TIEDI Analytical Report 11

July 2010

LANGUAGE SKILLS AND IMMIGRANT LABOUR MARKET OUTCOMES

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KEY POINTS:

- Immigrants with language skills from Level 1 to Level 3 (ranging from the lowest skills to the minimum level required to live and work in a complex environment) have slightly lower hourly earnings than their Canadian-born counterparts. Immigrants with language skills at Levels 4 and 5 earn more on average than Canadian-born.
- A substantial jump in earnings occurs for immigrants when moving from Level 2 to Level 3, which seems to suggest that Level 3 is the so-called "tipping point" for the improvement of immigrants' labour market outcomes.
- Lower levels of language proficiency tend to be associated with lower rates of labour market participation and higher rates of unemployment. Regardless of language skill level, recent immigrants have much higher unemployment rates and participation rates than other groups.
- Even those recent immigrants with high levels of language proficiency have unemployment rates 3 times those of Canadian-born or established immigrants.
- Established and recent immigrants are less matched and more likely to hold positions for which they are over-educated than Canadian-born up to Level 3 language skills. At Level 4 and 5, however, immigrants hold positions that match their education at about the same rate as Canadian-born, and established immigrants are slightly more likely to be matched with their education than either Canadian-born or recent immigrants.
- When skilled immigrants with a university degree and with strong language skills are compared with the Canadian-born, they are still found to have higher rates of education/employment mismatch.

INTRODUCTION TO TIEDI

The Toronto Immigrant Employment Data Initiative (TIEDI) seeks to assist organizations whose mandate includes the better integration of immigrants into Toronto's labour force. Such partner organizations include immigrant service agencies and advocacy groups, labour organizations, regulatory bodies, professional associations, training organizations, and credential assessment agencies.

The purpose of the project is to provide organizations with free access to statistical data and analysis on various aspects of immigrant labour market integration. The goal is to help organizations access the quantitative data they need in order to: identify priorities, develop programs and services, compose proposals and reports, and carrying out advocacy and public education endeavours.

TIEDI provides a unique service in which community organizations' data needs are met by a team of academic researchers and student analysts. Our partners define the data that they need - the project is thus driven by their agendas and not by academic research priorities.

TIEDI is based at York University, with a team of academic researchers drawn from York, the University of Toronto, and Ryerson University. Core members of the project team also include representatives of the Ontario Council of Agencies Serving Immigrants (OCASI), the Toronto Region Immigrant Employment Council (TRIEC) and World Education Services. The project is funded by the Social Sciences and Humanities Research Council of Canada under its Knowledge Impact in Society program, and by York University.

The datasets used by the project include a range of large-scale surveys such as the Census, the Longitudinal Survey of Immigrants to Canada, the Ethnic Diversity Survey, the Workplace and Employee Survey, the Survey of Labour and Income Dynamics, the Labour Force Survey and the Permanent Residents Data System.

TIEDI Analytical Reports provide tabulations of data, some brief analysis and contextualization, and some necessary caveats about the limitations of the data and analysis. Since the data presented have not been treated to detailed statistical analysis, any conclusions must be seen as preliminary and as starting points for further, more detailed, research.

For further information, contact the TIEDI Principal Investigator, Dr Philip Kelly (pfkelly@yorku.ca), or the TIEDI Project Coordinator, Maryse Lemoine (mlemoine@yorku.ca).

While the research and analysis are based on data from Statistics Canada, the opinions expressed do not represent the views of Statistics Canada.

RESEARCH QUESTION

How do language skills affect the labour market outcomes of immigrants? Is there an average language skill threshold required for immigrants to find work at an appropriate level?

BACKGROUND

Previous research using the International Adult Literacy and Skills Survey (IALSS) revealed that "literacy and numeracy skills exert a significant influence on a range of individual labour market outcomes" such as participation in the labour force, employment/unemployment, stability and duration of employment and wages. Moreover, "higher average [language] skill levels are associated with better than average labour market outcomes" (Statistics Canada, 2004: 1). There appears to be some consensus that "language skills are a key determinant of earnings among immigrants in Canada" (Chiswick and Miller, 2003: 475).

