See Appendix 3 for the actual "Approximate Sampling Variability Tables".

Rule 1: Estimates of Numbers Possessing a Characteristic (Aggregates)

The coefficient of variation depends only on the size of the estimate itself. On the Sampling Variability Table for the appropriate geographic area or age group, locate the estimated number in the left-most column of the table (headed "Numerator of Percentage") and follow the asterisks (if any) across to the first figure encountered. This figure is the approximate coefficient of variation.

Rule 2: Estimates of Proportions or Percentages Possessing a Characteristic

The coefficient of variation of an estimated proportion or percentage depends on both the size of the proportion or percentage and the size of the total upon which the proportion or percentage is based. Estimated proportions or percentages are relatively more reliable than the corresponding estimates of the numerator of the proportion or percentage, when the proportion or percentage is based upon a sub-group of the population. For example, the proportion of female babies who were of low birth weight (i.e., less than 2,500 grams) is more reliable than the estimated number of "female babies who were of low birth weight". Note that in the tables the c.v.'s decline in value reading from left to right.

When the proportion or percentage is based upon the total population of the geographic area or age group covered by the table, the c.v. of the proportion or percentage is the same as the c.v. of the numerator of the proportion or percentage. In this case, Rule 1 can be used.

When the proportion or percentage is based upon a subset of the total population (e.g. those in a particular sex or age group within province), reference should be made to the proportion or percentage (across the top of the table) and to the numerator of the proportion or percentage (down the left side of the table). The intersection of the appropriate row and column gives the coefficient of variation.

Rule 3: Estimates of Differences Between Aggregates or Percentages

The standard error of a difference between two estimates is approximately equal to the square root of the sum of squares of each standard error considered separately. That is, the standard error of a difference $(\hat{d} = X_1 - X_2)$ is:

$$\sigma_{\hat{d}} = \sqrt{(\hat{X}_1 \alpha_1)^2 + (\hat{X}_2 \alpha_2)^2}$$

where X_1 is estimate 1, X_2 is estimate 2, and alpha 1 and andalpha 2 are the coefficients

of variation of X_1 X_2 respectively.
The coefficient of variation of $\bar{d}$ is given by $\sigma_{\bar{d}}/\bar{d}$.

This formula is accurate for the difference between separate and uncorrelated characteristics, but is only approximate otherwise.

Rule 4:`Estimates of Ratios

In the case where the numerator is a subset of the denominator, the ratio should be treated as a percentage and Rule 2 applied. This would apply, for example, to the case where the denominator is the number of low birth weight babies and the numerator is the number of low birth weight babies who were born prematurely (gestational age 258 days or less).

In the case where the numerator is not a subset of the denominator, the standard deviation of the ratio of the estimates is approximately equal to the square root of the sum of squares of each coefficient of variation considered separately multiplied by the ratio itself. For example, this would apply to an estimate such as, the ratio of the number of female babies who were of low birth weight as compared to the number of male babies who were of low birth weight. The standard error of such a ratio
$(\hat{R}=\hat{X}_1/\hat{X}_2)$ is:

$$\sigma_{\hat{R}} = \hat{R}\sqrt{\alpha_1^2 + \alpha_2^2}$$

where α_1 and α_2 are the coefficients of variation of X_1 (the number of low birth weight female babies) and X_2 (the number of low birth weight male babies) respectively. The coefficient of variation of $\hat{R}$ is given by $\sigma_{\hat{R}}/\hat{R}$

.The formula will tend to overstate the error, if X_1 and X_2 are positively correlated and understate the error if X_1 and X_2 are negatively correlated.

Rule 5:Estimates of Differences of Ratios

In this case, Rules 3 and 4 are combined. The c.v.'s for the two ratios are first determined using Rule 4, and then the c.v. of their difference is found using Rule 3.

12.1.1 Examples of using the C.V. tables for Categorical Estimates

The following are examples using actual NLSCY data to illustrate how to apply the foregoing rules.

Example 1 : Estimates of Numbers Possessing a Characteristic (Aggregates)

Using NLSCY data, 84,085 babies were estimated to be of low birth weight (i.e., less than 2,500 grams). How does the user determine the coefficient of variation of this estimate?

(1) Refer to the c.v. table for children in 0 to 3 age group. Note that the question on birth weight was applicable only to children in the 0 to 3 age group and therefore this is the table that should be used to determine the c.v. for this estimate.

(2) The estimated aggregate (84,085) does not appear in the left-hand column (the 'Numerator of Percentage' column), so it is necessary to use the figure closest to it, namely 85,000.

(3) The coefficient of variation for an estimated aggregate is found by referring to the first non-asterisk entry on that row, namely, 7.3%.

(4) The approximate coefficient of variation of the number of low birth weight babies is estimated to be 7.3%. The finding that there were 84,085 babies that were of low birth weight is "acceptable" and no warning message is required to produce this estimate since the c.v. for the estimate is in the 0.0% to 16.5% range.

Example 2 : Estimates of Proportions or Percentages Possessing a Characteristic

Using NLSCY data, it is estimated that 70.8% (59,567/84,085) of low birth weight babies were born prematurely (gestational age 258 days or less). How does the user determine the coefficient of variation of this estimate?

(1) Refer to the c.v. table for children in 0 to 3 age group. Note that the questions on birth weight and delivery time were applicable only to children in the 0 to 3 age group and therefore this is the table that should be used to determine the c.v. for this estimate.

(2) Because the estimate is a percentage which is based on a subset of the total population (i.e., low birth weight babies who were born prematurely), it is necessary to use both the percentage (70.8%) and the numerator portion of the percentage (59,567) in determining the coefficient of variation.

(3) The numerator, 59,567, does not appear in the left-hand column (the 'Numerator of Percentage' column) so it is necessary to use the figure closet to it, namely 60,000. Similarly, the percentage estimate does not appear as any of the column headings, so it is necessary to use the figure closest to it, 70.0%.

(4) The figure at the intersection of the row and column used, namely 5.0% is he coefficient of variation to be used.

(5) The approximate coefficient of variation of the percentage of low birth weight babies who were prematurely is estimated to be 5.0%. The finding that 70.8% of low birth weight babies were born prematurely is "acceptable" and no warning message is required to produce this estimate since the c.v. for the estimate is in the 0.0% to 16.5% range.

Example 3 : Estimates of Differences Between Aggregates or Percentages

Using NLSCY data, it is estimated that 6.1% (45,690/753,203) of female babies were born prematurely, while 4.9% (38,395/791,149) of male babies were born prematurely. How does the user determine the coefficient of variation of the difference between these two estimates?

(1) Using the c.v. table for the 0 to 3 age group in the same manner as described in example 2 gives the c.v. of the estimate for female babies as 10.3%, and the c.v. of the estimate for male babies as 10.9%.

(2) Using Rule 3, the standard error of a difference

$(\hat{d} = X_1 - X_2)$ is:

$$\sigma_{\hat{d}} = \sqrt{(\hat{X}_1 \alpha_1)^2 + (\hat{X}_2 \alpha_2)^2}$$

where X_1 is estimate 1 (the percent of low birth weight female babies), X_2 is estimate 2 (the percent of low birth weight male babies) , and α_1 and α_2 are the coefficients of variation of X_1 and X_2 respectively.

That is, the standard error of the difference $\hat{d}$ = (.061-.049) = .012

(3) The coefficient of variation of $\hat{d}$ is given by

$$\sigma_{\hat{d}}/\hat{d} = 0{,}008/0{,}012 = 0{,}667$$

(4) So the approximate coefficient of variation of the difference between the estimates is 66.7%. This estimate is "unacceptable" since the coefficient of variation is over 33.3%.

Statistics Canada recommends not to release estimates of unacceptable quality.

Example 4 : Estimates of Ratios

Suppose now a user wants to compare the number of low birth weight female babies to the number of low birth weight male babies. The user is interested in comparing these estimates in the form of a ratio. How does the user determine the coefficient of variation of this estimate?

(1) First of all, this estimate is a ratio estimate, where the numerator of the estimate =(X_1) is the number of low birth weight female babies and denominator =(X_2) of the estimate is the number of low birth weight male babies.

(2) Refer to the table for the 0 to 3 age group. The questions on birth weight were applicable only to children in the 0 to 3 age group.

(3) The numerator of this ratio estimate is 45,690. The figure closest to it is 45,000. The coefficient of variation for this estimate is found by referring to the first non-asterisk entry on that row, namely, 10.3%.

(4) The denominator of this ratio estimate is 38,395. The figure closest to it is 40,000. The coefficient of variation for this estimate is found by referring to the first non-asterisk entry on that row, namely, 10.9%.

(5) So the approximate coefficient of variation of the ratio estimate is given by Rule

4, which is, $\alpha_{\hat{R}} = \sqrt{\alpha_1^2 + \alpha_2^2}$

where α_1 and α_2 are the coefficients of variation of $\hat{X}_1$ and $\hat{X}_2$ respectively. That is:

$$\alpha_{\hat{R}} = \sqrt{(0,103)^2 + (0,109)^2}$$
$$= 0,150$$

,

The obtained ratio of female babies who were of low birth weight versus male babies who were of low birth weight is 45,690/38,395 which is 1.19 : 1. The coefficient of variation of this estimate is 15.0%, which is "acceptable" and no warning message is required to produce this estimate since the c.v. for the estimate is in the 0.0% to 16.5% range.

12.2 How to Use the C.V. Tables to Obtain Confidence Limits

Although coefficients of variation are widely used, a more intuitively meaningful measure of sampling error is the confidence interval of an estimate. A confidence interval constitutes a statement on the level of confidence that the true value for the population lies within a specified range of values. For example a 95% confidence interval can be described as follows:

If sampling of the population is repeated indefinitely, each sample leading to a new confidence interval for an estimate, then in 95% of the samples the interval will cover the true population value.
Using the standard error of an estimate, confidence intervals for estimates may be obtained under the assumption that under repeated sampling of the population, the various estimates obtained for a population characteristic are normally distributed about the true population value. Under this assumption, the chances are about 68 out of 100 that the difference between a sample estimate and the true population value would be less than one standard error, about 95 out of 100 that the difference would be less than two standard errors, and about 99 out 100 that the differences would be less than three standard errors. These different degrees of confidence are referred to as the confidence levels.

Confidence intervals for an estimate,are generally expressed as two numbers, one below the estimate and one above the estimate, as where k is determined depending upon the level of confidence desired and the sampling error of the estimate.

Confidence intervals for an estimate can be calculated directly from the Approximate Sampling Variability Tables by first determining from the appropriate table the coefficient of variation of the estimateand then using the following formula to convert to a confidence interval CI:

$$IC_X = [X - tX\alpha_X), X + tX\alpha_X]$$

where α_X is the determined coefficient of variation X and

t = 1 if a 68% confidence interval is desired
t = 1.6 if a 90% confidence interval is desired
t = 2 if a 95% confidence interval is desired
t = 3 if a 99% confidence interval is desired.

Note:Release guidelines which apply to the estimate also apply to the confidence interval. For example, if the estimate is "marginal", then the confidence interval is marginal and should be accompanied by a warning note to caution subsequent users about the high levels of error.

12.2.1 Example of Using the C.V. Tables to Obtain Confidence Limits

A 95% confidence interval for the estimated proportion of babies who were of low birth weight would be calculated as follows.

estimate of X=5.5%
t=2
alpha estimate of X =7.3% (.073 expressed as a proportion)
is the coefficient of variation of this estimate
With 95% confidence it can be said that between 4.7% and 6.3% of babies who were 0 to 3 years old at the time of the survey were of low birth weight.

12.3 How to Use the C.V. Tables to Do a T-test

Standard errors may also be used to perform hypothesis testing, a procedure for distinguishing between population parameters using sample estimates. The sample estimates can be numbers, averages, percentages, ratios, etc. Tests may be performed at various levels of significance, where a level of significance is the probability of concluding that the characteristics are different when, in fact, they are identical.

Let X_1 and X_2 be sample estimates for two characteristics of interest.Let the standard error on the difference $X_1 - X_2$ be σ_d.

$$t = \frac{X_1 - X_2}{\sigma_d}$$

If is between -2 and 2, then no conclusion about the difference between the characteristics is justified at the 5% level of significance.If however, this ratio is smaller than -2 or larger than +2, the observed difference is significant at the 0.05 level.That is to say that the characteristics are significantly different.

12.3.1 Example of Using the C.V. Tables to Do a T-test

Let us suppose we wish to test, at 5% level of significance, the hypothesis that there is no difference between the proportion of female babies who were of low birth weight and the proportion of male babies who were of low birth weight. From example 3 (Section 12.1.1), the standard error of the difference between these two estimates was found to be = .008.

Hence,

$$t = \frac{\hat{X}_1 - \hat{X}_2}{\sigma_d} = \frac{0,061 - 0,049}{0,008} = \frac{0,012}{0,008} = 1,5.$$

Since t = 1.5 is between -2 and 2, no conclusion at the 0.05 level of significance can be made regarding the difference in proportions of male of female babies who were of low birth weight.

12.4 Coefficients of Variation for Quantitative Estimates

For quantitative estimates, special tables would have to be produced to determine their sampling error. Since most of the variables for the NLSCY are categorical in nature, this has not been done.

As a general rule, however, the coefficient of variation of a quantitative total will be larger than the coefficient of variation of the corresponding category estimate (i.e., the estimate of the number of persons contributing to the quantitative estimate). If the corresponding category estimate is not releasable, the quantitative estimate will not be either. For example, the coefficient of variation of the total number of days of special medical care received for low birth weight babies would be greater than the coefficient of variation of the corresponding proportion of babies who were of low birth weight. Hence if the coefficient of variation of the proportion is not releasable, then the coefficient of variation of the corresponding quantitative estimate will also not be releasable.

Coefficients of variation of such estimates can be derived as required for a specific estimate using a technique known as pseudo replication. This involves dividing the records on the micro data files into subgroups (or replicates) and determining the variation in the estimate from replicate to

replicate. Users wishing to derive coefficients of variation for quantitative estimates may contact Statistics Canada for advice on the allocation of records to appropriate replicates and the formulae to be used in these calculations.

12.5 Release Cut-offs for the NLSCY

In the tables that follow, cut-off numbers are given for NLSCY estimates in order for them to be of "acceptable", "marginal" or "unacceptable" quality. Users are encouraged to use these cut-offs when publishing data from the NLSCY. First a table is given to show the cut-offs at the provincial, regional and Canada level. Then a table is given to show the cut-offs for the various age cohorts. An interpretation of what is meant by the various cut-off levels can be found in Section 11.4.

For example, an estimate for Nova Scotia of 5,000 would fall into the "marginal" range. This would mean that the estimate should be flagged and a warning note attached to caution subsequent users about the high level of error associated with the estimate.

GEOGRAPHICAL RELEASE CUT-OFFS
CROSS-SECTIONAL SAMPLE

Province	Acceptable - estimates at or above	Marginal - estimates between	Unacceptable - Estimates at or below
Newfoundland	7,500	2 000 to 7 500	2,000
Prince Edward Island	3,500	1 000 to 3 500	1,000
Nova Scotia	12,000	3 000 to 12 000	3,000
New Brunswick	7,000	2 000 to 7000	2,000
Québec	52,500	13 500 to 52 500	13,500
Ontario	62,000	15 500 to 62 000	15,500
Manitoba	18,500	5 000 to 18 500	5,000
Saskatchewan	13,000	3 500 to 13 000	3,500
Alberta	33,500	8 500 to 33 500	8,500
British Columbia	51,500	13 500 to 51 500	13,500
Atlantic provinces	9,000	2 500 to 9 000	2,500
Prairie provinces	26,000	6 500 to 26 000	6,500
Total[32]	41,000	10 000 to 41 000	10,000

[32] *Excludes the Yukon and Northwest Territories.*

RELEASE CUT-OFFS BY AGE GROUP
CROSS-SECTIONAL SAMPLE

Age group	Acceptable - estimates at or above	Marginal - Estimates between	Unacceptable - Estimates at or below
0 - 23 months	15,500	4 000 to 15 500	4,000
2 - 3 years	20,000	5 000 to 20 000	5,000
4 - 5 years	35,500	9 000 to 35 500	9,000
6 - 7 years	42,000	11 000 to 42 000	11,000
8 - 9 years	37,500	9 500 to 37 500	9,500
10 - 11 years	37,000	9 500 to 37 000	9,500
12 - 13 years	40,500	10 500 to 0 500	10,500
0 - 3 years	18,500	4 500 to 18 500	4,500
4 - 11 years	41,000	10 000 to 41 000	10,000
4 - 7 years	43,000	11 000 to 43 000	11,000
8 - 11 years	43,000	11 000 to 43 000	11,000
TOTAL	**41,000**	**10 000 to 41 000**	**10,000**

GEOGRAPHICAL RELEASE CUT-OFFS
LONGITUDINAL SAMPLE

Province	Acceptable - estimates at or above	Marginal - Estimates btoween	Unacceptable - Estimates at or below
Newfoundland	7,000	2 000 to 7 000	2,000
Prince Edward Island	3,500	1 000 to 3 500	1,000
Nova Scotia	13,000	3 500 to 13 000	3,500
New Brunswick	9,500	2 500 to 9 500	2,500
Québec	63,500	16 500 to 63 500	16,500
Ontario	67,500	17 000 to 67 500	17,000
Manitoba	18,000	4 500 to 18 000	4,500
Saskatchewan	13,000	3 500 to 13 000	3,500
Alberta	36,500	9 500 to 36 500	9,500
British Columbia	52,000	13 500 to 52 000	13,500
Atlantic provinces	10,500	2 500 to 10 500	2,500
Prairie provinces	27,500	7 000 to 27 500	7,000
Total[33]	58,000	14 500 to 58 000	14,500

[33] *Excludes the Yukon and Northwest Territories.*

RELEASE CUT-OFFS BY AGE GROUP
LONGITUDINAL SAMPLE

Age Group	Acceptable - estimates at or above	Marginal - Estimates btoween	Unacceptable - Estimates at or below
0 - 23 months	19,500	5 000 to 19 500	5,000
2 - 3 years	33,000	8 500 to 33 000	8,500
4 - 5 years	38,000	9 500 to 38 000	9,500
6 - 7 years	37,000	9 500 to 37 000	9,500
8 - 9 years	36,500	9 500 to 36 500	9,500
10 - 11 years	38,500	10 000 to 38 500	10,000
0 - 3 years	29,000	7 000 to 29 000	7,000
4 - 11 years	47,000	11 500 to 47 000	11,500
4 - 7 years	47,000	12 000 to 47 000	12,000
8 - 11 years	50,500	12 500 to 50 000	12,500
TOTAL	**58,000**	**14 500 to 58 000**	**14,500**

13 Suppression of Confidential Information

It should be noted that the 'Public Use' NLSCY micro data file differs in a number of important respects from the survey 'master' file held by Statistics Canada. These differences are the result of actions taken to protect the anonymity of individual survey respondents. Actions taken to ensure confidentiality for survey respondents are discussed in Section 13.2. The methods used to detect confidentiality problems are discussed in Section 13.1. Users requiring access to information excluded on the micro data file may purchase custom tabulations or make use of the Remote Access service described in Section 13.3.

13.1 Methods Used to Protect Confidentiality

Several measures were taken to assess disclosure risk for the NLSCY public use micro data file. Principal among these was an extensive review of all variables proposed for the public use micro data file to identify those variables considered to be "key" or "indirect identifiers". These variables are ones that may not spontaneously lead to the identification of an individual on their own but when considered in conjunction with other variables on the file could lead to disclosure.[34] For example, a child with a mother tongue of French would not be considered to be a problem with respect to confidentiality. However if that child has parents with a mother tongue of Chinese and it is known that the child lives in rural Alberta, then the risk of disclosure increases. An assessment of risk was made based on the variables considered to be indirect identifiers.

The data for the self-completed portion of the file was separated from the main file to ensure that the information provided by children was kept confidential, even from their parents. In order to protect that confidentiality, the information from both files cannot be linked. An assessment and further suppressions were made following the procedures outlined in the next pages to ensure that the two files could not be linked. Similarly, because this is the second cross-section release of data from the NLSCY, an assessment was also done to ensure that data could not be linked from one cycle to the next.

Due to the hierarchical nature of the file, all analyses to assess risk of disclosure were carried out at the family level. For example, when the variables related to language (e.g., mother tongue) were checked for risk of disclosure, a new variable was created that comprised language information for all children in the family (up to four) and language for the parents. When occupation of the parents was considered, the occupation of both parents was considered simultaneously.

There were essentially three procedures used for these variables to analyse risk of disclosure.

1/ For cases where similar variables existed for the Census, Census data were retrieved to see if these variables (or combination of variables) were unique in the Census.

[34] *It should be noted that any variable considered being a direct identifier such as the name, address or telephone number of a respondent has been suppressed on the micro data file.*

2/ For other variables, in order to assess risk systematically, an approach developed for the Census was adapted for the NLSCY. This general approach uses Census software to look at three-way combinations of variables designated to be "indirect identifiers". Unusual combinations of these variables could in theory lead to spontaneous recognition an individual on the micro data file. There were two objectives:

- to identify combinations of variables that result in a high proportion of uniques i.e., what variables are "causing" an abnormal number of unique combinations.

- to determine what individual records emerge as uniques in many three-way combinations -- an indicator that the record in question is quite unusual and perhaps identifiable.

Because the NLSCY sample consists of approximately 0.5% of Canadian children, one should expect high proportions of unique combinations when several desegregated variables are combined. Therefore the goal was not to ensure that there were no unique combinations on the micro data file. This would involve making suppressions or recodes on virtually every record on the file. Instead the approach taken was to systematically identify variables and records causing the most problems and focus attention on them.

3/ Finally, all univariate counts were reviewed in isolation to assess any potential confidentiality problems. Top and bottom capping of values or regrouping of values was sometimes carried out.

Changes and suppressions made on the micro data file as a result of this analysis are presented in the next section.

13.2 Variables Available on Master File Not Included on Public Use File

The following is a summary of the actions that have been taken on the micro data file to reduce the risk of disclosure for individual respondents. It should be noted that in the univariate counts given in Section 14, counts from the master file are presented. This way, users can be aware of what is available on the master file. There is a note on the record layout explaining the nature of the suppression that was made on the micro data file for the variable. Most suppressions involved setting a variable to not stated.

Because children born in multiple births (twin, triplets and so on) are highly visible, much of the information about these children is being suppressed. Other children were also identifiable because of specific combination of information, so some of their information was also suppressed. The suppression for these cases can affected almost all variables. For these cases there are no suppression notes on the record layout.

13.2.1 Geographical Variables

- it was necessary to suppress the province code (BGEHD03) on some records on the micro data file. This was done for children who did not live with a parent and children

who lived in a family with a maIle PMK with no spouse/partner. As a result the province code was set to Not-Stated for 291 children.

•It was necessary to suppress the province code (BGEHD03) on all records on the self completed micro data file (for 10-13 year olds). A new variable identifying the geographical regions (Atlantic, Quebec, Ontario, Prairies and British Columbia) will be the smallest geographic area available for analysis.

•Sub-provincial indicators have not been included on the micro data file. Census Metropolitan Area (CMA) is available on the NLSCY master file (BGEHD02) as well as an indicator of urban/rural class size (BGEHD01).

13.2.2 Family Demographic variables

•Detailed age in years for the child (BMMCQ01) has been included on the micro data file (i.e., age for up to four children in the household). As a result of including detailed age, it was necessary to suppress collection date. Collection for the NLSCY took place over an eight-month period. By suppressing collection date this casts some doubt on the exact ages of the children.

- It was only possible to have age in ranges for the PMK (BDMPD06D with ranges 15 to 24, 25 to 29, 30 to 34, 35 to 39, and 40+). Age for the spouse/partner has been suppressed entirely. The age group for male PMKs not living with a spouse/partner has been set to not-stated. For female PMKs not living with a spouse/partner age group has been set to not-stated for a few cases. For families where children did not live with a parent, the spouse information was set at not stated and the age group of the PMK was also set to not stated.

- There is a variable on the micro data file indicating the number of people living in the household (BDMHD02). It has been capped at 6. The variable indicating the total number of persons in the economic family has been suppressed.

- On the micro data file, the sibling variables (total number of siblings (BDMCD08), number of older siblings (BDMCD09), number of younger siblings (BDMCD10) and number of siblings of exactly the same age (BDMCD11)) have all in effect been made into dichotomous variables. A code "0" means there is no such sibling and a code "1" means there is one or more of such a sibling.

- The variables on age of biological mother at birth of child (BDMCD18 and D18B) and age of biological father at birth of child (BDMCD19 and D19B) have been suppressed.

- The age of children on the self-completed micro-data file were combined (10 and 11, 12 and 13) so as to match the type of self-completed questionnaire filled out.

- The variable identifying the type of families on the self-completed file was recoded to identify only two types; couples and non-couples.

13.2.3 Ethno cultural Variables

•It was necessary to suppress many of the variables in this section on the micro data file due to confidentiality concerns. The questions on country of birth, ethnicity and religion have all been suppressed while frequency of attendance at religious services has been retained.

•The questions on mother tongue and language of conversation are included on the micro data file but only with aggregated answer categories:

- •English only
- •French only
- •English and French only
- •At least one "other" language indicated.

•Language of conversation:

- the aggregated variables are labelled as BSD**P**D05B, BSD**S**D05B, and BSD**C**D05B, for the **P**MK, **S**pouse/partner and **C**hild on the micro data file. There were a few suppressions for this variable.

•Mother tongue:

- the aggregated variables are BSDPD06B, BSDSD06B and BSDCD06B.

•Immigrant population:

- a derived variable was created to indicate number of years since first immigrating to Canada. It was possible to put a grouped version (0 to 4 years, 5 to 9 years, 10 or more years) of this derived variable on the micro data file (BSDPD02B, BSDSD02B, BSDPC02B).

13.2.4 Education Variables

•Due to confidentiality concerns only an aggregated version of the highest level of education attained by the PMK and spouse/partner have been included on the micro data file. These variables (BEDPD02 for the PMK and BEDSD02 for the spouse/partner) have the following values: less than secondary, secondary school graduation, beyond high school, college or university degree (including trade).

On the micro data file this variable has been set to not-stated for male PMKs who do not live with a spouse/partner.

•The other education variable included on the micro data file for parents, is current school status and whether attendance is full-time or part-time. These variables have been included on the file for the PMK (BEDPQ05 and Q06), but it was necessary to suppress them for the spouse/partner. If the PMK was a lone parent (i.e., did not live with a spouse/partner), then only the fact as to

whether or not she/he is a student has been retained, while the detail about full-time/part-time status has been suppressed.

•For the education variables on the micro data for children, the variables on language of instruction (BEDCQ12A) and type of school (BEDCBQ0) were set to not-stated in some cases because of confidentiality concerns. Only a very small number of records were affected (the variables for 34 children).

13.2.5 Labour Force Variables

•It was possible to include industry and occupation codes for the main job for the PMK and spouse/partner on the micro data file, but only for fairly large aggregate groupings. There are 21 major groups for occupation and 13 groups for industry.

The Pineo-economic classification code for the main job has also been included on the micro data file.

In a few cases industry and occupation codes have been set to not-stated due to confidentiality concerns. For the PMK, the occupation codes corresponding to religion and mining have been set to not-stated.

In total:

- •the occupation code was set to not-stated for 131 PMKs and for 181 spouse/partners.
- •the industry code was set to not-stated for 106 PMKs and for 6 spouse/partners.
- •the Pineo code was set to not-stated for 486 PMKs and for 470 spouse/partners.

•The hourly wage rate for the PMK and spouse/partner have been included on the micro data file

The input variables used to calculate the hourly wage rate have been suppressed.

•It was possible to include the detailed information on all jobs held by the PMK and spouse/partner in the previous year on the micro data file, except for the start and end dates of the jobs. These dates could potentially give an indication of collection date, which was suppressed. However the vectors to indicate the weeks worked over the previous year for the PMK and spouse/partner have been included.

13.2.6 Income Variables

•The only variable that was allowed to go on the micro data file for sources of income was the main source of household income (BINHD02B) in three major categories:
•wages and salaries, income from self-employment
•worker's compensation, unemployment insurance, social assistance
•other

This variable was suppressed for households where there was a lone male PMK with no

spouse/partner.

•A variable was created for household and PMK income (BINHD01A and BINPD02) for all households with the following categories:

- •less than $10,000
- •$10,000 - $14,999
- •$15,000 - $19,999
- •$20,000 - $29,999
- •$30,000 - $39,999
- •$40,000 or more

•For households in which there was a couple i.e., the PMK had a spouse/partner it was permissible to have more detail at the upper end. Therefore a second income variable (AINHD01B) was set up with the following categories:

- •less than $10,000
- •$10,000 - $14,999
- •$15,000 - $19,999
- •$20,000 - $29,999
- •$30,000 - $39,999
- •$40,000 - $49,999
- •$50,000 - $59,999
- •$60,000 - $79,999
- •$80,000 or more

This second variable has been set to not-applicable on the micro data file for all households where the PMK does not have a spouse/partner.

•The micro data file includes the ratio of household income to the low income cut-off for the economic family (i.e., the LICO) in ranges (<0.75, 0.75-<0.9, 0.9-<1.0, 1.0-<1.1, 1.1-<1.25, 1.25). Again it was not possible to give the exact ratio.

•The Socio-economic status variable discussed in Section 8.5 has been included on the micro data file. It was necessary to cap this variable at -2.0 at the lower end and +1.75 at the upper end.

•The Socio-economic status variable was recoded on the self-completed files was recoded to eight categories:

SES Recoded	Range of the original value
1.....	Under -1.7
2.....	Greater or equal to -1.7 but less than -1.1
3.....	Greater or equal to -1.1 but less than -0.8
4.....	Greater or equal to -0.8 but less than -0.5
5.....	Greater or equal to -0.5 but less than -0.2
6.....	Greater or equal to -0.2 but less than 0.1
7.....	Greater or equal to 0.1 but less than 0.7
8.....	Greater or equal to 0.7 but less than 1.7
	Greater or equal to -1.7

13.2.7 Medical Biological Variables

•On the micro data file it was necessary to cap birth weight (BMDCQ13B) at the lower end at 1.499 kilograms and less.

•For multiple births the variable (BMDCQ15) was capped at the upper end at 2 or more (i.e., twins).

13.2.8 Child and Adult Health Variables

On the microdata file, it was necessary to selectively suppress information for certain sub-populations. Chronic Care conditions for the Parent has been suppressed for all records, restriction of Activity for the parents and chronic care of the child have been suppressed for all single parent records (male or female) and, restriction of activities (general and by Asthma) and Chronic condition (Asthma only) of the child have been suppressed from the Male lone parent records.

In addition, the following health variables have been suppressed from all record: 1) From adult health, Type of cancer, Asthma Attack, Age of mother at first baby, and 2) for the Child: The entire sections dealing with the child's vision, hearing, speech, getting around and hands and fingers as well as the use of a mental health professional and the use of medications (including Ventolin, Ritalin, tranquilizers or nerve pills, anti-convulsants or anti-epileptic pills or other medication).

13.2.9 Dwelling Characteristics Variables

A useful series of variables captured by the NLSCY interviewer deals with the type, size and ownership and state of repair of the dwelling visited during the interview. Due to the directly observable nature of these variables, they have all been suppressed from the public micro data file.

13.2.10 Education Component Variables (Teacher's and Principal's Questionnaires)

These sections produce a particular problem of confidentiality that is relatively new to Statistics Canada. The idea of confidentiality is to protect the respondent from been identified as a respondent by others analysing the data. Given the large number of variables and a good memory, it is still possible for a respondent to find himself or herself (they know both direct and indirect identifiers and given a large enough collection of variables, they can narrow their search

considerably). The problem posed by the Teacher's and Principal's Questionnaires is that if Statistics Canada releases their information, each record would include the responses from several respondents and it would be possible that an individual finding their response could breach the confidentiality of another. While the Statistics Act provides legal recourse for such a breach, Statistics Canada is nevertheless unwilling to take the chance that someone outside the household might gain access to confidential information in this manner. For this reason, the second release has suppressed **all** of the variables associated with these two important components.

13.2.11 Custody Variables

This large collection of variables deals with the child's custody situation and the marital status of the parents, before, at and after the birth of the child in question. Due to its heavy reliance on event dates, the entire section was deemed a confidentiality risk and has been suppressed on the public micro data file.

13.2.12 Territory variables

Discussed in detail in its own documentation, the data collected from the Yukon and Northwest Territories will not be released as a public micro data file. Due to smaller samples, unique record occurrences are more frequent, and, overlapping samples with the National Population Health Survey presents particular confidentiality issues.

13.3 Remote Access Requests

During the past few years, as the surveys conducted by Statistics Canada have grown in scope and the number of variables collected increased substantially, suppression and collapsing of confidential variables has become a source of concern for many users of the data. This is particularly true for users of longitudinal data sets such as the NLSCY. As the number of variables collected about NLSCY survey respondents grows over time, more and more is known about these individuals and the protection of the person's confidentiality becomes a difficult task. At the same time, if the variables collected cannot be made readily available to users, it becomes difficult to justify the expense required to collect these variables. Often these are the very variables that are critical to a complete and comprehensive analysis of the survey data.

While individuals can obtain additional information through special "custom" tabulations this process does not facilitate inferential statistical analysis which is the primary objective of most researchers. Remote Data Access (RDA) is a service offered by Statistics Canada in order to facilitate this type of analysis,

RDA is a procedure whereby researchers are provided with a synthetic file on which they can do "quasi" data analysis for the purposes of verifying the logic and feasibility of the data analysis. The synthetic file is created using data for a representative proportion of respondents on a cross-sectional basis. For the NLSCY, ten percent of the sample is used to create the synthetic file. Blocks of variables are defined and swapped among records such that an individual record

becomes synthetic while the frequency distributions and overall relationship between variables mimics that of the master data file.

By using the synthetic file, researchers are able to investigate the general relationship between variables that are suppressed on the public use microdata file. In doing so, researchers are able to identify the feasibility of the analysis not only by formulating and testing retrieval code but also by examining the relationships that exist among variables in the synthetic file. With this information researchers are able to identify and program additional data manipulation that may be required, for example, the creation of derived variables or collapsing of variables.

Researchers will transmit RDA programs electronically to Statistics Canada via the INTERNET, which will then be moved into the Department's internal, secure environment. Next, the code would be processed on a PC, the results vetted for confidentiality, and shipped back to the client.

