



Skills in the Canadian Labour Market

Findings from the Programme for the International Assessment of Adult Competencies (PIAAC)



Government
of Canada

Gouvernement
du Canada



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Council of
Ministers
of Education,
Canada

Conseil des
ministres
de l'Éducation
(Canada)

This report was prepared by Yang Zou, Diego Santili, and Bruno Rainville from Employment Social Development Canada (ESDC). We acknowledge the valuable comments and suggestions we received from Employment Social Development Canada officials, the Council of Ministers of Education, Canada (CMEC), and members of the working group that was created for the preparation of this report as part of the PIAAC research partnership.

The opinions expressed and arguments employed herein do not necessarily reflect the official views of ESDC, CMEC, or the other provincial/territorial or federal departments and agencies involved in PIAAC.

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Executive Summary

This report shows the distribution of information-processing skills (literacy, numeracy, and problem solving in technology-rich environments [PS-TRE]) among Canadian labour force participants aged 16 to 65 based on data from the Programme for the International Assessment of Adult Competencies (PIAAC), an international assessment led by the Organisation for Economic Co-operation and Development (OECD). The report focuses on the distribution of information-processing skills among Canadian workers across occupational groups, industries, and selected job characteristics. It also illustrates the relationship between skill proficiencies and labour market outcomes, providing evidence of how higher skills are associated with the probabilities of being employed or unemployed. It also examines the relationship between skills and earnings (from employment). The main findings are as follows:

- On average, employed men show higher proficiency levels than their female counterparts. However, a larger proportion of men did not participate in the computer-based assessment of PS-TRE either because they lacked familiarity with information and communication technology or because they chose the paper-based assessment.
- Workers in jobs usually requiring university education or in management jobs display higher skill proficiencies.
- Among specific occupational groups, workers in occupations related to science, technology, engineering, and mathematics, or workers in occupations not related to trades, generally have higher skill proficiencies.
- Higher literacy, numeracy, or PS-TRE proficiencies increase the likelihood of being employed.
- Only lower numeracy skills increase the probability of being unemployed among labour force participants.
- Among recent female immigrants in Canada, higher skill proficiencies increase the likelihood of being employed.
- The skill premium, measured by the difference in earnings of workers who score at higher proficiency levels relative to those who score at or below Level 1, increases with higher skill proficiencies.

Note to Reader

Understanding the state of foundational skills of literacy, numeracy, and problem solving in technology-rich environments (PS-TRE) in Canada's adult population and how they are associated with jobs and labour market outcomes supports the development of relevant policy and programs, especially in a context of technological change, increased demand for higher-level cognitive skills, and increased competition for skilled labour globally. A population that does not have adequate foundational skills such as literacy and numeracy is likely to face major difficulties mastering the skills required in today's and tomorrow's labour market.

Why look at skills?

The socioeconomic impact of skills has long been recognized but its importance has grown significantly in recent years. Dramatic changes in technology have produced correspondingly dramatic changes in the workplace,¹ which now demands a greater diversity and depth of skills from workers. Not surprisingly, countries seek to measure these skills. Their aim is to gauge their populations' capacity to adapt to new working conditions and to identify how their education systems can enhance it. Their motivation extends beyond purely labour-market concerns, however. High skill levels tend to be associated with numerous positive social outcomes that improve people's quality of life, such as better health and higher levels of political and civic engagement. Governments are concerned about enhancing these as well.

The key skills: Literacy, numeracy, and problem solving in technology-rich environments

To measure skills in an international context, Canada joined the Programme for the International Assessment of Adult Competencies (PIAAC). The program was initiated by the Organisation for Economic Co-operation and Development (OECD). It builds on previous international assessments and provides internationally comparable measures of three skills that are essential to processing information: literacy, numeracy, and PS-TRE. Given the centrality of written communication and fundamental mathematics in virtually all areas of life, as well as the rapid integration of information and communications technology (ICT), individuals must be able to understand, process, and respond to textual and numerical information in both print and digital formats if they are to participate fully in society.

Literacy, numeracy, and PS-TRE are considered key to that ability. They provide a foundation for the development of other, higher-order cognitive skills and are prerequisites for gaining access to, and an understanding of, specific domains of knowledge. They are also necessary in a broad range of contexts, from education, to work, to everyday life.

Interpreting the data in the charts and tables

This report provides a series of charts and tables that were created using PIAAC's results to look at how individuals' information-processing skills (literacy, numeracy, and PS-TRE) are associated with their labour market outcomes and what the skill proficiencies of workers are across occupations and sectors in Canada's labour market.

PIAAC was designed and implemented to ensure the validity, reliability, comparability, and interpretability of results. It identified and quantified possible errors and issues that could interfere with or bias interpretation. Wherever such errors and issues might be present, they are highlighted for the reader in notes to figures and tables.

These charts/tables present results from descriptive and multivariate analyses with respect to skills. They emphasize proficiency levels. For literacy and numeracy, four groups of proficiency levels are presented: Level 1 or below, Level 2, Level 3, and Level 4 or 5. For PS-TRE, the following three categories are used:

¹ P. Knox, J. Agnew, & L. McCarthy, *The Geography of the World Economy*, 5th ed. (New York: Routledge, 2014).

PS-TRE nonrespondents, Level 1 or below, and Level 2 or 3. In some cases when a sample size gets too small, we use average skill score (e.g., skills by NOC two-digit occupation or by job characteristic of the unemployed) to ensure the quality of estimates.

The data presented in this report are estimated from representative samples of adults in Canada. There is a degree of sampling error that must be taken into account in analyzing the results. Sampling error decreases as the size of the sample increases, so the likelihood of any error is larger at the subsample level (by education attainment or immigration status) than at the level of Canada as a whole. This is complicated further by “measurement error” — the variation that may be created because respondents do not all answer the same questions. (For example, if they answer only a selected number and their results are then extrapolated onto the questionnaire in its entirety.) The aggregate degree of uncertainty that the sampling and measurement errors introduce is expressed by a statistic called the standard error.

When comparing average scores among provinces, territories, or population subgroups, the degree of error in each score must be considered to determine whether differences in scores are real or only apparent. Standard errors are used as the basis for making this determination. If the ranges that the scores could fall within when the standard error is taken into account do not overlap, then the score differences are statistically significant. The differences highlighted in the text are statistically significant unless otherwise stated. This does not necessarily mean that the differences have an impact in practice but simply that a difference can be observed.

The results from PIAAC do not permit readers to infer a causal relationship between variables (e.g., level of education or age) and a corresponding score. While such a relationship may in fact exist, the statistical analysis offers only a description of that relationship. More detailed research into the underlying factors would be needed to understand why particular patterns are observed.

Rounding

Numbers and standard errors are rounded to one decimal point. The numbers for proficiency points and population are whole numbers while numbers for hourly earnings and their standard errors are rounded up to the nearest two decimal points.

The document is organized as follows: the first section presents the distribution of workers’ skills across occupations and sectors, and among the unemployed. Section 2, mostly through multivariate analysis, shows skills as factors affecting the likelihood of employment and unemployment. It also examines skills and earnings, with a focus on returns to skills. Definitions of concepts, variables, and descriptions of regression models are explained in notes. Supporting tables can be found in the annexes.

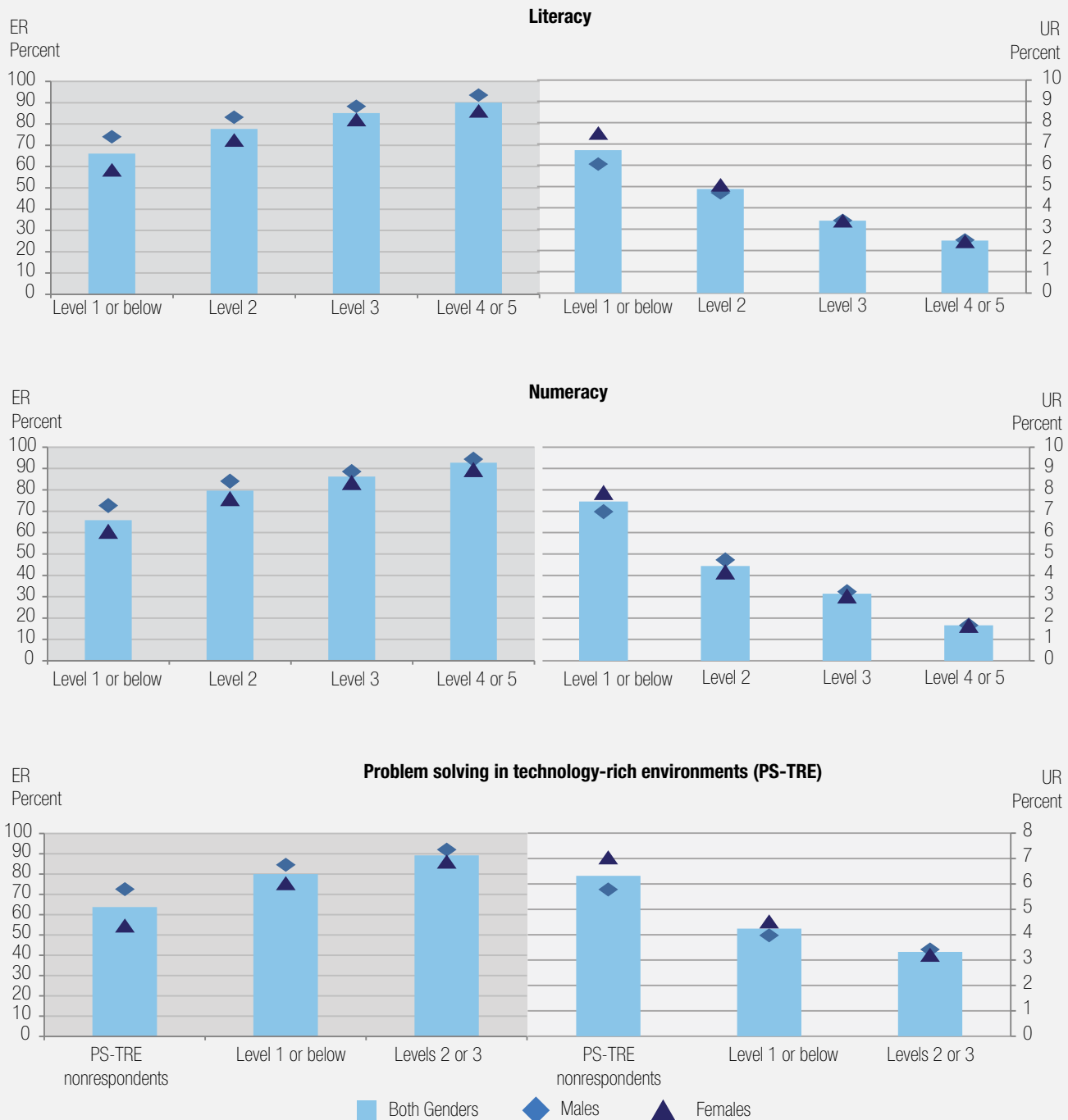


SECTION 1

SKILLS DISTRIBUTION IN CANADA'S LABOUR MARKET

1.1 Higher proficiency levels are associated with higher employment rates and lower unemployment rates.

Figure 1 Employment rate and unemployment rate by skill proficiency level, Canada, 2012



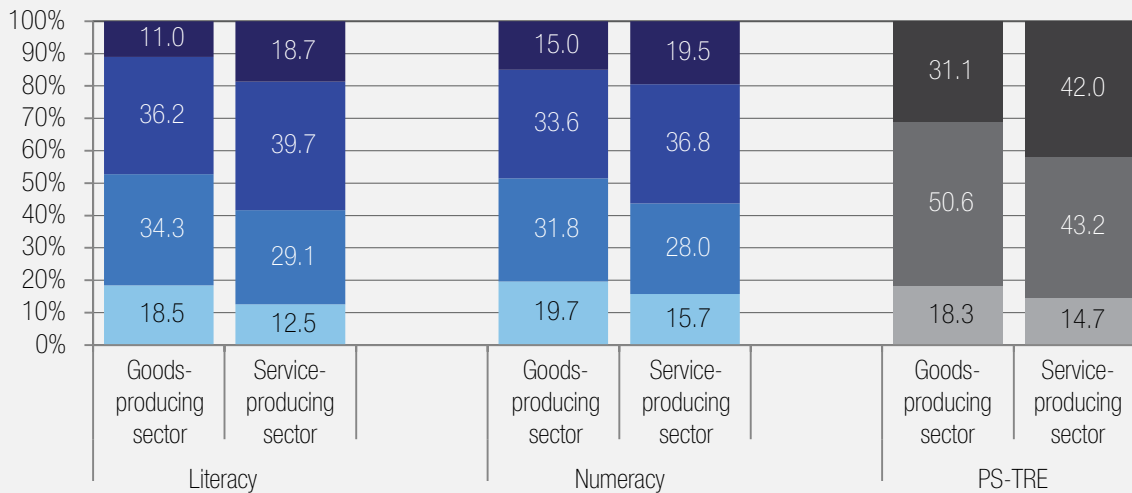
Notes: The sample excludes respondents who identified themselves as students. The data table corresponding to these figures is provided in Annex A. Employment rate (ER) is the ratio of the total number of employed people to the size of the total population of working age while the unemployment rate (UR) is the ratio of the total number of unemployed people to the total number of labour force participants.

Source: PIAAC, 2012

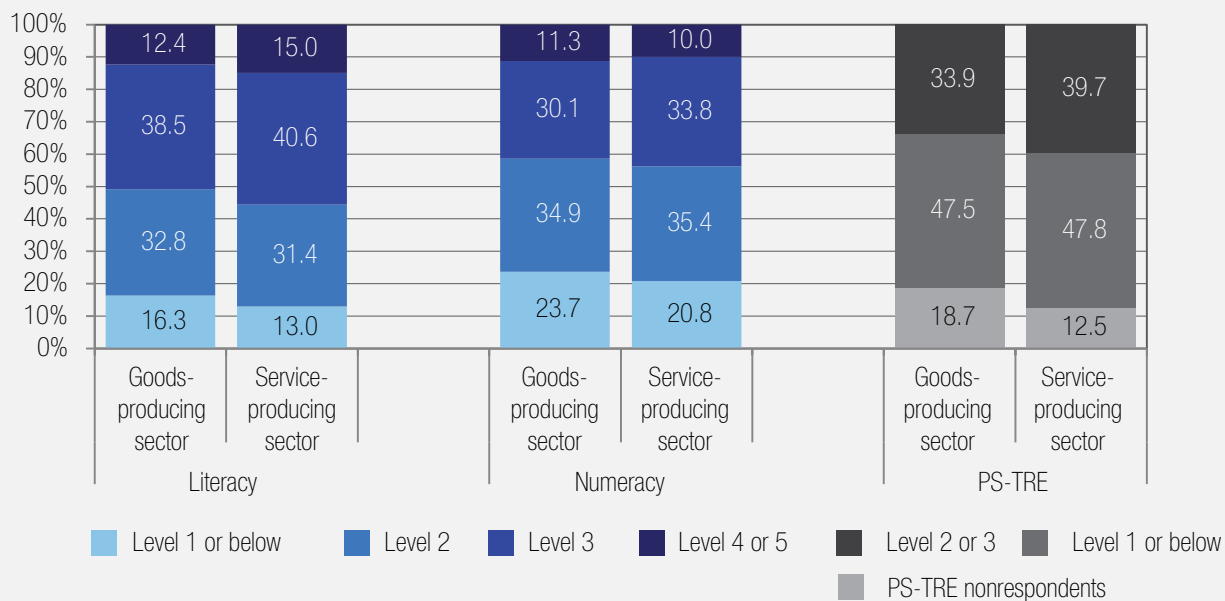
1.2 The proportion of low-skilled workers is higher in goods-producing industries.

Figure 2 Incidence of skill proficiency levels of workers aged 16 to 65, by goods- or service-producing industries, Canada, 2012

Male



Female



Notes: The sample excludes workers who identified themselves as students. The data tables corresponding to this figure and for both genders are provided in Annex B. Goods-producing sectors are determined based on North American Industry Classification System (NAICS) two-digit level. Industries with their first two-digit NAICS coding beginning with 11, 21, 22, 23, 31, 32, or 33 are counted as goods-producing sectors while the rest of the industries are grouped as services-producing sector.

Source: PIAAC, 2012

1.3 Workers in professional, scientific, and technical services sectors tend to have higher proficiency levels in the three skill domains.

Table 1

Incidence of skill proficiency levels of workers aged 16 to 65, in the six largest sectors, Canada, 2012

	Level 1 or below			Level 2			Level 3			Level 4 or 5		
	%	(SE)		%	(SE)		%	(SE)		%	(SE)	
Males												
Literacy												
05 Manufacturing	18.3	(1.9)		31.6	(2.5)		37.1	(2.6)		13.1	(1.8)	
06 Trade	17.6	(1.9)		35.1	(2.8)		35.4	(2.6)		12.0	(2.0)	m
04 Construction	21.8	(2.6)		39.7	(3.2)		32.5	(3.2)		6.0	(1.5)	m
09 Professional, scientific, and technical services	-	-	u	22.6	(3.3)	**	46.4	(3.8)		31.0	(3.9)	
07 Transportation and warehousing	19.6	(2.8)		38.0	(3.7)		34.8	(3.9)		7.6	(2.5)	m
08 Finance, insurance, real estate, and leasing	5.5	(1.8)	m	22.3	(3.8)	m	46.5	(4.4)		25.7	(3.9)	
Numeracy												
05 Manufacturing	19.4	(2.0)		29.1	(2.4)		34.8	(2.7)		16.7	(2.2)	
06 Trade	21.5	(2.1)		32.6	(2.7)		33.3	(2.2)		12.6	(2.0)	
04 Construction	22.5	(2.7)		35.9	(3.3)		32.2	(3.0)		9.4	(1.9)	m
09 Professional, scientific, and technical services	5.9	(1.7)	m	15.9	(2.9)	m	41.7	(4.1)		36.4	(4.1)	
07 Transportation and warehousing	25.4	(3.2)		34.6	(3.9)		30.9	(4.1)		9.0	(2.9)	m
08 Finance, insurance, real estate, and leasing	6.6	(1.7)	m	22.9	(3.9)	m	42.4	(4.8)		28.2	(3.8)	
PS-TRE												
	Nonrespondents			Level 1 or below			Level 2 or 3					
05 Manufacturing	16.4	(1.7)		49.7	(2.4)		33.8	(2.4)				
06 Trade	18.9	(2.2)		47.1	(2.5)		34.0	(2.7)				
04 Construction	20.5	(2.3)		54.3	(2.9)		25.2	(2.8)				
09 Professional, scientific, and technical services	4.5	(1.1)	m	33.1	(3.7)		62.4	(3.8)				
07 Transportation and warehousing	29.1	(2.9)		45.9	(3.9)		25.0	(3.4)				
08 Finance, insurance, real estate, and leasing	9.5	(1.8)	m	38.1	(3.9)		52.4	(4.0)				

Table 1 (cont'd)

Incidence of skill proficiency levels of workers aged 16 to 65, in the six largest sectors, Canada, 2012

	Level 1 or below		Level 2		Level 3		Level 4 or 5			
	%	(SE)	%	(SE)	%	(SE)	%	(SE)		
Females										
Literacy										
12 Health care and social assistance	14.2	(1.3)		31.7	(2.1)		39.3	(2.2)	14.7	(1.9)
06 Trade	18.3	(2.4)		39.8	(3.2)		34.4	(2.8)	7.5	(1.6) m
11 Educational services	7.0	(1.6)	m	23.1	(2.6)		46.2	(3.6)	23.7	(3.2)
08 Finance, insurance, real estate, and leasing	9.8	(2.3)	m	33.8	(4.3)		41.1	(4.1)	15.3	(3.0) m
09 Professional, scientific, and technical services	-	-	u	28.1	(3.6)	**	47.4	(3.9)	24.5	(3.4)
16 Public administration	5.3	(1.5)	m	20.6	(3.1)		51.3	(4.0)	22.8	(3.2)
Numeracy										
12 Health care and social assistance	23.5	(1.7)		35.7	(2.6)		31.2	(2.3)	9.6	(1.5)
06 Trade	27.4	(2.8)		42.7	(3.9)		25.0	(3.1)	4.9	(1.2) m
11 Educational services	11.1	(1.9)	m	31.0	(2.9)		42.7	(3.2)	15.2	(2.3)
08 Finance, insurance, real estate, and leasing	17.1	(3.1)	m	36.2	(3.5)		35.9	(3.7)	10.8	(2.7) m
09 Professional, scientific, and technical services	8.6	(2.2)	m	29.7	(3.9)		42.8	(4.4)	18.9	(3.4) m
16 Public administration	8.6	(2.2)	m	30.8	(3.8)		44.2	(4.8)	16.4	(3.4) m
PS-TRE										
	Nonrespondents		Level 1 or below		Level 2 or 3					
12 Health care and social assistance	14.1	(1.2)		50.4	(2.2)		35.6	(2.1)		
06 Trade	15.3	(1.8)		53.7	(2.5)		31.0	(2.4)		
11 Educational services	7.9	(1.3)	m	44.2	(2.6)		47.9	(2.7)		
08 Finance, insurance, real estate, and leasing	7.9	(2.2)	m	51.8	(3.6)		40.4	(3.5)		
09 Professional, scientific, and technical services	8.5	(1.8)	m	35.7	(3.9)		55.9	(3.8)		
16 Public administration	6.1	(1.4)	m	37.2	(3.6)		56.7	(3.7)		

Notes: The sample excludes workers who identified themselves as students. Full results for all sectors can be found in Annex C. The lower-case letters *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either "unacceptable" (when $CV > 33.3\%$) or "marginally acceptable" ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level. Size in terms of employment. Male workers in top six largest sectors represent 63 percent of total male employment while female workers in top six largest sectors account for 69 percent of total female employment.

* Level 3 or above; ** Level 2 or below

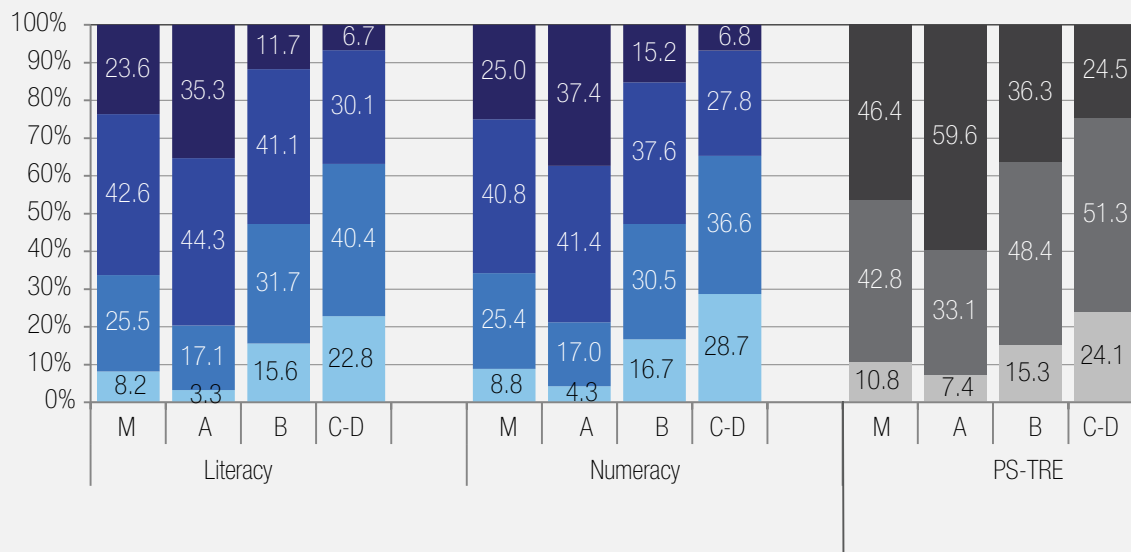
SE Standard error

Source: PIAAC, 2012

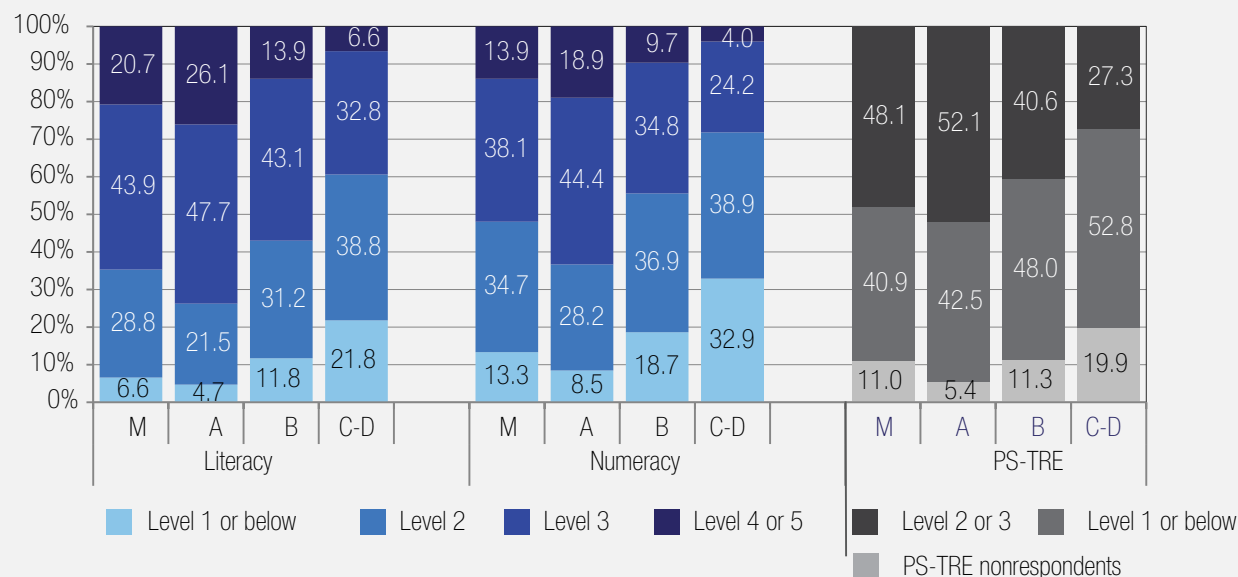
1.4 Workers in jobs usually requiring higher levels of education tend to have higher proficiency levels.

Figure 3 Distribution of skill proficiency levels for workers aged 16 to 65, by education level that is usually required in the jobs, Canada, 2012

Male



Female



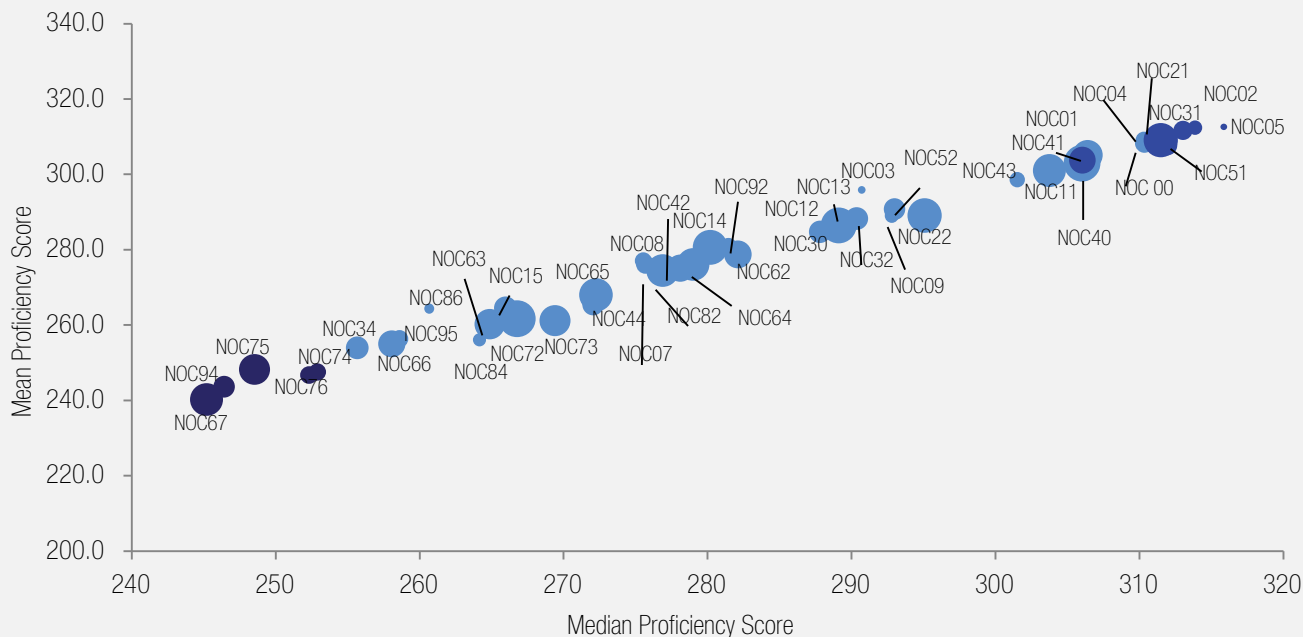
Notes: The sample excludes workers who identified themselves as students. Data corresponding to this figure are provided in Annex D. Occupations on skill level M are those usually requiring experience; occupations on skill level A are those that usually require university education; occupations on skill level B are those that usually require college education; occupations on skill level C are those that usually require high-school education, and occupations on skill level D are those that usually require on-the-job training.

Source: PIAAC, 2012

1.5 Average skills proficiency scores are higher among workers in management jobs or in jobs related to natural and applied sciences, social sciences, education, government, and religion.

Figure 4 Mean and median skill proficiency scores of all workers aged 16 to 65, by occupational group, Canada, 2012

Literacy, males



Literacy, females

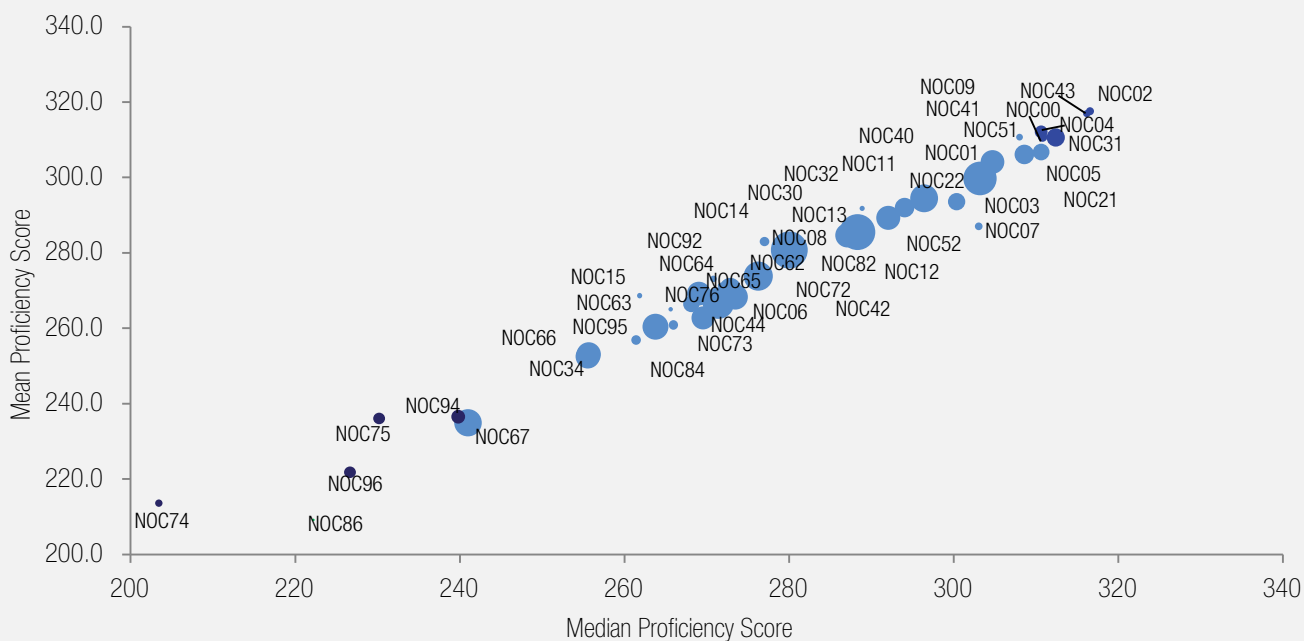
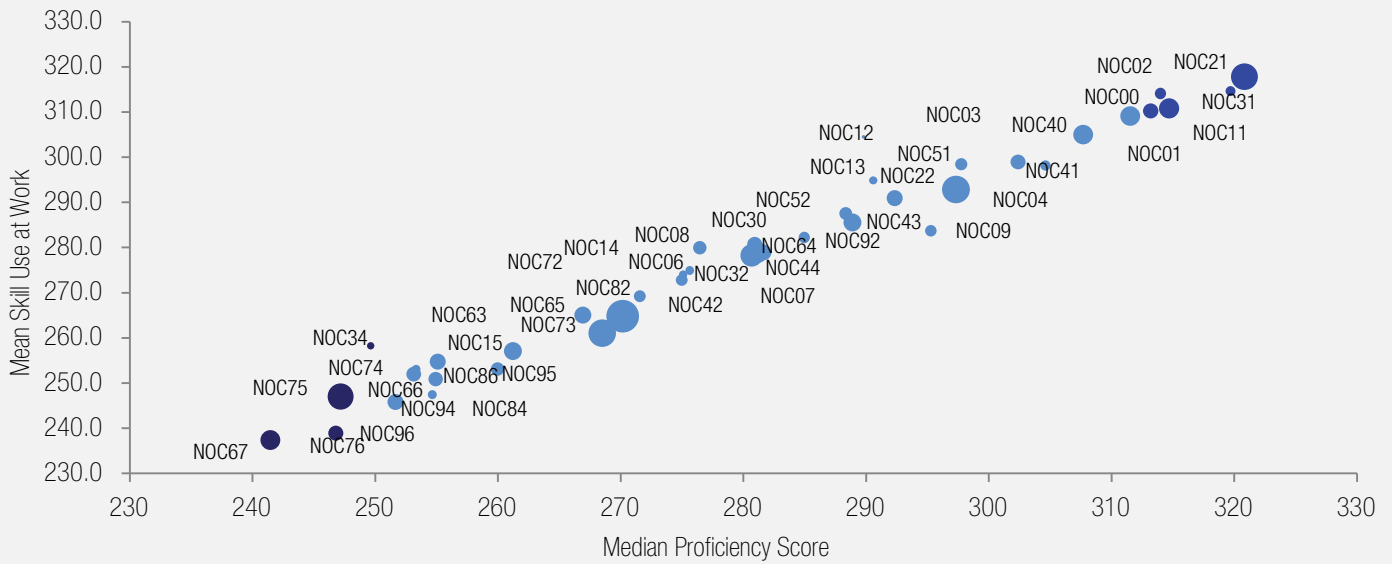
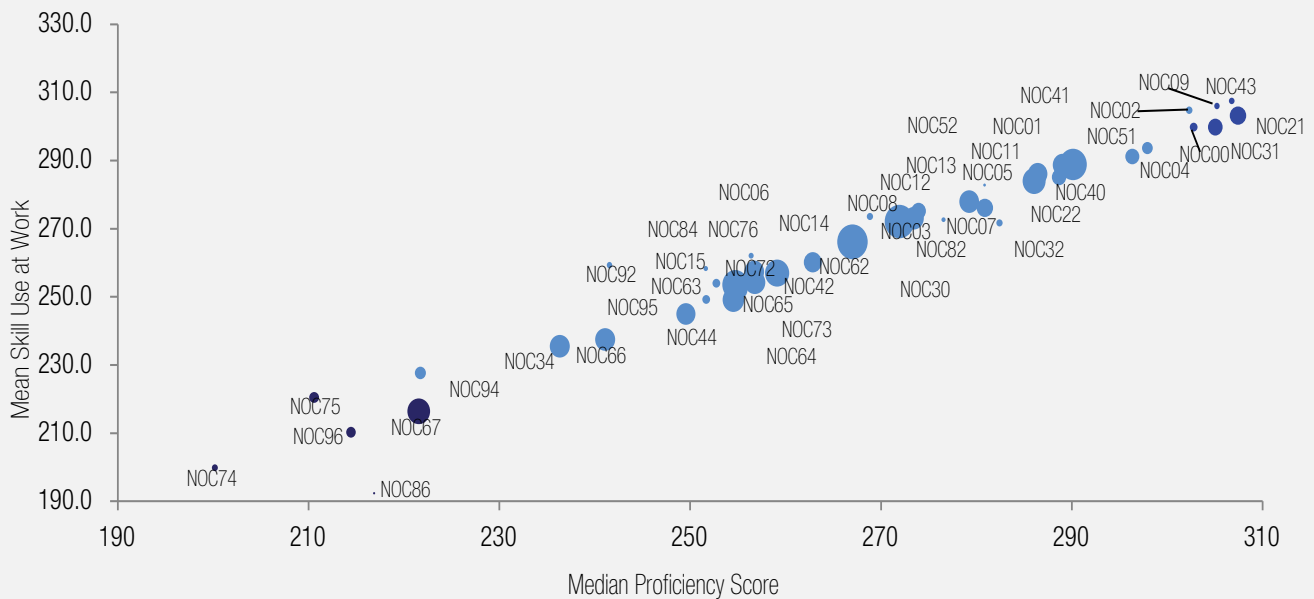


Figure 4 Mean and median skill proficiency scores of workers aged 16 to 65, by occupational group, Canada, 2012 (cont'd)
Numeracy, males



Numeracy, females



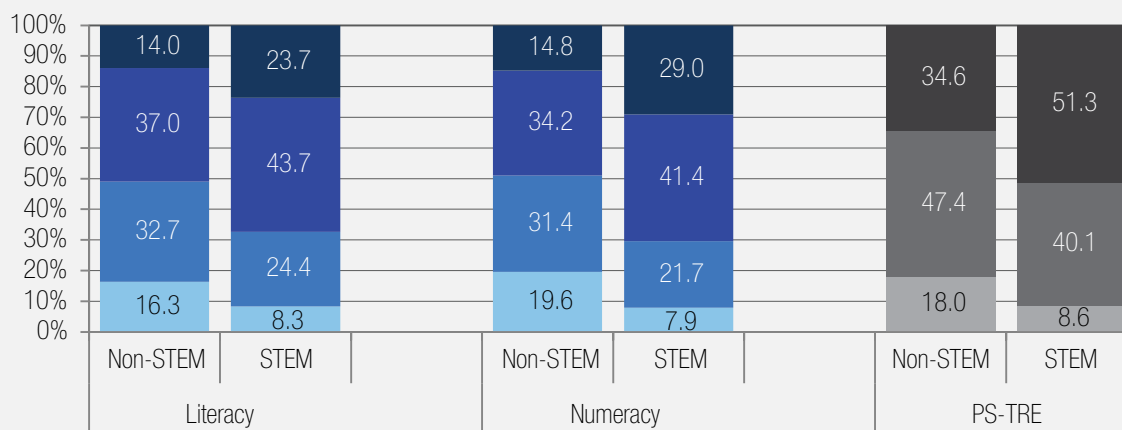
Notes: The sample excludes workers who identified themselves as students. Data corresponding to this figure and figures for both genders are provided in Annex E. There are 45 major occupational groups categorized based on the first two digits of National Occupation Classification (NOC) codes. The sizes of the bubbles signify the numbers of people employed in occupational groups.

Source: PIAAC, 2012

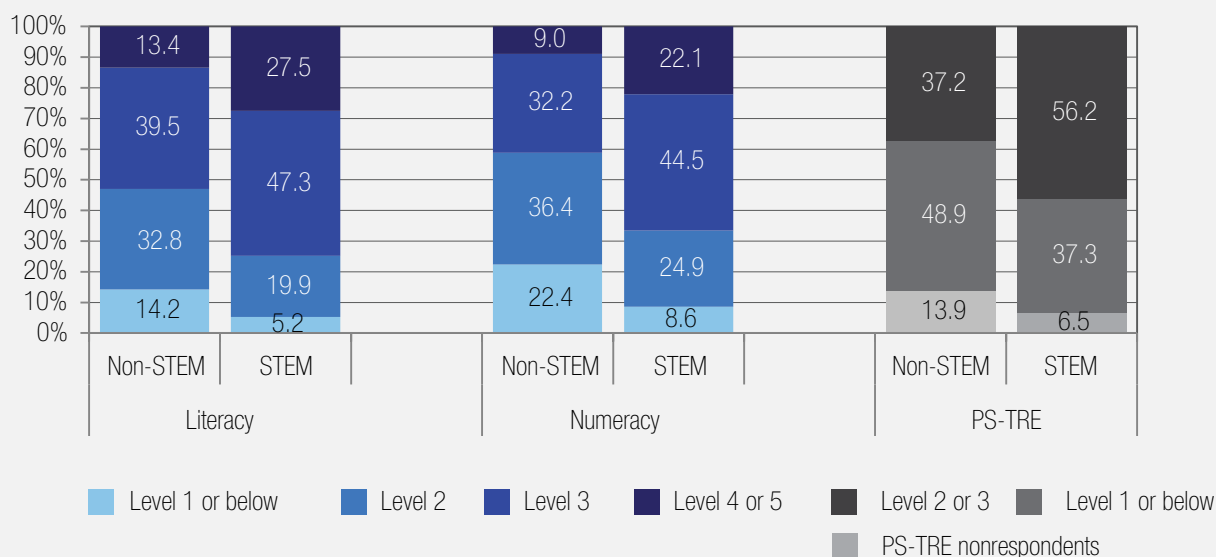
1.6 Workers in science, technology, engineering, and mathematics (STEM) occupations have higher proficiency levels.

Figure 5 Incidence of skill proficiency levels of workers aged 16 to 65, by STEM status, Canada, 2012

Males



Females



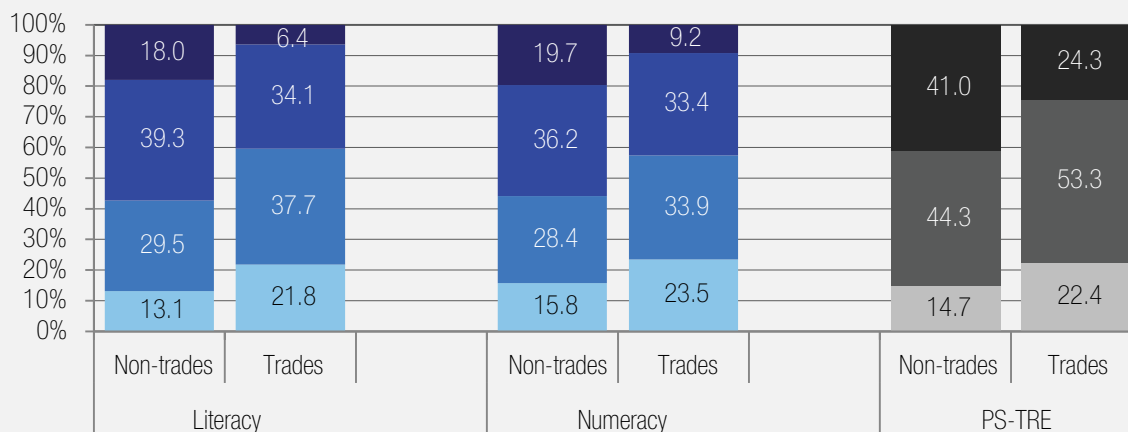
Notes: The sample excludes workers who identified themselves as students. The data table corresponding to this figure and figures for both genders are provided in Annex F. STEM occupations are identified based on four-digit NOC level. Please refer to Annex Table K.a for the detailed list of STEM occupations.

Source: PIAAC, 2012

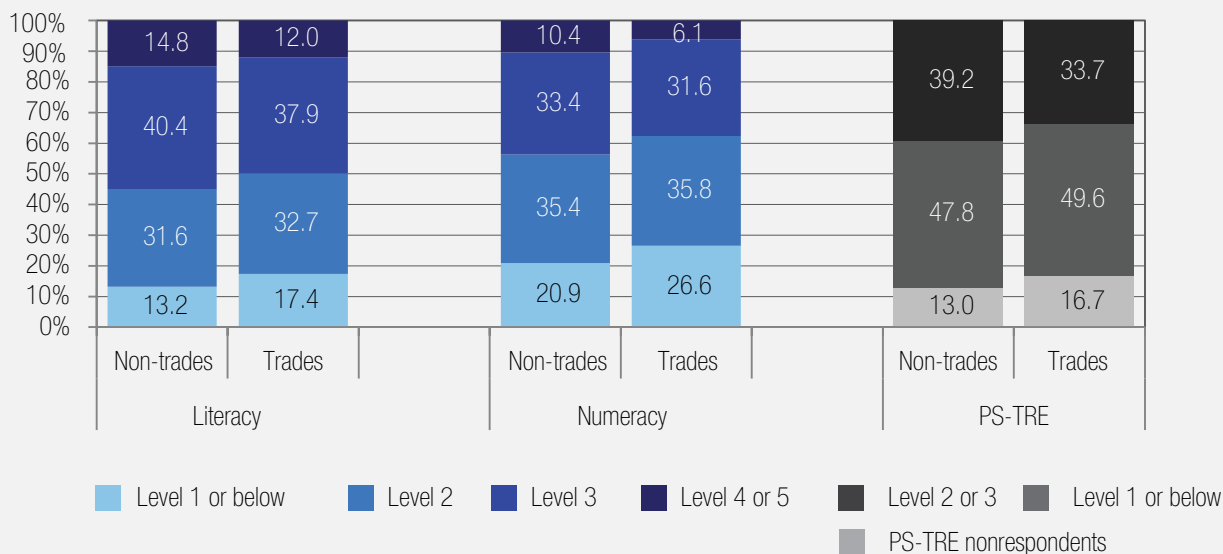
1.7 Workers in trade occupations have lower proficiency levels.

Figure 6 Incidence of skill proficiency levels of workers aged 16 to 65, by trades status, Canada, 2012

Males



Females



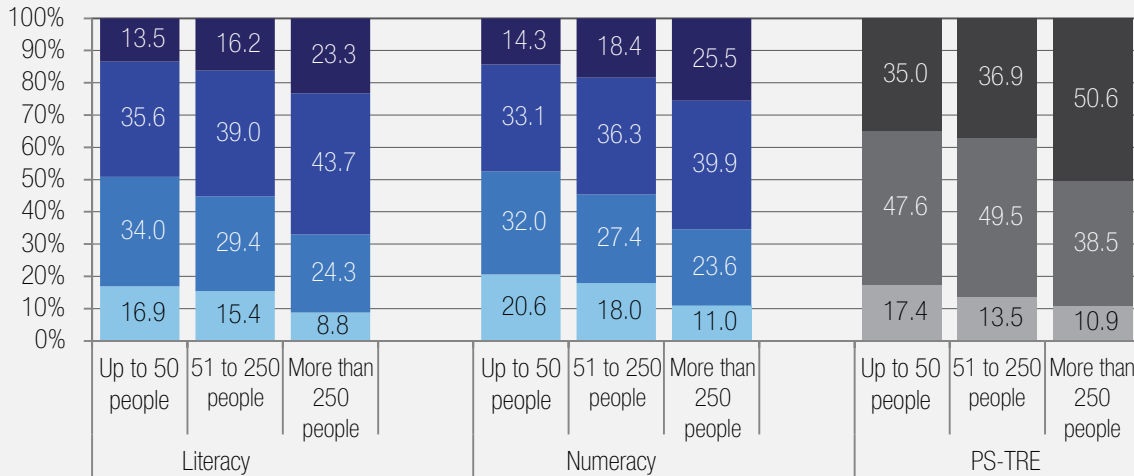
Notes: The sample excludes workers who identified themselves as students. The data table corresponding to this figure and the figure for both genders are provided in Annex G. This group of occupations is also constituted by those on NOC four-digit level. For a detailed list of occupations, please refer to Annex Table K.b.

Source: PIAAC, 2012

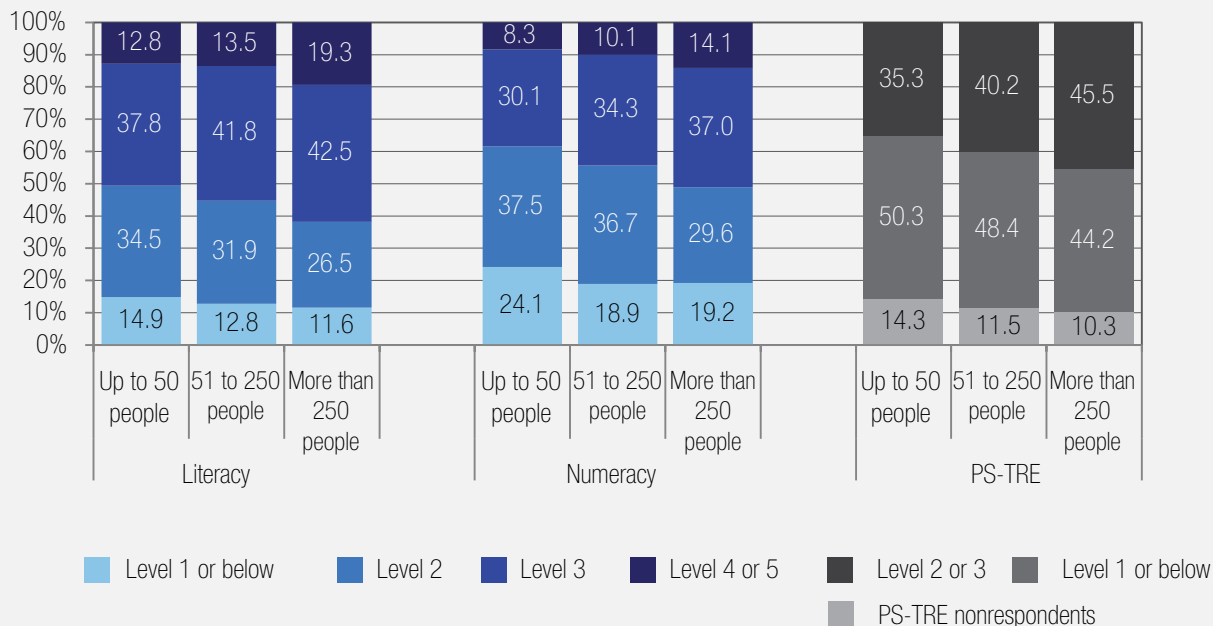
1.8 The proportion of workers who have higher proficiency levels is greater in large establishments.

Figure 7 Incidence of skill proficiency levels of workers aged 16 to 65, by establishment size, Canada, 2012

Males



Females



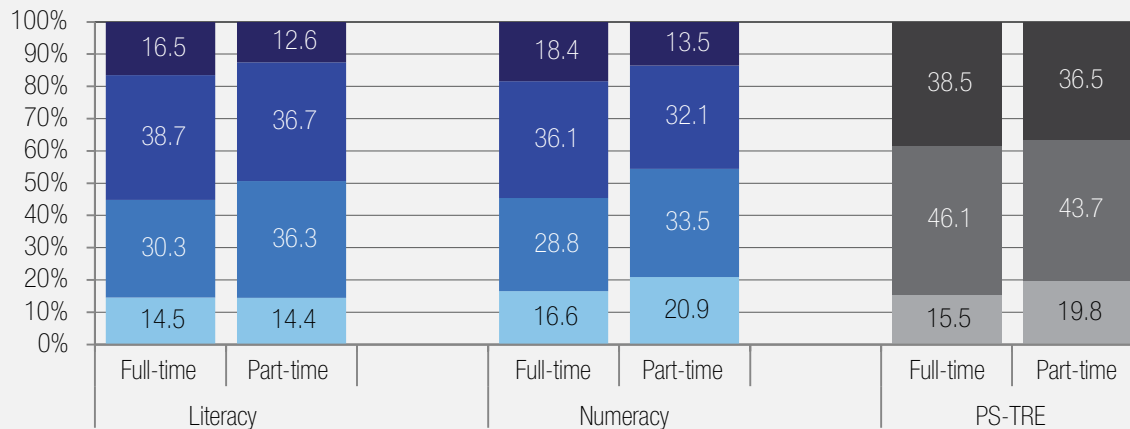
Notes: The sample excludes workers who identified themselves as students. The data table corresponding to this figure appears in Annex H (Table H.a) and parallel figures for both genders can be found in Figure H.a. In PIAAC, people who are currently working as paid or unpaid employees are asked “How many people work for your employer at your place of work?” Based on the number given in their responses, workers are grouped by the size of the establishment where they work. Three sizes are identified: small, where the number of employees is no more than 50 people; medium, where the number of employees is more than 50 but does not exceed 250 people, and large, where the number of employees is beyond 250 individuals.

