



The 2004 Canadian Learning and Work Survey

The 2003/4 National Survey of Learning and Work: the “WALL” Survey

Technical Documentation

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Conditions of Release

All research based upon these data must include an acknowledgement such as the following:

Data from the 2003/4 National Survey of Work and Lifelong Learning were provided by the Institute for Social Research, York University. The survey was funded by the Social Sciences and Humanities Research Council of Canada (SSHRC), and was completed for the research network for The Changing Nature of WORK AND LIFELONG LEARNING (WALL) in the New Economy under the direction of Dr David Livingstone, Principal Investigator and Doug Hart, Project Manager from the Ontario Institute for Studies in Education (OISE) at the University of Toronto. Neither the Institute for Social Research, the SSHRC, the Principal Investigator nor OISE are responsible for the analyses and interpretations presented here.

Researchers are requested to forward a copy of any publications or scholarly papers to the Associate Director, Institute for Social Research, 5067 TEL Building, York University, 4700 Keele Street, Toronto, Ontario, M3J 1P3 and to Dr David Livingstone, Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto, Ontario, M5S 1V6.

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Table of Contents

Conditions of Release	i
Table of Contents	ii
List of Tables	iii
1. Study Description	1
2. Sample Design	2
2.1 Introduction: Canada-wide Sample	2
2.2 Provincial and Metropolitan Sample Distribution for the Canada-wide Sample	2
2.3 Selection of Households: Canada-wide Sample	4
2.4 Selection of Respondents: Canada-wide Sample	5
2.5 Household Weights: Canada-wide Sample	6
2.6 National Estimates	7
2.7 Reinterview Sample Component	8
3. Data Collection	9
3.1 Introduction	9
3.2 Data Collection Procedures	9
3.3 Response Rate	10
4. Questionnaire Issues and Data Processing	13
4.1 Introduction	13
4.2 Random Assignment to Questionnaire Sections	13
4.3 Questionnaire Format	14
4.4 Close Ended Questions with "Other Specify" Responses	14
4.5 Open Ended Questions: Occupation and Industry Questions	17
References	19

List of Tables

2.1	Sample Distribution and Calculation of Provincial/Metropolitan Weight Variable (PROVWGT)	3
2.2	Calculation of Household Weights for the Canada-wide Sample Component (HHWGT)	7
3.1	Number of Call Attempts	9
3.2	Final Sample Disposition: Canada-wide Sample	11
3.3	Response Rate: Province/Metropolitan Area	12
4.1	Supplemental Information used in Coding Other Specifies	15

1. Study Description

The research network for The Changing Nature of WORK AND LIFELONG LEARNING (WALL) in the New Economy, a group of university researchers, community researchers, and professional institutions, with financial support from the Social Sciences and Humanities Research Council of Canada (SSHRC) engaged the Institute for Social Research (ISR) of York University to conduct the WALL survey. The WALL survey was designed to capture data, from a large representative sample of Canadians on their work, volunteer activities, formal and informal education and the relationship between these and other socio-demographic variables, especially the relationship between changing work conditions and learning. (For more information on the research endeavour see: <http://www1.oise.utoronto.ca/research/wall/>)

The WALL Survey included two survey components: a Canada-wide sample (9,063 observations) with an over representation of respondents from selected urban areas and a reinterview sample (600 observations) with respondents to the 1998 National Survey of Life Long Learning (NALLS). Both of these samples are combined in the data set and the variable SURVEY TYPE indicates cases from each sample component. Interviewing was initiated in October 2003 and was completed in July 2004. For the Canada-wide sample, modified random digit dialling (RDD) procedures were utilized to select households, and, within households, the birthday selection method was used to select respondents. For the reinterview sample, an attempt was made to locate and interview all respondents to the original 1998 NALL survey.