It should be noted that the onus is with the user to submit retrieval programs which are correct and tested. Statistics Canada will review results only for confidentiality concerns and will not make any assessment whatsoever as to whether or not the submitted program has worked properly. Initially, there should be some discussion to ensure that Statistics Canada has a copy of the software used in the submitted program.

The procedures for remote access are as followed:

1. Researchers will be given access to the synthetic files.

2. Before beginning the remote access researchers will be required to contact Statistics Canada outlining the objectives for their remote data access requests and the program package they will be using. Initial contact should be made with: nlscy@statcan.ca.

3. Statistics Canada sets up an account for the client in order to for billing purposes.

4. Clients produce and test programs using the synthetic research file. At this stage, clients can assess the feasibility of their requests as well as test their programs.

5. The researcher sends an e-mail message to Statistics Canada (nlscy@statcan.ca) which contains the attached RDA program.

6. Statistics Canada runs the program. vets the results for confidentiality, and, if needed, suppresses results which may breach confidentiality.

7. If there is an error in the program, Statistics Canada will not fix this error but will send back the log for the porgam.

8. These results are sent back to the researcher attached to an email message.

Guiding principles

1. RDA will operate on a cost-recovery basis. The cost is currently set at $80 per submission.

2. RDA does not currently support programs which require front end manual intervention before submitting the request.

3. Statistics Canada will be responsible for running and vetting the programs only. It will not make any assessment whatsoever as to whether or not the submitted program has worked properly.

4. Programs Supported: The NLSCY currently supports SAS.

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Newfoundland
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	46.4	46.2	45.5	44.3	43.0	41.7	40.4	39.0	37.6	36.1	33.0	25.6	14.8
2	**********	********	32.7	32.2	31.3	30.4	29.5	28.6	27.6	26.6	25.6	23.3	18.1	10.4
3	**********	**********	**********	26.3	25.6	24.8	24.1	23.3	22.5	21.7	20.9	19.1	14.8	8.5
4	**********	**********	**********	22.7	22.1	21.5	20.9	20.2	19.5	18.8	18.1	16.5	12.8	7.4
5	**********	**********	**********	20.3	19.8	19.2	18.7	18.1	17.5	16.8	16.2	14.8	11.4	6.6
6	**********	**********	**********	**********	18.1	17.6	17.0	16.5	15.9	15.4	14.8	13.5	10.4	6.0
7	**********	**********	**********	**********	16.7	16.3	15.8	15.3	14.8	14.2	13.7	12.5	9.7	5.6
8	**********	**********	**********	**********	15.7	15.2	14.8	14.3	13.8	13.3	12.8	11.7	9.0	5.2
9	**********	**********	**********	**********	14.8	14.3	13.9	13.5	13.0	12.5	12.0	11.0	8.5	4.9
10	**********	**********	**********	**********	14.0	13.6	13.2	12.8	12.3	11.9	11.4	10.4	8.1	4.7
11	**********	**********	**********	**********	**********	13.0	12.6	12.2	11.8	11.3	10.9	9.9	7.7	4.4
12	**********	**********	**********	**********	**********	12.4	12.0	11.7	11.3	10.9	10.4	9.5	7.4	4.3
13	**********	**********	**********	**********	**********	11.9	11.6	11.2	10.8	10.4	10.0	9.2	7.1	4.1
14	**********	**********	**********	**********	**********	11.5	11.2	10.8	10.4	10.1	9.7	8.8	6.8	3.9
15	**********	**********	**********	**********	**********	11.1	10.8	10.4	10.1	9.7	9.3	8.5	6.6	3.8
16	**********	**********	**********	**********	**********	**********	10.4	10.1	9.8	9.4	9.0	8.2	6.4	3.7
17	**********	**********	**********	**********	**********	**********	10.1	9.8	9.5	9.1	8.8	8.0	6.2	3.6
18	**********	**********	**********	**********	**********	**********	9.8	9.5	9.2	8.9	8.5	7.8	6.0	3.5
19	**********	**********	**********	**********	**********	**********	9.6	9.3	9.0	8.6	8.3	7.6	5.9	3.4
20	**********	**********	**********	**********	**********	**********	9.3	9.0	8.7	8.4	8.1	7.4	5.7	3.3
21	**********	**********	**********	**********	**********	**********	**********	8.8	8.5	8.2	7.9	7.2	5.6	3.2
22	**********	**********	**********	**********	**********	**********	**********	8.6	8.3	8.0	7.7	7.0	5.4	3.1
23	**********	**********	**********	**********	**********	**********	**********	8.4	8.1	7.8	7.5	6.9	5.3	3.1
24	**********	**********	**********	**********	**********	**********	**********	8.2	8.0	7.7	7.4	6.7	5.2	3.0
25	**********	**********	**********	**********	**********	**********	**********	8.1	7.8	7.5	7.2	6.6	5.1	3.0
30	**********	**********	**********	**********	**********	**********	**********	**********	7.1	6.9	6.6	6.0	4.7	2.7
35	**********	**********	**********	**********	**********	**********	**********	**********	**********	6.4	6.1	5.6	4.3	2.5
40	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	5.7	5.2	4.0	2.3
45	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	4.9	3.8	2.2
50	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	4.7	3.6	2.1
55	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.4	2.0
60	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.3	1.9
65	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.2	1.8
70	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.1	1.8
75	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	1.7
80	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	1.6
85	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	1.6
90	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	1.6

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Prince Edward Island
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	**********	**********	**********	31.8	31.0	30.1	29.2	28.3	27.3	26.3	25.3	23.1	17.9	10.3
2	**********	**********	**********	21.9	21.3	20.6	20.0	19.3	18.6	17.9	16.3	12.6	7.3	
3	**********	**********	**********	17.4	16.9	16.3	15.8	15.2	14.6	13.3	10.3	6.0		
4	**********	**********	**********	15.0	14.6	14.1	13.7	13.2	12.6	11.5	8.9	5.2		
5	**********	**********	**********	13.1	12.6	12.2	11.8	11.3	10.3	8.0	4.6			
6	**********	**********	**********	11.5	11.1	10.7	10.3	9.4	7.3	4.2				
7	**********	**********	**********	10.3	9.9	9.6	8.7	6.8	3.9					
8	**********	**********	**********	9.7	9.3	8.9	8.2	6.3	3.6					
9	**********	**********	**********	8.8	8.4	7.7	6.0	3.4						
10	**********	**********	**********	8.0	7.3	5.7	3.3							
11	**********	**********	**********	7.0	5.4	3.1								
12	**********	**********	**********	6.7	5.2	3.0								
13	**********	**********	**********	6.4	5.0	2.9								
14	**********	**********	**********	4.8	2.8									
15	**********	**********	**********	4.6	2.7									
16	**********	**********	**********	4.5	2.6									
17	**********	**********	**********	4.3	2.5									
18	**********	**********	**********	4.2	2.4									
19	**********	**********	**********	2.4										
20	**********	**********	**********	2.3										
21	**********	**********	**********	2.3										
22	**********	**********	**********	2.2										
23	**********	**********	**********	2.2										
24	**********	**********	**********	2.1										

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Nova Scotia
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	58.6	58.3	57.4	55.9	54.3	52.7	51.0	49.3	47.5	45.6	41.6	32.2	18.6
2	**********	41.2	40.6	39.5	38.4	37.2	36.1	34.8	33.6	32.2	29.4	22.8	13.2	
3	**********	33.7	33.1	32.2	31.3	30.4	29.4	28.4	27.4	26.3	24.0	18.6	10.7	
4	**********	28.7	27.9	27.1	26.3	25.5	24.6	23.7	22.8	20.8	16.1	9.3		
5	**********	25.7	25.0	24.3	23.6	22.8	22.0	21.2	20.4	18.6	14.4	8.3		
6	**********	23.4	22.8	22.2	21.5	20.8	20.1	19.4	18.6	17.0	13.2	7.6		
7	**********	21.7	21.1	20.5	19.9	19.3	18.6	17.9	17.2	15.7	12.2	7.0		
8	**********	20.3	19.7	19.2	18.6	18.0	17.4	16.8	16.1	14.7	11.4	6.6		
9	**********	18.6	18.1	17.6	17.0	16.4	15.8	15.2	13.9	10.7	6.2			
10	**********	17.7	17.2	16.7	16.1	15.6	15.0	14.4	13.2	10.2	5.9			
11	**********	16.8	16.4	15.9	15.4	14.9	14.3	13.8	12.6	9.7	5.6			
12	**********	16.1	15.7	15.2	14.7	14.2	13.7	13.2	12.0	9.3	5.4			
13	**********	15.5	15.1	14.6	14.1	13.7	13.2	12.6	11.5	8.9	5.2			
14	**********	14.9	14.5	14.1	13.6	13.2	12.7	12.2	11.1	8.6	5.0			
15	**********	14.4	14.0	13.6	13.2	12.7	12.3	11.8	10.7	8.3	4.8			
16	**********	14.0	13.6	13.2	12.7	12.3	11.9	11.4	10.4	8.1	4.7			
17	**********	13.2	12.8	12.4	11.9	11.5	11.1	10.1	7.8	4.5				
18	**********	12.8	12.4	12.0	11.6	11.2	10.7	9.8	7.6	4.4				
19	**********	12.5	12.1	11.7	11.3	10.9	10.5	9.6	7.4	4.3				
20	**********	12.1	11.8	11.4	11.0	10.6	10.2	9.3	7.2	4.2				
21	**********	11.8	11.5	11.1	10.7	10.4	10.0	9.1	7.0	4.1				
22	**********	11.6	11.2	10.9	10.5	10.1	9.7	8.9	6.9	4.0				
23	**********	11.3	11.0	10.6	10.3	9.9	9.5	8.7	6.7	3.9				
24	**********	11.1	10.7	10.4	10.1	9.7	9.3	8.5	6.6	3.8				
25	**********	10.9	10.5	10.2	9.9	9.5	9.1	8.3	6.4	3.7				
30	**********	9.6	9.3	9.0	8.7	8.3	7.6	5.9	3.4					
35	**********	8.6	8.3	8.0	7.7	7.0	5.5	3.1						
40	**********	8.1	7.8	7.5	7.2	6.6	5.1	2.9						
45	**********	7.3	7.1	6.8	6.2	4.8	2.8							
50	**********	7.0	6.7	6.4	5.9	4.6	2.6							
55	**********	6.4	6.1	5.6	4.3	2.5								
60	**********	5.9	5.4	4.2	2.4									
65	**********	5.7	5.2	4.0	2.3									
70	**********	5.0	3.9	2.2										
75	**********	4.8	3.7	2.1										
80	**********	4.7	3.6	2.1										
85	**********	3.5	2.0											
90	**********	3.4	2.0											
95	**********	3.3	1.9											
100	**********	3.2	1.9											
125	**********	1.7												
150	**********	1.5												

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for New Brunswick
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	44.3	44.1	43.4	42.2	41.0	39.8	38.5	37.2	35.9	34.5	31.5	24.4	14.1
2	**********	31.2	30.7	29.9	29.0	28.1	27.3	26.3	25.4	24.4	22.3	17.2	10.0	
3	**********	25.0	24.4	23.7	23.0	22.3	21.5	20.7	19.9	18.2	14.1	8.1		
4	**********	21.7	21.1	20.5	19.9	19.3	18.6	17.9	17.2	15.7	12.2	7.0		
5	**********	19.4	18.9	18.3	17.8	17.2	16.7	16.0	15.4	14.1	10.9	6.3		
6	**********	17.7	17.2	16.7	16.2	15.7	15.2	14.6	14.1	12.8	10.0	5.7		
7	**********	16.0	15.5	15.0	14.6	14.1	13.6	13.0	11.9	9.2	5.3			
8	**********	14.9	14.5	14.1	13.6	13.2	12.7	12.2	11.1	8.6	5.0			
9	**********	14.1	13.7	13.3	12.8	12.4	12.0	11.5	10.5	8.1	4.7			
10	**********	13.4	13.0	12.6	12.2	11.8	11.3	10.9	10.0	7.7	4.5			
11	**********	12.7	12.4	12.0	11.6	11.2	10.8	10.4	9.5	7.3	4.2			
12	**********	12.2	11.8	11.5	11.1	10.7	10.4	10.0	9.1	7.0	4.1			
13	**********	11.7	11.4	11.0	10.7	10.3	10.0	9.6	8.7	6.8	3.9			
14	**********	11.0	10.6	10.3	10.0	9.6	9.2	8.4	6.5	3.8				
15	**********	10.6	10.3	10.0	9.6	9.3	8.9	8.1	6.3	3.6				
16	**********	10.3	10.0	9.6	9.3	9.0	8.6	7.9	6.1	3.5				
17	**********	10.0	9.7	9.3	9.0	8.7	8.4	7.6	5.9	3.4				
18	**********	9.7	9.4	9.1	8.8	8.5	8.1	7.4	5.7	3.3				
19	**********	9.4	9.1	8.8	8.5	8.2	7.9	7.2	5.6	3.2				
20	**********	9.2	8.9	8.6	8.3	8.0	7.7	7.0	5.5	3.1				
21	**********	8.7	8.4	8.1	7.8	7.5	6.9	5.3	3.1					
22	**********	8.5	8.2	7.9	7.6	7.3	6.7	5.2	3.0					
23	**********	8.3	8.0	7.8	7.5	7.2	6.6	5.1	2.9					
24	**********	8.1	7.9	7.6	7.3	7.0	6.4	5.0	2.9					
25	**********	8.0	7.7	7.4	7.2	6.9	6.3	4.9	2.8					
30	**********	7.0	6.8	6.6	6.3	5.7	4.5	2.6						
35	**********	6.3	6.1	5.8	5.3	4.1	2.4							
40	**********	5.9	5.7	5.5	5.0	3.9	2.2							
45	**********	5.3	5.1	4.7	3.6	2.1								
50	**********	4.9	4.5	3.4	2.0									
55	**********	4.2	3.3	1.9										
60	**********	4.1	3.1	1.8										
65	**********	3.9	3.0	1.7										
70	**********	2.9	1.7											
75	**********	2.8	1.6											
80	**********	2.7	1.6											
85	**********	2.6	1.5											
90	**********	2.6	1.5											
95	**********	1.4												
100	**********	1.4												

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Quebec
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	122.0	121.4	120.8	119.0	115.8	112.5	109.2	105.7	102.1	98.4	94.5	86.3	66.8	38.6
2	********	85.9	85.4	84.1	81.9	79.6	77.2	74.7	72.2	69.6	66.8	61.0	47.3	27.3
3	********	70.1	69.8	68.7	66.8	65.0	63.0	61.0	59.0	56.8	54.6	49.8	38.6	22.3
4	********	60.7	60.4	59.5	57.9	56.3	54.6	52.8	51.1	49.2	47.3	43.2	33.4	19.3
5	********	54.3	54.0	53.2	51.8	50.3	48.8	47.3	45.7	44.0	42.3	38.6	29.9	17.3
6	********	49.6	49.3	48.6	47.3	45.9	44.6	43.2	41.7	40.2	38.6	35.2	27.3	15.8
7	********	45.9	45.7	45.0	43.8	42.5	41.3	39.9	38.6	37.2	35.7	32.6	25.3	14.6
8	********	42.9	42.7	42.1	40.9	39.8	38.6	37.4	36.1	34.8	33.4	30.5	23.6	13.6
9	********	40.5	40.3	39.7	38.6	37.5	36.4	35.2	34.0	32.8	31.5	28.8	22.3	12.9
10	********	38.4	38.2	37.6	36.6	35.6	34.5	33.4	32.3	31.1	29.9	27.3	21.1	12.2
11	********	36.6	36.4	35.9	34.9	33.9	32.9	31.9	30.8	29.7	28.5	26.0	20.2	11.6
12	********	35.1	34.9	34.3	33.4	32.5	31.5	30.5	29.5	28.4	27.3	24.9	19.3	11.1
13	**********		33.5	33.0	32.1	31.2	30.3	29.3	28.3	27.3	26.2	23.9	18.5	10.7
14	**********		32.3	31.8	30.9	30.1	29.2	28.2	27.3	26.3	25.3	23.1	17.9	10.3
15	**********		31.2	30.7	29.9	29.1	28.2	27.3	26.4	25.4	24.4	22.3	17.3	10.0
16	**********		30.2	29.7	28.9	28.1	27.3	26.4	25.5	24.6	23.6	21.6	16.7	9.6
17	**********		29.3	28.9	28.1	27.3	26.5	25.6	24.8	23.9	22.9	20.9	16.2	9.4
18	**********		28.5	28.0	27.3	26.5	25.7	24.9	24.1	23.2	22.3	20.3	15.8	9.1
19	**********		27.7	27.3	26.6	25.8	25.0	24.2	23.4	22.6	21.7	19.8	15.3	8.9
20	**********		27.0	26.6	25.9	25.2	24.4	23.6	22.8	22.0	21.1	19.3	14.9	8.6
21	**********		26.4	26.0	25.3	24.6	23.8	23.1	22.3	21.5	20.6	18.8	14.6	8.4
22	**********		25.8	25.4	24.7	24.0	23.3	22.5	21.8	21.0	20.2	18.4	14.3	8.2
23	**********		25.2	24.8	24.1	23.5	22.8	22.0	21.3	20.5	19.7	18.0	13.9	8.0
24	**********		24.7	24.3	23.6	23.0	22.3	21.6	20.8	20.1	19.3	17.6	13.6	7.9
25	**********		24.2	23.8	23.2	22.5	21.8	21.1	20.4	19.7	18.9	17.3	13.4	7.7
30	**********			21.7	21.1	20.5	19.9	19.3	18.6	18.0	17.3	15.8	12.2	7.0
35	**********			20.1	19.6	19.0	18.5	17.9	17.3	16.6	16.0	14.6	11.3	6.5
40	**********			18.8	18.3	17.8	17.3	16.7	16.1	15.6	14.9	13.6	10.6	6.1
45	**********			17.7	17.3	16.8	16.3	15.8	15.2	14.7	14.1	12.9	10.0	5.8
50	**********			16.8	16.4	15.9	15.4	14.9	14.4	13.9	13.4	12.2	9.5	5.5
55	**********			16.0	15.6	15.2	14.7	14.3	13.8	13.3	12.7	11.6	9.0	5.2
60	**********			15.4	14.9	14.5	14.1	13.6	13.2	12.7	12.2	11.1	8.6	5.0
65	**********				14.4	14.0	13.5	13.1	12.7	12.2	11.7	10.7	8.3	4.8
70	**********				13.8	13.4	13.0	12.6	12.2	11.8	11.3	10.3	8.0	4.6
75	**********				13.4	13.0	12.6	12.2	11.8	11.4	10.9	10.0	7.7	4.5
80	**********				12.9	12.6	12.2	11.8	11.4	11.0	10.6	9.6	7.5	4.3
85	**********				12.6	12.2	11.8	11.5	11.1	10.7	10.3	9.4	7.3	4.2
90	**********				12.2	11.9	11.5	11.1	10.8	10.4	10.0	9.1	7.0	4.1
95	**********				11.9	11.5	11.2	10.8	10.5	10.1	9.7	8.9	6.9	4.0
100	**********				11.6	11.3	10.9	10.6	10.2	9.8	9.5	8.6	6.7	3.9
125	**********				10.4	10.1	9.8	9.5	9.1	8.8	8.5	7.7	6.0	3.5
150	**********					9.2	8.9	8.6	8.3	8.0	7.7	7.0	5.5	3.2
200	**********					7.7	7.5	7.2	7.0	6.7	6.1	4.7	2.7	
250	**********					6.9	6.7	6.5	6.2	6.0	5.5	4.2	2.4	
300	**********						6.1	5.9	5.7	5.5	5.0	3.9	2.2	
350	**********							5.5	5.3	5.1	4.6	3.6	2.1	
400	**********								4.9	4.7	4.3	3.3	1.9	
450	**********									4.5	4.1	3.2	1.8	
500	**********									4.2	3.9	3.0	1.7	
750	**********											2.4	1.4	
1000	**********												1.2	

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Ontario
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	131.9	131.3	130.6	128.6	125.2	121.6	118.0	114.2	110.4	106.4	102.2	93.3	72.3	41.7
2	93.2	92.8	92.3	90.9	88.5	86.0	83.4	80.8	78.0	75.2	72.3	66.0	51.1	29.5
3	********	75.8	75.4	74.2	72.3	70.2	68.1	66.0	63.7	61.4	59.0	53.9	41.7	24.1
4	********	65.6	65.3	64.3	62.6	60.8	59.0	57.1	55.2	53.2	51.1	46.6	36.1	20.9
5	********	58.7	58.4	57.5	56.0	54.4	52.8	51.1	49.4	47.6	45.7	41.7	32.3	18.7
6	********	53.6	53.3	52.5	51.1	49.7	48.2	46.6	45.1	43.4	41.7	38.1	29.5	17.0
7	********	49.6	49.4	48.6	47.3	46.0	44.6	43.2	41.7	40.2	38.6	35.3	27.3	15.8
8	********	46.4	46.2	45.5	44.2	43.0	41.7	40.4	39.0	37.6	36.1	33.0	25.5	14.7
9	********	43.8	43.5	42.9	41.7	40.5	39.3	38.1	36.8	35.5	34.1	31.1	24.1	13.9
10	********	41.5	41.3	40.7	39.6	38.5	37.3	36.1	34.9	33.6	32.3	29.5	22.8	13.2
11	********	39.6	39.4	38.8	37.7	36.7	35.6	34.4	33.3	32.1	30.8	28.1	21.8	12.6
12	********	37.9	37.7	37.1	36.1	35.1	34.1	33.0	31.9	30.7	29.5	26.9	20.9	12.0
13	********	36.4	36.2	35.7	34.7	33.7	32.7	31.7	30.6	29.5	28.3	25.9	20.0	11.6
14	********	35.1	34.9	34.4	33.4	32.5	31.5	30.5	29.5	28.4	27.3	24.9	19.3	11.1
15	********	33.9	33.7	33.2	32.3	31.4	30.5	29.5	28.5	27.5	26.4	24.1	18.7	10.8
16	********	32.8	32.6	32.1	31.3	30.4	29.5	28.6	27.6	26.6	25.5	23.3	18.1	10.4
17	********	31.8	31.7	31.2	30.4	29.5	28.6	27.7	26.8	25.8	24.8	22.6	17.5	10.1
18	********	30.9	30.8	30.3	29.5	28.7	27.8	26.9	26.0	25.1	24.1	22.0	17.0	9.8
19	********	30.1	30.0	29.5	28.7	27.9	27.1	26.2	25.3	24.4	23.4	21.4	16.6	9.6
20	********	29.4	29.2	28.8	28.0	27.2	26.4	25.5	24.7	23.8	22.8	20.9	16.2	9.3
21	********	28.6	28.5	28.1	27.3	26.5	25.7	24.9	24.1	23.2	22.3	20.4	15.8	9.1
22	**********		27.8	27.4	26.7	25.9	25.2	24.4	23.5	22.7	21.8	19.9	15.4	8.9
23	**********		27.2	26.8	26.1	25.4	24.6	23.8	23.0	22.2	21.3	19.5	15.1	8.7
24	**********		26.7	26.2	25.5	24.8	24.1	23.3	22.5	21.7	20.9	19.0	14.7	8.5
25	**********		26.1	25.7	25.0	24.3	23.6	22.8	22.1	21.3	20.4	18.7	14.5	8.3
30	**********		23.8	23.5	22.8	22.2	21.5	20.9	20.2	19.4	18.7	17.0	13.2	7.6
35	**********		22.1	21.7	21.2	20.6	19.9	19.3	18.7	18.0	17.3	15.8	12.2	7.1
40	**********		20.6	20.3	19.8	19.2	18.7	18.1	17.5	16.8	16.2	14.7	11.4	6.6
45	**********			19.2	18.7	18.1	17.6	17.0	16.5	15.9	15.2	13.9	10.8	6.2
50	**********			18.2	17.7	17.2	16.7	16.2	15.6	15.0	14.5	13.2	10.2	5.9
55	**********			17.3	16.9	16.4	15.9	15.4	14.9	14.3	13.8	12.6	9.7	5.6
60	**********			16.6	16.2	15.7	15.2	14.7	14.2	13.7	13.2	12.0	9.3	5.4
65	**********			15.9	15.5	15.1	14.6	14.2	13.7	13.2	12.7	11.6	9.0	5.2
70	**********			15.4	15.0	14.5	14.1	13.7	13.2	12.7	12.2	11.1	8.6	5.0
75	**********			14.8	14.5	14.0	13.6	13.2	12.7	12.3	11.8	10.8	8.3	4.8
80	**********			14.4	14.0	13.6	13.2	12.8	12.3	11.9	11.4	10.4	8.1	4.7
85	**********			13.9	13.6	13.2	12.8	12.4	12.0	11.5	11.1	10.1	7.8	4.5
90	**********			13.6	13.2	12.8	12.4	12.0	11.6	11.2	10.8	9.8	7.6	4.4
95	**********			13.2	12.8	12.5	12.1	11.7	11.3	10.9	10.5	9.6	7.4	4.3
100	**********			12.9	12.5	12.2	11.8	11.4	11.0	10.6	10.2	9.3	7.2	4.2
125	**********				11.2	10.9	10.6	10.2	9.9	9.5	9.1	8.3	6.5	3.7
150	**********				10.2	9.9	9.6	9.3	9.0	8.7	8.3	7.6	5.9	3.4
200	**********				8.8	8.6	8.3	8.1	7.8	7.5	7.2	6.6	5.1	2.9
250	**********					7.7	7.5	7.2	7.0	6.7	6.5	5.9	4.6	2.6
300	**********					7.0	6.8	6.6	6.4	6.1	5.9	5.4	4.2	2.4
350	**********						6.3	6.1	5.9	5.7	5.5	5.0	3.9	2.2
400	**********						5.9	5.7	5.5	5.3	5.1	4.7	3.6	2.1
450	**********							5.4	5.2	5.0	4.8	4.4	3.4	2.0
500	**********							5.1	4.9	4.8	4.6	4.2	3.2	1.9
750	**********										3.7	3.4	2.6	1.5
1000	**********											2.9	2.3	1.3
1500	**********													1.1

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Manitoba
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	73.3	72.9	71.8	69.9	67.9	65.9	63.8	61.7	59.4	57.1	52.1	40.4	23.3
2	********	51.8	51.6	50.8	49.4	48.0	46.6	45.1	43.6	42.0	40.4	36.8	28.5	16.5
3	**********		42.1	41.5	40.4	39.2	38.1	36.8	35.6	34.3	33.0	30.1	23.3	13.5
4	**********		36.5	35.9	35.0	34.0	33.0	31.9	30.8	29.7	28.5	26.1	20.2	11.7
5	**********			32.1	31.3	30.4	29.5	28.5	27.6	26.6	25.5	23.3	18.1	10.4
6	**********			29.3	28.5	27.7	26.9	26.1	25.2	24.3	23.3	21.3	16.5	9.5
7	**********			27.1	26.4	25.7	24.9	24.1	23.3	22.5	21.6	19.7	15.3	8.8
8	**********			25.4	24.7	24.0	23.3	22.6	21.8	21.0	20.2	18.4	14.3	8.2
9	**********			23.9	23.3	22.6	22.0	21.3	20.6	19.8	19.0	17.4	13.5	7.8
10	**********			22.7	22.1	21.5	20.8	20.2	19.5	18.8	18.1	16.5	12.8	7.4
11	**********				21.1	20.5	19.9	19.2	18.6	17.9	17.2	15.7	12.2	7.0
12	**********				20.2	19.6	19.0	18.4	17.8	17.2	16.5	15.0	11.7	6.7
13	**********				19.4	18.8	18.3	17.7	17.1	16.5	15.8	14.5	11.2	6.5
14	**********				18.7	18.2	17.6	17.1	16.5	15.9	15.3	13.9	10.8	6.2
15	**********				18.1	17.5	17.0	16.5	15.9	15.3	14.7	13.5	10.4	6.0
16	**********				17.5	17.0	16.5	16.0	15.4	14.9	14.3	13.0	10.1	5.8
17	**********				17.0	16.5	16.0	15.5	15.0	14.4	13.8	12.6	9.8	5.7
18	**********				16.5	16.0	15.5	15.0	14.5	14.0	13.5	12.3	9.5	5.5
19	**********				16.0	15.6	15.1	14.6	14.1	13.6	13.1	12.0	9.3	5.3
20	**********				15.6	15.2	14.7	14.3	13.8	13.3	12.8	11.7	9.0	5.2
21	**********				15.3	14.8	14.4	13.9	13.5	13.0	12.5	11.4	8.8	5.1
22	**********					14.5	14.1	13.6	13.1	12.7	12.2	11.1	8.6	5.0
23	**********					14.2	13.7	13.3	12.9	12.4	11.9	10.9	8.4	4.9
24	**********					13.9	13.5	13.0	12.6	12.1	11.7	10.6	8.2	4.8
25	**********					13.6	13.2	12.8	12.3	11.9	11.4	10.4	8.1	4.7
30	**********					12.4	12.0	11.7	11.3	10.8	10.4	9.5	7.4	4.3
35	**********						11.1	10.8	10.4	10.0	9.6	8.8	6.8	3.9
40	**********						10.4	10.1	9.7	9.4	9.0	8.2	6.4	3.7
45	**********							9.5	9.2	8.9	8.5	7.8	6.0	3.5
50	**********							9.0	8.7	8.4	8.1	7.4	5.7	3.3
55	**********								8.3	8.0	7.7	7.0	5.4	3.1
60	**********								8.0	7.7	7.4	6.7	5.2	3.0
65	**********									7.4	7.1	6.5	5.0	2.9
70	**********									7.1	6.8	6.2	4.8	2.8
75	**********										6.6	6.0	4.7	2.7
80	**********										6.4	5.8	4.5	2.6
85	**********										6.2	5.7	4.4	2.5
90	**********											5.5	4.3	2.5
95	**********											5.3	4.1	2.4
100	**********											5.2	4.0	2.3
125	**********												3.6	2.1
150	**********													1.9

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Saskatchewan
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	60.4	60.0	59.1	57.5	55.9	54.3	52.5	50.8	48.9	47.0	42.9	33.2	19.2
2	********	42.7	42.5	41.8	40.7	39.5	38.4	37.1	35.9	34.6	33.2	30.3	23.5	13.6
3	**********		34.7	34.1	33.2	32.3	31.3	30.3	29.3	28.2	27.1	24.8	19.2	11.1
4	**********		30.0	29.6	28.8	28.0	27.1	26.3	25.4	24.5	23.5	21.4	16.6	9.6
5	**********			26.4	25.7	25.0	24.3	23.5	22.7	21.9	21.0	19.2	14.9	8.6
6	**********			24.1	23.5	22.8	22.1	21.4	20.7	20.0	19.2	17.5	13.6	7.8
7	**********			22.3	21.8	21.1	20.5	19.9	19.2	18.5	17.8	16.2	12.6	7.3
8	**********			20.9	20.3	19.8	19.2	18.6	17.9	17.3	16.6	15.2	11.7	6.8
9	**********			19.7	19.2	18.6	18.1	17.5	16.9	16.3	15.7	14.3	11.1	6.4
10	**********			18.7	18.2	17.7	17.2	16.6	16.0	15.5	14.9	13.6	10.5	6.1
11	**********				17.4	16.9	16.4	15.8	15.3	14.7	14.2	12.9	10.0	5.8
12	**********				16.6	16.1	15.7	15.2	14.7	14.1	13.6	12.4	9.6	5.5
13	**********				16.0	15.5	15.0	14.6	14.1	13.6	13.0	11.9	9.2	5.3
14	**********				15.4	14.9	14.5	14.0	13.6	13.1	12.6	11.5	8.9	5.1
15	**********				14.9	14.4	14.0	13.6	13.1	12.6	12.1	11.1	8.6	5.0
16	**********				14.4	14.0	13.6	13.1	12.7	12.2	11.7	10.7	8.3	4.8
17	**********				14.0	13.6	13.2	12.7	12.3	11.9	11.4	10.4	8.1	4.7
18	**********				13.6	13.2	12.8	12.4	12.0	11.5	11.1	10.1	7.8	4.5
19	**********				13.2	12.8	12.4	12.1	11.6	11.2	10.8	9.8	7.6	4.4
20	**********				12.9	12.5	12.1	11.7	11.3	10.9	10.5	9.6	7.4	4.3
21	**********					12.2	11.8	11.5	11.1	10.7	10.3	9.4	7.3	4.2
22	**********					11.9	11.6	11.2	10.8	10.4	10.0	9.1	7.1	4.1
23	**********					11.7	11.3	11.0	10.6	10.2	9.8	8.9	6.9	4.0
24	**********					11.4	11.1	10.7	10.4	10.0	9.6	8.8	6.8	3.9
25	**********					11.2	10.9	10.5	10.2	9.8	9.4	8.6	6.6	3.8
30	**********					10.2	9.9	9.6	9.3	8.9	8.6	7.8	6.1	3.5
35	**********						9.2	8.9	8.6	8.3	7.9	7.3	5.6	3.2
40	**********						8.6	8.3	8.0	7.7	7.4	6.8	5.3	3.0
45	**********							7.8	7.6	7.3	7.0	6.4	5.0	2.9
50	**********							7.4	7.2	6.9	6.6	6.1	4.7	2.7
55	**********								6.8	6.6	6.3	5.8	4.5	2.6
60	**********								6.6	6.3	6.1	5.5	4.3	2.5
65	**********									6.1	5.8	5.3	4.1	2.4
70	**********									5.8	5.6	5.1	4.0	2.3
75	**********										5.4	5.0	3.8	2.2
80	**********										5.3	4.8	3.7	2.1
85	**********											4.7	3.6	2.1
90	**********											4.5	3.5	2.0
95	**********											4.4	3.4	2.0
100	**********											4.3	3.3	1.9
125	**********												3.0	1.7
150	**********													1.6