Source: PIAAC, 2012

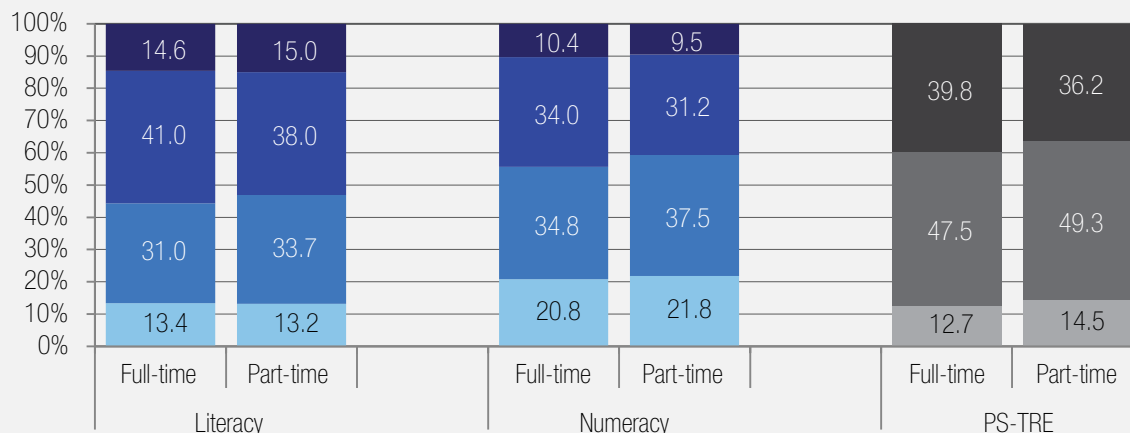
1.9 Full-time workers have higher proficiency levels.

Figure 8 Incidence of skill proficiency levels of workers aged 16 to 65, by full-time/part-time work, Canada, 2012

Males



Females



■ Level 1 or below
 ■ Level 2
 ■ Level 3
 ■ Level 4 or 5
 ■ Level 2 or 3
 ■ Level 1 or below
 ■ PS-TRE nonrespondents

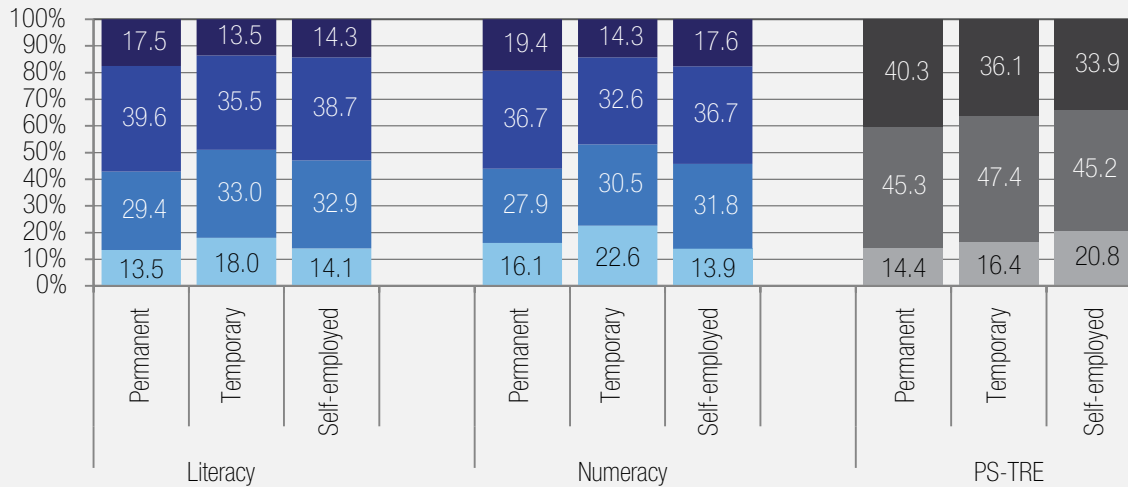
Notes: The sample excludes workers who identified themselves as students. The data table corresponding to this figure is Table H.b and the parallel figure for both genders is Figure H.b.

Source: PIAAC, 2012

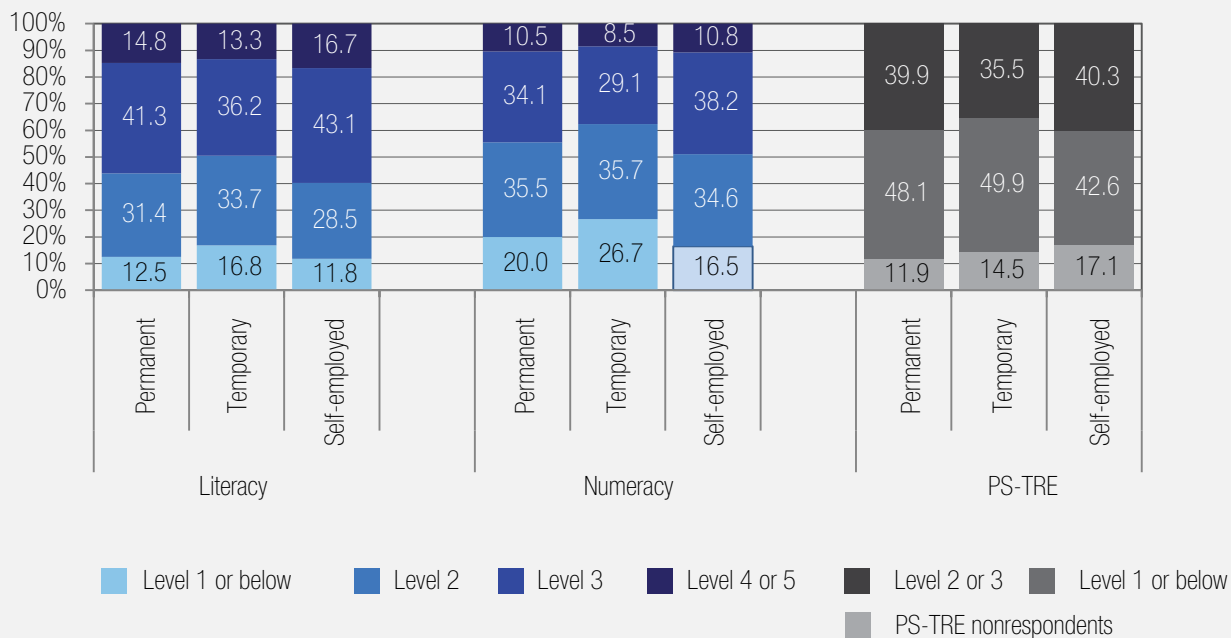
1.10 People working on permanent contracts have higher skills proficiency levels.

Figure 9 Incidence of skill proficiency levels of workers aged 16 to 65, by type of contract, Canada, 2012

Males



Females



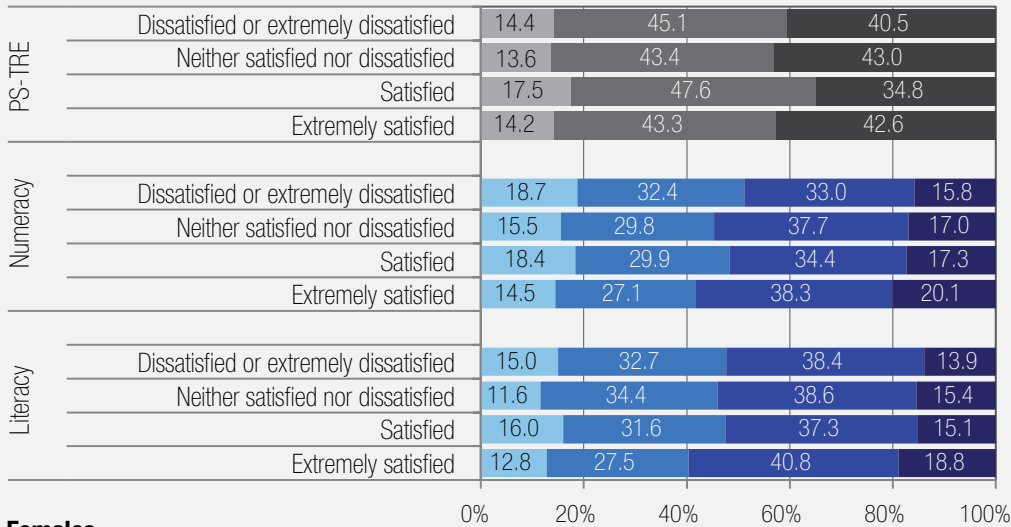
Notes: The sample excludes workers who identified themselves as students. The data table corresponding to this figure is Table H.c and the parallel figure for both genders is Figure H.c.

Source: PIAAC, 2012

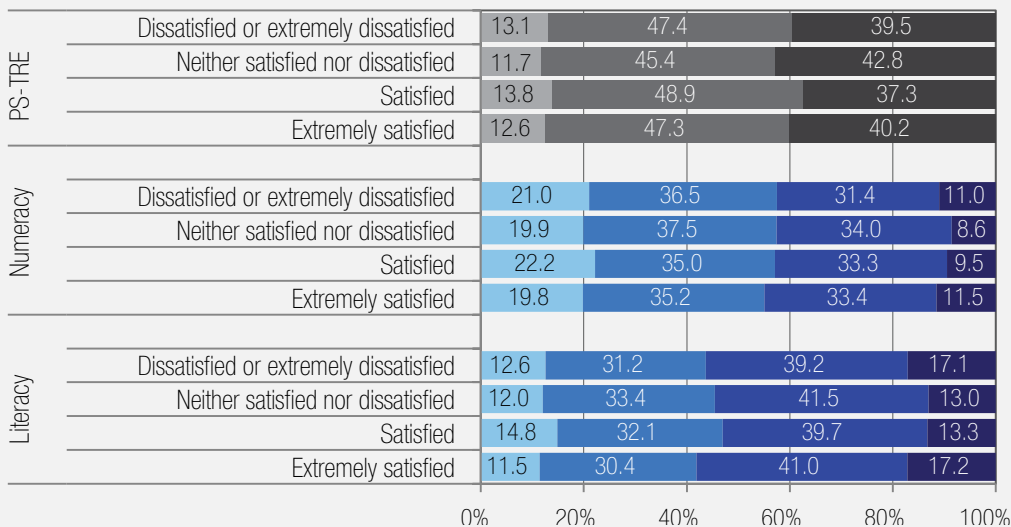
1.11 There is no clear relationship between skills proficiency and job satisfaction.

Figure 10 Incidence of skill proficiency levels of workers aged 16 to 65, by level of job satisfaction, Canada, 2012

Males



Females



Notes: The sample excludes workers who identified themselves as students. The data table corresponding to this figure is Table H.d and the parallel figure for both genders is Figure H.d. One of the questions in PIAAC asks the respondents “how satisfied are you with your current job (paid or unpaid)?” Among five different satisfaction levels, respondents are required to choose the one that best fits their situation, that is, whether they are 1 — extremely satisfied, 2 — satisfied, 3 — neither satisfied nor dissatisfied, 4 — dissatisfied, or 5 — extremely dissatisfied. In this study, to ensure a reliable sample size, the last two levels are combined as “dissatisfied or extremely dissatisfied.”

Source: PIAAC, 2012

1.12 There are no strong associations between previous employment and skills proficiency.

Table 2

Skill proficiency scores of all workers aged 16 to 65, by previous employment, Canada, 2012

Previous work characteristics		Literacy				Numeracy			
		Males		Females		Males		Females	
		obs. est.	521 SE	obs. est.	487 SE	obs. est.	521 SE	obs. est.	487 SE
Number of employers within 5 years	1–2	262	(7.5)	254	(6.3)	252	(7.1)	230	(7.8)
	3–4	265	(6.6)	276	(6.4)	255	(7.6)	252	(7.3)
	5+	259	(11.2)	249	(10.0)	251	(12.9)	226	(10.9)
Job tenure*+	0–5 years	251	(12.1)	257	(8.7)	235	(13.4)	240	(9.8)
	6–10 years	290	(45.1)	233	(30.6)	283	(60.4)	207	(28.1)
	11–15 years	211	(54.0)	271	(21.3)	184	(66.5)	241	(27.0)
	More than 15 years	244	(47.2)	218	(49.9)	253	(46.6)	228	(42.2)
	Missing	264	(5.4)	262	(5.1)	255	(5.6)	237	(6.4)
Contract Type+	Indefinite	266	(7.2)	259	(6.5)	252	(7.4)	238	(7.8)
	Fixed term	269	(6.4)	278	(9.2)	261	(7.6)	249	(10.4)
	Temporary	248	(10.1)	255	(11.7)	244	(13.5)	244	(13.3)
	Other	256	(11.3)	247	(9.1)	249	(11.9)	220	(10.4)
	Missing	299	(40.7)	270	(55.9)	276	(42.3)	253	(69.3)
Reason of Separation+	Dismissed	281	(14.8)	235	(14.0)	279	(15.2)	213	(16.0)
	Laid off or job end	265	(5.3)	270	(8.0)	257	(6.7)	243	(9.8)
	Quit	258	(8.4)	256	(6.5)	244	(7.9)	235	(7.3)
	Missing	257	(16.6)	249	(13.1)	249	(19.3)	229	(14.8)
Years of Experience	0–10 years	263	(6.5)	254	(6.1)	250	(6.4)	237	(7.5)
	11–20 years	267	(11.3)	267	(9.0)	258	(10.7)	236	(10.2)
	More than 20 years	263	(7.3)	261	(9.6)	256	(8.0)	241	(10.6)
	Missing	237	(38.7)	232	(15.7)	225	(45.6)	207	(17.2)
Work Type**+	Full time	260	(9.6)	266	(8.6)	248	(10.9)	247	(8.9)
	Part time	266	(5.2)	260	(5.5)	257	(5.0)	235	(6.9)
	Missing	237	(26.9)	232	(13.2)	227	(31.9)	206	(16.6)
Skill Level +	Management	306	(12.2)	293	(11.0)	298	(15.9)	267	(8.8)
	Skill Level A	303	(13.5)	287	(9.7)	300	(12.7)	270	(11.4)
	Skill Level B	260	(8.8)	274	(8.2)	248	(7.9)	248	(8.4)
	Skill Level C	255	(7.8)	259	(7.3)	247	(8.6)	238	(9.4)
	Skill Level D	258	(8.4)	232	(12.2)	246	(10.2)	206	(12.9)
	Missing	237	(26.9)	231	(13.3)	227	(31.9)	205	(16.6)
Industrial Sector+	Goods-producing sector	258	(6.8)	261	(10.8)	247	(7.9)	239	(11.3)
	Services-producing sector	268	(6.0)	262	(4.9)	260	(5.8)	239	(6.2)
	Missing	237	(26.9)	231	(13.3)	227	(31.9)	205	(16.6)

Notes: The sample excludes workers who identified themselves as students.

* Tenure is computed as the difference between the start year of the last job (E_Q05A2) and the year when the person stopped working in the last job (C_Q08C2).

** Full-time and part-time status is determined based on the number of working hours per week in the last job. If the number of hours is 35 hours or above, it is classified as full time, otherwise, it is considered part time.

+ Tenure, contract type, reason of separation, work type, skill level, and industrial sector are determined based on the last job.

est. Estimate

obs. Observed

Source: PIAAC, 2012



SECTION 2

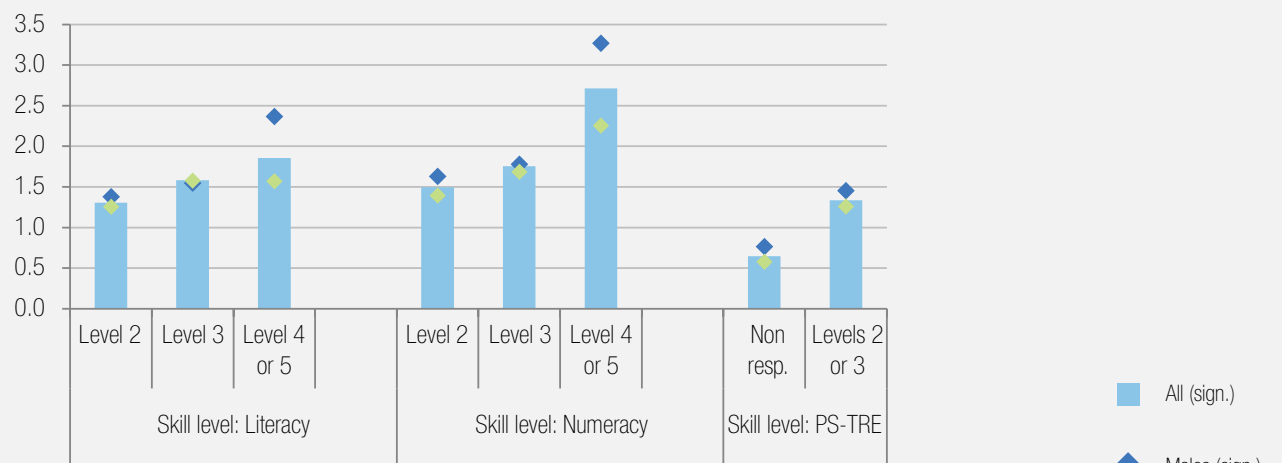
SKILLS AND LABOUR MARKET OUTCOMES

2.1 Higher skills proficiency increases the probability of being employed.

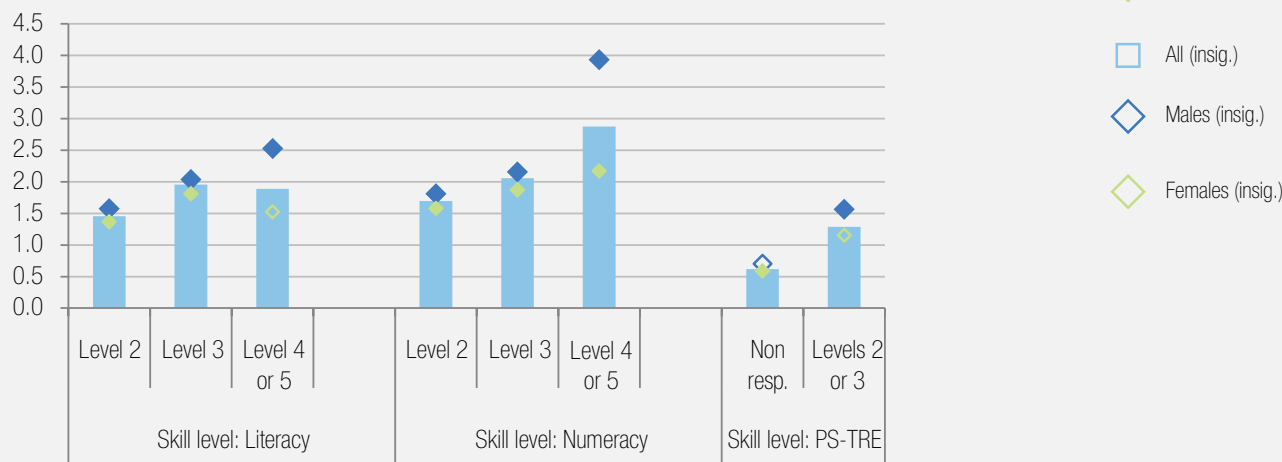
Figure 11 Odds ratio of being employed, by gender and skill domain, 2012

Adults 25–54

Odds ratio



Adults 16–65



Notes: The odds ratio represents the ratio between the likelihood of an outcome in the observed group and that in the reference group (those scoring on proficiency Level 1 or below). Values greater than 1.0 indicate that higher proficiency increases the probability of an outcome; values less than 1.0 mean that higher proficiency decreases the probability of an outcome. For instance, an odds ratio of 1.4 increases the probability by 1.4, while an odds ratio of 0.6 decreases the probability by 40 percent (1–0.6). The regression results are based on a logistic regression of probability of being employed on highest educational attainment, age group, Indigenous status, immigration status, provincial unemployment rate, presence of child(ren) in the household, origin of the highest education credential, and health status. Full regression results can be found in Table I.a (All adults 16–65) and Table I.b (Core-age adults 25–54).

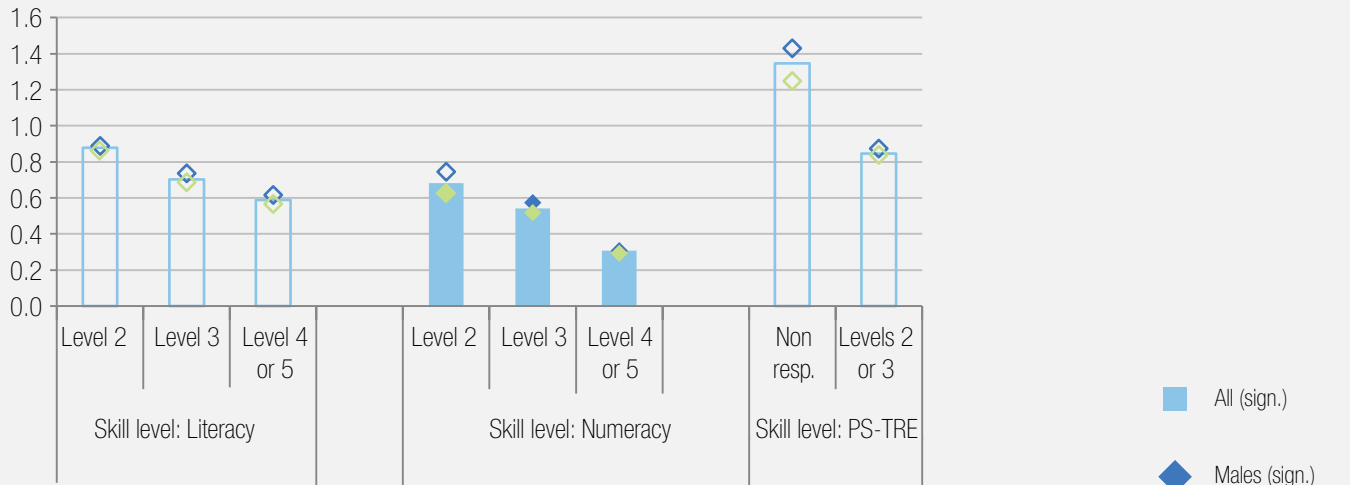
Source: PIAAC, 2012

2.2 Higher numeracy proficiency decreases the probability of being unemployed.

Figure 12 Odds ratio of being unemployed, all adults aged 16 to 65, by gender and skill domain, 2012

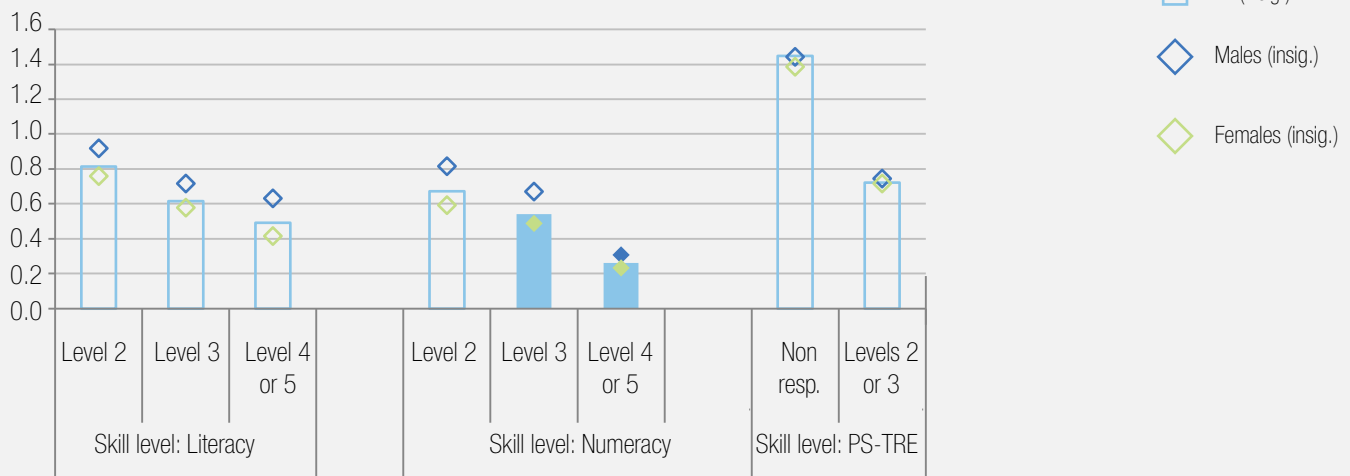
Adults 25–54

Odds ratio



Adults 16–65

Odds ratio



Notes: The odds ratio represents the ratio between the likelihood of an outcome in the observed group and that in the reference group (those scoring on proficiency Level 1 or below). Values greater than 1.0 indicate that higher proficiency increases the probability of an outcome; values less than 1.0 mean that higher proficiency decreases the probability of an outcome. For instance, an odds ratio of 1.4 increases the probability by 1.4, while an odds ratio of 0.6 decreases the probability by 40 percent (1–0.6). The regression results are based on a logistic regression of probability of being unemployed on highest educational attainment, gender, Indigenous status, immigration status, provincial unemployment rate, presence of child(ren) in the household, origin of the highest education credential, and health status. Full regression results can be found in Table I.c (All adults 16–65) and Table I.d (Core-age adults 25–54).

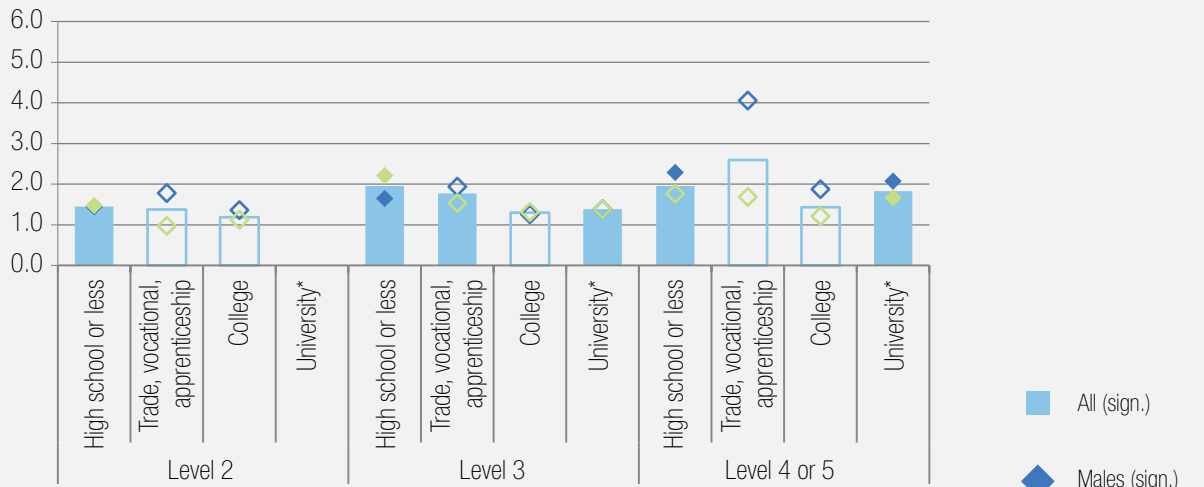
Source: PIAAC, 2012

2.3 Higher skills proficiency generally increases the probability of being employed at each education level. This is especially true among individuals with a university degree or with a high-school diploma or less.

Figure 13 Odds ratio of being employed by education level and proficiency level, adults aged 16 to 65, by gender, 2012

Literacy

Odds ratio



Numeracy

Odds ratio

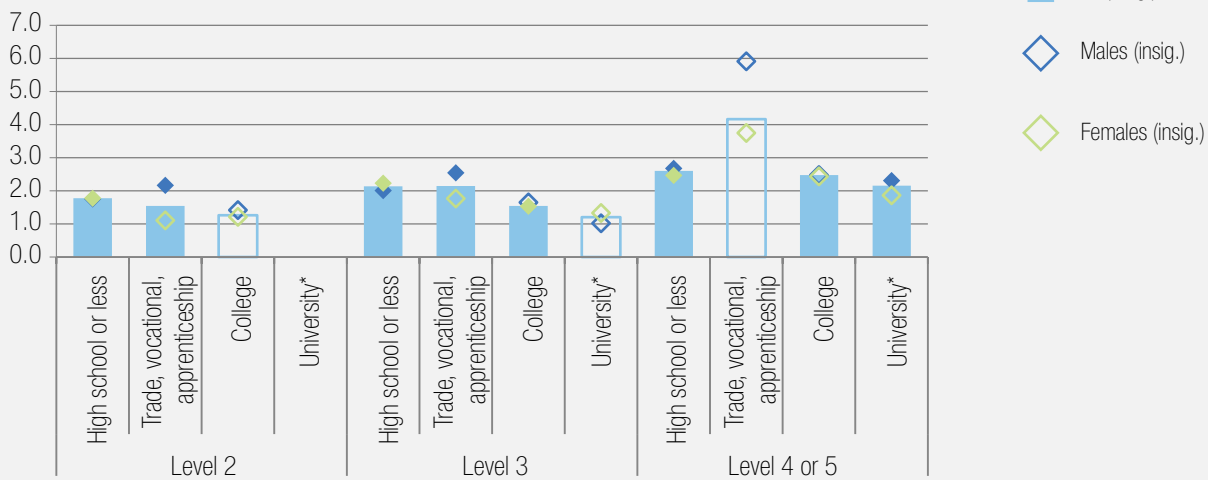
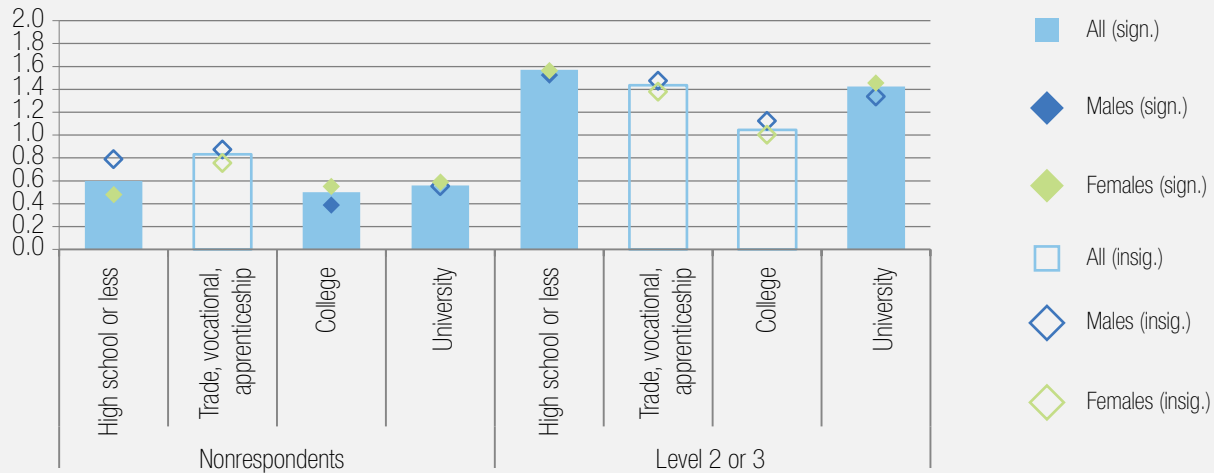


Figure 13 Odds ratio of being employed by education level and proficiency level, adults aged 16 to 65, by gender, 2012 (cont'd)
Problem solving in technology-rich environments (PS-TRE)

Odds ratio



Notes: The odds ratio represents the ratio between the likelihood of an outcome in the observed group and that in the reference group (those scoring on proficiency Level 1 or below). Values greater than 1.0 indicate that higher proficiency increases the probability of an outcome; values less than 1.0 mean that higher proficiency decreases the probability of an outcome. For instance, an odds ratio of 1.4 increases the probability by 1.4, while an odds ratio of 0.6 decreases the probability by 40 percent (1–0.6). For each education level, the regression results are based on a logistic regression of probability of being employed on age group, Indigenous status, immigration status, provincial unemployment rate, presence of child(ren) in the household, origin of the highest education credential, and health status.

For university education, due to the small sample size of those performing on proficiency Level 1 or below, a different reference group, “proficiency Level 2 or below” is used.

Further results of the odds ratio of being employed by International Standard Classification of Education (ISCED) level can be found in Figure I.a.

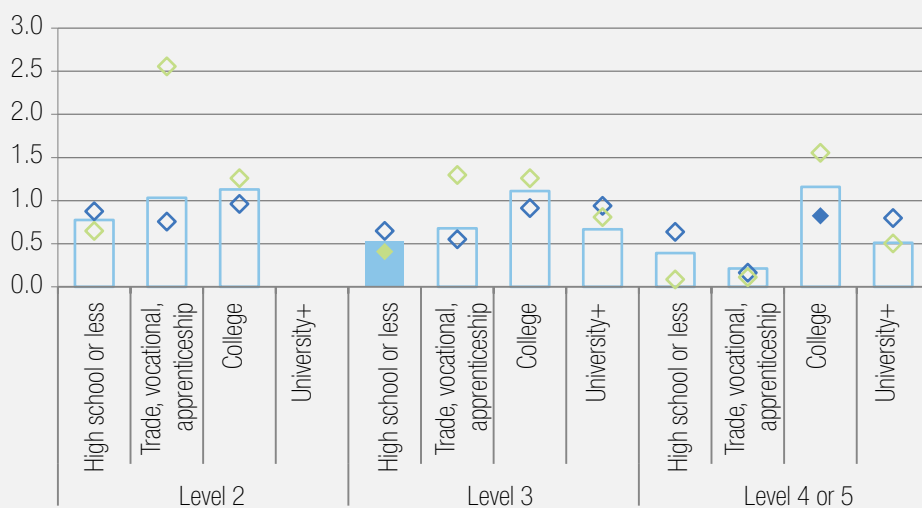
Source: PIAAC, 2012

2.4 Higher numeracy proficiency among labour force participants with high school or less generally decreases the probability of being unemployed.

Figure 14 Odds ratio of being unemployed by education level and proficiency level, adults aged 16 to 65, by gender, 2012

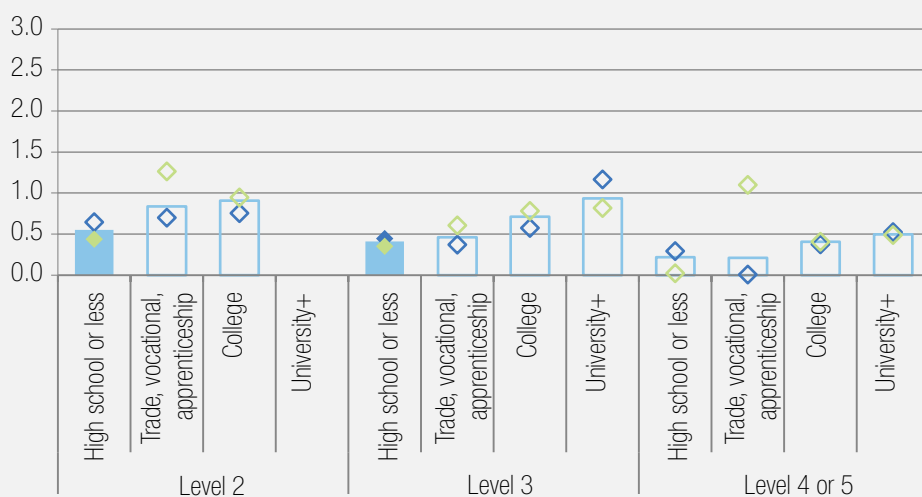
Literacy

Odds ratio



Numeracy

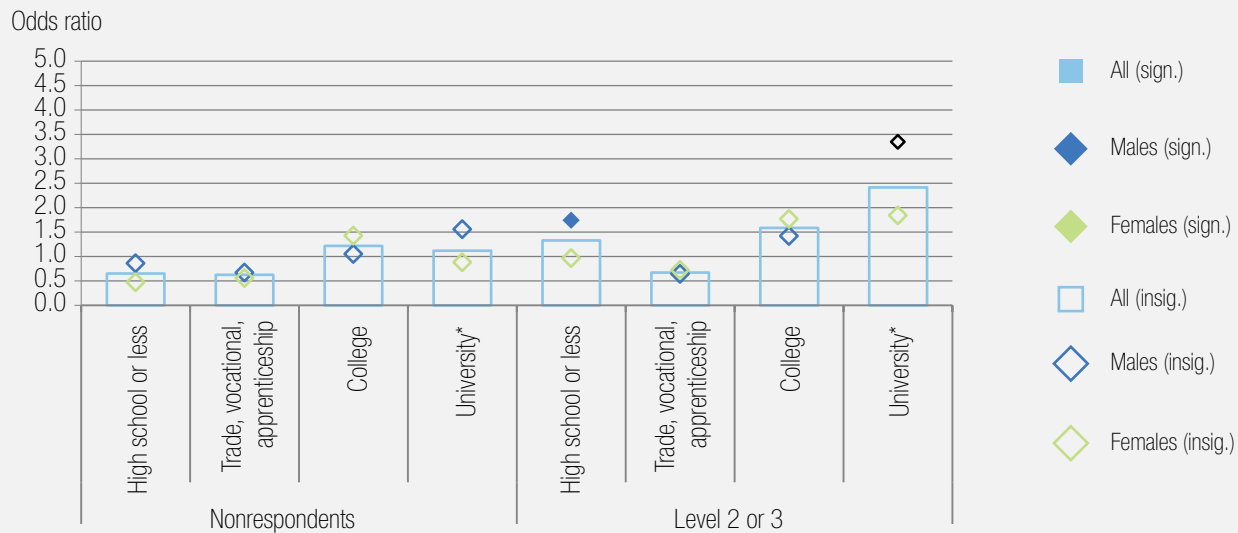
Odds ratio



- All (sign.)
- ◆ Males (sign.)
- ◆ Females (sign.)
- All (insig.)
- ◇ Males (insig.)
- ◇ Females (insig.)

Figure 14 Odds ratio of being unemployed by education level and proficiency level, adults aged 16 to 65, by gender, 2012 (cont'd)

Problem solving in technology-rich environments (PS-TRE)



Notes: The odds ratio represents the ratio between the likelihood of an outcome in the observed group and that in the reference group (those scoring on proficiency Level 1 or below). Values greater than 1.0 indicate that higher proficiency increases the probability of an outcome; values less than 1.0 mean that higher proficiency decreases the probability of an outcome. For instance, an odds ratio of 1.4 increases the probability by 1.4, while an odds ratio of 0.6 decreases the probability by 40 percent (1–0.6). For each education level, the regression results are based on a logistic regression of probability of being unemployed on Indigenous status, immigration status, provincial unemployment rate, presence of child(ren) in the household, origin of the highest education credential, experience of full-time work, and health status.

*For university education, due to the small sample size of those performing on proficiency Level 1 or below, a different reference group, “proficiency Level 2 or below” is used.

Further results of the odds ratio of being employed by ISCED level can be found in Figure I.b.

Source: PIAAC, 2012

2.5 Higher skills proficiency increases the probability of being employed among recent immigrants.

Figure 15 Odds ratio of being employed for all adults aged 16 to 65, by immigration status and gender, 2012

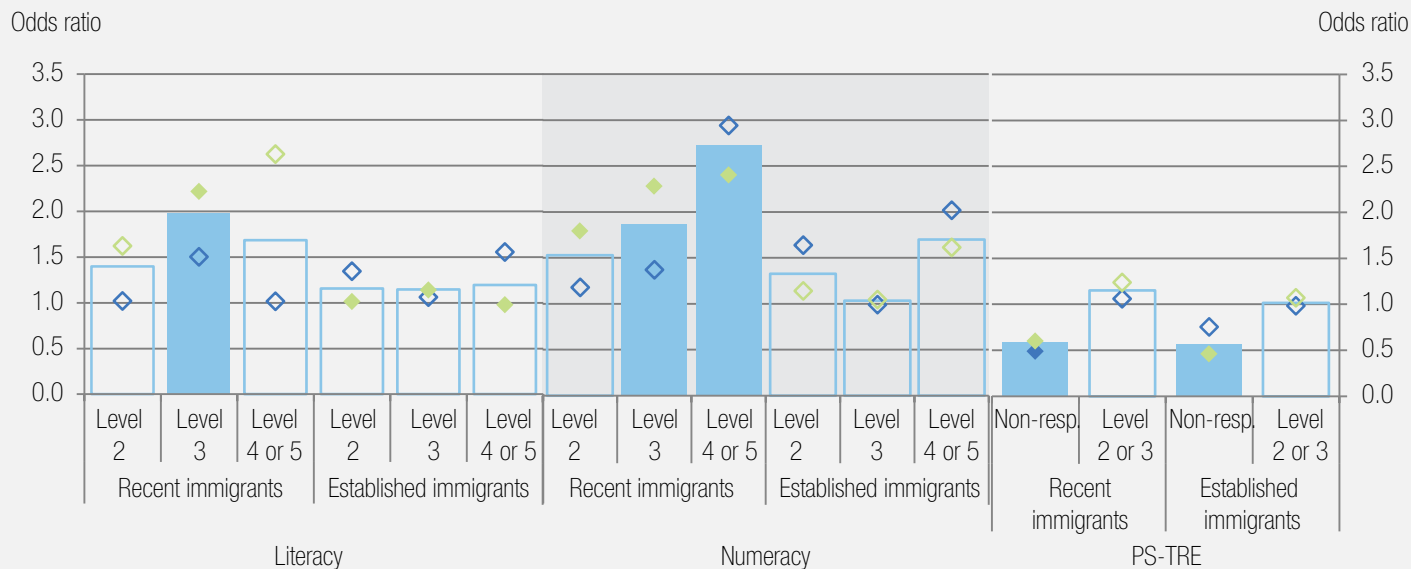
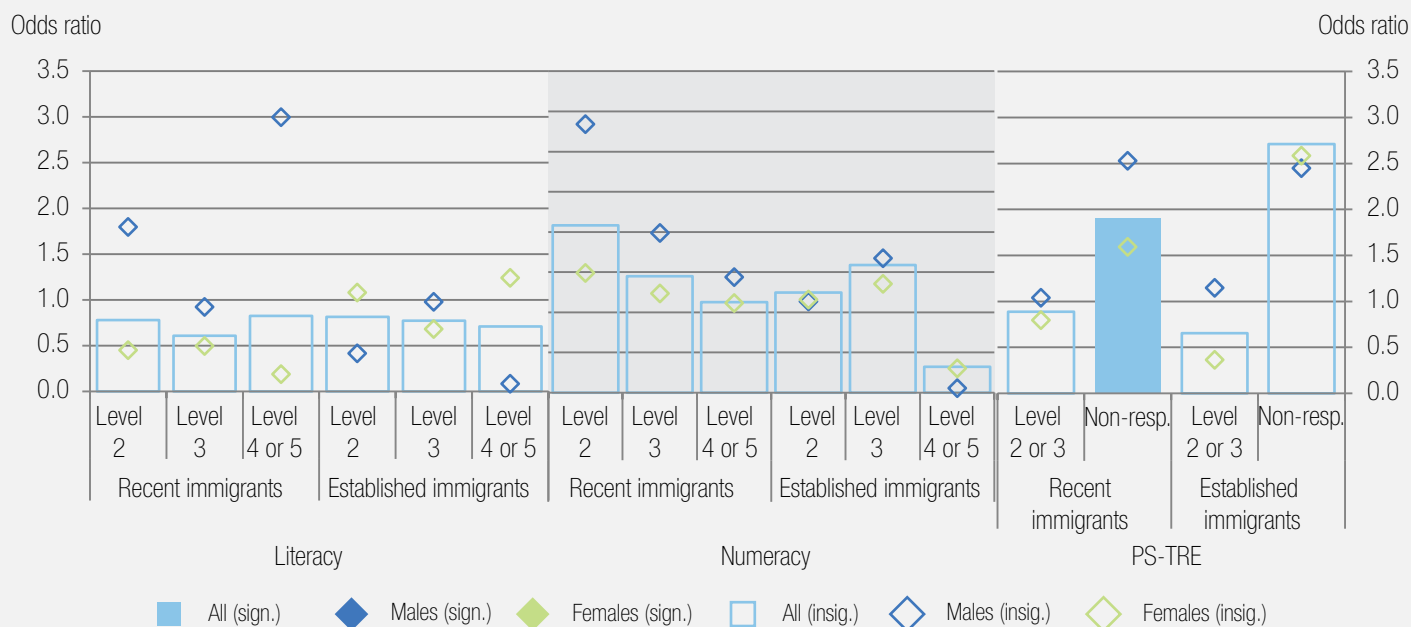


Figure 16 Odds ratio of being unemployed for all adults aged 16 to 65, by immigration status and gender, 2012



Notes: Recent immigrants are those who landed in the past five years and established immigrants are those who landed in Canada at least five years ago. The odds ratio represents the ratio between the likelihood of an outcome in the observed group and that in the reference group (those scoring on proficiency Level 1 or below). Values greater than 1.0 indicate that higher proficiency increases the probability of an outcome; values less than 1.0 mean that higher proficiency decreases the probability of an outcome. For instance, an odds ratio of 1.4 increases the probability by 1.4, while an odds ratio of 0.6 decreases the probability by 40 percent (1–0.6). For each immigration category the regression results are based on a logistic regression of probability of being employed/unemployed on highest educational attainment, gender, age group, origin of foreign credentials, presence of child(ren) in the household, provincial unemployment rate, and health status. Full regression results can be found in Table I.e, Table I.f, and Table I.g for likelihood of employment and Table I.h, Table I.i and Table I.j for likelihood of unemployment.

Source: PIAAC, 2012

2.6 Hourly earnings increase with skills proficiency and education. Most of the time, earnings are also higher among males than among females.

Table 3

Average and median hourly earnings indices, and hourly earnings indices at 1st and 3rd quartiles of population aged 16 to 65, by skill proficiency level and gender, Canada, 2012

Earnings and skill proficiency		Average	1 st quartile	Median	3 rd quartile
Males	Literacy				
	Level 2	1.21	1.09	1.22	1.25
	Level 3	1.44	1.40	1.50	1.48
	Levels 4 or 5	1.66	1.72	1.80	1.70
	Numeracy				
	Level 2	1.22	1.16	1.25	1.26
	Level 3	1.44	1.48	1.55	1.47
	Levels 4 or 5	1.72	1.84	1.87	1.76
	PS-TRE				
	PS-TRE nonrespondents	0.85	0.94	0.80	0.83
Levels 2 or 3	1.15	1.25	1.19	1.16	
Females	Literacy				
	Level 2	1.13	1.10	1.20	1.20
	Level 3	1.39	1.36	1.50	1.52
	Levels 4 or 5	1.66	1.66	1.84	1.81
	Numeracy				
	Level 2	1.16	1.11	1.23	1.22
	Level 3	1.41	1.42	1.52	1.52
	Levels 4 or 5	1.71	1.80	1.88	1.84
	PS-TRE				
	PS-TRE nonrespondents	0.85	0.89	0.80	0.78
Levels 2 or 3	1.20	1.26	1.23	1.22	

Table 4

Average and median hourly earnings indices, and hourly earnings indices at 1st and 3rd quartiles of population aged 16 to 65, by highest educational attainment and gender, Canada, 2012

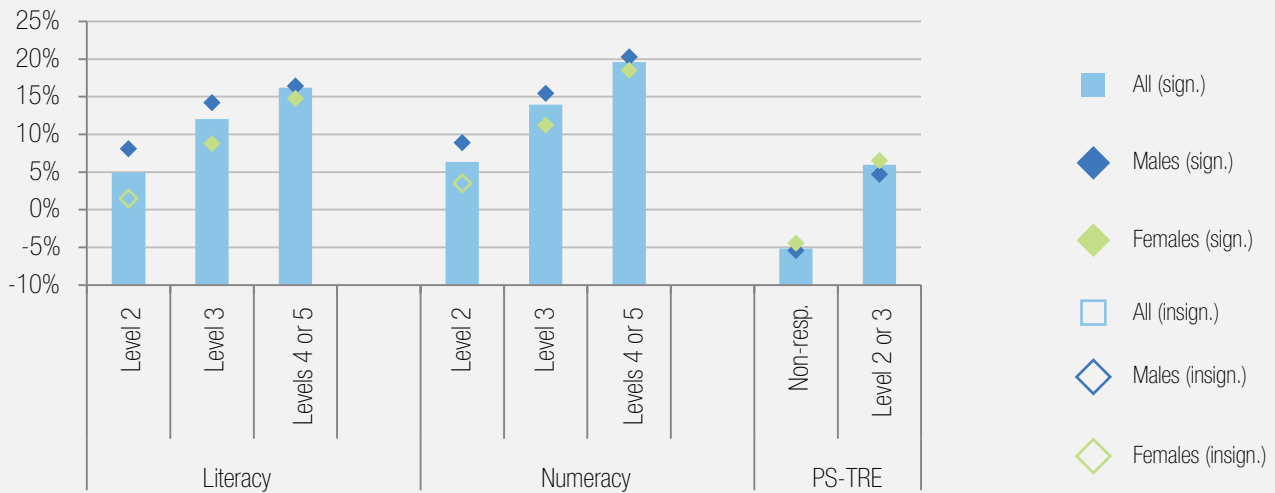
Earnings and education		Average	1 st quartile	Median	3 rd quartile
Males	Trades, vocational, apprenticeship	1.27	1.37	1.35	1.27
	College	1.33	1.43	1.40	1.36
	University	1.67	1.83	1.82	1.70
	Canadian credentials	1.75	1.91	1.89	1.78
	Foreign credential	1.43	1.38	1.55	1.50
	Western countries	1.65	1.86	1.81	1.68
	Rest of the world	1.32	1.30	1.45	1.42
	Females	Trades, vocational, apprenticeship	1.12	1.23	1.20
College		1.34	1.44	1.41	1.40
University		1.71	1.81	1.89	1.87
Canadian credentials		1.83	2.04	2.01	1.92
Foreign credential		1.34	1.23	1.32	1.48
Western countries		1.71	1.87	1.76	1.95
Rest of the world		1.20	1.07	1.16	1.25

Notes: Hourly earnings indices by proficiency level are computed as the relative ratio of hourly earnings with respect to that of the base group, which is those at proficiency Level 1 or below. Hourly earnings indices by education are computed as the relative ratio of hourly earnings with respect to that of the base group, which is those workers with high school or less education.

Source: PIAAC, 2012

2.7 The skill premium increases with proficiency levels.

Figure 17 Impacts (in %) of skill proficiency levels on hourly earnings for workers aged 16 to 65, Canada, 2012



Notes: The regression results are based on linear regression of hourly earnings in logarithm form on gender, experience, foreign education, highest educational attainment, experience, occupational type, establishment size, presence of child(ren), health status, full-time/part-time job, and provincial unemployment rate. Full regression results can be found in Annex J.a.