When looking at language skills for the population across Canada, individuals with low literacy skills tended to be "older, less educated, immigrants or had a mother tongue other than English or French", meaning that immigrants are "highly over-represented in the bottom literacy levels" (Grenier et al, 2008: 37). Lower proficiency levels among immigrants may in part be explained by their mother tongue: "74% of immigrants had a mother tongue other than English or French" (Grenier et al, 2008: 31). Such immigrants, with a mother tongue other than English or French, score in the lowest literacy level twice as often as immigrants whose first language is English or French, and more than three times as often as Canadian-born individuals (Statistics Canada, 2003: 10).

As might be expected, there is a years-since-immigration effect for language fluency. A study of the United States, Australia and Canada found that immigrant fluency rates increase with the length of time since arrival as they acquire fluency and adapt to their new home (Antecol, Cobb-Clark and Trejo, 2001: 10). Other findings from Canada also suggest that language fluency "increases with the level of schooling and decreases with age at immigration" (Chiswick and Miller, 1995: 279). The difference in language proficiency between immigrants and Canadian-born however "remains once age is taken into account" and "there are higher proportions of recent and established immigrants than Canadian-born at [the lowest level of language] proficiency" across age groups (Statistics Canada, 2003: 67).

There are gender differences in the language skills of immigrants. Immigrant women generally have poorer language skills in English or French than men. For instance, 34% of recent female immigrants are at the lowest level of language proficiency, compared to 28% of recent male immigrants. Additionally, "a smaller proportion of recent immigrant females attain the highest levels of literacy" compared to Canadian-born women and recent immigrant males (Statistics Canada, 2003: 68). It is also the case that some immigrants, e.g. female refugees, are less likely than males to speak English upon arrival, and the "male linguistic advantage" continues over time (Beiser and Hou, 2000: 311).

Despite a Canadian 'points system' for immigrant selection in the skilled worker category that effectively rewards immigrants who are proficient in English or French, language proficiency

problems persist (Antecol, Cobb-Clark and Trejo, 2001: 11). Some researchers have suggested that the shift in immigrant source countries "has presumably made the lack of English- or French-language proficiency an increasingly important potential barrier to their social and economic assimilation" (Finnie and Meng, 2002: 258). They go on to argue that this lack of language skills "has led to lower earnings, increased dependence on social services, and a generally slower rate of socio-economic integration for more recent cohorts" (Finnie and Meng, 2002: 258). It is, however, important to note that issues of linguistic ability are often inseparable from other processes of racialization and discrimination in the labour market, so outcomes should not be solely attributed to lack of human capital (in the form of English or French fluency) on the part of immigrants.

Immigrants often identify "language barriers" as their most important "capacity challenge", since limited language proficiency or even "distinctive accents" are considered by some to be "a hindrance to communication with others" (Ngo and Este, 2006: 37). Therefore, "adult education and training is one way to assist [immigrants]" in their settlement in Canada (Rubenson, Desjardins and Yoon, 2007: 30). However, it is important to keep in mind that those who have low levels of literacy skills – namely, those who are older, low-educated, female or immigrants – are also "least likely to participate in adult education and training" (Rubenson, Desjardins and Yoon, 2007: 57).

THE DATA: INTERNATIONAL ADULT LITERACY AND SKILLS SURVEY

The International Adult Literacy and Skills Survey (IALSS) was first conducted in 1994, and again in 2003 (Statistics Canada, 2007). In this report, 2003 data is used and so it must be remembered that the patterns presented here are a snapshot at a particular time. The primary aim of the IALSS is to investigate the possible relationship between literacy and a variety of economic and social outcomes.

The survey evaluates respondents' proficiency in literacy through two measurements: prose literacy and document literacy. Prose literacy is defined as "the knowledge and skills needed to understand and use information from texts including editorials, news stories, brochures and instruction manuals" (Statistics Canada and OECD, 2005: 16). On the other hand, document literacy is "the knowledge and skills required to locate and use information contained in various formats, including job applications, payroll forms, transportation schedules, maps, tables and charts" (Statistics Canada and OECD, 2005: 16). In this report, we use the 'document literacy' score only, as it most closely reflect the language skills required in job applications and workplaces.

While other surveys ask questions about self-assessed language skills (see, for example, TIEDI Analytical Report #6 available at http://www.yorku.ca/tiedi/doc/AnalyticalReport6.pdf which uses the Longitudinal Survey of Immigrants to Canada), an important feature of the IALSS is that such skills are actually tested using standardized techniques. The IALSS used "task booklets" to test prose and document skills, which are then scored by experts at Statistics Canada (Statistics Canada, 2007). The document literacy of respondents is then categorized into one of five levels.