Interviewing in all provinces, except Quebec, was completed at the Institute's centralized telephone facilities in Toronto. Eighty-five percent of the Quebec respondents in the Canada-wide sample were interviewed by Jolicoeur & Associés, all other interviews, including all of the reinterviews, were completed by ISR. The sample used by Jolicoeur was provided by ISR and the selection of respondents, number of call attempts, and all other survey procedures were the same at both data collection centres.

An easy-to-read copy of the questionnaire accompanies this documentation. Copies of the original CATI survey are available at ISR upon request. (Contact Anne Oram oram@yorku.ca.)

2. SAMPLE DESIGN

2.1 Introduction: Canada-wide Sample

The Canada-wide sample for the WALL Survey was designed to represent the adult population of Canada: 18 years of age or older who speak one of Canada's official languages, English or French, and reside in private homes¹ in the ten Canadian provinces (thus excluding the territories). Because the survey was conducted by telephone, the small proportion of households in Canada without telephones were excluded from the sample population.²

2.2 Provincial and Metropolitan Sample Distribution for the Canada-wide Sample

The distribution of the Canada-wide sample among the provinces and urban areas is detailed in Table 2.1. Note that the sample distribution is close to that of the population for most of the provinces and cities. Part of the study design called for analysis of new Canadians (those who had moved to the country in the last 10 years). In order to increase the number of new Canadians in the sample efforts were made to insure that the distribution of the sample population from urban areas was at least that as indicated in the Census (response rates tend to be lower in urban areas thus under representing these areas in population surveys that do not make adjustments to account for differential response rates). In addition, there was an over-sample in the cities of Montreal (9% of the population but 11% of the sample) and Toronto (11% of the population but 16% of the sample). Calgary and Edmonton were also over represented, but less so: 5 percent of the population and 5.5 percent of the sample. The design of the study also called for an over-sample in Vancouver but the lower response rate for Vancouver (43% versus 51 % for the study as a whole) negated this effort. Because the sample distribution does not match the population distribution weights are required before national estimates can be made.

¹ Interviews were not completed with respondents who could not speak English well enough to complete the survey and residents of old age homes, group homes, educational and penal institutions were excluded from the sample.

² Using their Household Inventory and Facilities and Equipment (HIFE) surveys, Statistics Canada estimates that two percent of the private households in Canada do not have a telephone (1997, Catalogue 52-203).

Table 2.1: Sample Distribution and Calculation of the Provincial/Metropolitan Weight Variable (PROVWGT)

Province	# pop.	% of pop	# Sample	% Sample	Weight
Nfld	547164	1.92	222	2.45	0.785613
PEI	132840	0.47	48	0.53	0.882128
Nova Scotia	899964	3.17	338	3.73	0.848697
NB	729648	2.57	278	3.07	0.836590
Quebec - Montreal	4519440	15.89	847	9.35	1.700769
Montreal	2525616	8.88	1,011	11.16	0.796270
Ontario - Toronto	7,474,932	26.29	2,198	24.25	1.083986
Toronto	3,167,856	11.14	1,452	16.02	0.695413
Manitoba	1,100,304	3.87	346	3.82	1.013633
Saskatchewan	976,608	3.43	322	3.55	0.966737
Alberta - Calgary & Edmonton	1,443,132	5.08	494	5.45	0.931158
Calgary & Edmonton	1,226,052	4.31	394	4.35	0.991875
BC- Vancouver	2,350,832	8.27	720	7.94	1.040718
Vancouver	1,338,952	4.71	393	4.34	1.085967
Totals	28,433,346	100	9,063	100	

Weights are obtained by dividing the proportion of households in the province/metropolitan area by the proportion of the households in the sample for that province/metropolitan area (stratum). Quebec—excluding Montreal-- has the largest weight, 1.700697, as this stratum has 16 percent of Canada's population but only 9.3 percent of the sample. In preparing national estimates, each Quebec case counts for 1.3435 observations in the weighted data set; in other words, Quebec (excluding Montreal) cases are “weighted up” so that the impact of the Quebec sample on national estimates is an accurate reflection of Quebec’s (excluding Montreal) proportion of the population of Canada. Conversely, provinces where the weights are smaller, for example

Newfoundland (.785613), are those in which the proportion of the sample allocated to the stratum exceeds its proportion of the national population. Such cases are “weighted down.” Note, however, that most weights are close to unity and thus estimates from the weighted and unweighted data will be very similar. (Of course, even if the weights were considerably above and below unity, the weighted data would only be different from the unweighted data if variables varied by provinces or metropolitan area.)