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Alberta
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	97.6	97.1	95.6	93.0	90.4	87.7	84.9	82.0	79.0	75.9	69.3	53.7	31.0
2	********	69.0	68.6	67.6	65.8	63.9	62.0	60.0	58.0	55.9	53.7	49.0	38.0	21.9
3	********	56.3	56.0	55.2	53.7	52.2	50.6	49.0	47.4	45.6	43.8	40.0	31.0	17.9
4	********	48.8	48.5	47.8	46.5	45.2	43.8	42.5	41.0	39.5	38.0	34.7	26.9	15.5
5	********	43.6	43.4	42.7	41.6	40.4	39.2	38.0	36.7	35.4	34.0	31.0	24.0	13.9
6	**********		39.6	39.0	38.0	36.9	35.8	34.7	33.5	32.3	31.0	28.3	21.9	12.7
7	**********		36.7	36.1	35.2	34.2	33.1	32.1	31.0	29.9	28.7	26.2	20.3	11.7
8	**********		34.3	33.8	32.9	32.0	31.0	30.0	29.0	27.9	26.9	24.5	19.0	11.0
9	**********		32.4	31.9	31.0	30.1	29.2	28.3	27.3	26.3	25.3	23.1	17.9	10.3
10	**********		30.7	30.2	29.4	28.6	27.7	26.9	25.9	25.0	24.0	21.9	17.0	9.8
11	**********		29.3	28.8	28.0	27.3	26.4	25.6	24.7	23.8	22.9	20.9	16.2	9.3
12	**********			27.6	26.9	26.1	25.3	24.5	23.7	22.8	21.9	20.0	15.5	9.0
13	**********			26.5	25.8	25.1	24.3	23.5	22.8	21.9	21.1	19.2	14.9	8.6
14	**********			25.5	24.9	24.2	23.4	22.7	21.9	21.1	20.3	18.5	14.4	8.3
15	**********			24.7	24.0	23.3	22.6	21.9	21.2	20.4	19.6	17.9	13.9	8.0
16	**********			23.9	23.3	22.6	21.9	21.2	20.5	19.8	19.0	17.3	13.4	7.8
17	**********			23.2	22.6	21.9	21.3	20.6	19.9	19.2	18.4	16.8	13.0	7.5
18	**********			22.5	21.9	21.3	20.7	20.0	19.3	18.6	17.9	16.3	12.7	7.3
19	**********			21.9	21.3	20.7	20.1	19.5	18.8	18.1	17.4	15.9	12.3	7.1
20	**********			21.4	20.8	20.2	19.6	19.0	18.3	17.7	17.0	15.5	12.0	6.9
21	**********			20.9	20.3	19.7	19.1	18.5	17.9	17.2	16.6	15.1	11.7	6.8
22	**********			20.4	19.8	19.3	18.7	18.1	17.5	16.9	16.2	14.8	11.4	6.6
23	**********			19.9	19.4	18.8	18.3	17.7	17.1	16.5	15.8	14.5	11.2	6.5
24	**********			19.5	19.0	18.5	17.9	17.3	16.7	16.1	15.5	14.2	11.0	6.3
25	**********			19.1	18.6	18.1	17.5	17.0	16.4	15.8	15.2	13.9	10.7	6.2
30	**********				17.0	16.5	16.0	15.5	15.0	14.4	13.9	12.7	9.8	5.7
35	**********				15.7	15.3	14.8	14.4	13.9	13.4	12.8	11.7	9.1	5.2
40	**********				14.7	14.3	13.9	13.4	13.0	12.5	12.0	11.0	8.5	4.9
45	**********				13.9	13.5	13.1	12.7	12.2	11.8	11.3	10.3	8.0	4.6
50	**********				13.2	12.8	12.4	12.0	11.6	11.2	10.7	9.8	7.6	4.4
55	**********				12.5	12.2	11.8	11.4	11.1	10.7	10.2	9.3	7.2	4.2
60	**********					11.7	11.3	11.0	10.6	10.2	9.8	9.0	6.9	4.0
65	**********					11.2	10.9	10.5	10.2	9.8	9.4	8.6	6.7	3.8
70	**********					10.8	10.5	10.1	9.8	9.4	9.1	8.3	6.4	3.7
75	**********					10.4	10.1	9.8	9.5	9.1	8.8	8.0	6.2	3.6
80	**********					10.1	9.8	9.5	9.2	8.8	8.5	7.8	6.0	3.5
85	**********					9.8	9.5	9.2	8.9	8.6	8.2	7.5	5.8	3.4
90	**********						9.2	9.0	8.6	8.3	8.0	7.3	5.7	3.3
95	**********						9.0	8.7	8.4	8.1	7.8	7.1	5.5	3.2
100	**********						8.8	8.5	8.2	7.9	7.6	6.9	5.4	3.1
125	**********							7.6	7.3	7.1	6.8	6.2	4.8	2.8
150	**********								6.7	6.5	6.2	5.7	4.4	2.5
200	**********										5.4	4.9	3.8	2.2
250	**********											4.4	3.4	2.0
300	**********												3.1	1.8
350	**********												2.9	1.7
400	**********													1.6
450	**********													1.5
500	**********													1.4

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for British Colombia
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	122.5	121.9	120.0	116.8	113.5	110.1	106.7	103.0	99.3	95.4	87.1	67.5	38.9
2	********	86.6	86.2	84.9	82.6	80.3	77.9	75.4	72.9	70.2	67.5	61.6	47.7	27.5
3	********	70.7	70.4	69.3	67.5	65.6	63.6	61.6	59.5	57.3	55.1	50.3	38.9	22.5
4	********	61.3	61.0	60.0	58.4	56.8	55.1	53.3	51.5	49.6	47.7	43.5	33.7	19.5
5	********	54.8	54.5	53.7	52.2	50.8	49.3	47.7	46.1	44.4	42.7	38.9	30.2	17.4
6	********	50.0	49.8	49.0	47.7	46.4	45.0	43.5	42.1	40.5	38.9	35.6	27.5	15.9
7	**********		46.1	45.4	44.2	42.9	41.6	40.3	38.9	37.5	36.1	32.9	25.5	14.7
8	**********		43.1	42.4	41.3	40.1	38.9	37.7	36.4	35.1	33.7	30.8	23.8	13.8
9	**********		40.6	40.0	38.9	37.8	36.7	35.6	34.3	33.1	31.8	29.0	22.5	13.0
10	**********		38.6	38.0	36.9	35.9	34.8	33.7	32.6	31.4	30.2	27.5	21.3	12.3
11	**********		36.8	36.2	35.2	34.2	33.2	32.2	31.1	29.9	28.8	26.3	20.3	11.7
12	**********		35.2	34.6	33.7	32.8	31.8	30.8	29.7	28.7	27.5	25.1	19.5	11.2
13	**********		33.8	33.3	32.4	31.5	30.5	29.6	28.6	27.5	26.5	24.2	18.7	10.8
14	**********			32.1	31.2	30.3	29.4	28.5	27.5	26.5	25.5	23.3	18.0	10.4
15	**********			31.0	30.2	29.3	28.4	27.5	26.6	25.6	24.6	22.5	17.4	10.1
16	**********			30.0	29.2	28.4	27.5	26.7	25.8	24.8	23.8	21.8	16.9	9.7
17	**********			29.1	28.3	27.5	26.7	25.9	25.0	24.1	23.1	21.1	16.4	9.4
18	**********			28.3	27.5	26.8	26.0	25.1	24.3	23.4	22.5	20.5	15.9	9.2
19	**********			27.5	26.8	26.0	25.3	24.5	23.6	22.8	21.9	20.0	15.5	8.9
20	**********			26.8	26.1	25.4	24.6	23.8	23.0	22.2	21.3	19.5	15.1	8.7
21	**********			26.2	25.5	24.8	24.0	23.3	22.5	21.7	20.8	19.0	14.7	8.5
22	**********			25.6	24.9	24.2	23.5	22.7	22.0	21.2	20.3	18.6	14.4	8.3
23	**********			25.0	24.4	23.7	23.0	22.2	21.5	20.7	19.9	18.2	14.1	8.1
24	**********			24.5	23.8	23.2	22.5	21.8	21.0	20.3	19.5	17.8	13.8	7.9
25	**********			24.0	23.4	22.7	22.0	21.3	20.6	19.9	19.1	17.4	13.5	7.8
30	**********			21.9	21.3	20.7	20.1	19.5	18.8	18.1	17.4	15.9	12.3	7.1
35	**********				19.7	19.2	18.6	18.0	17.4	16.8	16.1	14.7	11.4	6.6
40	**********				18.5	18.0	17.4	16.9	16.3	15.7	15.1	13.8	10.7	6.2
45	**********				17.4	16.9	16.4	15.9	15.4	14.8	14.2	13.0	10.1	5.8
50	**********				16.5	16.1	15.6	15.1	14.6	14.0	13.5	12.3	9.5	5.5
55	**********				15.8	15.3	14.9	14.4	13.9	13.4	12.9	11.7	9.1	5.3
60	**********				15.1	14.7	14.2	13.8	13.3	12.8	12.3	11.2	8.7	5.0
65	**********				14.5	14.1	13.7	13.2	12.8	12.3	11.8	10.8	8.4	4.8
70	**********					13.6	13.2	12.7	12.3	11.9	11.4	10.4	8.1	4.7
75	**********					13.1	12.7	12.3	11.9	11.5	11.0	10.1	7.8	4.5
80	**********					12.7	12.3	11.9	11.5	11.1	10.7	9.7	7.5	4.4
85	**********					12.3	11.9	11.6	11.2	10.8	10.3	9.4	7.3	4.2
90	**********					12.0	11.6	11.2	10.9	10.5	10.1	9.2	7.1	4.1
95	**********					11.6	11.3	10.9	10.6	10.2	9.8	8.9	6.9	4.0
100	**********					11.4	11.0	10.7	10.3	9.9	9.5	8.7	6.7	3.9
125	**********						9.9	9.5	9.2	8.9	8.5	7.8	6.0	3.5
150	**********						8.7	8.4	8.1	7.8	7.1	5.5	3.2	
200	**********							7.3	7.0	6.7	6.2	4.8	2.8	
250	**********									6.0	5.5	4.3	2.5	
300	**********										5.0	3.9	2.2	
350	**********											3.6	2.1	
400	**********											3.4	1.9	
450	**********											3.2	1.8	
500	**********												1.7	

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Canada
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	105.7	105.2	104.7	103.1	100.3	97.5	94.6	91.6	88.5	85.3	81.9	74.8	57.9	33.4
2	74.7	74.4	74.0	72.9	70.9	68.9	66.9	64.8	62.6	60.3	57.9	52.9	41.0	23.6
3	61.0	60.8	60.4	59.5	57.9	56.3	54.6	52.9	51.1	49.2	47.3	43.2	33.4	19.3
4	52.9	52.6	52.3	51.5	50.2	48.8	47.3	45.8	44.2	42.6	41.0	37.4	29.0	16.7
5	47.3	47.1	46.8	46.1	44.9	43.6	42.3	41.0	39.6	38.1	36.6	33.4	25.9	15.0
6	********	43.0	42.7	42.1	41.0	39.8	38.6	37.4	36.1	34.8	33.4	30.5	23.6	13.7
7	********	39.8	39.6	39.0	37.9	36.9	35.8	34.6	33.4	32.2	31.0	28.3	21.9	12.6
8	********	37.2	37.0	36.4	35.5	34.5	33.4	32.4	31.3	30.1	29.0	26.4	20.5	11.8
9	********	35.1	34.9	34.4	33.4	32.5	31.5	30.5	29.5	28.4	27.3	24.9	19.3	11.1
10	********	33.3	33.1	32.6	31.7	30.8	29.9	29.0	28.0	27.0	25.9	23.6	18.3	10.6
11	********	31.7	31.6	31.1	30.3	29.4	28.5	27.6	26.7	25.7	24.7	22.5	17.5	10.1
12	********	30.4	30.2	29.8	29.0	28.1	27.3	26.4	25.5	24.6	23.6	21.6	16.7	9.7
13	********	29.2	29.0	28.6	27.8	27.0	26.2	25.4	24.5	23.6	22.7	20.7	16.1	9.3
14	********	28.1	28.0	27.5	26.8	26.1	25.3	24.5	23.6	22.8	21.9	20.0	15.5	8.9
15	********	27.2	27.0	26.6	25.9	25.2	24.4	23.6	22.8	22.0	21.2	19.3	15.0	8.6
16	********	26.3	26.2	25.8	25.1	24.4	23.6	22.9	22.1	21.3	20.5	18.7	14.5	8.4
17	********	25.5	25.4	25.0	24.3	23.6	22.9	22.2	21.5	20.7	19.9	18.1	14.0	8.1
18	********	24.8	24.7	24.3	23.6	23.0	22.3	21.6	20.9	20.1	19.3	17.6	13.7	7.9
19	********	24.1	24.0	23.6	23.0	22.4	21.7	21.0	20.3	19.6	18.8	17.2	13.3	7.7
20	********	23.5	23.4	23.0	22.4	21.8	21.2	20.5	19.8	19.1	18.3	16.7	13.0	7.5
21	********	23.0	22.8	22.5	21.9	21.3	20.6	20.0	19.3	18.6	17.9	16.3	12.6	7.3
22	********	22.4	22.3	22.0	21.4	20.8	20.2	19.5	18.9	18.2	17.5	15.9	12.3	7.1
23	********	21.9	21.8	21.5	20.9	20.3	19.7	19.1	18.4	17.8	17.1	15.6	12.1	7.0
24	********	21.5	21.4	21.0	20.5	19.9	19.3	18.7	18.1	17.4	16.7	15.3	11.8	6.8
25	********	21.0	20.9	20.6	20.1	19.5	18.9	18.3	17.7	17.1	16.4	15.0	11.6	6.7
30	********	19.2	19.1	18.8	18.3	17.8	17.3	16.7	16.2	15.6	15.0	13.7	10.6	6.1
35	********	17.8	17.7	17.4	17.0	16.5	16.0	15.5	15.0	14.4	13.8	12.6	9.8	5.7
40	********	16.6	16.6	16.3	15.9	15.4	15.0	14.5	14.0	13.5	13.0	11.8	9.2	5.3
45	********	15.7	15.6	15.4	15.0	14.5	14.1	13.7	13.2	12.7	12.2	11.1	8.6	5.0
50	********	14.9	14.8	14.6	14.2	13.8	13.4	13.0	12.5	12.1	11.6	10.6	8.2	4.7
55	**********	14.1	13.9	13.5	13.1	12.8	12.3	11.9	11.5	11.0	10.1	7.8	4.5	
60	**********	13.5	13.3	13.0	12.6	12.2	11.8	11.4	11.0	10.6	9.7	7.5	4.3	
65	**********	13.0	12.8	12.4	12.1	11.7	11.4	11.0	10.6	10.2	9.3	7.2	4.1	
70	**********	12.5	12.3	12.0	11.7	11.3	10.9	10.6	10.2	9.8	8.9	6.9	4.0	
75	**********	12.1	11.9	11.6	11.3	10.9	10.6	10.2	9.8	9.5	8.6	6.7	3.9	
80	**********	11.7	11.5	11.2	10.9	10.6	10.2	9.9	9.5	9.2	8.4	6.5	3.7	
85	**********	11.4	11.2	10.9	10.6	10.3	9.9	9.6	9.2	8.9	8.1	6.3	3.6	
90	**********	11.0	10.9	10.6	10.3	10.0	9.7	9.3	9.0	8.6	7.9	6.1	3.5	
95	**********	10.7	10.6	10.3	10.0	9.7	9.4	9.1	8.7	8.4	7.7	5.9	3.4	
100	**********	10.5	10.3	10.0	9.8	9.5	9.2	8.8	8.5	8.2	7.5	5.8	3.3	
125	**********	9.2	9.0	8.7	8.5	8.2	7.9	7.6	7.3	6.7	5.2	3.0		
150	**********	8.4	8.2	8.0	7.7	7.5	7.2	7.0	6.7	6.1	4.7	2.7		
200	**********	7.3	7.1	6.9	6.7	6.5	6.3	6.0	5.8	5.3	4.1	2.4		
250	**********	6.5	6.3	6.2	6.0	5.8	5.6	5.4	5.2	4.7	3.7	2.1		
300	**********	5.8	5.6	5.5	5.3	5.1	4.9	4.7	4.3	3.3	1.9			
350	**********	5.4	5.2	5.1	4.9	4.7	4.6	4.4	4.0	3.1	1.8			
400	**********	5.0	4.9	4.7	4.6	4.4	4.3	4.1	3.7	2.9	1.7			
450	**********	4.7	4.6	4.5	4.3	4.2	4.0	3.9	3.5	2.7	1.6			
500	**********	4.5	4.4	4.2	4.1	4.0	3.8	3.7	3.3	2.6	1.5			
750	**********	3.6	3.5	3.3	3.2	3.1	3.0	2.7	2.1	1.2				
1000	**********	3.0	2.9	2.8	2.7	2.6	2.4	1.8	1.1					
1500	**********	2.3	2.2	2.1	1.9	1.5	0.9							
2000	**********	1.8	1.7	1.3	0.7									
3000	**********	1.1	0.6											
4000	**********	0.5												

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Atlantic Provinces
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	49.2	48.9	48.2	46.9	45.6	44.2	42.8	41.4	39.9	38.3	35.0	27.1	15.6
2	********	34.8	34.6	34.1	33.2	32.2	31.3	30.3	29.2	28.2	27.1	24.7	19.1	11.1
3	********	28.4	28.3	27.8	27.1	26.3	25.5	24.7	23.9	23.0	22.1	20.2	15.6	9.0
4	********	24.6	24.5	24.1	23.5	22.8	22.1	21.4	20.7	19.9	19.1	17.5	13.5	7.8
5	**********		21.9	21.5	21.0	20.4	19.8	19.1	18.5	17.8	17.1	15.6	12.1	7.0
6	**********		20.0	19.7	19.1	18.6	18.1	17.5	16.9	16.3	15.6	14.3	11.1	6.4
7	**********		18.5	18.2	17.7	17.2	16.7	16.2	15.6	15.1	14.5	13.2	10.2	5.9
8	**********		17.3	17.0	16.6	16.1	15.6	15.1	14.6	14.1	13.5	12.4	9.6	5.5
9	**********		**********	16.1	15.6	15.2	14.7	14.3	13.8	13.3	12.8	11.7	9.0	5.2
10	**********		**********	15.2	14.8	14.4	14.0	13.5	13.1	12.6	12.1	11.1	8.6	4.9
11	**********		**********	14.5	14.1	13.7	13.3	12.9	12.5	12.0	11.5	10.5	8.2	4.7
12	**********		**********	13.9	13.5	13.2	12.8	12.4	11.9	11.5	11.1	10.1	7.8	4.5
13	**********		**********	13.4	13.0	12.6	12.3	11.9	11.5	11.1	10.6	9.7	7.5	4.3
14	**********		**********	12.9	12.5	12.2	11.8	11.4	11.1	10.7	10.2	9.3	7.2	4.2
15	**********		**********	12.4	12.1	11.8	11.4	11.1	10.7	10.3	9.9	9.0	7.0	4.0
16	**********		**********	12.0	11.7	11.4	11.1	10.7	10.3	10.0	9.6	8.7	6.8	3.9
17	**********		**********	11.7	11.4	11.1	10.7	10.4	10.0	9.7	9.3	8.5	6.6	3.8
18	**********		**********	11.4	11.1	10.7	10.4	10.1	9.7	9.4	9.0	8.2	6.4	3.7
19	**********		**********	11.1	10.8	10.5	10.1	9.8	9.5	9.1	8.8	8.0	6.2	3.6
20	**********		**********	10.8	10.5	10.2	9.9	9.6	9.2	8.9	8.6	7.8	6.1	3.5
21	**********		**********	10.5	10.2	9.9	9.6	9.3	9.0	8.7	8.4	7.6	5.9	3.4
22	**********		**********	10.0	9.7	9.4	9.1	8.8	8.5	8.2	7.5	5.8	3.3	
23	**********		**********	9.8	9.5	9.2	8.9	8.6	8.3	8.0	7.3	5.6	3.3	
24	**********		**********	9.6	9.3	9.0	8.7	8.4	8.1	7.8	7.1	5.5	3.2	
25	**********		**********	9.4	9.1	8.8	8.6	8.3	8.0	7.7	7.0	5.4	3.1	
30	**********		**********	8.6	8.3	8.1	7.8	7.6	7.3	7.0	6.4	4.9	2.9	
35	**********		**********	7.9	7.7	7.5	7.2	7.0	6.7	6.5	5.9	4.6	2.6	
40	**********		**********	7.4	7.2	7.0	6.8	6.5	6.3	6.1	5.5	4.3	2.5	
45	**********		**********	6.8	6.6	6.4	6.2	5.9	5.7	5.2	4.0	2.3		
50	**********		**********	6.4	6.3	6.1	5.8	5.6	5.4	4.9	3.8	2.2		
55	**********		**********	6.1	6.0	5.8	5.6	5.4	5.2	4.7	3.7	2.1		
60	**********		**********	5.9	5.7	5.5	5.3	5.1	4.9	4.5	3.5	2.0		
65	**********		**********	5.5	5.3	5.1	4.9	4.7	4.3	3.4	1.9			
70	**********		**********	5.3	5.1	4.9	4.8	4.6	4.2	3.2	1.9			
75	**********		**********	5.1	4.9	4.8	4.6	4.4	4.0	3.1	1.8			
80	**********		**********	4.9	4.8	4.6	4.5	4.3	3.9	3.0	1.7			
85	**********		**********	4.8	4.6	4.5	4.3	4.2	3.8	2.9	1.7			
90	**********		**********	4.5	4.4	4.2	4.0	3.7	2.9	1.6				
95	**********		**********	4.4	4.2	4.1	3.9	3.6	2.8	1.6				
100	**********		**********	4.3	4.1	4.0	3.8	3.5	2.7	1.6				
125	**********		**********	3.7	3.6	3.4	3.1	2.4	1.4					
150	**********		**********	3.1	2.9	2.2	1.3							
200	**********		**********	2.5	1.9	1.1								
250	**********		**********	1.7	1.0									
300	**********		**********	0.9										
350	**********		**********	0.8										

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Prairie Provinces
Cross sectional

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	85.6	85.2	83.9	81.6	79.3	76.9	74.5	72.0	69.4	66.6	60.8	47.1	27.2
2	********	60.5	60.2	59.3	57.7	56.1	54.4	52.7	50.9	49.0	47.1	43.0	33.3	19.2
3	********	49.4	49.2	48.4	47.1	45.8	44.4	43.0	41.6	40.0	38.5	35.1	27.2	15.7
4	********	42.8	42.6	41.9	40.8	39.7	38.5	37.3	36.0	34.7	33.3	30.4	23.6	13.6
5	********	38.3	38.1	37.5	36.5	35.5	34.4	33.3	32.2	31.0	29.8	27.2	21.1	12.2
6	********	34.9	34.8	34.2	33.3	32.4	31.4	30.4	29.4	28.3	27.2	24.8	19.2	11.1
7	********	32.4	32.2	31.7	30.8	30.0	29.1	28.2	27.2	26.2	25.2	23.0	17.8	10.3
8	********	30.3	30.1	29.6	28.9	28.0	27.2	26.3	25.4	24.5	23.6	21.5	16.7	9.6
9	********	28.5	28.4	28.0	27.2	26.4	25.6	24.8	24.0	23.1	22.2	20.3	15.7	9.1
10	**********		26.9	26.5	25.8	25.1	24.3	23.6	22.8	21.9	21.1	19.2	14.9	8.6
11	**********		25.7	25.3	24.6	23.9	23.2	22.5	21.7	20.9	20.1	18.3	14.2	8.2
12	**********		24.6	24.2	23.6	22.9	22.2	21.5	20.8	20.0	19.2	17.6	13.6	7.9
13	**********		23.6	23.3	22.6	22.0	21.3	20.7	20.0	19.2	18.5	16.9	13.1	7.5
14	**********		22.8	22.4	21.8	21.2	20.6	19.9	19.2	18.5	17.8	16.3	12.6	7.3
15	**********		22.0	21.7	21.1	20.5	19.9	19.2	18.6	17.9	17.2	15.7	12.2	7.0
16	**********		21.3	21.0	20.4	19.8	19.2	18.6	18.0	17.3	16.7	15.2	11.8	6.8
17	**********		20.7	20.3	19.8	19.2	18.7	18.1	17.5	16.8	16.2	14.8	11.4	6.6
18	**********		20.1	19.8	19.2	18.7	18.1	17.6	17.0	16.3	15.7	14.3	11.1	6.4
19	**********		19.5	19.2	18.7	18.2	17.7	17.1	16.5	15.9	15.3	14.0	10.8	6.2
20	**********		18.8	18.3	17.7	17.2	16.7	16.1	15.5	14.9	13.6	10.5	6.1	
21	**********		18.3	17.8	17.3	16.8	16.3	15.7	15.1	14.5	13.3	10.3	5.9	
22	**********		17.9	17.4	16.9	16.4	15.9	15.3	14.8	14.2	13.0	10.0	5.8	
23	**********		17.5	17.0	16.5	16.0	15.5	15.0	14.5	13.9	12.7	9.8	5.7	
24	**********		17.1	16.7	16.2	15.7	15.2	14.7	14.2	13.6	12.4	9.6	5.6	
25	**********		16.8	16.3	15.9	15.4	14.9	14.4	13.9	13.3	12.2	9.4	5.4	
30	**********		15.3	14.9	14.5	14.0	13.6	13.1	12.7	12.2	11.1	8.6	5.0	
35	**********		14.2	13.8	13.4	13.0	12.6	12.2	11.7	11.3	10.3	8.0	4.6	
40	**********		13.3	12.9	12.5	12.2	11.8	11.4	11.0	10.5	9.6	7.5	4.3	
45	**********		12.5	12.2	11.8	11.5	11.1	10.7	10.3	9.9	9.1	7.0	4.1	
50	**********		11.5	11.2	10.9	10.5	10.2	9.8	9.4	8.6	6.7	3.8		
55	**********		11.0	10.7	10.4	10.0	9.7	9.4	9.0	8.2	6.4	3.7		
60	**********		10.5	10.2	9.9	9.6	9.3	9.0	8.6	7.9	6.1	3.5		
65	**********		10.1	9.8	9.5	9.2	8.9	8.6	8.3	7.5	5.8	3.4		
70	**********		9.8	9.5	9.2	8.9	8.6	8.3	8.0	7.3	5.6	3.3		
75	**********		9.4	9.2	8.9	8.6	8.3	8.0	7.7	7.0	5.4	3.1		
80	**********		9.1	8.9	8.6	8.3	8.0	7.8	7.5	6.8	5.3	3.0		
85	**********		8.9	8.6	8.3	8.1	7.8	7.5	7.2	6.6	5.1	3.0		
90	**********		8.6	8.4	8.1	7.9	7.6	7.3	7.0	6.4	5.0	2.9		
95	**********		8.4	8.1	7.9	7.6	7.4	7.1	6.8	6.2	4.8	2.8		
100	**********		7.9	7.7	7.5	7.2	6.9	6.7	6.1	4.7	2.7			
125	**********		7.1	6.9	6.7	6.4	6.2	6.0	5.4	4.2	2.4			
150	**********		6.3	6.1	5.9	5.7	5.4	5.0	3.8	2.2				
200	**********		5.3	5.1	4.9	4.7	4.3	3.3	1.9					
250	**********		4.6	4.4	4.2	3.8	3.0	1.7						
300	**********		4.0	3.8	3.5	2.7	1.6							
350	**********		3.6	3.3	2.5	1.5								
400	**********		3.0	2.4	1.4									
450	**********		2.9	2.2	1.3									
500	**********		2.1	1.2										
750	**********		1.0											

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97

Approximate Sampling Variability Table for Children aged 0 to 23 months
Cross-sectional file

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	64.9	64.6	63.6	61.9	60.1	58.3	56.5	54.6	52.6	50.5	46.1	35.7	20.6
2	********	45.9	45.6	44.9	43.7	42.5	41.2	39.9	38.6	37.2	35.7	32.6	25.3	14.6
3	********	37.5	37.3	36.7	35.7	34.7	33.7	32.6	31.5	30.4	29.2	26.6	20.6	11.9
4	********	32.4	32.3	31.8	30.9	30.1	29.2	28.2	27.3	26.3	25.3	23.1	17.9	10.3
5	********	29.0	28.9	28.4	27.7	26.9	26.1	25.3	24.4	23.5	22.6	20.6	16.0	9.2
6	********	26.5	26.4	25.9	25.3	24.5	23.8	23.1	22.3	21.5	20.6	18.8	14.6	8.4
7	********	24.5	24.4	24.0	23.4	22.7	22.0	21.3	20.6	19.9	19.1	17.4	13.5	7.8
8	**********		22.8	22.5	21.9	21.3	20.6	20.0	19.3	18.6	17.9	16.3	12.6	7.3
9	**********		21.5	21.2	20.6	20.0	19.4	18.8	18.2	17.5	16.8	15.4	11.9	6.9
10	**********		20.4	20.1	19.6	19.0	18.4	17.9	17.3	16.6	16.0	14.6	11.3	6.5
11	**********		19.5	19.2	18.7	18.1	17.6	17.0	16.4	15.9	15.2	13.9	10.8	6.2
12	**********		18.6	18.3	17.9	17.4	16.8	16.3	15.7	15.2	14.6	13.3	10.3	6.0
13	**********		17.9	17.6	17.2	16.7	16.2	15.7	15.1	14.6	14.0	12.8	9.9	5.7
14	**********		17.3	17.0	16.5	16.1	15.6	15.1	14.6	14.1	13.5	12.3	9.5	5.5
15	**********			16.4	16.0	15.5	15.1	14.6	14.1	13.6	13.0	11.9	9.2	5.3
16	**********			15.9	15.5	15.0	14.6	14.1	13.6	13.1	12.6	11.5	8.9	5.2
17	**********			15.4	15.0	14.6	14.1	13.7	13.2	12.8	12.3	11.2	8.7	5.0
18	**********			15.0	14.6	14.2	13.7	13.3	12.9	12.4	11.9	10.9	8.4	4.9
19	**********			14.6	14.2	13.8	13.4	13.0	12.5	12.1	11.6	10.6	8.2	4.7
20	**********			14.2	13.8	13.4	13.0	12.6	12.2	11.8	11.3	10.3	8.0	4.6
21	**********			13.9	13.5	13.1	12.7	12.3	11.9	11.5	11.0	10.1	7.8	4.5
22	**********			13.6	13.2	12.8	12.4	12.0	11.6	11.2	10.8	9.8	7.6	4.4
23	**********			13.3	12.9	12.5	12.2	11.8	11.4	11.0	10.5	9.6	7.4	4.3
24	**********			13.0	12.6	12.3	11.9	11.5	11.1	10.7	10.3	9.4	7.3	4.2
25	**********			12.7	12.4	12.0	11.7	11.3	10.9	10.5	10.1	9.2	7.1	4.1
30	**********			11.6	11.3	11.0	10.6	10.3	10.0	9.6	9.2	8.4	6.5	3.8
35	**********			10.7	10.5	10.2	9.9	9.5	9.2	8.9	8.5	7.8	6.0	3.5
40	**********				9.8	9.5	9.2	8.9	8.6	8.3	8.0	7.3	5.6	3.3
45	**********				9.2	9.0	8.7	8.4	8.1	7.8	7.5	6.9	5.3	3.1
50	**********				8.7	8.5	8.2	8.0	7.7	7.4	7.1	6.5	5.1	2.9
55	**********				8.3	8.1	7.9	7.6	7.4	7.1	6.8	6.2	4.8	2.8
60	**********				8.0	7.8	7.5	7.3	7.0	6.8	6.5	6.0	4.6	2.7
65	**********				7.7	7.5	7.2	7.0	6.8	6.5	6.3	5.7	4.4	2.6
70	**********				7.4	7.2	7.0	6.7	6.5	6.3	6.0	5.5	4.3	2.5
75	**********					6.9	6.7	6.5	6.3	6.1	5.8	5.3	4.1	2.4
80	**********					6.7	6.5	6.3	6.1	5.9	5.6	5.2	4.0	2.3
85	**********					6.5	6.3	6.1	5.9	5.7	5.5	5.0	3.9	2.2
90	**********					6.3	6.1	6.0	5.8	5.5	5.3	4.9	3.8	2.2
95	**********					6.2	6.0	5.8	5.6	5.4	5.2	4.7	3.7	2.1
100	**********					6.0	5.8	5.6	5.5	5.3	5.1	4.6	3.6	2.1
125	**********						5.2	5.1	4.9	4.7	4.5	4.1	3.2	1.8
150	**********							4.6	4.5	4.3	4.1	3.8	2.9	1.7
200	**********								3.9	3.7	3.6	3.3	2.5	1.5
250	**********									3.3	3.2	2.9	2.3	1.3
300	**********											2.7	2.1	1.2
350	**********											2.5	1.9	1.1
400	**********												1.8	1.0
450	**********												1.7	1.0
500	**********												1.6	0.9

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97

Approximate Sampling Variability Table for Children aged 2 to 3 years
Cross-sectional file