> Level 1: Persons with very poor skills, where the individual may, for example, be unable to determine the correct amount of medicine to give a child from information printed on the package (ABC Canada, 2005).
>
> Level 2: People can only deal with material that is simple, clearly laid out, and in which the tasks

involved are not too complex. It denotes a weak level of skill, but more hidden than Level 1. It identifies people who can read but test poorly. They may have developed coping skills to manage everyday literacy demands but their low level of proficiency makes it difficult for them to face novel demands, such as learning new job skills (ABC Canada, 2005).

Level 3: The minimum skills level suitable for coping with the demands of everyday life and work in a complex, advanced society. It denotes roughly the skill level required for successful secondary school completion and college entry. Like higher levels, it requires the ability to integrate several sources of information and solve more complex problems (ABC Canada, 2005).

Level 4 & 5: People demonstrate a command of higher-order information-processing skills (ABC Canada, 2005). In the results presented here, levels 4 and 5 are combined in order to produce counts large enough for analysis.

The IALSS interviewed and tested a representative sample of adults, aged 16-65, for prose and document literacy. An important feature of the survey is that the IALSS is designed with "special target populations," such as recent and established immigrants, in mind (Statistics Canada, 2007). The survey defines established immigrant as those who arrived in Canada more than ten years prior to the survey, i.e. before 1994. Recent immigrants are defined as those who arrived in Canada in the decade preceding the survey, i.e. from 1994-2003. In total the survey covered 40,000 dwellings, and in addition to literacy tests, information was also gathered on demographic characteristics, education, language, labour force, income, and employment (Statistics Canada, 2007).

Table 1: Distribution of Canadian-born and immigrants, by "document" language skill level, 2003

	Canadian-born		**Established immigrant**		**Recent immigrant**	
	N	%	N	%	N	%
Level 1	3, 091, 517	16.2	1, 529, 722	37.7	380, 950	29.7
Level 2	5, 099, 284	26.7	1, 169, 697	28.9	328, 751	25.7
Level 3	7, 287, 081	38.1	973, 579	24.0	435, 298	34.0
Level 4 & Level 5	3, 638, 839	19.0	379, 642	9.4	135, 541	10.6

Table 1 displays the distribution of Canadian-born and immigrants in terms of their document literacy score level in the IALSS dataset. Just over 57% of Canadian-born individuals have literacy skills at Level 3 or above (i.e. at or above a 'satisfactory' set of language skills). For established immigrants this figure is 33.4%. Perhaps surprisingly, a higher percentage of recent immigrants (44.6%) score in this range. It is also notable that the highest percentage at the lowest level of literacy (Level 1) was among established immigrants (37.7% of all such immigrants).

RESULTS

Using the IALSS data, we can cross-tabulate several measures of labour market outcomes with tested levels of document literacy. Table 2 shows the hourly earnings of Canadian-born and immigrants differentiated by their document literacy scores.

Table 2: Hourly earnings of Canadian-born and immigrants by "document" language skill level, 2003

	Canadian-born	Established immigrant	Recent immigrant
Level 1	$ 15.38	$ 14.32	$ 13.71
Level 2	$ 18.78	$ 18.44	$ 13.23
Level 3	$ 29.98	$ 26.47	$ 26.08
Level 4 & Level 5	$ 22.68	$ 24.27	$ 24.52

Table 2 shows that there is little variation in hourly earnings between the Canadian-born, established immigrants and recent immigrants who score in Levels 1 to 3, although immigrants generally have lower earnings than the Canadian-born. It is notable that there is also a substantial jump in earnings between Level 2 and Level 3 among established immigrants (from $18.44 to $26.47) and recent immigrants ($13.23 to $26.08). This would seem to suggest that Level 3 language proficiency represents the so-called "tipping point" for the improvement of immigrants' labour market outcomes. At higher levels of literacy (Levels 4 and 5), the IALSS data indicate that earnings among immigrants actually exceed those of Canadian-born.