Source: PIAAC, 2012

2.8 The skills premium increases with skills proficiency levels across all education levels.

Figure 18 Impacts (in %) of proficiency levels on hourly earnings by level of education, workers aged 16 to 65, Canada, 2012

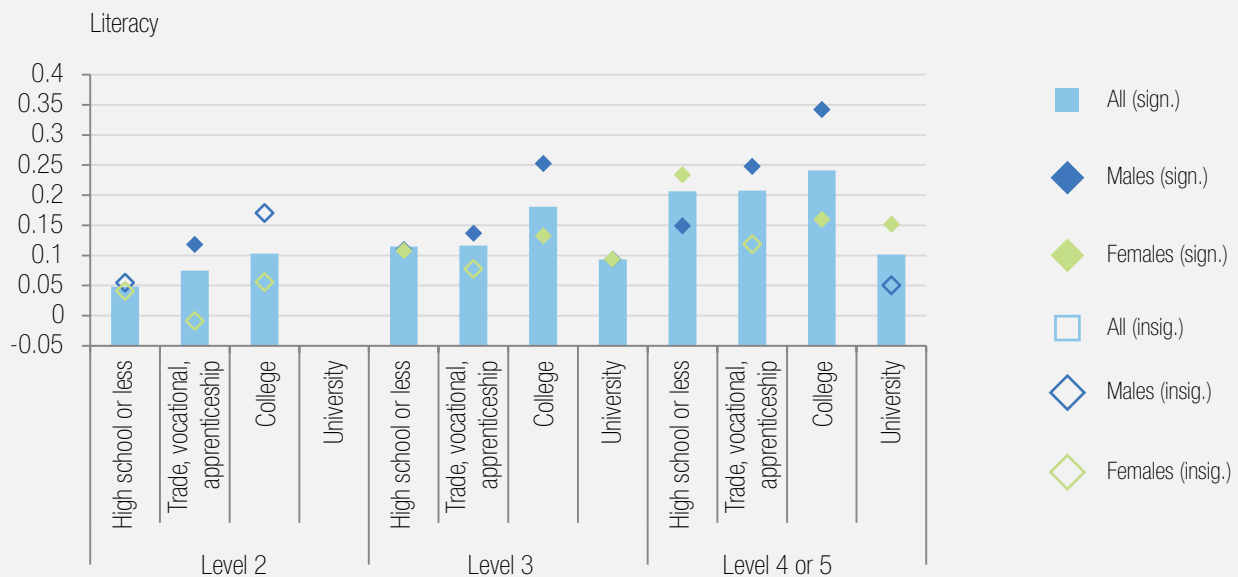
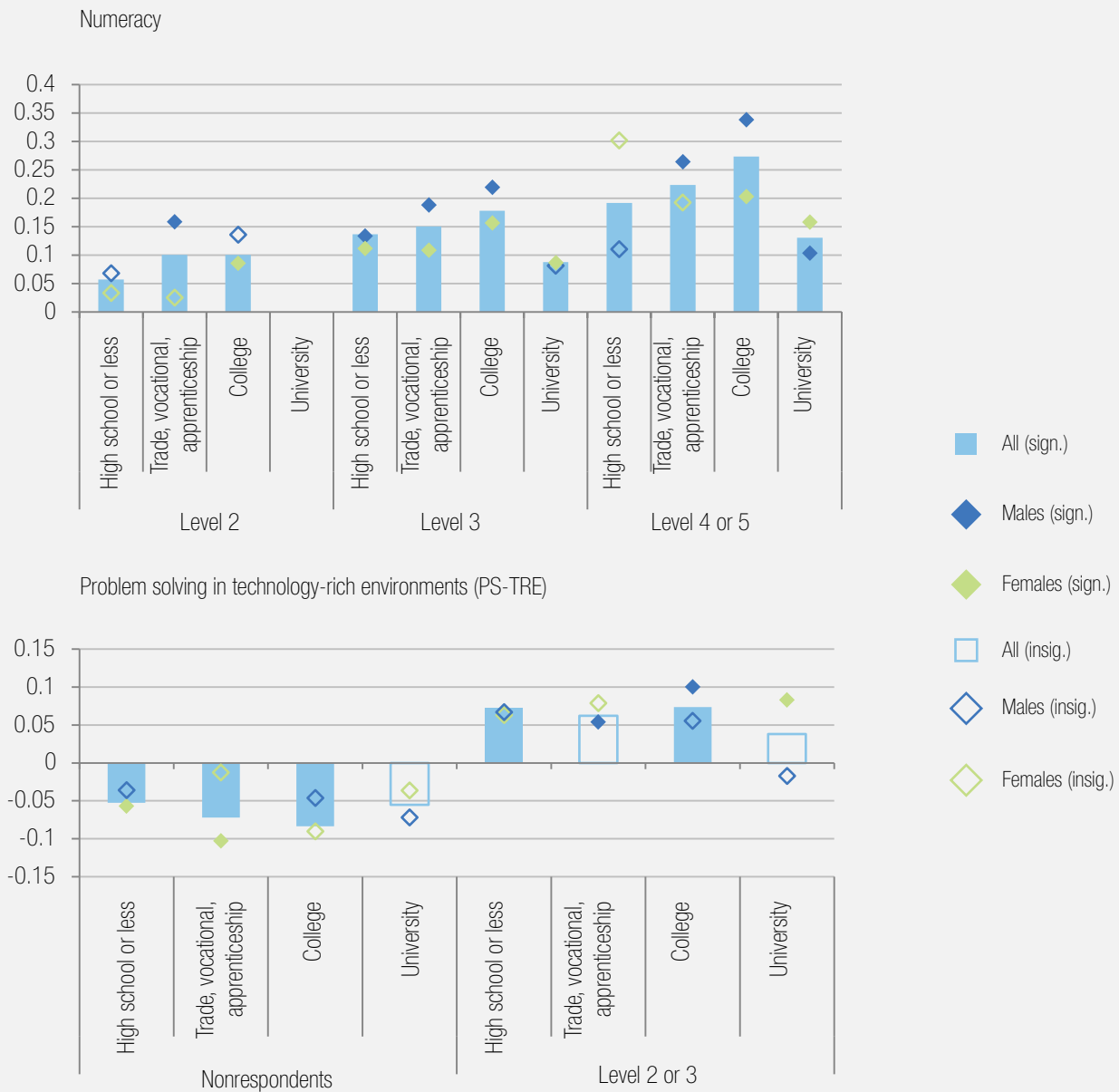


Figure 18 Impacts (in %) of proficiency levels on hourly earnings by level of education, workers aged 16 to 65, Canada, 2012 (cont'd)

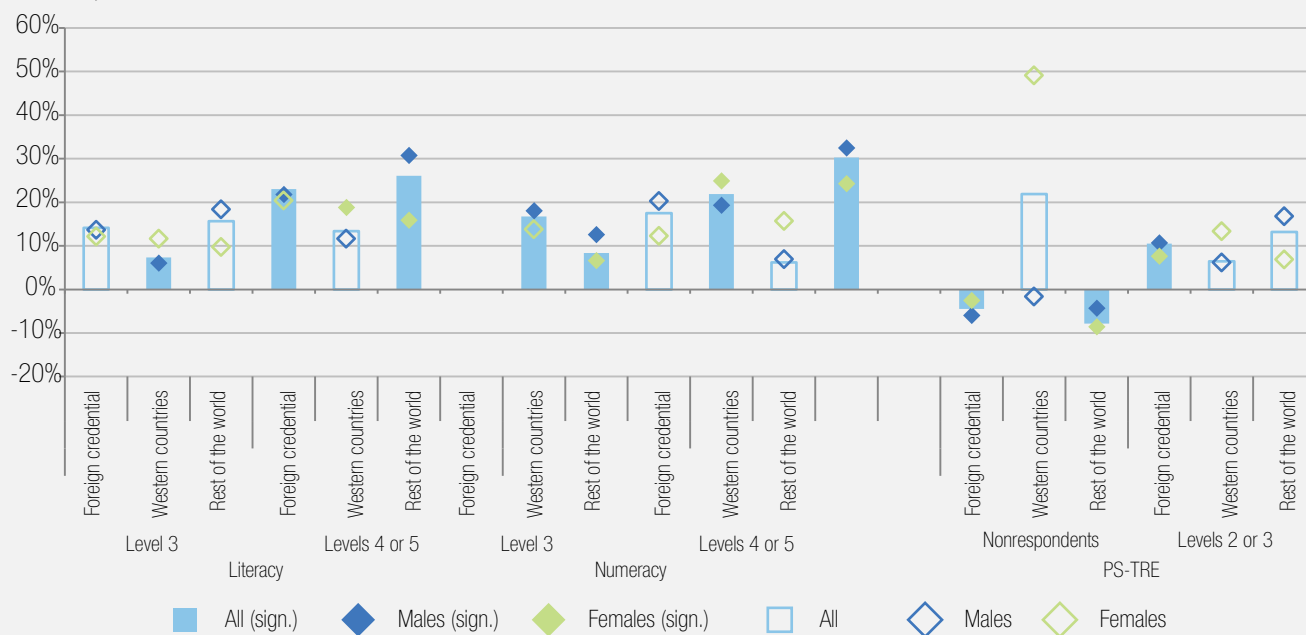


Notes: The regression results are based on linear regression of hourly earnings in logarithm form on firm size, health status, immigrant status, foreign education, experience squared, NOC skill type, full/part-time status, and provincial unemployment rate. For education categories within "University," only 5 percent scored at Level 1 or below in literacy and 7 percent scored at Level 1 or below in numeracy. So the skill proficiency reference group is expanded to include Level 2 and below. Supporting numbers for these figures can be found in Table J.b. Supporting numbers for regression results by the ISCED education level can be found in Table J.c.

Source: PIAAC, 2012

2.9 The skill premium also increases with skills proficiency levels among workers who obtained their highest level of education abroad. This is especially true among those who obtained their education in a nonWestern country.

Figure 19 Impacts (in %) of proficiency levels on hourly earnings by location of university credential, workers aged 16 to 65, Canada, 2012



Notes: The regression results are based on linear regressions of hourly earnings in logarithm form on firm size, health status, immigrant status, foreign education, experience squared, NOC skill type, full/part-time status, and provincial unemployment rate. The skill proficiency reference is Level 2 or below for literacy and numeracy domains and Level 1 or below for the PS-TRE domain. Supporting numbers for this figure can be found in Table J.d.

Source: PIAAC, 2012



ANNEX A

EMPLOYMENT RATE (E) AND UNEMPLOYMENT RATE (U) BY SKILL PROFICIENCY LEVEL, CANADA, 2012

Table A.a**Literacy**

		Level 1 or below		Level 2		Level 3		Level 4 or 5			
		%	(SE)	%	(SE)	%	(SE)	%	(SE)		
Males	E	73.9	(1.6)	83.1	(1.3)	88.2	(0.9)	93.6	(1.0)		
	U	6.0	(1.1)	m	4.7	(0.7)	3.4	(0.6)	m	2.5	(0.8)
Females	E	58.4	(1.8)	72.5	(1.1)	82.1	(0.9)	86.1	(1.7)		
	U	7.5	(1.4)	m	5.1	(0.7)	3.4	(0.5)	2.4	(0.8)	m
All	E	66.1	(1.2)	77.7	(0.9)	85.2	(0.7)	90.1	(1.0)		
	U	6.7	(0.9)	4.9	(0.5)	3.4	(0.4)	2.5	(0.5)	m	

Table A.b**Numeracy**

		Level 1 or below		Level 2		Level 3		Level 4 or 5			
		%	(SE)	%	(SE)	%	(SE)	%	(SE)		
Males	E	72.6	(1.6)	84.1	(1.2)	88.6	(1.0)	94.3	(1.1)		
	U	7.0	(1.1)	4.7	(0.8)	m	3.2	(0.6)	m	1.7	(0.6)
Females	E	60.7	(1.3)	75.9	(1.3)	83.5	(1.3)	89.5	(2.4)		
	U	7.9	(1.2)	4.2	(0.7)	3.0	(0.6)	m	1.7	(1.0)	u
All	E	65.8	(1.0)	79.7	(0.9)	86.2	(0.8)	92.7	(1.2)		
	U	7.5	(0.8)	4.4	(0.5)	3.1	(0.5)	1.7	(0.5)	m	

Table A.c**PS-TRE**

		Nonrespondents		Level 1 or below		Level 2 or 3		
		%	(SE)	%	(SE)	%	(SE)	
Males	E	72.6	(1.6)	84.6	(0.8)	92.0	(0.8)	
	U	5.8	(1.2)	m	4.0	(0.5)	3.4	(0.6)
Females	E	54.7	(1.6)	75.6	(0.9)	86.2	(1.1)	
	U	7.0	(1.4)	m	4.5	(0.5)	3.2	(0.5)
All	E	63.8	(1.0)	80.0	(0.6)	89.2	(0.7)	
	U	6.3	(0.9)	4.2	(0.4)	3.3	(0.4)	

Notes: The lower-case *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either “unacceptable” (when $CV > 33.3\%$) or “marginally acceptable” ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level. Uppercase E and U refer to employed or unemployed.

SE Standard error

Source: PIAAC, 2012



ANNEX B

SKILLS PROFICIENCY IN GOODS- AND SERVICES- PRODUCING SECTORS

Table B.a

Literacy — Incidence of skill proficiency levels of workers aged 16 to 65, Canada, 2012

		Level 1 or below		Level 2		Level 3		Level 4 or 5	
		%	(SE)	%	(SE)	%	(SE)	%	(SE)
Males	Goods-producing sector	18.5	(1.4)	34.3	(1.8)	36.2	(1.9)	11.0	(1.1)
	Services-producing sector	12.5	(0.7)	29.1	(1.2)	39.7	(1.3)	18.7	(1.1)
Females	Goods-producing sector	16.3	(2.3)	32.8	(3.6)	38.5	(3.3)	12.4	(2.3) m
	Services-producing sector	13.0	(0.7)	31.4	(1.2)	40.6	(1.2)	15.0	(0.9)
All	Goods-producing sector	18.0	(1.2)	34.0	(1.5)	36.7	(1.7)	11.3	(1.1)
	Services-producing sector	12.8	(0.5)	30.3	(0.9)	40.2	(0.9)	16.7	(0.7)

Table B.b

Numeracy — Incidence of skill proficiency levels of workers aged 16 to 65, Canada, 2012

		Level 1 or below		Level 2		Level 3		Level 4 or 5	
		%	(SE)	%	(SE)	%	(SE)	%	(SE)
Males	Goods-producing sector	19.7	(1.6)	31.8	(2.0)	33.6	(1.8)	15.0	(1.3)
	Services-producing sector	15.7	(0.8)	28.0	(1.1)	36.8	(1.4)	19.5	(1.0)
Females	Goods-producing sector	23.7	(2.6)	34.9	(3.0)	30.1	(3.2)	11.3	(2.4) m
	Services-producing sector	20.8	(0.9)	35.4	(1.2)	33.8	(1.2)	10.0	(0.7)
All	Goods-producing sector	20.5	(1.4)	32.4	(1.7)	32.9	(1.6)	14.2	(1.1)
	Services-producing sector	18.5	(0.6)	32.0	(0.8)	35.2	(1.0)	14.3	(0.6)

Table B.c

PS-TRE — Incidence of skill proficiency levels of workers aged 16 to 65, Canada, 2012

		Nonrespondents		Level 1 or below		Level 2 or 3	
		%	(SE)	%	(SE)	%	(SE)
Males	Goods-producing sector	18.3	(1.3)	50.6	(1.8)	31.1	(1.6)
	Services-producing sector	14.7	(0.9)	43.2	(1.3)	42.0	(1.2)
Females	Goods-producing sector	18.7	(2.2)	47.5	(3.2)	33.9	(3.1)
	Services-producing sector	12.5	(0.6)	47.8	(1.1)	39.7	(1.1)
All	Goods-producing sector	18.4	(1.0)	50.0	(1.6)	31.7	(1.5)
	Services-producing sector	13.5	(0.5)	45.7	(0.9)	40.7	(0.8)

Notes: The sample excludes workers who identify as students. The lower-case *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either “unacceptable” (when $CV > 33.3\%$) or “marginally acceptable” ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level.

SE Standard error

Source: PIAAC, 2012



ANNEX C

SKILL PROFICIENCY LEVELS OF WORKERS AGED 16 TO 65, BY SECTOR, CANADA, 2012

Table C.a

Literacy — Incidence of literacy proficiency levels of workers aged 16 to 65, by industry, Canada, 2012

		Level 1 or below			Level 2			Level 3			Level 4 or 5		
		%	(SE)		%	(SE)		%	(SE)		%	(SE)	
Males	01 Agriculture	17.8	(5.8)	m	37.1	(6.5)	m	36.3	(6.6)	m	8.9	(4.2)	u
	02 Forestry, fishing, mining, quarrying, oil and gas	12.1	(3.8)	m	32.6	(5.4)	m	39.7	(6.6)	m	15.6	(4.5)	m
	03 Utilities	8.8	(4.9)	u	19.8	(6.7)	u	49.3	(9.8)	m	22.1	(8.1)	u
	04 Construction	21.8	(2.6)		39.7	(3.2)		32.5	(3.2)		6.0	(1.5)	m
	05 Manufacturing	18.3	(1.9)		31.6	(2.5)		37.1	(2.6)		13.1	(1.8)	
	06 Trade	17.6	(1.9)		35.1	(2.8)		35.4	(2.6)		12.0	(2.0)	m
	07 Transportation and warehousing	19.6	(2.8)		38.0	(3.7)		34.8	(3.9)		7.6	(2.5)	m
	08 Finance, insurance, real estate, and leasing	5.5	(1.8)	m	22.3	(3.8)	m	46.5	(4.4)		25.7	(3.9)	
	09 Professional, scientific, and technical services	4.5	(1.6)	u	18.1	(2.7)		46.4	(3.8)		31.0	(3.9)	
	10 Business, building, and other support services	21.4	(3.6)	m	35.7	(4.6)		34.3	(4.3)		8.5	(2.9)	u
	11 Educational services	4.8	(1.7)	u	21.3	(3.5)		44.1	(4.6)		29.8	(4.5)	
	12 Health care and social assistance	11.0	(2.3)	m	28.4	(4.5)		40.8	(4.5)		19.8	(3.6)	m
	13 Information, culture, and recreation	7.6	(2.0)	m	18.9	(3.3)	m	46.8	(5.2)		26.7	(4.3)	
	14 Accommodation and food services	19.1	(3.8)	m	39.8	(5.3)		34.5	(5.3)		6.7	(2.4)	u
	15 Other services	19.5	(3.7)	m	36.6	(5.6)		32.2	(5.5)	m	11.8	(3.6)	m
	16 Public administration	6.2	(2.1)	u	23.3	(3.9)	m	42.7	(4.8)		27.7	(4.1)	
Females	01 Agriculture	14.6	(6.5)	u	38.0	(11.3)	m	41.1	(9.7)	m	6.3	(4.4)	u
	02 Forestry, fishing, mining, quarrying, oil and gas	14.5	(10.6)	u	24.2	(9.7)	u	48.1	(12.8)	m	13.2	(10.6)	u
	03 Utilities	8.7	(9.2)	u	25.6	(15.7)	u	49.8	(19.8)	u	16.0	(13.7)	u
	04 Construction	8.8	(4.6)	u	35.8	(6.4)	m	38.3	(8.1)	m	17.2	(6.8)	u
	05 Manufacturing	19.9	(3.3)		32.5	(4.2)		35.9	(4.0)		11.7	(2.7)	m
	06 Trade	18.3	(2.4)		39.8	(3.2)		34.4	(2.8)		7.5	(1.6)	m
	07 Transportation and warehousing	20.5	(6.2)	m	36.9	(8.0)	m	36.5	(6.8)	m	6.1	(2.9)	u
	08 Finance, insurance, real estate, and leasing	9.8	(2.3)	m	33.8	(4.3)		41.1	(4.1)		15.3	(3.0)	m
	09 Professional, scientific, and technical services	4.8	(1.6)	u	23.3	(3.6)		47.4	(3.9)		24.5	(3.4)	
	10 Business, building, and other support services	15.4	(4.1)	m	35.9	(5.6)		38.7	(5.2)		9.9	(3.6)	u
	11 Educational services	7.0	(1.6)	m	23.1	(2.6)		46.2	(3.6)		23.7	(3.2)	
	12 Health care and social assistance	14.2	(1.3)		31.7	(2.1)		39.3	(2.2)		14.7	(1.9)	
	13 Information, culture, and recreation	4.7	(1.7)	u	26.1	(4.2)		52.8	(5.4)		16.4	(4.1)	m
	14 Accommodation and food services	27.0	(4.0)		39.5	(4.5)		29.4	(3.8)		4.2	(1.6)	u
	15 Other services	17.5	(3.6)	m	36.7	(5.7)		33.6	(5.3)		12.2	(3.1)	m
	16 Public administration	5.3	(1.5)	m	20.6	(3.1)		51.3	(4.0)		22.8	(3.2)	

Table C.a (cont'd)

Literacy — Incidence of literacy proficiency levels of workers aged 16 to 65, by industry, Canada, 2012

		Level 1 or below			Level 2			Level 3			Level 4 or 5		
		%	(SE)		%	(SE)		%	(SE)		%	(SE)	
All	01 Agriculture	16.7	(4.3)	m	37.4	(5.8)		38.0	(5.2)		8.0	(3.2)	u
	02 Forestry, fishing, mining, quarrying, oil and gas	12.6	(3.4)	m	31.1	(4.8)		41.2	(5.8)		15.2	(3.8)	m
	03 Utilities	8.8	(4.2)	u	21.0	(6.5)	m	49.4	(8.8)	m	20.8	(7.1)	u
	04 Construction	20.2	(2.2)		39.2	(2.8)		33.3	(3.0)		7.4	(1.6)	m
	05 Manufacturing	18.7	(1.7)		31.8	(2.2)		36.8	(2.1)		12.7	(1.5)	
	06 Trade	17.9	(1.3)		37.3	(1.9)		34.9	(1.8)		9.9	(1.4)	
	07 Transportation and warehousing	19.8	(2.7)		37.7	(3.5)		35.2	(3.6)		7.2	(2.2)	m
	08 Finance, insurance, real estate, and leasing	7.7	(1.5)	m	28.3	(2.9)		43.7	(2.9)		20.3	(2.4)	
	09 Professional, scientific, and technical services	4.7	(1.1)	m	20.4	(2.4)		46.8	(2.9)		28.1	(2.7)	
	10 Business, building, and other support services	18.8	(2.8)		35.8	(3.7)		36.3	(3.1)		9.1	(2.5)	m
	11 Educational services	6.3	(1.2)	m	22.5	(2.3)		45.5	(3.0)		25.7	(2.8)	
	12 Health care and social assistance	13.7	(1.2)		31.1	(1.8)		39.6	(1.9)		15.6	(1.7)	
	13 Information, culture, and recreation	6.3	(1.3)	m	22.1	(2.5)		49.4	(3.9)		22.2	(3.0)	
	14 Accommodation and food services	23.6	(3.0)		39.6	(3.8)		31.6	(3.2)		5.3	(1.5)	m
	15 Other services	18.5	(2.5)		36.7	(3.9)		32.9	(4.0)		12.0	(2.5)	m
	16 Public administration	5.7	(1.2)	m	21.9	(2.3)		47.3	(2.6)		25.1	(2.5)	

Notes: The lower-case *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either "unacceptable" (when $CV > 33.3\%$) or "marginally acceptable" ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level.

SE Standard error

Source: PIAAC, 2012

Table C.b

Numeracy — Incidence of numeracy proficiency levels of workers aged 16 to 65, by industry, Canada, 2012

		Level 1 or below			Level 2			Level 3			Level 4 or 5		
		%	(SE)		%	(SE)		%	(SE)		%	(SE)	
Males	01 Agriculture	20.2	(5.7)	m	36.4	(6.8)	m	31.3	(7.2)	m	12.1	(4.7)	u
	02 Forestry, fishing, mining, quarrying, oil and gas	14.9	(4.2)	m	31.7	(5.4)	m	32.2	(4.5)		21.3	(4.0)	m
	03 Utilities	8.8	(4.9)	u	20.2	(7.9)	u	39.5	(9.9)	m	31.5	(8.1)	m
	04 Construction	22.5	(2.7)		35.9	(3.3)		32.2	(3.0)		9.4	(1.9)	m
	05 Manufacturing	19.4	(2.0)		29.1	(2.4)		34.8	(2.7)		16.7	(2.2)	
	06 Trade	21.5	(2.1)		32.6	(2.7)		33.3	(2.2)		12.6	(2.0)	
	07 Transportation and warehousing	25.4	(3.2)		34.6	(3.9)		30.9	(4.1)		9.0	(2.9)	m
	08 Finance, insurance, real estate, and leasing	6.6	(1.7)	m	22.9	(3.9)	m	42.4	(4.8)		28.2	(3.8)	
	09 Professional, scientific, and technical services	5.9	(1.7)	m	15.9	(2.9)	m	41.7	(4.1)		36.4	(4.1)	
	10 Business, building, and other support services	23.7	(4.3)	m	33.8	(5.4)		34.5	(4.6)		8.0	(3.3)	u
	11 Educational services	8.5	(2.2)	m	23.0	(4.1)	m	42.4	(4.8)		26.2	(4.6)	m
	12 Health care and social assistance	13.9	(2.8)	m	32.9	(5.3)		33.2	(5.1)		20.0	(3.6)	m
	13 Information, culture, and recreation	8.0	(2.2)	m	22.4	(4.2)	m	43.0	(5.1)		26.6	(4.4)	m
	14 Accommodation and food services	24.8	(3.9)		36.8	(4.7)		30.7	(4.9)		7.8	(2.8)	u
	15 Other services	23.0	(3.8)	m	35.0	(5.1)		30.7	(5.0)		11.3	(3.5)	m
	16 Public administration	9.8	(2.6)	m	21.1	(3.3)		43.1	(4.9)		26.0	(4.0)	
Females	01 Agriculture	20.9	(9.5)	u	39.7	(12.3)	m	33.4	(10.5)	m	6.0	(4.4)	u
	02 Forestry, fishing, mining, quarrying, oil and gas	18.6	(10.6)	u	25.9	(9.9)	u	37.2	(13.5)	u	18.3	(12.9)	u
	03 Utilities	12.2	(10.2)	u	36.6	(17.4)	u	39.3	(18.8)	u	11.9	(10.4)	u
	04 Construction	14.3	(5.1)	u	38.1	(6.9)	m	36.1	(8.2)	m	11.4	(5.4)	u
	05 Manufacturing	28.8	(3.6)		34.0	(3.9)		25.9	(3.1)		11.3	(2.8)	m
	06 Trade	27.4	(2.8)		42.7	(3.9)		25.0	(3.1)		4.9	(1.2)	m
	07 Transportation and warehousing	31.7	(6.8)	m	37.8	(7.5)	m	26.6	(5.6)	m	3.9	(2.0)	u
	08 Finance, insurance, real estate, and leasing	17.1	(3.1)	m	36.2	(3.5)		35.9	(3.7)		10.8	(2.7)	m
	09 Professional, scientific, and technical services	8.6	(2.2)	m	29.7	(3.9)		42.8	(4.4)		18.9	(3.4)	m
	10 Business, building, and other support services	26.9	(5.1)	m	35.9	(5.7)		32.0	(6.2)	m	5.2	(3.2)	u
	11 Educational services	11.1	(1.9)	m	31.0	(2.9)		42.7	(3.2)		15.2	(2.3)	
	12 Health care and social assistance	23.5	(1.7)		35.7	(2.6)		31.2	(2.3)		9.6	(1.5)	
	13 Information, culture, and recreation	9.9	(2.9)	m	29.8	(5.2)	m	48.5	(5.6)		11.7	(3.7)	m
	14 Accommodation and food services	39.3	(4.5)		39.1	(4.3)		19.4	(3.2)	m	2.1	(1.2)	u
	15 Other services	28.9	(4.6)		35.5	(5.3)		30.1	(4.7)		5.5	(2.3)	u
	16 Public administration	8.6	(2.2)	m	30.8	(3.8)		44.2	(4.8)		16.4	(3.4)	m

Table C.b (cont'd)

Numeracy — Incidence of numeracy proficiency levels of workers aged 16 to 65, by industry, Canada, 2012

	Level 1 or below			Level 2			Level 3			Level 4 or 5		
	%	(SE)		%	(SE)		%	(SE)		%	(SE)	
All												
01 Agriculture	20.4	(5.1)	m	37.6	(6.6)	m	32.1	(5.8)	m	9.9	(3.4)	u
02 Forestry, fishing, mining, quarrying, oil and gas	15.5	(4.0)	m	30.6	(4.7)		33.1	(4.3)		20.7	(3.8)	m
03 Utilities	9.5	(4.5)	u	23.5	(7.3)	m	39.4	(8.5)	m	27.5	(7.0)	m
04 Construction	21.5	(2.5)		36.2	(3.0)		32.6	(2.9)		9.7	(1.8)	m
05 Manufacturing	21.8	(1.8)		30.3	(2.0)		32.6	(2.2)		15.3	(1.8)	
06 Trade	24.2	(1.7)		37.2	(2.4)		29.5	(2.1)		9.0	(1.3)	
07 Transportation and warehousing	27.1	(2.8)		35.4	(3.5)		29.8	(3.4)		7.7	(2.2)	m
08 Finance, insurance, real estate, and leasing	12.0	(1.7)		29.8	(2.4)		39.0	(2.6)		19.2	(2.2)	
09 Professional, scientific, and technical services	7.1	(1.5)	m	22.0	(2.5)		42.2	(3.0)		28.7	(2.5)	
10 Business, building, and other support services	25.1	(3.6)		34.7	(4.2)		33.4	(3.8)		6.8	(2.5)	u
11 Educational services	10.3	(1.5)		28.4	(2.5)		42.6	(2.5)		18.8	(2.1)	
12 Health care and social assistance	21.8	(1.5)		35.2	(2.2)		31.6	(2.1)		11.4	(1.4)	
13 Information, culture, and recreation	8.8	(1.7)	m	25.7	(2.8)		45.4	(3.9)		20.0	(2.9)	
14 Accommodation and food services	33.1	(3.2)		38.1	(3.3)		24.2	(2.4)		4.6	(1.3)	m
15 Other services	26.0	(2.9)		35.2	(3.5)		30.4	(3.2)		8.3	(1.9)	m
16 Public administration	9.2	(1.7)	m	26.2	(2.7)		43.7	(3.8)		20.9	(2.8)	

Notes: The lower-case *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either “unacceptable” (when $CV > 33.3\%$) or “marginally acceptable” ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level.

SE Standard error

Source: PIAAC, 2012

Table C.c

PS-TRE — Incidence of numeracy proficiency levels of workers aged 16 to 65, by industry, Canada, 2012

		Nonrespondents			Level 1 or below			Level 2 or 3		
		%	(SE)		%	(SE)		%	(SE)	
Males	01 Agriculture	30.4	(5.3)	m	50.1	(7.1)		19.5	(6.1)	m
	02 Forestry, fishing, mining, quarrying, oil and gas	15.1	(3.3)	m	47.7	(5.2)		37.2	(4.9)	
	03 Utilities	11.0	(4.8)	u	36.7	(8.9)	m	52.3	(8.7)	m
	04 Construction	20.5	(2.3)		54.3	(2.9)		25.2	(2.8)	
	05 Manufacturing	16.4	(1.7)		49.7	(2.4)		33.8	(2.4)	
	06 Trade	18.9	(2.2)		47.1	(2.5)		34.0	(2.7)	
	07 Transportation and warehousing	29.1	(2.9)		45.9	(3.9)		25.0	(3.4)	
	08 Finance, insurance, real estate, and leasing	9.5	(1.8)	m	38.1	(3.9)		52.4	(4.0)	
	09 Professional, scientific, and technical services	4.5	(1.1)	m	33.1	(3.7)		62.4	(3.8)	
	10 Business, building, and other support services	17.8	(3.0)	m	54.3	(5.2)		27.9	(4.7)	m
	11 Educational services	11.2	(2.8)	m	39.6	(4.3)		49.2	(4.6)	
	12 Health care and social assistance	14.9	(2.7)	m	46.2	(4.9)		38.9	(5.1)	
	13 Information, culture, and recreation	7.4	(2.1)	m	34.0	(4.3)		58.7	(4.7)	
	14 Accommodation and food services	15.8	(3.2)	m	48.4	(5.2)		35.9	(5.2)	
	15 Other services	24.6	(3.6)		50.3	(5.0)		25.1	(4.2)	m
	16 Public administration	5.3	(1.1)	m	42.8	(4.1)		51.9	(4.3)	
Females	01 Agriculture	28.2	(10.0)	u	54.3	(10.9)	m	17.5	(7.4)	u
	02 Forestry, fishing, mining, quarrying, oil and gas	2.1	(1.4)	u	48.0	(11.8)	m	49.9	(11.7)	m
	03 Utilities	2.5	(2.3)	u	40.5	(15.8)	u	57.0	(16.1)	m
	04 Construction	8.1	(3.0)	u	50.2	(6.7)		41.7	(6.9)	m
	05 Manufacturing	23.5	(2.7)		45.6	(3.6)		30.9	(3.7)	
	06 Trade	15.3	(1.8)		53.7	(2.5)		31.0	(2.4)	
	07 Transportation and warehousing	15.2	(4.3)	m	51.2	(6.1)		33.6	(6.2)	m
	08 Finance, insurance, real estate, and leasing	7.9	(2.2)	m	51.8	(3.6)		40.4	(3.5)	
	09 Professional, scientific, and technical services	8.5	(1.8)	m	35.7	(3.9)		55.9	(3.8)	
	10 Business, building, and other support services	21.3	(4.4)	m	44.9	(5.6)		33.9	(5.6)	m
	11 Educational services	7.9	(1.3)	m	44.2	(2.6)		47.9	(2.7)	
	12 Health care and social assistance	14.1	(1.2)		50.4	(2.2)		35.6	(2.1)	
	13 Information, culture, and recreation	4.2	(1.3)	m	43.3	(5.9)		52.5	(6.0)	
	14 Accommodation and food services	20.5	(2.8)		56.9	(4.0)		22.5	(3.8)	m
	15 Other services	19.3	(3.2)	m	47.3	(5.0)		33.4	(4.8)	
	16 Public administration	6.1	(1.4)	m	37.2	(3.6)		56.7	(3.7)	

Table C.c (cont'd)

PS-TRE — Incidence of numeracy proficiency levels of workers aged 16 to 65, by industry, Canada, 2012

		Nonrespondents		Level 1 or below		Level 2 or 3			
		%	(SE)	%	(SE)	%	(SE)		
All	01 Agriculture	29.6	(4.1)	51.6	(4.9)	18.8	(4.6)	m	
	02 Forestry, fishing, mining, quarrying, oil and gas	12.8	(2.6)	m	47.7	(5.0)	39.5	(4.6)	
	03 Utilities	9.3	(3.8)	u	37.5	(7.8)	m	53.2	(7.7)
	04 Construction	19.0	(2.1)		53.8	(2.7)		27.3	(2.6)
	05 Manufacturing	18.2	(1.5)		48.7	(2.1)		33.1	(2.0)
	06 Trade	17.2	(1.4)		50.2	(1.8)		32.6	(1.8)
	07 Transportation and warehousing	25.5	(2.5)		47.3	(3.2)		27.2	(3.1)
	08 Finance, insurance, real estate and leasing	8.7	(1.5)	m	45.2	(2.6)		46.2	(2.4)
	09 Professional, scientific, and technical services	6.2	(1.1)	m	34.3	(2.8)		59.5	(2.9)
	10 Business, building, and other support services	19.3	(2.4)		50.1	(3.7)		30.5	(3.3)
	11 Educational services	9.0	(1.3)		42.7	(2.3)		48.3	(2.5)
	12 Health care and social assistance	14.2	(1.0)		49.6	(2.0)		36.1	(1.9)
	13 Information, culture, and recreation	6.0	(1.4)	m	38.1	(3.5)		55.9	(3.6)
	14 Accommodation and food services	18.5	(2.1)		53.2	(3.1)		28.3	(2.9)
	15 Other services	21.8	(2.4)		48.7	(3.4)		29.4	(3.0)
	16 Public administration	5.7	(0.9)		39.8	(2.6)		54.4	(2.7)

Notes: The lower-case *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either "unacceptable" (when $CV > 33.3\%$) or "marginally acceptable" ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level.

SE Standard error

Source: PIAAC, 2012



ANNEX D

SKILLS PROFICIENCY BY EDUCATION LEVEL USUALLY REQUIRED IN THE JOB

Table D.a

Literacy — Incidence of literacy proficiency levels of workers aged 16 to 65, by education level usually required in the job , Canada , 2012

		Level 1 or below			Level 2			Level 3			Level 4 or 5		
		%	SE		%	SE		%	SE		%	SE	
Males	0 Management	8.2	(1.2)		25.5	(2.1)		42.6	(2.7)		23.6	(2.5)	
	A usually requiring university degree	3.3	(0.9)	m	17.1	(1.9)		44.3	(2.4)		35.3	(2.4)	
	B usually requiring college or apprenticeship	15.6	(1.2)		31.7	(1.7)		41.1	(1.8)		11.7	(1.3)	
	C-D usually requiring up to high school	22.8	(1.7)		40.4	(1.9)		30.1	(1.8)		6.7	(1.0)	
Females	0 Management	6.6	(1.5)	m	28.8	(3.2)		43.9	(3.5)		20.7	(2.8)	
	A usually requiring university degree	4.7	(1.0)	m	21.5	(1.6)		47.7	(2.1)		26.1	(2.3)	
	B usually requiring college or apprenticeship	11.8	(1.1)		31.2	(2.0)		43.1	(2.0)		13.9	(1.4)	
	C-D usually requiring up to high school	21.8	(1.3)		38.8	(1.9)		32.8	(1.5)		6.6	(1.0)	
All	0 Management	7.7	(1.0)		26.6	(1.7)		43.1	(2.0)		22.6	(1.8)	
	A usually requiring university degree	4.1	(0.7)	m	19.5	(1.2)		46.2	(1.6)		30.2	(1.6)	
	B usually requiring college or apprenticeship	14.0	(0.9)		31.5	(1.4)		41.9	(1.4)		12.6	(0.9)	
	C-D usually requiring up to high school	22.3	(1.1)		39.5	(1.4)		31.5	(1.2)		6.7	(0.7)	

Table D.b

Numeracy — Incidence of literacy proficiency levels of workers aged 16 to 65, by education level usually required in the job , Canada , 2012

		Level 1 or below			Level 2			Level 3			Level 4 or 5		
		%	(SE)		%	(SE)		%	(SE)		%	(SE)	
Males	0 Management	8.8	(1.3)		25.4	(2.4)		40.8	(2.9)		25.0	(2.3)	
	A usually requiring university degree	4.3	(1.1)	m	17.0	(2.3)		41.4	(3.2)		37.4	(2.6)	
	B usually requiring college or apprenticeship	16.7	(1.2)		30.5	(1.7)		37.6	(1.9)		15.2	(1.3)	
	C-D usually requiring up to high school	28.7	(1.5)		36.6	(1.6)		27.8	(1.6)		6.8	(1.0)	
Females	0 Management	13.3	(2.4)	m	34.7	(3.7)		38.1	(3.6)		13.9	(2.4)	m
	A usually requiring university degree	8.5	(1.3)		28.2	(2.4)		44.4	(2.2)		18.9	(1.7)	
	B usually requiring college or apprenticeship	18.7	(1.4)		36.9	(2.0)		34.8	(2.0)		9.7	(1.2)	
	C-D usually requiring up to high school	32.9	(1.7)		38.9	(1.7)		24.2	(1.4)		4.0	(0.7)	m
All	0 Management	10.4	(1.2)		28.6	(2.0)		39.8	(2.2)		21.1	(1.6)	
	A usually requiring university degree	6.6	(0.9)		23.2	(1.6)		43.0	(1.7)		27.2	(1.5)	
	B usually requiring college or apprenticeship	17.5	(0.9)		33.1	(1.2)		36.4	(1.3)		12.9	(0.9)	
	C-D usually requiring up to high school	30.9	(1.1)		37.8	(1.1)		26.0	(1.0)		5.3	(0.6)	

Table D.c

PS-TRE — Incidence of literacy proficiency levels of workers aged 16 to 65, by education level usually required in the job, Canada, 2012

	Nonrespondents		Level 1 or below		Level 2 or 3		
	%	(SE)	%	(SE)	%	(SE)	
Males							
0 Management	10.8	(1.2)	42.8	(2.3)	46.4	(2.2)	
A usually requiring university degree	7.4	(1.3)	m	33.1	(2.3)	59.6	(2.3)
B usually requiring college or apprenticeship	15.3	(1.2)	48.4	(1.8)	36.3	(1.7)	
C-D usually requiring up to high school	24.1	(1.1)	51.3	(1.6)	24.5	(1.5)	
Females							
0 Management	11.0	(1.7)	40.9	(3.7)	48.1	(3.6)	
A usually requiring university degree	5.4	(0.8)	42.5	(1.8)	52.1	(1.8)	
B usually requiring college or apprenticeship	11.3	(1.0)	48.0	(2.0)	40.6	(2.1)	
C-D usually requiring up to high school	19.9	(1.1)	52.8	(1.7)	27.3	(1.6)	
All							
0 Management	10.9	(1.0)	42.1	(2.0)	47.0	(1.9)	
A usually requiring university degree	6.3	(0.7)	38.3	(1.3)	55.4	(1.4)	
B usually requiring college or apprenticeship	13.7	(0.8)	48.3	(1.5)	38.1	(1.4)	
C-D usually requiring up to high school	21.9	(0.8)	52.1	(1.2)	26.0	(1.1)	

Notes: The lower-case *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either "unacceptable" (when $CV > 33.3\%$) or "marginally acceptable" ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level.

SE Standard error

Source: PIAAC, 2012



ANNEX E

SKILLS PROFICIENCY BY MAJOR OCCUPATIONAL GROUP²

² Major occupational groups are based on NOC two-digit level.

Table E.a

Literacy — Skill proficiency scores of workers aged 16 to 65, Canada, 2012

NOC	Major Occupational Groups	Men			Women			All		
		Occ. Share	Mean Score	SE	Occ. Share	Mean Score	SE	Occ. Share	Mean Score	SE
00	Senior management	1.9%	308	(5.7)	0.5%	311	(10.6)	1.2%	308	(4.8)
01	Managers in administrative services, financial, and business services, communication	3.2%	309	(4.3)	3.2%	300	(3.9)	3.2%	305	(2.9)
02	Managers in engineering, architecture, science, and information systems	1.1%	311	(7.3)	0.4%	318	(9.2)	0.7%	312	(5.9)
03	Managers in health care	0.1%	299	(51.6)	0.3%	295	(13.7)	0.2%	296	(11.6)
04	Managers in public administration, education, social, and community services, and public protection services	0.9%	306	(6.4)	1.0%	312	(6.9)	0.9%	309	(4.5)
05	Managers in art, culture, recreation, and sport	0.2%	314	(13.3)	0.1%	307	(21.7)	0.2%	313	(11.9)
06	Managers in retail and wholesale trade and customer services	4.2%	278	(4.2)	3.3%	269	(4.0)	3.8%	274	(3.2)
07	Managers in trades and transportation	2.0%	274	(5.2)	0.4%	287	(17.0)	1.2%	276	(5.3)
08	Managers in production and agriculture, horticulture, and aquaculture	1.5%	275	(6.9)	0.5%	283	(10.5)	1.0%	277	(5.9)
09	Managers in manufacturing and utilities	1.1%	284	(14.0)	0.3%	311	(17.0)	0.7%	289	(11.7)
11	Professional occupations in business and finance	3.4%	309	(4.5)	4.5%	294	(3.7)	3.9%	301	(3.0)
12	Administrative and financial supervisors and administrative occupations	2.1%	289	(5.5)	7.4%	285	(2.7)	4.6%	286	(2.4)
13	Finance, insurance, and related business administrative occupations	0.6%	292	(11.0)	1.8%	287	(5.7)	1.2%	288	(4.9)
14	Office support occupations	1.1%	280	(6.5)	8.0%	281	(2.6)	4.3%	281	(2.5)
15	Distribution, tracking, and scheduling co-ordination occupations	2.2%	263	(5.4)	1.6%	266	(5.6)	1.9%	264	(4.2)
21	Professional occupations in natural and applied sciences	5.9%	310	(3.2)	2.2%	306	(4.9)	4.2%	309	(2.7)
22	Technical occupations related to natural and applied sciences	6.3%	288	(3.0)	1.7%	294	(6.7)	4.2%	289	(2.7)
30	Professional occupations in nursing	0.3%	286	(10.9)	3.4%	285	(5.4)	1.8%	285	(5.0)
31	Professional occupations in health	0.8%	314	(9.8)	1.9%	311	(5.9)	1.3%	312	(4.9)
32	Technical occupations in health	0.6%	283	(8.3)	3.3%	289	(5.5)	1.9%	288	(4.8)
34	Assisting occupations in support of health services	0.5%	263	(17.3)	3.4%	252	(4.5)	1.8%	254	(4.7)
40	Professional occupations in education services	3.2%	309	(4.9)	6.5%	300	(3.1)	4.8%	303	(3.1)
41	Professional occupations in law and social, community, and government services	1.9%	303	(8.1)	3.3%	304	(4.2)	2.5%	304	(4.1)
42	Professional occupations in legal, social, community, and education services	0.6%	284	(10.8)	4.9%	274	(3.5)	2.6%	275	(3.5)
43	Occupations in front-line public protection services	1.4%	295	(9.1)	0.3%	317	(9.8)	0.9%	299	(7.9)
44	Care providers and educational, legal, and public protection support occupations	0.3%	290	(12.2)	3.1%	263	(5.6)	1.6%	265	(5.5)
51	Professional occupations in art and culture	1.2%	309	(6.4)	1.6%	307	(5.5)	1.4%	308	(4.2)
52	Technical occupations in art, culture, recreation, and sport	1.1%	288	(7.2)	2.3%	292	(5.8)	1.6%	291	(4.5)
62	Retail sales supervisors and specialized sales occupations	2.7%	286	(4.5)	2.8%	271	(6.3)	2.7%	279	(3.7)
63	Service supervisors and specialized service occupations	2.7%	260	(5.5)	3.9%	260	(4.0)	3.3%	260	(3.2)

Table E.a (cont'd)

Literacy — Skill proficiency scores of workers aged 16 to 65, Canada, 2012

NOC	Major Occupational Groups	Men			Women			All		
		Occ. Share	Mean Score	SE	Occ. Share	Mean Score	SE	Occ. Share	Mean Score	SE
64	Sales representatives and salespersons — wholesale and retail trade	3.8%	283	(4.2)	3.7%	268	(5.7)	3.7%	276	(3.6)
65	Service representatives and other customer and personal services occupations	2.4%	271	(4.6)	5.7%	267	(3.6)	3.9%	268	(2.8)
66	Sales support occupations	1.8%	258	(5.2)	3.5%	253	(4.5)	2.6%	255	(3.6)
67	Service support and other service occupations	3.3%	246	(4.9)	4.4%	235	(5.2)	3.8%	240	(3.8)
72	Industrial, electrical, and construction trades	8.9%	261	(3.1)	0.2%	271	(13.4)	4.8%	262	(3.1)
73	Maintenance and equipment operation trades	6.3%	261	(4.1)	0.1%	265	(11.3)	3.4%	261	(4.1)
74	Other installers, repairers, and services and material handlers	1.7%	253	(4.9)	0.3%	214	(13.4)	1.1%	248	(5.1)
75	Transport and heavy equipment operation and related maintenance occupations	5.7%	250	(3.3)	0.8%	236	(11.6)	3.4%	248	(3.2)
76	Trades helpers, construction labourers, and related occupations	2.0%	245	(7.9)	0.2%	269	(11.6)	1.1%	247	(7.4)
82	Supervisors and technical occupations in natural resources, agriculture, and related production	1.1%	270	(7.9)	0.1%	292	(15.4)	0.7%	273	(7.1)
84	Workers in natural resources, agriculture, and related production	0.7%	253	(11.1)	0.5%	261	(13.7)	0.6%	256	(8.8)
86	Harvesting, landscaping, and natural resources labourers	0.7%	267	(12.8)	0.0%	209	(60.2)	0.4%	264	(12.5)
92	Processing, manufacturing, and utilities supervisors and central control operators	1.9%	282	(6.9)	0.3%	273	(17.6)	1.1%	281	(6.5)
94	Processing and manufacturing machine operators and related production workers	2.1%	247	(9.1)	1.1%	237	(10.3)	1.6%	244	(7.0)
95	Assemblers in manufacturing	1.6%	256	(8.0)	0.5%	257	(18.3)	1.1%	256	(8.0)
96	Labourers in processing, manufacturing, and utilities	1.2%	247	(6.1)	0.8%	222	(9.8)	1.0%	238	(5.9)

Table E.b

Numeracy — Skill proficiency scores of workers aged 16 to 65, Canada, 2012

NOC	Major Occupational Groups	Men			Women			All		
		Occ. Share	Mean Score	SE	Occ. Share	Mean Score	SE	Occ. Share	Mean Score	SE
00	Senior management	1.9%	310	(5.0)	0.5%	300	(10.2)	1.2%	308	(4.4)
01	Managers in administrative services, financial, and business services, communication	3.2%	309	(4.9)	3.2%	286	(4.7)	3.2%	298	(3.5)
02	Managers in engineering, architecture, science, and information systems	1.1%	314	(7.1)	0.4%	305	(12.4)	0.7%	312	(6.1)
03	Managers in health care	0.1%	304	(28.8)	0.3%	274	(15.4)	0.2%	282	(12.6)
04	Managers in public administration, education, and social and community services, and public protection services	0.9%	298	(7.4)	1.0%	294	(7.4)	0.9%	296	(5.1)
05	Managers in art, culture, recreation, and sport	0.2%	306	(19.5)	0.1%	283	(25.3)	0.2%	301	(16.6)
06	Managers in retail and wholesale trade and customer services	4.2%	278	(4.5)	3.3%	257	(4.8)	3.8%	270	(3.8)
07	Managers in trades and transportation	2.0%	279	(6.5)	0.4%	272	(21.0)	1.2%	278	(6.6)
08	Managers in production and agriculture, horticulture, and aquaculture	1.5%	280	(8.0)	0.5%	274	(11.8)	1.0%	279	(7.0)
09	Managers in manufacturing and utilities	1.1%	284	(17.2)	0.3%	306	(20.3)	0.7%	288	(14.6)
11	Professional occupations in business and finance	3.4%	311	(5.2)	4.5%	284	(4.4)	3.9%	296	(3.6)
12	Administrative and financial supervisors and administrative occupations	2.1%	291	(6.5)	7.4%	272	(3.4)	4.6%	277	(3.0)
13	Finance, insurance, and related business administrative occupations	0.6%	295	(9.9)	1.8%	275	(6.7)	1.2%	280	(5.5)
14	Office support occupations	1.1%	273	(8.6)	8.0%	266	(3.0)	4.3%	267	(2.8)
15	Distribution, tracking, and scheduling coordination occupations	2.2%	255	(6.2)	1.6%	252	(5.6)	1.9%	254	(4.5)
21	Professional occupations in natural and applied sciences	5.9%	318	(2.7)	2.2%	303	(5.2)	4.2%	314	(2.5)
22	Technical occupations related to natural and applied sciences	6.3%	293	(3.1)	1.7%	285	(6.6)	4.2%	291	(2.7)
30	Professional occupations in nursing	0.3%	280	(10.9)	3.4%	273	(5.7)	1.8%	274	(5.4)
31	Professional occupations in health	0.8%	315	(8.7)	1.9%	300	(7.0)	1.3%	305	(5.9)
32	Technical occupations in health	0.6%	274	(9.6)	3.3%	278	(6.3)	1.9%	277	(5.4)
34	Assisting occupations in support of health services	0.5%	258	(18.3)	3.4%	235	(5.2)	1.8%	239	(5.3)
40	Professional occupations in education services	3.2%	305	(5.2)	6.5%	289	(2.9)	4.8%	295	(3.0)
41	Professional occupations in law and social, community, and government services	1.9%	299	(7.5)	3.3%	289	(5.1)	2.5%	293	(4.3)
42	Professional occupations in legal, social, community, and education services	0.6%	275	(10.6)	4.9%	257	(3.8)	2.6%	259	(3.8)
43	Occupations in front-line public protection services	1.4%	288	(9.7)	0.3%	307	(19.5)	0.9%	291	(8.7)
44	Care providers and educational, legal, and public protection support occupations	0.3%	280	(11.6)	3.1%	245	(6.3)	1.6%	248	(6.1)
51	Professional occupations in art and culture	1.2%	298	(9.2)	1.6%	291	(6.1)	1.4%	295	(5.1)
52	Technical occupations in art, culture, recreation, and sport	1.1%	282	(8.6)	2.3%	276	(6.4)	1.6%	278	(4.6)
62	Retail sales supervisors and specialized sales occupations	2.7%	286	(5.1)	2.8%	260	(6.6)	2.7%	273	(4.2)
63	Service supervisors and specialized service occupations	2.7%	257	(6.3)	3.9%	249	(4.2)	3.3%	253	(3.5)

Table E.b (cont'd)

Numeracy — Skill proficiency scores of workers aged 16 to 65, Canada, 2012

NOC	Major Occupational Groups	Men			Women			All		
		Occ. Share	Mean Score	SE	Occ. Share	Mean Score	SE	Occ. Share	Mean Score	SE
64	Sales representatives and salespersons — wholesale and retail trade	3.8%	279	(5.4)	3.7%	254	(5.6)	3.7%	267	(4.1)
65	Service representatives and other customer and personal services occupations	2.4%	265	(5.6)	5.7%	254	(3.8)	3.9%	257	(3.2)
66	Sales support occupations	1.8%	252	(6.6)	3.5%	237	(4.3)	2.6%	243	(3.7)
67	Service support and other service occupations	3.3%	237	(5.7)	4.4%	216	(5.8)	3.8%	226	(4.2)
72	Industrial, electrical, and construction trades	8.9%	265	(3.5)	0.2%	262	(9.9)	4.8%	265	(3.5)
73	Maintenance and equipment operation trades	6.3%	261	(4.3)	0.1%	252	(14.2)	3.4%	261	(4.2)
74	Other installers, repairers, and services and material handlers	1.7%	251	(5.0)	0.3%	200	(15.4)	1.1%	244	(5.5)
75	Transport and heavy equipment operation and related maintenance occupations	5.7%	247	(3.6)	0.8%	220	(9.7)	3.4%	244	(3.4)
76	Trades helpers, construction labourers, and related occupations	2.0%	239	(8.9)	0.2%	258	(17.6)	1.1%	240	(8.3)
82	Supervisors and technical occupations in natural resources, agriculture, and related production	1.1%	269	(9.6)	0.1%	273	(13.2)	0.7%	270	(8.7)
84	Workers in natural resources, agriculture, and related production	0.7%	247	(12.9)	0.5%	254	(18.0)	0.6%	250	(10.5)
86	Harvesting, landscaping, and natural resources labourers	0.7%	253	(10.9)	0.0%	192	(61.9) m	0.4%	250	(10.7)
92	Processing, manufacturing, and utilities supervisors and central control operators	1.9%	281	(8.5)	0.3%	259	(20.1)	1.1%	278	(8.0)
94	Processing and manufacturing machine operators and related production workers	2.1%	246	(8.9)	1.1%	228	(12.5)	1.6%	240	(7.2)
95	Assemblers in manufacturing	1.6%	253	(7.9)	0.5%	249	(21.0)	1.1%	252	(8.5)
96	Labourers in processing, manufacturing, and utilities	1.2%	245	(5.6)	0.8%	210	(11.2)	1.0%	232	(5.9)