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	74.0	73.6	72.5	70.5	68.5	66.5	64.4	62.2	59.9	57.6	52.6	40.7	23.5
2	********	52.3	52.0	51.2	49.9	48.5	47.0	45.5	44.0	42.4	40.7	37.2	28.8	16.6
3	********	42.7	42.5	41.8	40.7	39.6	38.4	37.2	35.9	34.6	33.2	30.4	23.5	13.6
4	********	37.0	36.8	36.2	35.3	34.3	33.2	32.2	31.1	30.0	28.8	26.3	20.4	11.8
5	********	33.1	32.9	32.4	31.5	30.7	29.7	28.8	27.8	26.8	25.8	23.5	18.2	10.5
6	********	30.2	30.0	29.6	28.8	28.0	27.1	26.3	25.4	24.5	23.5	21.5	16.6	9.6
7	********	28.0	27.8	27.4	26.7	25.9	25.1	24.3	23.5	22.7	21.8	19.9	15.4	8.9
8	**********		26.0	25.6	24.9	24.2	23.5	22.8	22.0	21.2	20.4	18.6	14.4	8.3
9	**********		24.5	24.2	23.5	22.8	22.2	21.5	20.7	20.0	19.2	17.5	13.6	7.8
10	**********		23.3	22.9	22.3	21.7	21.0	20.4	19.7	19.0	18.2	16.6	12.9	7.4
11	**********		22.2	21.8	21.3	20.7	20.0	19.4	18.8	18.1	17.4	15.9	12.3	7.1
12	**********		21.2	20.9	20.4	19.8	19.2	18.6	18.0	17.3	16.6	15.2	11.8	6.8
13	**********		20.4	20.1	19.6	19.0	18.4	17.9	17.3	16.6	16.0	14.6	11.3	6.5
14	**********		19.7	19.4	18.8	18.3	17.8	17.2	16.6	16.0	15.4	14.0	10.9	6.3
15	**********		19.0	18.7	18.2	17.7	17.2	16.6	16.1	15.5	14.9	13.6	10.5	6.1
16	**********			18.1	17.6	17.1	16.6	16.1	15.6	15.0	14.4	13.1	10.2	5.9
17	**********			17.6	17.1	16.6	16.1	15.6	15.1	14.5	14.0	12.7	9.9	5.7
18	**********			17.1	16.6	16.2	15.7	15.2	14.7	14.1	13.6	12.4	9.6	5.5
19	**********			16.6	16.2	15.7	15.3	14.8	14.3	13.8	13.2	12.1	9.3	5.4
20	**********			16.2	15.8	15.3	14.9	14.4	13.9	13.4	12.9	11.8	9.1	5.3
21	**********			15.8	15.4	15.0	14.5	14.0	13.6	13.1	12.6	11.5	8.9	5.1
22	**********			15.4	15.0	14.6	14.2	13.7	13.3	12.8	12.3	11.2	8.7	5.0
23	**********			15.1	14.7	14.3	13.9	13.4	13.0	12.5	12.0	11.0	8.5	4.9
24	**********			14.8	14.4	14.0	13.6	13.1	12.7	12.2	11.8	10.7	8.3	4.8
25	**********			14.5	14.1	13.7	13.3	12.9	12.4	12.0	11.5	10.5	8.1	4.7
30	**********			13.2	12.9	12.5	12.1	11.8	11.4	10.9	10.5	9.6	7.4	4.3
35	**********			12.2	11.9	11.6	11.2	10.9	10.5	10.1	9.7	8.9	6.9	4.0
40	**********				11.2	10.8	10.5	10.2	9.8	9.5	9.1	8.3	6.4	3.7
45	**********				10.5	10.2	9.9	9.6	9.3	8.9	8.6	7.8	6.1	3.5
50	**********				10.0	9.7	9.4	9.1	8.8	8.5	8.1	7.4	5.8	3.3
55	**********				9.5	9.2	9.0	8.7	8.4	8.1	7.8	7.1	5.5	3.2
60	**********				9.1	8.8	8.6	8.3	8.0	7.7	7.4	6.8	5.3	3.0
65	**********				8.7	8.5	8.2	8.0	7.7	7.4	7.1	6.5	5.1	2.9
70	**********				8.4	8.2	7.9	7.7	7.4	7.2	6.9	6.3	4.9	2.8
75	**********				8.1	7.9	7.7	7.4	7.2	6.9	6.6	6.1	4.7	2.7
80	**********					7.7	7.4	7.2	7.0	6.7	6.4	5.9	4.6	2.6
85	**********					7.4	7.2	7.0	6.7	6.5	6.2	5.7	4.4	2.5
90	**********					7.2	7.0	6.8	6.6	6.3	6.1	5.5	4.3	2.5
95	**********					7.0	6.8	6.6	6.4	6.1	5.9	5.4	4.2	2.4
100	**********					6.9	6.6	6.4	6.2	6.0	5.8	5.3	4.1	2.4
125	**********						5.9	5.8	5.6	5.4	5.2	4.7	3.6	2.1
150	**********						5.4	5.3	5.1	4.9	4.7	4.3	3.3	1.9
200	**********								4.4	4.2	4.1	3.7	2.9	1.7
250	**********									3.8	3.6	3.3	2.6	1.5
300	**********										3.3	3.0	2.4	1.4
350	**********											2.8	2.2	1.3
400	**********												2.0	1.2
450	**********												1.9	1.1
500	**********												1.8	1.1

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Children aged 4 to 5 years
Cross-sectional file

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	100.1	99.6	98.1	95.5	92.8	90.0	87.1	84.2	81.1	77.9	71.1	55.1	31.8
2	********	70.8	70.4	69.3	67.5	65.6	63.6	61.6	59.5	57.4	55.1	50.3	39.0	22.5
3	********	57.8	57.5	56.6	55.1	53.6	52.0	50.3	48.6	46.8	45.0	41.1	31.8	18.4
4	********	50.1	49.8	49.0	47.7	46.4	45.0	43.6	42.1	40.6	39.0	35.6	27.6	15.9
5	********	44.8	44.5	43.9	42.7	41.5	40.2	39.0	37.6	36.3	34.9	31.8	24.6	14.2
6	********	40.9	40.7	40.0	39.0	37.9	36.7	35.6	34.4	33.1	31.8	29.0	22.5	13.0
7	********	37.8	37.6	37.1	36.1	35.1	34.0	32.9	31.8	30.7	29.5	26.9	20.8	12.0
8	********	35.4	35.2	34.7	33.7	32.8	31.8	30.8	29.8	28.7	27.6	25.2	19.5	11.2
9	**********		33.2	32.7	31.8	30.9	30.0	29.0	28.1	27.0	26.0	23.7	18.4	10.6
10	**********		31.5	31.0	30.2	29.3	28.5	27.6	26.6	25.7	24.6	22.5	17.4	10.1
11	**********		30.0	29.6	28.8	28.0	27.1	26.3	25.4	24.5	23.5	21.5	16.6	9.6
12	**********		28.8	28.3	27.6	26.8	26.0	25.2	24.3	23.4	22.5	20.5	15.9	9.2
13	**********		27.6	27.2	26.5	25.7	25.0	24.2	23.3	22.5	21.6	19.7	15.3	8.8
14	**********		26.6	26.2	25.5	24.8	24.1	23.3	22.5	21.7	20.8	19.0	14.7	8.5
15	**********		25.7	25.3	24.6	24.0	23.2	22.5	21.7	20.9	20.1	18.4	14.2	8.2
16	**********		24.9	24.5	23.9	23.2	22.5	21.8	21.0	20.3	19.5	17.8	13.8	8.0
17	**********		********	23.8	23.2	22.5	21.8	21.1	20.4	19.7	18.9	17.3	13.4	7.7
18	**********		********	23.1	22.5	21.9	21.2	20.5	19.8	19.1	18.4	16.8	13.0	7.5
19	**********		********	22.5	21.9	21.3	20.6	20.0	19.3	18.6	17.9	16.3	12.6	7.3
20	**********		********	21.9	21.3	20.7	20.1	19.5	18.8	18.1	17.4	15.9	12.3	7.1
21	**********		********	21.4	20.8	20.2	19.6	19.0	18.4	17.7	17.0	15.5	12.0	6.9
22	**********		********	20.9	20.4	19.8	19.2	18.6	17.9	17.3	16.6	15.2	11.7	6.8
23	**********		********	20.4	19.9	19.3	18.8	18.2	17.6	16.9	16.3	14.8	11.5	6.6
24	**********		********	20.0	19.5	18.9	18.4	17.8	17.2	16.6	15.9	14.5	11.2	6.5
25	**********		********	19.6	19.1	18.6	18.0	17.4	16.8	16.2	15.6	14.2	11.0	6.4
30	**********		********	17.9	17.4	16.9	16.4	15.9	15.4	14.8	14.2	13.0	10.1	5.8
35	**********		********	16.6	16.1	15.7	15.2	14.7	14.2	13.7	13.2	12.0	9.3	5.4
40	**********		********	15.5	15.1	14.7	14.2	13.8	13.3	12.8	12.3	11.2	8.7	5.0
45	**********		********	14.2	13.8	13.4	13.0	12.5	12.1	11.6	10.6	8.2	4.7	
50	**********		********	13.5	13.1	12.7	12.3	11.9	11.5	11.0	10.1	7.8	4.5	
55	**********		********	12.9	12.5	12.1	11.7	11.4	10.9	10.5	9.6	7.4	4.3	
60	**********		********	12.3	12.0	11.6	11.2	10.9	10.5	10.1	9.2	7.1	4.1	
65	**********		********	11.8	11.5	11.2	10.8	10.4	10.1	9.7	8.8	6.8	3.9	
70	**********		********	11.4	11.1	10.8	10.4	10.1	9.7	9.3	8.5	6.6	3.8	
75	**********		********	11.0	10.7	10.4	10.1	9.7	9.4	9.0	8.2	6.4	3.7	
80	**********		********	10.7	10.4	10.1	9.7	9.4	9.1	8.7	8.0	6.2	3.6	
85	**********		**********	10.1	9.8	9.5	9.1	8.8	8.5	7.7	6.0	3.5		
90	**********		**********	9.8	9.5	9.2	8.9	8.6	8.2	7.5	5.8	3.4		
95	**********		**********	9.5	9.2	8.9	8.6	8.3	8.0	7.3	5.7	3.3		
100	**********		**********	9.3	9.0	8.7	8.4	8.1	7.8	7.1	5.5	3.2		
125	**********		**********	8.0	7.8	7.5	7.3	7.0	6.4	4.9	2.8			
150	**********		**********	7.3	7.1	6.9	6.6	6.4	5.8	4.5	2.6			
200	**********		**********	6.2	6.0	5.7	5.5	5.0	3.9	2.2				
250	**********		**********	5.1	4.9	4.5	3.5	2.0						
300	**********		**********	4.5	4.1	3.2	1.8							
350	**********		**********	3.8	2.9	1.7								
400	**********		**********	3.6	2.8	1.6								
450	**********		**********	2.6	1.5									
500	**********		**********	2.5	1.4									

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Children aged 6 to 7 years
Cross-sectional file

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	109.3	108.7	107.0	104.2	101.2	98.2	95.1	91.9	88.5	85.1	77.6	60.1	34.7
2	********	77.3	76.9	75.7	73.7	71.6	69.4	67.2	65.0	62.6	60.1	54.9	42.5	24.6
3	********	63.1	62.8	61.8	60.1	58.4	56.7	54.9	53.0	51.1	49.1	44.8	34.7	20.0
4	********	54.6	54.3	53.5	52.1	50.6	49.1	47.5	45.9	44.3	42.5	38.8	30.1	17.4
5	********	48.9	48.6	47.9	46.6	45.3	43.9	42.5	41.1	39.6	38.0	34.7	26.9	15.5
6	********	44.6	44.4	43.7	42.5	41.3	40.1	38.8	37.5	36.1	34.7	31.7	24.6	14.2
7	********	41.3	41.1	40.5	39.4	38.3	37.1	35.9	34.7	33.5	32.1	29.3	22.7	13.1
8	********	38.6	38.4	37.8	36.8	35.8	34.7	33.6	32.5	31.3	30.1	27.5	21.3	12.3
9	**********		36.2	35.7	34.7	33.7	32.7	31.7	30.6	29.5	28.4	25.9	20.0	11.6
10	**********		34.4	33.8	32.9	32.0	31.1	30.1	29.1	28.0	26.9	24.6	19.0	11.0
11	**********		32.8	32.3	31.4	30.5	29.6	28.7	27.7	26.7	25.6	23.4	18.1	10.5
12	**********		31.4	30.9	30.1	29.2	28.4	27.5	26.5	25.6	24.6	22.4	17.4	10.0
13	**********		30.1	29.7	28.9	28.1	27.2	26.4	25.5	24.6	23.6	21.5	16.7	9.6
14	**********		29.1	28.6	27.8	27.1	26.2	25.4	24.6	23.7	22.7	20.8	16.1	9.3
15	**********		28.1	27.6	26.9	26.1	25.4	24.6	23.7	22.9	22.0	20.0	15.5	9.0
16	**********		27.2	26.8	26.0	25.3	24.6	23.8	23.0	22.1	21.3	19.4	15.0	8.7
17	**********			26.0	25.3	24.6	23.8	23.1	22.3	21.5	20.6	18.8	14.6	8.4
18	**********			25.2	24.6	23.9	23.1	22.4	21.7	20.9	20.0	18.3	14.2	8.2
19	**********			24.6	23.9	23.2	22.5	21.8	21.1	20.3	19.5	17.8	13.8	8.0
20	**********			23.9	23.3	22.6	22.0	21.3	20.5	19.8	19.0	17.4	13.4	7.8
21	**********			23.4	22.7	22.1	21.4	20.8	20.0	19.3	18.6	16.9	13.1	7.6
22	**********			22.8	22.2	21.6	20.9	20.3	19.6	18.9	18.1	16.6	12.8	7.4
23	**********			22.3	21.7	21.1	20.5	19.8	19.2	18.5	17.7	16.2	12.5	7.2
24	**********			21.8	21.3	20.7	20.0	19.4	18.8	18.1	17.4	15.8	12.3	7.1
25	**********			21.4	20.8	20.2	19.6	19.0	18.4	17.7	17.0	15.5	12.0	6.9
30	**********			19.5	19.0	18.5	17.9	17.4	16.8	16.2	15.5	14.2	11.0	6.3
35	**********			18.1	17.6	17.1	16.6	16.1	15.5	15.0	14.4	13.1	10.2	5.9
40	**********			16.9	16.5	16.0	15.5	15.0	14.5	14.0	13.4	12.3	9.5	5.5
45	**********				15.5	15.1	14.6	14.2	13.7	13.2	12.7	11.6	9.0	5.2
50	**********				14.7	14.3	13.9	13.4	13.0	12.5	12.0	11.0	8.5	4.9
55	**********				14.0	13.7	13.2	12.8	12.4	11.9	11.5	10.5	8.1	4.7
60	**********				13.4	13.1	12.7	12.3	11.9	11.4	11.0	10.0	7.8	4.5
65	**********				12.9	12.6	12.2	11.8	11.4	11.0	10.5	9.6	7.5	4.3
70	**********				12.5	12.1	11.7	11.4	11.0	10.6	10.2	9.3	7.2	4.2
75	**********				12.0	11.7	11.3	11.0	10.6	10.2	9.8	9.0	6.9	4.0
80	**********				11.6	11.3	11.0	10.6	10.3	9.9	9.5	8.7	6.7	3.9
85	**********					11.0	10.7	10.3	10.0	9.6	9.2	8.4	6.5	3.8
90	**********					10.7	10.4	10.0	9.7	9.3	9.0	8.2	6.3	3.7
95	**********					10.4	10.1	9.8	9.4	9.1	8.7	8.0	6.2	3.6
100	**********					10.1	9.8	9.5	9.2	8.9	8.5	7.8	6.0	3.5
125	**********						8.8	8.5	8.2	7.9	7.6	6.9	5.4	3.1
150	**********						8.0	7.8	7.5	7.2	6.9	6.3	4.9	2.8
200	**********							6.7	6.5	6.3	6.0	5.5	4.3	2.5
250	**********									5.6	5.4	4.9	3.8	2.2
300	**********										4.9	4.5	3.5	2.0
350	**********											4.2	3.2	1.9
400	**********											3.9	3.0	1.7
450	**********												2.8	1.6
500	**********												2.7	1.6

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Children aged 8 to 9 years
Cross-sectional file

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	103.0	102.4	100.9	98.2	95.4	92.6	89.6	86.6	83.4	80.2	73.2	56.7	32.7
2	********	72.8	72.4	71.3	69.4	67.5	65.4	63.4	61.2	59.0	56.7	51.7	40.1	23.1
3	********	59.4	59.1	58.2	56.7	55.1	53.4	51.7	50.0	48.2	46.3	42.2	32.7	18.9
4	********	51.5	51.2	50.4	49.1	47.7	46.3	44.8	43.3	41.7	40.1	36.6	28.3	16.4
5	********	46.0	45.8	45.1	43.9	42.7	41.4	40.1	38.7	37.3	35.8	32.7	25.3	14.6
6	********	42.0	41.8	41.2	40.1	38.9	37.8	36.6	35.3	34.1	32.7	29.9	23.1	13.4
7	********	38.9	38.7	38.1	37.1	36.1	35.0	33.9	32.7	31.5	30.3	27.7	21.4	12.4
8	**********		36.2	35.7	34.7	33.7	32.7	31.7	30.6	29.5	28.3	25.9	20.0	11.6
9	**********		34.1	33.6	32.7	31.8	30.9	29.9	28.9	27.8	26.7	24.4	18.9	10.9
10	**********		32.4	31.9	31.0	30.2	29.3	28.3	27.4	26.4	25.3	23.1	17.9	10.3
11	**********		30.9	30.4	29.6	28.8	27.9	27.0	26.1	25.2	24.2	22.1	17.1	9.9
12	**********		29.6	29.1	28.3	27.5	26.7	25.9	25.0	24.1	23.1	21.1	16.4	9.4
13	**********		28.4	28.0	27.2	26.5	25.7	24.9	24.0	23.1	22.2	20.3	15.7	9.1
14	**********		27.4	27.0	26.2	25.5	24.7	23.9	23.1	22.3	21.4	19.6	15.1	8.7
15	**********		26.4	26.0	25.3	24.6	23.9	23.1	22.4	21.5	20.7	18.9	14.6	8.4
16	**********			25.2	24.5	23.8	23.1	22.4	21.6	20.9	20.0	18.3	14.2	8.2
17	**********			24.5	23.8	23.1	22.4	21.7	21.0	20.2	19.4	17.7	13.7	7.9
18	**********			23.8	23.1	22.5	21.8	21.1	20.4	19.7	18.9	17.2	13.4	7.7
19	**********			23.1	22.5	21.9	21.2	20.6	19.9	19.1	18.4	16.8	13.0	7.5
20	**********			22.6	22.0	21.3	20.7	20.0	19.4	18.7	17.9	16.4	12.7	7.3
21	**********			22.0	21.4	20.8	20.2	19.6	18.9	18.2	17.5	16.0	12.4	7.1
22	**********			21.5	20.9	20.3	19.7	19.1	18.5	17.8	17.1	15.6	12.1	7.0
23	**********			21.0	20.5	19.9	19.3	18.7	18.1	17.4	16.7	15.3	11.8	6.8
24	**********			20.6	20.0	19.5	18.9	18.3	17.7	17.0	16.4	14.9	11.6	6.7
25	**********			20.2	19.6	19.1	18.5	17.9	17.3	16.7	16.0	14.6	11.3	6.5
30	**********			18.4	17.9	17.4	16.9	16.4	15.8	15.2	14.6	13.4	10.3	6.0
35	**********			17.0	16.6	16.1	15.6	15.1	14.6	14.1	13.5	12.4	9.6	5.5
40	**********				15.5	15.1	14.6	14.2	13.7	13.2	12.7	11.6	9.0	5.2
45	**********				14.6	14.2	13.8	13.4	12.9	12.4	11.9	10.9	8.4	4.9
50	**********				13.9	13.5	13.1	12.7	12.2	11.8	11.3	10.3	8.0	4.6
55	**********				13.2	12.9	12.5	12.1	11.7	11.2	10.8	9.9	7.6	4.4
60	**********				12.7	12.3	11.9	11.6	11.2	10.8	10.3	9.4	7.3	4.2
65	**********				12.2	11.8	11.5	11.1	10.7	10.3	9.9	9.1	7.0	4.1
70	**********				11.7	11.4	11.1	10.7	10.3	10.0	9.6	8.7	6.8	3.9
75	**********				11.3	11.0	10.7	10.3	10.0	9.6	9.3	8.4	6.5	3.8
80	**********					10.7	10.3	10.0	9.7	9.3	9.0	8.2	6.3	3.7
85	**********					10.3	10.0	9.7	9.4	9.0	8.7	7.9	6.1	3.5
90	**********					10.1	9.8	9.4	9.1	8.8	8.4	7.7	6.0	3.4
95	**********					9.8	9.5	9.2	8.9	8.6	8.2	7.5	5.8	3.4
100	**********					9.5	9.3	9.0	8.7	8.3	8.0	7.3	5.7	3.3
125	**********						8.3	8.0	7.7	7.5	7.2	6.5	5.1	2.9
150	**********						7.6	7.3	7.1	6.8	6.5	6.0	4.6	2.7
200	**********								6.1	5.9	5.7	5.2	4.0	2.3
250	**********									5.3	5.1	4.6	3.6	2.1
300	**********										4.6	4.2	3.3	1.9
350	**********											3.9	3.0	1.7
400	**********												2.8	1.6
450	**********												2.7	1.5
500	**********												2.5	1.5

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Children aged 10 to 11 years
Cross-sectional file

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	102.4	101.8	100.3	97.6	94.9	92.0	89.1	86.1	82.9	79.7	72.7	56.4	32.5
2	********	72.4	72.0	70.9	69.0	67.1	65.1	63.0	60.9	58.7	56.4	51.4	39.8	23.0
3	********	59.1	58.8	57.9	56.4	54.8	53.1	51.4	49.7	47.9	46.0	42.0	32.5	18.8
4	********	51.2	50.9	50.1	48.8	47.4	46.0	44.5	43.0	41.5	39.8	36.4	28.2	16.3
5	********	45.8	45.5	44.8	43.6	42.4	41.2	39.8	38.5	37.1	35.6	32.5	25.2	14.5
6	********	41.8	41.6	40.9	39.8	38.7	37.6	36.4	35.1	33.9	32.5	29.7	23.0	13.3
7	********	38.7	38.5	37.9	36.9	35.9	34.8	33.7	32.5	31.4	30.1	27.5	21.3	12.3
8	**********		36.0	35.5	34.5	33.5	32.5	31.5	30.4	29.3	28.2	25.7	19.9	11.5
9	**********		33.9	33.4	32.5	31.6	30.7	29.7	28.7	27.6	26.6	24.2	18.8	10.8
10	**********		32.2	31.7	30.9	30.0	29.1	28.2	27.2	26.2	25.2	23.0	17.8	10.3
11	**********		30.7	30.2	29.4	28.6	27.7	26.9	26.0	25.0	24.0	21.9	17.0	9.8
12	**********		29.4	28.9	28.2	27.4	26.6	25.7	24.8	23.9	23.0	21.0	16.3	9.4
13	**********		28.2	27.8	27.1	26.3	25.5	24.7	23.9	23.0	22.1	20.2	15.6	9.0
14	**********		27.2	26.8	26.1	25.4	24.6	23.8	23.0	22.2	21.3	19.4	15.1	8.7
15	**********		26.3	25.9	25.2	24.5	23.8	23.0	22.2	21.4	20.6	18.8	14.5	8.4
16	**********			25.1	24.4	23.7	23.0	22.3	21.5	20.7	19.9	18.2	14.1	8.1
17	**********			24.3	23.7	23.0	22.3	21.6	20.9	20.1	19.3	17.6	13.7	7.9
18	**********			23.6	23.0	22.4	21.7	21.0	20.3	19.6	18.8	17.1	13.3	7.7
19	**********			23.0	22.4	21.8	21.1	20.4	19.7	19.0	18.3	16.7	12.9	7.5
20	**********			22.4	21.8	21.2	20.6	19.9	19.2	18.5	17.8	16.3	12.6	7.3
21	**********			21.9	21.3	20.7	20.1	19.4	18.8	18.1	17.4	15.9	12.3	7.1
22	**********			21.4	20.8	20.2	19.6	19.0	18.4	17.7	17.0	15.5	12.0	6.9
23	**********			20.9	20.4	19.8	19.2	18.6	17.9	17.3	16.6	15.2	11.8	6.8
24	**********			20.5	19.9	19.4	18.8	18.2	17.6	16.9	16.3	14.8	11.5	6.6
25	**********			20.1	19.5	19.0	18.4	17.8	17.2	16.6	15.9	14.5	11.3	6.5
30	**********			18.3	17.8	17.3	16.8	16.3	15.7	15.1	14.5	13.3	10.3	5.9
35	**********			16.9	16.5	16.0	15.6	15.1	14.5	14.0	13.5	12.3	9.5	5.5
40	**********				15.4	15.0	14.5	14.1	13.6	13.1	12.6	11.5	8.9	5.1
45	**********				14.5	14.1	13.7	13.3	12.8	12.4	11.9	10.8	8.4	4.8
50	**********				13.8	13.4	13.0	12.6	12.2	11.7	11.3	10.3	8.0	4.6
55	**********				13.2	12.8	12.4	12.0	11.6	11.2	10.7	9.8	7.6	4.4
60	**********				12.6	12.2	11.9	11.5	11.1	10.7	10.3	9.4	7.3	4.2
65	**********				12.1	11.8	11.4	11.1	10.7	10.3	9.9	9.0	7.0	4.0
70	**********				11.7	11.3	11.0	10.6	10.3	9.9	9.5	8.7	6.7	3.9
75	**********				11.3	11.0	10.6	10.3	9.9	9.6	9.2	8.4	6.5	3.8
80	**********					10.6	10.3	10.0	9.6	9.3	8.9	8.1	6.3	3.6
85	**********					10.3	10.0	9.7	9.3	9.0	8.6	7.9	6.1	3.5
90	**********					10.0	9.7	9.4	9.1	8.7	8.4	7.7	5.9	3.4
95	**********					9.7	9.4	9.1	8.8	8.5	8.2	7.5	5.8	3.3
100	**********					9.5	9.2	8.9	8.6	8.3	8.0	7.3	5.6	3.3
125	**********						8.2	8.0	7.7	7.4	7.1	6.5	5.0	2.9
150	**********						7.5	7.3	7.0	6.8	6.5	5.9	4.6	2.7
200	**********							6.1	5.9	5.6	5.1	4.0	2.3	
250	**********								5.2	5.0	4.6	3.6	2.1	
300	**********									4.6	4.2	3.3	1.9	
350	**********										3.9	3.0	1.7	
400	**********											2.8	1.6	
450	**********											2.7	1.5	
500	**********											2.5	1.5	

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Children aged 12to 13 years
Cross-sectional file

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	107.0	106.4	104.8	102.0	99.1	96.2	93.1	89.9	86.7	83.3	76.0	58.9	34.0
2	********	75.6	75.3	74.1	72.1	70.1	68.0	65.8	63.6	61.3	58.9	53.8	41.6	24.0
3	********	61.8	61.4	60.5	58.9	57.2	55.5	53.8	51.9	50.0	48.1	43.9	34.0	19.6
4	********	53.5	53.2	52.4	51.0	49.6	48.1	46.6	45.0	43.3	41.6	38.0	29.4	17.0
5	********	47.8	47.6	46.9	45.6	44.3	43.0	41.6	40.2	38.8	37.2	34.0	26.3	15.2
6	********	43.7	43.4	42.8	41.6	40.5	39.3	38.0	36.7	35.4	34.0	31.0	24.0	13.9
7	********	40.4	40.2	39.6	38.5	37.5	36.3	35.2	34.0	32.8	31.5	28.7	22.3	12.8
8	**********		37.6	37.0	36.1	35.0	34.0	32.9	31.8	30.6	29.4	26.9	20.8	12.0
9	**********		35.5	34.9	34.0	33.0	32.1	31.0	30.0	28.9	27.8	25.3	19.6	11.3
10	**********		33.7	33.1	32.3	31.3	30.4	29.4	28.4	27.4	26.3	24.0	18.6	10.8
11	**********		32.1	31.6	30.8	29.9	29.0	28.1	27.1	26.1	25.1	22.9	17.8	10.3
12	**********		30.7	30.2	29.4	28.6	27.8	26.9	26.0	25.0	24.0	21.9	17.0	9.8
13	**********		29.5	29.1	28.3	27.5	26.7	25.8	24.9	24.0	23.1	21.1	16.3	9.4
14	**********		28.4	28.0	27.3	26.5	25.7	24.9	24.0	23.2	22.3	20.3	15.7	9.1
15	**********		27.5	27.1	26.3	25.6	24.8	24.0	23.2	22.4	21.5	19.6	15.2	8.8
16	**********			26.2	25.5	24.8	24.0	23.3	22.5	21.7	20.8	19.0	14.7	8.5
17	**********			25.4	24.7	24.0	23.3	22.6	21.8	21.0	20.2	18.4	14.3	8.2
18	**********			24.7	24.0	23.4	22.7	21.9	21.2	20.4	19.6	17.9	13.9	8.0
19	**********			24.0	23.4	22.7	22.1	21.4	20.6	19.9	19.1	17.4	13.5	7.8
20	**********			23.4	22.8	22.2	21.5	20.8	20.1	19.4	18.6	17.0	13.2	7.6
21	**********			22.9	22.3	21.6	21.0	20.3	19.6	18.9	18.2	16.6	12.8	7.4
22	**********			22.3	21.7	21.1	20.5	19.9	19.2	18.5	17.8	16.2	12.6	7.2
23	**********			21.8	21.3	20.7	20.1	19.4	18.8	18.1	17.4	15.9	12.3	7.1
24	**********			21.4	20.8	20.2	19.6	19.0	18.4	17.7	17.0	15.5	12.0	6.9
25	**********			21.0	20.4	19.8	19.2	18.6	18.0	17.3	16.7	15.2	11.8	6.8
30	**********			19.1	18.6	18.1	17.6	17.0	16.4	15.8	15.2	13.9	10.8	6.2
35	**********			17.7	17.2	16.8	16.3	15.7	15.2	14.7	14.1	12.8	10.0	5.7
40	**********				16.1	15.7	15.2	14.7	14.2	13.7	13.2	12.0	9.3	5.4
45	**********				15.2	14.8	14.3	13.9	13.4	12.9	12.4	11.3	8.8	5.1
50	**********				14.4	14.0	13.6	13.2	12.7	12.3	11.8	10.8	8.3	4.8
55	**********				13.8	13.4	13.0	12.6	12.1	11.7	11.2	10.3	7.9	4.6
60	**********				13.2	12.8	12.4	12.0	11.6	11.2	10.8	9.8	7.6	4.4
65	**********				12.7	12.3	11.9	11.5	11.2	10.8	10.3	9.4	7.3	4.2
70	**********				12.2	11.8	11.5	11.1	10.8	10.4	10.0	9.1	7.0	4.1
75	**********				11.8	11.4	11.1	10.8	10.4	10.0	9.6	8.8	6.8	3.9
80	**********					11.1	10.8	10.4	10.1	9.7	9.3	8.5	6.6	3.8
85	**********					10.8	10.4	10.1	9.8	9.4	9.0	8.2	6.4	3.7
90	**********					10.4	10.1	9.8	9.5	9.1	8.8	8.0	6.2	3.6
95	**********					10.2	9.9	9.6	9.2	8.9	8.5	7.8	6.0	3.5
100	**********					9.9	9.6	9.3	9.0	8.7	8.3	7.6	5.9	3.4
125	**********						8.6	8.3	8.0	7.8	7.4	6.8	5.3	3.0
150	**********						7.9	7.6	7.3	7.1	6.8	6.2	4.8	2.8
200	**********							6.4	6.1	5.9	5.4	4.2	2.4	
250	**********								5.5	5.3	4.8	3.7	2.2	
300	**********									4.8	4.4	3.4	2.0	
350	**********										4.1	3.1	1.8	
400	**********											2.9	1.7	
450	**********											2.8	1.6	
500	**********											2.6	1.5	

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Children aged 0 to 3 years
Cross-sectional file

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	71.0	70.7	70.3	69.2	67.4	65.5	63.5	61.5	59.4	57.3	55.0	50.2	38.9	22.5
2	********	50.0	49.7	49.0	47.7	46.3	44.9	43.5	42.0	40.5	38.9	35.5	27.5	15.9
3	********	40.8	40.6	40.0	38.9	37.8	36.7	35.5	34.3	33.1	31.8	29.0	22.5	13.0
4	********	35.3	35.2	34.6	33.7	32.7	31.8	30.8	29.7	28.6	27.5	25.1	19.5	11.2
5	********	31.6	31.5	31.0	30.1	29.3	28.4	27.5	26.6	25.6	24.6	22.5	17.4	10.0
6	********	28.9	28.7	28.3	27.5	26.7	25.9	25.1	24.3	23.4	22.5	20.5	15.9	9.2
7	********	26.7	26.6	26.2	25.5	24.8	24.0	23.3	22.5	21.6	20.8	19.0	14.7	8.5
8	********	25.0	24.9	24.5	23.8	23.2	22.5	21.8	21.0	20.3	19.5	17.8	13.8	7.9
9	********	23.6	23.4	23.1	22.5	21.8	21.2	20.5	19.8	19.1	18.3	16.7	13.0	7.5
10	********	22.4	22.2	21.9	21.3	20.7	20.1	19.5	18.8	18.1	17.4	15.9	12.3	7.1
11	********	21.3	21.2	20.9	20.3	19.7	19.2	18.6	17.9	17.3	16.6	15.1	11.7	6.8
12	********	20.4	20.3	20.0	19.5	18.9	18.3	17.8	17.2	16.5	15.9	14.5	11.2	6.5
13	********	19.6	19.5	19.2	18.7	18.2	17.6	17.1	16.5	15.9	15.3	13.9	10.8	6.2
14	********	18.9	18.8	18.5	18.0	17.5	17.0	16.4	15.9	15.3	14.7	13.4	10.4	6.0
15	********	18.3	18.2	17.9	17.4	16.9	16.4	15.9	15.3	14.8	14.2	13.0	10.0	5.8
16	**********		17.6	17.3	16.8	16.4	15.9	15.4	14.9	14.3	13.8	12.6	9.7	5.6
17	**********		17.1	16.8	16.3	15.9	15.4	14.9	14.4	13.9	13.3	12.2	9.4	5.4
18	**********		16.6	16.3	15.9	15.4	15.0	14.5	14.0	13.5	13.0	11.8	9.2	5.3
19	**********		16.1	15.9	15.5	15.0	14.6	14.1	13.6	13.1	12.6	11.5	8.9	5.2
20	**********		15.7	15.5	15.1	14.6	14.2	13.8	13.3	12.8	12.3	11.2	8.7	5.0
21	**********		15.3	15.1	14.7	14.3	13.9	13.4	13.0	12.5	12.0	11.0	8.5	4.9
22	**********		15.0	14.8	14.4	14.0	13.5	13.1	12.7	12.2	11.7	10.7	8.3	4.8
23	**********		14.7	14.4	14.1	13.7	13.2	12.8	12.4	11.9	11.5	10.5	8.1	4.7
24	**********		14.4	14.1	13.8	13.4	13.0	12.6	12.1	11.7	11.2	10.3	7.9	4.6
25	**********		14.1	13.8	13.5	13.1	12.7	12.3	11.9	11.5	11.0	10.0	7.8	4.5
30	**********		12.8	12.6	12.3	12.0	11.6	11.2	10.9	10.5	10.0	9.2	7.1	4.1
35	**********			11.7	11.4	11.1	10.7	10.4	10.0	9.7	9.3	8.5	6.6	3.8
40	**********			10.9	10.7	10.4	10.0	9.7	9.4	9.1	8.7	7.9	6.2	3.6
45	**********			10.3	10.0	9.8	9.5	9.2	8.9	8.5	8.2	7.5	5.8	3.3
50	**********			9.8	9.5	9.3	9.0	8.7	8.4	8.1	7.8	7.1	5.5	3.2
55	**********			9.3	9.1	8.8	8.6	8.3	8.0	7.7	7.4	6.8	5.2	3.0
60	**********			8.9	8.7	8.5	8.2	7.9	7.7	7.4	7.1	6.5	5.0	2.9
65	**********			8.6	8.4	8.1	7.9	7.6	7.4	7.1	6.8	6.2	4.8	2.8
70	**********			8.3	8.1	7.8	7.6	7.4	7.1	6.8	6.6	6.0	4.7	2.7
75	**********			8.0	7.8	7.6	7.3	7.1	6.9	6.6	6.4	5.8	4.5	2.6
80	**********				7.5	7.3	7.1	6.9	6.6	6.4	6.2	5.6	4.4	2.5
85	**********				7.3	7.1	6.9	6.7	6.4	6.2	6.0	5.4	4.2	2.4
90	**********				7.1	6.9	6.7	6.5	6.3	6.0	5.8	5.3	4.1	2.4
95	**********				6.9	6.7	6.5	6.3	6.1	5.9	5.6	5.2	4.0	2.3
100	**********				6.7	6.5	6.4	6.2	5.9	5.7	5.5	5.0	3.9	2.2
125	**********				6.0	5.9	5.7	5.5	5.3	5.1	4.9	4.5	3.5	2.0
150	**********				5.5	5.3	5.2	5.0	4.9	4.7	4.5	4.1	3.2	1.8
200	**********					4.6	4.5	4.4	4.2	4.1	3.9	3.6	2.8	1.6
250	**********					4.0	3.9	3.8	3.6	3.5	3.2	2.5	1.4	
300	**********					3.7	3.6	3.4	3.3	3.2	2.9	2.2	1.3	
350	**********						3.3	3.2	3.1	2.9	2.7	2.1	1.2	
400	**********							3.0	2.9	2.8	2.5	1.9	1.1	
450	**********							2.8	2.7	2.6	2.4	1.8	1.1	
500	**********								2.6	2.5	2.2	1.7	1.0	
750	**********										1.8	1.4	0.8	
1000	**********											1.2	0.7	