Note that in the calculation of the provincial/metropolitan (or stratum) weights, the total number of observations in the sample—the “weighted sample size”—is based on the original sample size, but we do not have a true random sample and there is no accounting for sample design effects. Weighting in this manner, so that the weighted sample size is equal to the actual number of interviews, provides researchers with a good approximation of the precision of their sample. But, treating the sample as if it was a simple random sample of equal size results in *incorrect* estimates of standard errors and, of course, incorrect significance tests. Worse, the errors are *downwardly* biased and so give a false sense of the precision of estimates as well as significance tests with too many false positives. Researchers should consider the use of a statistical package that takes proper account of weights (such as STATA) or the use of procedures in other packages that treat these data appropriately (e.g., UNIANOVA in SPSS) when analysing the data. Another, somewhat less desirable alternative, which would produce reasonably accurate standard errors, would be to compute design effects due to weighting, for a variety of survey items and multiply the weights by a factor that reduces the weighted sample size to a value corresponding to the actual precision of estimates.

2.3 Selection of Households: Canada-Wide Sample

To select individual survey respondents for the Canada-wide sample, a two-stage probability selection process was utilized. The first stage involved the selection of households by randomly selecting telephone numbers. The ideal sampling frame for the Canada-wide sample would have been a complete listing of all residential telephone numbers in Canada. Unfortunately, such a listing does not exist. To select numbers ISR employs a modified form of random digit dialling (RDD).

All telephone numbers in Canada consist of an area code, a “central office code” or exchange (the first three digits of the telephone number), and a suffix or “bank” (the last four digits of the number). A list of most telephone numbers in Canada can be constructed from CD-ROM versions of telephone books and other commercially available lists of telephone numbers. Numbers from these sources, as well as telephone numbers on either side of listed numbers are included in the sampling frame. For example, if the following number was found in a directory, (416) 651-8513 then (416) 651-8512 and (416) 651-8514 would be included in the sample (if they had not already been randomly generated). A computer would then generate a random sample of telephone numbers from this list. Since unlisted numbers and numbers too new to be included in the directory are interspersed among valid numbers, this strategy provides a much better sample than one based on listed numbers alone.

As well as household telephone numbers, RDD samples include "not-in-service" and "non-residential" telephone numbers. Typically, non-household numbers are identified the first time the interviewer calls. Most of the interviewer's subsequent efforts are then directed at encouraging an informant from the household to provide information about the number of adults living in the home, and after randomly selecting a respondent, completing the interview.

2.4 Selection of Respondents: Canada-wide Sample

The second stage of the sample selection process was the random selection of a respondent from the selected household. To be eligible for the interview the household member had to be an adult (18 years of age or older). If there was more than one eligible person in the household, the person with the next birthday was selected as the survey respondent.³ The birthday selection method is used as it ensures a random selection of respondents and is a much less intrusive way to begin an interview than more traditional methods that require the interviewer to obtain a list of all adult household residents. This less intrusive approach makes it easier for the interviewer to secure the respondent's cooperation.

³ See O'Rourke and Blair, 1983; for a review of the birthday selection method.