Labour market participation rates refer to the percentage of the working age population (i.e. over 15 years old) that is working or looking for work. Unemployment rates refer to the percentage of those participating in the labour market who are unable to find work. Table 3 shows the participation and unemployment rates of Canadian-born and immigrants by their document literacy score.

Table 3: Participation rate and unemployment rate of Canadian-born and immigrants by "document" language skill level, 2003

	Canadian-born		Established immigrant		Recent immigrant	
	Participation rate	Unemployment rate	Participation rate	Unemployment rate	Participation rate	Unemployment rate
Level 1	36.9 %	21.0 %	46.7 %	11.6 %	68.8 %	21.8 %
Level 2	68.8 %	10.2 %	59.9 %	8.4 %	74.9 %	13.6 %
Level 3	79.9 %	7.6 %	76.8 %	8.4 %	76.5 %	10.9 %
Level 4 & Level 5	85.8 %	5.8 %	83.8 %	5.3 %	86.6 %	16.9 %

Table 3 indicates that lower levels of language proficiency are generally associated with lower rates of labour market participation and higher rates of unemployment.

When looking at participation rates, recent immigrants have similar or higher rates compared to Canadian-born and established immigrants. In fact, at the lowest level of language proficiency, recent

immigrants have higher participation rate (68.8%) than Canadian-born (36.9%) and established immigrants (46.7%). At Levels 3, 4 and 5, Canadian-born, established immigrants and recent immigrants have approximately the same participation rate (76.5-79.9% for Level 3 literacy, and 83.8-86.6% for Levels 4/5).

Turning to unemployment rates, regardless of their language skills, recent immigrants have higher unemployment rates than Canadian-born or established immigrants. Unemployment rates for Canadian-born and established immigrants are not significantly different at Level 3 and above, another indication that Level 3 is the tipping point at which immigrants achieve similar outcomes as Canadian-born. Canadian-born with the poorest language skills (Level 1), however, have almost twice the unemployment rate of established immigrants, similar to the unemployment rate of recent immigrants.

It is also notable that recent immigrants with strong language skills still have unemployment rates that are approximately three times those of Canadian-born or established immigrants. This implies that, for some immigrants, poor labour market outcomes are not necessarily linked to poor language ability.

The IALSS asks respondents what level of education is required to do their job. It is therefore possible to assess mismatches between levels of education or training and the jobs that individuals hold. Table 4 indicates the percentage of Canadian-born and immigrants who are either over-educated relative to the requirements of the job they hold, or who are well matched to their job.

Table 4: Occupational-matching of Canadian-born and immigrants by "document" language skill level, 2003

	Canadian-born		**Established immigrant**		**Recent immigrant**	
	Over-educated	Matched	Over-educated	Matched	Over-educated	Matched
Level 1	27.2 %	72.8 %	33.4 %	66.6 %	64.6 %	35.4 %
Level 2	38.2 %	61.8 %	57.0 %	43.0 %	64.8 %	35.2 %
Level 3	45.9 %	54.1 %	49.6 %	50.4 %	59.2 %	40.8 %
Level 4 & Level 5	45.7 %	54.3 %	41.7 %	58.3 %	45.2 %	54.8 %

Table 4 reveals that more than half of the Canadian-born hold positions matching their educational attainment at all language skill levels, but the pattern is much more variable for both established and recent immigrants (although established immigrants fare consistently better than their more recent counterparts).

The lowest incidence of over-education among Canadian-born is found at document literacy Levels 1 or 2, which likely reflects some correlation between level of literacy and level of formal education (and with lower formal education obviously there is less likelihood of being 'over-educated' relative to a job). While recent immigrants had much higher levels of over-education than Canadian-born or established immigrants at lower literacy levels, at the highest literacy levels recent immigrants are actually slightly more likely to find a match between their education and their employment. This would appear to indicate the significance of language skills in finding work that matches the training of immigrants.

The level of education of the various groups under consideration can be held constant if we focus solely on those with a bachelor's degree. Table 5 provides employment match data for this group (with Levels 1 and 2 combined due to small counts).

