Team

04.

Understanding Persistent Adult Skill Gaps in Canada

Why do skill differences still exist among adults in Canada, and what factors contribute to them?

Skill gaps can contribute to labour-market inequality and lower workforce productivity.



Persistent adult skill gaps in Canada remain a major challenge because differences in literacy, numeracy, and adaptive problem-solving skills affect employment opportunities, income, and long-term economic mobility. Factors such as immigration background, language barriers, educational attainment, and job mismatch contribute to persistent skill disparities across demographic groups in Canada.

Methodology

Step 1: Used Canada's PIAAC Cycle 2 dataset on literacy, numeracy, and problem-solving skills.

Step 2: Applied survey and replicate weights to produce representative estimates.

Step 3: Combined plausible values using Rubin's rules.

Step 4: Conducted regression analysis in Python and exported results to Excel.

A collaborative project with:

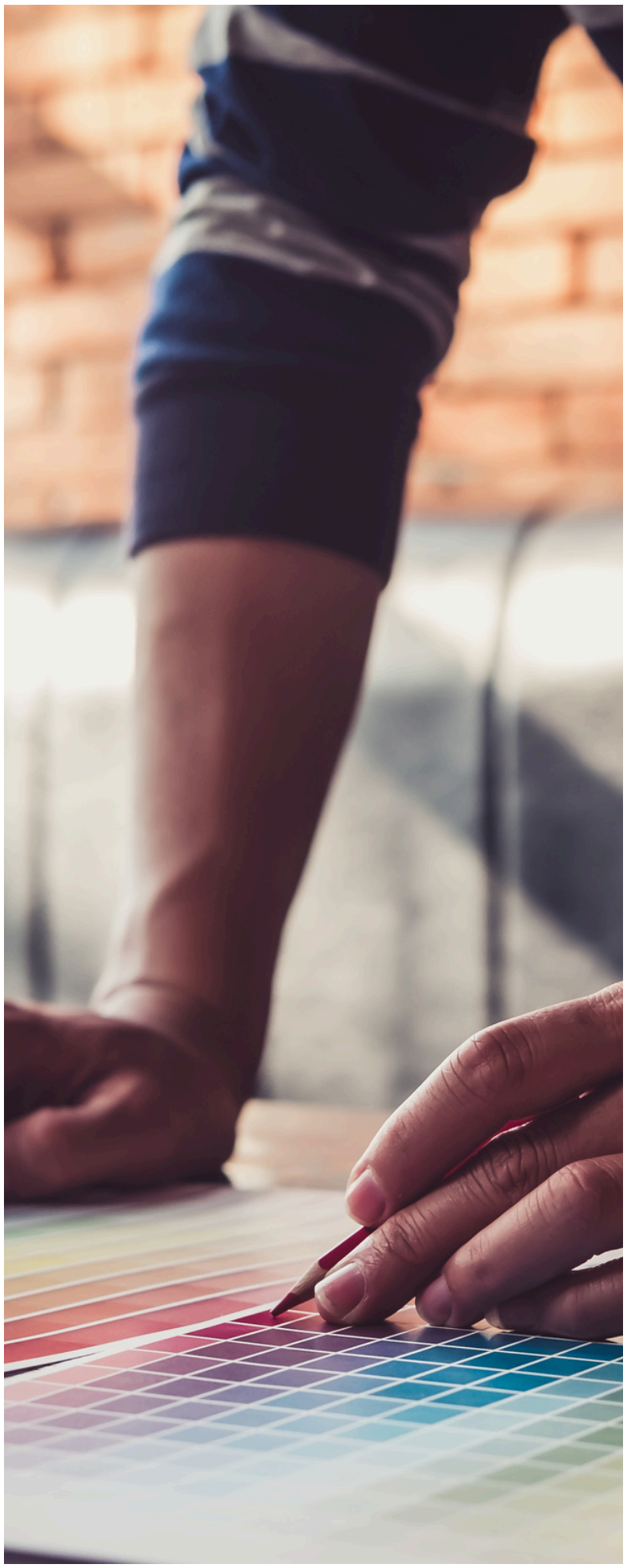
UNIVERSITY OF TORONTO

YORK UNIVERSITÉ UNIVERSITY

Risk and Insurance Studies Centre

Next page

Key Findings



Skills and Earnings

- Higher literacy, numeracy, and problem-solving skills were linked to higher earnings.
- Education level showed a strong positive relationship with skill proficiency.
- Many highly educated individuals were overqualified for their jobs, suggesting a skills mismatch.

Immigration and Skill Disparities

- Immigration and language background significantly affected skill outcomes.
- First-generation immigrants and those arriving at older ages generally scored lower across all domains.
- Second-generation immigrants showed stronger proficiency, highlighting the importance of long-term integration.

Recommendation

We recommended targeted language, settlement, and adult upskilling programs, particularly for later-life immigrants and language minority groups. We also suggested improving credential alignment with labour-market needs.

Next Steps?

This study used a single Canadian PIAAC cycle, limiting time-based and international comparisons. Future research could incorporate multiple cycles and cross-country OECD analyses.

Team 4

HAIVE 11

Risk and Insurance Studies Centre

Team Members



Geng-Wei Lin
Actuarial Science
York University



Oluwakanyinsola Odunaiya
Master of Business Analytics
York University



Raihan Firosh
Economics & Statistics
University of Toronto



Mentor:
Ida Ferrara, PhD
Professor in Economics, York University
Chair of the Board of Directors, RISC Foundation