2.5 Household Weights: Canada-wide Sample

The probability of an adult member of the household being selected for an interview varies inversely with the number of people living in that household. In a household with only one adult, this person has a 100 percent chance of selection, in a two adult household each adult has a 50 percent chance of selection, and so on. Analyses based on unweighted estimates are therefore biased: members of one adult households are over-represented, and larger households are under-represented. Most practitioners of survey research "weight the data" in order to compensate for the unequal probabilities of selection (one adult households are given a weight of one, two adult households are given a weight of two, three adult households are given a weight of three, etc.).⁴

Conventionally, most users of survey data wish to have the same number of observations in the weighted and unweighted data set.⁵ This adjustment is made by determining the number of cases in each household size category that would have been in the sample, if an interview had been completed with each adult member of the household, and then dividing the sample among each household size category according to the proportion of interviews completed in each household size category.

In the Canada-wide sample component there are 9,063 households in the sample and 2,701 are one-adult households, 4,806 are two-adult households, and 1,005 are three-adult households, etc. (Table 2.2 and variable `NADULTS` in the data set). The weights for each household are calculated as follows. First, the total number of weighted cases is calculated (number of cases times the number of adults in the household). For three-adult households the calculation is: 1,005 times 3 which gives 3,015 three-adult households in the weighted sample. In the Canada-wide sample there are 17,722 weighted cases. Second, the 17,722 weighted cases are adjusted down to the

⁴ Weighting to correct for unequal probabilities of selection, stratification, and other factors in order to improve sample estimates is common in survey research. See, for example: Lessler and Kalsbeek, 1992 Chapter 8; Kalton, 1983 Chapter 10; and Babbie, 1992 Chapter 5, Kish, 1965; specifically addresses the issue of weighting to correct for unequal probability of selection at the household level (p. 400) and suggests, unlike most survey researchers, that household weighting may not be necessary.

⁵ While such weights are common they do not include a downward adjustment in sample size to compensate for design effects. Another option used by some researchers is to "weight up" to the population.

original sample size of 9,063 (calculated as weighted cases for each household size divided by the weighted sample size times the original sample size). For three-adult households the calculation is: $(3,015/17,722) * 9,063 = 1,541.8658$. Third, the weight for each household size is calculated (by dividing the adjustment to original sample size by the number of cases). For three-adult households the calculation is: $1,541.8658/1,005 = 1.534195$.

Table 2.2 Calculation of Household Weights for the Canada-wide Sample Component (HHWGT)

HH Size	No. of HH's	Weighted Cases	Adjustment	Weight
1 adult	2,701	2,701	1,381.29	0.511398
2 adults	4,806	9,612	4,915.56	1.022797
3 adults	1,005	3,015	1,541.87	1.534195
4 adults	425	1,700	869.38	2.045593
5 adults	89	445	227.57	2.556991
6 adults	25	150	76.71	3.068390
7 adults	6	42	21.48	3.579788
8 adults	2	16	8.18	4.091186
9 adults	1	9	4.60	4.602584
10 adults	1	10	5.11	5.113983
11 adults	2	22	11.25	5.625381
Totals	9,063	17,722	9063.00	

2.6 National Estimates

In order to produce national estimates, for the Canada-wide sample, it is advisable to correct for both the unequal probabilities of selection at the household stage and the unequal probabilities of selection based on province of residence. NATWGT (National Weight) is the product of the

household weight and the stratum (provincial/metropolitan) weight and should be used when national estimates are required.

Although the weights are provided as part of the data set, users must specify the weights they wish to use in the appropriate programming language before analysing the data. If weights are not invoked the tabulations produced will be for unweighted data. Because the weights include fractions that are rounded and missing values vary by item, there will be minor variations in the number of cases for different analytical procedures and subsets of the data.

2.7 Reinterview Sample Component

In 1998 ISR completed the National Survey of Life Long Learning (NALL) survey. The 1998 survey compliments the WALL survey and many of the themes explored are common to both surveys. The initial NALL survey, which was completed with 1,560 respondents was not designed as a longitudinal survey, however respondents were asked their willingness to participate in a more in-depth follow-up survey and those who agreed were asked for a name and address to facilitate follow-up. Almost 800 respondents provided this information. Reinterviews were completed with 328 of these respondents in 2000. For the WALL survey we attempted to reinterview all of the 1998 respondents. Not surprisingly, most of the 600 reinterviews included in the WALL survey were with respondents who provided names and addresses in the initial survey. When these respondents were not located at the telephone number from which the 1998 interview was conducted there was supplemental information to assist in attempting to locate a new telephone number.