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Children aged 4 to 11 years
Cross-sectional file

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	105.9	105.4	104.9	103.3	100.5	97.7	94.8	91.8	88.6	85.4	82.1	74.9	58.0	33.5
2	74.9	74.5	74.2	73.0	71.1	69.1	67.0	64.9	62.7	60.4	58.0	53.0	41.0	23.7
3	61.1	60.9	60.6	59.6	58.0	56.4	54.7	53.0	51.2	49.3	47.4	43.3	33.5	19.3
4	********	52.7	52.4	51.6	50.3	48.8	47.4	45.9	44.3	42.7	41.0	37.5	29.0	16.8
5	********	47.1	46.9	46.2	44.9	43.7	42.4	41.0	39.6	38.2	36.7	33.5	26.0	15.0
6	********	43.0	42.8	42.2	41.0	39.9	38.7	37.5	36.2	34.9	33.5	30.6	23.7	13.7
7	********	39.8	39.6	39.0	38.0	36.9	35.8	34.7	33.5	32.3	31.0	28.3	21.9	12.7
8	********	37.3	37.1	36.5	35.5	34.5	33.5	32.4	31.3	30.2	29.0	26.5	20.5	11.8
9	********	35.1	35.0	34.4	33.5	32.6	31.6	30.6	29.5	28.5	27.4	25.0	19.3	11.2
10	********	33.3	33.2	32.7	31.8	30.9	30.0	29.0	28.0	27.0	26.0	23.7	18.4	10.6
11	********	31.8	31.6	31.1	30.3	29.5	28.6	27.7	26.7	25.8	24.7	22.6	17.5	10.1
12	********	30.4	30.3	29.8	29.0	28.2	27.4	26.5	25.6	24.7	23.7	21.6	16.8	9.7
13	********	29.2	29.1	28.6	27.9	27.1	26.3	25.4	24.6	23.7	22.8	20.8	16.1	9.3
14	********	28.2	28.0	27.6	26.9	26.1	25.3	24.5	23.7	22.8	21.9	20.0	15.5	9.0
15	********	27.2	27.1	26.7	26.0	25.2	24.5	23.7	22.9	22.1	21.2	19.3	15.0	8.7
16	********	26.4	26.2	25.8	25.1	24.4	23.7	22.9	22.2	21.4	20.5	18.7	14.5	8.4
17	********	25.6	25.4	25.0	24.4	23.7	23.0	22.3	21.5	20.7	19.9	18.2	14.1	8.1
18	********	24.8	24.7	24.3	23.7	23.0	22.3	21.6	20.9	20.1	19.3	17.7	13.7	7.9
19	********	24.2	24.1	23.7	23.1	22.4	21.7	21.0	20.3	19.6	18.8	17.2	13.3	7.7
20	********	23.6	23.5	23.1	22.5	21.8	21.2	20.5	19.8	19.1	18.4	16.8	13.0	7.5
21	********	23.0	22.9	22.5	21.9	21.3	20.7	20.0	19.3	18.6	17.9	16.3	12.7	7.3
22	********	22.5	22.4	22.0	21.4	20.8	20.2	19.6	18.9	18.2	17.5	16.0	12.4	7.1
23	********	22.0	21.9	21.5	21.0	20.4	19.8	19.1	18.5	17.8	17.1	15.6	12.1	7.0
24	********	21.5	21.4	21.1	20.5	19.9	19.3	18.7	18.1	17.4	16.8	15.3	11.8	6.8
25	********	21.1	21.0	20.7	20.1	19.5	19.0	18.4	17.7	17.1	16.4	15.0	11.6	6.7
30	********	19.2	19.1	18.9	18.4	17.8	17.3	16.8	16.2	15.6	15.0	13.7	10.6	6.1
35	********	17.8	17.7	17.5	17.0	16.5	16.0	15.5	15.0	14.4	13.9	12.7	9.8	5.7
40	**********		16.6	16.3	15.9	15.4	15.0	14.5	14.0	13.5	13.0	11.8	9.2	5.3
45	**********		15.6	15.4	15.0	14.6	14.1	13.7	13.2	12.7	12.2	11.2	8.7	5.0
50	**********		14.8	14.6	14.2	13.8	13.4	13.0	12.5	12.1	11.6	10.6	8.2	4.7
55	**********		14.1	13.9	13.6	13.2	12.8	12.4	12.0	11.5	11.1	10.1	7.8	4.5
60	**********		13.5	13.3	13.0	12.6	12.2	11.8	11.4	11.0	10.6	9.7	7.5	4.3
65	**********		13.0	12.8	12.5	12.1	11.8	11.4	11.0	10.6	10.2	9.3	7.2	4.2
70	**********		12.5	12.3	12.0	11.7	11.3	11.0	10.6	10.2	9.8	9.0	6.9	4.0
75	**********		12.1	11.9	11.6	11.3	10.9	10.6	10.2	9.9	9.5	8.7	6.7	3.9
80	**********			11.5	11.2	10.9	10.6	10.3	9.9	9.5	9.2	8.4	6.5	3.7
85	**********			11.2	10.9	10.6	10.3	10.0	9.6	9.3	8.9	8.1	6.3	3.6
90	**********			10.9	10.6	10.3	10.0	9.7	9.3	9.0	8.7	7.9	6.1	3.5
95	**********			10.6	10.3	10.0	9.7	9.4	9.1	8.8	8.4	7.7	6.0	3.4
100	**********			10.3	10.1	9.8	9.5	9.2	8.9	8.5	8.2	7.5	5.8	3.4
125	**********			9.2	9.0	8.7	8.5	8.2	7.9	7.6	7.3	6.7	5.2	3.0
150	**********			8.4	8.2	8.0	7.7	7.5	7.2	7.0	6.7	6.1	4.7	2.7
200	**********				7.1	6.9	6.7	6.5	6.3	6.0	5.8	5.3	4.1	2.4
250	**********				6.4	6.2	6.0	5.8	5.6	5.4	5.2	4.7	3.7	2.1
300	**********				5.8	5.6	5.5	5.3	5.1	4.9	4.7	4.3	3.4	1.9
350	**********				5.4	5.2	5.1	4.9	4.7	4.6	4.4	4.0	3.1	1.8
400	**********					4.9	4.7	4.6	4.4	4.3	4.1	3.7	2.9	1.7
450	**********					4.6	4.5	4.3	4.2	4.0	3.9	3.5	2.7	1.6
500	**********					4.4	4.2	4.1	4.0	3.8	3.7	3.4	2.6	1.5
750	**********						3.5	3.4	3.2	3.1	3.0	2.7	2.1	1.2
1000	**********								2.8	2.7	2.6	2.4	1.8	1.1
1500	**********										2.1	1.9	1.5	0.9
2000	**********												1.3	0.7
3000	**********													0.6

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Children aged 4 to 7 years
Cross-sectional file

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	112.4	111.9	111.4	109.6	106.7	103.7	100.6	97.4	94.1	90.7	87.1	79.5	61.6	35.6
2	********	79.1	78.7	77.5	75.5	73.3	71.2	68.9	66.6	64.1	61.6	56.2	43.6	25.2
3	********	64.6	64.3	63.3	61.6	59.9	58.1	56.2	54.3	52.4	50.3	45.9	35.6	20.5
4	********	56.0	55.7	54.8	53.4	51.9	50.3	48.7	47.1	45.3	43.6	39.8	30.8	17.8
5	********	50.1	49.8	49.0	47.7	46.4	45.0	43.6	42.1	40.6	39.0	35.6	27.6	15.9
6	********	45.7	45.5	44.8	43.6	42.3	41.1	39.8	38.4	37.0	35.6	32.5	25.2	14.5
7	********	42.3	42.1	41.4	40.3	39.2	38.0	36.8	35.6	34.3	32.9	30.1	23.3	13.4
8	********	39.6	39.4	38.8	37.7	36.7	35.6	34.4	33.3	32.1	30.8	28.1	21.8	12.6
9	********	37.3	37.1	36.5	35.6	34.6	33.5	32.5	31.4	30.2	29.0	26.5	20.5	11.9
10	********	35.4	35.2	34.7	33.7	32.8	31.8	30.8	29.8	28.7	27.6	25.2	19.5	11.2
11	********	33.7	33.6	33.1	32.2	31.3	30.3	29.4	28.4	27.3	26.3	24.0	18.6	10.7
12	********	32.3	32.1	31.7	30.8	29.9	29.0	28.1	27.2	26.2	25.2	23.0	17.8	10.3
13	********	31.0	30.9	30.4	29.6	28.8	27.9	27.0	26.1	25.2	24.2	22.1	17.1	9.9
14	********	29.9	29.8	29.3	28.5	27.7	26.9	26.0	25.2	24.2	23.3	21.3	16.5	9.5
15	********	28.9	28.8	28.3	27.6	26.8	26.0	25.2	24.3	23.4	22.5	20.5	15.9	9.2
16	********	28.0	27.8	27.4	26.7	25.9	25.2	24.4	23.5	22.7	21.8	19.9	15.4	8.9
17	**********		27.0	26.6	25.9	25.2	24.4	23.6	22.8	22.0	21.1	19.3	14.9	8.6
18	**********		26.2	25.8	25.2	24.4	23.7	23.0	22.2	21.4	20.5	18.7	14.5	8.4
19	**********		25.5	25.2	24.5	23.8	23.1	22.4	21.6	20.8	20.0	18.2	14.1	8.2
20	**********		24.9	24.5	23.9	23.2	22.5	21.8	21.0	20.3	19.5	17.8	13.8	8.0
21	**********		24.3	23.9	23.3	22.6	22.0	21.3	20.5	19.8	19.0	17.4	13.4	7.8
22	**********		23.7	23.4	22.8	22.1	21.5	20.8	20.1	19.3	18.6	17.0	13.1	7.6
23	**********		23.2	22.9	22.3	21.6	21.0	20.3	19.6	18.9	18.2	16.6	12.8	7.4
24	**********		22.7	22.4	21.8	21.2	20.5	19.9	19.2	18.5	17.8	16.2	12.6	7.3
25	**********		22.3	21.9	21.3	20.7	20.1	19.5	18.8	18.1	17.4	15.9	12.3	7.1
30	**********		20.3	20.0	19.5	18.9	18.4	17.8	17.2	16.6	15.9	14.5	11.2	6.5
35	**********			18.5	18.0	17.5	17.0	16.5	15.9	15.3	14.7	13.4	10.4	6.0
40	**********			17.3	16.9	16.4	15.9	15.4	14.9	14.3	13.8	12.6	9.7	5.6
45	**********			16.3	15.9	15.5	15.0	14.5	14.0	13.5	13.0	11.9	9.2	5.3
50	**********			15.5	15.1	14.7	14.2	13.8	13.3	12.8	12.3	11.2	8.7	5.0
55	**********			14.8	14.4	14.0	13.6	13.1	12.7	12.2	11.8	10.7	8.3	4.8
60	**********			14.2	13.8	13.4	13.0	12.6	12.2	11.7	11.2	10.3	8.0	4.6
65	**********			13.6	13.2	12.9	12.5	12.1	11.7	11.2	10.8	9.9	7.6	4.4
70	**********			13.1	12.8	12.4	12.0	11.6	11.2	10.8	10.4	9.5	7.4	4.3
75	**********			12.7	12.3	12.0	11.6	11.2	10.9	10.5	10.1	9.2	7.1	4.1
80	**********			12.3	11.9	11.6	11.2	10.9	10.5	10.1	9.7	8.9	6.9	4.0
85	**********				11.6	11.2	10.9	10.6	10.2	9.8	9.5	8.6	6.7	3.9
90	**********				11.2	10.9	10.6	10.3	9.9	9.6	9.2	8.4	6.5	3.7
95	**********				10.9	10.6	10.3	10.0	9.7	9.3	8.9	8.2	6.3	3.6
100	**********				10.7	10.4	10.1	9.7	9.4	9.1	8.7	8.0	6.2	3.6
125	**********				9.5	9.3	9.0	8.7	8.4	8.1	7.8	7.1	5.5	3.2
150	**********				8.7	8.5	8.2	8.0	7.7	7.4	7.1	6.5	5.0	2.9
200	**********					7.3	7.1	6.9	6.7	6.4	6.2	5.6	4.4	2.5
250	**********						6.4	6.2	6.0	5.7	5.5	5.0	3.9	2.2
300	**********						5.8	5.6	5.4	5.2	5.0	4.6	3.6	2.1
350	**********							5.2	5.0	4.8	4.7	4.3	3.3	1.9
400	**********							4.9	4.7	4.5	4.4	4.0	3.1	1.8
450	**********								4.4	4.3	4.1	3.7	2.9	1.7
500	**********									4.1	3.9	3.6	2.8	1.6
750	**********											2.9	2.2	1.3
1000	**********												1.9	1.1

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Children aged 8 to 11 years
Cross-sectional file

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	111.2	110.7	110.1	108.4	105.5	102.5	99.5	96.3	93.1	89.7	86.2	78.6	60.9	35.2
2	********	78.3	77.9	76.7	74.6	72.5	70.3	68.1	65.8	63.4	60.9	55.6	43.1	24.9
3	********	63.9	63.6	62.6	60.9	59.2	57.4	55.6	53.7	51.8	49.7	45.4	35.2	20.3
4	********	55.3	55.1	54.2	52.8	51.3	49.7	48.2	46.5	44.8	43.1	39.3	30.5	17.6
5	********	49.5	49.2	48.5	47.2	45.9	44.5	43.1	41.6	40.1	38.5	35.2	27.2	15.7
6	********	45.2	45.0	44.3	43.1	41.9	40.6	39.3	38.0	36.6	35.2	32.1	24.9	14.4
7	********	41.8	41.6	41.0	39.9	38.8	37.6	36.4	35.2	33.9	32.6	29.7	23.0	13.3
8	********	39.1	38.9	38.3	37.3	36.3	35.2	34.1	32.9	31.7	30.5	27.8	21.5	12.4
9	********	36.9	36.7	36.1	35.2	34.2	33.2	32.1	31.0	29.9	28.7	26.2	20.3	11.7
10	********	35.0	34.8	34.3	33.4	32.4	31.5	30.5	29.4	28.4	27.2	24.9	19.3	11.1
11	********	33.4	33.2	32.7	31.8	30.9	30.0	29.0	28.1	27.0	26.0	23.7	18.4	10.6
12	********	31.9	31.8	31.3	30.5	29.6	28.7	27.8	26.9	25.9	24.9	22.7	17.6	10.2
13	********	30.7	30.5	30.1	29.3	28.4	27.6	26.7	25.8	24.9	23.9	21.8	16.9	9.8
14	********	29.6	29.4	29.0	28.2	27.4	26.6	25.7	24.9	24.0	23.0	21.0	16.3	9.4
15	********	28.6	28.4	28.0	27.2	26.5	25.7	24.9	24.0	23.2	22.2	20.3	15.7	9.1
16	**********		27.5	27.1	26.4	25.6	24.9	24.1	23.3	22.4	21.5	19.7	15.2	8.8
17	**********		26.7	26.3	25.6	24.9	24.1	23.4	22.6	21.7	20.9	19.1	14.8	8.5
18	**********		26.0	25.6	24.9	24.2	23.4	22.7	21.9	21.1	20.3	18.5	14.4	8.3
19	**********		25.3	24.9	24.2	23.5	22.8	22.1	21.3	20.6	19.8	18.0	14.0	8.1
20	**********		24.6	24.2	23.6	22.9	22.2	21.5	20.8	20.1	19.3	17.6	13.6	7.9
21	**********		24.0	23.7	23.0	22.4	21.7	21.0	20.3	19.6	18.8	17.2	13.3	7.7
22	**********		23.5	23.1	22.5	21.9	21.2	20.5	19.8	19.1	18.4	16.8	13.0	7.5
23	**********		23.0	22.6	22.0	21.4	20.7	20.1	19.4	18.7	18.0	16.4	12.7	7.3
24	**********		22.5	22.1	21.5	20.9	20.3	19.7	19.0	18.3	17.6	16.1	12.4	7.2
25	**********		22.0	21.7	21.1	20.5	19.9	19.3	18.6	17.9	17.2	15.7	12.2	7.0
30	**********		20.1	19.8	19.3	18.7	18.2	17.6	17.0	16.4	15.7	14.4	11.1	6.4
35	**********			18.3	17.8	17.3	16.8	16.3	15.7	15.2	14.6	13.3	10.3	5.9
40	**********			17.1	16.7	16.2	15.7	15.2	14.7	14.2	13.6	12.4	9.6	5.6
45	**********			16.2	15.7	15.3	14.8	14.4	13.9	13.4	12.8	11.7	9.1	5.2
50	**********			15.3	14.9	14.5	14.1	13.6	13.2	12.7	12.2	11.1	8.6	5.0
55	**********			14.6	14.2	13.8	13.4	13.0	12.5	12.1	11.6	10.6	8.2	4.7
60	**********			14.0	13.6	13.2	12.8	12.4	12.0	11.6	11.1	10.2	7.9	4.5
65	**********			13.4	13.1	12.7	12.3	11.9	11.5	11.1	10.7	9.8	7.6	4.4
70	**********			13.0	12.6	12.3	11.9	11.5	11.1	10.7	10.3	9.4	7.3	4.2
75	**********			12.5	12.2	11.8	11.5	11.1	10.7	10.4	9.9	9.1	7.0	4.1
80	**********				11.8	11.5	11.1	10.8	10.4	10.0	9.6	8.8	6.8	3.9
85	**********				11.4	11.1	10.8	10.4	10.1	9.7	9.3	8.5	6.6	3.8
90	**********				11.1	10.8	10.5	10.2	9.8	9.5	9.1	8.3	6.4	3.7
95	**********				10.8	10.5	10.2	9.9	9.5	9.2	8.8	8.1	6.3	3.6
100	**********				10.6	10.3	9.9	9.6	9.3	9.0	8.6	7.9	6.1	3.5
125	**********				9.4	9.2	8.9	8.6	8.3	8.0	7.7	7.0	5.4	3.1
150	**********				8.6	8.4	8.1	7.9	7.6	7.3	7.0	6.4	5.0	2.9
200	**********					7.3	7.0	6.8	6.6	6.3	6.1	5.6	4.3	2.5
250	**********					6.3	6.1	5.9	5.7	5.4	5.0	3.9	2.2	
300	**********					5.7	5.6	5.4	5.2	5.0	4.5	3.5	2.0	
350	**********						5.1	5.0	4.8	4.6	4.2	3.3	1.9	
400	**********							4.7	4.5	4.3	3.9	3.0	1.8	
450	**********							4.4	4.2	4.1	3.7	2.9	1.7	
500	**********								4.0	3.9	3.5	2.7	1.6	
750	**********											2.9	2.2	1.3
1000	**********												1.9	1.1

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Newfoundland
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	**********		44.1	43.5	42.3	41.1	39.9	38.6	37.3	35.9	34.5	31.5	24.4	14.1
2	**********		30.7	29.9	29.1	28.2	27.3	26.4	25.4	24.4	22.3	17.3	10.0	
3	**********		25.1	24.4	23.7	23.0	22.3	21.5	20.8	19.9	18.2	14.1	8.1	
4	**********		21.7	21.1	20.6	19.9	19.3	18.6	18.0	17.3	15.8	12.2	7.0	
5	**********			18.9	18.4	17.8	17.3	16.7	16.1	15.4	14.1	10.9	6.3	
6	**********			17.3	16.8	16.3	15.8	15.2	14.7	14.1	12.9	10.0	5.8	
7	**********			16.0	15.5	15.1	14.6	14.1	13.6	13.1	11.9	9.2	5.3	
8	**********			15.0	14.5	14.1	13.7	13.2	12.7	12.2	11.1	8.6	5.0	
9	**********				13.7	13.3	12.9	12.4	12.0	11.5	10.5	8.1	4.7	
10	**********				13.0	12.6	12.2	11.8	11.4	10.9	10.0	7.7	4.5	
11	**********				12.4	12.0	11.6	11.2	10.8	10.4	9.5	7.4	4.3	
12	**********				11.9	11.5	11.1	10.8	10.4	10.0	9.1	7.0	4.1	
13	**********				11.4	11.1	10.7	10.3	10.0	9.6	8.7	6.8	3.9	
14	**********					10.7	10.3	10.0	9.6	9.2	8.4	6.5	3.8	
15	**********					10.3	10.0	9.6	9.3	8.9	8.1	6.3	3.6	
16	**********					10.0	9.7	9.3	9.0	8.6	7.9	6.1	3.5	
17	**********					9.7	9.4	9.0	8.7	8.4	7.6	5.9	3.4	
18	**********						9.1	8.8	8.5	8.1	7.4	5.8	3.3	
19	**********						8.9	8.6	8.2	7.9	7.2	5.6	3.2	
20	**********						8.6	8.3	8.0	7.7	7.0	5.5	3.2	
21	**********						8.4	8.1	7.8	7.5	6.9	5.3	3.1	
22	**********						8.2	8.0	7.7	7.4	6.7	5.2	3.0	
23	**********							7.8	7.5	7.2	6.6	5.1	2.9	
24	**********							7.6	7.3	7.0	6.4	5.0	2.9	
25	**********							7.5	7.2	6.9	6.3	4.9	2.8	
30	**********								6.6	6.3	5.8	4.5	2.6	
35	**********									5.8	5.3	4.1	2.4	
40	**********										5.0	3.9	2.2	
45	**********											3.6	2.1	
50	**********											3.5	2.0	
55	**********											3.3	1.9	
60	**********											3.2	1.8	
65	**********												1.7	
70	**********												1.7	
75	**********												1.6	
80	**********												1.6	

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Prince Edward Island
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	**********	**********	**********	31.2	30.4	29.5	28.6	27.7	26.8	25.8	24.8	22.6	17.5	10.1
2	**********	**********	**********	21.5	20.9	20.3	19.6	18.9	18.3	17.5	16.0	12.4	7.2	
3	**********	**********	**********	17.0	16.5	16.0	15.5	14.9	14.3	13.1	10.1	5.8		
4	**********	**********	**********	14.3	13.9	13.4	12.9	12.4	11.3	8.8	5.1			
5	**********	**********	**********	12.4	12.0	11.5	11.1	10.1	7.8	4.5				
6	**********	**********	**********	10.9	10.5	10.1	9.2	7.2	4.1					
7	**********	**********	**********	9.8	9.4	8.6	6.6	3.8						
8	**********	**********	**********	9.1	8.8	8.0	6.2	3.6						
9	**********	**********	**********	8.3	7.5	5.8	3.4							
10	**********	**********	**********	7.2	5.5	3.2								
11	**********	**********	**********	6.8	5.3	3.1								
12	**********	**********	**********	5.1	2.9									
13	**********	**********	**********	4.9	2.8									
14	**********	**********	**********	4.7	2.7									
15	**********	**********	**********	4.5	2.6									
16	**********	**********	**********	4.4	2.5									
17	**********	**********	**********	2.5										
18	**********	**********	**********	2.4										
19	**********	**********	**********	2.3										
20	**********	**********	**********	2.3										

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Nova Scotia
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	62.1	61.8	60.9	59.3	57.6	55.9	54.1	52.3	50.4	48.4	44.2	34.2	19.8
2	**********	**********	43.7	43.0	41.9	40.7	39.5	38.2	37.0	35.6	34.2	31.2	24.2	14.0
3	**********	**********	**********	35.1	34.2	33.2	32.3	31.2	30.2	29.1	27.9	25.5	19.8	11.4
4	**********	**********	**********	30.4	29.6	28.8	27.9	27.0	26.1	25.2	24.2	22.1	17.1	9.9
5	**********	**********	**********	27.2	26.5	25.8	25.0	24.2	23.4	22.5	21.6	19.8	15.3	8.8
6	**********	**********	**********	24.9	24.2	23.5	22.8	22.1	21.3	20.6	19.8	18.0	14.0	8.1
7	**********	**********	**********	23.0	22.4	21.8	21.1	20.4	19.8	19.0	18.3	16.7	12.9	7.5
8	**********	**********	**********	**********	20.9	20.4	19.8	19.1	18.5	17.8	17.1	15.6	12.1	7.0
9	**********	**********	**********	**********	19.8	19.2	18.6	18.0	17.4	16.8	16.1	14.7	11.4	6.6
10	**********	**********	**********	**********	18.7	18.2	17.7	17.1	16.5	15.9	15.3	14.0	10.8	6.2
11	**********	**********	**********	**********	17.9	17.4	16.8	16.3	15.8	15.2	14.6	13.3	10.3	6.0
12	**********	**********	**********	**********	17.1	16.6	16.1	15.6	15.1	14.5	14.0	12.7	9.9	5.7
13	**********	**********	**********	**********	16.4	16.0	15.5	15.0	14.5	14.0	13.4	12.2	9.5	5.5
14	**********	**********	**********	**********	15.8	15.4	14.9	14.5	14.0	13.5	12.9	11.8	9.1	5.3
15	**********	**********	**********	**********	**********	14.9	14.4	14.0	13.5	13.0	12.5	11.4	8.8	5.1
16	**********	**********	**********	**********	**********	14.4	14.0	13.5	13.1	12.6	12.1	11.0	8.6	4.9
17	**********	**********	**********	**********	**********	14.0	13.5	13.1	12.7	12.2	11.7	10.7	8.3	4.8
18	**********	**********	**********	**********	**********	13.6	13.2	12.7	12.3	11.9	11.4	10.4	8.1	4.7
19	**********	**********	**********	**********	**********	13.2	12.8	12.4	12.0	11.6	11.1	10.1	7.8	4.5
20	**********	**********	**********	**********	**********	12.9	12.5	12.1	11.7	11.3	10.8	9.9	7.6	4.4
21	**********	**********	**********	**********	**********	12.6	12.2	11.8	11.4	11.0	10.6	9.6	7.5	4.3
22	**********	**********	**********	**********	**********	**********	11.9	11.5	11.1	10.7	10.3	9.4	7.3	4.2
23	**********	**********	**********	**********	**********	**********	11.6	11.3	10.9	10.5	10.1	9.2	7.1	4.1
24	**********	**********	**********	**********	**********	**********	11.4	11.0	10.7	10.3	9.9	9.0	7.0	4.0
25	**********	**********	**********	**********	**********	**********	11.2	10.8	10.5	10.1	9.7	8.8	6.8	4.0
30	**********	**********	**********	**********	**********	**********	**********	9.9	9.5	9.2	8.8	8.1	6.2	3.6
35	**********	**********	**********	**********	**********	**********	**********	9.1	8.8	8.5	8.2	7.5	5.8	3.3
40	**********	**********	**********	**********	**********	**********	**********	**********	8.3	8.0	7.6	7.0	5.4	3.1
45	**********	**********	**********	**********	**********	**********	**********	**********	**********	7.5	7.2	6.6	5.1	2.9
50	**********	**********	**********	**********	**********	**********	**********	**********	**********	7.1	6.8	6.2	4.8	2.8
55	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	6.5	6.0	4.6	2.7
60	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	5.7	4.4	2.5
65	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	5.5	4.2	2.4
70	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	5.3	4.1	2.4
75	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	4.0	2.3
80	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.8	2.2
85	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.7	2.1
90	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.6	2.1
95	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.5	2.0
100	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.4	2.0
125	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	1.8

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for New Brunswick
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	52.3	52.0	51.2	49.8	48.4	47.0	45.5	44.0	42.4	40.7	37.1	28.8	16.6
2	**********	**********	36.8	36.2	35.2	34.2	33.2	32.2	31.1	29.9	28.8	26.3	20.3	11.7
3	**********	**********	**********	29.6	28.8	28.0	27.1	26.3	25.4	24.5	23.5	21.4	16.6	9.6
4	**********	**********	**********	25.6	24.9	24.2	23.5	22.7	22.0	21.2	20.3	18.6	14.4	8.3
5	**********	**********	**********	22.9	22.3	21.7	21.0	20.3	19.7	18.9	18.2	16.6	12.9	7.4
6	**********	**********	**********	**********	20.3	19.8	19.2	18.6	17.9	17.3	16.6	15.2	11.7	6.8
7	**********	**********	**********	**********	18.8	18.3	17.8	17.2	16.6	16.0	15.4	14.0	10.9	6.3
8	**********	**********	**********	**********	17.6	17.1	16.6	16.1	15.5	15.0	14.4	13.1	10.2	5.9
9	**********	**********	**********	**********	16.6	16.1	15.7	15.2	14.7	14.1	13.6	12.4	9.6	5.5
10	**********	**********	**********	**********	15.8	15.3	14.9	14.4	13.9	13.4	12.9	11.7	9.1	5.3
11	**********	**********	**********	**********	15.0	14.6	14.2	13.7	13.3	12.8	12.3	11.2	8.7	5.0
12	**********	**********	**********	**********	**********	14.0	13.6	13.1	12.7	12.2	11.7	10.7	8.3	4.8
13	**********	**********	**********	**********	**********	13.4	13.0	12.6	12.2	11.7	11.3	10.3	8.0	4.6
14	**********	**********	**********	**********	**********	12.9	12.6	12.2	11.7	11.3	10.9	9.9	7.7	4.4
15	**********	**********	**********	**********	**********	12.5	12.1	11.7	11.3	10.9	10.5	9.6	7.4	4.3
16	**********	**********	**********	**********	**********	12.1	11.7	11.4	11.0	10.6	10.2	9.3	7.2	4.2
17	**********	**********	**********	**********	**********	11.7	11.4	11.0	10.7	10.3	9.9	9.0	7.0	4.0
18	**********	**********	**********	**********	**********	**********	11.1	10.7	10.4	10.0	9.6	8.8	6.8	3.9
19	**********	**********	**********	**********	**********	**********	10.8	10.4	10.1	9.7	9.3	8.5	6.6	3.8
20	**********	**********	**********	**********	**********	**********	10.5	10.2	9.8	9.5	9.1	8.3	6.4	3.7
21	**********	**********	**********	**********	**********	**********	10.3	9.9	9.6	9.2	8.9	8.1	6.3	3.6
22	**********	**********	**********	**********	**********	**********	10.0	9.7	9.4	9.0	8.7	7.9	6.1	3.5
23	**********	**********	**********	**********	**********	**********	9.8	9.5	9.2	8.8	8.5	7.7	6.0	3.5
24	**********	**********	**********	**********	**********	**********	**********	9.3	9.0	8.6	8.3	7.6	5.9	3.4
25	**********	**********	**********	**********	**********	**********	**********	9.1	8.8	8.5	8.1	7.4	5.8	3.3
30	**********	**********	**********	**********	**********	**********	**********	**********	8.0	7.7	7.4	6.8	5.3	3.0
35	**********	**********	**********	**********	**********	**********	**********	**********	**********	7.2	6.9	6.3	4.9	2.8
40	**********	**********	**********	**********	**********	**********	**********	**********	**********	6.7	6.4	5.9	4.5	2.6
45	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	6.1	5.5	4.3	2.5
50	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	5.3	4.1	2.3
55	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	5.0	3.9	2.2
60	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.7	2.1
65	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.6	2.1
70	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.4	2.0
75	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.3	1.9
80	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.2	1.9
85	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	1.8
90	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	1.8
95	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	1.7
100	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	1.7