Table E.c

Problem solving in technology-rich environments (PS-TRE) — Skill proficiency levels of male workers aged 16 to 65, Canada, 2012

NOC2	Major Occupational Groups	Nonrespondents				Level 1				Level 2 or 3			
		Occ. Share	Prof. Level Proportion	SE		Occ. Share	Prof. Level Proportion	SE		Occ. Share	Prof. Level Proportion	SE	
00	Senior management	0.7%	6.2	(2.1)	m	1.6%	37.3	(7.0)	m	2.8%	56.5	(7.1)	
01	Managers in administrative services, financial, and business services, communication	1.3%	6.3	(2.5)	u	2.2%	30.8	(5.7)	m	5.3%	62.9	(5.9)	
02	Managers in engineering, architecture, science, and information systems	0.2%	3.4	(2.3)	u	0.7%	29.5	(10.8)	u	1.9%	67.1	(10.8)	
03	Managers in health care	0.1%	10.8	(24.7)	u	0.1%	61.0	(67.9)	u	0.1%	28.2	(49.6)	u
04	Managers in public administration, education, and social and community services, and public protection services	0.2%	2.7	(1.9)	u	0.8%	40.6	(10.6)	m	1.3%	56.7	(10.6)	m
05	Managers in art, culture, recreation, and sport	0.3%	22.2	(23.5)	u	0.1%	10.8	(15.7)	u	0.4%	67.0	(25.5)	u
06	Managers in retail and wholesale trade and customer services	3.5%	13.3	(3.1)	m	4.6%	50.1	(4.9)		4.0%	36.6	(5.0)	
07	Managers in trades and transportation	1.1%	8.5	(2.4)	m	2.6%	59.6	(6.1)		1.7%	32.0	(5.9)	m
08	Managers in production and agriculture, horticulture, and aquaculture	2.5%	27.7	(6.2)	m	1.5%	45.4	(8.7)	m	1.0%	26.9	(8.4)	m
09	Managers in manufacturing and utilities	1.1%	15.7	(8.0)	u	1.1%	45.1	(10.2)	m	1.1%	39.2	(10.2)	m
11	Professional occupations in business and finance	1.2%	5.7	(1.6)	m	2.5%	34.7	(5.4)		5.2%	59.5	(5.7)	
12	Administrative and financial supervisors and administrative occupations	1.1%	8.0	(3.0)	u	1.9%	42.1	(6.5)		2.7%	49.9	(6.6)	
13	Finance, insurance, and related business administrative occupations	0.3%	9.1	(7.8)	u	0.6%	48.1	(17.0)	u	0.6%	42.8	(16.7)	u
14	Office support occupations	0.7%	10.4	(5.4)	u	1.3%	54.7	(9.8)	m	1.0%	34.9	(9.0)	m
15	Distribution, tracking, and scheduling co-ordination occupations	2.9%	21.3	(4.8)	m	2.2%	46.2	(6.1)		1.8%	32.5	(5.9)	m
21	Professional occupations in natural and applied sciences	1.8%	4.8	(1.7)	u	3.4%	26.5	(3.4)		10.6%	68.6	(3.4)	
22	Technical occupations related to natural and applied sciences	2.0%	5.0	(1.3)	m	5.9%	42.7	(3.9)		8.7%	52.3	(4.0)	
30	Professional occupations in nursing	0.0%	2.0	(2.0)	u	0.5%	70.9	(15.0)	m	0.2%	27.0	(15.4)	u
31	Professional occupations in health	0.4%	8.5	(5.9)	u	0.7%	40.5	(11.8)	m	1.1%	51.0	(12.4)	m
32	Technical occupations in health	0.4%	11.8	(7.3)	u	0.5%	39.4	(13.6)	u	0.7%	48.9	(14.4)	m
34	Assisting occupations in support of health services	1.0%	36.1	(12.9)	u	0.5%	45.1	(12.5)	m	0.2%	18.8	(13.2)	u
40	Professional occupations in education services	1.8%	8.7	(2.5)	m	2.6%	36.6	(5.6)		4.7%	54.8	(5.8)	
41	Professional occupations in law and social, community, and government services	0.9%	7.4	(3.4)	u	1.6%	39.4	(7.9)	m	2.6%	53.2	(8.2)	
42	Professional occupations in legal, social, community, and education services	0.3%	7.4	(3.2)	u	0.7%	50.9	(13.0)	m	0.7%	41.7	(12.8)	m
43	Occupations in front-line public protection services	0.7%	8.3	(3.4)	u	1.2%	42.0	(10.8)	m	1.8%	49.7	(11.0)	m
44	Care providers and educational, legal, and public protection support occupations	0.1%	4.0	(2.5)	u	0.3%	43.7	(18.1)	u	0.4%	52.3	(18.2)	u
51	Professional occupations in art and culture	1.7%	21.3	(11.5)	u	0.7%	26.8	(8.0)	m	1.7%	52.0	(10.2)	m
52	Technical occupations in art, culture, recreation, and sport	0.3%	3.7	(2.3)	u	0.8%	34.1	(8.4)	m	1.8%	62.2	(7.9)	

Table E.c (cont'd)

Problem solving in technology-rich environments (PS-TRE) — Skill proficiency levels of male workers aged 16 to 65, Canada, 2012

NOC2	Major Occupational Groups	Nonrespondents				Level 1				Level 2 or 3			
		Occ. Share	Prof. Level Proportion	SE		Occ. Share	Prof. Level Proportion	SE		Occ. Share	Prof. Level Proportion	SE	
62	Retail sales supervisors and specialized sales occupations	1.7%	10.4	(3.4)	m	2.7%	46.6	(6.4)		3.0%	43.1	(6.2)	
63	Service supervisors and specialized service occupations	2.9%	17.2	(3.3)	m	2.9%	48.3	(5.8)		2.4%	34.4	(6.1)	m
64	Sales representatives and salespersons—wholesale and retail trade	2.5%	10.8	(2.4)	m	3.7%	44.7	(5.7)		4.4%	44.5	(5.7)	
65	Service representatives and other customer and personal services occupations	1.5%	10.0	(3.7)	u	2.7%	51.4	(6.4)		2.4%	38.6	(6.5)	m
66	Sales support occupations	1.1%	10.1	(4.8)	u	2.3%	59.3	(7.6)		1.4%	30.7	(7.3)	m
67	Service support and other service occupations	7.6%	36.9	(4.7)		3.3%	46.5	(5.6)		1.4%	16.6	(4.5)	m
72	Industrial, electrical, and construction trades	13.9%	24.9	(2.9)		10.2%	52.5	(3.8)		5.3%	22.6	(3.3)	
73	Maintenance and equipment operation trades	8.6%	21.8	(3.1)		7.5%	54.9	(4.5)		3.8%	23.3	(3.8)	
74	Other installers, repairers, and services and material handlers	2.8%	26.4	(5.5)	m	1.9%	51.6	(6.8)		1.0%	22.0	(5.3)	m
75	Transport and heavy equipment operation and related maintenance occupations	11.8%	33.2	(2.9)		6.7%	54.4	(3.4)		1.8%	12.4	(2.5)	m
76	Trades helpers, construction labourers, and related occupations	3.2%	26.5	(4.8)	m	2.4%	55.9	(7.7)		0.9%	17.6	(5.8)	m
82	Supervisors and technical occupations in natural resources, agriculture, and related production	1.4%	20.2	(6.4)	m	1.1%	44.6	(8.7)	m	1.1%	35.2	(8.1)	m
84	Workers in natural resources, agriculture, and related production	1.5%	36.9	(8.3)	m	0.7%	50.8	(11.2)	m	0.2%	12.3	(7.2)	u
86	Harvesting, landscaping, and natural resources labourers	1.1%	27.9	(8.9)	m	0.7%	46.5	(12.0)	m	0.4%	25.6	(12.3)	u
92	Processing, manufacturing, and utilities supervisors and central control operators	1.2%	10.0	(3.2)	m	2.2%	53.4	(8.0)		1.8%	36.6	(7.9)	m
94	Processing and manufacturing machine operators and related production workers	4.1%	31.1	(5.3)	m	2.5%	53.3	(6.6)		0.9%	15.6	(4.6)	m
95	Assemblers in manufacturing	2.4%	24.5	(6.5)	m	1.8%	54.1	(8.6)		0.9%	21.5	(7.5)	u
96	Labourers in processing, manufacturing, and utilities	2.0%	26.3	(5.4)	m	1.5%	57.7	(8.0)		0.5%	16.0	(6.1)	u

Notes: The sample excludes workers who identified themselves as students. The lower-case *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either “unacceptable” (when $CV > 33.3\%$) or “marginally acceptable” ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level.

SE Standard error

Source: PIAAC, 2012

Table E.d

(PS-TRE) — Skill proficiency levels of female workers aged 16 to 65, Canada, 2012

NOC2	Major Occupational Groups	Nonrespondents				Level 1 or below				Level 2 or 3			
		Occ. Share	Prof. Level Proportion	SE		Occ. Share	Prof. Level Proportion	SE		Occ. Share	Prof. Level Proportion	SE	
00	Senior management	0.3%	7.1	(4.1)	u	0.3%	27.0	(13.3)	u	0.9%	65.9	(14.1)	m
01	Managers in administrative services, financial, and business services, communication	2.0%	8.0	(2.9)	u	2.2%	32.8	(5.4)	m	4.9%	59.2	(5.6)	
02	Managers in engineering, architecture, science, and information systems	0.0%	0.8	(0.8)	u	0.2%	24.7	(13.0)	u	0.7%	74.6	(13.0)	m
03	Managers in health care	0.0%	0.0	-	-	0.3%	46.4	(19.0)	u	0.4%	53.6	(19.0)	u
04	Managers in public administration, education, and social and community services, and public protection services	0.6%	7.7	(3.4)	u	0.6%	27.6	(7.7)	m	1.6%	64.7	(8.1)	
05	Managers in art, culture, recreation, and sport	0.0%	1.6	(1.8)	u	0.1%	39.0	(27.0)	u	0.1%	59.4	(26.8)	u
06	Managers in retail and wholesale trade, and customer services	3.8%	15.3	(3.8)	m	3.7%	54.4	(5.9)		2.6%	30.3	(5.0)	
07	Managers in trades and transportation	0.4%	13.7	(14.7)	u	0.3%	37.9	(18.5)	u	0.4%	48.3	(20.5)	u
08	Managers in production and agriculture, horticulture, and aquaculture	0.5%	13.6	(9.2)	u	0.7%	67.1	(12.4)	m	0.3%	19.3	(9.4)	u
09	Managers in manufacturing and utilities	0.7%	35.0	(20.5)	u	0.1%	16.0	(12.2)	u	0.3%	49.1	(20.2)	u
11	Professional occupations in business and finance	1.4%	4.2	(1.5)	u	4.2%	45.0	(4.9)		5.9%	50.8	(4.9)	
12	Administrative and financial supervisors, and administrative occupations	4.3%	7.6	(1.7)	m	7.4%	47.7	(3.9)		8.5%	44.8	(3.8)	
13	Finance, insurance, and related business administrative occupations	1.3%	9.7	(3.3)	u	1.7%	45.5	(7.6)	m	2.1%	44.8	(7.9)	m
14	Office support occupations	4.2%	6.9	(1.3)	m	8.6%	51.8	(4.0)		8.4%	41.4	(4.0)	
15	Distribution, tracking, and scheduling co-ordination occupations	1.6%	12.8	(5.3)	u	1.8%	53.6	(8.6)		1.4%	33.6	(8.3)	m
21	Professional occupations in natural and applied sciences	0.7%	4.2	(1.9)	u	1.4%	29.6	(6.4)	m	3.8%	66.2	(6.5)	
22	Technical occupations related to natural and applied sciences	0.7%	5.6	(1.9)	u	1.4%	39.3	(7.7)	m	2.4%	55.1	(7.7)	
30	Professional occupations in nursing	2.0%	7.8	(2.9)	u	4.1%	58.2	(5.4)		3.0%	34.1	(5.4)	
31	Professional occupations in health	0.5%	3.4	(1.4)	u	1.5%	38.5	(8.2)	m	2.8%	58.1	(8.3)	
32	Technical occupations in health	1.5%	5.9	(1.6)	m	3.3%	47.0	(5.6)		4.0%	47.1	(5.3)	
34	Assisting occupations in support of health services	5.8%	22.6	(4.1)	m	4.3%	60.5	(4.5)		1.5%	16.8	(3.9)	m
40	Professional occupations in education services	2.6%	5.2	(1.4)	m	5.9%	43.2	(3.3)		8.6%	51.6	(3.4)	
41	Professional occupations in law and social, community, and government services	0.9%	3.4	(1.3)	u	2.7%	38.8	(5.2)		4.9%	57.8	(5.2)	
42	Professional occupations in legal, social, community, and education services	5.4%	14.5	(2.9)	m	5.4%	52.5	(4.5)		4.2%	33.0	(4.3)	
43	Occupations in front-line public protection services	0.0%	1.5	(1.3)	u	0.1%	23.4	(18.0)	u	0.6%	75.2	(17.9)	m
44	Care providers and educational, legal, and public protection support occupations	5.5%	23.2	(4.1)	m	3.4%	51.9	(5.6)		2.0%	24.9	(5.3)	m
51	Professional occupations in art and culture	1.6%	13.0	(4.9)	u	1.0%	30.2	(6.4)	m	2.4%	56.8	(7.1)	
52	Technical occupations in art, culture, recreation, and sport	0.5%	2.7	(2.0)	u	2.1%	43.7	(8.0)	m	3.1%	53.6	(8.2)	

Table E.d (cont'd)

(PS-TRE) — Skill proficiency levels of female workers aged 16 to 65, Canada, 2012

NOC2	Major Occupational Groups	Nonrespondents			Level 1 or below			Level 2 or 3					
		Occ. Share	Prof. Level Proportion	SE	Occ. Share	Prof. Level Proportion	SE	Occ. Share	Prof. Level Proportion	SE			
62	Retail sales supervisors and specialized sales occupations	2.4%	11.7	(4.0)	u	3.2%	55.7	(6.6)	2.3%	32.7	(6.4)	m	
63	Service supervisors and specialized service occupations	7.9%	26.5	(3.7)		4.0%	49.1	(4.7)	2.4%	24.4	(4.6)	m	
64	Sales representatives and salespersons — wholesale and retail trade	3.6%	12.7	(3.6)	m	3.7%	47.3	(5.5)	3.8%	40.0	(6.1)		
65	Service representatives and other customer and personal services occupations	6.2%	14.1	(3.0)	m	6.4%	53.7	(4.6)	4.7%	32.2	(3.9)		
66	Sales support occupations	5.6%	21.2	(4.1)	m	4.0%	55.3	(4.9)	2.1%	23.5	(4.2)	m	
67	Service support and other service occupations	13.6%	40.5	(4.3)		4.5%	49.5	(4.8)	1.1%	10.0	(2.6)	m	
72	Industrial, electrical, and construction trades	0.1%	6.0	(4.8)	u	0.2%	52.9	(20.3)	u	0.2%	41.1	(20.9)	u
73	Maintenance and equipment operation trades	0.2%	24.2	(11.9)	u	0.1%	41.4	(16.6)	u	0.1%	34.4	(14.9)	u
74	Other installers, repairers, and services and material handlers	0.9%	35.7	(16.6)	u	0.4%	60.4	(16.9)	m	0.0%	3.9	(5.2)	u
75	Transport and heavy equipment operation, and related maintenance occupations	1.3%	21.9	(11.4)	u	1.1%	67.4	(11.7)	m	0.2%	10.7	(5.4)	u
76	Trades helpers, construction labourers, and related occupations	0.1%	7.5	(5.6)	u	0.2%	59.3	(28.2)	u	0.1%	33.3	(27.8)	u
82	Supervisors and technical occupations in natural resources, agriculture, and related production	0.2%	20.1	(13.1)	u	0.1%	35.4	(22.6)	u	0.2%	44.5	(24.5)	u
84	Workers in natural resources, agriculture, and related production	1.2%	31.5	(15.7)	u	0.5%	49.7	(16.2)	m	0.2%	18.7	(12.5)	u
86	Harvesting, landscaping, and natural resources labourers	0.2%	67.1	(20.3)	m	0.0%	25.4	(19.0)	u	0.0%	7.5	(11.2)	u
92	Processing, manufacturing, and utilities supervisors and central control operators	0.5%	26.9	(16.3)	u	0.2%	39.2	(17.8)	u	0.2%	33.8	(13.9)	u
94	Processing and manufacturing machine operators, and related production workers	2.9%	36.0	(8.4)	m	1.2%	51.9	(7.2)	0.3%	12.1	(8.1)	u	
95	Assemblers in manufacturing	1.8%	45.0	(13.7)	m	0.4%	37.0	(13.9)	u	0.2%	18.0	(13.7)	u
96	Labourers in processing, manufacturing, and utilities	2.5%	40.9	(8.8)	m	0.9%	56.2	(9.7)	m	0.1%	2.9	(5.1)	u

Notes: The sample excludes workers who identified themselves as students. The lower-case *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either “unacceptable” (when $CV > 33.3\%$) or “marginally acceptable” ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level.

SE Standard error

Source: PIAAC, 2012

Table E.e

(PS-TRE) — Skill proficiency levels of all workers aged 16 to 65, Canada, 2012

NOC2	Major Occupational Group	Nonrespondents				Level 1 or below				Level 2 or 3			
		Occ. Share	Prof. Level Proportion	SE		Occ. Share	Prof. Level Proportion	SE		Occ. Share	Prof. Level Proportion	SE	
00	Senior management	0.5%	6.4	(1.8)	m	0.9%	35.4	(6.3)	m	1.9%	58.3	(6.4)	
01	Managers in administrative services, financial and business services, communication	1.6%	7.1	(1.8)	m	2.2%	31.8	(3.9)		5.1%	61.1	(3.9)	
02	Managers in engineering, architecture, science, and information systems	0.1%	2.8	(1.7)	u	0.4%	28.3	(8.6)	m	1.3%	68.9	(8.6)	
03	Managers in health care	0.0%	3.1	(3.2)	u	0.2%	50.6	(19.2)	u	0.2%	46.4	(19.0)	u
04	Managers in public administration, education and social and community services, and public protection services	0.3%	5.2	(1.9)	u	0.7%	34.2	(6.7)	m	1.5%	60.6	(6.8)	
05	Managers in art, culture, recreation, and sport	0.2%	18.2	(18.5)	u	0.1%	16.2	(13.1)	u	0.3%	65.6	(20.0)	m
06	Managers in retail and wholesale trade and customer services	3.6%	14.1	(2.4)	m	4.2%	51.8	(3.8)		3.3%	34.0	(3.7)	
07	Managers in trades and transportation	0.8%	9.2	(2.8)	m	1.5%	56.6	(6.0)		1.1%	34.2	(5.7)	m
08	Managers in production and agriculture, horticulture, and aquaculture	1.7%	24.4	(4.8)	m	1.1%	50.5	(7.0)		0.7%	25.1	(6.9)	m
09	Managers in manufacturing and utilities	0.9%	19.2	(7.2)	u	0.6%	39.9	(8.2)	m	0.8%	40.9	(8.6)	m
11	Professional occupations in business and finance	1.3%	4.9	(1.1)	m	3.4%	40.3	(3.5)		5.5%	54.8	(3.6)	
12	Administrative and financial supervisors and administrative occupations	2.4%	7.7	(1.4)	m	4.5%	46.3	(3.4)		5.5%	46.0	(3.4)	
13	Finance, insurance, and related business administrative occupations	0.8%	9.6	(3.1)	m	1.1%	46.1	(7.1)		1.3%	44.3	(7.2)	
14	Office support occupations	2.2%	7.4	(1.4)	m	4.8%	52.2	(3.7)		4.5%	40.5	(3.7)	
15	Distribution, tracking and scheduling co-ordination occupations	2.3%	18.0	(3.6)	m	2.0%	49.1	(4.7)		1.6%	32.9	(4.8)	
21	Professional occupations in natural and applied sciences	1.3%	4.7	(1.3)	m	2.4%	27.3	(2.9)		7.4%	68.0	(2.7)	
22	Technical occupations related to natural and applied sciences	1.5%	5.1	(1.2)	m	3.8%	42.0	(3.6)		5.7%	52.9	(3.6)	
30	Professional occupations in nursing	0.9%	7.3	(2.6)	u	2.2%	59.3	(5.1)		1.5%	33.4	(5.1)	
31	Professional occupations in health	0.4%	5.0	(2.1)	u	1.1%	39.2	(7.0)	m	1.9%	55.8	(7.1)	
32	Technical occupations in health	0.9%	6.9	(1.6)	m	1.8%	45.8	(4.8)		2.3%	47.4	(4.4)	
34	Assisting occupations in support of health services	3.0%	24.4	(4.1)	m	2.3%	58.4	(4.3)		0.8%	17.1	(3.7)	m
40	Professional occupations in education services	2.1%	6.5	(1.3)	m	4.2%	40.8	(3.1)		6.5%	52.7	(3.2)	
41	Professional occupations in law and social, community, and government services	0.9%	5.0	(1.5)	m	2.1%	39.1	(4.2)		3.7%	56.0	(4.4)	
42	Professional occupations in legal, social, community, and education services	2.4%	13.5	(2.6)	m	3.0%	52.3	(4.2)		2.3%	34.2	(4.1)	
43	Occupations in front-line public protection services	0.4%	7.2	(2.9)	u	0.7%	39.0	(9.6)	m	1.2%	53.8	(9.7)	m
44	Care providers and educational, legal, and public protection support occupations	2.4%	21.3	(3.9)	m	1.8%	51.1	(5.4)		1.2%	27.6	(5.3)	m
51	Professional occupations in art and culture	1.6%	16.8	(6.0)	u	0.9%	28.6	(5.2)	m	2.0%	54.5	(6.3)	
52	Technical occupations in art, culture, recreation, and sport	0.3%	3.0	(1.5)	u	1.4%	40.3	(6.2)		2.4%	56.7	(6.3)	

Table E.e (cont'd)

(PS-TRE) — Skill proficiency levels of all workers aged 16 to 65, Canada, 2012

NOC2	Major Occupational Group	Nonrespondents				Level 1 or below				Level 2 or 3		
		Occ. Share	Prof. Level Proportion	SE		Occ. Share	Prof. Level Proportion	SE		Occ. Share	Prof. Level Proportion	SE
62	Retail sales supervisors and specialized sales occupations	2.0%	11.0	(2.5)	m	3.0%	50.9	(5.0)		2.7%	38.1	(5.1)
63	Service supervisors and specialized service occupations	5.0%	22.4	(2.4)		3.4%	48.8	(3.9)		2.4%	28.8	(3.8)
64	Sales representatives and salespersons — wholesale and retail trade	3.0%	11.7	(2.1)	m	3.7%	45.9	(4.0)		4.1%	42.4	(4.3)
65	Service representatives and other customer and personal services occupations	3.4%	12.8	(2.2)	m	4.5%	53.0	(4.0)		3.5%	34.2	(3.5)
66	Sales support occupations	3.0%	17.1	(3.2)	m	3.1%	56.8	(4.1)		1.7%	26.2	(3.8)
67	Service support and other service occupations	10.1%	38.8	(3.1)		3.9%	48.1	(3.6)		1.3%	13.0	(2.5)
72	Industrial, electrical, and construction trades	8.1%	24.5	(2.8)		5.4%	52.5	(3.8)		2.9%	23.0	(3.3)
73	Maintenance and equipment operation trades	5.1%	21.8	(3.1)		4.0%	54.7	(4.4)		2.1%	23.5	(3.7)
74	Other installers, repairers, and services and material handlers	2.0%	27.7	(5.2)	m	1.2%	52.8	(6.3)		0.5%	19.4	(4.7)
75	Transport and heavy equipment operation and related maintenance occupations	7.4%	32.0	(2.8)		4.0%	55.8	(3.2)		1.1%	12.2	(2.3)
76	Trades helpers, construction labourers, and related occupations	1.9%	25.2	(4.6)	m	1.3%	56.1	(7.3)		0.5%	18.6	(5.5)
82	Supervisors and technical occupations in natural resources, agriculture, and related production	0.9%	20.2	(5.8)	m	0.6%	43.6	(8.0)	m	0.6%	36.2	(7.5)
84	Workers in natural resources, agriculture, and related production	1.4%	34.7	(7.9)	m	0.6%	50.4	(9.7)	m	0.2%	14.9	(6.2)
86	Harvesting, landscaping, and natural resources labourers	0.7%	29.9	(8.5)	m	0.4%	45.4	(11.4)	m	0.2%	24.7	(11.8)
92	Processing, manufacturing, and utilities supervisors and central control operators	0.9%	11.8	(3.6)	m	1.2%	51.9	(7.5)		1.1%	36.3	(7.3)
94	Processing and manufacturing machine operators and related production workers	3.6%	32.6	(4.2)		1.8%	52.9	(4.9)		0.6%	14.5	(3.9)
95	Assemblers in manufacturing	2.1%	29.1	(6.0)	m	1.1%	50.2	(7.2)		0.6%	20.7	(6.4)
96	Labourers in processing, manufacturing, and utilities	2.2%	31.6	(4.9)		1.2%	57.2	(6.0)		0.3%	11.2	(4.2)

Notes: The sample excludes workers who identified themselves as students. The lower-case *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either “unacceptable” (when $CV > 33.3\%$) or “marginally acceptable” ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level.

SE Standard error

Source: PIAAC, 2012

Figure E.a Literacy — Mean and median skill proficiency scores of all workers aged 16 to 65, by major occupational group, Canada, 2012

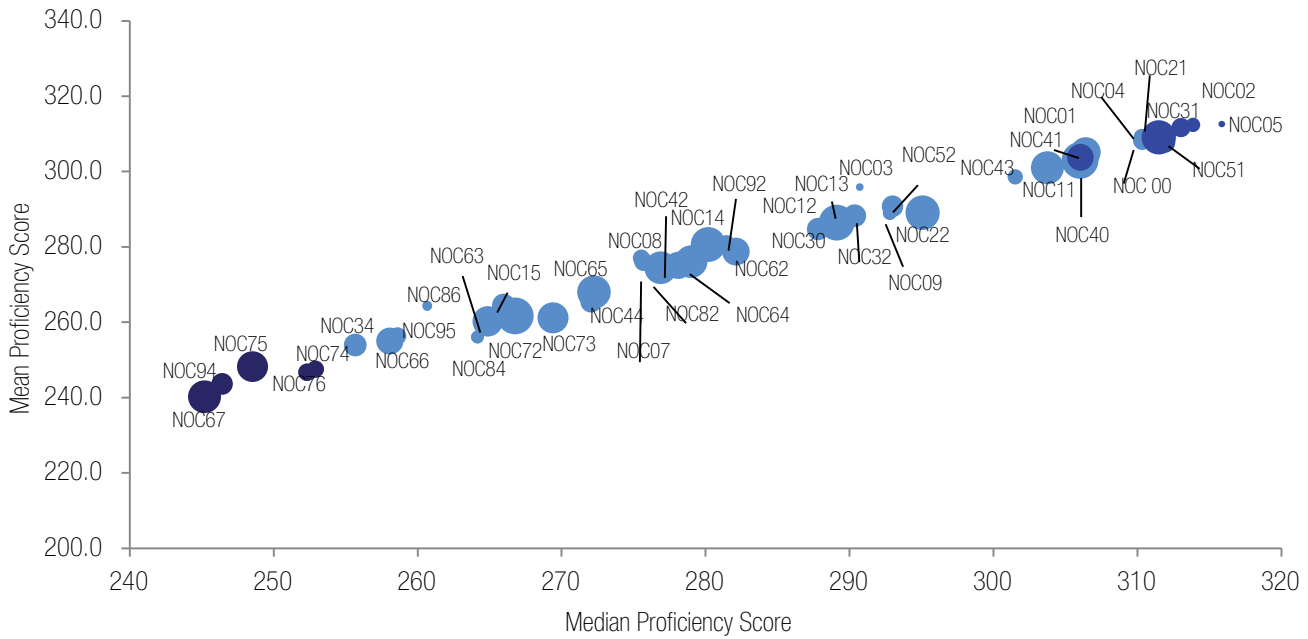


Figure E.b Numeracy — Mean and median skill proficiency scores of all workers aged 16 to 65, by major occupational group, Canada, 2012

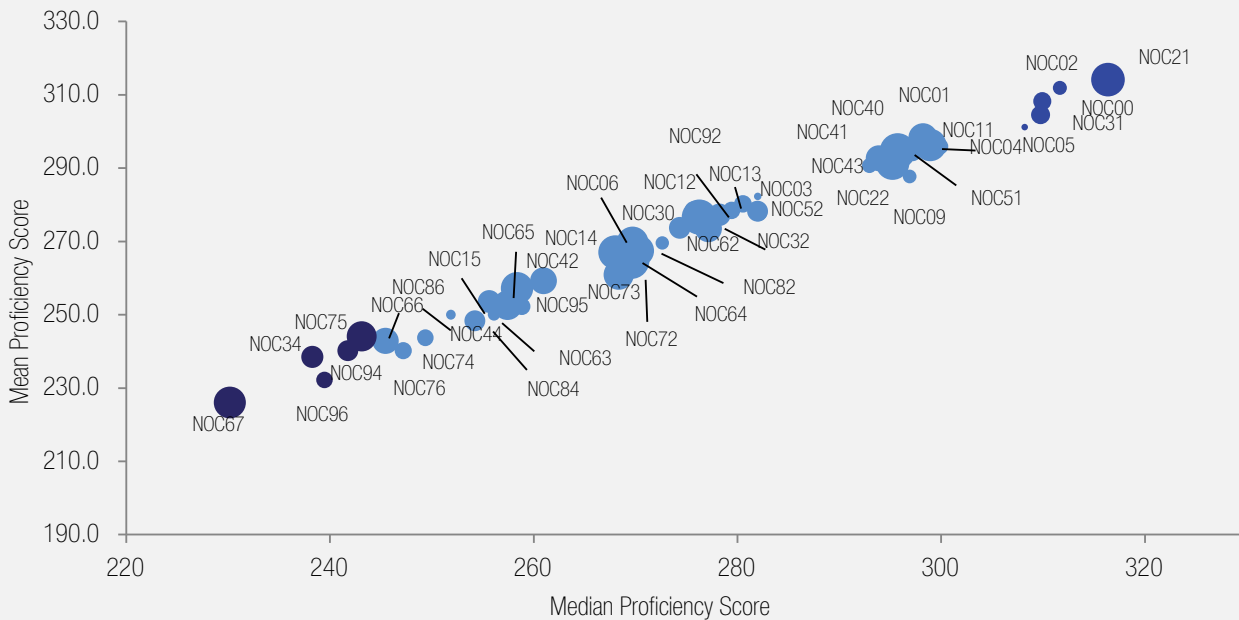


Figure E.c Problem solving in technology-rich environments (PS-TRE) — Distribution of skill proficiency levels of all workers aged 16 to 65, sorted by share of proficiency level 2 or 3, by major occupational group, Canada, 2012

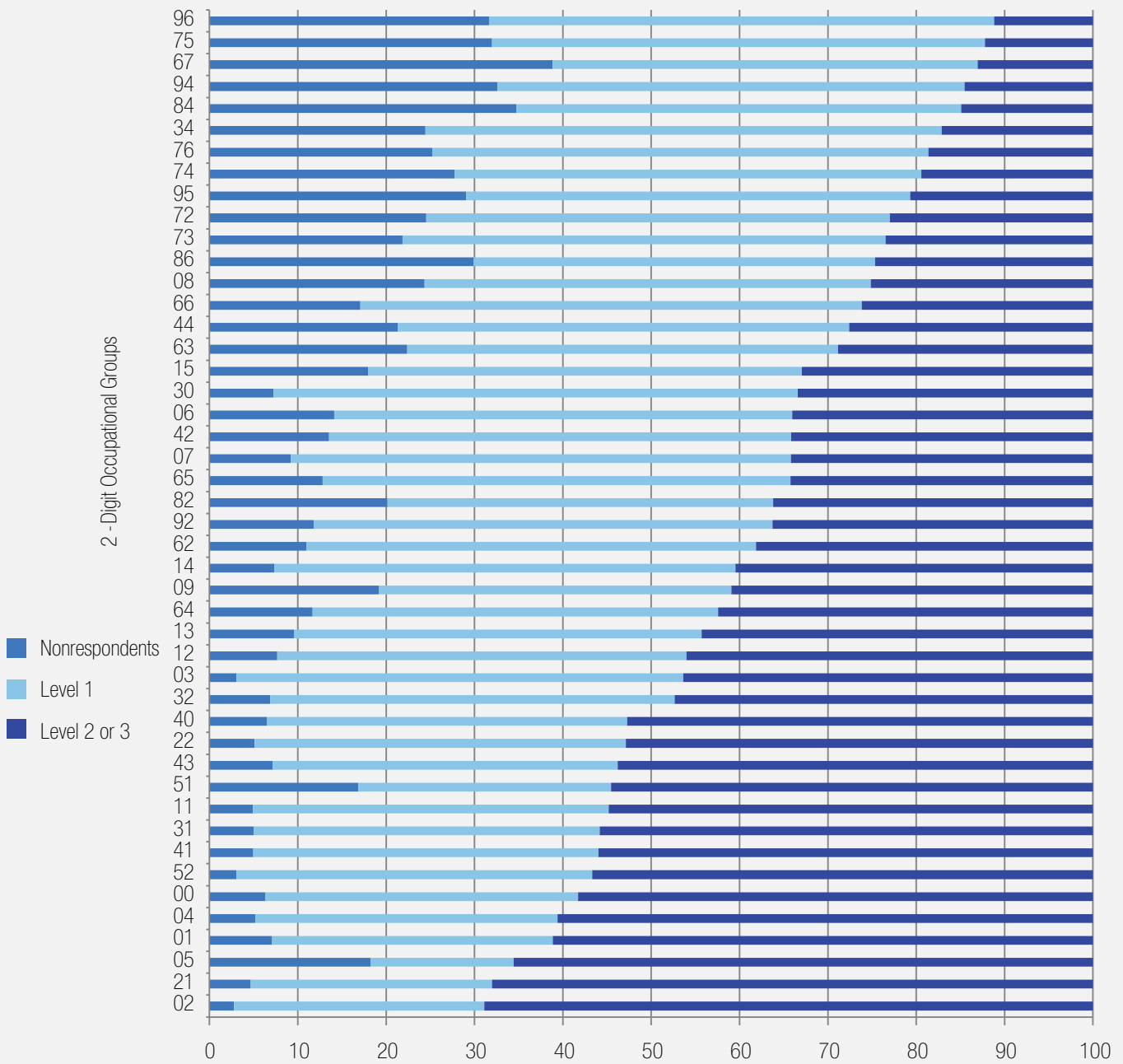


Figure E.d Problem solving in technology-rich environments (PS-TRE) — Distribution of skill proficiency levels of male workers aged 16 to 65, sorted by share of proficiency level 2 or 3, by major occupational group, Canada, 2012

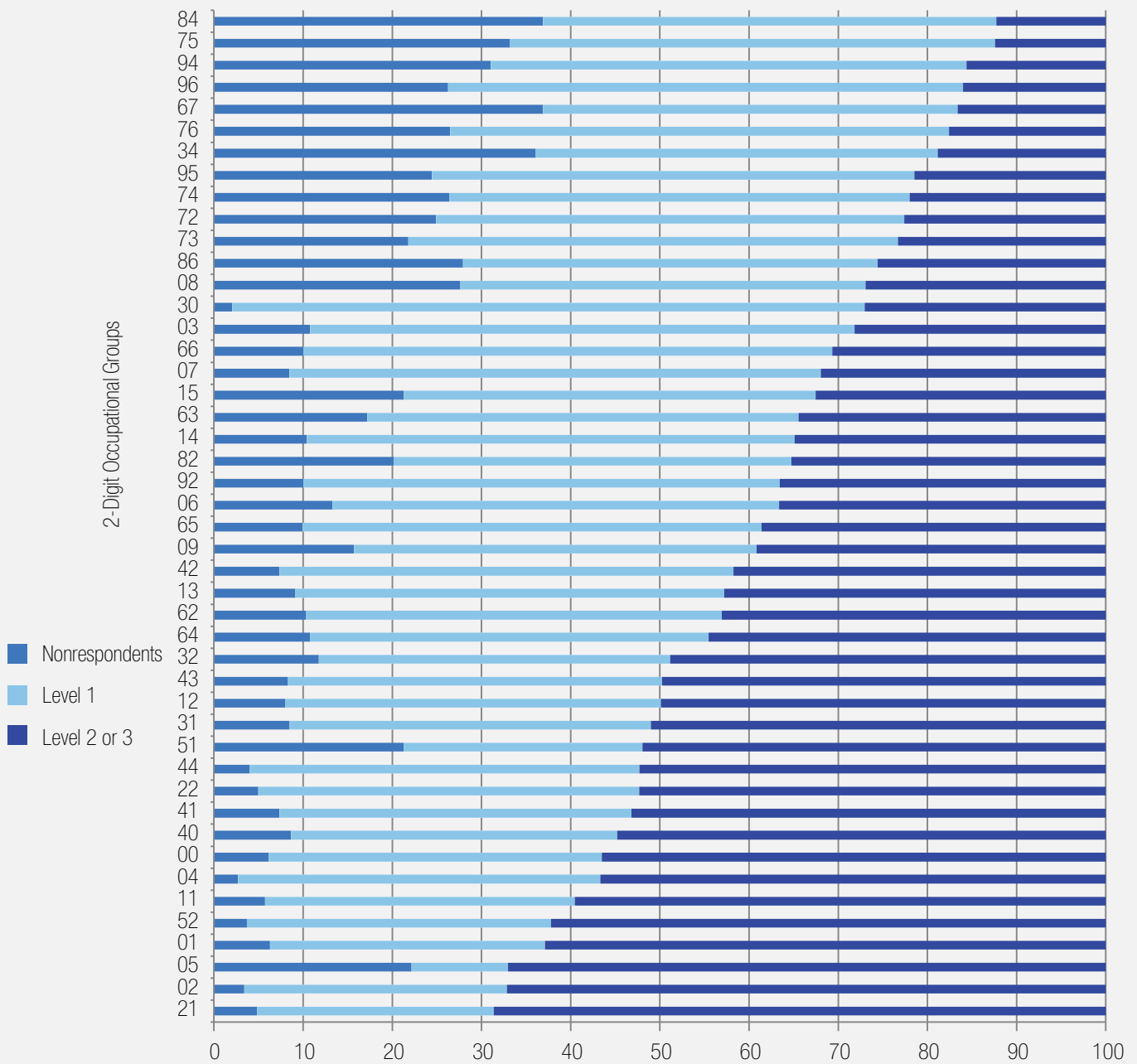
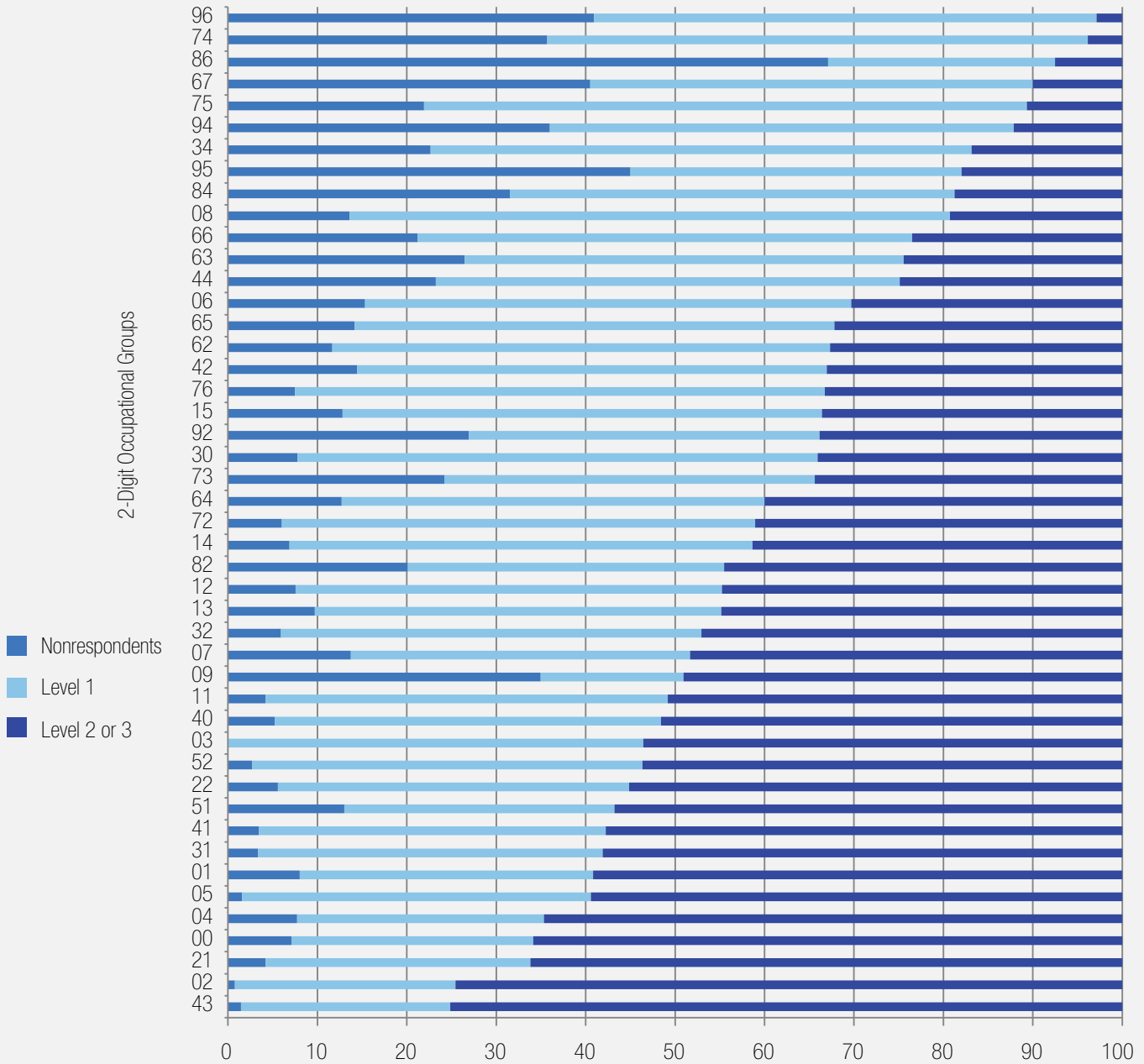


Figure E.e Problem solving in technology-rich environments (PS-TRE) — Distribution of skill proficiency levels of female workers aged 16 to 65, sorted by share of proficiency level 2 or 3, by major occupational group, Canada, 2012





ANNEX F

SKILLS PROFICIENCY BY PROVINCE AND STEM STATUS

Table F

Literacy — Incidence of skill proficiency levels among workers aged 16 to 65 by province, Canada, 2012, STEM vs. non-STEM workers

PROV	Level 1 or below			Level 2			Level 3			Level 4 or 5			
	%	(SE)		%	(SE)		%	(SE)		%	(SE)		
Males													
Non-STEM	NL	20.9	(2.5)	35.6	(3.0)		33.8	(3.0)		9.7	(1.9)		
	PE	16.5	(3.3)	32.7	(4.5)		37.6	(4.2)		13.2	(4.0)		
	NS	16.0	(2.5)	34.9	(3.7)		34.1	(3.7)		15.0	(2.8)		
	NB	18.2	(2.4)	33.5	(2.8)		35.3	(3.0)		13.1	(2.5)		
	QC	18.4	(1.3)	35.2	(1.5)	m	34.4	(1.6)	m	12.0	(0.9)		
	ON	14.2	(1.5)	32.8	(2.2)		37.8	(2.3)		15.2	(1.7)		
	MB	18.2	(2.5)	34.3	(3.5)		34.0	(3.3)		13.5	(2.3)		
	SK	19.8	(3.1)	35.6	(4.1)		35.5	(3.9)		9.1	(2.1)		
	AB	15.5	(2.7)	30.1	(4.0)		39.7	(4.4)		14.7	(2.7)		
	BC	17.1	(2.4)	28.9	(3.5)		39.1	(3.6)		14.9	(2.6)		
	YK	17.4	(10.2)	25.1	(9.9)		33.8	(14.0)		23.7	(10.0)		
	NT	27.7	(3.8)	30.9	(4.1)		29.2	(4.1)		12.2	(3.0)		
	NU	47.3	(4.6)	31.6	(4.2)		16.3	(3.0)		4.8	(1.9)		
	All	16.3	(0.9)	m	32.7	(1.2)	m	37.0	(1.3)	m	14.0	(0.8)	m
STEM	NL	8.5	(4.2)	20.1	(5.4)		45.1	(8.2)		26.4	(6.5)		
	PE	7.7	(4.5)	26.8	(7.1)		42.1	(9.7)		23.4	(8.0)		
	NS	9.0	(3.5)	21.7	(5.2)		42.6	(6.4)		26.6	(6.0)		
	NB	9.6	(4.5)	30.2	(6.5)		44.6	(8.0)		15.6	(6.0)		
	QC	8.9	(2.0)	24.3	(2.9)		43.8	(3.3)		23.0	(2.7)		
	ON	6.8	(2.3)	25.3	(3.9)		44.6	(4.3)		23.4	(3.6)		
	MB	15.0	(5.0)	23.6	(6.1)		39.9	(6.2)		21.4	(6.2)		
	SK	7.6	(4.0)	25.8	(6.9)		46.0	(7.9)		20.6	(6.7)		
	AB	9.3	(3.4)	20.9	(6.5)		39.2	(6.8)		30.5	(6.3)		
	BC	9.2	(4.4)	25.3	(6.7)		45.7	(6.9)		19.9	(5.5)		
	YK	3.8	(4.8)	13.6	(11.4)		55.7	(17.4)		26.9	(14.7)		
	NT	12.4	(8.9)	25.9	(8.5)		34.5	(8.6)		27.2	(7.5)		
	NU	28.4	(12.2)	37.5	(11.0)		25.3	(7.9)		8.8	(5.3)		
	All	8.3	(1.2)		24.4	(1.8)		43.7	(2.4)	m	23.7	(2.0)	

Table F (cont'd)

Literacy — Incidence of skill proficiency levels among workers aged 16 to 65 by province, Canada, 2012, STEM vs. non-STEM workers

PROV	Level 1 or below			Level 2			Level 3			Level 4 or 5		
	%	(SE)		%	(SE)		%	(SE)		%	(SE)	
Females												
Non-STEM	NL	15.0	(2.1)	36.7	(3.0)		36.7	(3.1)		11.6	(2.1)	
	PE	7.7	(2.1)	30.2	(3.9)		47.8	(3.5)		14.3	(3.1)	
	NS	11.8	(1.8)	35.7	(2.7)		38.6	(2.5)		13.9	(1.9)	
	NB	12.5	(1.8)	36.7	(2.9)		40.7	(3.3)		10.2	(1.9)	
	QC	16.5	(1.2)	35.1	(1.4)	m	38.2	(1.3)	m	10.2	(0.8)	
	ON	13.1	(1.2)	32.2	(2.3)		40.5	(2.5)		14.2	(1.7)	
	MB	14.1	(2.2)	30.6	(3.1)		40.5	(3.4)		14.8	(2.7)	
	SK	13.7	(2.4)	31.7	(2.6)		41.9	(3.1)		12.8	(2.6)	
	AB	14.3	(2.3)	32.7	(3.2)		39.5	(3.6)		13.6	(2.2)	
	BC	14.6	(2.5)	30.1	(3.3)		38.4	(3.9)		16.9	(3.1)	
	YK	7.8	(3.8)	29.5	(10.4)		48.8	(12.1)		14.0	(7.4)	
	NT	27.6	(4.4)	37.2	(4.9)		26.1	(5.0)		9.1	(2.6)	
	NU	48.1	(4.7)	31.7	(4.6)		15.9	(3.4)		4.3	(1.5)	
	All	14.2	(0.7)	m	32.8	(1.3)	m	39.5	(1.1)	u	13.4	(0.9)
STEM	NL	-	-	27.2	(12.6)		47.5	(15.6)		23.5	(12.9)	
	PE	-	-	17.1	(7.7)		52.7	(10.2)		27.3	(9.9)	
	NS	-	-	18.0	(9.0)		43.7	(11.6)		37.7	(11.0)	
	NB	5.9	(4.2)	18.6	(8.0)		41.6	(11.7)		33.9	(10.7)	
	QC	3.9	(1.7)	22.3	(4.2)		47.0	(5.5)		26.8	(4.6)	
	ON	3.9	(2.2)	18.7	(4.7)		48.8	(5.9)		28.7	(5.9)	
	MB	1.2	(2.2)	15.2	(8.0)		46.8	(13.0)		36.8	(11.7)	
	SK	11.9	(7.1)	14.4	(7.5)		52.8	(10.3)		20.9	(7.2)	
	AB	7.5	(5.7)	16.4	(8.5)		50.3	(11.1)		25.7	(9.3)	
	BC	9.9	(7.3)	27.6	(12.0)		39.0	(12.2)		23.6	(11.1)	
	YK	9.9	(6.1)	9.9	(7.3)		45.7	(15.7)		34.4	(15.7)	
	NT	10.3	(7.3)	26.3	(12.9)		44.8	(13.4)		18.6	(9.0)	
	NU	16.6	(10.8)	31.4	(10.7)		35.9	(13.6)		16.1	(9.4)	
	All	5.2	(1.6)		19.9	(2.9)		47.3	(3.5)		27.5	(3.0)

Table F (cont'd)

Literacy — Incidence of skill proficiency levels among workers aged 16 to 65 by province, Canada, 2012, STEM vs. non-STEM workers

PROV	Level 1 or below			Level 2			Level 3			Level 4 or 5			
	%	(SE)		%	(SE)		%	(SE)		%	(SE)		
All													
Non-STEM	NL	17.8	(1.8)	36.1	(2.3)		35.3	(2.3)		10.7	(1.5)		
	PE	11.9	(2.1)	31.4	(3.2)		42.9	(2.9)		13.8	(2.9)		
	NS	13.7	(1.5)	35.3	(2.0)	m	36.5	(2.1)	m	14.4	(1.7)		
	NB	15.3	(1.5)	35.1	(1.9)	m	38.0	(2.0)	m	11.6	(1.5)		
	QC	17.4	(0.9)	m	35.1	(1.0)	u	36.3	(1.0)	u	11.1	(0.7)	m
	ON	13.7	(1.0)		32.5	(1.6)	m	39.2	(1.6)	m	14.7	(1.2)	
	MB	16.0	(1.7)		32.4	(2.2)		37.4	(2.6)		14.2	(1.8)	
	SK	16.8	(2.1)		33.7	(2.5)		38.7	(2.3)	m	10.9	(1.9)	
	AB	14.9	(1.9)		31.4	(2.4)		39.6	(2.8)		14.1	(1.7)	
	BC	15.8	(1.7)		29.5	(2.4)		38.7	(2.6)		15.9	(1.9)	
	YK	12.5	(6.2)		27.3	(7.6)		41.5	(10.0)		18.7	(7.0)	
	NT	27.7	(3.4)		34.0	(3.3)		27.7	(3.6)		10.7	(2.2)	
	NU	47.7	(3.4)		31.6	(2.9)		16.1	(2.5)		4.5	(1.1)	
		All	15.3	(0.6)	m	32.8	(0.9)	u	38.3	(0.9)	u	13.7	(0.6)
STEM	NL	7.0	(3.5)		21.6	(5.3)		45.6	(6.8)		25.7	(4.9)	
	PE	6.2	(3.4)		23.8	(5.3)		45.4	(7.9)		24.6	(6.6)	
	NS	7.1	(2.7)		20.9	(4.8)		42.9	(6.0)		29.1	(5.7)	
	NB	8.4	(3.2)		26.5	(4.9)		43.7	(6.5)		21.4	(5.6)	
	QC	7.6	(1.5)		23.8	(2.5)		44.6	(2.8)		24.0	(2.3)	
	ON	6.0	(1.9)		23.5	(3.2)		45.7	(3.7)		24.8	(3.4)	
	MB	11.7	(3.8)		21.6	(4.9)		41.6	(5.5)		25.1	(5.2)	
	SK	8.8	(3.6)		22.6	(5.5)		48.0	(6.2)		20.7	(5.4)	
	AB	8.8	(2.9)		19.6	(5.2)		42.4	(5.5)		29.1	(5.2)	
	BC	9.4	(3.5)		25.9	(5.3)		43.9	(6.1)		20.8	(5.0)	
	YK	5.2	(4.3)		12.7	(8.3)		53.4	(14.4)		28.6	(12.4)	
	NT	11.6	(6.4)		26.0	(6.8)		38.4	(7.6)		23.9	(5.3)	
	NU	24.3	(8.7)		35.4	(8.4)		29.0	(6.9)		11.3	(4.4)	
		All	7.5	(1.0)		23.2	(1.5)		44.6	(2.0)	m	24.7	(1.8)