While the reinterview respondents were asked the same survey questions, given their different probabilities of selection and the panel attrition over the five to six years between the initial NALL survey and WALL survey it is recommended that researchers exclude these cases from any analysis that seeks to provide national estimates. The premier utility of the reinterviews is in comparing the 1998 and 2003/4 responses.

3. Data Collection

3.1 Introduction

A description of the data collection procedures is outlined in this section of the technical documentation. Supervisors monitored (listened to) about 10 percent of interviewers' calls to verify that the interviewers were reading questions and recording answers correctly. The response rate for the Canada-wide sample component of the WALL survey was 51 percent. Six years after the NALL survey, 38 percent of the respondents were reinterviewed as part of the WALL survey.

3.2 Data Collection Procedures

In order to maximize the chances of getting a completed interview from each sample number, call attempts were made during the day and the evening - for both week and weekend days. Although almost exactly half (51 percent) of the interviews completed took four or fewer call attempts, another quarter (26 percent) of the interviews were completed on the fifth to ninth call. The remaining interviews, 23 percent of all interviews, were completed on the tenth or subsequent call: 17 percent took ten to nineteen calls and 6 percent took twenty or more calls (Table 3.1). (The variable `ATTEMPTS`, indicates the number of call attempts.)

Table 3.1. Number of Call Attempts

Calls	number	percent
1	1,548	16
2	1,397	14
3	1,145	12
4	892	9
5 to 9	2,525	26
10 to 19	1,613	17
20 or more	543	6
Totals	9,963	100

In order to maximize response rates, respondents and/or households who refused to participate when initially contacted by the interviewer were called a second time. The household may have been reached on the first call attempt after the initial refusal, or a subsequent attempt. On average, it took just under three additional calls to the initial refusal before a second refusal or an interview was completed. Conversion attempts started four (or more) weeks after the initial refusal and were made by a subset of interviewers who had higher response rates on the study. Interviewers did not try to convert their own refusals. Converted refusals represent 19 percent of the completions in the survey. The variable REFUSALS identifies whether the interview was a "standard" completion or a "converted" refusal.

The substantial data collection effort, as indicated by the number of calls and refusal conversions is designed to maximize the response rate, thus increasing the likelihood the sample is representative. Many researchers have found that respondents who are "hard-to-reach" and those who "refused" have characteristics that are somewhat different from typical survey responders (Dunkelberg and Day, 1973; Fitzgerald and Fuller, 1982; and McDonald, 1979). Nevertheless the final response rate of 51 is modest. The lower rate mirrors a trend of declining response rates reported by a number of American survey research experts (see, for example, Dillman, 2000; Smith, 1995; and *Survey Research*, 1998 and 1999 (volumes 29 through 31)).

3.3 Response Rate

There are numerous ways to calculate response rates in survey research (Wiseman and Billington, 1984; Groves, 1989; and Groves and Lyberg, 1988). The method used in this project was conservative; most other ways of calculating the response rate would produce inflated values. The response rate was defined as the number of completed interviews divided by the estimated number of eligible households times 100 percent. A final response rate, for the Canada wide sample was 51 percent. The reinterview rate for the panel component was 38 percent. The sample from the reinterview study component are excluded from the response rate calculations that follow.

Details on the calculation of the response rate, for the WALL Survey are as follows. Of the 26,499 telephone numbers included in the sample, 17,133 were identified as being eligible households (completed interviews, number (n) = 9,063, refusals n = 6,668, and callbacks n = 1,402). Not eligible households (n = 3,807), where respondents were unable to speak English or

French, were not healthy enough to complete the interview, and nonresidential and not in service numbers (n = 4,787) totalled 8,594 thus accounting for most of the remaining numbers telephone numbers.