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Quebec
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	135.0	134.4	133.7	131.6	128.1	124.5	120.8	117.0	113.0	108.9	104.6	95.5	74.0	42.7
2	********	95.0	94.5	93.1	90.6	88.1	85.4	82.7	79.9	77.0	74.0	67.5	52.3	30.2
3	********	77.6	77.2	76.0	74.0	71.9	69.7	67.5	65.2	62.9	60.4	55.1	42.7	24.7
4	********	67.2	66.9	65.8	64.1	62.3	60.4	58.5	56.5	54.4	52.3	47.8	37.0	21.4
5	********	60.1	59.8	58.9	57.3	55.7	54.0	52.3	50.5	48.7	46.8	42.7	33.1	19.1
6	********	54.9	54.6	53.7	52.3	50.8	49.3	47.8	46.1	44.5	42.7	39.0	30.2	17.4
7	********	50.8	50.5	49.8	48.4	47.1	45.7	44.2	42.7	41.2	39.5	36.1	28.0	16.1
8	********	47.5	47.3	46.5	45.3	44.0	42.7	41.4	40.0	38.5	37.0	33.8	26.2	15.1
9	********	44.8	44.6	43.9	42.7	41.5	40.3	39.0	37.7	36.3	34.9	31.8	24.7	14.2
10	********	42.5	42.3	41.6	40.5	39.4	38.2	37.0	35.7	34.4	33.1	30.2	23.4	13.5
11	**********		40.3	39.7	38.6	37.5	36.4	35.3	34.1	32.8	31.5	28.8	22.3	12.9
12	**********		38.6	38.0	37.0	35.9	34.9	33.8	32.6	31.4	30.2	27.6	21.4	12.3
13	**********		37.1	36.5	35.5	34.5	33.5	32.4	31.3	30.2	29.0	26.5	20.5	11.8
14	**********		35.7	35.2	34.2	33.3	32.3	31.3	30.2	29.1	28.0	25.5	19.8	11.4
15	**********		34.5	34.0	33.1	32.2	31.2	30.2	29.2	28.1	27.0	24.7	19.1	11.0
16	**********		33.4	32.9	32.0	31.1	30.2	29.2	28.3	27.2	26.2	23.9	18.5	10.7
17	**********		32.4	31.9	31.1	30.2	29.3	28.4	27.4	26.4	25.4	23.2	17.9	10.4
18	**********		31.5	31.0	30.2	29.4	28.5	27.6	26.6	25.7	24.7	22.5	17.4	10.1
19	**********		30.7	30.2	29.4	28.6	27.7	26.8	25.9	25.0	24.0	21.9	17.0	9.8
20	**********		29.9	29.4	28.7	27.8	27.0	26.2	25.3	24.3	23.4	21.4	16.5	9.6
21	**********		29.2	28.7	28.0	27.2	26.4	25.5	24.7	23.8	22.8	20.8	16.1	9.3
22	**********		**********	28.1	27.3	26.5	25.8	24.9	24.1	23.2	22.3	20.4	15.8	9.1
23	**********		**********	27.5	26.7	26.0	25.2	24.4	23.6	22.7	21.8	19.9	15.4	8.9
24	**********		**********	26.9	26.2	25.4	24.7	23.9	23.1	22.2	21.4	19.5	15.1	8.7
25	**********		**********	26.3	25.6	24.9	24.2	23.4	22.6	21.8	20.9	19.1	14.8	8.5
30	**********		**********	24.0	23.4	22.7	22.1	21.4	20.6	19.9	19.1	17.4	13.5	7.8
35	**********		**********	22.3	21.7	21.0	20.4	19.8	19.1	18.4	17.7	16.1	12.5	7.2
40	**********		**********	20.8	20.3	19.7	19.1	18.5	17.9	17.2	16.5	15.1	11.7	6.8
45	**********		**********	19.6	19.1	18.6	18.0	17.4	16.8	16.2	15.6	14.2	11.0	6.4
50	**********		**********	18.6	18.1	17.6	17.1	16.5	16.0	15.4	14.8	13.5	10.5	6.0
55	**********		**********	**********	17.3	16.8	16.3	15.8	15.2	14.7	14.1	12.9	10.0	5.8
60	**********		**********	**********	16.5	16.1	15.6	15.1	14.6	14.1	13.5	12.3	9.6	5.5
65	**********		**********	**********	15.9	15.4	15.0	14.5	14.0	13.5	13.0	11.8	9.2	5.3
70	**********		**********	**********	15.3	14.9	14.4	14.0	13.5	13.0	12.5	11.4	8.8	5.1
75	**********		**********	**********	14.8	14.4	13.9	13.5	13.0	12.6	12.1	11.0	8.5	4.9
80	**********		**********	**********	14.3	13.9	13.5	13.1	12.6	12.2	11.7	10.7	8.3	4.8
85	**********		**********	**********	13.9	13.5	13.1	12.7	12.3	11.8	11.3	10.4	8.0	4.6
90	**********		**********	**********	13.5	13.1	12.7	12.3	11.9	11.5	11.0	10.1	7.8	4.5
95	**********		**********	**********	13.1	12.8	12.4	12.0	11.6	11.2	10.7	9.8	7.6	4.4
100	**********		**********	**********	12.8	12.5	12.1	11.7	11.3	10.9	10.5	9.6	7.4	4.3
125	**********		**********	**********	**********	11.1	10.8	10.5	10.1	9.7	9.4	8.5	6.6	3.8
150	**********		**********	**********	**********	10.2	9.9	9.6	9.2	8.9	8.5	7.8	6.0	3.5
200	**********		**********	**********	**********	**********	8.5	8.3	8.0	7.7	7.4	6.8	5.2	3.0
250	**********		**********	**********	**********	**********	**********	7.4	7.1	6.9	6.6	6.0	4.7	2.7
300	**********		**********	**********	**********	**********	**********	**********	6.5	6.3	6.0	5.5	4.3	2.5
350	**********		**********	**********	**********	**********	**********	**********	**********	5.8	5.6	5.1	4.0	2.3
400	**********		**********	**********	**********	**********	**********	**********	**********	**********	5.2	4.8	3.7	2.1
450	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	4.5	3.5	2.0
500	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	4.3	3.3	1.9
750	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	2.7	1.6

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Ontario
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	138.2	137.5	136.8	134.7	131.1	127.4	123.6	119.7	115.6	111.4	107.1	97.7	75.7	43.7
2	********	97.2	96.8	95.3	92.7	90.1	87.4	84.6	81.8	78.8	75.7	69.1	53.5	30.9
3	********	79.4	79.0	77.8	75.7	73.6	71.4	69.1	66.8	64.3	61.8	56.4	43.7	25.2
4	********	68.8	68.4	67.4	65.6	63.7	61.8	59.9	57.8	55.7	53.5	48.9	37.9	21.9
5	********	61.5	61.2	60.2	58.6	57.0	55.3	53.5	51.7	49.8	47.9	43.7	33.9	19.5
6	********	56.1	55.9	55.0	53.5	52.0	50.5	48.9	47.2	45.5	43.7	39.9	30.9	17.8
7	********	52.0	51.7	50.9	49.6	48.2	46.7	45.2	43.7	42.1	40.5	36.9	28.6	16.5
8	********	48.6	48.4	47.6	46.4	45.1	43.7	42.3	40.9	39.4	37.9	34.6	26.8	15.5
9	********	45.8	45.6	44.9	43.7	42.5	41.2	39.9	38.5	37.1	35.7	32.6	25.2	14.6
10	********	43.5	43.3	42.6	41.5	40.3	39.1	37.9	36.6	35.2	33.9	30.9	23.9	13.8
11	********	41.5	41.3	40.6	39.5	38.4	37.3	36.1	34.9	33.6	32.3	29.5	22.8	13.2
12	********	39.7	39.5	38.9	37.9	36.8	35.7	34.6	33.4	32.2	30.9	28.2	21.9	12.6
13	********	38.1	38.0	37.4	36.4	35.3	34.3	33.2	32.1	30.9	29.7	27.1	21.0	12.1
14	********	36.8	36.6	36.0	35.0	34.1	33.0	32.0	30.9	29.8	28.6	26.1	20.2	11.7
15	********	35.5	35.3	34.8	33.9	32.9	31.9	30.9	29.9	28.8	27.6	25.2	19.5	11.3
16	********	34.4	34.2	33.7	32.8	31.9	30.9	29.9	28.9	27.9	26.8	24.4	18.9	10.9
17	********	33.4	33.2	32.7	31.8	30.9	30.0	29.0	28.0	27.0	26.0	23.7	18.4	10.6
18	**********	32.3	31.8	30.9	30.0	29.1	28.2	27.3	26.3	25.2	23.0	17.8	10.3	
19	**********	31.4	30.9	30.1	29.2	28.4	27.5	26.5	25.6	24.6	22.4	17.4	10.0	
20	**********	30.6	30.1	29.3	28.5	27.6	26.8	25.9	24.9	23.9	21.9	16.9	9.8	
21	**********	29.9	29.4	28.6	27.8	27.0	26.1	25.2	24.3	23.4	21.3	16.5	9.5	
22	**********	29.2	28.7	28.0	27.2	26.4	25.5	24.7	23.8	22.8	20.8	16.1	9.3	
23	**********	28.5	28.1	27.3	26.6	25.8	25.0	24.1	23.2	22.3	20.4	15.8	9.1	
24	**********	27.9	27.5	26.8	26.0	25.2	24.4	23.6	22.7	21.9	20.0	15.5	8.9	
25	**********	27.4	26.9	26.2	25.5	24.7	23.9	23.1	22.3	21.4	19.5	15.1	8.7	
30	**********	25.0	24.6	23.9	23.3	22.6	21.9	21.1	20.3	19.5	17.8	13.8	8.0	
35	**********	23.1	22.8	22.2	21.5	20.9	20.2	19.5	18.8	18.1	16.5	12.8	7.4	
40	**********	21.3	20.7	20.1	19.5	18.9	18.3	17.6	16.9	15.5	12.0	6.9		
45	**********	20.1	19.5	19.0	18.4	17.8	17.2	16.6	16.0	14.6	11.3	6.5		
50	**********	19.1	18.5	18.0	17.5	16.9	16.4	15.8	15.1	13.8	10.7	6.2		
55	**********	18.2	17.7	17.2	16.7	16.1	15.6	15.0	14.4	13.2	10.2	5.9		
60	**********	17.4	16.9	16.5	16.0	15.5	14.9	14.4	13.8	12.6	9.8	5.6		
65	**********	16.7	16.3	15.8	15.3	14.8	14.3	13.8	13.3	12.8	12.1	9.4	5.4	
70	**********	16.1	15.7	15.2	14.8	14.3	13.8	13.3	12.8	11.7	9.0	5.2		
75	**********	15.6	15.1	14.7	14.3	13.8	13.4	12.9	12.4	11.3	8.7	5.0		
80	**********	15.1	14.7	14.2	13.8	13.4	12.9	12.5	12.0	10.9	8.5	4.9		
85	**********	14.6	14.2	13.8	13.4	13.0	12.5	12.1	11.6	10.6	8.2	4.7		
90	**********	13.8	13.4	13.0	12.6	12.2	11.7	11.3	10.3	8.0	4.6			
95	**********	13.5	13.1	12.7	12.3	11.9	11.4	11.0	10.0	7.8	4.5			
100	**********	13.1	12.7	12.4	12.0	11.6	11.1	10.7	9.8	7.6	4.4			
125	**********	11.7	11.4	11.1	10.7	10.3	10.0	9.6	8.7	6.8	3.9			
150	**********	10.7	10.4	10.1	9.8	9.4	9.1	8.7	8.0	6.2	3.6			
200	**********	9.0	8.7	8.5	8.2	7.9	7.6	6.9	5.4	3.1				
250	**********	8.1	7.8	7.6	7.3	7.0	6.8	6.2	4.8	2.8				
300	**********	7.1	6.9	6.7	6.4	6.2	5.6	4.4	2.5					
350	**********	6.6	6.4	6.2	6.0	5.7	5.2	4.0	2.3					
400	**********	6.0	5.8	5.6	5.4	4.9	3.8	2.2						
450	**********	5.5	5.3	5.0	4.6	3.6	2.1							
500	**********	5.2	5.0	4.8	4.4	3.4	2.0							
750	**********	3.6	2.8	1.6										
1000	**********	2.4	1.4											
1500	**********	1.1												

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Manitoba
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	72.7	72.3	71.2	69.3	67.3	65.3	63.2	61.1	58.9	56.6	51.6	40.0	23.1
2	**********		51.1	50.3	49.0	47.6	46.2	44.7	43.2	41.6	40.0	36.5	28.3	16.3
3	**********		41.7	41.1	40.0	38.9	37.7	36.5	35.3	34.0	32.7	29.8	23.1	13.3
4	**********		**********	35.6	34.6	33.7	32.7	31.6	30.5	29.4	28.3	25.8	20.0	11.5
5	**********		**********	31.8	31.0	30.1	29.2	28.3	27.3	26.3	25.3	23.1	17.9	10.3
6	**********		**********	29.1	28.3	27.5	26.7	25.8	24.9	24.0	23.1	21.1	16.3	9.4
7	**********		**********	26.9	26.2	25.4	24.7	23.9	23.1	22.3	21.4	19.5	15.1	8.7
8	**********		**********	25.2	24.5	23.8	23.1	22.4	21.6	20.8	20.0	18.3	14.1	8.2
9	**********		**********	23.7	23.1	22.4	21.8	21.1	20.4	19.6	18.9	17.2	13.3	7.7
10	**********		**********	**********	21.9	21.3	20.7	20.0	19.3	18.6	17.9	16.3	12.6	7.3
11	**********		**********	**********	20.9	20.3	19.7	19.1	18.4	17.8	17.1	15.6	12.1	7.0
12	**********		**********	**********	20.0	19.4	18.9	18.3	17.6	17.0	16.3	14.9	11.5	6.7
13	**********		**********	**********	19.2	18.7	18.1	17.5	16.9	16.3	15.7	14.3	11.1	6.4
14	**********		**********	**********	18.5	18.0	17.5	16.9	16.3	15.7	15.1	13.8	10.7	6.2
15	**********		**********	**********	17.9	17.4	16.9	16.3	15.8	15.2	14.6	13.3	10.3	6.0
16	**********		**********	**********	17.3	16.8	16.3	15.8	15.3	14.7	14.1	12.9	10.0	5.8
17	**********		**********	**********	16.8	16.3	15.8	15.3	14.8	14.3	13.7	12.5	9.7	5.6
18	**********		**********	**********	16.3	15.9	15.4	14.9	14.4	13.9	13.3	12.2	9.4	5.4
19	**********		**********	**********	**********	15.4	15.0	14.5	14.0	13.5	13.0	11.8	9.2	5.3
20	**********		**********	**********	**********	15.1	14.6	14.1	13.7	13.2	12.6	11.5	8.9	5.2
21	**********		**********	**********	**********	14.7	14.3	13.8	13.3	12.8	12.3	11.3	8.7	5.0
22	**********		**********	**********	**********	14.4	13.9	13.5	13.0	12.6	12.1	11.0	8.5	4.9
23	**********		**********	**********	**********	14.0	13.6	13.2	12.7	12.3	11.8	10.8	8.3	4.8
24	**********		**********	**********	**********	13.7	13.3	12.9	12.5	12.0	11.5	10.5	8.2	4.7
25	**********		**********	**********	**********	13.5	13.1	12.6	12.2	11.8	11.3	10.3	8.0	4.6
30	**********		**********	**********	**********	**********	11.9	11.5	11.2	10.7	10.3	9.4	7.3	4.2
35	**********		**********	**********	**********	**********	11.0	10.7	10.3	10.0	9.6	8.7	6.8	3.9
40	**********		**********	**********	**********	**********	**********	10.0	9.7	9.3	8.9	8.2	6.3	3.7
45	**********		**********	**********	**********	**********	**********	9.4	9.1	8.8	8.4	7.7	6.0	3.4
50	**********		**********	**********	**********	**********	**********	**********	8.6	8.3	8.0	7.3	5.7	3.3
55	**********		**********	**********	**********	**********	**********	**********	**********	7.9	7.6	7.0	5.4	3.1
60	**********		**********	**********	**********	**********	**********	**********	**********	7.6	7.3	6.7	5.2	3.0
65	**********		**********	**********	**********	**********	**********	**********	**********	**********	7.0	6.4	5.0	2.9
70	**********		**********	**********	**********	**********	**********	**********	**********	**********	6.8	6.2	4.8	2.8
75	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	6.0	4.6	2.7
80	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	5.8	4.5	2.6
85	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	5.6	4.3	2.5
90	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	5.4	4.2	2.4
95	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	4.1	2.4
100	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	4.0	2.3
125	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	3.6	2.1
150	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	**********	1.9

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Saskatchewan
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	61.0	60.7	59.7	58.2	56.5	54.8	53.1	51.3	49.4	47.5	43.3	33.6	19.4
2	**********	42.9	42.2	41.1	40.0	38.8	37.5	36.3	34.9	33.6	30.7	23.7	13.7	
3	**********	35.0	34.5	33.6	32.6	31.7	30.7	29.6	28.5	27.4	25.0	19.4	11.2	
4	**********	29.9	29.1	28.3	27.4	26.5	25.6	24.7	23.7	21.7	16.8	9.7		
5	**********	26.7	26.0	25.3	24.5	23.7	22.9	22.1	21.2	19.4	15.0	8.7		
6	**********	24.4	23.7	23.1	22.4	21.7	20.9	20.2	19.4	17.7	13.7	7.9		
7	**********	22.6	22.0	21.4	20.7	20.1	19.4	18.7	17.9	16.4	12.7	7.3		
8	**********	21.1	20.6	20.0	19.4	18.8	18.1	17.5	16.8	15.3	11.9	6.9		
9	**********	19.4	18.8	18.3	17.7	17.1	16.5	15.8	14.4	11.2	6.5			
10	**********	18.4	17.9	17.3	16.8	16.2	15.6	15.0	13.7	10.6	6.1			
11	**********	17.5	17.0	16.5	16.0	15.5	14.9	14.3	13.1	10.1	5.8			
12	**********	16.8	16.3	15.8	15.3	14.8	14.3	13.7	12.5	9.7	5.6			
13	**********	16.1	15.7	15.2	14.7	14.2	13.7	13.2	12.0	9.3	5.4			
14	**********	15.5	15.1	14.7	14.2	13.7	13.2	12.7	11.6	9.0	5.2			
15	**********	15.0	14.6	14.2	13.7	13.2	12.8	12.3	11.2	8.7	5.0			
16	**********	14.5	14.1	13.7	13.3	12.8	12.4	11.9	10.8	8.4	4.8			
17	**********	14.1	13.7	13.3	12.9	12.4	12.0	11.5	10.5	8.1	4.7			
18	**********	13.3	12.9	12.5	12.1	11.6	11.2	10.2	7.9	4.6				
19	**********	13.0	12.6	12.2	11.8	11.3	10.9	9.9	7.7	4.4				
20	**********	12.6	12.3	11.9	11.5	11.1	10.6	9.7	7.5	4.3				
21	**********	12.3	12.0	11.6	11.2	10.8	10.4	9.5	7.3	4.2				
22	**********	12.0	11.7	11.3	10.9	10.5	10.1	9.2	7.2	4.1				
23	**********	11.8	11.4	11.1	10.7	10.3	9.9	9.0	7.0	4.0				
24	**********	11.5	11.2	10.8	10.5	10.1	9.7	8.8	6.9	4.0				
25	**********	11.3	11.0	10.6	10.3	9.9	9.5	8.7	6.7	3.9				
30	**********	10.0	9.7	9.4	9.0	8.7	7.9	6.1	3.5					
35	**********	9.3	9.0	8.7	8.4	8.0	7.3	5.7	3.3					
40	**********	8.4	8.1	7.8	7.5	6.9	5.3	3.1						
45	**********	7.6	7.4	7.1	6.5	5.0	2.9							
50	**********	7.3	7.0	6.7	6.1	4.7	2.7							
55	**********	6.7	6.4	5.8	4.5	2.6								
60	**********	6.4	6.1	5.6	4.3	2.5								
65	**********	5.9	5.4	4.2	2.4									
70	**********	5.7	5.2	4.0	2.3									
75	**********	5.0	3.9	2.2										
80	**********	4.8	3.8	2.2										
85	**********	4.7	3.6	2.1										
90	**********	3.5	2.0											
95	**********	3.4	2.0											
100	**********	3.4	1.9											
125	**********	1.7												
150	**********	1.6												

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Alberta
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	102.7	102.2	100.6	98.0	95.2	92.4	89.4	86.4	83.3	80.0	73.0	56.6	32.7
2	********	72.6	72.3	71.2	69.3	67.3	65.3	63.2	61.1	58.9	56.6	51.6	40.0	23.1
3	********	59.3	59.0	58.1	56.6	55.0	53.3	51.6	49.9	48.1	46.2	42.2	32.7	18.9
4	********	51.4	51.1	50.3	49.0	47.6	46.2	44.7	43.2	41.6	40.0	36.5	28.3	16.3
5	**********		45.7	45.0	43.8	42.6	41.3	40.0	38.6	37.2	35.8	32.7	25.3	14.6
6	**********		41.7	41.1	40.0	38.9	37.7	36.5	35.3	34.0	32.7	29.8	23.1	13.3
7	**********		38.6	38.0	37.0	36.0	34.9	33.8	32.7	31.5	30.2	27.6	21.4	12.3
8	**********		36.1	35.6	34.6	33.7	32.7	31.6	30.5	29.4	28.3	25.8	20.0	11.5
9	**********		34.1	33.5	32.7	31.7	30.8	29.8	28.8	27.8	26.7	24.3	18.9	10.9
10	**********			31.8	31.0	30.1	29.2	28.3	27.3	26.3	25.3	23.1	17.9	10.3
11	**********			30.3	29.5	28.7	27.8	27.0	26.0	25.1	24.1	22.0	17.1	9.8
12	**********			29.1	28.3	27.5	26.7	25.8	24.9	24.0	23.1	21.1	16.3	9.4
13	**********			27.9	27.2	26.4	25.6	24.8	24.0	23.1	22.2	20.3	15.7	9.1
14	**********			26.9	26.2	25.4	24.7	23.9	23.1	22.2	21.4	19.5	15.1	8.7
15	**********			26.0	25.3	24.6	23.8	23.1	22.3	21.5	20.7	18.9	14.6	8.4
16	**********			25.2	24.5	23.8	23.1	22.4	21.6	20.8	20.0	18.3	14.1	8.2
17	**********			24.4	23.8	23.1	22.4	21.7	21.0	20.2	19.4	17.7	13.7	7.9
18	**********			23.7	23.1	22.4	21.8	21.1	20.4	19.6	18.9	17.2	13.3	7.7
19	**********			23.1	22.5	21.8	21.2	20.5	19.8	19.1	18.3	16.8	13.0	7.5
20	**********			22.5	21.9	21.3	20.7	20.0	19.3	18.6	17.9	16.3	12.6	7.3
21	**********			22.0	21.4	20.8	20.2	19.5	18.9	18.2	17.5	15.9	12.3	7.1
22	**********			21.5	20.9	20.3	19.7	19.1	18.4	17.7	17.1	15.6	12.1	7.0
23	**********			21.0	20.4	19.9	19.3	18.6	18.0	17.4	16.7	15.2	11.8	6.8
24	**********			20.5	20.0	19.4	18.9	18.3	17.6	17.0	16.3	14.9	11.5	6.7
25	**********				19.6	19.0	18.5	17.9	17.3	16.7	16.0	14.6	11.3	6.5
30	**********				17.9	17.4	16.9	16.3	15.8	15.2	14.6	13.3	10.3	6.0
35	**********				16.6	16.1	15.6	15.1	14.6	14.1	13.5	12.3	9.6	5.5
40	**********				15.5	15.1	14.6	14.1	13.7	13.2	12.6	11.5	8.9	5.2
45	**********				14.6	14.2	13.8	13.3	12.9	12.4	11.9	10.9	8.4	4.9
50	**********					13.5	13.1	12.6	12.2	11.8	11.3	10.3	8.0	4.6
55	**********					12.8	12.5	12.1	11.6	11.2	10.8	9.8	7.6	4.4
60	**********					12.3	11.9	11.5	11.2	10.7	10.3	9.4	7.3	4.2
65	**********					11.8	11.5	11.1	10.7	10.3	9.9	9.1	7.0	4.1
70	**********					11.4	11.0	10.7	10.3	10.0	9.6	8.7	6.8	3.9
75	**********						10.7	10.3	10.0	9.6	9.2	8.4	6.5	3.8
80	**********						10.3	10.0	9.7	9.3	8.9	8.2	6.3	3.7
85	**********						10.0	9.7	9.4	9.0	8.7	7.9	6.1	3.5
90	**********						9.7	9.4	9.1	8.8	8.4	7.7	6.0	3.4
95	**********						9.5	9.2	8.9	8.5	8.2	7.5	5.8	3.4
100	**********							8.9	8.6	8.3	8.0	7.3	5.7	3.3
125	**********							7.7	7.4	7.2	6.5	5.1	2.9	
150	**********								6.8	6.5	6.0	4.6	2.7	
200	**********										5.2	4.0	2.3	
250	**********											3.6	2.1	
300	**********											3.3	1.9	
350	**********												1.7	
400	**********												1.6	

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for British Colombia
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	123.8	123.1	121.2	118.0	114.7	111.2	107.7	104.1	100.3	96.3	87.9	68.1	39.3
2	********	87.5	87.1	85.7	83.4	81.1	78.7	76.2	73.6	70.9	68.1	62.2	48.2	27.8
3	********	71.5	71.1	70.0	68.1	66.2	64.2	62.2	60.1	57.9	55.6	50.8	39.3	22.7
4	********	61.9	61.6	60.6	59.0	57.3	55.6	53.9	52.0	50.1	48.2	44.0	34.1	19.7
5	********	55.3	55.1	54.2	52.8	51.3	49.8	48.2	46.5	44.8	43.1	39.3	30.5	17.6
6	**********		50.3	49.5	48.2	46.8	45.4	44.0	42.5	40.9	39.3	35.9	27.8	16.1
7	**********		46.5	45.8	44.6	43.3	42.0	40.7	39.3	37.9	36.4	33.2	25.7	14.9
8	**********		43.5	42.9	41.7	40.5	39.3	38.1	36.8	35.5	34.1	31.1	24.1	13.9
9	**********		41.0	40.4	39.3	38.2	37.1	35.9	34.7	33.4	32.1	29.3	22.7	13.1
10	**********		38.9	38.3	37.3	36.3	35.2	34.1	32.9	31.7	30.5	27.8	21.5	12.4
11	**********		37.1	36.6	35.6	34.6	33.5	32.5	31.4	30.2	29.0	26.5	20.5	11.9
12	**********			35.0	34.1	33.1	32.1	31.1	30.0	28.9	27.8	25.4	19.7	11.4
13	**********			33.6	32.7	31.8	30.9	29.9	28.9	27.8	26.7	24.4	18.9	10.9
14	**********			32.4	31.5	30.6	29.7	28.8	27.8	26.8	25.7	23.5	18.2	10.5
15	**********			31.3	30.5	29.6	28.7	27.8	26.9	25.9	24.9	22.7	17.6	10.2
16	**********			30.3	29.5	28.7	27.8	26.9	26.0	25.1	24.1	22.0	17.0	9.8
17	**********			29.4	28.6	27.8	27.0	26.1	25.2	24.3	23.4	21.3	16.5	9.5
18	**********			28.6	27.8	27.0	26.2	25.4	24.5	23.6	22.7	20.7	16.1	9.3
19	**********			27.8	27.1	26.3	25.5	24.7	23.9	23.0	22.1	20.2	15.6	9.0
20	**********			27.1	26.4	25.6	24.9	24.1	23.3	22.4	21.5	19.7	15.2	8.8
21	**********			26.5	25.7	25.0	24.3	23.5	22.7	21.9	21.0	19.2	14.9	8.6
22	**********			25.8	25.2	24.4	23.7	23.0	22.2	21.4	20.5	18.8	14.5	8.4
23	**********			25.3	24.6	23.9	23.2	22.5	21.7	20.9	20.1	18.3	14.2	8.2
24	**********			24.7	24.1	23.4	22.7	22.0	21.2	20.5	19.7	18.0	13.9	8.0
25	**********			24.2	23.6	22.9	22.2	21.5	20.8	20.1	19.3	17.6	13.6	7.9
30	**********				21.5	20.9	20.3	19.7	19.0	18.3	17.6	16.1	12.4	7.2
35	**********				19.9	19.4	18.8	18.2	17.6	17.0	16.3	14.9	11.5	6.6
40	**********				18.7	18.1	17.6	17.0	16.5	15.9	15.2	13.9	10.8	6.2
45	**********				17.6	17.1	16.6	16.1	15.5	14.9	14.4	13.1	10.2	5.9
50	**********				16.7	16.2	15.7	15.2	14.7	14.2	13.6	12.4	9.6	5.6
55	**********				15.9	15.5	15.0	14.5	14.0	13.5	13.0	11.9	9.2	5.3
60	**********					14.8	14.4	13.9	13.4	12.9	12.4	11.4	8.8	5.1
65	**********					14.2	13.8	13.4	12.9	12.4	11.9	10.9	8.4	4.9
70	**********					13.7	13.3	12.9	12.4	12.0	11.5	10.5	8.1	4.7
75	**********					13.2	12.8	12.4	12.0	11.6	11.1	10.2	7.9	4.5
80	**********					12.8	12.4	12.0	11.6	11.2	10.8	9.8	7.6	4.4
85	**********					12.4	12.1	11.7	11.3	10.9	10.4	9.5	7.4	4.3
90	**********						11.7	11.4	11.0	10.6	10.2	9.3	7.2	4.1
95	**********						11.4	11.1	10.7	10.3	9.9	9.0	7.0	4.0
100	**********						11.1	10.8	10.4	10.0	9.6	8.8	6.8	3.9
125	**********							9.6	9.3	9.0	8.6	7.9	6.1	3.5
150	**********								8.5	8.2	7.9	7.2	5.6	3.2
200	**********									7.1	6.8	6.2	4.8	2.8
250	**********											5.6	4.3	2.5
300	**********												3.9	2.3
350	**********												3.6	2.1
400	**********												3.4	2.0
450	**********													1.9
500	**********													1.8

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Canada
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	126.3	125.7	125.1	123.1	119.9	116.5	113.0	109.4	105.7	101.9	97.9	89.3	69.2	40.0
2	89.3	88.9	88.4	87.1	84.7	82.4	79.9	77.4	74.7	72.0	69.2	63.2	48.9	28.2
3	72.9	72.6	72.2	71.1	69.2	67.2	65.2	63.2	61.0	58.8	56.5	51.6	40.0	23.1
4	63.1	62.8	62.5	61.6	59.9	58.2	56.5	54.7	52.8	50.9	48.9	44.7	34.6	20.0
5	********	56.2	55.9	55.1	53.6	52.1	50.5	48.9	47.3	45.6	43.8	40.0	30.9	17.9
6	********	51.3	51.1	50.3	48.9	47.6	46.1	44.7	43.2	41.6	40.0	36.5	28.2	16.3
7	********	47.5	47.3	46.5	45.3	44.0	42.7	41.4	40.0	38.5	37.0	33.8	26.2	15.1
8	********	44.4	44.2	43.5	42.4	41.2	40.0	38.7	37.4	36.0	34.6	31.6	24.5	14.1
9	********	41.9	41.7	41.0	40.0	38.8	37.7	36.5	35.2	34.0	32.6	29.8	23.1	13.3
10	********	39.7	39.5	38.9	37.9	36.8	35.7	34.6	33.4	32.2	30.9	28.2	21.9	12.6
11	********	37.9	37.7	37.1	36.1	35.1	34.1	33.0	31.9	30.7	29.5	26.9	20.9	12.0
12	********	36.3	36.1	35.5	34.6	33.6	32.6	31.6	30.5	29.4	28.2	25.8	20.0	11.5
13	********	34.9	34.7	34.2	33.2	32.3	31.3	30.3	29.3	28.2	27.1	24.8	19.2	11.1
14	********	33.6	33.4	32.9	32.0	31.1	30.2	29.2	28.2	27.2	26.2	23.9	18.5	10.7
15	********	32.5	32.3	31.8	30.9	30.1	29.2	28.2	27.3	26.3	25.3	23.1	17.9	10.3
16	********	31.4	31.3	30.8	30.0	29.1	28.2	27.4	26.4	25.5	24.5	22.3	17.3	10.0
17	********	30.5	30.3	29.9	29.1	28.2	27.4	26.5	25.6	24.7	23.7	21.7	16.8	9.7
18	********	29.6	29.5	29.0	28.2	27.5	26.6	25.8	24.9	24.0	23.1	21.1	16.3	9.4
19	********	28.8	28.7	28.2	27.5	26.7	25.9	25.1	24.2	23.4	22.4	20.5	15.9	9.2
20	********	28.1	28.0	27.5	26.8	26.0	25.3	24.5	23.6	22.8	21.9	20.0	15.5	8.9
21	********	27.4	27.3	26.9	26.2	25.4	24.7	23.9	23.1	22.2	21.4	19.5	15.1	8.7
22	********	26.8	26.7	26.3	25.6	24.8	24.1	23.3	22.5	21.7	20.9	19.0	14.8	8.5
23	********	26.2	26.1	25.7	25.0	24.3	23.6	22.8	22.0	21.2	20.4	18.6	14.4	8.3
24	********	25.7	25.5	25.1	24.5	23.8	23.1	22.3	21.6	20.8	20.0	18.2	14.1	8.2
25	********	25.1	25.0	24.6	24.0	23.3	22.6	21.9	21.1	20.4	19.6	17.9	13.8	8.0
30	********	22.9	22.8	22.5	21.9	21.3	20.6	20.0	19.3	18.6	17.9	16.3	12.6	7.3
35	********	21.2	21.1	20.8	20.3	19.7	19.1	18.5	17.9	17.2	16.5	15.1	11.7	6.8
40	********	19.9	19.8	19.5	18.9	18.4	17.9	17.3	16.7	16.1	15.5	14.1	10.9	6.3
45	********	18.7	18.6	18.4	17.9	17.4	16.8	16.3	15.8	15.2	14.6	13.3	10.3	6.0
50	**********	17.7	17.4	16.9	16.5	16.0	15.5	14.9	14.4	13.8	12.6	9.8	5.6	
55	**********	16.9	16.6	16.2	15.7	15.2	14.8	14.3	13.7	13.2	12.0	9.3	5.4	
60	**********	16.1	15.9	15.5	15.0	14.6	14.1	13.6	13.1	12.6	11.5	8.9	5.2	
65	**********	15.5	15.3	14.9	14.4	14.0	13.6	13.1	12.6	12.1	11.1	8.6	5.0	
70	**********	14.9	14.7	14.3	13.9	13.5	13.1	12.6	12.2	11.7	10.7	8.3	4.8	
75	**********	14.4	14.2	13.8	13.4	13.0	12.6	12.2	11.8	11.3	10.3	8.0	4.6	
80	**********	14.0	13.8	13.4	13.0	12.6	12.2	11.8	11.4	10.9	10.0	7.7	4.5	
85	**********	13.6	13.4	13.0	12.6	12.3	11.9	11.5	11.0	10.6	9.7	7.5	4.3	
90	**********	13.2	13.0	12.6	12.3	11.9	11.5	11.1	10.7	10.3	9.4	7.3	4.2	
95	**********	12.6	12.3	11.9	11.6	11.2	10.8	10.4	10.0	9.2	7.1	4.1		
100	**********	12.3	12.0	11.6	11.3	10.9	10.6	10.2	9.8	8.9	6.9	4.0		
125	**********	11.0	10.7	10.4	10.1	9.8	9.5	9.1	8.8	8.0	6.2	3.6		
150	**********	10.1	9.8	9.5	9.2	8.9	8.6	8.3	8.0	7.3	5.6	3.3		
200	**********	8.7	8.5	8.2	8.0	7.7	7.5	7.2	6.9	6.3	4.9	2.8		
250	**********	7.6	7.4	7.1	6.9	6.7	6.4	6.2	5.6	4.4	2.5			
300	**********	6.9	6.7	6.5	6.3	6.1	5.9	5.6	5.2	4.0	2.3			
350	**********	6.4	6.2	6.0	5.8	5.6	5.4	5.2	4.8	3.7	2.1			
400	**********	6.0	5.8	5.6	5.5	5.3	5.1	4.9	4.5	3.5	2.0			
450	**********	5.6	5.5	5.3	5.2	5.0	4.8	4.6	4.2	3.3	1.9			
500	**********	5.2	5.1	4.9	4.7	4.6	4.4	4.0	3.1	1.8				
750	**********	4.1	4.0	3.9	3.7	3.6	3.3	2.5	1.5					
1000	**********	3.5	3.3	3.2	3.1	2.8	2.2	1.3						
1500	**********	2.6	2.5	2.3	1.8	1.0								
2000	**********	2.0	1.5	0.9										
3000	**********	1.3	0.7											
4000	**********	0.6												