Table 5: Occupational-matching of Canadian-born and immigrants with a bachelor degree by "document" language skill level, 2003

	Canadian-born		**Established immigrant**		**Recent immigrant**	
	Over-educated	Matched	Over-educated	Matched	Over-educated	Matched
Level 1 & Level 2	54.2 %	45.8 %	81.4 %	18.6 %	75.5 %	24.5 %
Level 3	46.1 %	53.9 %	55.6 %	44.4 %	69.6 %	30.4 %
Level 4 & Level 5	37.9 %	62.1 %	44.2 %	55.8 %	55.0 %	45.0 %

Table 5 indicates that the highest incidences of over-education are consistently found in the lowest levels of language skill (Levels 1 and 2), which implies that educated immigrants without adequate language skills are unable to apply their skills in the workforce. However, the incidence of over-education for recent immigrants who have degrees and who have strong language skills (55%) is still much higher than for the Canadian born (37.9%), which implies that immigrants still face problems in the labour market despite having adequate job and language skills.

CONCLUSIONS

Clearly only tentative conclusions can be derived from the data compiled in this report. The IALSS data is derived from 2003 and so it is a single snapshot of labour market outcomes and also reflects a particular point in time in terms of macro economic condition (see, for example, TIEDI's Labour Force Update available at http://www.yorku.ca/tiedi/labourforce.html, which indicates a relative deterioration in some indicators of immigrant labour market outcomes in recent years). The analysis presented here also takes language/literacy skills in isolation as a variable affecting labour market outcomes - clearly such outcomes are the result of many factors.

Nevertheless, some conclusions can be drawn from the specific tabulations provided here:

- Immigrants with language skills from Level 1 to Level 3 (ranging from the lowest skills to the minimum level required to live and work in a complex environment) have slightly lower hourly earnings than their Canadian-born counterparts. Immigrants with language skills at Levels 4 and 5 earn more than Canadian-born.
- A substantial jump in earnings occurs for immigrants when moving from Level 2 to Level 3, which seems to suggest that Level 3 is the so-called "tipping point" for the improvement of immigrants' labour market outcomes.
- Lower levels of language proficiency tend to be associated with lower rates of labour market participation and higher rates of unemployment. Regardless of language skill level, recent immigrants have much higher unemployment rates and participation rates than other groups.

- Even those recent immigrants with high levels of language proficiency have unemployment rates 3 times those of Canadian-born or established immigrants.
- Established and recent immigrants are less matched, and more likely to hold positions for which they are over-educated, than Canadian-born up to Level 3 language skills. At Level 4 and 5, however, immigrants hold positions that match their education at about the same rate as Canadian-born, and in fact established immigrants are slightly more likely to be matched with their education than either Canadian-born or recent immigrants.
- When skilled immigrants with a university degree and with strong language skills are compared with Canadian-born, they are still found to have higher rates of over-education relative to their employment.

APPENDIX

RELEVANT QUESTIONS FROM IALSS SURVEY QUESTIONNAIRE:

1. A1: Were you born in Canada?
2. A1D: In what country were you born?
3. A3: During your lifetime, how many years of formal education have you completed beginning with grade one and not counting repeated years at the same level?
4. A3B: Of these years of formal education, how many years did you complete outside of Canada.
5. A4C: What is the highest level of schooling that you have ever completed?
6. A6B: Did you obtain this level of education in Canada?
7. A6C: What is the highest level of education you attained outside of Canada?
8. B5: How would you rate your current reading skills in [English or French]?
9. B6: How would you rate your current writing skills in [English or French]?
10. B7: How would you rate your current ability to speak [English or French]?
11. D1: What is your current work situation?
12. D7: During the last 12 months, did you work mostly full-time, that is 30 hours per week or more or part-time, that is less than 30 hours per week?
13. D26: What kind of business, industry or service was/is this?
14. D27: What kind of work were/are you doing at this job?
15. D28B: What level of education was required to do your main job?
16. D41: What was/is your (interviewer fill text as indicated in D39, e.g. hourly, weekly, etc.) wage or salary before taxes and all other deductions at this job? Including tips and commissions?
17. K6: What is your best estimate of your personal income in < year before interview > from all sources, including those just mentioned, before taxes and deductions?

Questionnaire: http://www.statcan.gc.ca/imdb-bmdi/instrument/4406_Q1_V1-eng.pdf

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FURTHER READING

For an international comparison, see:
http://www.statcan.gc.ca/pub/89-603-x/2005001/pdf/4200878-eng.pdf

For more data on immigrants, see pp. 65-71 in:
http://www.statcan.gc.ca/pub/89-617-x/89-617-x2005001-eng.pdf