It was not possible to determine the eligibility status for 772 or 2.9% of all the numbers in the sample as every call attempt resulted in either a ring no answer (RNA) or a busy signal. For response rate calculations, it was assumed that the proportion of these 772 numbers that were eligible household numbers was the same as it was in the rest of the sample. This proportion, or "household eligibility rate," was $.7816$ (eligibles [17,133]/(eligibles [17,133] + not eligibles [8,594]) = $.7816$). The estimated total number of eligibles was then computed as 17,736 (17,133 + [$.7816 * 772$] = 17,736). Dividing the number of completions (9,063) by the estimated number of eligibles (17,736) gives a final overall response rate of 51 percent.

Table 3.2 Final Sample Disposition: Canada-wide Sample

Results	number	percent
completions	9,063	34.2
refusals	6,668	25.1
callbacks	1,402	5.3
ill/aged/language problem/ absent/not a citizen	3,807	14.4
not-in-service & nonresidential	4,787	18.1
eligibility not determined	772	2.9
total	26,499	100.0
eligible households	17,133	
not eligible households	8,594	
household eligibility rate	-	0.7816
estimated number of eligibles	17,736	-
response rate	-	51

Many organizations would not include "eligibility not determined" numbers in the denominator for the response rate calculations on the argument that few of these numbers would be eligible households. (See: Groves and Lyberg, 1988 for a debate on this issue.) This version of the response rate, calculated as completions/known eligibles is 53 percent (9,063/17,133). Other organizations calculate response rates as the number of completions over the number of completions plus refusals. This version of the response rate, which is sometimes known as the completion rate, is 58 percent (9,063/9,063+6,668).

Using the same formula for computing the response rate the results for each Province and Metropolitan area are detailed in the table below:

Table 3.3 Response Rate: Provincial/Metropolitan Area

Province/City	Rate	Province/City	Rate
Newfoundland	56	Toronto	49
Nova Scotia	56	Manitoba	53
Prince Edward Island	65	Saskatchewan	56
New Brunswick	57	Alberta	55
Quebec	50	Calgary & Edmonton	50
Montreal	48	British Columbia	51
Ontario	53	Vancouver	43

The response rates tend to be higher in the Atlantic Provinces and lowest in the urban centres. This pattern, where higher percentages of the population living in large urban areas is negatively correlated with response rate has been noted by other survey researchers and is common in ISR national surveys.

4. Questionnaire Issues and Data Processing

4.1 Introduction

With CATI, interviewers read questions from a computer screen and enter answers directly into a file for processing. CATI questionnaires, while relatively easy to follow are cumbersome and require considerable space for CATI code and interviewer instructions. The printed version of the English/French CATI version of the WALL questionnaire is 128 pages long. An easy-to-read version of the questionnaire, English only, with most CATI code and interviewer instructions dropped has been provided to facilitate use of the data. Copies of the CATI surveys used by ISR (which also include the French wording) are available upon request (contact Anne Oram oram@yorku.ca).

4.2 Random Assignment to Questionnaire Sections

Not all respondents were asked all sections of the questionnaire. Sections, or large blocks of questions were skipped as appropriate. For example, respondents who never worked were not asked questions about the utility of formal and informal learning in relationship to job retention, promotion, and so on. Respondents who indicated they did no volunteering (item s3_6) were skipped out the remaining questions in section 3 and all of section 4 (about volunteer activity).