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Atlantic Provinces
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	54.2	54.0	53.1	51.7	50.3	48.8	47.2	45.6	44.0	42.2	38.6	29.9	17.2
2	********	38.4	38.2	37.6	36.6	35.5	34.5	33.4	32.3	31.1	29.9	27.3	21.1	12.2
3	********	31.3	31.2	30.7	29.9	29.0	28.2	27.3	26.3	25.4	24.4	22.3	17.2	10.0
4	**********		27.0	26.6	25.9	25.1	24.4	23.6	22.8	22.0	21.1	19.3	14.9	8.6
5	**********		24.1	23.8	23.1	22.5	21.8	21.1	20.4	19.7	18.9	17.2	13.4	7.7
6	**********		22.0	21.7	21.1	20.5	19.9	19.3	18.6	17.9	17.2	15.7	12.2	7.0
7	**********		20.4	20.1	19.5	19.0	18.4	17.8	17.2	16.6	16.0	14.6	11.3	6.5
8	**********			18.8	18.3	17.8	17.2	16.7	16.1	15.5	14.9	13.6	10.6	6.1
9	**********			17.7	17.2	16.8	16.3	15.7	15.2	14.7	14.1	12.9	10.0	5.7
10	**********			16.8	16.4	15.9	15.4	14.9	14.4	13.9	13.4	12.2	9.4	5.5
11	**********			16.0	15.6	15.2	14.7	14.2	13.8	13.3	12.7	11.6	9.0	5.2
12	**********			15.3	14.9	14.5	14.1	13.6	13.2	12.7	12.2	11.1	8.6	5.0
13	**********			14.7	14.3	13.9	13.5	13.1	12.7	12.2	11.7	10.7	8.3	4.8
14	**********			14.2	13.8	13.4	13.0	12.6	12.2	11.7	11.3	10.3	8.0	4.6
15	**********			13.7	13.4	13.0	12.6	12.2	11.8	11.3	10.9	10.0	7.7	4.5
16	**********			13.3	12.9	12.6	12.2	11.8	11.4	11.0	10.6	9.6	7.5	4.3
17	**********			12.9	12.5	12.2	11.8	11.5	11.1	10.7	10.2	9.3	7.2	4.2
18	**********			12.5	12.2	11.8	11.5	11.1	10.8	10.4	10.0	9.1	7.0	4.1
19	**********				11.9	11.5	11.2	10.8	10.5	10.1	9.7	8.8	6.9	4.0
20	**********				11.6	11.2	10.9	10.6	10.2	9.8	9.4	8.6	6.7	3.9
21	**********				11.3	11.0	10.6	10.3	10.0	9.6	9.2	8.4	6.5	3.8
22	**********				11.0	10.7	10.4	10.1	9.7	9.4	9.0	8.2	6.4	3.7
23	**********				10.8	10.5	10.2	9.8	9.5	9.2	8.8	8.0	6.2	3.6
24	**********				10.6	10.3	10.0	9.6	9.3	9.0	8.6	7.9	6.1	3.5
25	**********				10.3	10.1	9.8	9.4	9.1	8.8	8.4	7.7	6.0	3.4
30	**********				9.4	9.2	8.9	8.6	8.3	8.0	7.7	7.0	5.5	3.1
35	**********				8.7	8.5	8.2	8.0	7.7	7.4	7.1	6.5	5.0	2.9
40	**********					7.9	7.7	7.5	7.2	6.9	6.7	6.1	4.7	2.7
45	**********					7.5	7.3	7.0	6.8	6.6	6.3	5.7	4.5	2.6
50	**********					7.1	6.9	6.7	6.5	6.2	6.0	5.5	4.2	2.4
55	**********					6.8	6.6	6.4	6.2	5.9	5.7	5.2	4.0	2.3
60	**********						6.3	6.1	5.9	5.7	5.5	5.0	3.9	2.2
65	**********						6.0	5.9	5.7	5.5	5.2	4.8	3.7	2.1
70	**********						5.8	5.6	5.5	5.3	5.0	4.6	3.6	2.1
75	**********							5.5	5.3	5.1	4.9	4.5	3.4	2.0
80	**********							5.3	5.1	4.9	4.7	4.3	3.3	1.9
85	**********							5.1	4.9	4.8	4.6	4.2	3.2	1.9
90	**********							5.0	4.8	4.6	4.5	4.1	3.1	1.8
95	**********								4.7	4.5	4.3	4.0	3.1	1.8
100	**********								4.6	4.4	4.2	3.9	3.0	1.7
125	**********									3.9	3.8	3.4	2.7	1.5
150	**********											3.1	2.4	1.4
200	**********												2.1	1.2
250	**********												1.9	1.1
300	**********													1.0

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97
Approximate Sampling Variability Table for Prairie Provinces
longitudinal

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	87.5	87.1	85.8	83.5	81.1	78.7	76.2	73.6	70.9	68.2	62.2	48.2	27.8
2	********	61.9	61.6	60.6	59.0	57.4	55.6	53.9	52.1	50.2	48.2	44.0	34.1	19.7
3	********	50.5	50.3	49.5	48.2	46.8	45.4	44.0	42.5	41.0	39.3	35.9	27.8	16.1
4	********	43.8	43.6	42.9	41.7	40.6	39.3	38.1	36.8	35.5	34.1	31.1	24.1	13.9
5	********	39.2	39.0	38.4	37.3	36.3	35.2	34.1	32.9	31.7	30.5	27.8	21.6	12.4
6	********	35.7	35.6	35.0	34.1	33.1	32.1	31.1	30.1	29.0	27.8	25.4	19.7	11.4
7	********	33.1	32.9	32.4	31.6	30.7	29.7	28.8	27.8	26.8	25.8	23.5	18.2	10.5
8	********	31.0	30.8	30.3	29.5	28.7	27.8	26.9	26.0	25.1	24.1	22.0	17.0	9.8
9	**********		29.0	28.6	27.8	27.0	26.2	25.4	24.5	23.6	22.7	20.7	16.1	9.3
10	**********		27.5	27.1	26.4	25.7	24.9	24.1	23.3	22.4	21.6	19.7	15.2	8.8
11	**********		26.3	25.9	25.2	24.5	23.7	23.0	22.2	21.4	20.5	18.8	14.5	8.4
12	**********		25.1	24.8	24.1	23.4	22.7	22.0	21.3	20.5	19.7	18.0	13.9	8.0
13	**********		24.2	23.8	23.2	22.5	21.8	21.1	20.4	19.7	18.9	17.3	13.4	7.7
14	**********		23.3	22.9	22.3	21.7	21.0	20.4	19.7	19.0	18.2	16.6	12.9	7.4
15	**********		22.5	22.1	21.6	20.9	20.3	19.7	19.0	18.3	17.6	16.1	12.4	7.2
16	**********		21.8	21.4	20.9	20.3	19.7	19.1	18.4	17.7	17.0	15.6	12.0	7.0
17	**********			20.8	20.2	19.7	19.1	18.5	17.9	17.2	16.5	15.1	11.7	6.7
18	**********			20.2	19.7	19.1	18.5	18.0	17.4	16.7	16.1	14.7	11.4	6.6
19	**********			19.7	19.2	18.6	18.1	17.5	16.9	16.3	15.6	14.3	11.1	6.4
20	**********			19.2	18.7	18.1	17.6	17.0	16.5	15.9	15.2	13.9	10.8	6.2
21	**********			18.7	18.2	17.7	17.2	16.6	16.1	15.5	14.9	13.6	10.5	6.1
22	**********			18.3	17.8	17.3	16.8	16.2	15.7	15.1	14.5	13.3	10.3	5.9
23	**********			17.9	17.4	16.9	16.4	15.9	15.4	14.8	14.2	13.0	10.0	5.8
24	**********			17.5	17.0	16.6	16.1	15.6	15.0	14.5	13.9	12.7	9.8	5.7
25	**********			17.2	16.7	16.2	15.7	15.2	14.7	14.2	13.6	12.4	9.6	5.6
30	**********			15.7	15.2	14.8	14.4	13.9	13.4	13.0	12.4	11.4	8.8	5.1
35	**********			14.5	14.1	13.7	13.3	12.9	12.4	12.0	11.5	10.5	8.1	4.7
40	**********			13.6	13.2	12.8	12.4	12.0	11.6	11.2	10.8	9.8	7.6	4.4
45	**********				12.4	12.1	11.7	11.4	11.0	10.6	10.2	9.3	7.2	4.1
50	**********				11.8	11.5	11.1	10.8	10.4	10.0	9.6	8.8	6.8	3.9
55	**********				11.3	10.9	10.6	10.3	9.9	9.6	9.2	8.4	6.5	3.8
60	**********				10.8	10.5	10.2	9.8	9.5	9.2	8.8	8.0	6.2	3.6
65	**********				10.4	10.1	9.8	9.5	9.1	8.8	8.5	7.7	6.0	3.5
70	**********				10.0	9.7	9.4	9.1	8.8	8.5	8.1	7.4	5.8	3.3
75	**********				9.6	9.4	9.1	8.8	8.5	8.2	7.9	7.2	5.6	3.2
80	**********				9.3	9.1	8.8	8.5	8.2	7.9	7.6	7.0	5.4	3.1
85	**********					8.8	8.5	8.3	8.0	7.7	7.4	6.7	5.2	3.0
90	**********					8.6	8.3	8.0	7.8	7.5	7.2	6.6	5.1	2.9
95	**********					8.3	8.1	7.8	7.6	7.3	7.0	6.4	4.9	2.9
100	**********					8.1	7.9	7.6	7.4	7.1	6.8	6.2	4.8	2.8
125	**********					7.3	7.0	6.8	6.6	6.3	6.1	5.6	4.3	2.5
150	**********						6.4	6.2	6.0	5.8	5.6	5.1	3.9	2.3
200	**********							5.4	5.2	5.0	4.8	4.4	3.4	2.0
250	**********								4.7	4.5	4.3	3.9	3.0	1.8
300	**********										3.9	3.6	2.8	1.6
350	**********											3.3	2.6	1.5
400	**********											3.1	2.4	1.4
450	**********												2.3	1.3
500	**********												2.2	1.2
750	**********													1.0

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

Approximate Sampling Variability Table for Children aged 0 to 23 months
Longitudinal File

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	74.1	73.7	72.5	70.6	68.6	66.6	64.5	62.3	60.0	57.7	52.6	40.8	23.5
2	********	52.4	52.1	51.3	49.9	48.5	47.1	45.6	44.0	42.4	40.8	37.2	28.8	16.6
3	********	42.8	42.5	41.9	40.8	39.6	38.4	37.2	36.0	34.6	33.3	30.4	23.5	13.6
4	**********		36.8	36.3	35.3	34.3	33.3	32.2	31.1	30.0	28.8	26.3	20.4	11.8
5	**********		33.0	32.4	31.6	30.7	29.8	28.8	27.8	26.8	25.8	23.5	18.2	10.5
6	**********		30.1	29.6	28.8	28.0	27.2	26.3	25.4	24.5	23.5	21.5	16.6	9.6
7	**********		27.8	27.4	26.7	25.9	25.2	24.4	23.5	22.7	21.8	19.9	15.4	8.9
8	**********			25.6	25.0	24.3	23.5	22.8	22.0	21.2	20.4	18.6	14.4	8.3
9	**********			24.2	23.5	22.9	22.2	21.5	20.8	20.0	19.2	17.5	13.6	7.8
10	**********			22.9	22.3	21.7	21.1	20.4	19.7	19.0	18.2	16.6	12.9	7.4
11	**********			21.9	21.3	20.7	20.1	19.4	18.8	18.1	17.4	15.9	12.3	7.1
12	**********			20.9	20.4	19.8	19.2	18.6	18.0	17.3	16.6	15.2	11.8	6.8
13	**********			20.1	19.6	19.0	18.5	17.9	17.3	16.6	16.0	14.6	11.3	6.5
14	**********			19.4	18.9	18.3	17.8	17.2	16.6	16.0	15.4	14.1	10.9	6.3
15	**********			18.7	18.2	17.7	17.2	16.6	16.1	15.5	14.9	13.6	10.5	6.1
16	**********			18.1	17.7	17.2	16.6	16.1	15.6	15.0	14.4	13.2	10.2	5.9
17	**********			17.6	17.1	16.6	16.1	15.6	15.1	14.6	14.0	12.8	9.9	5.7
18	**********			17.1	16.6	16.2	15.7	15.2	14.7	14.1	13.6	12.4	9.6	5.5
19	**********				16.2	15.7	15.3	14.8	14.3	13.8	13.2	12.1	9.4	5.4
20	**********				15.8	15.3	14.9	14.4	13.9	13.4	12.9	11.8	9.1	5.3
21	**********				15.4	15.0	14.5	14.1	13.6	13.1	12.6	11.5	8.9	5.1
22	**********				15.1	14.6	14.2	13.7	13.3	12.8	12.3	11.2	8.7	5.0
23	**********				14.7	14.3	13.9	13.4	13.0	12.5	12.0	11.0	8.5	4.9
24	**********				14.4	14.0	13.6	13.2	12.7	12.2	11.8	10.7	8.3	4.8
25	**********				14.1	13.7	13.3	12.9	12.5	12.0	11.5	10.5	8.2	4.7
30	**********				12.9	12.5	12.2	11.8	11.4	11.0	10.5	9.6	7.4	4.3
35	**********				11.9	11.6	11.3	10.9	10.5	10.1	9.7	8.9	6.9	4.0
40	**********					10.8	10.5	10.2	9.8	9.5	9.1	8.3	6.4	3.7
45	**********					10.2	9.9	9.6	9.3	8.9	8.6	7.8	6.1	3.5
50	**********					9.7	9.4	9.1	8.8	8.5	8.2	7.4	5.8	3.3
55	**********					9.3	9.0	8.7	8.4	8.1	7.8	7.1	5.5	3.2
60	**********						8.6	8.3	8.0	7.7	7.4	6.8	5.3	3.0
65	**********						8.3	8.0	7.7	7.4	7.2	6.5	5.1	2.9
70	**********						8.0	7.7	7.4	7.2	6.9	6.3	4.9	2.8
75	**********							7.4	7.2	6.9	6.7	6.1	4.7	2.7
80	**********							7.2	7.0	6.7	6.4	5.9	4.6	2.6
85	**********							7.0	6.8	6.5	6.3	5.7	4.4	2.6
90	**********							6.8	6.6	6.3	6.1	5.5	4.3	2.5
95	**********								6.4	6.2	5.9	5.4	4.2	2.4
100	**********								6.2	6.0	5.8	5.3	4.1	2.4
125	**********									5.4	5.2	4.7	3.6	2.1
150	**********											4.3	3.3	1.9
200	**********												2.9	1.7
250	**********												2.6	1.5
300	**********													1.4

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97

Approximate Sampling Variability Table for Children aged 2 to 3 years
Longitudinal File

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	96.3	95.8	94.3	91.8	89.2	86.5	83.8	81.0	78.0	74.9	68.4	53.0	30.6
2	********	68.1	67.7	66.7	64.9	63.1	61.2	59.3	57.2	55.2	53.0	48.4	37.5	21.6
3	********	55.6	55.3	54.4	53.0	51.5	50.0	48.4	46.7	45.0	43.3	39.5	30.6	17.7
4	********	48.1	47.9	47.2	45.9	44.6	43.3	41.9	40.5	39.0	37.5	34.2	26.5	15.3
5	********	43.1	42.8	42.2	41.1	39.9	38.7	37.5	36.2	34.9	33.5	30.6	23.7	13.7
6	********	39.3	39.1	38.5	37.5	36.4	35.3	34.2	33.0	31.8	30.6	27.9	21.6	12.5
7	********	36.4	36.2	35.6	34.7	33.7	32.7	31.7	30.6	29.5	28.3	25.9	20.0	11.6
8	**********		33.9	33.3	32.5	31.5	30.6	29.6	28.6	27.6	26.5	24.2	18.7	10.8
9	**********		31.9	31.4	30.6	29.7	28.8	27.9	27.0	26.0	25.0	22.8	17.7	10.2
10	**********		30.3	29.8	29.0	28.2	27.4	26.5	25.6	24.7	23.7	21.6	16.8	9.7
11	**********		28.9	28.4	27.7	26.9	26.1	25.3	24.4	23.5	22.6	20.6	16.0	9.2
12	**********		27.7	27.2	26.5	25.8	25.0	24.2	23.4	22.5	21.6	19.8	15.3	8.8
13	**********		26.6	26.2	25.5	24.7	24.0	23.2	22.5	21.6	20.8	19.0	14.7	8.5
14	**********		25.6	25.2	24.5	23.8	23.1	22.4	21.6	20.8	20.0	18.3	14.2	8.2
15	**********		24.7	24.4	23.7	23.0	22.3	21.6	20.9	20.1	19.4	17.7	13.7	7.9
16	**********		**********	23.6	22.9	22.3	21.6	20.9	20.2	19.5	18.7	17.1	13.2	7.6
17	**********		**********	22.9	22.3	21.6	21.0	20.3	19.6	18.9	18.2	16.6	12.9	7.4
18	**********		**********	22.2	21.6	21.0	20.4	19.8	19.1	18.4	17.7	16.1	12.5	7.2
19	**********		**********	21.6	21.1	20.5	19.9	19.2	18.6	17.9	17.2	15.7	12.2	7.0
20	**********		**********	21.1	20.5	19.9	19.4	18.7	18.1	17.4	16.8	15.3	11.9	6.8
21	**********		**********	20.6	20.0	19.5	18.9	18.3	17.7	17.0	16.4	14.9	11.6	6.7
22	**********		**********	20.1	19.6	19.0	18.5	17.9	17.3	16.6	16.0	14.6	11.3	6.5
23	**********		**********	19.7	19.1	18.6	18.0	17.5	16.9	16.3	15.6	14.3	11.1	6.4
24	**********		**********	19.3	18.7	18.2	17.7	17.1	16.5	15.9	15.3	14.0	10.8	6.2
25	**********		**********	18.9	18.4	17.8	17.3	16.8	16.2	15.6	15.0	13.7	10.6	6.1
30	**********		**********	17.2	16.8	16.3	15.8	15.3	14.8	14.2	13.7	12.5	9.7	5.6
35	**********		**********	15.9	15.5	15.1	14.6	14.2	13.7	13.2	12.7	11.6	9.0	5.2
40	**********		**********	**********	14.5	14.1	13.7	13.2	12.8	12.3	11.9	10.8	8.4	4.8
45	**********		**********	**********	13.7	13.3	12.9	12.5	12.1	11.6	11.2	10.2	7.9	4.6
50	**********		**********	**********	13.0	12.6	12.2	11.9	11.4	11.0	10.6	9.7	7.5	4.3
55	**********		**********	**********	12.4	12.0	11.7	11.3	10.9	10.5	10.1	9.2	7.1	4.1
60	**********		**********	**********	11.9	11.5	11.2	10.8	10.5	10.1	9.7	8.8	6.8	4.0
65	**********		**********	**********	11.4	11.1	10.7	10.4	10.0	9.7	9.3	8.5	6.6	3.8
70	**********		**********	**********	11.0	10.7	10.3	10.0	9.7	9.3	9.0	8.2	6.3	3.7
75	**********		**********	**********	10.6	10.3	10.0	9.7	9.3	9.0	8.7	7.9	6.1	3.5
80	**********		**********	**********	**********	10.0	9.7	9.4	9.1	8.7	8.4	7.6	5.9	3.4
85	**********		**********	**********	**********	9.7	9.4	9.1	8.8	8.5	8.1	7.4	5.7	3.3
90	**********		**********	**********	**********	9.4	9.1	8.8	8.5	8.2	7.9	7.2	5.6	3.2
95	**********		**********	**********	**********	9.2	8.9	8.6	8.3	8.0	7.7	7.0	5.4	3.1
100	**********		**********	**********	**********	8.9	8.7	8.4	8.1	7.8	7.5	6.8	5.3	3.1
125	**********		**********	**********	**********	**********	7.7	7.5	7.2	7.0	6.7	6.1	4.7	2.7
150	**********		**********	**********	**********	**********	7.1	6.8	6.6	6.4	6.1	5.6	4.3	2.5
200	**********		**********	**********	**********	**********	**********	5.7	5.5	5.3	4.8	3.7	2.2	
250	**********		**********	**********	**********	**********	**********	**********	4.9	4.7	4.3	3.4	1.9	
300	**********		**********	**********	**********	**********	**********	**********	**********	4.3	4.0	3.1	1.8	
350	**********		**********	**********	**********	**********	**********	**********	**********	**********	3.7	2.8	1.6	
400	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	2.6	1.5	
450	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	2.5	1.4	
500	**********		**********	**********	**********	**********	**********	**********	**********	**********	**********	2.4	1.4	

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97

Approximate Sampling Variability Table for Children aged 4 to 5 years
Longitudinal File

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	103.6	103.1	101.5	98.8	96.0	93.1	90.2	87.1	83.9	80.6	73.6	57.0	32.9
2	********	73.2	72.9	71.7	69.8	67.9	65.8	63.7	61.6	59.3	57.0	52.0	40.3	23.3
3	********	59.8	59.5	58.6	57.0	55.4	53.8	52.0	50.3	48.5	46.6	42.5	32.9	19.0
4	********	51.8	51.5	50.7	49.4	48.0	46.6	45.1	43.5	42.0	40.3	36.8	28.5	16.5
5	********	46.3	46.1	45.4	44.2	42.9	41.6	40.3	39.0	37.5	36.1	32.9	25.5	14.7
6	********	42.3	42.1	41.4	40.3	39.2	38.0	36.8	35.6	34.3	32.9	30.1	23.3	13.4
7	********	39.1	39.0	38.3	37.3	36.3	35.2	34.1	32.9	31.7	30.5	27.8	21.6	12.4
8	********	36.6	36.4	35.9	34.9	33.9	32.9	31.9	30.8	29.7	28.5	26.0	20.2	11.6
9	**********		34.4	33.8	32.9	32.0	31.0	30.1	29.0	28.0	26.9	24.5	19.0	11.0
10	**********		32.6	32.1	31.2	30.3	29.4	28.5	27.5	26.5	25.5	23.3	18.0	10.4
11	**********		31.1	30.6	29.8	28.9	28.1	27.2	26.3	25.3	24.3	22.2	17.2	9.9
12	**********		29.7	29.3	28.5	27.7	26.9	26.0	25.1	24.2	23.3	21.2	16.5	9.5
13	**********		28.6	28.1	27.4	26.6	25.8	25.0	24.2	23.3	22.4	20.4	15.8	9.1
14	**********		27.5	27.1	26.4	25.7	24.9	24.1	23.3	22.4	21.6	19.7	15.2	8.8
15	**********		26.6	26.2	25.5	24.8	24.0	23.3	22.5	21.7	20.8	19.0	14.7	8.5
16	**********		25.8	25.4	24.7	24.0	23.3	22.5	21.8	21.0	20.2	18.4	14.3	8.2
17	**********			24.6	24.0	23.3	22.6	21.9	21.1	20.4	19.6	17.9	13.8	8.0
18	**********			23.9	23.3	22.6	21.9	21.2	20.5	19.8	19.0	17.3	13.4	7.8
19	**********			23.3	22.7	22.0	21.4	20.7	20.0	19.3	18.5	16.9	13.1	7.6
20	**********			22.7	22.1	21.5	20.8	20.2	19.5	18.8	18.0	16.5	12.7	7.4
21	**********			22.1	21.6	20.9	20.3	19.7	19.0	18.3	17.6	16.1	12.4	7.2
22	**********			21.6	21.1	20.5	19.9	19.2	18.6	17.9	17.2	15.7	12.2	7.0
23	**********			21.2	20.6	20.0	19.4	18.8	18.2	17.5	16.8	15.3	11.9	6.9
24	**********			20.7	20.2	19.6	19.0	18.4	17.8	17.1	16.5	15.0	11.6	6.7
25	**********			20.3	19.8	19.2	18.6	18.0	17.4	16.8	16.1	14.7	11.4	6.6
30	**********			18.5	18.0	17.5	17.0	16.5	15.9	15.3	14.7	13.4	10.4	6.0
35	**********			17.2	16.7	16.2	15.7	15.2	14.7	14.2	13.6	12.4	9.6	5.6
40	**********			16.0	15.6	15.2	14.7	14.3	13.8	13.3	12.7	11.6	9.0	5.2
45	**********				14.7	14.3	13.9	13.4	13.0	12.5	12.0	11.0	8.5	4.9
50	**********				14.0	13.6	13.2	12.7	12.3	11.9	11.4	10.4	8.1	4.7
55	**********				13.3	12.9	12.6	12.2	11.7	11.3	10.9	9.9	7.7	4.4
60	**********				12.7	12.4	12.0	11.6	11.2	10.8	10.4	9.5	7.4	4.2
65	**********				12.2	11.9	11.5	11.2	10.8	10.4	10.0	9.1	7.1	4.1
70	**********				11.8	11.5	11.1	10.8	10.4	10.0	9.6	8.8	6.8	3.9
75	**********				11.4	11.1	10.8	10.4	10.1	9.7	9.3	8.5	6.6	3.8
80	**********				11.0	10.7	10.4	10.1	9.7	9.4	9.0	8.2	6.4	3.7
85	**********					10.4	10.1	9.8	9.4	9.1	8.7	8.0	6.2	3.6
90	**********					10.1	9.8	9.5	9.2	8.8	8.5	7.8	6.0	3.5
95	**********					9.8	9.6	9.2	8.9	8.6	8.3	7.6	5.8	3.4
100	**********					9.6	9.3	9.0	8.7	8.4	8.1	7.4	5.7	3.3
125	**********						8.3	8.1	7.8	7.5	7.2	6.6	5.1	2.9
150	**********						7.6	7.4	7.1	6.9	6.6	6.0	4.7	2.7
200	**********							6.4	6.2	5.9	5.7	5.2	4.0	2.3
250	**********									5.3	5.1	4.7	3.6	2.1
300	**********										4.7	4.2	3.3	1.9
350	**********											3.9	3.0	1.8
400	**********											3.7	2.9	1.6
450	**********												2.7	1.6
500	**********												2.5	1.5

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97

Approximate Sampling Variability Table for Children aged 6 to 7 years
Longitudinal File

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	102.1	101.6	100.0	97.4	94.6	91.8	88.9	85.9	82.7	79.5	72.6	56.2	32.5
2	********	72.2	71.8	70.7	68.8	66.9	64.9	62.8	60.7	58.5	56.2	51.3	39.7	22.9
3	********	59.0	58.7	57.8	56.2	54.6	53.0	51.3	49.6	47.8	45.9	41.9	32.5	18.7
4	********	51.1	50.8	50.0	48.7	47.3	45.9	44.4	42.9	41.4	39.7	36.3	28.1	16.2
5	********	45.7	45.4	44.7	43.5	42.3	41.1	39.7	38.4	37.0	35.6	32.5	25.1	14.5
6	********	41.7	41.5	40.8	39.7	38.6	37.5	36.3	35.1	33.8	32.5	29.6	22.9	13.2
7	********	38.6	38.4	37.8	36.8	35.8	34.7	33.6	32.5	31.3	30.0	27.4	21.2	12.3
8	**********		35.9	35.4	34.4	33.5	32.5	31.4	30.4	29.3	28.1	25.7	19.9	11.5
9	**********		33.9	33.3	32.5	31.5	30.6	29.6	28.6	27.6	26.5	24.2	18.7	10.8
10	**********		32.1	31.6	30.8	29.9	29.0	28.1	27.2	26.2	25.1	22.9	17.8	10.3
11	**********		30.6	30.2	29.4	28.5	27.7	26.8	25.9	24.9	24.0	21.9	16.9	9.8
12	**********		29.3	28.9	28.1	27.3	26.5	25.7	24.8	23.9	22.9	20.9	16.2	9.4
13	**********		28.2	27.7	27.0	26.2	25.5	24.6	23.8	22.9	22.0	20.1	15.6	9.0
14	**********		27.2	26.7	26.0	25.3	24.5	23.8	22.9	22.1	21.2	19.4	15.0	8.7
15	**********		26.2	25.8	25.1	24.4	23.7	22.9	22.2	21.4	20.5	18.7	14.5	8.4
16	**********			25.0	24.3	23.7	22.9	22.2	21.5	20.7	19.9	18.1	14.1	8.1
17	**********			24.3	23.6	22.9	22.3	21.6	20.8	20.1	19.3	17.6	13.6	7.9
18	**********			23.6	22.9	22.3	21.6	20.9	20.2	19.5	18.7	17.1	13.2	7.6
19	**********			22.9	22.3	21.7	21.1	20.4	19.7	19.0	18.2	16.6	12.9	7.4
20	**********			22.4	21.8	21.2	20.5	19.9	19.2	18.5	17.8	16.2	12.6	7.3
21	**********			21.8	21.2	20.6	20.0	19.4	18.7	18.1	17.3	15.8	12.3	7.1
22	**********			21.3	20.8	20.2	19.6	18.9	18.3	17.6	16.9	15.5	12.0	6.9
23	**********			20.9	20.3	19.7	19.1	18.5	17.9	17.3	16.6	15.1	11.7	6.8
24	**********			20.4	19.9	19.3	18.7	18.1	17.5	16.9	16.2	14.8	11.5	6.6
25	**********			20.0	19.5	18.9	18.4	17.8	17.2	16.5	15.9	14.5	11.2	6.5
30	**********			18.3	17.8	17.3	16.8	16.2	15.7	15.1	14.5	13.2	10.3	5.9
35	**********			16.9	16.5	16.0	15.5	15.0	14.5	14.0	13.4	12.3	9.5	5.5
40	**********				15.4	15.0	14.5	14.1	13.6	13.1	12.6	11.5	8.9	5.1
45	**********				14.5	14.1	13.7	13.2	12.8	12.3	11.9	10.8	8.4	4.8
50	**********				13.8	13.4	13.0	12.6	12.1	11.7	11.2	10.3	7.9	4.6
55	**********				13.1	12.8	12.4	12.0	11.6	11.2	10.7	9.8	7.6	4.4
60	**********				12.6	12.2	11.9	11.5	11.1	10.7	10.3	9.4	7.3	4.2
65	**********				12.1	11.7	11.4	11.0	10.6	10.3	9.9	9.0	7.0	4.0
70	**********				11.6	11.3	11.0	10.6	10.3	9.9	9.5	8.7	6.7	3.9
75	**********				11.2	10.9	10.6	10.3	9.9	9.6	9.2	8.4	6.5	3.7
80	**********					10.6	10.3	9.9	9.6	9.3	8.9	8.1	6.3	3.6
85	**********					10.3	10.0	9.6	9.3	9.0	8.6	7.9	6.1	3.5
90	**********					10.0	9.7	9.4	9.1	8.7	8.4	7.6	5.9	3.4
95	**********					9.7	9.4	9.1	8.8	8.5	8.2	7.4	5.8	3.3
100	**********					9.5	9.2	8.9	8.6	8.3	7.9	7.3	5.6	3.2
125	**********						8.2	7.9	7.7	7.4	7.1	6.5	5.0	2.9
150	**********						7.5	7.3	7.0	6.8	6.5	5.9	4.6	2.6
200	**********							6.1	5.9	5.6	5.1	4.0	2.3	
250	**********								5.2	5.0	4.6	3.6	2.1	
300	**********									4.6	4.2	3.2	1.9	
350	**********											3.9	3.0	1.7
400	**********												2.8	1.6
450	**********												2.6	1.5
500	**********												2.5	1.5

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97

Approximate Sampling Variability Table for Children aged 8 to 9 years
Longitudinal File