Table F (cont'd)

Numeracy — Incidence of skill proficiency levels among workers aged 16 to 65 by province, Canada, 2012, STEM vs. non-STEM workers

PROV	Level 1 or below			Level 2			Level 3			Level 4 or 5			
	%	(SE)		%	(SE)		%	(SE)		%	(SE)		
Males													
Non-STEM	NL	26.2	(3.2)	35.7	(4.1)		28.8	(3.3)		9.3	(2.1)		
	PE	21.4	(3.4)	32.5	(5.3)		35.0	(4.4)		11.0	(3.5)		
	NS	21.6	(2.9)	32.2	(3.7)		31.0	(3.0)		15.2	(2.5)		
	NB	24.5	(2.7)	30.3	(2.9)		33.4	(2.8)		11.8	(2.2)		
	QC	18.9	(1.3)	34.0	(1.7)	m	34.2	(1.5)	m	12.9	(1.0)		
	ON	19.0	(1.6)	30.4	(2.2)		34.5	(2.8)		16.1	(1.9)		
	MB	22.8	(3.2)	32.5	(3.8)		31.5	(3.9)		13.2	(2.6)		
	SK	22.9	(3.6)	32.7	(4.0)		35.2	(4.3)		9.1	(2.3)		
	AB	18.4	(3.0)	29.8	(3.5)		36.0	(3.7)		15.8	(2.5)		
	BC	19.8	(2.7)	30.3	(3.5)		33.4	(3.3)		16.5	(2.7)		
	YK	22.9	(10.2)	29.3	(10.3)		27.2	(12.5)		20.6	(9.4)		
	NT	32.1	(4.6)	29.3	(4.2)		26.0	(4.2)		12.6	(2.8)		
	NU	56.1	(3.9)	22.4	(4.0)		17.5	(3.3)		4.0	(1.6)		
		All	19.6	(0.9)	m	31.4	(1.2)	m	34.2	(1.2)	m	14.8	(0.8)
STEM	NL	11.4	(4.3)	16.3	(5.0)		38.6	(6.9)		33.7	(6.5)		
	PE	11.1	(5.3)	29.5	(8.8)		32.9	(9.3)		26.4	(8.9)		
	NS	12.9	(4.7)	18.8	(5.6)		41.4	(6.2)		27.0	(5.8)		
	NB	10.6	(5.1)	32.5	(6.7)		38.1	(6.8)		18.8	(6.6)		
	QC	7.0	(1.5)	22.3	(3.1)		43.9	(3.6)		26.8	(2.6)		
	ON	6.0	(1.7)	20.6	(3.6)		42.6	(4.7)		30.9	(3.7)		
	MB	15.0	(5.2)	22.8	(5.4)		38.8	(6.6)		23.4	(6.2)		
	SK	8.2	(3.5)	22.2	(6.6)		43.4	(8.2)		26.2	(6.9)		
	AB	9.0	(3.9)	22.2	(6.2)		33.9	(7.2)		35.0	(6.1)		
	BC	11.3	(4.5)	23.0	(6.5)		41.7	(7.3)		24.0	(6.2)		
	YK	3.5	(3.8)	12.7	(9.8)		56.4	(18.7)		27.4	(14.3)		
	NT	13.9	(7.3)	23.0	(8.8)		32.3	(6.4)		30.8	(7.1)		
	NU	33.1	(12.1)	33.8	(11.2)		22.2	(8.3)		10.8	(6.2)		
		All	7.9	(1.0)		21.7	(1.8)		41.4	(2.4)	m	29.0	(2.0)

Table F (cont'd)

Numeracy — Incidence of skill proficiency levels among workers aged 16 to 65 by province, Canada, 2012, STEM vs. non-STEM workers

PROV	Level 1 or below			Level 2			Level 3			Level 4 or 5		
	%	(SE)		%	(SE)		%	(SE)		%	(SE)	
Females												
Non-STEM	NL	27.8	(2.5)	36.1	(2.9)		28.3	(2.8)		7.8	(2.0)	
	PE	15.4	(3.1)	39.4	(3.8)		36.5	(4.3)		8.7	(2.1)	
	NS	23.7	(2.7)	36.6	(3.1)		30.5	(2.8)		9.2	(1.7)	
	NB	23.8	(2.6)	41.3	(2.8)		30.2	(2.9)		4.7	(1.5)	
	QC	20.3	(1.1)	m	39.0	(1.5)	m	33.5	(1.5)	m	7.2	(0.9)
	ON	22.3	(1.6)		36.4	(1.9)	m	31.8	(1.7)	m	9.5	(1.2)
	MB	21.3	(2.8)		35.7	(3.1)		34.5	(3.7)		8.5	(2.2)
	SK	23.0	(2.5)		36.2	(3.3)		31.6	(3.4)		9.2	(2.1)
	AB	25.3	(3.1)		34.5	(4.7)		31.0	(3.9)		9.3	(1.7)
	BC	22.6	(2.7)		33.6	(4.0)		32.9	(3.6)		10.9	(2.1)
	YK	17.9	(8.0)		37.0	(10.9)		36.8	(11.6)		8.3	(4.9)
	NT	41.0	(5.8)		32.5	(3.8)		21.7	(3.1)		4.8	(1.9)
	NU	62.4	(3.5)	m	25.6	(3.9)		9.5	(2.7)		2.5	(1.0)
	All	22.4	(0.8)	m	36.4	(1.2)	m	32.2	(1.1)	m	9.0	(0.7)
STEM	NL	-	-	27.1	(13.3)		44.8	(14.5)		16.4	(12.3)	
	PE	9.9	(7.3)	16.6	(7.5)		48.2	(10.0)		25.3	(9.6)	
	NS	-	-	24.9	(10.3)		43.9	(10.8)		27.5	(9.9)	
	NB	10.2	(6.3)	22.7	(8.8)		41.9	(12.0)		25.2	(8.7)	
	QC	5.3	(2.1)	26.0	(5.0)		47.6	(6.1)		21.2	(4.7)	
	ON	6.8	(3.1)	25.2	(5.7)		46.5	(6.9)		21.5	(5.0)	
	MB	1.7	(2.4)	13.9	(7.6)		62.8	(15.0)		21.6	(12.1)	
	SK	9.8	(7.3)	26.0	(10.3)		39.9	(11.6)		24.2	(8.7)	
	AB	9.8	(6.5)	24.4	(9.2)		40.8	(10.3)		25.0	(9.1)	
	BC	21.6	(10.7)	25.1	(9.8)		32.6	(11.7)		20.7	(10.3)	
	YK	10.3	(7.4)	30.2	(15.9)		45.9	(16.0)		13.6	(10.3)	
	NT	20.7	(11.4)	28.2	(12.0)		39.8	(11.8)		11.3	(5.2)	
	NU	28.3	(12.2)	34.2	(14.5)		26.2	(12.2)		11.3	(7.9)	
	All	8.6	(2.0)	24.9	(3.2)		44.5	(4.0)		22.1	(2.7)	

Table F (cont'd)

Numeracy — Incidence of skill proficiency levels among workers aged 16 to 65 by province, Canada, 2012, STEM vs. non-STEM workers

PROV	Level 1 or below			Level 2			Level 3			Level 4 or 5		
	%	(SE)		%	(SE)		%	(SE)		%	(SE)	
All												
Non-STEM	NL	27.0	(2.0)	35.9	(2.3)		28.5	(1.9)		8.5	(1.3)	
	PE	18.3	(2.4)	36.1	(3.8)		35.8	(3.4)		9.8	(2.2)	
	NS	22.7	(1.8)	34.6	(2.3)		30.7	(1.8)	m	12.0	(1.5)	
	NB	24.2	(1.9)	35.9	(2.0)	m	31.8	(2.0)		8.2	(1.4)	
	QC	19.6	(0.8)	m	36.5	(1.0)	u	33.9	(1.0)	u	10.0	(0.7)
	ON	20.7	(1.0)	m	33.5	(1.4)	m	33.1	(1.7)	m	12.7	(1.1)
	MB	22.0	(2.2)		34.1	(2.6)		33.1	(3.0)		10.7	(1.8)
	SK	23.0	(2.4)		34.5	(2.6)		33.4	(2.9)		9.1	(1.6)
	AB	21.8	(2.3)		32.1	(2.7)		33.5	(2.6)		12.6	(1.4)
	BC	21.2	(1.9)		31.9	(2.7)		33.2	(2.4)		13.7	(1.7)
	YK	20.3	(7.2)		33.3	(7.8)		32.1	(9.0)		14.3	(5.5)
	NT	36.5	(4.3)		30.9	(2.9)		23.9	(2.7)		8.7	(2.0)
	NU	59.4	(2.7)	m	24.1	(2.7)		13.3	(2.1)		3.2	(0.9)
	All	21.0	(0.6)	m	34.0	(0.8)	u	33.2	(0.9)	u	11.8	(0.5)
STEM	NL	11.5	(4.1)	18.7	(4.8)		40.0	(6.1)		29.9	(5.9)	
	PE	10.8	(4.6)	25.5	(6.5)		37.7	(6.7)		26.0	(6.9)	
	NS	10.8	(3.5)	20.2	(4.6)		41.9	(5.3)		27.1	(5.1)	
	NB	10.5	(4.2)	29.3	(5.4)		39.3	(5.8)		20.8	(5.3)	
	QC	6.6	(1.2)	23.2	(2.7)		44.8	(2.5)	m	25.3	(2.2)	
	ON	6.2	(1.4)	21.8	(3.3)		43.6	(4.2)		28.4	(3.1)	
	MB	11.8	(3.9)	20.6	(4.5)		44.6	(6.2)		23.0	(5.2)	
	SK	8.6	(3.5)	23.3	(6.0)		42.4	(6.5)		25.6	(5.3)	
	AB	9.2	(3.3)	22.8	(4.9)		35.9	(5.8)		32.1	(5.0)	
	BC	13.9	(4.5)	23.6	(5.1)		39.3	(6.2)		23.1	(5.3)	
	YK	5.1	(3.9)	16.8	(9.2)		54.0	(14.6)		24.2	(11.3)	
	NT	16.5	(6.7)	25.0	(7.0)		35.2	(6.3)		23.4	(4.6)	
	NU	31.4	(8.6)	34.0	(9.0)		23.6	(7.0)		11.0	(4.5)	
	All	8.1	(0.9)		22.5	(1.5)		42.2	(2.1)	m	27.2	(1.6)

Table F (cont'd)

PS-TRE — Incidence of skill proficiency levels among workers aged 16 to 65 by province, Canada, 2012, STEM vs. non-STEM workers

PROV	Nonrespondents			Level 1 or below			Level 2 or 3			
	%	(S.E.)		%	(S.E.)		%	(S.E.)		
Males										
Non-STEM	NL	46.0	(3.1)		27.7	(2.8)		26.4	(2.4)	
	PE	46.9	(4.3)		24.8	(3.5)		28.2	(3.0)	
	NS	44.3	(3.4)		38.2	(2.9)		17.5	(2.6)	
	NB	45.5	(3.3)		30.9	(3.2)		23.6	(2.0)	
	QC	52.2	(1.6)	m	30.5	(1.6)	m	17.4	(1.2)	
	ON	45.9	(2.1)	m	37.0	(2.1)	m	17.1	(1.3)	
	MB	42.1	(3.6)		29.8	(2.9)		28.0	(2.9)	
	SK	56.8	(4.1)		30.1	(3.9)		13.1	(1.9)	
	AB	49.7	(3.7)		33.1	(3.2)		17.3	(2.7)	
	BC	42.0	(3.4)		39.4	(3.3)		18.7	(2.1)	
	YK	44.9	(14.2)		36.0	(9.0)		19.1	(9.8)	
	NT	43.9	(4.5)		32.0	(4.1)		24.1	(2.4)	
	NU	38.9	(4.2)		14.6	(2.8)		46.4	(4.1)	
	All	18.0	(0.8)	m	47.4	(1.1)	u	34.6	(1.0)	u
STEM	NFL	36.4	(7.9)		55.9	(7.4)		7.7	(2.9)	
	PEI	46.5	(8.2)		43.6	(7.8)		9.9	(4.1)	
	NS	34.0	(5.8)		57.5	(5.8)		8.4	(2.3)	
	NB	39.0	(6.8)		48.8	(7.2)		12.2	(3.8)	
	QC	41.3	(3.3)		50.6	(3.1)		8.1	(1.3)	
	ON	42.4	(3.6)		51.8	(3.7)		5.8	(1.7)	
	MB	35.7	(5.7)		46.0	(6.7)		18.2	(4.6)	
	SK	45.9	(6.8)		43.9	(6.7)		10.3	(2.9)	
	AB	40.7	(6.8)		53.1	(6.1)		6.1	(2.4)	
	BC	30.3	(6.4)		51.0	(7.3)		18.7	(5.0)	
	YK	41.8	(21.6)		57.1	(21.6)		1.0	(1.0)	
	NT	43.6	(9.8)		49.4	(9.5)		7.0	(3.0)	
	NU	44.0	(10.7)		29.0	(9.8)		27.0	(11.3)	
All	8.6	(1.0)		40.1	(2.1)	m	51.3	(2.0)	m	

Table F (cont'd)

PS-TRE — Incidence of skill proficiency levels among workers aged 16 to 65 by province, Canada, 2012, STEM vs. non-STEM workers

PROV	Nonrespondents			Level 1 or below			Level 2 or 3			
	%	(S.E.)		%	(S.E.)		%	(S.E.)		
Females										
Non-STEM	NL	47.7	(3.1)		31.4	(2.8)		21.0	(1.9)	
	PE	52.2	(4.7)		34.2	(4.6)		13.7	(1.8)	
	NS	50.2	(2.9)	m	40.0	(2.8)		9.8	(1.3)	
	NB	49.8	(3.2)		32.2	(3.1)		18.0	(1.9)	
	QC	54.4	(1.5)	u	32.1	(1.4)	m	13.5	(0.8)	m
	ON	48.2	(2.0)	m	39.0	(2.1)	m	12.9	(1.0)	
	MB	43.5	(3.3)		37.9	(3.4)		18.6	(2.1)	
	SK	55.2	(3.3)	m	35.4	(3.1)		9.4	(1.6)	
	AB	45.3	(3.3)		41.2	(3.3)		13.5	(2.1)	
	BC	44.9	(3.7)		38.2	(3.4)		16.8	(2.4)	
	YK	58.6	(13.6)		35.4	(13.1)		6.0	(2.1)	
	NT	56.1	(4.8)		25.7	(4.5)		18.2	(2.6)	
	NU	48.8	(4.9)		14.9	(3.0)		36.3	(4.7)	
	All	13.9	(0.6)	m	48.9	(1.1)	u	37.2	(1.1)	m
STEM	NL	30.3	12.5		59.2	(13.1)		10.4	(7.4)	
	PE	37.1	(9.6)		56.8	(9.8)		6.0	(4.0)	
	NS	23.6	9.2		67.4	(9.9)		9.1	(4.7)	
	NB	30.3	(9.7)		62.9	(10.2)		6.8	(5.1)	
	QC	37.0	(4.7)		55.3	(4.9)		7.8	(2.1)	
	ON	35.9	(6.1)		56.6	(6.3)		7.4	(2.8)	
	MB	31.3	(11.1)		65.2	(11.3)		3.4	(3.3)	
	SK	43.4	(10.9)		56.6	(10.9)		-	-	
	AB	38.9	(9.1)		60.0	(9.1)		1.0	(1.1)	
	BC	44.4	(11.0)		45.6	(11.1)		10.0	(6.2)	
	YK	42.8	(16.4)		55.6	(16.6)		1.7	(1.8)	
	NT	41.2	(14.4)		55.5	(15.2)		3.3	(3.4)	
	NU	54.7	(11.8)		28.2	(15.6)		17.1	(11.8)	
	All	6.5	(1.4)		37.3	(3.1)		56.2	(3.2)	m

Table F (cont'd)

PS-TRE — Incidence of skill proficiency levels among workers aged 16 to 65 by province, Canada, 2012, STEM vs. non-STEM workers

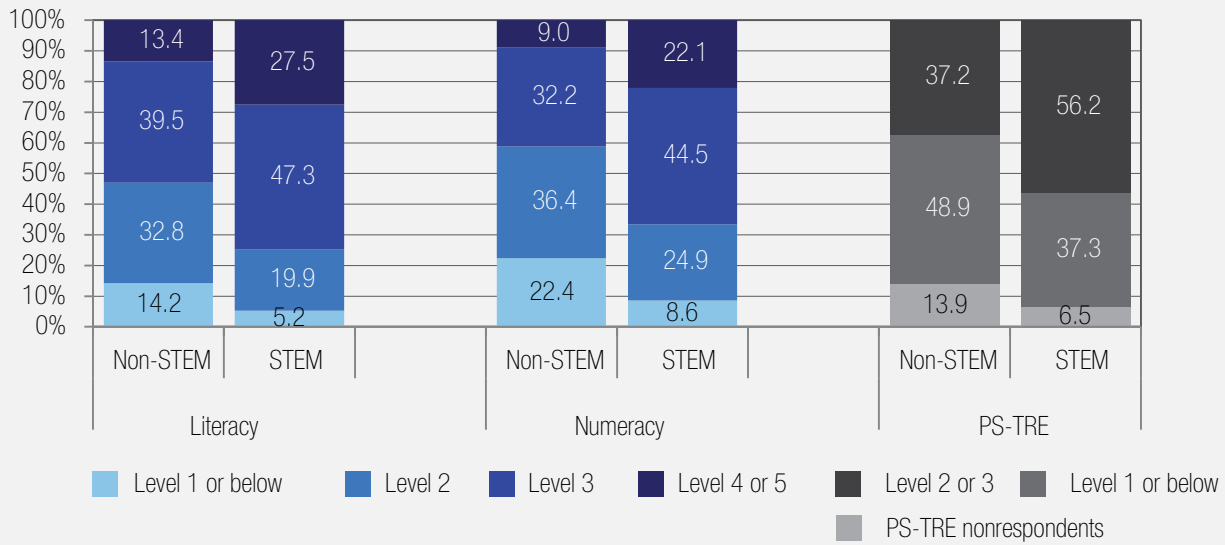
PROV	Nonrespondents			Level 1 or below			Level 2 or 3			
	%	(S.E.)		%	(S.E.)		%	(S.E.)		
All										
Non-STEM	NL	46.8	(2.2)	m	29.6	(2.0)		23.5	(1.6)	
	PE	49.7	(3.5)		29.7	(3.3)		20.6	(1.8)	
	NS	47.4	(2.2)	m	39.2	(1.9)	m	13.4	(1.5)	
	NB	47.7	(2.5)	m	31.6	(2.5)		20.8	(1.3)	
	QC	53.3	(1.0)	u	31.3	(1.0)	m	15.4	(0.7)	m
	ON	47.1	(1.6)	m	38.0	(1.6)	m	14.9	(0.8)	m
	MB	42.8	(2.5)	m	34.0	(2.4)		23.2	(2.0)	
	SK	56.0	(2.8)	m	32.7	(2.7)		11.3	(1.3)	
	AB	47.5	(2.6)	m	37.1	(2.4)		15.4	(1.7)	
	BC	43.5	(2.7)		38.8	(2.4)		17.7	(1.8)	
	YK	51.9	(10.0)		35.7	(8.7)		12.4	(5.2)	
	NT	49.9	(3.9)		28.9	(3.6)		21.1	(1.8)	
	NU	44.1	(3.5)		14.8	(2.3)		41.1	(3.3)	
	All	15.9	(0.5)	u	48.2	(0.9)	u	35.9	(0.8)	u
STEM	NFL	35.1	(6.5)		56.6	(6.4)		8.3	(2.8)	
	PEI	43.6	(6.5)		47.8	(6.4)		8.7	(3.0)	
	NS	31.7	(5.0)		59.8	(5.2)		8.6	(1.9)	
	NB	36.2	(5.9)		53.3	(6.1)		10.5	(3.0)	
	QC	40.2	(2.7)		51.8	(2.7)	m	8.0	(1.1)	
	ON	40.7	(3.1)		53.1	(3.2)		6.2	(1.3)	
	MB	34.7	(5.4)		50.7	(6.0)		14.7	(3.5)	
	SK	45.2	(6.0)		47.5	(6.0)		7.3	(2.1)	
	AB	40.2	(5.9)		55.1	(5.4)		4.6	(1.7)	
	BC	33.9	(5.4)		49.6	(5.8)		16.5	(4.0)	
	YK	42.1	(18.0)		56.8	(18.1)		1.2	(0.8)	
	NT	42.7	(9.2)		51.7	(9.2)		5.6	(2.8)	
	NU	47.7	(7.6)		28.8	(8.6)		23.5	(9.0)	
	All	8.1	(0.8)		39.3	(1.8)	m	52.6	(1.7)	m

Notes: The sample excludes workers who identified themselves as students. The lower-case *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either “unacceptable” (when $CV > 33.3\%$) or “marginally acceptable” ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level.

SE Standard error

Source: PIAAC, 2012

Figure F Skill proficiency levels among all workers aged 16 to 65, by STEM status, Canada, 2012



Note: The sample excludes workers who identified themselves as students.

Source: PIAAC, 2012



ANNEX G

SKILLS PROFICIENCY BY PROVINCE AND TRADES STATUS

Table G

Literacy — Incidence of skill proficiency levels among workers aged 16 to 65, Canada, 2012, trades vs. non-trades workers

PROV	Level 1 or below			Level 2			Level 3			Level 4 or 5			
	%	(SE)		%	(SE)		%	(SE)		%	(SE)		
Males													
Non-trades	NL	16.5	(2.7)		31.8	(3.1)		37.4	(3.2)		14.2	(2.5)	m
	PE	13.9	(2.9)	m	30.3	(3.9)		39.4	(4.2)		16.4	(3.9)	m
	NS	13.2	(2.3)	m	29.5	(3.6)		37.6	(4.3)		19.7	(3.2)	
	NB	15.5	(2.3)		32.1	(2.8)		37.3	(2.9)		15.2	(2.5)	m
	QC	14.1	(1.2)		31.8	(1.6)	m	38.2	(1.6)		15.9	(1.1)	
	ON	11.4	(1.2)		29.8	(2.2)		39.7	(2.2)		19.1	(1.8)	
	MB	16.6	(2.5)		29.3	(3.5)		35.8	(3.2)		18.3	(2.9)	
	SK	15.7	(2.4)		30.4	(4.1)		39.6	(3.9)		14.3	(2.6)	m
	AB	13.9	(2.4)	m	26.6	(3.6)		39.5	(4.3)		20.0	(2.8)	
	BC	13.7	(2.3)	m	26.9	(3.2)		41.6	(3.6)		17.9	(2.7)	
	YK	12.9	(9.1)	u	21.6	(9.1)		38.8	(13.2)	u	26.6	(9.2)	u
	NT	24.0	(4.2)	m	28.6	(3.8)		31.0	(4.3)		16.4	(2.8)	m
	NU	40.0	(4.6)		33.5	(4.5)		20.2	(3.4)	m	6.3	(2.4)	u
	All	13.1	(0.7)		29.5	(1.1)	m	39.3	(1.2)		18.0	(1.0)	
Trades	NL	26.4	(5.2)	m	36.6	(5.8)		30.1	(6.9)	m	7.0	(3.9)	u
	PE	17.0	(7.3)	u	36.3	(9.7)		35.1	(9.3)	m	11.6	(5.7)	u
	NS	19.1	(5.2)	m	40.8	(6.4)		30.5	(6.6)	m	9.7	(4.2)	u
	NB	23.1	(5.2)	m	37.1	(6.6)		33.8	(6.7)	m	6.0	(3.9)	u
	QC	27.8	(3.0)		38.4	(3.6)		27.2	(3.2)		6.6	(2.0)	m
	ON	19.7	(3.7)	m	39.2	(5.3)		37.1	(5.4)		4.0	(2.0)	u
	MB	21.2	(6.1)	m	43.4	(8.3)		32.9	(6.7)	m	2.5	(2.0)	u
	SK	23.0	(7.2)	m	44.7	(8.4)		31.1	(7.6)	m	-	-	
	AB	14.9	(5.0)	u	32.8	(6.7)		39.9	(7.4)	m	12.4	(5.6)	u
	BC	25.4	(7.1)	m	35.2	(8.3)		34.1	(8.5)	m	5.3	(3.5)	u
	YK	29.0	(17.6)	u	32.0	(18.5)		31.4	(14.9)	u	7.6	(6.6)	u
	NT	31.2	(10.7)	u	39.1	(11.0)		24.6	(8.7)	u	5.0	(4.2)	u
	NU	63.9	(11.4)	m	28.0	(10.0)		6.8	(4.5)	u	-	-	
	All	21.8	(2.1)		37.7	(2.5)		34.1	(2.4)		6.4	(1.2)	m

Table G (cont'd)

Literacy — Incidence of skill proficiency levels among workers aged 16 to 65, Canada, 2012, trades vs. non-trades workers

PROV	Level 1 or below			Level 2			Level 3			Level 4 or 5			
	%	(SE)		%	(SE)		%	(SE)		%	(SE)		
Females													
Non-trades	NL	14.3	(2.0)		35.8	(2.9)		37.6	(3.1)		12.3	(2.1)	m
	PE	6.9	(1.9)	m	28.4	(3.7)		48.4	(3.3)		16.3	(3.2)	m
	NS	10.5	(1.7)	m	34.9	(2.7)		39.0	(2.5)		15.6	(2.2)	
	NB	11.5	(1.8)		35.9	(2.9)		40.7	(3.5)		11.9	(2.2)	m
	QC	14.8	(1.2)		33.7	(1.4)		39.3	(1.4)	m	12.2	(0.9)	
	ON	12.2	(1.2)		31.0	(2.2)		41.2	(2.2)	m	15.6	(1.7)	
	MB	12.6	(2.1)	m	29.4	(3.1)		41.5	(3.3)		16.6	(2.7)	m
	SK	13.6	(2.2)		30.0	(2.5)		42.8	(3.1)		13.6	(2.5)	m
	AB	13.7	(2.1)		30.7	(3.1)		40.7	(3.6)		14.8	(2.1)	
	BC	14.0	(2.4)	m	30.1	(3.2)		38.6	(3.9)		17.3	(3.1)	m
	YK	8.7	(4.2)	u	30.1	(10.6)	u	45.2	(11.8)		16.0	(7.3)	u
	NT	24.8	(4.2)	m	35.0	(4.4)		29.4	(4.3)		10.8	(3.0)	m
	NU	44.0	(4.5)		32.0	(4.3)		18.3	(3.3)		5.7	(1.7)	m
	All	13.2	(0.7)		31.6	(1.2)		40.4	(1.1)	u	14.8	(0.9)	
Trades	NL	16.4	(9.7)	u	44.8	(15.9)	u	29.4	(14.2)		-	-	
	PE	12.7	(8.9)	u	34.3	(15.6)	u	47.2	(19.2)		-	-	
	NS	20.6	(9.6)	u	27.1	(9.7)	u	38.2	(12.0)		14.1	(8.4)	u
	NB	19.3	(9.7)	u	27.9	(10.5)	u	41.7	(12.9)		11.0	(8.0)	u
	QC	22.1	(3.7)	m	37.7	(4.9)		34.5	(5.0)		5.7	(2.9)	u
	ON	14.0	(6.0)	u	29.9	(9.3)	m	42.1	(11.6)		14.0	(9.7)	u
	MB	23.5	(12.6)	u	31.8	(15.7)	u	31.0	(14.2)		13.7	(11.3)	u
	SK	9.8	(7.9)	u	33.2	(16.2)	u	46.1	(17.0)		10.9	(11.2)	u
	AB	10.2	(8.3)	u	35.1	(16.2)	u	38.3	(15.7)		16.5	(11.1)	u
	BC	17.8	(10.2)	u	27.3	(13.3)	u	36.4	(13.1)		18.4	(10.9)	u
	YK	3.2	(3.7)	u	17.4	(21.3)	u	68.2	(29.4)		11.2	(20.1)	u
	NT	33.3	(7.8)	m	45.0	(13.8)	m	17.1	(12.6)		-	-	
	NU	64.3	(18.5)	m	27.5	(16.4)	u	-	-		-	-	
	All	17.4	(2.8)		32.7	(4.0)		37.9	(4.6)		12.0	(4.1)	u

Table G (cont'd)

Literacy — Incidence of skill proficiency levels among workers aged 16 to 65, Canada, 2012, trades vs. non-trades workers

PROV	Level 1 or below			Level 2			Level 3			Level 4 or 5			
	%	(SE)		%	(SE)		%	(SE)		%	(SE)		
All													
Non-trades	NL	15.3	(1.8)		34.0	(2.2)		37.5	(2.3)		13.2	(1.6)	
	PE	10.3	(1.8)	m	29.3	(2.9)		44.1	(2.7)		16.3	(2.9)	m
	NS	11.7	(1.4)		32.4	(2.2)		38.3	(2.5)		17.5	(2.1)	
	NB	13.4	(1.3)		34.1	(2.0)		39.0	(2.1)		13.5	(1.6)	
	QC	14.5	(0.8)		32.7	(1.1)		38.8	(1.1)		14.1	(0.7)	
	ON	11.8	(0.8)		30.3	(1.7)		40.5	(1.6)		17.4	(1.2)	
	MB	14.5	(1.6)		29.3	(2.5)		38.8	(2.5)		17.4	(2.0)	
	SK	14.6	(1.7)		30.2	(2.4)		41.2	(2.2)		14.0	(1.9)	
	AB	13.8	(1.8)		28.8	(2.3)		40.1	(2.7)		17.3	(1.6)	
	BC	13.8	(1.7)		28.5	(2.2)		40.1	(2.5)		17.6	(2.0)	
	YK	10.9	(5.9)	u	25.6	(7.3)	m	41.8	(8.7)	m	21.6	(6.7)	m
	NT	24.4	(3.6)		31.7	(2.9)		30.2	(3.1)		13.6	(2.3)	m
	NU	42.1	(3.3)		32.7	(2.8)		19.2	(2.6)		6.0	(1.4)	m
All	13.2	(0.5)		30.6	(0.8)		39.8	(0.8)		16.4	(0.7)		
Trades	NL	24.9	(4.8)	m	37.7	(5.8)		30.0	(6.5)	m	7.3	(3.8)	u
	PE	16.0	(6.0)	u	35.8	(8.3)	m	37.9	(9.1)	m	10.2	(4.8)	u
	NS	19.4	(4.7)	m	38.0	(5.2)		32.0	(5.7)	m	10.6	(3.6)	u
	NB	22.2	(4.6)	m	34.9	(5.9)	m	35.7	(6.2)	m	7.2	(3.6)	u
	QC	26.1	(2.5)		38.2	(2.9)		29.4	(2.6)		6.4	(1.6)	m
	ON	18.4	(2.9)		37.1	(4.6)		38.3	(4.7)		6.3	(2.7)	u
	MB	21.6	(5.2)	m	41.2	(7.4)	m	32.5	(6.0)	m	4.6	(2.6)	u
	SK	21.5	(6.5)	m	43.4	(7.4)	m	32.8	(7.1)	m	2.3	(2.2)	u
	AB	14.2	(4.4)	m	33.1	(6.3)	m	39.6	(6.6)	m	13.1	(4.9)	u
	BC	23.5	(5.8)	m	33.2	(7.1)	m	34.7	(7.4)	m	8.7	(4.2)	u
	YK	15.5	(9.6)	u	24.4	(15.3)	u	50.6	(18.6)	u	9.5	(11.3)	u
	NT	32.0	(7.8)	m	41.4	(8.6)	m	21.8	(8.1)	u	4.8	(3.2)	u
	NU	64.0	(10.3)		27.9	(8.7)	m	7.2	(4.3)	u	-	-	
All	20.8	(1.7)		36.6	(2.1)		35.0	(2.0)		7.6	(1.3)	m	

Table G (cont'd)

Numeracy — Incidence of skill proficiency levels among workers aged 16 to 65, Canada, 2012, trades vs. non-trades workers

PROV	Level 1 or below			Level 2			Level 3			Level 4 or 5		
	%	(SE)		%	(SE)		%	(SE)		%	(SE)	
Males												
Non-trades												
NL	21.5	(3.0)		31.8	(4.0)		31.1	(3.6)		15.6	(2.6)	m
PE	18.5	(3.3)	m	31.4	(5.0)		34.8	(3.9)		15.3	(4.3)	m
NS	17.8	(2.9)		27.8	(3.7)		34.2	(3.0)		20.2	(2.8)	
NB	20.7	(2.6)		30.7	(2.9)		34.5	(2.9)		14.2	(2.3)	
QC	14.8	(1.2)		30.7	(1.8)		37.4	(1.8)		17.1	(1.2)	
ON	15.0	(1.3)		27.1	(2.1)		36.9	(2.7)		21.1	(1.9)	
MB	19.4	(3.1)		29.0	(3.4)		34.1	(3.9)		17.5	(3.0)	m
SK	18.1	(2.7)		28.2	(3.9)		38.2	(4.4)		15.5	(2.9)	m
AB	15.6	(2.7)	m	28.1	(3.5)		34.2	(3.7)		22.1	(2.6)	
BC	16.5	(2.6)		27.9	(3.3)		35.2	(3.5)		20.4	(3.0)	
YK	17.8	(9.2)	u	24.5	(9.3)	u	33.6	(11.8)	u	24.1	(7.6)	m
NT	27.4	(4.4)		27.5	(4.5)		28.0	(3.7)		17.1	(2.7)	
NU	47.8	(3.7)		25.7	(3.9)		20.6	(4.0)	m	5.9	(2.0)	u
All	15.8	(0.7)		28.4	(1.2)		36.2	(1.3)		19.7	(0.9)	
Trades												
NL	30.8	(5.5)	m	34.5	(6.6)	m	28.5	(5.6)	m	6.2	(2.9)	u
PE	21.8	(8.0)	u	34.2	(11.1)	m	33.3	(10.2)	m	10.8	(5.5)	u
NS	26.3	(6.5)	m	34.5	(7.4)	m	30.1	(5.9)	m	9.1	(3.7)	u
NB	30.3	(5.8)	m	30.6	(6.4)	m	32.4	(6.5)	m	6.7	(4.4)	u
QC	24.4	(2.7)		35.6	(3.7)		30.7	(4.2)		9.3	(2.6)	m
ON	22.0	(3.6)		34.7	(5.2)		33.1	(5.1)		10.1	(3.2)	m
MB	28.5	(6.4)	m	36.6	(7.0)	m	28.6	(6.4)	m	6.4	(3.4)	u
SK	26.4	(7.0)	m	39.1	(7.2)	m	32.3	(7.1)	m	-	-	
AB	18.4	(5.6)	m	28.2	(7.6)	m	39.7	(6.9)	m	13.6	(4.8)	
BC	26.6	(7.5)	m	34.4	(10.7)	m	34.1	(9.3)	m	4.9	(3.4)	
YK	30.2	(19.7)	u	38.4	(16.8)	u	26.2	(13.0)	u	5.2	(4.4)	
NT	38.8	(11.9)	m	32.4	(11.5)	u	21.3	(11.0)	u	7.5	(5.5)	
NU	74.0	(9.9)		17.1	(9.2)	u	7.9	(4.6)	u	-	-	
All	23.5	(2.2)		33.9	(2.6)		33.4	(2.2)		9.2	(1.4)	

Table G (cont'd)

Numeracy — Incidence of skill proficiency levels among workers aged 16 to 65, Canada, 2012, trades vs. non-trades workers

PROV	Level 1 or below			Level 2			Level 3			Level 4 or 5			
	%	(SE)		%	(SE)		%	(SE)		%	(SE)		
Females													
Non-trades	NL	26.9	(2.4)	35.5	(3.0)		29.2	(2.8)		8.4	(2.1)	m	
	PE	14.0	(3.1)	m	36.8	(3.3)		38.3	(4.2)		10.9	(2.3)	m
	NS	21.8	(2.5)		36.0	(3.1)		31.7	(2.8)		10.5	(1.9)	m
	NB	22.5	(2.5)		40.1	(2.8)		30.9	(2.8)		6.5	(1.4)	m
	QC	18.3	(1.1)		37.4	(1.4)		35.3	(1.4)		8.9	(0.9)	
	ON	20.7	(1.4)		35.3	(1.9)		33.2	(1.9)		10.8	(1.3)	
	MB	19.0	(2.6)		34.6	(3.1)		36.7	(3.8)		9.7	(2.4)	m
	SK	21.9	(2.5)		35.0	(3.3)		32.2	(3.7)		10.9	(2.1)	m
	AB	23.3	(3.0)		33.7	(4.4)		32.2	(3.7)		10.8	(1.8)	m
	BC	22.3	(2.7)		33.4	(3.8)		32.4	(3.8)		11.9	(2.1)	m
	YK	19.3	(9.1)	u	35.3	(10.8)	m	36.7	(11.8)	m	8.6	(4.2)	u
	NT	37.9	(5.0)		30.8	(3.8)		25.2	(3.1)		6.0	(1.8)	m
	NU	57.7	(3.8)		27.2	(3.8)		11.6	(2.8)	m	3.5	(1.1)	m
All	20.9	(0.8)		35.4	(1.2)		33.4	(1.2)		10.4	(0.7)		
Trades	NL	28.8	12.5	u	39.6	(15.2)	u	27.6	(13.7)	u	-	-	
	PE	27.2	(14.1)	u	38.7	(17.1)	u	29.8	(16.0)	u	-	-	
	NS	32.2	11.1	u	31.9	(12.5)	u	26.7	(11.7)	u	9.2	(7.8)	u
	NB	27.5	(11.0)	u	37.4	(11.3)	m	33.3	(11.7)	u	-	-	
	QC	27.4	(4.3)		42.6	(6.0)		27.6	(4.6)	m	2.3	(1.4)	u
	ON	23.3	(7.5)	m	37.0	(10.5)	m	32.6	(11.3)	u	7.1	(6.6)	u
	MB	37.8	(12.9)	u	25.5	(14.2)	u	33.0	(14.5)	u	3.7	(6.3)	u
	SK	16.5	(10.3)	u	43.0	(18.4)	u	39.6	(16.8)	u	-	-	
	AB	30.5	(14.8)	u	27.4	(15.4)	u	28.2	(14.4)	u	13.8	(11.2)	u
	BC	25.8	(11.4)	u	25.4	(11.6)	u	40.4	(12.3)	m	8.5	(9.1)	u
	YK	6.4	(5.8)	u	44.0	(30.8)	u	41.3	(30.6)	u	8.3	(17.6)	u
	NT	45.3	(17.1)	u	43.6	(14.7)	u	9.9	(9.5)	u	-	-	
	NU	82.6	(13.7)	m	-	-		-	-		-	-	
All	26.6	(3.7)		35.8	(4.6)		31.6	(5.1)		6.1	(2.8)		

Table G (cont'd)

Numeracy — Incidence of skill proficiency levels among workers aged 16 to 65, Canada, 2012, trades vs. non-trades workers

PROV	Level 1 or below			Level 2			Level 3			Level 4 or 5			
	%	(SE)		%	(SE)		%	(SE)		%	(SE)		
All													
Non-trades	NL	24.5	(1.9)	33.8	(2.2)		30.1	(2.0)		11.7	(1.6)		
	PE	16.2	(2.4)	34.2	(3.4)		36.6	(2.7)		13.0	(2.6)	m	
	NS	19.9	(1.9)	32.2	(2.4)		32.8	(1.9)		15.0	(1.5)		
	NB	21.6	(1.8)	35.6	(2.0)		32.6	(2.0)		10.1	(1.3)		
	QC	16.5	(0.8)	34.0	(1.1)		36.4	(1.1)		13.1	(0.8)		
	ON	17.8	(0.9)	31.1	(1.3)		35.1	(1.7)		16.0	(1.2)		
	MB	19.2	(2.0)	31.9	(2.4)		35.5	(3.1)		13.5	(2.0)		
	SK	20.1	(2.0)	31.7	(2.7)		35.1	(2.8)		13.1	(1.8)		
	AB	19.6	(2.2)	31.0	(2.7)		33.2	(2.4)		16.3	(1.4)		
	BC	19.4	(1.8)	30.6	(2.8)		33.8	(2.7)		16.2	(1.9)		
	YK	18.5	(7.0)	u	29.6	(7.2)	m	35.1	(8.4)	m	16.9	(4.7)	m
	NT	32.5	(3.9)		29.1	(3.1)		26.6	(2.5)		11.7	(1.9)	
	NU	53.1	(2.7)		26.5	(2.4)		15.8	(2.5)		4.6	(1.1)	m
All	18.3	(0.6)		31.9	(0.7)		34.8	(0.9)		15.0	(0.6)		
Trades	NL	30.5	(4.8)		35.2	(6.2)	m	28.4	(5.3)	m	5.9	(2.7)	u
	PE	23.0	(7.3)	m	35.2	(9.5)	m	32.5	(8.4)	m	9.2	(4.4)	u
	NS	27.5	(5.5)	m	33.9	(6.2)	m	29.4	(5.0)	m	9.1	(3.2)	u
	NB	29.6	(5.4)	m	32.2	(5.7)	m	32.6	(5.7)	m	5.6	(3.7)	u
	QC	25.3	(2.6)		37.7	(3.4)		29.8	(3.5)		7.2	(1.9)	m
	ON	22.3	(3.3)		35.2	(4.8)		33.0	(4.8)		9.4	(2.8)	m
	MB	30.2	(5.5)	m	34.5	(6.1)	m	29.4	(5.8)	m	5.9	(3.1)	u
	SK	25.3	(6.2)	m	39.5	(6.3)		33.1	(6.4)	m	-	-	
	AB	20.2	(5.4)	m	28.1	(6.8)	m	38.0	(6.4)	m	13.7	(4.6)	u
	BC	26.4	(6.1)	m	32.1	(7.5)	m	35.7	(7.2)	m	5.9	(3.5)	u
	YK	17.8	(10.9)	u	41.3	(17.7)	u	34.0	(17.8)	u	6.8	(9.3)	u
	NT	41.3	(11.2)	m	36.7	(9.8)	m	16.9	(8.4)	u	5.1	(3.7)	u
	NU	76.7	(7.1)		16.6	(7.3)	u	6.0	(3.9)	u	-	-	
All	24.2	(2.0)		34.3	(2.4)		33.0	(2.2)		8.5	(1.4)		

Table G (cont'd)

PS-TRE — Incidence of skill proficiency levels among workers aged 16 to 65, Canada, 2012, trades vs. non-trades workers

PROV	Level 1 or below			Level 2 or 3			Nonrespondents			
	%	(SE)		%	(SE)		%	(SE)		
Males										
Non-trades	NL	43.7	(3.3)		35.6	(3.0)		20.8	(1.9)	
	PE	44.7	(4.0)		30.3	(3.5)		24.9	(2.7)	
	NS	40.4	(3.4)		46.6	(2.9)		13.1	(2.2)	m
	NB	44.2	(3.3)		36.5	(3.2)		19.3	(2.0)	
	QC	48.3	(1.5)		37.0	(1.5)		14.7	(1.0)	
	ON	43.4	(1.9)		43.3	(2.0)		13.3	(1.2)	
	MB	37.3	(3.4)		36.8	(3.3)		25.9	(3.0)	
	SK	51.9	(3.8)		37.0	(3.9)		11.1	(1.7)	
	AB	46.9	(3.5)		40.0	(3.1)		13.1	(2.2)	m
	BC	38.8	(3.0)		44.3	(3.1)		16.8	(2.0)	
	YK	43.8	(12.3)	m	42.9	(8.7)	m	13.3	(8.9)	u
	NT	42.6	(4.5)		37.4	(3.8)		20.0	(2.9)	
	NU	38.2	(4.4)		19.1	(3.3)	m	42.7	(4.1)	
	All	44.3	(1.0)		41.0	(0.9)		14.7	(0.7)	
Trades	NL	46.6	(5.6)		22.1	(4.7)	m	31.3	(5.1)	
	PE	56.7	(9.6)	m	23.4	(8.1)	u	19.9	(6.0)	m
	NS	47.9	(6.5)		27.5	(6.1)	m	24.5	(4.5)	m
	NB	46.1	(6.6)		20.8	(5.9)	m	33.1	(5.2)	
	QC	57.8	(3.6)		23.1	(3.1)		19.1	(2.6)	
	ON	55.4	(4.8)		22.7	(4.6)	m	22.0	(3.6)	
	MB	54.5	(6.3)		18.8	(5.3)	m	26.7	(4.7)	m
	SK	63.9	(6.5)		18.6	(5.7)	m	17.4	(4.3)	m
	AB	50.2	(7.4)		29.6	(6.6)	m	20.3	(5.3)	m
	BC	44.3	(8.3)	m	27.4	(7.6)	m	28.4	(7.0)	m
	YK	48.1	(18.0)	u	19.2	(12.0)	u	32.7	(22.8)	u
	NT	52.1	(10.2)	m	19.9	(9.3)	u	28.0	(9.7)	u
	NU	45.9	(8.4)	m	6.5	(4.2)	u	47.6	(8.6)	m
	All	53.3	(2.8)		24.3	(2.2)		22.4	(1.8)	

Table G (cont'd)

PS-TRE — Incidence of skill proficiency levels among workers aged 16 to 65, Canada, 2012, trades vs. non-trades workers

PROV	Level 1 or below			Level 2 or 3			Nonrespondents			
	%	(SE)		%	(SE)		%	(SE)		
Females										
Non-trades	NL	46.5	(3.1)		33.0	(2.9)		20.6	(1.9)	
	PE	50.7	(4.6)		37.5	(4.5)		11.9	(1.8)	
	NS	48.6	(2.7)		41.8	(2.7)		9.6	(1.4)	
	NB	48.5	(3.1)		33.9	(3.1)		17.5	(1.7)	
	QC	52.2	(1.5)		35.3	(1.4)		12.5	(0.8)	
	ON	46.9	(2.1)		40.7	(2.1)		12.4	(1.0)	
	MB	42.8	(3.3)		39.9	(3.5)		17.3	(2.0)	
	SK	53.8	(3.3)		37.6	(3.2)		8.5	(1.4)	m
	AB	45.2	(3.1)		42.9	(3.2)		11.8	(2.0)	m
	BC	45.2	(3.5)		39.0	(3.2)		15.8	(2.3)	
	YK	59.8	(12.7)	m	33.9	(12.0)	u	6.3	(2.2)	u
	NT	53.9	(5.3)		30.2	(5.3)	m	15.9	(2.6)	m
	NU	50.1	(4.8)		17.0	(3.3)	m	32.9	(4.6)	
	All	47.8	(1.1)		39.2	(1.1)		13.0	(0.5)	
Trades	NL	54.6	13.0	m	28.4	(13.7)	u	17.0	(8.0)	u
	PE	48.6	(15.1)	m	22.5	(14.9)	u	28.9	(11.8)	u
	NS	43.2	11.6	m	44.7	(11.8)	m	12.1	(5.5)	u
	NB	46.1	(11.4)	m	41.2	(11.5)	m	12.7	(5.7)	u
	QC	60.5	(4.6)		20.7	(3.9)	m	18.8	(3.3)	m
	ON	49.6	(10.1)	m	39.7	(9.7)	m	10.8	(4.2)	u
	MB	39.1	(15.6)	u	40.2	(14.4)	u	20.7	(11.3)	u
	SK	60.7	(15.2)	m	31.4	(14.8)	u	7.8	(8.6)	u
	AB	32.1	(12.6)	u	49.3	(13.9)	m	18.6	(11.5)	u
	BC	40.3	(13.0)	m	35.1	(13.3)	u	24.6	(8.9)	u
	YK	44.7	(31.7)	u	52.6	(31.8)	u	2.7	(2.3)	u
	NT	58.9	(21.1)	u	19.6	(14.1)	u	21.5	(10.2)	u
	NU	40.6	(14.6)	u	-	-		56.2	(14.2)	m
	All	49.6	(4.5)		33.7	(4.6)		16.7	(2.6)	

Table G (cont'd)

PS-TRE — Incidence of skill proficiency levels among workers aged 16 to 65, Canada, 2012, trades vs. non-trades workers

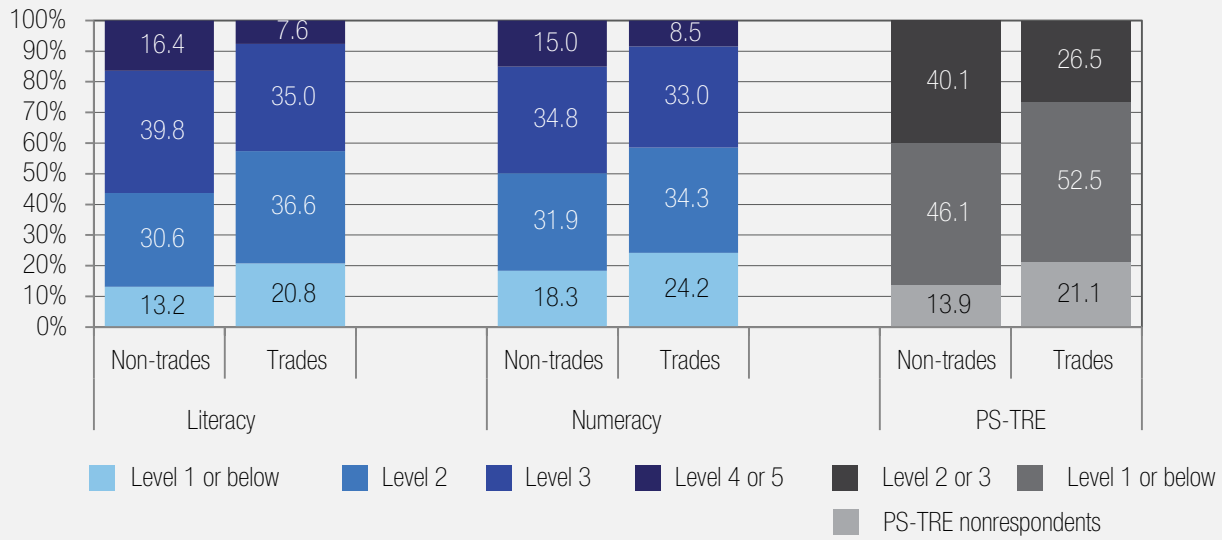
PROV	Level 1 or below			Level 2 or 3			Nonrespondents			
	%	(SE)		%	(SE)		%	(SE)		
All										
Non-trades	NL	45.2	(2.3)		34.2	(2.1)		20.7	(1.3)	
	PE	47.8	(3.3)		34.1	(3.2)		18.1	(1.7)	
	NS	44.8	(2.0)		44.0	(1.8)		11.2	(1.4)	
	NB	46.5	(2.4)		35.2	(2.3)		18.4	(1.2)	
	QC	50.2	(1.0)		36.2	(1.0)		13.6	(0.7)	
	ON	45.2	(1.5)		42.0	(1.5)		12.9	(0.8)	
	MB	40.2	(2.5)		38.4	(2.6)		21.4	(1.9)	
	SK	52.9	(2.7)		37.3	(2.7)		9.8	(1.1)	
	AB	46.0	(2.6)		41.5	(2.4)		12.4	(1.5)	
	BC	42.0	(2.5)		41.7	(2.3)		16.3	(1.7)	
	YK	51.3	(9.6)	m	38.7	(8.2)	m	10.0	(5.0)	u
	NT	48.1	(4.1)		33.9	(3.9)		18.0	(2.1)	
	NU	44.6	(3.5)		18.0	(2.6)		37.4	(3.3)	
All	46.1	(0.8)		40.1	(0.7)		13.9	(0.4)		
Trades	NL	47.7	(4.8)		23.0	(4.2)	m	29.3	(4.4)	
	PE	54.8	(8.4)		23.1	(7.3)	m	22.0	(5.3)	m
	NS	47.0	(5.3)		31.0	(5.3)	m	22.0	(3.9)	m
	NB	46.1	(5.8)		25.7	(5.4)	m	28.2	(4.3)	
	QC	58.6	(2.9)		22.4	(2.7)		19.0	(2.1)	
	ON	54.1	(4.2)		26.5	(4.1)		19.4	(3.0)	
	MB	51.6	(5.9)		22.8	(5.0)	m	25.6	(4.3)	m
	SK	63.6	(5.6)		20.1	(4.9)	m	16.3	(3.8)	m
	AB	47.5	(6.4)		32.5	(5.8)	m	20.0	(4.7)	m
	BC	43.3	(6.7)		29.3	(6.4)	m	27.4	(5.8)	m
	YK	46.3	(20.2)	u	36.6	(20.5)	u	17.0	(12.9)	u
	NT	54.7	(7.6)		19.8	(8.1)	u	25.5	(5.2)	m
	NU	44.2	(6.6)		5.5	(3.8)	u	50.3	(5.9)	
All	52.5	(2.4)		26.5	(2.1)		21.1	(1.5)		

Notes: The sample excludes workers who identified themselves as students. The lower-case *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either "unacceptable" (when $CV > 33.3\%$) or "marginally acceptable" ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level.