In addition to questions or sections that were skipped on the basis of respondent's answers, respondents were randomly assigned to two different paths through the questionnaire. This process was designed to reduce overall questionnaire length so as to try to keep respondent burden and fatigue to manageable levels. The logical operators resident in CATI were used to randomly assign respondents to one of these two paths. About half of the respondents were routed to Sections 7 (Youth), 18 (Union Membership), 22 (Attitudes about Economic Policies) and Section 26-second half (parental information). In turn, these respondents skipped over Sections 4 (Volunteering), 11 (Access to Information) and 13 (Volunteer Related Learning). Conversely, respondents who were asked sections 4, 11 and 13, skipped sections 7, 18, 22 and 26-second half.

Of course less than half the respondents were asked most of these sections because other operational conditions were not satisfied. For example, only respondents less than 22 years of

age were asked section 7 (Youth), only union members were asked section 18 (Union Activities) and those who were not working were not asked sections 13 and 18.

4.3 Questionnaire Format

Almost all of the questions in the survey had a small set of fixed, or close ended, responses from which the respondent was asked to select their answer. Of course the most common response set for close ended questions was “yes and no.” More than half the survey questions required the respondents to provide a yes or no answer.

For questions like: “How satisfied are you with your job?” (s2_17), or “How satisfied are you with the courses and workshops provided by the union?” (s18_2) the list of responses read to the respondent by the interviewer were: *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied or very dissatisfied*. Similar scales were used for questions about helpfulness (*very helpful, fairly helpful or not at all helpful*), ratings (*excellent, good, average, somewhat below average and poor, and above average, average, below average*), and agreement (*strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree and strongly disagree*). For questions that used these, and other, scales the respondent’s answer was selected from the list provided.

There were a small number of open ended questions, that is questions where the respondent answered in their own words rather than selected a response from a list provided. In addition, there were a small number of close ended questions that included an “other specify” response. In these questions interviewers could add a text response when the respondents gave an answer other than those provided in the preset list.

4.4 Close Ended Questions with Other Specify Responses

In a number of items, particularly questions about major life changes (i.e., s2_25a asking about major changes at work, s23_2, asking about major health problems, s25_10 major life changes) and the socio-demographics questions, interviewers had the option of writing in an “other specify” response. For these types of questions, a list of responses were provided as well as a place to add a response other than the precoded answers. The information provided by

interviewers was reviewed and placed into existing categories, and when appropriate additional categories were added. The main purpose of the post survey coding of other specifies was to review and correct interviewer’s errors in interpretation, not to develop new codes to supplement those provided by the investigators. Observations that remain in the other category in the final data set normally are few in number, cover such a wide range of possible options that it was not sensible to create specific codes, or include responses for which alternative codes could be developed, but the definition of these codes required expertise in the subject matter. The easy-to-read questionnaire and the data set include new codes, the original CATI questionnaire has not been changed.

For a number of these questions, the short form categories in the questionnaire were expanded during the coding process. These modifications/clarifications are detailed in the table below.

Table 4.1 Supplemental Information used in Coding Other Specifies

#	Question & Original Responses	modifications/new codes
s3_7	<p>What type of organization did you volunteer for?</p> <p>1 political organizations 2 cultural, education or hobby group 3 religious organization 4 sports organization 5 service club 6 school or neighbourhood organization</p>	<p>Community associations were coded with neighbourhood organizations (code 6). The majority of the not coded responses are health related charities</p>
s6_10a	<p>Who contributed towards the direct expense for this course?</p> <p>1 the respondent (self) 2 employer 3 government agency 4 union/professional association 5 anyone else 7 combination of sources</p>	<p>code 0 added, combination of respondent and additional sources (i.e., 1 and 2, 1 and 3, 1 and 4, 1 and 2 and 3, etc.</p>
s11_2	<p>Where do you use a computer?</p> <p>1 at work 2 at school 3 at home 4 other specify</p>	<p>codes added: 5 public settings (libraries, school, internet café, etc.) 6 at friends, family, partner’s home 7 combinations of first 3 codes</p>