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	101.5	101.0	99.5	96.8	94.1	91.3	88.4	85.4	82.3	79.1	72.2	55.9	32.3
2	********	71.8	71.4	70.3	68.5	66.5	64.5	62.5	60.4	58.2	55.9	51.0	39.5	22.8
3	********	58.6	58.3	57.4	55.9	54.3	52.7	51.0	49.3	47.5	45.6	41.7	32.3	18.6
4	********	50.8	50.5	49.7	48.4	47.0	45.6	44.2	42.7	41.1	39.5	36.1	27.9	16.1
5	********	45.4	45.2	44.5	43.3	42.1	40.8	39.5	38.2	36.8	35.4	32.3	25.0	14.4
6	********	41.5	41.2	40.6	39.5	38.4	37.3	36.1	34.9	33.6	32.3	29.5	22.8	13.2
7	********	38.4	38.2	37.6	36.6	35.6	34.5	33.4	32.3	31.1	29.9	27.3	21.1	12.2
8	**********		35.7	35.2	34.2	33.3	32.3	31.2	30.2	29.1	27.9	25.5	19.8	11.4
9	**********		33.7	33.2	32.3	31.4	30.4	29.5	28.5	27.4	26.4	24.1	18.6	10.8
10	**********		31.9	31.5	30.6	29.8	28.9	27.9	27.0	26.0	25.0	22.8	17.7	10.2
11	**********		30.5	30.0	29.2	28.4	27.5	26.6	25.7	24.8	23.8	21.8	16.9	9.7
12	**********		29.2	28.7	27.9	27.2	26.4	25.5	24.6	23.8	22.8	20.8	16.1	9.3
13	**********		28.0	27.6	26.9	26.1	25.3	24.5	23.7	22.8	21.9	20.0	15.5	9.0
14	**********		27.0	26.6	25.9	25.1	24.4	23.6	22.8	22.0	21.1	19.3	14.9	8.6
15	**********		26.1	25.7	25.0	24.3	23.6	22.8	22.0	21.2	20.4	18.6	14.4	8.3
16	**********			24.9	24.2	23.5	22.8	22.1	21.3	20.6	19.8	18.0	14.0	8.1
17	**********			24.1	23.5	22.8	22.1	21.4	20.7	20.0	19.2	17.5	13.6	7.8
18	**********			23.4	22.8	22.2	21.5	20.8	20.1	19.4	18.6	17.0	13.2	7.6
19	**********			22.8	22.2	21.6	20.9	20.3	19.6	18.9	18.1	16.6	12.8	7.4
20	**********			22.2	21.6	21.0	20.4	19.8	19.1	18.4	17.7	16.1	12.5	7.2
21	**********			21.7	21.1	20.5	19.9	19.3	18.6	18.0	17.3	15.7	12.2	7.0
22	**********			21.2	20.6	20.1	19.5	18.8	18.2	17.5	16.9	15.4	11.9	6.9
23	**********			20.7	20.2	19.6	19.0	18.4	17.8	17.2	16.5	15.0	11.7	6.7
24	**********			20.3	19.8	19.2	18.6	18.0	17.4	16.8	16.1	14.7	11.4	6.6
25	**********			19.9	19.4	18.8	18.3	17.7	17.1	16.5	15.8	14.4	11.2	6.5
30	**********			18.2	17.7	17.2	16.7	16.1	15.6	15.0	14.4	13.2	10.2	5.9
35	**********			16.8	16.4	15.9	15.4	14.9	14.4	13.9	13.4	12.2	9.4	5.5
40	**********				15.3	14.9	14.4	14.0	13.5	13.0	12.5	11.4	8.8	5.1
45	**********				14.4	14.0	13.6	13.2	12.7	12.3	11.8	10.8	8.3	4.8
50	**********				13.7	13.3	12.9	12.5	12.1	11.6	11.2	10.2	7.9	4.6
55	**********				13.1	12.7	12.3	11.9	11.5	11.1	10.7	9.7	7.5	4.4
60	**********				12.5	12.1	11.8	11.4	11.0	10.6	10.2	9.3	7.2	4.2
65	**********				12.0	11.7	11.3	11.0	10.6	10.2	9.8	9.0	6.9	4.0
70	**********				11.6	11.2	10.9	10.6	10.2	9.8	9.4	8.6	6.7	3.9
75	**********				11.2	10.9	10.5	10.2	9.9	9.5	9.1	8.3	6.5	3.7
80	**********					10.5	10.2	9.9	9.5	9.2	8.8	8.1	6.2	3.6
85	**********					10.2	9.9	9.6	9.3	8.9	8.6	7.8	6.1	3.5
90	**********					9.9	9.6	9.3	9.0	8.7	8.3	7.6	5.9	3.4
95	**********					9.7	9.4	9.1	8.8	8.4	8.1	7.4	5.7	3.3
100	**********					9.4	9.1	8.8	8.5	8.2	7.9	7.2	5.6	3.2
125	**********						8.2	7.9	7.6	7.4	7.1	6.5	5.0	2.9
150	**********						7.5	7.2	7.0	6.7	6.5	5.9	4.6	2.6
200	**********								6.0	5.8	5.6	5.1	4.0	2.3
250	**********									5.2	5.0	4.6	3.5	2.0
300	**********										4.6	4.2	3.2	1.9
350	**********											3.9	3.0	1.7
400	**********												2.8	1.6
450	**********												2.6	1.5
500	**********												2.5	1.4

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97

Approximate Sampling Variability Table for Children aged 10 to 11 years
Longitudinal File

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	104.3	103.8	102.2	99.5	96.7	93.8	90.8	87.7	84.5	81.2	74.1	57.4	33.2
2	********	73.8	73.4	72.3	70.3	68.4	66.3	64.2	62.0	59.8	57.4	52.4	40.6	23.4
3	********	60.2	59.9	59.0	57.4	55.8	54.2	52.4	50.7	48.8	46.9	42.8	33.2	19.1
4	********	52.2	51.9	51.1	49.7	48.3	46.9	45.4	43.9	42.3	40.6	37.1	28.7	16.6
5	********	46.7	46.4	45.7	44.5	43.2	41.9	40.6	39.2	37.8	36.3	33.2	25.7	14.8
6	********	42.6	42.4	41.7	40.6	39.5	38.3	37.1	35.8	34.5	33.2	30.3	23.4	13.5
7	********	39.4	39.2	38.6	37.6	36.5	35.4	34.3	33.2	32.0	30.7	28.0	21.7	12.5
8	**********		36.7	36.1	35.2	34.2	33.2	32.1	31.0	29.9	28.7	26.2	20.3	11.7
9	**********		34.6	34.1	33.2	32.2	31.3	30.3	29.2	28.2	27.1	24.7	19.1	11.1
10	**********		32.8	32.3	31.5	30.6	29.7	28.7	27.7	26.7	25.7	23.4	18.2	10.5
11	**********		31.3	30.8	30.0	29.1	28.3	27.4	26.5	25.5	24.5	22.4	17.3	10.0
12	**********		30.0	29.5	28.7	27.9	27.1	26.2	25.3	24.4	23.4	21.4	16.6	9.6
13	**********		28.8	28.3	27.6	26.8	26.0	25.2	24.3	23.4	22.5	20.6	15.9	9.2
14	**********		27.7	27.3	26.6	25.8	25.1	24.3	23.4	22.6	21.7	19.8	15.4	8.9
15	**********		26.8	26.4	25.7	25.0	24.2	23.4	22.7	21.8	21.0	19.1	14.8	8.6
16	**********			25.6	24.9	24.2	23.4	22.7	21.9	21.1	20.3	18.5	14.4	8.3
17	**********			24.8	24.1	23.4	22.7	22.0	21.3	20.5	19.7	18.0	13.9	8.0
18	**********			24.1	23.4	22.8	22.1	21.4	20.7	19.9	19.1	17.5	13.5	7.8
19	**********			23.4	22.8	22.2	21.5	20.8	20.1	19.4	18.6	17.0	13.2	7.6
20	**********			22.9	22.2	21.6	21.0	20.3	19.6	18.9	18.2	16.6	12.8	7.4
21	**********			22.3	21.7	21.1	20.5	19.8	19.1	18.4	17.7	16.2	12.5	7.2
22	**********			21.8	21.2	20.6	20.0	19.4	18.7	18.0	17.3	15.8	12.2	7.1
23	**********			21.3	20.7	20.2	19.6	18.9	18.3	17.6	16.9	15.5	12.0	6.9
24	**********			20.9	20.3	19.7	19.1	18.5	17.9	17.3	16.6	15.1	11.7	6.8
25	**********			20.4	19.9	19.3	18.8	18.2	17.5	16.9	16.2	14.8	11.5	6.6
30	**********			18.7	18.2	17.7	17.1	16.6	16.0	15.4	14.8	13.5	10.5	6.1
35	**********			17.3	16.8	16.3	15.9	15.4	14.8	14.3	13.7	12.5	9.7	5.6
40	**********				15.7	15.3	14.8	14.4	13.9	13.4	12.8	11.7	9.1	5.2
45	**********				14.8	14.4	14.0	13.5	13.1	12.6	12.1	11.1	8.6	4.9
50	**********				14.1	13.7	13.3	12.8	12.4	12.0	11.5	10.5	8.1	4.7
55	**********				13.4	13.0	12.6	12.2	11.8	11.4	11.0	10.0	7.7	4.5
60	**********				12.8	12.5	12.1	11.7	11.3	10.9	10.5	9.6	7.4	4.3
65	**********				12.3	12.0	11.6	11.3	10.9	10.5	10.1	9.2	7.1	4.1
70	**********				11.9	11.6	11.2	10.9	10.5	10.1	9.7	8.9	6.9	4.0
75	**********				11.5	11.2	10.8	10.5	10.1	9.8	9.4	8.6	6.6	3.8
80	**********					10.8	10.5	10.2	9.8	9.5	9.1	8.3	6.4	3.7
85	**********					10.5	10.2	9.9	9.5	9.2	8.8	8.0	6.2	3.6
90	**********					10.2	9.9	9.6	9.2	8.9	8.6	7.8	6.1	3.5
95	**********					9.9	9.6	9.3	9.0	8.7	8.3	7.6	5.9	3.4
100	**********					9.7	9.4	9.1	8.8	8.5	8.1	7.4	5.7	3.3
125	**********						8.4	8.1	7.8	7.6	7.3	6.6	5.1	3.0
150	**********						7.7	7.4	7.2	6.9	6.6	6.1	4.7	2.7
200	**********								6.2	6.0	5.7	5.2	4.1	2.3
250	**********									5.3	5.1	4.7	3.6	2.1
300	**********										4.7	4.3	3.3	1.9
350	**********											4.0	3.1	1.8
400	**********												2.9	1.7
450	**********												2.7	1.6
500	**********												2.6	1.5

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97

Approximate Sampling Variability Table for Children aged 0 to 3 years
Longitudinal File

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	95.9	95.4	95.0	93.5	91.0	88.4	85.8	83.1	80.3	77.3	74.3	67.8	52.5	30.3
2	********	67.5	67.2	66.1	64.4	62.5	60.7	58.7	56.8	54.7	52.5	48.0	37.2	21.5
3	********	55.1	54.8	54.0	52.5	51.1	49.5	48.0	46.3	44.7	42.9	39.2	30.3	17.5
4	********	47.7	47.5	46.7	45.5	44.2	42.9	41.5	40.1	38.7	37.2	33.9	26.3	15.2
5	********	42.7	42.5	41.8	40.7	39.6	38.4	37.2	35.9	34.6	33.2	30.3	23.5	13.6
6	********	39.0	38.8	38.2	37.2	36.1	35.0	33.9	32.8	31.6	30.3	27.7	21.5	12.4
7	********	36.1	35.9	35.3	34.4	33.4	32.4	31.4	30.3	29.2	28.1	25.6	19.9	11.5
8	********	33.7	33.6	33.1	32.2	31.3	30.3	29.4	28.4	27.3	26.3	24.0	18.6	10.7
9	********	31.8	31.7	31.2	30.3	29.5	28.6	27.7	26.8	25.8	24.8	22.6	17.5	10.1
10	********	30.2	30.0	29.6	28.8	28.0	27.1	26.3	25.4	24.5	23.5	21.5	16.6	9.6
11	********	28.8	28.6	28.2	27.4	26.7	25.9	25.0	24.2	23.3	22.4	20.5	15.8	9.1
12	********	27.6	27.4	27.0	26.3	25.5	24.8	24.0	23.2	22.3	21.5	19.6	15.2	8.8
13	********	26.5	26.3	25.9	25.2	24.5	23.8	23.0	22.3	21.5	20.6	18.8	14.6	8.4
14	********	25.5	25.4	25.0	24.3	23.6	22.9	22.2	21.5	20.7	19.9	18.1	14.0	8.1
15	********	24.6	24.5	24.1	23.5	22.8	22.2	21.5	20.7	20.0	19.2	17.5	13.6	7.8
16	**********	23.7	23.4	22.8	22.1	21.5	20.8	20.1	19.3	18.6	17.0	13.1	7.6	
17	**********	23.0	22.7	22.1	21.5	20.8	20.1	19.5	18.8	18.0	16.5	12.7	7.4	
18	**********	22.4	22.0	21.5	20.8	20.2	19.6	18.9	18.2	17.5	16.0	12.4	7.2	
19	**********	21.8	21.5	20.9	20.3	19.7	19.1	18.4	17.7	17.0	15.6	12.1	7.0	
20	**********	21.2	20.9	20.3	19.8	19.2	18.6	17.9	17.3	16.6	15.2	11.7	6.8	
21	**********	20.7	20.4	19.9	19.3	18.7	18.1	17.5	16.9	16.2	14.8	11.5	6.6	
22	**********	20.2	19.9	19.4	18.9	18.3	17.7	17.1	16.5	15.8	14.5	11.2	6.5	
23	**********	19.8	19.5	19.0	18.4	17.9	17.3	16.7	16.1	15.5	14.1	11.0	6.3	
24	**********	19.4	19.1	18.6	18.1	17.5	17.0	16.4	15.8	15.2	13.8	10.7	6.2	
25	**********	19.0	18.7	18.2	17.7	17.2	16.6	16.1	15.5	14.9	13.6	10.5	6.1	
30	**********	17.3	17.1	16.6	16.1	15.7	15.2	14.7	14.1	13.6	12.4	9.6	5.5	
35	**********	15.8	15.4	14.9	14.5	14.0	13.6	13.1	12.6	11.5	8.9	5.1		
40	**********	14.8	14.4	14.0	13.6	13.1	12.7	12.2	11.7	10.7	8.3	4.8		
45	**********	13.9	13.6	13.2	12.8	12.4	12.0	11.5	11.1	10.1	7.8	4.5		
50	**********	13.2	12.9	12.5	12.1	11.7	11.4	10.9	10.5	9.6	7.4	4.3		
55	**********	12.6	12.3	11.9	11.6	11.2	10.8	10.4	10.0	9.1	7.1	4.1		
60	**********	12.1	11.7	11.4	11.1	10.7	10.4	10.0	9.6	8.8	6.8	3.9		
65	**********	11.6	11.3	11.0	10.6	10.3	10.0	9.6	9.2	8.4	6.5	3.8		
70	**********	11.2	10.9	10.6	10.3	9.9	9.6	9.2	8.9	8.1	6.3	3.6		
75	**********	10.8	10.5	10.2	9.9	9.6	9.3	8.9	8.6	7.8	6.1	3.5		
80	**********	10.2	9.9	9.6	9.3	9.0	8.6	8.3	7.6	5.9	3.4			
85	**********	9.9	9.6	9.3	9.0	8.7	8.4	8.1	7.4	5.7	3.3			
90	**********	9.6	9.3	9.0	8.8	8.5	8.2	7.8	7.2	5.5	3.2			
95	**********	9.3	9.1	8.8	8.5	8.2	7.9	7.6	7.0	5.4	3.1			
100	**********	9.1	8.8	8.6	8.3	8.0	7.7	7.4	6.8	5.3	3.0			
125	**********	8.1	7.9	7.7	7.4	7.2	6.9	6.6	6.1	4.7	2.7			
150	**********	7.4	7.2	7.0	6.8	6.6	6.3	6.1	5.5	4.3	2.5			
200	**********	6.3	6.1	5.9	5.7	5.5	5.3	4.8	3.7	2.1				
250	**********	5.4	5.3	5.1	4.9	4.7	4.3	3.3	1.9					
300	**********	5.0	4.8	4.6	4.5	4.3	3.9	3.0	1.8					
350	**********	4.4	4.3	4.1	4.0	3.6	2.8	1.6						
400	**********	4.0	3.9	3.7	3.4	2.6	1.5							
450	**********	3.8	3.6	3.5	3.2	2.5	1.4							
500	**********	3.5	3.3	3.0	2.3	1.4								
750	**********	2.5	1.9	1.1										
1000	**********	1.7	1.0											

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97

Approximate Sampling Variability Table for Children aged 4 to 11 years
Longitudinal File

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	115.5	114.9	114.4	112.6	109.6	106.5	103.3	100.0	96.7	93.1	89.5	81.7	63.3	36.5
2	81.6	81.3	80.9	79.6	77.5	75.3	73.1	70.7	68.3	65.9	63.3	57.8	44.7	25.8
3	66.7	66.4	66.0	65.0	63.3	61.5	59.7	57.8	55.8	53.8	51.7	47.2	36.5	21.1
4	********	57.5	57.2	56.3	54.8	53.3	51.7	50.0	48.3	46.6	44.7	40.8	31.6	18.3
5	********	51.4	51.1	50.4	49.0	47.6	46.2	44.7	43.2	41.7	40.0	36.5	28.3	16.3
6	********	46.9	46.7	46.0	44.7	43.5	42.2	40.8	39.5	38.0	36.5	33.3	25.8	14.9
7	********	43.4	43.2	42.6	41.4	40.3	39.1	37.8	36.5	35.2	33.8	30.9	23.9	13.8
8	********	40.6	40.4	39.8	38.7	37.7	36.5	35.4	34.2	32.9	31.6	28.9	22.4	12.9
9	********	38.3	38.1	37.5	36.5	35.5	34.4	33.3	32.2	31.0	29.8	27.2	21.1	12.2
10	********	36.3	36.2	35.6	34.7	33.7	32.7	31.6	30.6	29.5	28.3	25.8	20.0	11.6
11	********	34.7	34.5	34.0	33.0	32.1	31.2	30.2	29.1	28.1	27.0	24.6	19.1	11.0
12	********	33.2	33.0	32.5	31.6	30.7	29.8	28.9	27.9	26.9	25.8	23.6	18.3	10.5
13	********	31.9	31.7	31.2	30.4	29.5	28.7	27.7	26.8	25.8	24.8	22.7	17.5	10.1
14	********	30.7	30.6	30.1	29.3	28.5	27.6	26.7	25.8	24.9	23.9	21.8	16.9	9.8
15	********	29.7	29.5	29.1	28.3	27.5	26.7	25.8	25.0	24.0	23.1	21.1	16.3	9.4
16	********	28.7	28.6	28.2	27.4	26.6	25.8	25.0	24.2	23.3	22.4	20.4	15.8	9.1
17	********	27.9	27.7	27.3	26.6	25.8	25.1	24.3	23.4	22.6	21.7	19.8	15.3	8.9
18	********	27.1	27.0	26.5	25.8	25.1	24.4	23.6	22.8	22.0	21.1	19.3	14.9	8.6
19	********	26.4	26.2	25.8	25.1	24.4	23.7	23.0	22.2	21.4	20.5	18.7	14.5	8.4
20	********	25.7	25.6	25.2	24.5	23.8	23.1	22.4	21.6	20.8	20.0	18.3	14.1	8.2
21	********	25.1	25.0	24.6	23.9	23.2	22.5	21.8	21.1	20.3	19.5	17.8	13.8	8.0
22	********	24.5	24.4	24.0	23.4	22.7	22.0	21.3	20.6	19.9	19.1	17.4	13.5	7.8
23	********	24.0	23.8	23.5	22.9	22.2	21.5	20.9	20.2	19.4	18.7	17.0	13.2	7.6
24	********	23.5	23.3	23.0	22.4	21.7	21.1	20.4	19.7	19.0	18.3	16.7	12.9	7.5
25	********	23.0	22.9	22.5	21.9	21.3	20.7	20.0	19.3	18.6	17.9	16.3	12.7	7.3
30	********	21.0	20.9	20.6	20.0	19.4	18.9	18.3	17.6	17.0	16.3	14.9	11.6	6.7
35	**********	19.3	19.0	18.5	18.0	17.5	16.9	16.3	15.7	15.1	13.8	10.7	6.2	
40	**********	18.1	17.8	17.3	16.8	16.3	15.8	15.3	14.7	14.1	12.9	10.0	5.8	
45	**********	17.0	16.8	16.3	15.9	15.4	14.9	14.4	13.9	13.3	12.2	9.4	5.4	
50	**********	16.2	15.9	15.5	15.1	14.6	14.1	13.7	13.2	12.7	11.6	8.9	5.2	
55	**********	15.4	15.2	14.8	14.4	13.9	13.5	13.0	12.6	12.1	11.0	8.5	4.9	
60	**********	14.8	14.5	14.1	13.8	13.3	12.9	12.5	12.0	11.6	10.5	8.2	4.7	
65	**********	14.0	13.6	13.2	12.8	12.4	12.0	11.6	11.1	10.1	7.8	4.5		
70	**********	13.5	13.1	12.7	12.4	12.0	11.6	11.1	10.7	9.8	7.6	4.4		
75	**********	13.0	12.7	12.3	11.9	11.6	11.2	10.8	10.3	9.4	7.3	4.2		
80	**********	12.6	12.3	11.9	11.6	11.2	10.8	10.4	10.0	9.1	7.1	4.1		
85	**********	12.2	11.9	11.6	11.2	10.9	10.5	10.1	9.7	8.9	6.9	4.0		
90	**********	11.9	11.6	11.2	10.9	10.5	10.2	9.8	9.4	8.6	6.7	3.9		
95	**********	11.6	11.2	10.9	10.6	10.3	9.9	9.6	9.2	8.4	6.5	3.7		
100	**********	11.3	11.0	10.7	10.3	10.0	9.7	9.3	8.9	8.2	6.3	3.7		
125	**********	10.1	9.8	9.5	9.2	8.9	8.6	8.3	8.0	7.3	5.7	3.3		
150	**********	9.2	8.9	8.7	8.4	8.2	7.9	7.6	7.3	6.7	5.2	3.0		
200	**********	7.7	7.5	7.3	7.1	6.8	6.6	6.3	5.8	4.5	2.6			
250	**********	6.9	6.7	6.5	6.3	6.1	5.9	5.7	5.2	4.0	2.3			
300	**********	6.3	6.1	6.0	5.8	5.6	5.4	5.2	4.7	3.7	2.1			
350	**********	5.7	5.5	5.3	5.2	5.0	4.8	4.4	3.4	2.0				
400	**********	5.3	5.2	5.0	4.8	4.7	4.5	4.1	3.2	1.8				
450	**********	5.0	4.9	4.7	4.6	4.4	4.2	3.9	3.0	1.7				
500	**********	4.6	4.5	4.3	4.2	4.0	3.7	2.8	1.6					
750	**********	3.7	3.5	3.4	3.3	3.0	2.3	1.3						
1000	**********	2.9	2.8	2.6	2.0	1.2								
1500	**********	2.1	1.6	0.9										
2000	**********	1.4	0.8											

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97

Approximate Sampling Variability Table for Children aged 4 to 7 years
Longitudinal File

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	117.8	117.3	116.7	114.9	111.9	108.7	105.5	102.1	98.6	95.1	91.3	83.4	64.6	37.3
2	********	83.0	82.5	81.3	79.1	76.9	74.6	72.2	69.8	67.2	64.6	59.0	45.7	26.4
3	********	67.7	67.4	66.4	64.6	62.8	60.9	59.0	57.0	54.9	52.7	48.1	37.3	21.5
4	********	58.7	58.4	57.5	55.9	54.4	52.7	51.1	49.3	47.5	45.7	41.7	32.3	18.6
5	********	52.5	52.2	51.4	50.0	48.6	47.2	45.7	44.1	42.5	40.8	37.3	28.9	16.7
6	********	47.9	47.7	46.9	45.7	44.4	43.1	41.7	40.3	38.8	37.3	34.0	26.4	15.2
7	********	44.3	44.1	43.4	42.3	41.1	39.9	38.6	37.3	35.9	34.5	31.5	24.4	14.1
8	********	41.5	41.3	40.6	39.5	38.4	37.3	36.1	34.9	33.6	32.3	29.5	22.8	13.2
9	********	39.1	38.9	38.3	37.3	36.2	35.2	34.0	32.9	31.7	30.4	27.8	21.5	12.4
10	********	37.1	36.9	36.3	35.4	34.4	33.3	32.3	31.2	30.1	28.9	26.4	20.4	11.8
11	********	35.4	35.2	34.7	33.7	32.8	31.8	30.8	29.7	28.7	27.5	25.1	19.5	11.2
12	********	33.9	33.7	33.2	32.3	31.4	30.4	29.5	28.5	27.4	26.4	24.1	18.6	10.8
13	********	32.5	32.4	31.9	31.0	30.1	29.2	28.3	27.4	26.4	25.3	23.1	17.9	10.3
14	********	31.4	31.2	30.7	29.9	29.1	28.2	27.3	26.4	25.4	24.4	22.3	17.3	10.0
15	********	30.3	30.1	29.7	28.9	28.1	27.2	26.4	25.5	24.5	23.6	21.5	16.7	9.6
16	**********	29.2	28.7	28.0	27.2	26.4	25.5	24.7	23.8	22.8	20.8	16.1	9.3	
17	**********	28.3	27.9	27.1	26.4	25.6	24.8	23.9	23.1	22.2	20.2	15.7	9.0	
18	**********	27.5	27.1	26.4	25.6	24.9	24.1	23.3	22.4	21.5	19.7	15.2	8.8	
19	**********	26.8	26.4	25.7	24.9	24.2	23.4	22.6	21.8	21.0	19.1	14.8	8.6	
20	**********	26.1	25.7	25.0	24.3	23.6	22.8	22.1	21.3	20.4	18.6	14.4	8.3	
21	**********	25.5	25.1	24.4	23.7	23.0	22.3	21.5	20.7	19.9	18.2	14.1	8.1	
22	**********	24.9	24.5	23.8	23.2	22.5	21.8	21.0	20.3	19.5	17.8	13.8	7.9	
23	**********	24.3	24.0	23.3	22.7	22.0	21.3	20.6	19.8	19.0	17.4	13.5	7.8	
24	**********	23.8	23.5	22.8	22.2	21.5	20.8	20.1	19.4	18.6	17.0	13.2	7.6	
25	**********	23.3	23.0	22.4	21.7	21.1	20.4	19.7	19.0	18.3	16.7	12.9	7.5	
30	**********	21.3	21.0	20.4	19.8	19.3	18.6	18.0	17.4	16.7	15.2	11.8	6.8	
35	**********	19.4	18.9	18.4	17.8	17.3	16.7	16.1	15.4	14.1	10.9	6.3		
40	**********	18.2	17.7	17.2	16.7	16.1	15.6	15.0	14.4	13.2	10.2	5.9		
45	**********	17.1	16.7	16.2	15.7	15.2	14.7	14.2	13.6	12.4	9.6	5.6		
50	**********	16.3	15.8	15.4	14.9	14.4	14.0	13.4	12.9	11.8	9.1	5.3		
55	**********	15.5	15.1	14.7	14.2	13.8	13.3	12.8	12.3	11.2	8.7	5.0		
60	**********	14.8	14.4	14.0	13.6	13.2	12.7	12.3	11.8	10.8	8.3	4.8		
65	**********	14.3	13.9	13.5	13.1	12.7	12.2	11.8	11.3	10.3	8.0	4.6		
70	**********	13.7	13.4	13.0	12.6	12.2	11.8	11.4	10.9	10.0	7.7	4.5		
75	**********	13.3	12.9	12.6	12.2	11.8	11.4	11.0	10.5	9.6	7.5	4.3		
80	**********	12.5	12.2	11.8	11.4	11.0	10.6	10.2	9.3	7.2	4.2			
85	**********	12.1	11.8	11.4	11.1	10.7	10.3	9.9	9.0	7.0	4.0			
90	**********	11.8	11.5	11.1	10.8	10.4	10.0	9.6	8.8	6.8	3.9			
95	**********	11.5	11.2	10.8	10.5	10.1	9.8	9.4	8.6	6.6	3.8			
100	**********	11.2	10.9	10.5	10.2	9.9	9.5	9.1	8.3	6.5	3.7			
125	**********	10.0	9.7	9.4	9.1	8.8	8.5	8.2	7.5	5.8	3.3			
150	**********	9.1	8.9	8.6	8.3	8.1	7.8	7.5	6.8	5.3	3.0			
200	**********	7.7	7.5	7.2	7.0	6.7	6.5	5.9	4.6	2.6				
250	**********	6.7	6.5	6.2	6.0	5.8	5.3	4.1	2.4					
300	**********	6.1	5.9	5.7	5.5	5.3	4.8	3.7	2.2					
350	**********	5.5	5.3	5.1	4.9	4.5	3.5	2.0						
400	**********	4.9	4.8	4.6	4.2	3.2	1.9							
450	**********	4.7	4.5	4.3	3.9	3.0	1.8							
500	**********	4.3	4.1	3.7	2.9	1.7								
750	**********	3.0	2.4	1.4										
1000	**********	2.0	1.2											

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)

National Longitudinal Survey of Children and Youth - 1996\97

Approximate Sampling Variability Table for Children aged 8 to 11 years
Longitudinal File

NUMERATOR OF PERCENTAGE ('000)	ESTIMATED PERCENTAGE													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	96.5	96.1	95.6	94.1	91.6	89.0	86.4	83.6	80.8	77.9	74.8	68.3	52.9	30.5
2	********	67.9	67.6	66.6	64.8	63.0	61.1	59.1	57.1	55.1	52.9	48.3	37.4	21.6
3	********	55.5	55.2	54.3	52.9	51.4	49.9	48.3	46.6	45.0	43.2	39.4	30.5	17.6
4	********	48.0	47.8	47.1	45.8	44.5	43.2	41.8	40.4	38.9	37.4	34.1	26.4	15.3
5	********	43.0	42.8	42.1	41.0	39.8	38.6	37.4	36.1	34.8	33.5	30.5	23.7	13.7
6	********	39.2	39.0	38.4	37.4	36.3	35.3	34.1	33.0	31.8	30.5	27.9	21.6	12.5
7	********	36.3	36.1	35.6	34.6	33.7	32.6	31.6	30.5	29.4	28.3	25.8	20.0	11.5
8	********	34.0	33.8	33.3	32.4	31.5	30.5	29.6	28.6	27.5	26.4	24.1	18.7	10.8
9	********	32.0	31.9	31.4	30.5	29.7	28.8	27.9	26.9	26.0	24.9	22.8	17.6	10.2
10	********	30.4	30.2	29.8	29.0	28.2	27.3	26.4	25.5	24.6	23.7	21.6	16.7	9.7
11	********	29.0	28.8	28.4	27.6	26.8	26.0	25.2	24.4	23.5	22.6	20.6	15.9	9.2
12	********	27.7	27.6	27.2	26.4	25.7	24.9	24.1	23.3	22.5	21.6	19.7	15.3	8.8
13	********	26.6	26.5	26.1	25.4	24.7	24.0	23.2	22.4	21.6	20.7	18.9	14.7	8.5
14	********	25.7	25.5	25.2	24.5	23.8	23.1	22.4	21.6	20.8	20.0	18.2	14.1	8.2
15	********	24.8	24.7	24.3	23.7	23.0	22.3	21.6	20.9	20.1	19.3	17.6	13.7	7.9
16	**********	23.9	23.5	22.9	22.3	21.6	20.9	20.2	19.5	18.7	17.1	13.2	7.6	
17	**********	23.2	22.8	22.2	21.6	20.9	20.3	19.6	18.9	18.1	16.6	12.8	7.4	
18	**********	22.5	22.2	21.6	21.0	20.4	19.7	19.0	18.4	17.6	16.1	12.5	7.2	
19	**********	21.9	21.6	21.0	20.4	19.8	19.2	18.5	17.9	17.2	15.7	12.1	7.0	
20	**********	21.4	21.0	20.5	19.9	19.3	18.7	18.1	17.4	16.7	15.3	11.8	6.8	
21	**********	20.9	20.5	20.0	19.4	18.8	18.2	17.6	17.0	16.3	14.9	11.5	6.7	
22	**********	20.4	20.1	19.5	19.0	18.4	17.8	17.2	16.6	15.9	14.6	11.3	6.5	
23	**********	19.9	19.6	19.1	18.6	18.0	17.4	16.8	16.2	15.6	14.2	11.0	6.4	
24	**********	19.5	19.2	18.7	18.2	17.6	17.1	16.5	15.9	15.3	13.9	10.8	6.2	
25	**********	19.1	18.8	18.3	17.8	17.3	16.7	16.2	15.6	15.0	13.7	10.6	6.1	
30	**********	17.5	17.2	16.7	16.3	15.8	15.3	14.8	14.2	13.7	12.5	9.7	5.6	
35	**********	15.9	15.5	15.0	14.6	14.1	13.7	13.2	12.6	11.5	8.9	5.2		
40	**********	14.9	14.5	14.1	13.7	13.2	12.8	12.3	11.8	10.8	8.4	4.8		
45	**********	14.0	13.7	13.3	12.9	12.5	12.0	11.6	11.2	10.2	7.9	4.6		
50	**********	13.3	13.0	12.6	12.2	11.8	11.4	11.0	10.6	9.7	7.5	4.3		
55	**********	12.7	12.4	12.0	11.6	11.3	10.9	10.5	10.1	9.2	7.1	4.1		
60	**********	12.2	11.8	11.5	11.2	10.8	10.4	10.1	9.7	8.8	6.8	3.9		
65	**********	11.7	11.4	11.0	10.7	10.4	10.0	9.7	9.3	8.5	6.6	3.8		
70	**********	11.2	10.9	10.6	10.3	10.0	9.7	9.3	8.9	8.2	6.3	3.6		
75	**********	10.9	10.6	10.3	10.0	9.7	9.3	9.0	8.6	7.9	6.1	3.5		
80	**********	10.2	10.0	9.7	9.4	9.0	8.7	8.4	7.6	5.9	3.4			
85	**********	9.9	9.7	9.4	9.1	8.8	8.4	8.1	7.4	5.7	3.3			
90	**********	9.7	9.4	9.1	8.8	8.5	8.2	7.9	7.2	5.6	3.2			
95	**********	9.4	9.1	8.9	8.6	8.3	8.0	7.7	7.0	5.4	3.1			
100	**********	9.2	8.9	8.6	8.4	8.1	7.8	7.5	6.8	5.3	3.1			
125	**********	8.2	8.0	7.7	7.5	7.2	7.0	6.7	6.1	4.7	2.7			
150	**********	7.5	7.3	7.1	6.8	6.6	6.4	6.1	5.6	4.3	2.5			
200	**********	6.3	6.1	5.9	5.7	5.5	5.3	4.8	3.7	2.2				
250	**********	5.5	5.3	5.1	4.9	4.7	4.3	3.3	1.9					
300	**********	5.0	4.8	4.7	4.5	4.3	3.9	3.1	1.8					
350	**********	4.5	4.3	4.2	4.0	3.6	2.8	1.6						
400	**********	4.0	3.9	3.7	3.4	2.6	1.5							
450	**********	3.8	3.7	3.5	3.2	2.5	1.4							
500	**********	3.5	3.3	3.1	2.4	1.4								
750	**********	2.5	1.9	1.1										
1000	**********	1.7	1.0											

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO "NLSCY USERS HANDBOOK AND MICRODATA GUIDE" (CHAPTER 12)