# THE IMPACTS OF LITERACY AND NUMERACY ON EARNINGS: DO ADMISSION CATEGORIES MATTER?

AUTHORS	Richard E. Mueller <sup>1</sup> , N.T. Khuong Truong <sup>2</sup>
AFFILIATION	<sup>1</sup> Dept. of Economics, University of Lethbridge; <sup>2</sup> Dept. of Economics, McMaster University
RESEARCH PARTNER	Calgary Catholic Immigration Society
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### WHAT THE RESEARCH IS ABOUT

**Objective:** This research examines differences in literacy and numeracy skills and the economic returns to these skills, for immigrants to Canada in different admission classes and their Canadian-born counterparts.

**Justification:** Canada is a major immigrant-receiving nation with individuals coming from different countries, economic backgrounds, and under various immigrant policies. There are numerous studies focused on the labour market performance of immigrants compared to Canadian-born individuals. However, there is little research studying differences in basic skills (e.g., literacy and numeracy) and the labour market returns among immigrant and Canadian-born subgroups. We extend the current literature by studying the labour market outcomes of immigrants in the host country to gain a deeper understanding of how basic literacy and numeracy skills are valued across population subgroups.

**Practical Goal:** To guide policy related to the types and timing of interventions to better assist refugees and immigrants to perform well in the Canadian education system and, subsequently, in the labour market.

Primary Audience: Policy makers and service providers

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### HOW WAS THE DATA OBTAINED

This study utilizes Statistics Canada's 2012 Survey of Adult Skills, part of the OECD's Programme for the International Assessment of Adult Competencies (PIAAC). Respondents are categorized into nine subpopulations: adult economic immigrants, adult refugees, adult family reunification, other adult immigrants, adult temporary residents, young refugees, young non-refugee immigrants, second- and third-generation Canadians. The sample consisted of 17,891 individuals, aged 25 to 65 years old; 3,944 fall into one of the immigrant categories and the remaining 13,947 are second- or third-generation Canadians. It excluded Indigenous populations, those with missing immigration

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information, and Canadians at birth who are born outside of Canada. Young immigrants were defined as those who arrived in Canada when they were 13 years old or younger. Adult immigrants are those who arrived in Canada older than 13 years.

Thirty-eight percent of male immigrants are economic immigrants and 34% are family reunification class. The family reunification class accounts for 41% of all female immigrants, with economic immigrants accounting for 31%. The proportion of male refugees is almost double that of female refugees.

### FINDINGS

- Both adult and young immigrants (those who arrived in Canada at age 13 or younger) do not perform as well on literacy and numeracy tests as those born in Canada, although young immigrants have higher test scores than adult immigrants.
- After accounting for differences in educational levels, whether individuals obtain their highest degree overseas, differences in regional labour markets, and test scores, adult economic immigrants have similar earnings compared to Canadian-born individuals.
- Adults in the refugee or family reunification categories earn about 14-18% less than Canadian-born counterparts.
- Literacy and numeracy skills are related to wages:
  - A 1-point increase in literacy corresponds to a wage premium of 8% for men and 9% for women. A 1-point increase in numeracy is associated with 10% wage premium for men and women.
  - The effects of literacy and numeracy on wages are the same from immigrants and Canadian-born individuals
- Immigrants tend to be concentrated in Canada's large urban areas, with about 90% of all immigrants in these locations, compared to only about 50% of those born in Canada

#### **CALL TO ACTION**

While numeracy and literacy skills are both important, our results show that numeracy skills are the more important determinant of earnings. Our results also point to the need for tougher language requirements for new immigrants and suggest that assessing numeracy skills of immigrants should also be considered when admitting immigrants to Canada

Improving numeracy and literacy skills would assist all immigrant groups perform better in the Canadian labour market.

#### **ABOUT CYRRC**

The Child and Youth Refugee Research Coalition (CYRRC) is a network of researchers, service providers, and government partners working together to produce and share research that facilitates the integration of young refugees and their families in Canada and beyond.

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The views and opinions expressed in this article are those of the researchers and do not necessarily reflect the official position of the Child and Youth Refugee Research Coalition.





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