s19_8	<p>Which of the following has been the most important source of specific knowledge to do your job?</p> <ul style="list-style-type: none"> 1 co-workers 2 own independent efforts 3 employer training program 7 something else 	<p>“Experience” was coded under own independent efforts. Code 4 for the combination of co-workers & independent efforts, code 5 for the combination of all three and code 6 for independent efforts & employer</p>
s21_3	<p>Has your workplace experienced any of the following organizational changes in the last five years?</p> <ul style="list-style-type: none"> 1 reduction in the number of employees 2 reduction in the number of managers/supervisors 3 greater reliance on part-time or temp workers 4 an increase in over time hours 5 greater reliance on job rotation and or multi-skilling 6 other 	<p>“downsizing” coded as a reduction in number of employees, many of the not coded answers related to expansion/growth of workplace, reorganization at upper management (and CEO changed), amalgamation of firms, firms being bought out or buying out other firms</p>
s23_3	<p>What are these changes?</p> <ul style="list-style-type: none"> 1 major illness 2 major injury 3 serious disability 4 health improvement 5 other 	<p>surgery and operations coded under major illness</p>
s24_5a s24_5b	<p>How would you best describe your race or colour?</p> <ul style="list-style-type: none"> 1 White 2 Chinese 3 South Asian 4 Black 5 Aboriginal 6 Arab/West Asian 7 Filipino 8 South East Asian 9 Latin American 10 Japanese 11 Korean <p>Country of birth (respondent and parents)</p>	<p>Anglo, Caucasian, Canadian, English, French, etc, coded as White</p> <p>a large number of codes were added, see data set</p>
s25_1a	<p>Are you currently:</p> <ul style="list-style-type: none"> 1 married 2 living with a partner 3 separated 4 divorced 5 widowed 6 never been married 	<p>single coded as never been married</p>

s25_10	What was it? 1 moved 2 became a parent 3 experienced a break up 4 serious illness/death of family member 5 other significant household change	currently pregnant included in code 2
s26_15	What is your main source of personal income at present?	unemployment and employment insurance both coded as UI (code 5)

4.5 Open-Ended Questions Occupation and Industry Questions

There were three open ended questions in the survey that did not include any precoded answers: the respondents' occupation, the industrial sector in which the respondent worked and the occupation of the main wage earner in the respondent's family when they were growing up. For these three questions, the interviewer entered a text answer in CATI. The textual responses for the respondents occupation were coded into CCDO (SOC) and NOC codes. The 1981 CCDO codes (Canadian Classification and Dictionary of Occupations) can be examined in the 1980 Standard Occupation Classification published by Statistics Canada (catalogue 12-565E, ISBN 0-660-10673-6).

A small number of non-standard codes were used to indicate respondents who described their occupation as a taking care of a family (9994); student (9995); disabled (9996); retired (9997); don't know (9998) and refused to answer (9999). Appended to each occupation is a socio-economic index score. These indices are commonly referred to as "Blisshen Scores" and are based on the male labour force population who reported an occupation in the 1981 Canadian Census. The development of the scale is reported in Blisshen, Carroll and Moore (1987). Another well-known socio-economic index was developed by Pineo, Porter and McRoberts (1977), based on the 1971 Canadian Census. This index was updated in 1985 to reflect the 1981 Census and is reported in McMaster University (1985).

While the CCDO scores are valuable in that they can be linked to other indexes they are dated. The NOC (National Occupational Classification) scores are an updated version of CCDO scores and are summarized in Human Resources Development Canada (HRDC) 1993 publication (catalogue MP53-25-1993E, ISBN 0-660-1418-5).

For the main wage earner when the respondent was growing up, CCDO codes are provided.

For coding industry, NAICS (North American Industry Classification System) was used. The codes for this system can be found in Statistics Canada's 2003 publication (catalogue 12-501-XPE, ISBN 0-660-18982-8).

Respondents do not always provide enough information for coders to accurately code occupation and industry. In a small percent of the cases respondents were called back for additional information. The textual responses obtained by the interviewer in the initial call, as well as that obtained for recalls, are available from ISR.

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