SE Standard error

Source: PIAAC, 2012

Figure G Skills proficiency among all workers aged 16 to 65, by trades status, Canada, 2012



Note: The sample excludes workers who identified themselves as students.

Source: PIAAC, 2012



ANNEX H

SKILLS PROFICIENCY BY SELECTED JOB CHARACTERISTICS

Table H.a

Incidence of skill proficiency levels of workers aged 16 to 65 by establishment size, Canada, 2012

		Level 1 or below		Level 2		Level 3		Level 4 or 5	
		%	(SE)	%	(SE)	%	(SE)	%	(SE)
Literacy									
Males	Up to 50 people	16.9	(1.1)	34	(1.4)	35.6	(1.4)	13.5	(1.1)
	51 to 250 people	15.4	(1.5)	29.4	(2.0)	39	(2.3)	16.2	(2.0)
	More than 250 people	8.8	(1.3)	24.3	(2.6)	43.7	(3.3)	23.3	(2.0)
Females	Up to 50 people	14.9	(1.1)	34.5	(1.6)	37.8	(1.6)	12.8	(1.0)
	51 to 250 people	12.8	(1.5)	31.9	(2.4)	41.8	(2.3)	13.5	(1.9)
	More than 250 people	11.6	(1.4)	26.5	(2.0)	42.5	(2.3)	19.3	(1.9)
All	Up to 50 people	15.9	(0.8)	34.2	(1.0)	36.7	(1.0)	13.1	(0.8)
	51 to 250 people	14.2	(1.1)	30.5	(1.4)	40.3	(1.6)	14.9	(1.4)
	More than 250 people	10.2	(1.0)	25.4	(1.6)	43.1	(2.0)	21.4	(1.3)
Numeracy									
Males	Up to 50 people	20.6	(1.2)	32	(1.5)	33.1	(1.7)	14.3	(1.2)
	51 to 250 people	18	(1.5)	27.4	(2.2)	36.3	(2.5)	18.4	(1.9)
	More than 250 people	11	(1.5)	23.6	(2.2)	39.9	(2.7)	25.5	(1.9)
Females	Up to 50 people	24.1	(1.3)	37.5	(1.5)	30.1	(1.4)	8.3	(1.0)
	51 to 250 people	18.9	(1.8)	36.7	(2.5)	34.3	(2.3)	10.1	(1.3)
	More than 250 people	19.2	(2.0)	29.6	(2.5)	37	(2.5)	14.1	(1.7)
All	Up to 50 people	22.4	(0.9)	34.7	(1.0)	31.6	(1.2)	11.3	(0.8)
	51 to 250 people	18.4	(1.2)	31.7	(1.4)	35.4	(1.7)	14.6	(1.1)
	More than 250 people	15	(1.2)	26.5	(1.6)	38.5	(2.0)	20	(1.3)

Table H.a (cont'd)

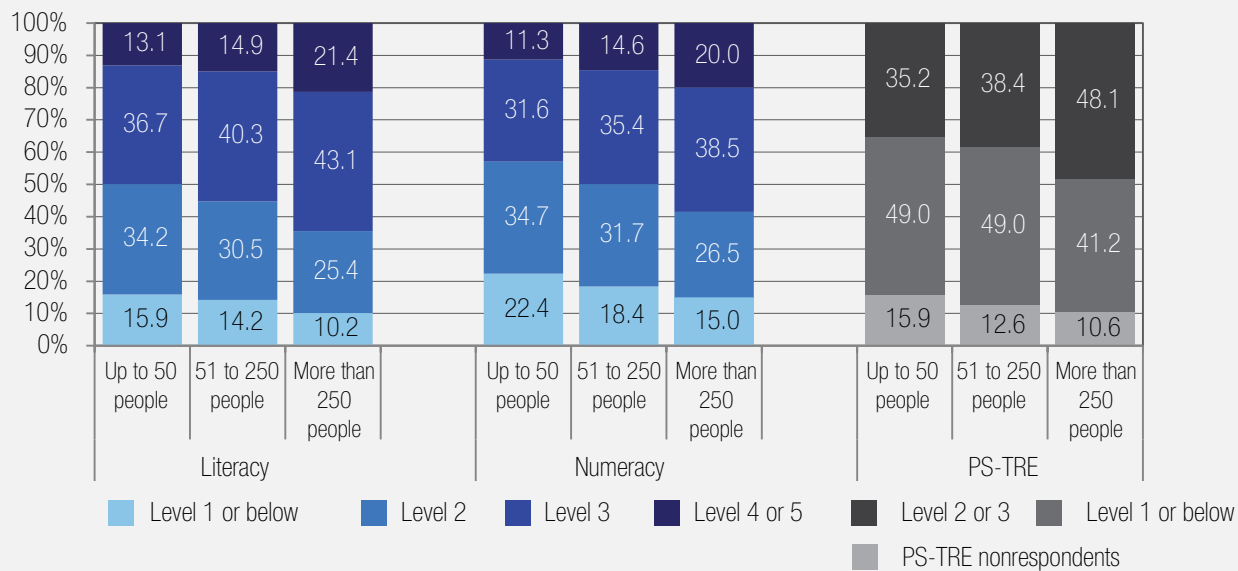
Incidence of skill proficiency levels of workers aged 16 to 65 by establishment size, Canada, 2012

		Nonrespondents		Level 1 or below		Level 2 or 3	
		%	(SE)	%	(SE)	%	(SE)
PS(TRE)							
Males	Up to 50 people	17.4	(1.1)	47.6	(1.7)	35	(1.7)
	51 to 250 people	13.5	(1.4)	49.5	(2.3)	36.9	(2.1)
	More than 250 people	10.9	(1.3)	38.5	(2.4)	50.6	(2.3)
Females	Up to 50 people	14.3	(0.8)	50.3	(1.7)	35.3	(1.6)
	51 to 250 people	11.5	(1.1)	48.4	(2.4)	40.2	(2.4)
	More than 250 people	10.3	(1.2)	44.2	(2.0)	45.5	(2.1)
All	Up to 50 people	15.9	(0.7)	49	(1.2)	35.2	(1.2)
	51 to 250 people	12.6	(0.9)	49	(1.8)	38.4	(1.7)
	More than 250 people	10.6	(0.9)	41.2	(1.6)	48.1	(1.6)

Notes: The sample excludes workers who identified themselves as students.

Source: PIAAC, 2012

Figure H.a Incidence of skill proficiency levels of all workers aged 16 to 65, by establishment size, Canada, 2012



Note: The sample excludes workers who identified themselves as students.
SE Standard error

Source: PIAAC, 2012

Table H.b

Incidence of skill proficiency levels of workers aged 16 to 65 by contract type, Canada, 2012

		Level 1 or below		Level 2		Level 3		Level 4 or 5		
		%	(SE)	%	(SE)	%	(SE)	%	(SE)	
Literacy										
Males	Full time	14.5	(0.7)	30.3	(1.0)	38.7	(1.2)	16.5	(0.9)	
	Part time	14.4	(2.0)	36.3	(3.1)	36.7	(3.4)	12.6	(2.3)	m
Females	Full time	13.4	(0.8)	31	(1.4)	41	(1.2)	14.6	(1.0)	
	Part time	13.2	(1.4)	33.7	(2.1)	38	(2.4)	15	(1.6)	
All	Full time	14	(0.6)	30.6	(0.9)	39.7	(0.9)	15.7	(0.7)	
	Part time	13.6	(1.2)	34.5	(1.8)	37.6	(2.1)	14.3	(1.4)	
Numeracy										
Males	Full time	16.6	(0.8)	28.8	(1.2)	36.1	(1.2)	18.4	(0.8)	
	Part time	20.9	(2.7)	33.5	(3.4)	32.1	(3.0)	13.5	(2.3)	m
Females	Full time	20.8	(0.9)	34.8	(1.3)	34	(1.3)	10.4	(0.8)	
	Part time	21.8	(2.0)	37.5	(2.6)	31.2	(2.2)	9.5	(1.5)	
All	Full time	18.4	(0.6)	31.4	(0.8)	35.2	(0.9)	15	(0.6)	
	Part time	21.5	(1.6)	36.3	(2.0)	31.4	(1.7)	10.8	(1.3)	

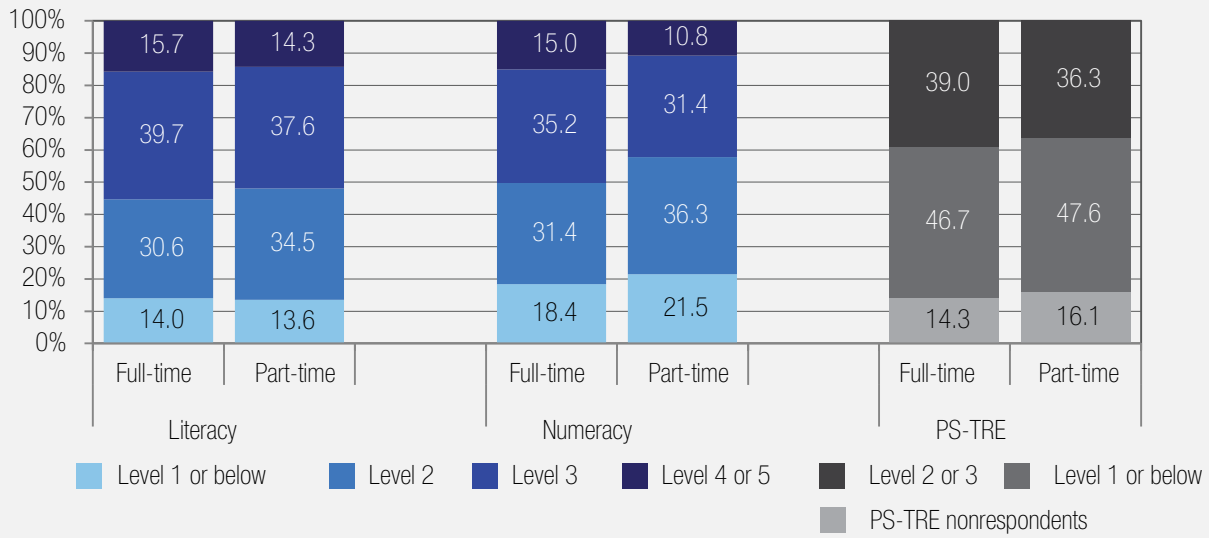
Table H.b (cont'd)

Incidence of skill proficiency levels of workers aged 16 to 65 by contract type, Canada, 2012

		Nonrespondents		Level 1 or below		Level 2 or 3		
		%	(SE)	%	(SE)	%	(SE)	
PS(TRE)								
Males	Full time	15.5	(0.7)	46.1	(1.0)	38.5	(0.9)	
	Part time	19.8	(2.7)	43.7	(3.4)	36.5	(3.2)	
Females	Full time	12.7	(0.6)	47.5	(1.1)	39.8	(1.2)	
	Part time	14.5	(1.3)	49.3	(2.3)	36.2	(2.4)	
All	Full time	14.3	(0.4)	46.7	(0.8)	39	(0.7)	
	Part time	16.1	(1.2)	47.6	(2.1)	36.3	(2.0)	

Note: SE Standard error

Figure H.b Incidence of skill proficiency levels among all workers aged 16 to 65, by full-time/part-time work, Canada, 2012



Note: The sample excludes workers who identified themselves as students
Source: PIAAC, 2012

Table H.c

Incidence of skill proficiency levels among workers aged 16 to 65, Canada, 2012

		Level 1 or below		Level 2		Level 3		Level 4 or 5	
		%	(SE)	%	(SE)	%	(SE)	%	(SE)
Literacy									
Males	Permanent	13.5	(0.8)	29.4	(1.3)	39.6	(1.3)	17.5	(1.0)
	Temporary	18	(1.6)	33	(2.1)	35.5	(2.3)	13.5	(1.6)
	Self-employed	14.1	(1.6)	32.9	(2.1)	38.7	(2.7)	14.3	(2.1)
Females	Permanent	12.5	(0.9)	31.4	(1.4)	41.3	(1.4)	14.8	(1.1)
	Temporary	16.8	(1.5)	33.7	(2.1)	36.2	(2.2)	13.3	(1.6)
	Self-employed	11.8	(2.1)	m	28.5	(2.8)	43.1	(3.2)	16.7
All	Permanent	13	(0.6)	30.4	(0.9)	40.4	(0.9)	16.2	(0.8)
	Temporary	17.5	(1.2)	33.3	(1.5)	35.8	(1.6)	13.4	(1.2)
	Self-employed	13.2	(1.3)	31.3	(1.8)	40.3	(2.2)	15.2	(1.6)
Numeracy									
Males	Permanent	16.1	(0.9)	27.9	(1.2)	36.7	(1.6)	19.4	(1.0)
	Temporary	22.6	(1.7)	30.5	(2.3)	32.6	(2.4)	14.3	(1.7)
	Self-employed	13.9	(1.7)	31.8	(2.5)	36.7	(2.3)	17.6	(1.6)
Females	Permanent	20	(1.1)	35.5	(1.4)	34.1	(1.3)	10.5	(0.8)
	Temporary	26.7	(1.8)	35.7	(2.5)	29.1	(2.3)	8.5	(1.2)
	Self-employed	16.5	(2.1)	34.6	(3.2)	38.2	(2.8)	10.8	(1.9)
All	Permanent	18	(0.8)	31.6	(0.9)	35.4	(1.1)	15	(0.6)
	Temporary	24.6	(1.2)	33	(1.6)	30.9	(1.7)	11.5	(1)
	Self-employed	14.9	(1.4)	32.8	(2.1)	37.2	(1.7)	15.1	(1.3)

Table H.c (cont'd)

Incidence of skill proficiency levels among workers aged 16 to 65, Canada, 2012

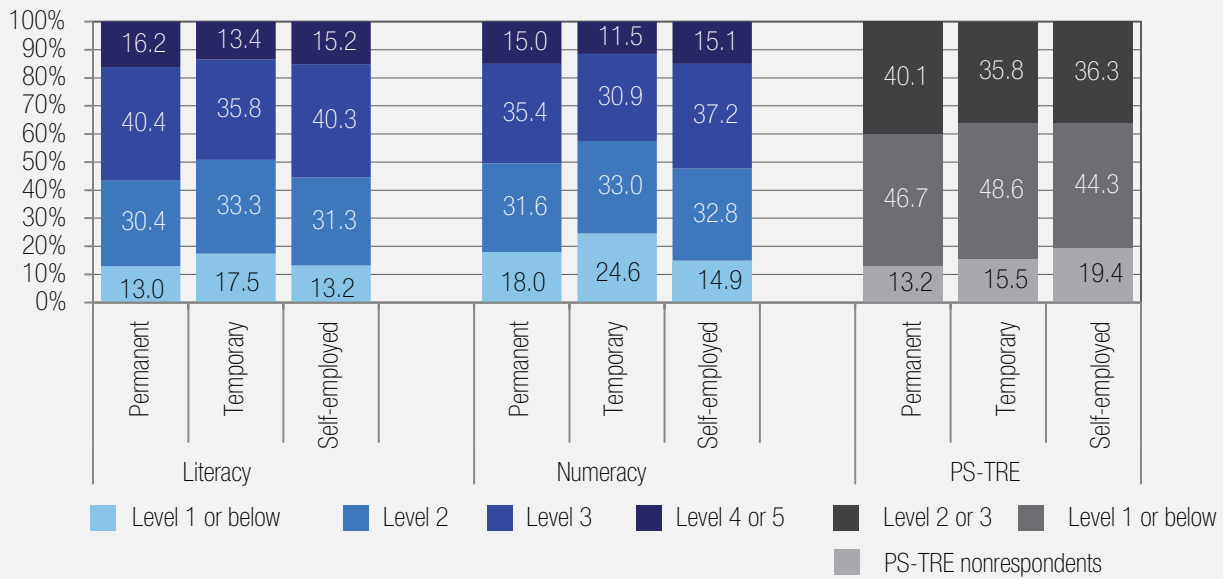
		Nonrespondents		Level 1 or below		Level 2 or 3	
		%	(SE)	%	(SE)	%	(SE)
PS-TRE							
Males	Permanent	14.4	(0.9)	45.3	(1.1)	40.3	(1.1)
	Temporary	16.4	(1.3)	47.4	(1.9)	36.1	(1.9)
	Self-employed	20.8	(1.7)	45.2	(2.5)	33.9	(2.5)
Females	Permanent	11.9	(0.6)	48.1	(1.4)	39.9	(1.5)
	Temporary	14.5	(1.1)	49.9	(2.1)	35.5	(2.1)
	Self-employed	17.1	(2.1)	42.6	(3.4)	40.3	(3.4)
All	Permanent	13.2	(0.5)	46.7	(1.0)	40.1	(1.0)
	Temporary	15.5	(1.0)	48.6	(1.5)	35.8	(1.4)
	Self-employed	19.4	(1.4)	44.3	(2.0)	36.3	(2.0)

Notes: The sample excludes workers who identified themselves as students. The lower-case *u* and *m* indicate the reliability of the estimate based on coefficient values (CV, the standard error of an estimate expressed as a percentage of that estimate). The estimate is either "unacceptable" (when $CV > 33.3\%$) or "marginally acceptable" ($16.6\% \leq CV \leq 33.3\%$), or acceptable ($0 \leq CV < 16.6\%$) if no letter is present. All unacceptable results are suppressed to the next level.

SE Standard error

Source: PIAAC, 2012

Figure H.c Incidence of skill proficiency levels among all workers aged 16 to 65, by type of contract, Canada, 2012



Note: The sample excludes workers who identified themselves as students
Source: PIAAC, 2012

Table H.d

Incidence of skill proficiency levels among workers aged 16 to 65, by level of job satisfaction, Canada, 2012

		Level 1 or below			Level 2			Level 3			Level 4 or 5		
		%	(SE)		%	(SE)		%	(SE)		%	(SE)	
Literacy													
Males	Extremely satisfied	12.8	(1.1)		27.5	(1.7)		40.8	(1.9)		18.8	(1.6)	
	Satisfied	16	(1.0)		31.6	(1.4)		37.3	(1.6)		15.1	(1.0)	
	Neither satisfied nor dissatisfied	11.6	(1.9)		34.4	(3.1)		38.6	(3.2)		15.4	(2.1)	
	Dissatisfied or extremely dissatisfied	15	(3.0)	m	32.7	(4.3)		38.4	(4.6)		13.9	(3.3)	m
Females	Extremely satisfied	11.5	(1.3)		30.4	(2.1)		41	(2.1)		17.2	(1.5)	
	Satisfied	14.8	(1.0)		32.1	(1.4)		39.7	(1.4)		13.3	(1.1)	
	Neither satisfied nor dissatisfied	12	(1.9)		33.4	(2.7)		41.5	(3.0)		13	(2.0)	
	Dissatisfied or extremely dissatisfied	12.6	(2.7)	m	31.2	(4.6)		39.2	(5.0)		17.1	(3.6)	m
All	Extremely satisfied	12.1	(0.9)		29	(1.4)		40.9	(1.2)		18	(1.0)	
	Satisfied	15.5	(0.7)		31.8	(1.0)		38.4	(1.0)		14.3	(0.8)	
	Neither satisfied nor dissatisfied	11.8	(1.4)		34	(2.1)		39.9	(2.3)		14.4	(1.6)	
	Dissatisfied or extremely dissatisfied	13.8	(2.1)		31.9	(3.0)		38.8	(3.4)		15.5	(2.7)	m
Numeracy													
Males	Extremely satisfied	14.5	(1.1)		27.1	(1.7)		38.3	(1.9)		20.1	(1.5)	
	Satisfied	18.4	(1.1)		29.9	(1.4)		34.4	(1.7)		17.3	(1.1)	
	Neither satisfied nor dissatisfied	15.5	(2.1)		29.8	(3.1)		37.7	(3.3)		17	(2.7)	
	Dissatisfied or extremely dissatisfied	18.7	(3.5)	m	32.4	(4.7)		33	(3.6)		15.8	(3.0)	m
Females	Extremely satisfied	19.8	(1.6)		35.2	(2.4)		33.4	(2.3)		11.5	(1.2)	
	Satisfied	22.2	(1.1)		35	(1.5)		33.3	(1.4)		9.5	(0.9)	
	Neither satisfied nor dissatisfied	19.9	(2.6)		37.5	(3.2)		34	(3.5)		8.6	(1.8)	m
	Dissatisfied or extremely dissatisfied	21	(4.3)	m	36.5	(4.5)		31.4	(4.2)		11	(2.8)	m
All	Extremely satisfied	17.2	(1.0)		31.2	(1.2)		35.9	(1.5)		15.8	(1.0)	
	Satisfied	20.1	(0.8)		32.2	(1.0)		33.9	(1.0)		13.7	(0.7)	
	Neither satisfied nor dissatisfied	17.5	(1.5)		33.2	(2.3)		36.1	(2.4)		13.3	(1.7)	
	Dissatisfied or extremely dissatisfied	19.9	(2.9)		34.4	(3.2)		32.2	(2.7)		13.5	(2.0)	

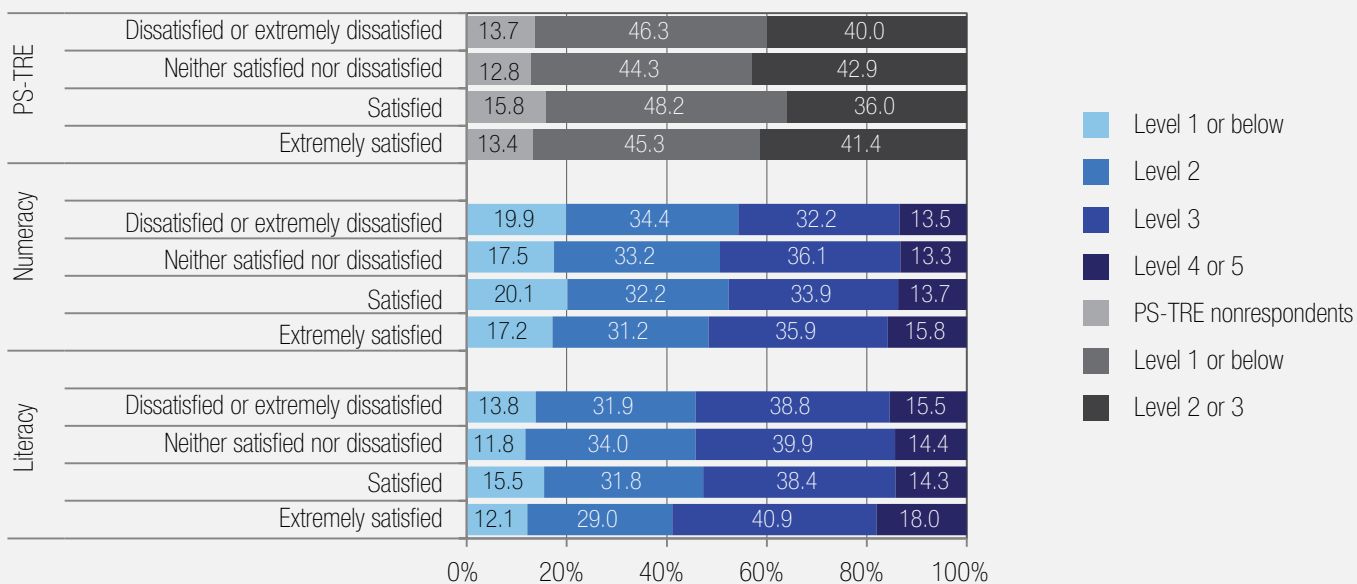
Table H.d (cont'd)

Incidence of skill proficiency levels among workers aged 16 to 65, Canada , 2012

		Nonrespondents		Level 1 or below			Level 2 or 3	
		%	(SE)	%	(SE)	%	(SE)	
PS-TRE								
Males	Extremely satisfied	14.2	(1.3)	43.3	(1.9)	42.6	(1.7)	
	Satisfied	17.5	(0.9)	47.6	(1.3)	34.8	(1.3)	
	Neither satisfied nor dissatisfied	13.6	(1.8)	43.4	(3.1)	43	(3.1)	
	Dissatisfied or extremely dissatisfied	14.4	(2.6)	m	45.1	(3.9)	40.5	(4.2)
Females	Extremely satisfied	12.6	(1.1)	47.3	(2)	40.2	(1.9)	
	Satisfied	13.8	(0.8)	48.9	(1.5)	37.3	(1.5)	
	Neither satisfied nor dissatisfied	11.7	(1.5)	45.4	(2.9)	42.8	(3.0)	
	Dissatisfied or extremely dissatisfied	13.1	(2.5)	m	47.4	(5.2)	39.5	(4.6)
All	Extremely satisfied	13.4	(0.9)	45.3	(1.4)	41.4	(1.3)	
	Satisfied	15.8	(0.6)	48.2	(1.0)	36	(1.0)	
	Neither satisfied nor dissatisfied	12.8	(1.2)	44.3	(2.4)	42.9	(2.4)	
	Dissatisfied or extremely dissatisfied	13.7	(1.7)	46.3	(3.4)	40	(3.4)	

Note: SE Standard error

Figure H.d Incidence of skill proficiency levels among all workers aged 16 to 65, by level of job satisfaction, Canada, 2012



Note: The sample excludes workers who identified themselves as students.

Source: PIAAC, 2012



ANNEX I

RELATIONSHIP BETWEEN SKILLS AND EMPLOYMENT OR UNEMPLOYMENT

Table I.a

Odds ratio of being employed, adults aged 16 to 65

	Males			Females			All		
Literacy									
Skill level (Reference: Level 1 or below)									
Level 2	1.37	*	(0.17)	1.25	*	(0.12)	1.31	**	(0.1)
Level 3	1.54	***	(0.15)	1.57	***	(0.13)	1.58	***	(0.1)
Levels 4 or 5	2.37	***	(0.24)	1.57	**	(0.19)	1.86	***	(0.15)
Educational attainment (Reference: High school)									
Less than high school	0.71	**	(0.17)	0.55	***	(0.13)	0.63	***	(0.1)
Apprenticeship	1.19		(0.25)	0.87		(0.48)	1.19		(0.21)
Trade, vocational	1.42	**	(0.16)	1.72	***	(0.15)	1.61	***	(0.11)
College	1.4	**	(0.13)	1.53	***	(0.13)	1.5	***	(0.09)
Bachelor	1.24		(0.19)	1.8	***	(0.16)	1.61	***	(0.11)
Master's and PhD	1.47	*	(0.22)	2.38	***	(0.17)	2.04	***	(0.13)
Gender (Reference: Males)									
Females							0.49	***	(0.06)
Age (Reference: 25–34)									
16–24	0.85		(0.21)	1.24		(0.19)	1.08		(0.15)
35–44	1.39	*	(0.19)	1.13		(0.13)	1.18		(0.12)
45–54	0.79		(0.17)	1.39	***	(0.11)	1.1		(0.1)
55–65	0.23	***	(0.17)	0.4	***	(0.1)	0.33	***	(0.1)
Population subgroups (Reference: Canadian-born and non-Indigenous)									
Indigenous peoples	0.58	***	(0.17)	0.71	***	(0.11)	0.65	***	(0.1)
Recent immigrants	0.45	***	(0.25)	0.43	***	(0.19)	0.44	***	(0.15)
Established immigrants	1.09		(0.2)	1.07		(0.14)	1.08		(0.11)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	1.33		(0.34)	1.18		(0.26)	1.2		(0.18)
Foreign credential (2)	1.23		(0.25)	0.96		(0.14)	1.05		(0.12)
Health (Reference: Fair or poor)									
Excellent or very good	4.48	***	(0.13)	3.52	***	(0.11)	3.91	***	(0.09)
Good	3.39	***	(0.14)	2.54	***	(0.12)	2.88	***	(0.08)
Other									
Children in household	1.57	***	(0.12)	0.53	***	(0.1)	0.86	*	(0.08)
Provincial unemployment	0.86	***	(0.03)	0.9	***	(0.02)	0.88	***	(0.02)

Table I.a (cont'd)

Odds ratio of being employed, adults aged 16 to 65

	Males			Females			All		
Numeracy									
Skill level (Reference: Level 1 or below)									
Level 2	1.63	***	(0.16)	1.39	***	(0.12)	1.5	***	(0.10)
Level 3	1.78	***	(0.16)	1.68	***	(0.13)	1.75	***	(0.10)
Levels 4 or 5	3.27	***	(0.26)	2.25	***	(0.27)	2.71	***	(0.19)
Educational attainment (Reference: High school)									
Less than high school	0.73	*	(0.17)	0.56	***	(0.13)	0.65	***	(0.10)
Apprenticeship	1.12		(0.25)	0.88		(0.49)	1.15		(0.21)
Trade, vocational	1.37	**	(0.16)	1.7	***	(0.15)	1.58	***	(0.11)
College	1.31	**	(0.13)	1.51	***	(0.13)	1.45	***	(0.09)
Bachelor	1.11		(0.19)	1.68	***	(0.16)	1.48	***	(0.11)
Master's and PhD	1.33		(0.21)	2.19	***	(0.17)	1.85	***	(0.13)
Gender (Reference: Males)									
Females							0.52	***	(0.06)
Age (Reference: 25–34)									
16–24	0.82		(0.21)	1.23		(0.19)	1.06		(0.15)
35–44	1.39	*	(0.19)	1.13		(0.13)	1.18		(0.12)
45–54	0.8		(0.17)	1.38	***	(0.11)	1.1		(0.09)
55–65	0.23	***	(0.17)	0.41	***	(0.1)	0.33	***	(0.10)
Population subgroups (Reference: Canadian-born and non-Indigenous)									
Indigenous peoples	0.6	***	(0.17)	0.74	***	(0.11)	0.67	***	(0.10)
Recent immigrants	0.46	***	(0.25)	0.44	***	(0.19)	0.45	***	(0.15)
Established immigrants	1.1		(0.2)	1.08		(0.14)	1.09		(0.11)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	1.28		(0.34)	1.16		(0.26)	1.17		(0.18)
Foreign credential (2)	1.27		(0.25)	0.98		(0.14)	1.07		(0.12)
Health (Reference: Fair or poor)									
Excellent or very good	4.41	***	(0.13)	3.51	***	(0.12)	3.87	***	(0.09)
Good	3.3	***	(0.14)	2.54	***	(0.12)	2.84	***	(0.08)
Other									
Children in household	1.52	***	(0.12)	0.53	***	(0.10)	0.85	**	(0.08)
Provincial unemployment	0.86	***	(0.03)	0.9	***	(0.02)	0.88	***	(0.02)

Table I.a (cont'd)

Odds ratio of being employed, adults aged 16 to 65

	Males			Females			All		
PS-TRE									
Skill level (Reference: Level 1 or below)									
PS-TRE nonrespondents	0.76	**	(0.12)	0.58	***	(0.10)	0.64	***	(0.07)
Levels 2 or 3	1.45	**	(0.16)	1.26	*	(0.12)	1.34	***	(0.10)
Educational attainment (Reference: High school)									
Less than high school	0.68	**	(0.16)	0.56	***	(0.13)	0.62	***	(0.10)
Apprenticeship	1.19		(0.25)	0.85		(0.49)	1.19		(0.21)
Trade, vocational	1.4	**	(0.16)	1.71	***	(0.15)	1.59	***	(0.11)
College	1.36	**	(0.13)	1.52	***	(0.13)	1.48	***	(0.09)
Bachelor	1.24		(0.18)	1.78	***	(0.16)	1.6	***	(0.11)
Master's and PhD	1.54	**	(0.21)	2.31	***	(0.17)	2.03	***	(0.13)
Gender (Reference: Males)									
Females							0.48	***	(0.06)
Age (Reference: 25–34)									
16–24	0.8		(0.21)	1.19		(0.19)	1.02		(0.15)
35–44	1.41	*	(0.19)	1.19		(0.13)	1.23	*	(0.12)
45–54	0.84		(0.17)	1.5	***	(0.11)	1.18	*	(0.10)
55–65	0.26	***	(0.17)	0.46	***	(0.11)	0.37	***	(0.10)
Population subgroups (Reference: Canadian-born and non-Indigenous)									
Indigenous peoples	0.57	***	(0.16)	0.73	***	(0.11)	0.65	***	(0.10)
Recent immigrants	0.43	***	(0.25)	0.44	***	(0.20)	0.44	***	(0.15)
Established immigrants	1.04		(0.2)	1.12		(0.14)	1.08		(0.11)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	1.34		(0.34)	1.16		(0.25)	1.19		(0.18)
Foreign credential (2)	1.25		(0.24)	1		(0.15)	1.08		(0.12)
Health (Reference: Fair or poor)									
Excellent or very good	4.54	***	(0.13)	3.47	***	(0.11)	3.89	***	(0.09)
Good	3.42	***	(0.15)	2.55	***	(0.12)	2.88	***	(0.09)
Other									
Children in household	1.53	***	(0.12)	0.52	***	(0.10)	0.84	**	(0.08)
Provincial unemployment	0.86	***	(0.03)	0.9	***	(0.02)	0.88	***	(0.02)

Notes: (1) USA, Northern and Western Europe, Australia, and New Zealand

(2) Rest of the world

***, **, and * represent estimates that are significant at the 1, 5, and 10 percent levels of significance, respectively. The regression results are based on a logistic regression of probability of being employed on a constant and the listed variables.

Source: PIAAC, 2012

Table I.b

Odds ratio of being employed, adults aged 25 to 54

	Males			Females			All		
Literacy									
Skill level (Reference: Level 1 or below)									
Level 2	1.58	*	(0.23)	1.37	*	(0.17)	1.46	***	(0.14)
Level 3	2.04	***	(0.24)	1.81	***	(0.18)	1.95	***	(0.14)
Levels 4 or 5	2.53	**	(0.39)	1.53		(0.26)	1.89	***	(0.20)
Educational attainment (Reference: High school)									
Less than high school	0.52	**	(0.25)	0.45	***	(0.21)	0.49	***	(0.16)
Apprenticeship	1.55		(0.45)	0.63		(0.57)	1.3		(0.30)
Trade, vocational	1.11		(0.24)	1.99	***	(0.20)	1.57	***	(0.15)
College	1.42		(0.21)	1.61	***	(0.17)	1.53	***	(0.13)
Bachelor	1.19		(0.31)	2.19	***	(0.20)	1.84	***	(0.15)
Master's and PhD	2.1	**	(0.35)	3.44	***	(0.25)	3.02	***	(0.20)
Gender (Reference: Males)									
Females							0.4	***	(0.08)
Age (Reference: 25–34)									
35–44	1.47	*	(0.21)	1.16		(0.13)	1.22		(0.12)
45–54	0.88		(0.18)	1.51	***	(0.11)	1.2	*	(0.10)
Population subgroups (Reference: Canadian-born and non-Indigenous)									
Indigenous peoples	0.45	***	(0.23)	0.59	***	(0.14)	0.54	***	(0.12)
Recent immigrants	0.3	***	(0.36)	0.46	***	(0.26)	0.4	***	(0.20)
Established immigrants	0.8		(0.3)	1.05		(0.20)	0.95		(0.18)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	1.68		(0.47)	0.86		(0.34)	1.07		(0.27)
Foreign credential (2)	1.4		(0.39)	0.81		(0.21)	0.99		(0.19)
Health (Reference: Fair or poor)									
Excellent or very good	7.34	***	(0.22)	3.78	***	(0.16)	5.02	***	(0.13)
Good	4.47	***	(0.21)	2.63	***	(0.16)	3.35	***	(0.12)
Other									
Children in household	1.62	***	(0.16)	0.49	***	(0.13)	0.85		(0.11)
Provincial unemployment	0.86	***	(0.04)	0.9	***	(0.02)	0.89	***	(0.02)

Table I.b (cont'd)

Odds ratio of being employed, adults aged 25 to 54

	Males			Females			All		
Numeracy									
Skill level (Reference: Level 1 or below)									
Level 2	1.81	**	(0.26)	1.58	**	(0.17)	1.69	**	(0.14)
Level 3	2.16	***	(0.24)	1.88	***	(0.16)	2.06	***	(0.13)
Levels 4 or 5	3.93	***	(0.41)	2.17	**	(0.33)	2.87	***	(0.27)
Educational attainment (Reference: High school)									
Less than high school	0.52	**	(0.26)	0.46	***	(0.20)	0.5	***	(0.16)
Apprenticeship	1.43		(0.46)	0.63		(0.57)	1.25		(0.30)
Trade, vocational	1.05		(0.24)	1.96	***	(0.2)	1.53	***	(0.15)
College	1.31		(0.22)	1.58	***	(0.17)	1.48	***	(0.13)
Bachelor	1.02		(0.31)	2.04	***	(0.20)	1.67	***	(0.15)
Master's and PhD	1.81	*	(0.35)	3.16	***	(0.24)	2.71	***	(0.20)
Gender (Reference: Males)									
Females							0.42	***	(0.09)
Age (Reference: 25–34)									
35–44	1.47	*	(0.21)	1.15		(0.13)	1.21		(0.12)
45–54	0.88		(0.19)	1.5	***	(0.11)	1.19	*	(0.10)
Population subgroups (Reference: Canadian-born and non-Indigenous)									
Indigenous peoples	0.47	***	(0.23)	0.61	***	(0.14)	0.56	***	(0.13)
Recent immigrants	0.32	***	(0.36)	0.47	***	(0.26)	0.41	***	(0.20)
Established immigrants	0.82		(0.30)	1.06		(0.20)	0.96		(0.18)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	1.65		(0.47)	0.86		(0.34)	1.05		(0.27)
Foreign credential (2)	1.4		(0.38)	0.83		(0.21)	1.01		(0.18)
Health (Reference: Fair or poor)									
Excellent or very good	7.18	***	(0.21)	3.75	***	(0.16)	4.95	***	(0.13)
Good	4.29	***	(0.20)	2.6	***	(0.16)	3.28	***	(0.12)
Other									
Children in household	1.58	***	(0.16)	0.49	***	(0.13)	0.84	*	(0.11)
Provincial unemployment	0.87	***	(0.04)	0.9	***	(0.03)	0.89	***	(0.02)

Table I.b (cont'd)

Odds ratio of being employed, adults aged 25 to 54

	Males		Females		All				
PS-TRE									
Skill level (Reference: Level 1 or below)									
PS-TRE nonrespondents	0.7	(0.21)	0.59	***	(0.13)	0.62	***	(0.12)	
Levels 2 or 3	1.57	*	(0.26)	1.16		(0.16)	1.29	**	(0.12)
Educational attainment (Reference: High school)									
Less than high school	0.47	***	(0.25)	0.44	***	(0.21)	0.47	***	(0.16)
Apprenticeship	1.59		(0.45)	0.6		(0.57)	1.33		(0.30)
Trade, vocational	1.09		(0.24)	1.98	***	(0.20)	1.56	***	(0.15)
College	1.39		(0.21)	1.63	***	(0.17)	1.54	***	(0.13)
Bachelor	1.19		(0.31)	2.24	***	(0.19)	1.9	***	(0.15)
Master's and PhD	2.21	**	(0.35)	3.49	***	(0.24)	3.12	***	(0.19)
Gender (Reference: Males)									
Females						0.39	***	(0.08)	
Age (Reference: 25–34)									
35–44	1.51	**	(0.20)	1.21		(0.13)	1.26	*	(0.12)
45–54	0.95		(0.19)	1.61	***	(0.11)	1.28	**	(0.10)
Population subgroups (Reference: Canadian-born and non-Indigenous)									
Indigenous peoples	0.44	***	(0.22)	0.6	***	(0.14)	0.54	***	(0.12)
Recent immigrants	0.3	***	(0.36)	0.46	***	(0.27)	0.39	***	(0.21)
Established immigrants	0.76		(0.30)	1.07		(0.20)	0.95		(0.18)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	1.63		(0.47)	0.87		(0.33)	1.06		(0.27)
Foreign credential (2)	1.41		(0.40)	0.81		(0.21)	0.98		(0.18)
Health (Reference: Fair or poor)									
Excellent or very good	7.52	***	(0.22)	3.76	***	(0.16)	5.02	***	(0.13)
Good	4.51	***	(0.21)	2.63	***	(0.16)	3.35	***	(0.12)
Other									
Children in household	1.59	***	(0.16)	0.48	***	(0.13)	0.83	*	(0.11)
Provincial unemployment	0.86	***	(0.04)	0.9	***	(0.02)	0.89	***	(0.02)

Notes: (1) USA, Northern and Western Europe, Australia, and New Zealand

(2) Rest of the world

***, **, and * represent estimates that are significant at the 1, 5, and 10 percent levels of significance, respectively. The regression results are based on a logistic regression of probability of being employed on a constant and the listed variables.

Source: PIAAC, 2012

Table I.c

Odds ratio of being unemployed, adults aged 16 to 65

	Males		Females		All				
Literacy									
Skill level (Reference: Level 1 or below)									
Level 2	0.89	(0.27)	0.86	(0.28)	0.88	(0.19)			
Level 3	0.74	(0.32)	0.69	(0.32)	0.7	(0.23)			
Levels 4 or 5	0.62	(0.47)	0.57	(0.49)	0.59	(0.34)			
Educational attainment (Reference: High school)									
Less than high school	1.39	(0.29)	1.3	(0.32)	1.36	(0.21)			
Apprenticeship	0.54	(0.43)	0.71	(0.98)	0.54	*			
Trade, vocational	0.81	(0.3)	0.45	**	(0.34)	0.65	*		
College	0.88	(0.25)	0.96	(0.26)	0.93	(0.18)			
Bachelor	0.91	(0.36)	0.61	(0.36)	0.74	(0.25)			
Master's and PhD	0.34	**	(0.50)	0.42	**	(0.39)	0.39	***	
Gender (Reference: Males)									
Females					0.95	(0.12)			
Experience									
Additional year	0.91	***	(0.03)	0.98	(0.03)	0.93	***	(0.02)	
Population subgroups (Reference: Canadian-born and non-Indigenous)									
Indigenous peoples	1.89	***	(0.24)	2.11	***	(0.25)	1.94	***	(0.17)
Recent immigrants	2.09	**	(0.35)	2.71	***	(0.29)	2.22	***	(0.2)
Established immigrants	1.18		(0.41)	1.62		(0.29)	1.33		(0.23)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	1.17		(0.70)	0.56		(0.47)	0.86		(0.44)
Foreign credential (2)	0.9		(0.45)	1.13		(0.33)	1.07		(0.28)
Health (Reference: Fair or poor)									
Excellent or very good	0.4	***	(0.31)	0.51	**	(0.27)	0.45	***	(0.19)
Good	0.59	*	(0.31)	0.75		(0.26)	0.66	**	(0.18)
Other									
Children in household	0.77		(0.19)	1.27		(0.19)	0.99		(0.14)
Provincial unemployment	1.16	***	(0.05)	1.18	***	(0.04)	1.17	***	(0.03)

Table I.c (cont'd)

Odds ratio of being unemployed, adults aged 16 to 65

	Males			Females			All		
Numeracy									
Skill level (Reference: Level 1 or below)									
Level 2	0.74		(0.27)	0.62	*	(0.27)	0.68	**	(0.19)
Level 3	0.57	*	(0.30)	0.52	**	(0.30)	0.54	**	(0.23)
Levels 4 or 5	0.31	**	(0.48)	0.29	*	(0.71)	0.31	***	(0.35)
Educational attainment (Reference: High school)									
Less than high school	1.32		(0.28)	1.23		(0.31)	1.28		(0.21)
Apprenticeship	0.59		(0.43)	0.7		(1.00)	0.57		(0.37)
Trade, vocational	0.84		(0.30)	0.45	**	(0.34)	0.67	*	(0.23)
College	0.96		(0.25)	0.99		(0.27)	0.99		(0.18)
Bachelor	1.1		(0.36)	0.67		(0.37)	0.85		(0.25)
Master's and PhD	0.41	*	(0.51)	0.47	*	(0.39)	0.46	***	(0.28)
Gender (Reference: Males)									
Females							0.88		(0.13)
Experience									
Additional year	0.91	***	(0.03)	0.98		(0.03)	0.94	***	(0.02)
Population subgroups (Reference: Canadian-born and non-Indigenous)									
Indigenous peoples	1.78	**	(0.24)	2.03	***	(0.25)	1.85	***	(0.17)
Recent immigrants	1.95	*	(0.35)	2.61	***	(0.30)	2.11	***	(0.20)
Established immigrants	1.12		(0.41)	1.58		(0.29)	1.29		(0.23)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	1.21		(0.70)	0.57		(0.47)	0.88		(0.44)
Foreign credential (2)	0.85		(0.44)	1.07		(0.33)	1.01		(0.28)
Health (Reference: Fair or poor)									
Excellent or very good	0.41	***	(0.31)	0.51	**	(0.27)	0.45	***	(0.19)
Good	0.61		(0.31)	0.75		(0.26)	0.67	**	(0.18)
Other									
Children in household	0.78		(0.18)	1.25		(0.19)	0.99		(0.14)
Provincial unemployment	1.15	***	(0.05)	1.17	***	(0.04)	1.16	***	(0.03)

Table I.c (cont'd)

Odds ratio of being unemployed, adults aged 16 to 65

	Males		Females		All				
PS-TRE									
Skill level (Reference: Level 1 or below)									
PS-TRE nonrespondents	1.43	(0.27)	1.25	(0.25)	1.35	(0.18)			
Levels 2 or 3	0.87	(0.27)	0.84	(0.24)	0.85	(0.17)			
Educational attainment (Reference: High school)									
Less than high school	1.38	(0.27)	1.34	(0.31)	1.37	(0.21)			
Apprenticeship	0.54	(0.43)	0.73	(0.97)	0.54	*			
Trade, vocational	0.81	(0.30)	0.45	**	(0.34)	0.65	*		
College	0.87	(0.24)	0.94	(0.26)	0.92	(0.17)			
Bachelor	0.88	(0.34)	0.58	(0.35)	0.71	(0.24)			
Master's and PhD	0.32	**	(0.50)	0.39	**	(0.37)	0.36	***	
Gender (Reference: Males)									
Females					0.95	(0.12)			
Experience									
Additional year	0.91	***	(0.03)	0.98	(0.03)	0.93	***	(0.02)	
Population subgroups (Reference: Canadian-born and non-Indigenous)									
Indigenous peoples	1.88	***	(0.24)	2.14	***	(0.24)	1.96	***	(0.17)
Recent immigrants	2.15	**	(0.35)	2.78	***	(0.29)	2.28	***	(0.20)
Established immigrants	1.2		(0.41)	1.63	*	(0.27)	1.35		(0.23)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	1.15		(0.70)	0.56		(0.47)	0.86		(0.43)
Foreign credential (2)	0.86		(0.45)	1.17		(0.32)	1.06		(0.28)
Health (Reference: Fair or poor)									
Excellent or very good	0.4	***	(0.31)	0.52	**	(0.27)	0.45	***	(0.19)
Good	0.6		(0.31)	0.76		(0.26)	0.66	**	(0.18)
Other									
Children in household	0.77		(0.18)	1.26		(0.19)	0.99		(0.14)
Provincial unemployment	1.16	***	(0.05)	1.18	***	(0.04)	1.16	***	(0.03)

Notes: (1) USA, Northern and Western Europe, Australia, and New Zealand

(2) Rest of the world

***, **, and * represent estimates that are significant at the 1, 5, and 10 percent levels of significance, respectively. The regression results are based on a logistic regression of probability of being employed on a constant and the listed variables.

Source: PIAAC, 2012

Table I.d

Odds ratio of being unemployed, adults aged 25 to 54

	Males		Females		All				
Literacy									
Skill level (Reference: Level 1 or below)									
Level 2	0.92	(0.39)	0.76	(0.35)	0.81	(0.26)			
Level 3	0.72	(0.48)	0.58	(0.39)	0.61	(0.31)			
Levels 4 or 5	0.63	(0.65)	0.42	(0.63)	0.49	(0.45)			
Educational attainment (Reference: High school)									
Less than high school	2	(0.46)	1	(0.49)	1.44	(0.35)			
Apprenticeship	0.3	*	(0.67)	0.55	(2.94)	0.3	**	(0.53)	
Trade, vocational	0.99	(0.39)	0.38	**	(0.43)	0.66	(0.30)		
College	0.9	(0.32)	0.88	(0.32)	0.92	(0.23)			
Bachelor	0.86	(0.48)	0.55	(0.43)	0.67	(0.31)			
Master's and PhD	0.38	(0.63)	0.35	**	(0.44)	0.37	***	(0.32)	
Gender (Reference: Males)									
Females					1.14	(0.16)			
Experience									
Additional year	0.87	***	(0.05)	0.96	(0.04)	0.92	***	(0.03)	
Population subgroups (Reference: Canadian-born and non-Indigenous)									
Indigenous peoples	1.75	(0.36)	2.44	***	(0.29)	2.05	***	(0.22)	
Recent immigrants	2.62	**	(0.45)	2.7	**	(0.41)	2.46	***	(0.27)
Established immigrants	1.3	(0.47)	1.44	(0.39)	1.29	(0.29)			
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	1.08	(0.82)	0.65	(0.53)	0.84	(0.46)			
Foreign credential (2)	0.88	(0.53)	0.99	(0.42)	0.97	(0.32)			
Health (Reference: Fair or poor)									
Excellent or very good	0.26	***	(0.38)	0.55	*	(0.35)	0.38	***	(0.24)
Good	0.46	*	(0.39)	0.75	(0.35)	0.59	**	(0.22)	
Other									
Children in household	0.71	(0.23)	1.2	(0.22)	0.91	(0.15)			
Provincial unemployment	1.09	(0.08)	1.17	***	(0.04)	1.13	***	(0.04)	

Table I.d (cont'd)

Odds ratio of being unemployed, adults aged 25 to 54

	Males		Females		All	
Numeracy						
Skill level (Reference: Level 1 or below)						
Level 2	0.82	(0.45)	0.59	(0.33)	0.67	(0.26)
Level 3	0.67	(0.40)	0.49	** (0.36)	0.54	** (0.27)
Levels 4 or 5	0.31	* (0.70)	0.23	* (0.74)	0.26	*** (0.50)
Educational attainment (Reference: High school)						
Less than high school	1.95	(0.45)	0.97	(0.47)	1.4	(0.33)
Apprenticeship	0.31	* (0.67)	0.55	(2.96)	0.31	** (0.53)
Trade, vocational	1.02	(0.40)	0.39	** (0.43)	0.68	(0.30)
College	0.97	(0.32)	0.89	(0.32)	0.96	(0.24)
Bachelor	1.01	(0.46)	0.59	(0.44)	0.75	(0.31)
Master's and PhD	0.45	(0.63)	0.39	** (0.43)	0.42	*** (0.32)
Gender (Reference: Males)						
Females					1.05	(0.16)
Experience						
Additional year	0.88	** (0.05)	0.96	(0.04)	0.92	*** (0.03)
Population subgroups (Reference: Canadian-born and non-Indigenous)						
Indigenous peoples	1.69	(0.36)	2.36	*** (0.29)	1.97	*** (0.22)
Recent immigrants	2.44	** (0.44)	2.63	** (0.41)	2.35	*** (0.27)
Established immigrants	1.25	(0.47)	1.42	(0.38)	1.26	(0.28)
Foreign credentials (Reference: Canadian credential)						
Foreign credential (1)	1.06	(0.83)	0.67	(0.52)	0.85	(0.46)
Foreign credential (2)	0.86	(0.52)	0.96	(0.41)	0.96	(0.32)
Health (Reference: Fair or poor)						
Excellent or very good	0.27	*** (0.39)	0.55	* (0.35)	0.38	*** (0.24)
Good	0.48	* (0.40)	0.77	(0.35)	0.61	** (0.22)
Other						
Children in household	0.72	(0.23)	1.2	(0.22)	0.92	(0.15)
Provincial unemployment	1.08	(0.07)	1.17	*** (0.04)	1.13	*** (0.04)

Table I.d (cont'd)

Odds ratio of being unemployed, adults aged 25 to 54

	Males		Females		All	
PS-TRE						
Skill level (Reference: Level 1 or below)						
PS-TRE nonrespondents	1.44	(0.33)	1.39	(0.31)	1.45	(0.23)
Levels 2 or 3	0.74	(0.39)	0.72	(0.28)	0.72	(0.28)
Educational attainment (Reference: High school)						
Less than high school	1.92	(0.41)	1.02	(0.48)	1.43	(0.33)
Apprenticeship	0.31	*	0.57	(2.93)	0.30	**
Trade, vocational	1	(0.4)	0.38	**	0.66	(0.30)
College	0.92	(0.32)	0.85	(0.31)	0.91	(0.23)
Bachelor	0.89	(0.46)	0.51	(0.42)	0.65	(0.30)
Master's and PhD	0.37	(0.62)	0.32	***	0.35	***
Gender (Reference: Males)						
Females					1.15	(0.16)
Experience						
Additional year	0.88	***	(0.05)	0.96	(0.04)	0.92
Population subgroups (Reference: Canadian-born and non-Indigenous)						
Indigenous peoples	1.78	(0.36)	2.49	***	(0.29)	2.09
Recent immigrants	2.66	**	(0.43)	2.77	**	(0.4)
Established immigrants	1.31	(0.46)	1.44	(0.36)	1.3	(0.28)
Foreign credentials (Reference: Canadian credential)						
Foreign credential (1)	1.09	(0.82)	0.66	(0.52)	0.85	(0.46)
Foreign credential (2)	0.81	(0.55)	1.02	(0.4)	0.95	(0.32)
Health (Reference: Fair or poor)						
Excellent or very good	0.26	***	(0.38)	0.55	*	(0.35)
Good	0.48	*	(0.39)	0.76	(0.34)	0.59
Other						
Children in household	0.72	(0.23)	1.19	(0.22)	0.91	(0.15)
Provincial unemployment	1.08	(0.08)	1.17	***	(0.04)	1.13

Notes: (1) USA, Northern and Western Europe, Australia, and New Zealand

(2) Rest of the world

***, **, and * represent estimates that are significant at the 1, 5, and 10 percent levels of significance, respectively. The regression results are based on a logistic regression of probability of being employed on a constant and the listed variables.

Source: PIAAC, 2012

Table I.e

Odds ratio of being employed, recent immigrants (landed in the past five years)

	Males		Females		All		
Literacy							
Skill level (Reference: Level 1 or below)							
Level 2	1.02	(0.56)	1.62	(0.31)	1.4	(0.26)	
Level 3	1.5	(0.53)	2.22	** (0.35)	1.97	** (0.29)	
Levels 4 or 5	1.01	(1.02)	2.62	(0.77)	1.69	(0.49)	
Educational attainment (Reference: High school)							
Less than high school	0.28	(0.77)	0.56	(0.37)	0.42	** (0.40)	
Apprenticeship	0.38	(2.37)	0.01	(8.04)	0.31	(0.99)	
Trade, vocational	3.51	* (0.67)	1.5	(0.53)	2.27	** (0.37)	
College	1.23	(0.40)	1.68	(0.41)	1.47	(0.28)	
Bachelor	1.41	(0.54)	1.94	* (0.34)	1.69	** (0.26)	
Master's and PhD	1.95	(0.51)	2.5	*** (0.33)	2.32	*** (0.24)	
Gender (Reference: Males)							
Females					0.35	*** (0.17)	
Age (Reference: 25–34)							
16–24	0.79	(0.62)	0.48	(0.47)	0.53	(0.39)	
35–44	1.88	(0.41)	1.33	(0.23)	1.44	* (0.21)	
45–54	0.73	(0.44)	1.52	(0.33)	1.09	(0.24)	
55–65	0.9	(0.68)	0.79	(0.49)	0.84	(0.35)	
Foreign credentials (Reference: Canadian credential)							
Foreign credential (1)	0.77	(0.69)	0.4	** (0.37)	0.48	** (0.33)	
Foreign credential (2)	0.86	(0.47)	0.47	** (0.34)	0.58	** (0.25)	
Health (Reference: Fair or poor)							
Excellent or very good	4.09	*** (0.53)	1.79	(0.40)	2.41	*** (0.30)	
Good	2.57	(0.60)	1.53	(0.41)	1.91	* (0.34)	
Other							
Children in household	1.21	(0.32)	0.37	*** (0.36)	0.55	** (0.24)	
Provincial unemployment	0.96	(0.14)	0.89	(0.08)	0.9	* (0.06)	

Table I.e (cont'd)

Odds ratio of being employed, recent immigrants (landed in the past five years)

	Males		Females		All			
Numeracy								
Skill level (Reference: Level 1 or below)								
Level 2	1.18	(0.63)	1.79	*	(0.34)	1.53	(0.29)	
Level 3	1.37	(0.56)	2.28	**	(0.35)	1.87	**	(0.27)
Levels 4 or 5	2.94	(0.94)	2.4	*	(0.52)	2.73	**	(0.48)
Educational attainment (Reference: High school)								
Less than high school	0.28	(0.77)	0.55		(0.37)	0.42	**	(0.39)
Apprenticeship	0.32	(2.28)	0		(8.04)	0.28		(0.99)
Trade, vocational	3.6	*	(0.69)	1.5	(0.52)	2.24	**	(0.37)
College	1.22	(0.43)	1.66		(0.40)	1.44		(0.28)
Bachelor	1.26	(0.55)	1.9	*	(0.33)	1.62	*	(0.25)
Masters and PhD	1.71	(0.52)	2.5	***	(0.31)	2.22	***	(0.24)
Gender (Reference: Males)								
Females						0.37	***	(0.17)
Age (Reference: 25–34)								
16–24	0.77	(0.64)	0.46	*	(0.46)	0.51	*	(0.38)
35–44	1.82	(0.41)	1.33		(0.23)	1.42		(0.21)
45–54	0.71	(0.44)	1.53		(0.33)	1.08		(0.24)
55–65	0.89	(0.69)	0.8		(0.48)	0.84		(0.35)
Foreign credentials (Reference: Canadian credential)								
Foreign credential (1)	0.7	(0.71)	0.38	**	(0.37)	0.45	**	(0.33)
Foreign credential (2)	0.88	(0.46)	0.46	**	(0.33)	0.58	**	(0.25)
Health (Reference: Fair or poor)								
Excellent or very good	3.98	**	(0.54)	1.84	(0.40)	2.44	***	(0.30)
Good	2.49		(0.60)	1.55	(0.41)	1.9	*	(0.35)
Other								
Children in household	1.21	(0.33)	0.35	***	(0.36)	0.54	**	(0.24)
Provincial unemployment	0.96	(0.14)	0.89		(0.08)	0.91	*	(0.05)

Table I.e (cont'd)

Odds ratio of being employed, recent immigrants (landed in the past five years)

	Males		Females		All	
PS-TRE						
Skill level (Reference: Level 1 or below)						
Level 2 or 3	1.06	(0.44)	1.24	(0.33)	1.15	(0.24)
Nonrespondents	0.49	** (0.36)	0.6	** (0.23)	0.59	*** (0.19)
Educational attainment (Reference: High school)						
Less than high school	0.31	(0.72)	0.55	(0.39)	0.44	** (0.37)
Apprenticeship	0.34	(2.19)	0	(80)	0.29	(0.93)
Trade, vocational	3.31	* (0.70)	1.32	(0.54)	2.09	* (0.39)
College	1.08	(0.43)	1.61	(0.40)	1.39	(0.29)
Bachelor	1.14	(0.50)	2.02	** (0.31)	1.68	** (0.24)
Master's and PhD	1.6	(0.49)	2.67	*** (0.31)	2.34	*** (0.24)
Gender (Reference: Males)						
Females					0.34	*** (0.17)
Age (Reference: 25–34)						
16–24	0.65	(0.61)	0.5	(0.48)	0.51	* (0.39)
35–44	1.79	(0.39)	1.46	* (0.22)	1.52	** (0.20)
45–54	0.75	(0.42)	1.59	(0.32)	1.15	(0.24)
55–65	1	(0.67)	0.85	(0.48)	0.92	(0.35)
Foreign credentials (Reference: Canadian credential)						
Foreign credential (1)	0.76	(0.72)	0.41	** (0.36)	0.49	** (0.33)
Foreign credential (2)	0.95	(0.44)	0.45	** (0.33)	0.57	** (0.26)
Health (Reference: Fair or poor)						
Excellent or very good	3.88	** (0.51)	1.64	(0.38)	2.24	*** (0.29)
Good	2.58	(0.57)	1.41	(0.39)	1.8	* (0.34)
Other						
Children in household	1.28	(0.33)	0.36	*** (0.35)	0.56	** (0.24)
Provincial unemployment	0.95	(0.13)	0.9	(0.08)	0.91	* (0.05)

Notes: (1) USA, Northern and Western Europe, Australia, and New Zealand

(2) Rest of the world

***, **, and * represent estimates that are significant at the 1, 5, and 10 percent levels of significance, respectively. The regression results are based on a logistic regression of probability of being employed on a constant and the listed variables.

Source: PIAAC, 2012

Table I.f

Odds ratio of being employed, established immigrants (landed for at least five years)

	Males		Females		All	
Literacy						
Skill level (Reference: Level 1 or below)						
Level 2	1.34	(0.48)	1.02	(0.35)	1.16	(0.28)
Level 3	1.06	(0.47)	1.14	(0.43)	1.15	(0.31)
Levels 4 or 5	1.55	(0.87)	0.98	(0.77)	1.19	(0.55)
Educational attainment (Reference: High school)						
Less than high school	0.54	(0.52)	0.84	(0.40)	0.73	(0.28)
Apprenticeship	1.25	(0.75)	3.69	(2.13)	2.23	(0.66)
Trade, vocational	0.95	(0.55)	4.28	** (0.62)	2.37	** (0.42)
College	0.79	(0.47)	2.57	*** (0.33)	1.63	** (0.24)
Bachelor	0.93	(0.50)	2.93	** (0.44)	1.9	** (0.32)
Master's and PhD	1.5	(0.68)	9.69	*** (0.48)	4.41	*** (0.37)
Gender (Reference: Males)						
Females					0.47	*** (0.20)
Age (Reference: 25–34)						
16–24	1.21	(0.87)	2.12	(1.00)	2.08	(0.63)
35–44	1.65	(0.87)	0.72	(0.50)	0.91	(0.41)
45–54	0.83	(0.72)	2.51	* (0.53)	1.58	(0.44)
55–65	0.27	* (0.68)	0.49	(0.46)	0.41	** (0.39)
Foreign credentials (Reference: Canadian credential)						
Foreign credential (1)	2.69	(0.60)	1.13	(0.49)	1.51	(0.33)
Foreign credential (2)	1.13	(0.34)	1.21	(0.26)	1.18	(0.18)
Health (Reference: Fair or poor)						
Excellent or very good	3.98	*** (0.38)	3.05	*** (0.36)	3.34	*** (0.24)
Good	2.6	** (0.39)	1.7	* (0.31)	1.97	*** (0.21)
Other						
Children in household	2.24	* (0.46)	0.36	*** (0.35)	0.82	(0.30)
Provincial unemployment	0.99	(0.17)	0.89	(0.10)	0.91	(0.08)

Table I.f (cont'd)

Odds ratio of being employed, established immigrants (landed for at least five years)

	Males		Females		All	
Numeracy						
Skill level (Reference: Level 1 or below)						
Level 2	1.64	(0.52)	1.14	(0.32)	1.33	(0.29)
Level 3	0.99	(0.54)	1.05	(0.44)	1.03	(0.32)
Levels 4 or 5	2.02	(0.82)	1.61	(1.75)	1.7	(0.58)
Educational attainment (Reference: High school)						
Less than high school	0.54	(0.51)	0.85	(0.38)	0.73	(0.28)
Apprenticeship	1.21	(0.80)	3.85	(2.12)	2.22	(0.67)
Trade, vocational	0.92	(0.56)	4.26	** (0.62)	2.33	** (0.42)
College	0.81	(0.50)	2.58	*** (0.33)	1.63	* (0.25)
Bachelor	0.91	(0.54)	2.86	** (0.45)	1.84	* (0.33)
Master's and PhD	1.45	(0.67)	9.53	*** (0.49)	4.22	*** (0.36)
Gender (Reference: Males)						
Females					0.48	*** (0.20)
Age (Reference: 25–34)						
16–24	1.17	(0.88)	2.19	(0.99)	2.04	* (0.64)
35–44	1.71	(0.88)	0.71	(0.49)	0.92	(0.41)
45–54	0.82	(0.72)	2.49	* (0.53)	1.57	(0.44)
55–65	0.27	* (0.70)	0.49	(0.46)	0.41	** (0.39)
Foreign credentials (Reference: Canadian credential)						
Foreign credential (1)	2.69	(0.61)	1.11	(0.47)	1.51	(0.33)
Foreign credential (2)	1.15	(0.35)	1.24	(0.25)	1.19	(0.18)
Health (Reference: Fair or poor)						
Excellent or very good	4.11	*** (0.39)	3.07	*** (0.36)	3.36	*** (0.24)
Good	2.62	** (0.40)	1.7	* (0.31)	1.97	*** (0.21)
Other						
Children in household	2.23	* (0.46)	0.36	*** (0.35)	0.82	(0.30)
Provincial unemployment	1	(0.17)	0.88	(0.10)	0.91	(0.08)

Table I.f (cont'd)

Odds ratio of being employed, established immigrants (landed for at least five years)

	Males		Females		All		
PS-TRE							
Skill level (Reference: Level 1 or below)							
Level 2 or 3	0.98	(0.57)	1.07	(0.52)	1.01	(0.38)	
Nonrespondents	0.76	(0.53)	0.46	**	(0.30)	0.57	
Educational attainment (Reference: High school)							
Less than high school	0.55	(0.55)	0.98	(0.38)	0.81	(0.28)	
Apprenticeship	1.17	(0.79)	3.75	(2.29)	2.01	(0.70)	
Trade, vocational	0.92	(0.56)	4.24	**	(0.63)	2.28	
College	0.75	(0.51)	2.38	**	(0.33)	1.49	
Bachelor	0.9	(0.56)	2.51	**	(0.43)	1.69	
Master's and PhD	1.5	(0.64)	8.17	***	(0.46)	3.95	
Gender (Reference: Males)							
Females					0.49	***	
Age (Reference: 25–34)							
16–24	1.16	(0.86)	1.96	(1.00)	1.92	(0.62)	
35–44	1.67	(0.88)	0.76	(0.49)	0.97	(0.41)	
45–54	0.83	(0.71)	2.8	*	(0.56)	1.68	
55–65	0.28	*	(0.69)	0.59	(0.49)	0.46	
Foreign credentials (Reference: Canadian credential)							
Foreign credential (1)	2.81	*	(0.61)	1.07	(0.46)	1.53	
Foreign credential (2)	1.17	(0.36)	1.45	(0.25)	1.32	(0.19)	
Health (Reference: Fair or poor)							
Excellent or very good	3.96	***	(0.38)	2.95	***	(0.35)	
Good	2.58	**	(0.38)	1.79	*	(0.31)	
Other							
Children in household	2.19	*	(0.46)	0.34	***	(0.38)	
Provincial unemployment	0.98	(0.17)	0.89	(0.10)	0.91	(0.08)	

Notes: (1) USA, Northern and Western Europe, Australia, and New Zealand

(2) Rest of the world

***, **, and * represent estimates that are significant at the 1, 5, and 10 percent levels of significance, respectively. The regression results are based on a logistic regression of probability of being employed on a constant and the listed variables.

Source: PIAAC, 2012

Table I.g

Odds ratio of being employed, Canadian born

	Males			Females			All		
Literacy									
Skill level (Reference: Level 1 or below)									
Level 2	1.39		(0.20)	1.32	*	(0.15)	1.34	**	(0.11)
Level 3	1.64	***	(0.18)	1.69	***	(0.15)	1.68	***	(0.12)
Levels 4 or 5	2.53	***	(0.27)	1.68	**	(0.22)	1.97	***	(0.17)
Educational attainment (Reference: High school)									
Less than high school	0.79		(0.19)	0.51	***	(0.15)	0.64	***	(0.12)
Apprenticeship	1.26		(0.28)	0.65		(0.53)	1.15		(0.24)
Trade, vocational	1.51	**	(0.18)	1.51	***	(0.14)	1.53	***	(0.13)
College	1.59	***	(0.17)	1.39	**	(0.15)	1.48	***	(0.12)
Bachelor	1.52	*	(0.21)	1.63	***	(0.18)	1.63	***	(0.13)
Master's and PhD	1.36		(0.27)	1.63	**	(0.20)	1.57	***	(0.16)
Gender (Reference: Males)									
Females							0.51	***	(0.070)
Age (Reference: 25–34)									
16–24	0.82		(0.25)	1.32		(0.20)	1.08		(0.15)
35–44	1.19		(0.21)	1.24		(0.15)	1.2		(0.14)
45–54	0.7	*	(0.20)	1.15		(0.12)	0.94		(0.11)
55–65	0.19	***	(0.20)	0.35	***	(0.13)	0.28	***	(0.12)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	0.73		(0.64)	1.95		(1.02)	1.11		(0.37)
Foreign credential (2)	48,600.01		(18.47)	1.21		(1.40)	4.58		(1.60)
Health (Reference: Fair or poor)									
Excellent or very good	4.82	***	(0.15)	4.22	***	(0.13)	4.5	***	(0.09)
Good	3.79	***	(0.16)	2.95	***	(0.14)	3.32	***	(0.10)
Other									
Children in household	1.58	***	(0.13)	0.6	***	(0.12)	0.93		(0.09)
Provincial unemployment	0.85	***	(0.03)	0.91	***	(0.02)	0.88	***	(0.02)

Table I.g (cont'd)

Odds ratio of being employed, Canadian born

	Males			Females			All		
Numeracy									
Skill level (Reference: Level 1 or below)									
Level 2	1.66	***	(0.17)	1.44	***	(0.14)	1.53	***	(0.11)
Level 3	2.01	***	(0.16)	1.87	***	(0.15)	1.97	***	(0.11)
Levels 4 or 5	3.5	***	(0.28)	2.46	***	(0.28)	2.95	***	(0.21)
Educational attainment (Reference: High school)									
Less than high school	0.83		(0.19)	0.52	***	(0.14)	0.67	***	(0.11)
Apprenticeship	1.19		(0.29)	0.66		(0.54)	1.1		(0.24)
Trade, vocational	1.46	**	(0.18)	1.49	***	(0.15)	1.5	***	(0.12)
College	1.49	**	(0.18)	1.35	**	(0.15)	1.42	***	(0.12)
Bachelor	1.36		(0.21)	1.47	**	(0.18)	1.46	***	(0.13)
Master's and PhD	1.24		(0.27)	1.45	*	(0.20)	1.39	**	(0.16)
Gender (Reference: Males)									
Females							0.55	***	(0.08)
Age (Reference: 25–34)									
16–24	0.79		(0.25)	1.32		(0.20)	1.07		(0.15)
35–44	1.18		(0.21)	1.24		(0.15)	1.21		(0.14)
45–54	0.72		(0.20)	1.16		(0.12)	0.96		(0.11)
55–65	0.19	***	(0.20)	0.36	***	(0.13)	0.28	***	(0.12)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	0.74		(0.65)	1.98		(1.03)	1.12		(0.37)
Foreign credential (2)	53,300.15		(18.43)	1.13		(1.40)	4.42		(1.58)
Health (Reference: Fair or poor)									
Excellent or very good	4.69	***	(0.15)	4.18	***	(0.13)	4.42	***	(0.09)
Good	3.65	***	(0.16)	2.94	***	(0.14)	3.26	***	(0.10)
Other									
Children in household	1.53	***	(0.13)	0.6	***	(0.12)	0.92		(0.08)
Provincial unemployment	0.86	***	(0.03)	0.91	***	(0.02)	0.89	***	(0.02)

Table I.g (cont'd)

Odds ratio of being employed, Canadian born

	Males			Females			All		
PS-TRE									
Skill level (Reference: Level 1 or below)									
Level 2 or 3	1.55	***	(0.16)	1.29	**	(0.13)	1.4	***	(0.10)
Nonrespondents	0.82		(0.12)	0.6	***	(0.12)	0.69	***	(0.08)
Educational attainment (Reference: High school)									
Less than high school	0.74		(0.18)	0.5	***	(0.14)	0.62	***	(0.11)
Apprenticeship	1.27		(0.29)	0.65		(0.53)	1.16		(0.24)
Trade, vocational	1.48	**	(0.18)	1.52	***	(0.15)	1.52	***	(0.13)
College	1.59	***	(0.17)	1.4	**	(0.15)	1.49	***	(0.12)
Bachelor	1.55	**	(0.21)	1.65	***	(0.17)	1.65	***	(0.13)
Master's and PhD	1.45		(0.27)	1.62	**	(0.19)	1.6	***	(0.15)
Gender (Reference: Males)									
Females							0.5	***	(0.08)
Age (Reference: 25–34)									
16–24	0.77		(0.24)	1.27		(0.20)	1.03		(0.15)
35–44	1.2		(0.21)	1.28		(0.15)	1.23		(0.14)
45–54	0.74		(0.20)	1.24	*	(0.12)	1.01		(0.11)
55–65	0.21	***	(0.20)	0.4	***	(0.13)	0.31	***	(0.12)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	0.71		(0.64)	1.99		(1.02)	1.09		(0.38)
Foreign credential (2)	45,064.95		(18.46)	1.11		(1.34)	4.27		(1.60)
Health (Reference: Fair or poor)									
Excellent or very good	4.91	***	(0.15)	4.21	***	(0.13)	4.53	***	(0.09)
Good	3.84	***	(0.16)	2.96	***	(0.14)	3.34	***	(0.10)
Other									
Children in household	1.55	***	(0.13)	0.59	***	(0.12)	0.92		(0.08)
Provincial unemployment	0.85	***	(0.03)	0.91	***	(0.02)	0.89	***	(0.02)

Notes: (1) USA, Northern and Western Europe, Australia, and New Zealand

(2) Rest of the world

***, **, and * represent estimates that are significant at the 1, 5, and 10 percent levels of significance, respectively. The regression results are based on a logistic regression of probability of being employed on a constant and the listed variables.

Source: PIAAC, 2012

Table I.h

Odds ratio of being unemployed, recent immigrants (landed in the past five years)

	Males		Females		All			
Literacy								
Skill level (Reference: Level 1 or below)								
Level 2	1.8	(1.01)	0.45	(0.62)	0.78	(0.50)		
Level 3	0.92	(1.14)	0.5	(0.59)	0.61	(0.54)		
Levels 4 or 5	2.99	(1.37)	0.19	(1.04)	0.82	(0.82)		
Educational attainment (Reference: High school)								
Less than high school	7.83	(2.09)	2.09	(0.64)	3.56	(0)		
Apprenticeship	0	(22.86)	1,608.51	(125.87)	4.81	(0)		
Trade, vocational	0.33	(13.03)	0.7	(1.11)	0.4	(0)		
College	1.84	(0.80)	1.43	(0.90)	1.57	(0)		
Bachelor	1.48	(0.84)	1.61	(0.62)	1.68	(0)		
Master's and PhD	0.95	(0.86)	1.11	(0.54)	1.07	(0)		
Gender (Reference: Males)								
Females					1.39	(0.32)		
Experience								
Additional year	1.01	(0.10)	0.95	(0.06)	0.97	(0.04)		
Foreign credentials (Reference: Canadian credential)								
Foreign credential (1)	3.49	(1.45)	1.65	(0.67)	1.97	(0.57)		
Foreign credential (2)	3.12	(0)	1.2	(0.52)	1.61	(0.34)		
Health (Reference: Fair or poor)								
Excellent or very good	0.22	(0.98)	1.16	(0.88)	0.5	(0.62)		
Good	0.38	(1.45)	1.06	(0.90)	0.57	(0.71)		
Other								
Children in household	1.06	(0.57)	0.84	(0.47)	0.99	(0.32)		
Provincial unemployment	1.17	(0.98)	1.43	***	(0.12)	1.31	**	(0.11)

Table I.h (cont'd)

Odds ratio of being unemployed, recent immigrants (landed in the past five years)

	Males		Females		All			
Numeracy								
Skill level (Reference: Level 1 or below)								
Level 2	1.34	(1.11)	0.6	(0.63)	0.83	(0.57)		
Level 3	0.79	(1.02)	0.49	(0.56)	0.58	(0.49)		
Levels 4 or 5	0.57	(1.31)	0.45	(0.95)	0.45	(0.78)		
Educational attainment (Reference: High school)								
Less than high school	7.64	(2.07)	2.24	(0.64)	3.47	(0.9)		
Apprenticeship	0	(23.01)	1,408.54	(134.59)	4.88	(12.86)		
Trade, vocational	0.29	(13.02)	0.67	(1.11)	0.39	(0.81)		
College	1.83	(0.83)	1.32	(0.89)	1.55	(0.54)		
Bachelor	1.88	(0.85)	1.45	(0.59)	1.73	(0.45)		
Master's and PhD	1.2	(0.88)	0.99	(0.53)	1.11	(0.39)		
Gender (Reference: Males)								
Females					1.32	(0.31)		
Experience								
Additional year	1.02	(0.09)	0.95	(0.06)	0.97	(0.04)		
Foreign credentials (Reference: Canadian credential)								
Foreign credential (1)	4.15	(1.56)	1.68	(0.67)	2.1	(0.59)		
Foreign credential (2)	2.79	(0.94)	1.25	(0.51)	1.56	(0.32)		
Health (Reference: Fair or poor)								
Excellent or very good	0.24	(0.99)	1.15	(0.87)	0.49	(0.62)		
Good	0.41	(1.09)	1.09	(0.89)	0.58	(0.7)		
Other								
Children in household	0.98	(0.61)	0.87	(0.47)	0.99	(0.32)		
Provincial unemployment	1.18	(0.22)	1.42	***	(0.11)	1.31	**	(0.11)

Table I.h (cont'd)

Odds ratio of being unemployed, recent immigrants (landed in the past five years)

	Males		Females		All	
PS-TRE						
Skill level (Reference: Level 1 or below)						
Level 2 or 3	1.04	(0.55)	0.8	(0.51)	0.89	(0.35)
Nonrespondents	2.53	(0.70)	1.59	(0.50)	1.91	* (0.36)
Educational attainment (Reference: High school)						
Less than high school	6.71	(2.010)	2.31	(0.67)	3.24	(0.85)
Apprenticeship	0	(22.78)	1,308.95	(97.28)	5.8	(13.08)
Trade, vocational	0.36	(13.01)	0.72	(1.09)	0.42	(0.80)
College	2.43	(0.84)	1.42	(0.87)	1.7	(0.53)
Bachelor	2.47	(0.84)	1.45	(0.55)	1.79	(0.45)
Master's and PhD	1.54	(0.88)	0.97	(0.51)	1.13	(0.38)
Gender (Reference: Males)						
Females					1.4	(0.31)
Experience						
Additional year	1.02	(0.09)	0.94	(0.06)	0.97	(0.03)
Foreign credentials (Reference: Canadian credential)						
Foreign credential (1)	3.66	(1.46)	1.53	(0.66)	1.99	(0.59)
Foreign credential (2)	2.37	(0.81)	1.25	(0.49)	1.5	(0.31)
Health (Reference: Fair or poor)						
Excellent or very good	0.23	(0.95)	1.2	(0.86)	0.51	(0.60)
Good	0.38	(1.04)	1.53	(0.88)	0.58	(0.68)
Other						
Children in household	0.9	(0.59)	0.85	(0.47)	0.95	(0.32)
Provincial unemployment	1.18	(0.21)	1.44	*** (0.12)	1.32	** (0.11)

Notes: (1) USA, Northern and Western Europe, Australia, and New Zealand

(2) Rest of the world

***, **, and * represent estimates that are significant at the 1, 5, and 10 percent levels of significance, respectively. The regression results are based on a logistic regression of probability of being employed on a constant and the listed variables.

Source: PIAAC, 2012

Table I.i

Odds ratio of being unemployed, established immigrants (landed for at least five years)

	Males		Females		All	
Literacy						
Skill level (Reference: Level 1 or below)						
Level 2	0.41	(1.35)	1.08	(0.88)	0.81	(0.67)
Level 3	0.98	(1.17)	0.68	(1.03)	0.77	(0.70)
Levels 4 or 5	0.08	(12.85)	1.24	(6.92)	0.71	(1.10)
Educational attainment (Reference: High school)						
Less than high school	19.16	(14.06)	0.5	(1.15)	1.31	(0.76)
Apprenticeship	5.66	(14.53)	0	(31.71)	0.54	(4.25)
Trade, vocational	6.93	(20.02)	0.05	(12.94)	0.3	(1.58)
College	13.62	(13.94)	0.42	(0.74)	1.05	(0.63)
Bachelor	19.02	(13.98)	0.32	(1.15)	1.15	(0.78)
Master's and PhD	0	(25.55)	0.02	(12.92)	0.04	(12.93)
Gender (Reference: Males)						
Females					1.23	(0.42)
Experience						
Additional year	0.87	(0.12)	0.99	(0.09)	0.9	(0.07)
Foreign credentials (Reference: Canadian credential)						
Foreign credential (1)	0.03	(2.29)	0.19	(12.98)	0.1	(1.98)
Foreign credential (2)	0.56	(0.74)	0.85	(0.62)	0.8	(0.43)
Health (Reference: Fair or poor)						
Excellent or very good	0.47	(1.50)	0.35	(0.80)	0.36	* (0.55)
Good	1.04	(1.54)	0.62	(0.77)	0.73	(0.57)
Other						
Children in household	0.4	(0.63)	3.64	* (0.73)	1.3	(0.45)
Provincial unemployment	0.74	(0.40)	1.24	(0.24)	0.99	(0.20)

Table I.i (cont'd)

Odds ratio of being unemployed, established immigrants (landed for at least five years)

	Males		Females		All	
Numeracy						
Skill level (Reference: Level 1 or below)						
Level 2	0.45	(1.31)	0.46	(0.83)	0.5	(0.66)
Level 3	0.67	(1.18)	0.54	(0.93)	0.64	(0.69)
Levels 4 or 5	0.02	(15.47)	0.12	(6.04)	0.13	(1.93)
Educational attainment (Reference: High school)						
Less than high school	19.99	(14.05)	0.45	(1.10)	1.26	(0.74)
Apprenticeship	6.58	(14.58)	0	(31.43)	0.56	(4.30)
Trade, vocational	6.69	(20.24)	0.05	(12.94)	0.3	(1.58)
College	14.41	(13.94)	0.44	(0.76)	1.12	(0.64)
Bachelor	24.1	(14.01)	0.39	(1.18)	1.37	(0.80)
Master's and PhD	0	(27.05)	0.03	(12.9)	0.05	(12.92)
Gender (Reference: Males)						
Females					1.16	(0.43)
Experience						
Additional year	0.88	(0.11)	0.99	(0.09)	0.91	(0.07)
Foreign credentials (Reference: Canadian credential)						
Foreign credential (1)	0.04	(2.29)	0.18	(12.99)	0.1	(1.98)
Foreign credential (2)	0.47	(0.77)	0.69	(0.58)	0.7	(0.40)
Health (Reference: Fair or poor)						
Excellent or very good	0.5	(1.51)	0.32	(0.81)	0.36	* (0.55)
Good	1.19	(1.61)	0.57	(0.76)	0.77	(0.56)
Other						
Children in household	0.41	(0.69)	3.49	* (0.71)	1.26	(0.45)
Provincial unemployment	0.76	(0.40)	1.28	(0.23)	1	(0.20)

Table I.i (cont'd)

Odds ratio of being unemployed, established immigrants (landed for at least five years)

	Males		Females		All	
PS-TRE						
Skill level (Reference: Level 1 or below)						
Level 2 or 3	1.15	(1.19)	0.37	(0.93)	0.66	(0.71)
Nonrespondents	2.45	(1.17)	2.59	(0.65)	2.71	(0.60)
Educational attainment (Reference: High school)						
Less than high school	16.42	(14.01)	0.45	(1.12)	1.1	(0.75)
Apprenticeship	6.57	(14.57)	0	(30.64)	0.68	(4.31)
Trade, vocational	7.49	(20)	0.04	(12.97)	0.3	(1.59)
College	14.84	(13.97)	0.54	(0.78)	1.29	(0.64)
Bachelor	21.13	(14.00)	0.47	(1.14)	1.51	(0.78)
Master's and PhD	0	(24.27)	0.03	(12.91)	0.05	(12.93)
Gender (Reference: Males)						
Females					1.2	(0.41)
Experience						
Additional year	0.89	(0.11)	0.98	(0.09)	0.9	(0.06)
Foreign credentials (Reference: Canadian credential)						
Foreign credential (1)	0.03	(2.24)	0.14	(13.00)	0.08	(1.99)
Foreign credential (2)	0.48	(0.83)	0.56	(0.56)	0.59	(0.42)
Health (Reference: Fair or poor)						
Excellent or very good	0.51	(1.50)	0.41	(0.83)	0.4	* (0.55)
Good	1.1	(1.57)	0.63	(0.77)	0.76	(0.55)
Other						
Children in household	0.38	(0.67)	3.08	(0.72)	1.21	(0.45)
Provincial unemployment	0.8	(0.35)	1.29	(0.23)	1.03	(0.19)

Notes: (1) USA, Northern and Western Europe, Australia, and New Zealand

(2) Rest of the world

***, **, and * represent estimates that are significant at the 1, 5, and 10 percent levels of significance, respectively. The regression results are based on a logistic regression of probability of being employed on a constant and the listed variables.

Source: PIAAC, 2012

Table I.j

Odds ratio of being unemployed, Canadian born

	Males		Females		All	
Literacy						
Skill level (Reference: Level 1 or below)						
Level 2	0.82	(0.30)	0.78	(0.37)	0.81	(0.22)
Level 3	0.66	(0.31)	0.66	(0.40)	0.66	*
Levels 4 or 5	0.57	(0.48)	0.51	(0.60)	0.53	*
Educational attainment (Reference: High school)						
Less than high school	1.09	(0.28)	1.62	(0.40)	1.26	(0.23)
Apprenticeship	0.38	*	(0.50)	0.53	(1.97)	0.39
Trade, vocational	0.75	(0.32)	0.52	*	(0.37)	0.67
College	0.65	(0.30)	1.12	(0.31)	0.86	(0.21)
Bachelor	0.48	*	(0.41)	0.58	(0.47)	0.52
Master's and PhD	0.24	(1.00)	0.52	(0.57)	0.36	**
Gender (Reference: Males)						
Females					0.82	(0.14)
Experience						
Additional year	0.91	***	(0.03)	0.99	(0.03)	0.94
Foreign credentials (Reference: Canadian credential)						
Foreign credential (1)	2.57	(1.69)	0.08	(9.94)	1.24	(1.43)
Foreign credential (2)	0	(17.27)	0	(19.65)	0	(16.86)
Health (Reference: Fair or poor)						
Excellent or very good	0.44	**	(0.34)	0.45	**	(0.36)
Good	0.55	(0.36)	0.78	(0.32)	0.63	**
Other						
Children in household	0.81	(0.24)	1.21	(0.24)	0.96	(0.15)
Provincial unemployment	1.18	***	(0.04)	1.13	***	(0.04)

Table I.j (cont'd)

Odds ratio of being unemployed, Canadian born

	Males			Females			All		
Numeracy									
Skill level (Reference: Level 1 or below)									
Level 2	0.68		(0.31)	0.6		(0.35)	0.64	*	(0.23)
Level 3	0.52	**	(0.29)	0.46	**	(0.36)	0.49	***	(0.24)
Levels 4 or 5	0.37	*	(0.51)	0.26		(0.95)	0.32	***	(0.40)
Educational attainment (Reference: High school)									
Less than high school	1.04		(0.27)	1.5		(0.37)	1.19		(0.22)
Apprenticeship	0.41	*	(0.51)	0.54		(1.97)	0.42	*	(0.45)
Trade, vocational	0.79		(0.32)	0.53	*	(0.37)	0.69		(0.24)
College	0.7		(0.31)	1.17		(0.31)	0.92		(0.21)
Bachelor	0.56		(0.41)	0.67		(0.46)	0.6	*	(0.29)
Master's and PhD	0.27		(1.01)	0.6		(0.56)	0.42	**	(0.43)
Gender (Reference: Males)									
Females							0.76	*	(0.15)
Experience									
Additional year	0.91	***	(0.03)	0.99		(0.03)	0.94	***	(0.02)
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	2.54		(1.71)	0.08		(9.94)	1.22		(1.44)
Foreign credential (2)	0		(17.23)	0		(19.77)	0		(16.90)
Health (Reference: Fair or poor)									
Excellent or very good	0.45	**	(0.35)	0.45	**	(0.36)	0.45	***	(0.23)
Good	0.56		(0.37)	0.78		(0.33)	0.65	**	(0.21)
Other									
Children in household	0.83		(0.24)	1.18		(0.24)	0.97		(0.15)
Provincial unemployment	1.17	***	(0.04)	1.12	***	(0.04)	1.15	***	(0.03)

Table I.j (cont'd)

Odds ratio of being unemployed, Canadian born

	Males		Females		All				
PS-TRE									
Skill level (Reference: Level 1 or below)									
Level 2 or 3	0.87	(0.26)	0.97	(0.29)	0.89	(0.18)			
Nonrespondents	1.25	(0.29)	0.81	(0.34)	1.07	(0.21)			
Educational attainment (Reference: High school)									
Less than high school	1.15	(0.27)	1.86	*	(0.37)	1.37	(0.22)		
Apprenticeship	0.37	*	(0.5)	0.54	(1.96)	0.38	**	(0.45)	
Trade, vocational	0.75	(0.32)	0.52	*	(0.37)	0.66	*	(0.24)	
College	0.62	(0.29)	1.05	(0.31)	0.81	(0.20)			
Bachelor	0.44	**	(0.39)	0.5	(0.45)	0.46	***	(0.28)	
Master's and PhD	0.21	(1.01)	0.43	(0.56)	0.31	***	(0.42)		
Gender (Reference: Males)									
Females					0.83	(0.14)			
Experience									
Additional year	0.91	***	(0.03)	0.99	(0.03)	0.94	***	(0.02)	
Foreign credentials (Reference: Canadian credential)									
Foreign credential (1)	2.71	(1.70)	0.08	(9.94)	1.26	(1.42)			
Foreign credential (2)	0	(17.25)	0	(19.60)	0	(16.8)			
Health (Reference: Fair or poor)									
Excellent or very good	0.43	**	(0.34)	0.44	**	(0.37)	0.43	***	(0.22)
Good	0.55	*	(0.36)	0.77	(0.33)	0.62	**	(0.20)	
Other									
Children in household	0.82	(0.23)	1.24	(0.24)	0.97	(0.15)			
Provincial unemployment	1.18	***	(0.04)	1.14	***	(0.04)	1.16	***	(0.03)

Notes: (1) USA, Northern and Western Europe, Australia, and New Zealand

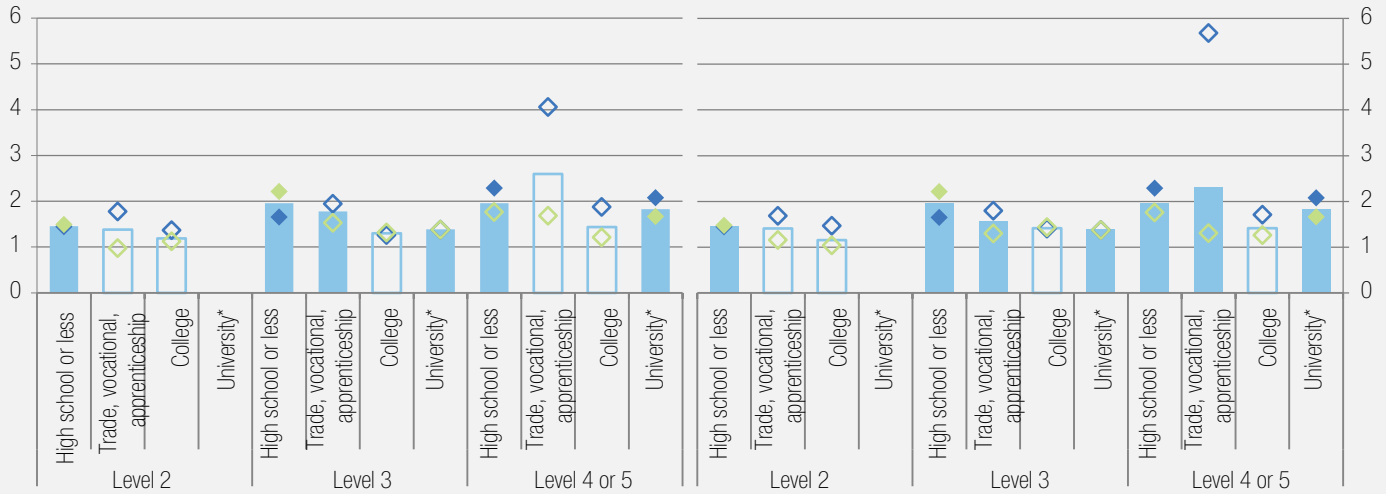
(2) Rest of the world

***, **, and * represent estimates that are significant at the 1, 5, and 10 percent levels of significance, respectively. The regression results are based on a logistic regression of probability of being employed on a constant and the listed variables.

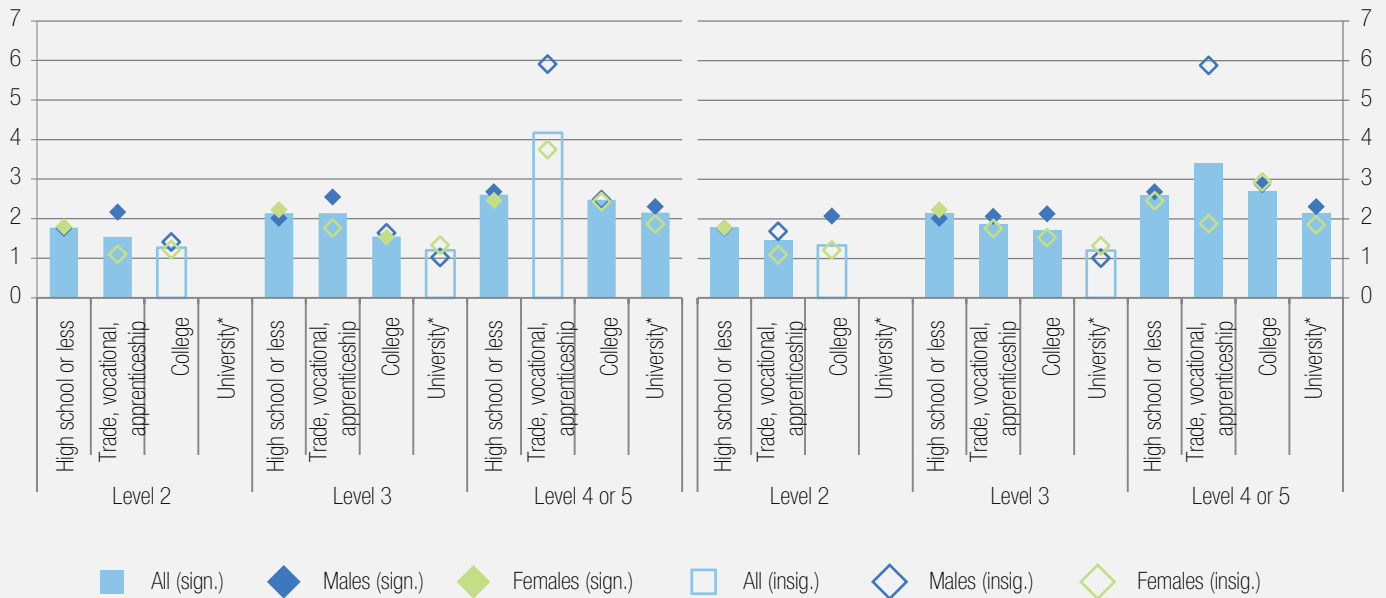
Source: PIAAC, 2012

Figure 1.a Odds ratio of being employed by education level and literacy proficiency level, adults aged 16 to 65, by gender 2012, ESDC vs. ISCED education levels

Literacy



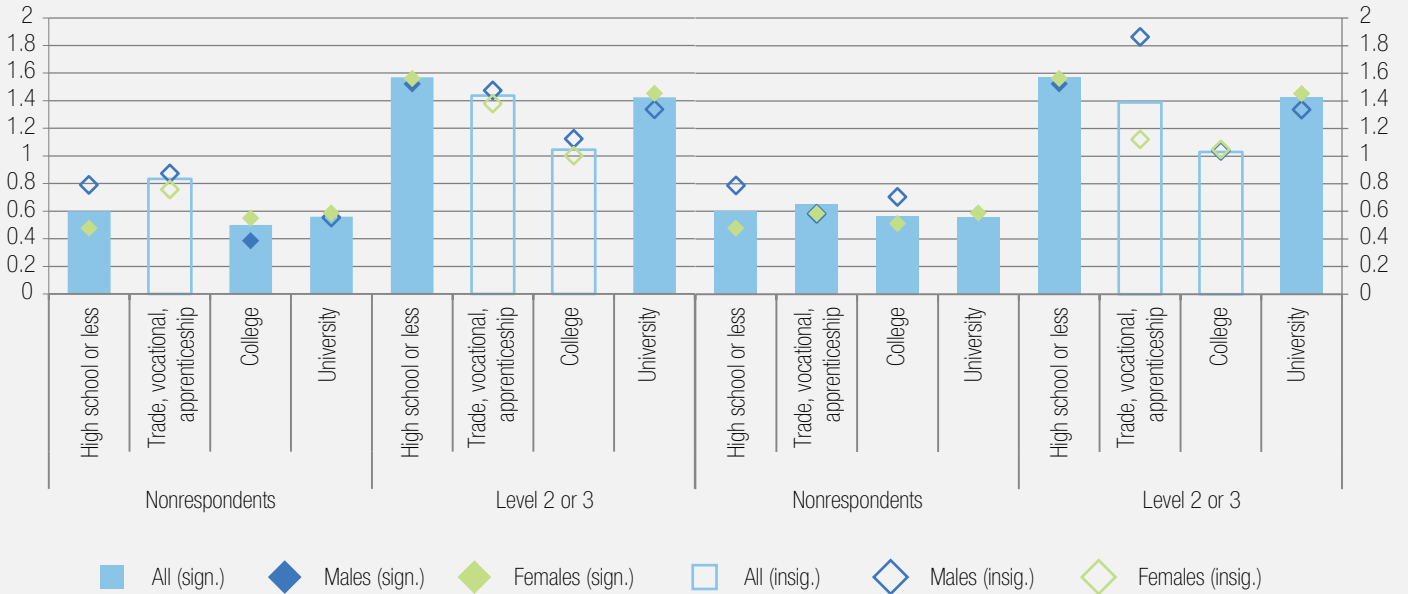
Numeracy



■ All (sign.)
 ◆ Males (sign.)
 ◆ Females (sign.)
 All (insig.)
 Males (insig.)
 Females (insig.)

Figure I.a Odds ratio of being employed by education level and literacy proficiency level, adults aged 16 to 65, by gender 2012, ESDC vs. ISCED education levels, cont'd

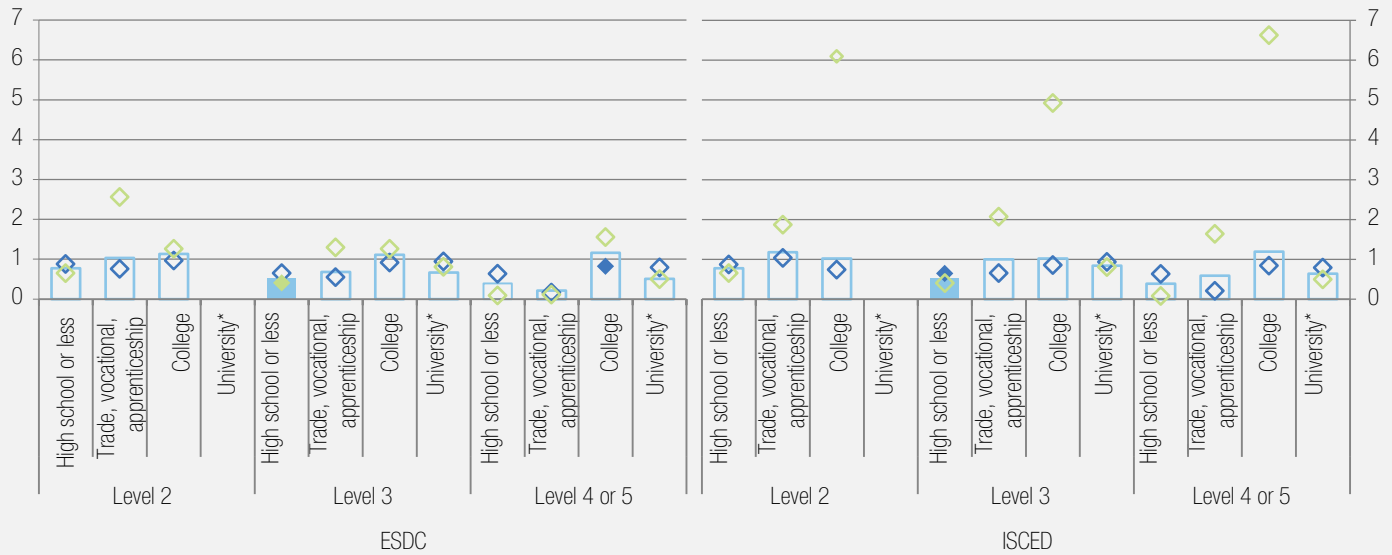
Problem solving in technology-rich environments (PS-TRE)



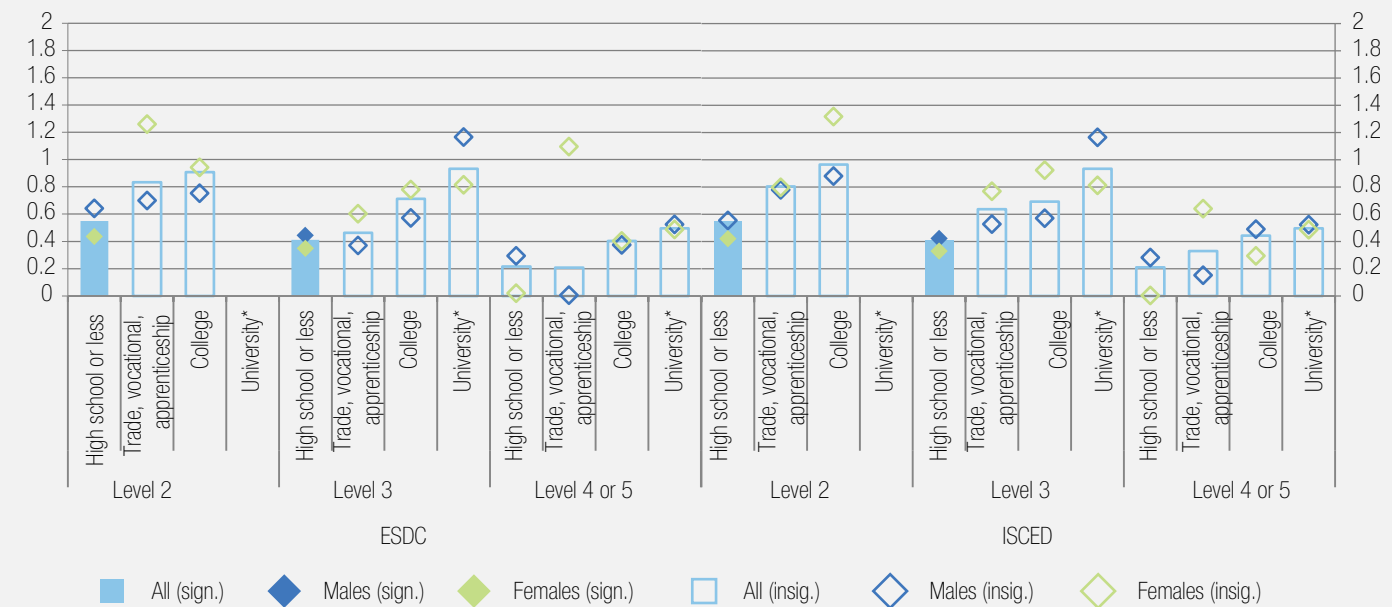
Notes: The odds ratio represents the ratio between the likelihood of an outcome in the observed group and that in the reference group (usually those scoring on proficiency Level 1 or below). Values greater than 1.0 indicate that higher proficiency increases the probability of an outcome and values less than 1.0 mean that higher proficiency decreases the probability of an outcome. For instance, an odds ratio of 1.4 means that it increases the probability by 1.4, while an odds ratio of 0.6 means that it decreases the probability by 40 percent (1–0.6).
 For university education, due to the small sample size of those performing on proficiency Level 1 or below, a different reference group, “proficiency Level 2 or below” is used. The regression results are based on a logistic regression of probability of being employed on a constant and the listed variables.
Source: PIAAC, 2012

Figure I.b Odds ratio of being unemployed by education level and literacy proficiency level, adults aged 16 to 65, by gender 2012, ESDC vs. ISCED education levels

Literacy



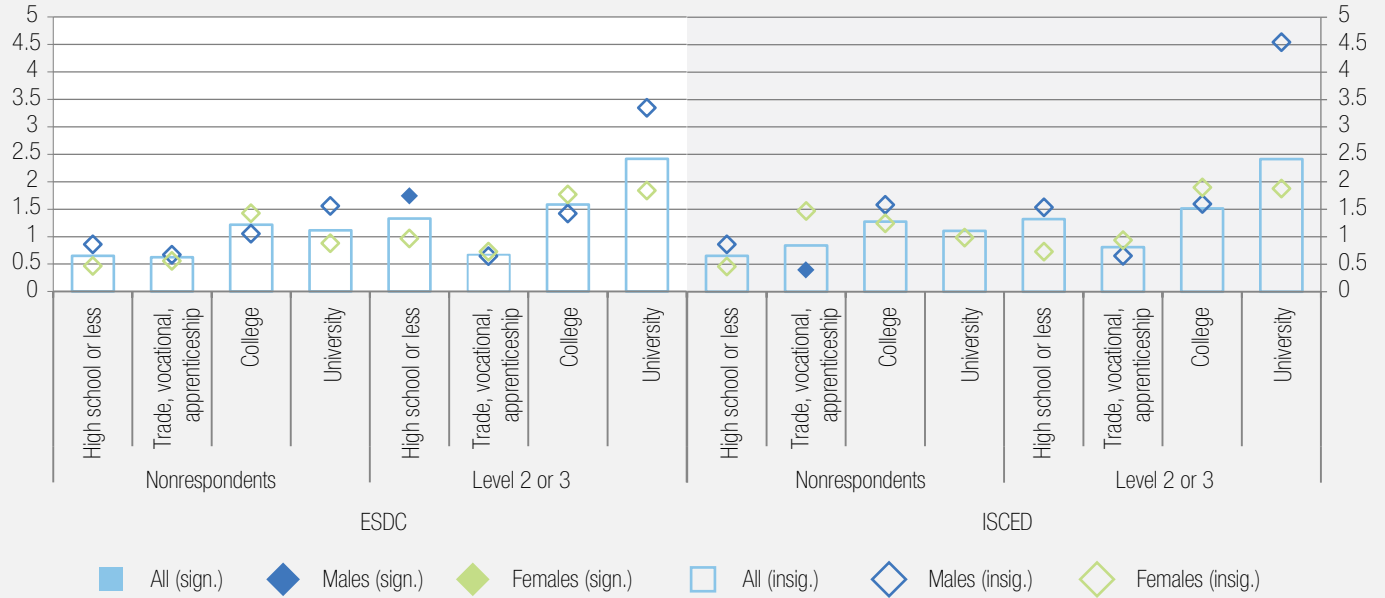
Numeracy



■ All (sign.)
 ◆ Males (sign.)
 ◆ Females (sign.)
 All (insig.)
 ◆ Males (insig.)
 ◆ Females (insig.)

Figure I.b Odds ratio of being unemployed by education level and literacy proficiency level, adults aged 16 to 65, by gender 2012, ESDC vs. ISCED education levels (cont'd)

Problem solving in technology-rich environments (PS-TRE)



Notes: The odds ratio represents the ratio between the likelihood of an outcome in the observed group and that in the reference group (those scoring on proficiency Level 1 or below). Values greater than 1.0 indicate that higher proficiency increases the probability of an outcome; values less than 1.0 means that higher proficiency decreases the probability of an outcome. For instance, an odds ratio of 1.4 increases the probability by 1.4, while an odds ratio of 0.6 decreases the probability by 40 percent (1–0.6).

+ For university education, due to the small sample size of those performing on proficiency Level 1 or below, a different reference group, “proficiency Level 2 or below” is used. The regression results are based on a logistic regression of probability of being employed on a constant and the listed variables.

Source: PIAAC, 2012



ANNEX J

RELATIONSHIP BETWEEN SKILLS AND HOURLY EARNINGS

Table J.a

Impacts of proficiency levels on hourly earnings by level of education, for workers aged 16 to 65, Canada, 2012

	Males						Females						All					
	Not controlling for education			Controlling for education			Not controlling for education			Controlling for education			Not controlling for education			Controlling for education		
Literacy																		
Skill level																		
Level 2	0.12	***	(0.03)	0.08	**	(0.03)	0.06	**	(0.03)	0.01		(0.03)	0.09	***	(0.02)	0.05	**	(0.02)
Level 3	0.22	***	(0.03)	0.14	***	(0.03)	0.18	***	(0.03)	0.09	***	(0.03)	0.20	***	(0.02)	0.12	***	(0.02)
Levels 4 or 5	0.28	***	(0.04)	0.16	***	(0.04)	0.31	***	(0.04)	0.15	***	(0.04)	0.30	***	(0.03)	0.16	***	(0.03)
Educational attainment																		
Less than high school				-0.06	**	(0.03)				-0.05		(0.03)				-0.06	***	(0.02)
Apprenticeship				0.14	***	(0.04)										0.15	***	(0.04)
Trade, vocational				0.05	*	(0.03)										0.03	*	(0.02)
Trade, vocational, apprenticeship										0.00		(0.02)						
College				0.10	***	(0.03)				0.11	***	(0.02)				0.11	***	(0.02)
Bachelor				0.25	***	(0.03)				0.28	***	(0.02)				0.27	***	(0.02)
Master's and PhD				0.33	***	(0.04)				0.44	***	(0.03)				0.39	***	(0.03)
Females													-0.14	***	(0.01)	-0.14	***	(0.01)
Experience	0.03	***	(0.00)	0.02	***	(0.00)	0.02	***	(0.00)	0.02	***	(0.00)	0.02	***	(0.00)	0.02	***	(0.00)
Foreign credential (1)	0.07		(0.05)	-0.02		(0.05)	0.07		(0.05)	-0.02		(0.04)	0.07	**	(0.03)	-0.03		(0.03)
Foreign credential (2)	-0.11	***	(0.04)	-0.15	***	(0.04)	-0.09	**	(0.04)	-0.14	***	(0.03)	-0.10	***	(0.03)	-0.15	***	(0.02)
Numeracy																		
Skill level																		
Level 2	0.12	***	(0.03)	0.09	**	(0.03)	0.08	***	(0.02)	0.04		(0.02)	0.10	***	(0.02)	0.06	***	(0.02)
Level 3	0.22	***	(0.03)	0.15	***	(0.03)	0.21	***	(0.02)	0.11	***	(0.02)	0.22	***	(0.02)	0.14	***	(0.02)
Levels 4 or 5	0.31	***	(0.04)	0.20	***	(0.04)	0.34	***	(0.04)	0.19	***	(0.05)	0.32	***	(0.02)	0.20	***	(0.03)
Educational attainment																		
Less than high school				-0.06	**	(0.03)				-0.05		(0.03)				-0.06	***	(0.02)
Apprenticeship				0.13	***	(0.04)										0.14	***	(0.04)
Trade, vocational				0.04		(0.03)										0.03		(0.02)
Trade, vocational, apprenticeship										0.00		(0.02)						
College				0.09	***	(0.03)				0.11	***	(0.02)				0.11	***	(0.02)
Bachelor				0.23	***	(0.03)				0.28	***	(0.03)				0.26	***	(0.02)
Master's and PhD				0.31	***	(0.04)				0.43	***	(0.03)				0.37	***	(0.03)
Females													-0.12	***	(0.01)	-0.13	***	(0.01)
Experience	0.03	***	(0.00)	0.02	***	(0.00)	0.02	***	(0.00)	0.02	***	(0.00)	0.02	***	(0.00)	0.02	***	(0.00)
Foreign credential (1)	0.05		(0.05)	-0.03		(0.05)	0.06		(0.05)	-0.02		(0.04)	0.06	*	(0.03)	-0.03		(0.03)
Foreign credential (2)	-0.11	***	(0.04)	-0.15	***	(0.04)	-0.09	**	(0.04)	-0.14	***	(0.03)	-0.10	***	(0.03)	-0.15	***	(0.02)

Table J.a (cont'd)

Impacts of proficiency levels on hourly earnings by level of education, for workers aged 16 to 65, Canada, 2012

	Males						Females						All					
	Not controlling for education			Controlling for education			Not controlling for education			Controlling for education			Not controlling for education			Controlling for education		
PS-TRE																		
Skill level																		
Level 2 or 3	0.08	***	(0.02)	0.05	**	(0.02)	0.12	***	(0.02)	0.07	***	(0.02)	0.11	***	(0.01)	0.06	***	(0.01)
Nonrespondents	-0.09	***	(0.02)	-0.05	**	(0.02)	-0.07	***	(0.02)	-0.04	**	(0.02)	-0.08	***	(0.02)	-0.05	***	(0.02)
Educational attainment																		
Less than high school				-0.08	***	(0.03)				-0.06	*	(0.03)				-0.07	***	(0.02)
Apprenticeship				0.15	***	(0.04)										0.16	***	(0.04)
Trade, vocational				0.05	*	(0.03)										0.04	*	(0.02)
Trade, vocational, apprenticeship										0.00		(0.02)						
College				0.11	***	(0.03)				0.12	***	(0.02)				0.12	***	(0.02)
Bachelor				0.27	***	(0.03)				0.30	***	(0.02)				0.29	***	(0.02)
Master's and PhD				0.35	***	(0.04)				0.46	***	(0.03)				0.41	***	(0.02)
Females													-0.15	***	(0.01)	-0.14	***	(0.01)
Experience	0.03	***	(0.00)	0.02	***	(0.00)	0.02	***	(0.00)	0.02	***	(0.00)	0.02	***	(0.00)	0.02	***	(0.00)
Foreign credential (1)	0.08		(0.05)	-0.02		(0.05)	0.08		(0.05)	-0.02		(0.05)	0.08	**	(0.03)	-0.03		(0.03)
Foreign credential (2)	-0.11	***	(0.04)	-0.15	***	(0.04)	-0.10	***	(0.04)	-0.15	***	(0.03)	-0.11	***	(0.03)	-0.15	***	(0.03)

Notes: These specifications also control for firm size, health status, immigrant status, foreign education, experience squared, NOC skill type, full/part-time status, and provincial unemployment rate.

(1) USA, Northern and Western Europe, Australia, and New Zealand

(2) Rest of the world

***, **, and * represent estimates that are significant at the 1, 5, and 10% levels of significance, respectively.

Source: PIAAC, 2012

Table J.b

Impacts of proficiency levels on hourly earnings by level of education, for workers aged 16 to 65, Canada, 2012

	Level 2		Level 3		Levels 4 or 5				
Literacy									
MALES									
High school or less	0.05	(0.04)	0.11	***	(0.04)	0.15	*	(0.08)	
Less than high school	0.10	(0.06)	0.11	*	(0.06)	0.37		(0.53)	
High school	-0.01	(0.06)	0.05		(0.05)	0.04		(0.08)	
Postsecondary education (non-university)	0.14	**	(0.06)	0.20	***	(0.05)	0.31	***	(0.07)
Trade, vocational, apprenticeship	0.12	**	(0.06)	0.14	**	(0.07)	0.25	**	(0.11)
Apprenticeship	0.18		(0.13)	0.18		(0.13)	0.24		(0.21)
Trade, vocational	0.10		(0.07)	0.11		(0.08)	0.23	*	(0.13)
College	0.17		(0.10)	0.25	***	(0.09)	0.34	***	(0.09)
University			0.09	**	(0.05)	0.05		(0.05)	
Bachelor			0.09		(0.06)	0.04		(0.06)	
Master's and PhD			0.06		(0.08)	0.03		(0.09)	
FEMALES									
High school or less	0.04	(0.04)	0.11	**	(0.04)	0.23	*	(0.12)	
Less than high school	0.02	(0.07)	0.00		(0.11)	0.04		(0.30)	
High school	0.03	(0.06)	0.10	*	(0.06)	0.22	*	(0.12)	
Postsecondary education (non-university)	0.04	(0.04)	0.13	***	(0.04)	0.16	***	(0.06)	
Trade, vocational, apprenticeship	-0.01	(0.06)	0.08		(0.06)	0.12		(0.10)	
College	0.06	(0.06)	0.13	**	(0.06)	0.16	**	(0.08)	
University			0.09	**	(0.04)	0.15	***	(0.04)	
Bachelor			0.04		(0.04)	0.10	**	(0.04)	
Master's and PhD			0.18	**	(0.08)	0.20	**	(0.09)	
ALL									
High school or less	0.05	*	(0.03)	0.11	***	(0.03)	0.21	***	(0.06)
Less than high school	0.06		(0.05)	0.07		(0.05)	0.30		(0.45)
High school	0.01		(0.04)	0.08	**	(0.04)	0.15	**	(0.07)
Postsecondary education (non-university)	0.09	**	(0.04)	0.16	***	(0.03)	0.24	***	(0.05)
Trade, vocational, apprenticeship	0.07	*	(0.04)	0.12	**	(0.05)	0.21	**	(0.08)
Apprenticeship	0.17		(0.12)	0.20		(0.12)	0.26		(0.20)
Trade, vocational	0.06		(0.05)	0.10	*	(0.05)	0.20	**	(0.09)
College	0.10	**	(0.05)	0.18	***	(0.05)	0.24	***	(0.06)
University			0.09	***	(0.03)	0.10	***	(0.04)	
Bachelor			0.07	**	(0.03)	0.07	*	(0.04)	
Master's and PhD			0.12	**	(0.06)	0.12	*	(0.06)	

Table J.b (cont'd)

Impacts of proficiency levels on hourly earnings by level of education, for workers aged 16 to 65, Canada, 2012

	Level 2		Level 3		Levels 4 or 5				
Numeracy									
MALES									
High school or less	0.07	(0.04)	0.13	***	(0.04)	0.11	(0.08)		
Less than high school	0.11	*	(0.06)	0.19	***	(0.07)	0.15	(0.17)	
High school	0.02		(0.05)	0.07		(0.05)	0.04	(0.08)	
Postsecondary education (non-university)	0.15	**	(0.06)	0.21	***	(0.05)	0.32	***	(0.06)
Trade, vocational, apprenticeship	0.16	**	(0.07)	0.19	**	(0.08)	0.26	***	(0.09)
Apprenticeship	0.18		(0.13)	0.18		(0.13)	0.25		(0.20)
Trade, vocational	0.15	*	(0.08)	0.17	*	(0.10)	0.25	**	(0.10)
College	0.14		(0.08)	0.22	***	(0.08)	0.34	***	(0.08)
University				0.08		(0.05)	0.10	**	(0.05)
Bachelor				0.12	*	(0.07)	0.12	**	(0.06)
Master's and PhD				0.03		(0.09)	0.07		(0.08)
FEMALES									
High school or less	0.03		(0.04)	0.11	**	(0.05)	0.30		(0.18)
Less than high school	-0.01		(0.08)	0.06		(0.15)	0.11		(0.42)
High school	0.03		(0.05)	0.10	*	(0.05)	0.29		(0.18)
Postsecondary education (non-university)	0.08	**	(0.03)	0.16	***	(0.03)	0.21	***	(0.07)
Trade, vocational, apprenticeship	0.03		(0.05)	0.11	*	(0.06)	0.19		(0.12)
College	0.09	*	(0.04)	0.16	***	(0.04)	0.20	***	(0.07)
University				0.09	**	(0.03)	0.16	***	(0.05)
Bachelor				0.06	*	(0.04)	0.12	**	(0.05)
Master's and PhD				0.10	*	(0.06)	0.16	**	(0.07)
ALL									
High school or less	0.06	*	(0.03)	0.14	***	(0.03)	0.19	***	(0.07)
Less than high school	0.06		(0.05)	0.14	**	(0.06)	0.11		(0.15)
High school	0.04		(0.03)	0.11	***	(0.03)	0.16	**	(0.07)
Postsecondary education (non-university)	0.10	***	(0.03)	0.18	***	(0.03)	0.28	***	(0.04)
Trade, vocational, apprenticeship	0.10	**	(0.05)	0.15	***	(0.05)	0.22	***	(0.06)
Apprenticeship	0.17		(0.13)	0.19		(0.12)	0.28		(0.19)
Trade, vocational	0.09	*	(0.05)	0.14	**	(0.06)	0.21	***	(0.08)
College	0.10	**	(0.04)	0.18	***	(0.04)	0.27	***	(0.05)
University				0.09	***	(0.03)	0.13	***	(0.03)
Bachelor				0.09	**	(0.03)	0.12	***	(0.04)
Master's and PhD				0.07		(0.05)	0.12	**	(0.05)

Table J.b (cont'd)

Effects of PS-TRE proficiency levels on hourly earnings by level of education, for workers aged 16 to 65, Canada, 2012

	Nonrespondents		Levels 2 or 3			
PS-TRE						
MALES						
High school or less	-0.04	(0.03)	0.07	*	(0.04)	
Less than high school	-0.06	(0.05)	0.06		(0.08)	
High school	-0.04	(0.04)	0.04		(0.04)	
Postsecondary education (non-university)	-0.08	**	(0.04)	0.09	***	(0.03)
Trade, vocational, apprenticeship	-0.10	*	(0.06)	0.05		(0.05)
Apprenticeship	0.00		(0.11)	-0.02		(0.11)
Trade, vocational	-0.11	**	(0.05)	0.08		(0.07)
College	-0.05		(0.05)	0.10	**	(0.04)
University	-0.07		(0.06)	-0.02		(0.04)
Bachelor	-0.01		(0.09)	0.00		(0.05)
Master's and PhD	-0.15		(0.09)	-0.06		(0.07)
FEMALES						
High school or less	-0.06	*	(0.03)	0.06		(0.05)
Less than high school	-0.07		(0.05)	-0.08		(0.13)
High school	-0.01		(0.05)	0.07		(0.05)
Postsecondary education (non-university)	-0.07	*	(0.04)	0.07	**	(0.03)
Trade, vocational, apprenticeship	-0.01		(0.06)	0.08		(0.05)
College	-0.09	*	(0.05)	0.06		(0.03)
University	-0.04		(0.04)	0.08	***	(0.03)
Bachelor	-0.06		(0.05)	0.07	*	(0.04)
Master's and PhD	0.01		(0.07)	0.09	*	(0.05)
ALL						
High school or less	-0.05	**	(0.02)	0.07	***	(0.03)
Less than high school	-0.07	*	(0.04)	0.00		(0.06)
High school	-0.04		(0.03)	0.07	**	(0.03)
Postsecondary education (non-university)	-0.08	***	(0.03)	0.08	***	(0.02)
Trade, vocational, apprenticeship	-0.07	*	(0.04)	0.06		(0.04)
Apprenticeship	0.03		(0.11)	0.02		(0.11)
Trade, vocational	-0.07	*	(0.04)	0.08	*	(0.05)
College	-0.08	***	(0.03)	0.07	***	(0.02)
University	-0.06		(0.04)	0.04		(0.02)
Bachelor	-0.05		(0.05)	0.04		(0.03)
Master's and PhD	-0.07		(0.05)	0.02		(0.04)

Notes: These specifications also control for firm size, health status, immigrant status, foreign education, experience squared, NOC skill type, full/part-time status, and provincial unemployment rate.

***, **, and * represent estimates that are significant at the 1, 5, and 10% levels of significance, respectively

Source: PIAAC, 2012.

Table J.c

Impacts of proficiency levels on hourly earnings by ISCED level of education, for workers aged 16 to 65, Canada, 2012

	Level 2		Level 3		Levels 4 or 5				
Literacy									
MALES									
High school or less (ISCED 1 and below, 2, and 3)	0.05	(0.04)	0.11	***	(0.04)	0.15	*	(0.08)	
Less than high school (ISCED 1 and below, and 2)	0.1	(0.06)	0.11	*	(0.06)	0.37		(0.53)	
High school (ISCED 3)	-0.01	(0.06)	0.05		(0.05)	0.04		(0.08)	
ISCED 4A and 4B	0.14	**	(0.07)	0.15	**	(0.07)	0.23	**	(0.09)
ISCED 5B	0.14		(0.1)	0.24	***	(0.09)	0.34	***	(0.1)
Bachelor (ISCED 5A bachelor)				0.09		(0.06)	0.04		(0.06)
Master's and PhD (ISCED 5A master and 6)				0.09		(0.1)	0.05		(0.1)
FEMALES									
High school or less (ISCED 1 and below, 2, and 3)	0.04	(0.04)	0.11	**	(0.04)	0.23	*	(0.12)	
Less than high school (ISCED 1 and below, and 2)	0.02	(0.07)	0		(0.11)	0.04		(0.3)	
High school (ISCED 3)	0.03	(0.06)	0.1	*	(0.06)	0.22	*	(0.12)	
ISCED 4A and 4B	0.01	(0.07)	0.06		(0.07)	0.06		(0.09)	
ISCED 5B	0.04	(0.06)	0.15	**	(0.06)	0.19	**	(0.08)	
Bachelor (ISCED 5A bachelor)				0.07	*	(0.04)	0.13	***	(0.04)
Master's and PhD (ISCED 5A master and 6)				0.17		(0.1)	0.17		(0.11)
ALL									
High school or less (ISCED 1 and below, 2, and 3)	0.05	*	(0.03)	0.11	***	(0.03)	0.21	***	(0.06)
Less than high school (ISCED 1 and below, and 2)	0.06		(0.05)	0.07		(0.05)	0.3		(0.45)
High school (ISCED 3)	0.01		(0.04)	0.08	**	(0.04)	0.15	**	(0.07)
ISCED 4A and 4B	0.08		(0.05)	0.11	**	(0.05)	0.16	**	(0.07)
ISCED 5B	0.09	*	(0.05)	0.19	***	(0.05)	0.27	***	(0.06)
Bachelor (ISCED 5A bachelor)				0.08	**	(0.03)	0.09	**	(0.04)
Master's and PhD (ISCED 5A master and 6)				0.12		(0.07)	0.1		(0.07)

Table J.c (cont'd)

Impacts of proficiency levels on hourly earnings by ISCED level of education, for workers aged 16 to 65, Canada, 2012

	Level 2		Level 3		Levels 4 or 5				
Numeracy									
MALES									
High school or less (ISCED 1 and below, 2, and 3)	0.07	(0.04)	0.13	***	(0.04)	0.11	(0.08)		
Less than high school (ISCED 1 and below, and 2)	0.11	*	(0.06)	0.19	***	(0.07)	0.15	(0.17)	
High school (ISCED 3)	0.02		(0.05)	0.07		(0.05)	0.04	(0.08)	
ISCED 4A and 4B	0.14	*	(0.07)	0.18	**	(0.07)	0.22	**	(0.09)
ISCED 5B	0.15	*	(0.08)	0.24	***	(0.08)	0.37	***	(0.08)
Bachelor (ISCED 5A bachelor)				0.11		(0.07)	0.11	*	(0.06)
Master's and PhD (ISCED 5A master and 6)				0.03		(0.12)	0.1		(0.1)
FEMALES									
High school or less (ISCED 1 and below, 2, and 3)	0.03		(0.04)	0.11	**	(0.05)	0.3	(0.18)	
Less than high school (ISCED 1 and below, and 2)	-0.01		(0.08)	0.06		(0.15)	0.11	(0.42)	
High school (ISCED 3)	0.03		(0.05)	0.1	*	(0.05)	0.29	(0.18)	
ISCED 4A and 4B	0.04		(0.05)	0.08		(0.05)	0.1	(0.1)	
ISCED 5B	0.09	*	(0.05)	0.17	***	(0.05)	0.24	***	(0.08)
Bachelor (ISCED 5A bachelor)				0.09	**	(0.04)	0.15	***	(0.05)
Master's and PhD (ISCED 5A master and 6)				0.07		(0.08)	0.11	(0.09)	
ALL									
High school or less (ISCED 1 and below, 2, and 3)	0.06	*	(0.03)	0.14	***	(0.03)	0.19	***	(0.07)
Less than high school (ISCED 1 and below, and 2)	0.06		(0.05)	0.14	**	(0.06)	0.11	(0.15)	
High school (ISCED 3)	0.04		(0.03)	0.11	***	(0.03)	0.16	**	(0.07)
ISCED 4A and 4B	0.08	*	(0.04)	0.13	***	(0.04)	0.16	**	(0.07)
ISCED 5B	0.12	**	(0.05)	0.2	***	(0.04)	0.31	***	(0.05)
Bachelor (ISCED 5A bachelor)				0.1	***	(0.03)	0.12	***	(0.03)
Master's and PhD (ISCED 5A master and 6)				0.05		(0.07)	0.1	*	(0.06)

Table J.c (cont'd)

Impacts of proficiency levels on hourly earnings by ISCED level of education, for workers aged 16 to 65, Canada, 2012

	Nonrespondents		Levels 2 or 3		
PS-TRE					
MALES					
High school or less (ISCED 1 and below, 2, and 3)	-0.04	(0.03)	0.07	*	(0.04)
Less than high school (ISCED 1 and below, and 2)	-0.06	(0.05)	0.06		(0.08)
High school (ISCED 3)	-0.04	(0.04)	0.04		(0.04)
ISCED 4A and 4B	-0.07	(0.06)	0.02		(0.05)
ISCED 5B	-0.09	*	(0.05)	0.12	***
Bachelor (ISCED 5A bachelor)	-0.04	(0.07)	0		(0.05)
Master's and PhD (ISCED 5A master and 6)	-0.13	(0.11)	-0.06		(0.08)
FEMALES					
High school or less (ISCED 1 and below, 2, and 3)	-0.06	*	(0.03)	0.06	(0.05)
Less than high school (ISCED 1 and below, and 2)	-0.07		(0.05)	-0.08	(0.13)
High school (ISCED 3)	-0.01		(0.05)	0.07	(0.05)
ISCED 4A and 4B	-0.03		(0.06)	0.02	(0.05)
ISCED 5B	-0.07		(0.05)	0.08	**
Bachelor (ISCED 5A bachelor)	-0.07		(0.05)	0.08	**
Master's and PhD (ISCED 5A master and 6)	-0.02		(0.11)	0.04	(0.08)
ALL					
High school or less (ISCED 1 and below, 2, and 3)	-0.05	**	(0.02)	0.07	***
Less than high school (ISCED 1 and below, and 2)	-0.07	*	(0.04)	0	(0.06)
High school (ISCED 3)	-0.04		(0.03)	0.07	**
ISCED 4A and 4B	-0.06		(0.04)	0.02	(0.03)
ISCED 5B	-0.08	**	(0.03)	0.1	***
Bachelor (ISCED 5A bachelor)	-0.06		(0.04)	0.05	(0.03)
Master's and PhD (ISCED 5A master and 6)	-0.08		(0.07)	0	(0.06)

Notes: This is based on linear regression of hourly earnings in logarithm form on a constant and the listed variables; it also controls for firm size, health status, immigrant status, foreign education, experience squared, NOC skill type, full/part-time status, and provincial unemployment rate. ***, **, and * represent estimates that are significant at the 1, 5, and 10 percent levels of significance, respectively.

Table J.d

Impacts of proficiency levels on hourly earnings by credential location, for workers aged 16 to 65, Canada, 2012

	Proportion	Level 3			Levels 4 or 5		
		est.		(SE)	est.		(SE)
Literacy							
MALES							
Canadian credential	71%	0.01		(0.06)	-0.04		(0.07)
Foreign credential	29%	0.14	**	(0.06)	0.22	**	(0.10)
Western countries	10%	0.06		(0.16)	0.12		(0.16)
Rest of the world	19%	0.18	***	(0.06)	0.31	***	(0.12)
FEMALES							
Canadian credential	77%	0.07		(0.04)	0.13	***	(0.05)
Foreign credential	23%	0.12		(0.09)	0.20	*	(0.12)
Western countries	6%	0.12		(0.27)	0.19		(0.28)
Rest of the world	17%	0.10		(0.09)	0.16		(0.13)
ALL							
Canadian credential	74%	0.04		(0.04)	0.05		(0.04)
Foreign credential	26%	0.14	***	(0.05)	0.23	***	(0.08)
Western countries	8%	0.07		(0.14)	0.13		(0.15)
Rest of the world	18%	0.16	***	(0.05)	0.26	***	(0.09)

Numeracy

MALES							
Canadian credential	71%	0.01		(0.07)	0.03		(0.06)
Foreign credential	29%	0.18	***	(0.06)	0.19	**	(0.08)
Western countries	10%	0.13		(0.18)	0.07		(0.19)
Rest of the world	19%	0.20	***	(0.07)	0.32	***	(0.08)
FEMALES							
Canadian credential	77%	0.07		(0.04)	0.13	***	(0.05)
Foreign credential	23%	0.14	**	(0.07)	0.25	*	(0.14)
Western countries	6%	0.07		(0.22)	0.16		(0.28)
Rest of the world	17%	0.12	*	(0.07)	0.24	*	(0.13)
ALL							
Canadian credential	74%	0.05		(0.03)	0.09	**	(0.04)
Foreign credential	26%	0.17	***	(0.05)	0.22	***	(0.06)
Western countries	8%	0.08		(0.13)	0.06		(0.15)
Rest of the world	18%	0.17	***	(0.05)	0.30	***	(0.07)

Notes: These specifications also control for firm size, health status, immigrant status, foreign education, experience squared, NOC skill type, full/part-time status, and provincial unemployment rate.

***, **, and * represent estimates that are significant at the 1, 5, and 10% levels of significance, respectively.

est. Estimate

SE Standard error

Source: PIAAC, 2012.

Table J.d (cont'd)

Impacts of proficiency levels on hourly earnings by credential location, for workers aged 16 to 65, Canada, 2012

	Proportion	Nonrespondents		Levels 2 or 3		
		est.	(SE)	est.	(SE)	
PS-TRE						
MALES						
Canadian credential	71%	-0.03	(0.09)	-0.07		(0.05)
Foreign credential	29%	-0.06	(0.07)	0.11		(0.07)
Western countries	10%	-0.02	(0.32)	0.06		(0.12)
Rest of the world	19%	-0.04	(0.08)	0.17	**	(0.07)
FEMALES						
Canadian credential	77%	-0.03	(0.06)	0.08	**	(0.03)
Foreign credential	23%	-0.03	(0.07)	0.08		(0.08)
Western countries	6%	0.49	** (0.23)	0.13		(0.23)
Rest of the world	17%	-0.09	(0.07)	0.07		(0.08)
ALL						
Canadian credential	74%	-0.02	(0.06)	0.02		(0.03)
Foreign credential	26%	-0.04	(0.05)	0.11	**	(0.05)
Western countries	8%	0.22	(0.14)	0.06		(0.11)
Rest of the world	18%	-0.08	(0.05)	0.13	**	(0.05)

Notes: These specifications also control for firm size, health status, immigrant status, foreign education, experience squared, NOC skill type, full/part-time status, and provincial unemployment rate.

***, **, and * represent estimates that are significant at the 1, 5, and 10% levels of significance, respectively.

Source: PIAAC, 2012.



ANNEX K

STEM AND TRADES OCCUPATIONS

Table K.a

NOC four-digit occupations included in STEM group

NOC	Occupations	NOC	Occupations
0131	Telecommunication carriers managers	2212	Geological and mineral technologists and technicians
0132	Postal and courier services managers	2221	Biological technologists and technicians
0211	Engineering managers	2222	Agricultural and fish products inspectors
0212	Architecture and science managers	2223	Forestry technologists and technicians
0213	Computer and information systems managers	2224	Conservation and fishery officers
0711	Construction managers	2225	Landscape and horticulture technicians and specialists
0712	Home building and renovation managers	2231	Civil engineering technologists and technicians
0714	Facility operation and maintenance managers	2232	Mechanical engineering technologists and technicians
0731	Managers in transportation	2233	Industrial engineering and manufacturing technologists and technicians
0811	Managers in natural resources production and fishing	2234	Construction estimators
0821	Managers in agriculture	2241	Electrical and electronics engineering technologists and technicians
0822	Managers in horticulture	2242	Electronic service technicians (household and business equipment)
0823	Managers in aquaculture	2243	Industrial instrument technicians and mechanics
0911	Manufacturing managers	2244	Aircraft instrument, electrical and avionics mechanics, technicians, and inspectors
0912	Utilities managers	2251	Architectural technologists and technicians
2111	Physicists and astronomers	2252	Industrial designers
2112	Chemists	2253	Drafting technologists and technicians
2113	Geoscientists and oceanographers	2254	Land survey technologists and technicians
2114	Meteorologists and climatologists	2255	Technical occupations in geomatics and meteorology
2115	Other professional occupations in physical science	2261	Nondestructive testers and inspection technicians
2121	Biologists and related scientists	2262	Engineering inspectors and regulatory officers
2122	Forestry professionals	2263	Inspectors in public and environmental health and occupational health and safety
2123	Agricultural representatives, consultants, and specialists	2264	Construction inspectors
2131	Civil engineers	2281	Computer network technicians
2132	Mechanical engineers	2282	User-support technicians
2133	Electrical and electronics engineers	2283	Information systems testing technicians
2134	Chemical engineers	4011	University professors and lecturers
2141	Industrial and manufacturing engineers	4012	Postsecondary teaching and research assistants
2142	Metallurgical and materials engineers	4021	College and other vocational instructors
2143	Mining engineers	4161	Natural and applied science policy researchers, consultants, and program officers
2144	Geological engineers	4162	Economists and economic policy researchers and analysts
2145	Petroleum engineers	4163	Business development officers and marketing researchers and consultants
2146	Aerospace engineers	4164	Social policy researchers, consultants, and program officers
2147	Computer engineers (except software engineers and designers)	4165	Health policy researchers, consultants, and program officers
2148	Other professional engineers, n.e.c.	4166	Education policy researchers, consultants, and program officers
2151	Architects	4167	Recreation, sports and fitness policy researchers, consultants, and program officers
2152	Landscape architects	4168	Program officers unique to government
2153	Urban and land use planners	4169	Other professional occupations in social science, n.e.c.
2154	Land surveyors	7311	Construction millwrights and industrial mechanics
2161	Mathematicians, statisticians, and actuaries	7312	Heavy-duty equipment mechanics
2171	Information systems analysts and consultants	7313	Refrigeration and air conditioning mechanics
2172	Database analysts and data administrators	7314	Railway carmen/women
2173	Software engineers and designers	7315	Aircraft mechanics and aircraft inspectors
2174	Computer programmers and interactive media developers	7316	Machine fitters
2175	Web designers and developers	7318	Elevator constructors and mechanics
2211	Chemical technologists and technicians		

Table K.b

NOC four-digit occupations included in trades group

NOC	Occupations	NOC	Occupations
1226	Conference and event planners	7313	Refrigeration and air conditioning mechanics
2225	Landscape and horticulture technicians and specialists	7314	Railway carmen/women
2242	Electronic service technicians (household and business equipment)	7315	Aircraft mechanics and aircraft inspectors
2243	Industrial instrument technicians and mechanics	7316	Machine fitters
2253	Drafting technologists and technicians	7301	Textile machinery mechanics and repairers
4212	Social and community service workers	7318	Elevator constructors and mechanics
4214	Early childhood educators and assistants	7321	Automatic service technicians, truck and bus mechanics, and mechanical repairers
5223	Graphic arts technicians	7322	Motor vehicle body repairers
5226	Other technical and co-ordinating occupations in motion pictures, broadcasting, and the performing arts	7331	Oil and solid fuel heating mechanics
5227	Support occupations in motion pictures, broadcasting, photography, and the performing arts	7332	Electric appliance servicers and repairers
6321	Chefs	7333	Electrical mechanics
6322	Cooks	7334	Motorcycle and other related mechanics
6341	Hairstylists and barbers	7335	Other small engine and equipment mechanics
4312	Firefighters	6345	Upholsterers
6562	Estheticians, electrologists, and related occupations	6342	Tailors, dressmakers, furriers, and milliners
6331	Butchers, meat cutters, and fishmongers — retail and wholesale	6343	Shoe repairers and shoemakers
6332	Bakers	6344	Jewellers, watch repairers, and related occupations
7251	Plumbers	7381	Printing press operators
7252	Steamfitters, pipefitters, and sprinkler system installers	7384	Other trades and related occupations, n.e.c.
7253	Gas fitters	7441	Residential and commercial installers and servicers
7271	Carpenters	7442	Waterworks and gas maintenance workers
7272	Cabinetmakers	7535	Automotive mechanical installers and servicers
7281	Bricklayers	7445	Other repairers and servicers
7282	Concrete finishers	7521	Heavy equipment operators (except crane)
7283	Tiles setters	7371	Crane operators
7284	Plasterers, drywall installers, and finishers and lathers	7372	Drillers and blasters — surface mining, quarrying, and construction
7291	Roofers and shinglers	7373	Water well drillers
7292	Glaziers	7452	Material handlers
7293	Insulators	7611	Construction trades helpers and labourers
7294	Painters and decorators (except interior decorators)	7612	Other trades helpers and labourers
7295	Floor covering installers	8222	Contractors and supervisors, oil and gas drilling and services
7241	Electricians (except industrial and power system)	8231	Underground production and development miners
7242	Industrial electricians	8232	Oil and gas well drillers, servicers, testers, and related workers
7243	Power system electricians	8412	Oil and gas well drilling and related workers and services operators
7244	Electrical power line and cable workers	8421	Chain saw and skidder operators
7245	Telecommunications line and cable workers	8422	Silviculture and forestry workers
7246	Telecommunications installation and repair workers	9232	Petroleum, gas, and chemical process operators
7247	Cable television service and maintenance technicians	9411	Machine operators, mineral and metal processing
9241	Power engineers and power systems operators	9422	Plastics-processing machine operators
9241	Stationary engineers and auxiliary equipment operators	9243	Water and waste plant operators
7231	Machinists and machining and tooling inspectors	9431	Sawmill machine operators
7232	Tool and die makers	9436	Lumber graders and other wood-processing inspectors and graders
7233	Sheet metal workers	9441	Textile fibre and yarn, hide- and pelt-processing machine operators and workers
7234	Boilermakers	9442	Weavers, knitters, and other fabric-making occupations
7235	Structural metal and platework fabricators and fitters	9445	Fabric, fur, and leather cutters
7236	Ironworkers	9462	Industrial butchers and meat cutters, poultry preparers, and related workers

Table K.b (cont'd)**NOC four-digit occupations included in trades group**

NOC	Occupations	NOC	Occupations
7237	Welders and related machine operators	9463	Fish and seafood plant workers
7384	Blacksmiths and die setters	9465	Testers and graders, food, beverage, and associated products processing
7311	Construction millwrights and industrial mechanics	9473	Binding and finishing machine operators
7312	Heavy-duty equipment mechanics	9417	Machining tool operators



ANNEX L

METHODS OF ANALYSIS

Foundational skills: Definitions and descriptions of proficiency levels

The skills assessed by PIAAC are defined in terms of three parameters: content, cognitive strategies, and context. The context defines the different situations in which each of these skills is used, including professional, educational, personal, and societal. The content and cognitive strategies—summarized in the following tables for each skill and each proficiency level—are defined by a specific framework that describes what is being measured and guides the interpretation of results (OECD, 2012).

Literacy

Literacy is defined as “understanding, evaluating, using and engaging with written texts to participate in society, to achieve one’s goals, and to develop one’s knowledge and potential” (OECD, 2012, p. 19).

The population of adults aged 16 to 65 was assessed over a continuum of ability in literacy using a measurement scale ranging from 0 to 500. Proficiency levels are used to help interpret the findings. OECD has divided reporting scales for literacy into five proficiency levels (with an additional category, “below Level 1”), defined by a particular score-point range, where each level corresponds to a description of what adults with particular scores can do.

Literacy — Description of proficiency levels		
Level	Score range	Descriptors of the characteristics of literacy tasks
5	376–500	At this level, tasks may require the respondent to search for and integrate information across multiple, dense texts; construct syntheses of similar and contrasting ideas or points of view; or evaluate evidenced-based arguments. Application and evaluation of logical and conceptual models of ideas may be required to accomplish tasks. Evaluating reliability of evidentiary sources and selecting key information is frequently a key requirement. Tasks often require respondents to be aware of subtle, rhetorical cues and to make high-level inferences or use specialized background knowledge.
4	326–375	Tasks at this level often require respondents to perform multiple-step operations to integrate, interpret, or synthesize information from complex or lengthy continuous, noncontinuous, mixed, or multiple-type texts. Complex inferences and application of background knowledge may be needed to perform successfully. Many tasks require identifying and understanding one or more specific, noncentral ideas in the text to interpret or evaluate subtle evidence-claim or persuasive discourse relationships. Conditional information is frequently present in tasks at this level and must be taken into consideration by the respondent. Competing information is present and sometimes seemingly as prominent as correct information.
3	276–325	Texts at this level are often dense or lengthy, and include continuous, noncontinuous, mixed, or multiple pages of text. Understanding text and rhetorical structures becomes more central to successfully completing tasks, especially navigating complex digital texts. Tasks require the respondent to identify, interpret, or evaluate one or more pieces of information, and often require varying levels of inference. Many tasks require the respondent to construct meaning across larger chunks of text or perform multi-step operations in order to identify and formulate responses. Often tasks also demand that the respondent disregard irrelevant or inappropriate content to answer accurately. Competing information is often present, but it is not more prominent than the correct information.
2	226–275	At this level the medium of texts may be digital or printed and texts may include continuous, noncontinuous, or mixed types. Tasks at this level require respondents to make matches between the text and information and may require paraphrasing or low-level inferences. Some competing pieces of information may be present. Some tasks require the respondent to: <ul style="list-style-type: none"> ▪ cycle through or integrate two or more pieces of information based on criteria ▪ compare and contrast or reason about information requested in the question ▪ navigate within digital texts to access and identify information from various parts of a document.
1	176–225	Most of the tasks at this level require the respondent to read relatively short digital or print continuous, noncontinuous, or mixed texts to locate a single piece of information that is identical to or synonymous with the information given in the question or directive. Some tasks, such as those involving noncontinuous texts, may require the respondent to enter personal information onto a document. Little, if any, competing information is present. Some tasks may require simple cycling through more than one piece of information. Knowledge and skill in recognizing basic vocabulary, determining the meaning of sentences, and reading paragraphs of text is expected.
Below 1	0–175	The tasks at this level require the respondent to read brief texts on familiar topics to locate a single piece of specific information. There is seldom any competing information in the text and the requested information is identical in form to information in the question or directive. The respondent may be required to locate information in short continuous texts. However, in this case, the information can be located as if the text were noncontinuous in format. Only basic vocabulary knowledge is required and the reader is not required to understand the structure of sentences or paragraphs or make use of other text features. Tasks below Level 1 do not make use of any features specific to digital texts.

Numeracy

PIAAC defines numeracy as “the ability to access, use, interpret and communicate mathematical information and ideas, in order to engage in and manage the mathematical demands of a range of situations in adult life” (OECD, 2012, p. 33).

The population of adults aged 16 to 65 was assessed over a continuum of ability in numeracy using a measurement scale ranging from 0 to 500. As is the case for literacy, the results for numeracy are presented either as an average score or as a distribution across proficiency levels.

Numeracy — Description of proficiency levels		
Level	Score range	Descriptors of the characteristics of numeracy tasks
5	376–500	Tasks at this level require the respondent to understand complex representations and abstract and formal mathematical and statistical ideas, possibly embedded in complex texts. Respondents may have to integrate multiple types of mathematical information where considerable translation or interpretation is required; draw inferences; develop or work with mathematical arguments or models; and justify, evaluate, and critically reflect upon solutions or choices.
4	326–375	Tasks at this level require the respondent to understand a broad range of mathematical information that may be complex, abstract, or embedded in unfamiliar contexts. These tasks involve undertaking multiple steps and choosing relevant problem-solving strategies and processes. Tasks tend to require analysis and more complex reasoning about quantities and data; statistics and chance; spatial relationships; and change, proportions, and formulas. Tasks at this level may also require understanding arguments or communicating well-reasoned explanations for answers or choices.
3	276–325	Tasks at this level require the respondent to understand mathematical information that may be less explicit, embedded in contexts that are not always familiar, and represented in more complex ways. Tasks require several steps and may involve the choice of problem-solving strategies and relevant processes. Tasks tend to require the application of number sense and spatial sense; recognizing and working with mathematical relationships, patterns, and proportions expressed in verbal or numerical form; and interpretation and basic analysis of data and statistics in texts, tables, and graphs.
2	226–275	Tasks at this level require the respondent to identify and act on mathematical information and ideas embedded in a range of common contexts where the mathematical content is fairly explicit or visual with relatively few distractors. Tasks tend to require the application of two or more steps or processes involving calculation with whole numbers and common decimals, per cents, and fractions; simple measurement and spatial representation; estimation; and interpretation of relatively simple data and statistics in texts, tables, and graphs.
1	176–225	Tasks at this level require the respondent to carry out basic mathematical processes in common, concrete contexts where the mathematical content is explicit with little text and minimal distractors. Tasks usually require simple one-step or simple processes involving counting; sorting; performing basic arithmetic operations; understanding simple per cents such as 50 per cent; or locating, identifying, and using elements of simple or common graphical or spatial representations.
Below 1	0–175	Tasks at this level require the respondents to carry out simple processes such as counting, sorting, performing basic arithmetic operations with whole numbers or money, or recognizing common spatial representations in concrete, familiar contexts where the mathematical content is explicit with little or no text or distractors.

PS-TRE

For the PS-TRE domain, respondents are measured for their ability to use “digital technology, communications tools, and networks to acquire and evaluate information, communicate with others, and perform practical tasks” (OECD, 2012, p. 45). The PS-TRE proficiency scale was divided into four levels, as described below.

PS-TRE — Description of Proficiency levels		
Level	Score range	Descriptors of the characteristics of PS-TRE tasks.
3	341-500	At this level, tasks typically require the use of both generic and more specific technology applications. Some navigation across pages and applications is required to solve the problem. The use of tools (e.g., a sort function) is needed to make progress towards the solution. The task may involve multiple steps and operators. The goal of the problem may have to be defined by the respondent, and the criteria to be met may or may not be explicit. There are typically high monitoring demands. Unexpected outcomes and impasses are likely to occur. The task may require evaluating the relevance and reliability of information in order to discard distractors. Integration and inferential reasoning may be needed to a large extent.
2	291-340	At this level, tasks typically require the use of both generic and specific technology applications. For instance, respondents may have to make use of a novel online form. Some navigation across pages and applications is required to solve the problem. The use of tools (e.g., a sort function) can facilitate resolution of the problem. The task may involve multiple steps and operators. The goal of the problem may have to be defined by the respondent, though the criteria to be met are explicit. There are higher monitoring demands. Some unexpected outcomes or impasses may appear. The task may require evaluating the relevance of a set of items to discard distractors. Some integration and inferential reasoning may be needed.
1	241-290	At this level, tasks typically require the use of widely available and familiar technology applications, such as e-mail software or a web browser. There is little or no navigation required to access to the information or commands required to solve the problem. The problem may be solved regardless of respondents' awareness and use of specific tools and functions (e.g., a sort function). The tasks involve few steps and a minimal number of operators. At the cognitive level, the respondent can readily infer the goal from the task statement; problem resolution requires the respondent to apply explicit criteria; and there are few monitoring demands (e.g. the respondent do not have to check whether he or she has used the appropriate procedure or made progress towards the solution). Identifying contents and operators can be done through simple match. Only simple forms of reasoning, such as assigning items to categories, are required; there is no need to contrast or integrate information.
Below 1	0-240	Tasks are based on well-defined problems involving the use of only one function within a generic interface to meet one explicit criterion without any categorical, inferential reasoning or transforming of information. Few steps are required and no sub-goal has to be generated.
PS-TRE non-respondents		This category includes those individuals who did not report previous computer experience, did not pass the ICT core test, or opted not to be assessed by a computer-based test.

Definitions of terms used in this report

Population groups

An **immigrant** is a person who is, or has ever been, a landed immigrant/permanent resident. **Recent immigrants** are those who landed in Canada as permanent residents between 2002 and 2012 (i.e., they've been in Canada 10 years or less). **Established immigrants** are those who landed in Canada as permanent residents before 2002 (more than 10 years ago).

Indigenous respondents in PIAAC include First Nations people living off-reserve (48 per cent of Indigenous respondents), Métis (44 per cent), and Inuit (5 per cent). An additional 1 per cent reported multiple Indigenous identities, and 2 per cent reported Indigenous identities not included elsewhere (Statistics Canada, 2013, p. 42). This report does not disaggregate data on Indigenous respondents because of limitations created by sample sizes within these populations.

Employment status

Employed respondents were those who in the week prior to PIAAC did at least one hour of paid work as an employee or self-employed, or were away from a job they plan to return to, or did at least one hour of unpaid work in a business that either they or a relative own (Statistics Canada et al., 2013, p. 61).

Not in the labour force refers to those “out of the labour force” respondents who met none of the employment conditions and did not actively look for work in the four weeks prior to PIAAC, or would not begin work for more than three months. The “out of the labour force” population also consists of respondents who did not take active steps to find a job and were not looking for work or available to begin work within two weeks of the survey (Statistics Canada et al., 2013, p. 61). This may include retired people, students, or those with health conditions that prevent them from working.

Unemployed respondents did not identify themselves in any of the “employed” categories, or indicate they were actively looking for work in the four weeks prior to PIAAC and were able to begin work within two weeks. The unemployed population also included respondents who were waiting to begin a job for which they had been hired (Statistics Canada et al., 2013, p. 61).

Employment types

Precarious employment refers to “nonstandard” work arrangements, such as short-term or fixed-term contract work, casual work, temporary work (including jobs supplied by temporary agencies), certain forms of part-time work, own-account self-employment, telework, home-based work, and seasonal work. It may also be characterized by specific employment attributes, such as uncertainty of ongoing employment, unpredictability of hours, or a lack of employment protections and benefits.

Secure employment refers to “standard” work arrangement, typically full-time, full-year, permanent employment with regular hours—and more often with employer-provided benefits such as paid vacation or extended health care

Highest level of educational attainment

The highest level of education ever completed. Education is defined as formal education provided in the system of schools, colleges, universities and other formal educational institutions. Educational attainment is based on the 1997 International Standard Classification of Education (ISCED) coding developed by UNESCO. Includes every type of education associated with obtaining a certificate or diploma the respondent has ever successfully completed.

- Less than high-school diploma: no formal education or Elementary school, or Jr High/Middle School. In terms of ISCED classification, this category includes no formal qualification or below ISCED 1, ISCED 1, and ISCED 2.
- High-school diploma: Senior High-School, Adult secondary school, or Upgrading programs or courses. In terms of ISCED classification, this category includes ISCED 3C- shorter than 2 years, ISCED 3C-2 years or more, ISCED 3A-B, and ISCED 3 (without distinction A-B-C, 2 years or more).
- Postsecondary education - below bachelor's degree: non-university certificate or diploma from a college, school of nursing, or technical institute; trade/vocational certificates; apprenticeship certificates; CEGEP diploma or certificates; university transfer programs; and university certificate or diploma programs below bachelor's degree. In terms of ISCED classification, this category includes: ISCED 4C, ISCED 4A-B, ISCED 4 (without distinction A-B-C), and ISCED 5B.
- Postsecondary education - bachelor's degree or higher: bachelor's degree and university

certificate above bachelor level. In terms of ISCED classification, this category includes ISCED 5A-bachelor's degree.

- Postsecondary education-first professional degree, master's degree, or Ph.D.: first professional degree (medical, veterinary medicine, dental, optometry, law, and divinity), master's and Ph.D. In terms of ISCED classification, this category includes ISCED 5A- master's degree and ISCED 6.

