

Jacob Hazen

Department of Economics, McGill University, Leacock Building, 855 Sherbrooke St W, Montreal, QC
H3A 2T7

<https://jacobhazen1.github.io> | jacob.hazen@mcgill.ca

EDUCATION

McGill University

Ph.D. in Economics

2022 – Present

Advisors: Fabian Lange and Fernando Saltiel

Carleton University

M.A. in Economics & Data Science (Thesis)

2020 – 2022

Advisor: Ba Chu

University of Calgary

B.A. in Economics & Computer Science

2016 – 2020

RESEARCH AND TEACHING INTERESTS

Primary: Labor Economics, Applied Microeconomics

Secondary: Applied Econometrics, Economics of Education

WORKING PAPERS

“Parental Bond, Wage Risk, Skill Formation” (Job Market Paper)

Abstract: Children’s socio-emotional skills depend not only on parental time and money but on the quality of the parent-child relationship these investments help build. I estimate a structural model of household decision-making in which parents allocate time across work, leisure, and time with their child, and a parent-child bond, capturing parenting behaviours, emotional warmth, and consistency, mediates how this time shapes socio-emotional development. Investment is more than four times as productive for the bond as for skill directly, and the bond is more persistent, so shocks to parenting and to the economic environment operate mainly through the relationship rather than through skill formation itself. Maternal and paternal time enter as roughly independent inputs. Progressive tax-and-transfer policies have only small effects on skill formation, as the bond channel absorbs most of the adjustment. These results suggest that policies aimed at children’s development should target the parent-child relationship, rather than parental time alone.

“Human Capital Development of Socio-Emotional Skills in Children”

Best Third-Year Research Paper Award; CRDCN Award & Webinar; SSHRC Doctoral Award

Abstract: This study examines the process of how socio-emotional skills in children evolve and how they predict adult outcomes. Using Canadian data from the National Longitudinal Survey of Children and Youth (NLSCY), this research estimates production functions of socio-emotional skills. Using recent advances in Latent Factor Analysis, I find a five factor model representation of socio-emotional skills, attention, conduct, prosocial, emotional, and malice problems. I find that these skills are shown to be increasingly self-productive as child ages and that parental investment are larger for these skills at earlier ages. Next, using newly linked income data from their tax files in adulthood, I show that children that have higher levels of malice problems suggest a 4% increase in earnings.

“Persistent Inequality in Maternal Mental Health”

With Fernando Saltiel

Abstract: In this paper, we analyze persistent inequality in maternal mental health by examining whether and how mothers’ latent mental health can be compared across different stages of motherhood for different groups. We introduce a measurement model for binary mental health indicators that draws on multiple measures across survey rounds, establishing identification conditions for valid cross-group and longitudinal comparisons. We implement this framework using rich longitudinal data from Peru (Young Lives Study), covering mothers’ mental health over a fifteen-year period and study inequality in mental health across Indigenous and non-Indigenous mothers. We find that mental health measures exhibit strict measurement invariance, enabling direct comparisons across groups and over time. Our results reveal that while both Indigenous and non-Indigenous mothers experience improvements in mental health after the postpartum period, the gains are substantially larger for non-Indigenous mothers, leading to widening disparities as children age. We show that differences in educational attainment and family composition explain most of the initial gap in mental health, but early postpartum mental health becomes increasingly important in driving persistent inequality through children’s adolescence.

REPORTS

“Did the Pandemic and Current Labour Shortages Change the Quality of Jobs?” 2024

With Mahmut Ablay, Luc Bissonnette, and Fabian Lange

Funded under the Government of Canada’s Future Skills program

TEACHING EXPERIENCE

Teaching Assistant McGill University

Applied Data Analysis, Introductory Econometrics, Graduate Economic Data Science, Graduate Macroeconomics, Introductory Microeconomics, Introductory Macroeconomics, Game Theory

RESEARCH EXPERIENCE

Research Assistant McGill University, 2023

For Dr. Fabian Lange

Research Assistant Queen’s & Carleton University, 2022

For Dr. James MacKinnon, Dr. Matt Webb, Dr. Morten Ørregaard Nielsen

Research Assistant (Computer Science) Carleton University, APEX Group, 2022

Research Assistant University of Calgary (PatiML), 2020

For Dr. Alexander Whalley

OTHER EMPLOYMENT

Junior Data Science Analyst Infrastructure Canada, 2021–2022

Data Analyst, Data Science (Internship) Infrastructure Canada, 2021

Data Scientist (Internship) Critical Mass, 2020

PROFESSIONAL ACTIVITIES

Conference & Seminar Presentations

Royal Economic Society Conference (2026); Canadian Economics Association 60th Annual Conference (2026); 20th CIREQ-CIRANO Ph.D. Students' Conference (2026); CRDCN Emerging Scholars Webinar (2025); Canadian Economics Association 59th Annual Conference (2025); "Artificial Intelligence in Economics," Guest Speaker, Expanding Economics & McGill AI Society (2024)

Service

President, McGill Economics Graduate Society (2024–present); Ph.D. Representative, CIREQ (2024–present); Judge, Expanding Economics and ESA Case Competition (2026); Judge, CodeJam Montreal Hackathon (2024)

HONORS, SCHOLARSHIPS, AND FELLOWSHIPS

CRDCN Emerging Scholar Award (\$1,200)	2025
Best Third-Year Research Paper Award, McGill University	2025
SSHRC Doctoral Fellowship (\$80,000)	2025
Graduate Excellence Award in Economics (5-year Ph.D. funding)	2022
Ontario Graduate Scholarship (Declined, \$15,000)	2022
Randall Geehan Memorial Scholarship in Quantitative Economics (\$1,200)	2022
Departmental Merit Scholarship, Carleton University	2020

REFERENCES

Prof. Fabian Lange

Department of Economics, McGill University
Leacock 511, 855 Sherbrooke St W
Montreal, QC H3A 2T7
fabian.lange@mcgill.ca

Prof. Fernando Saltiel

Department of Economics, McGill University
Leacock 512, 855 Sherbrooke St W
Montreal, QC H3A 2T7
fernando.saltiel@mcgill.ca

Prof. Nicolas Gendron-Carrier

Department of Economics, McGill University
Leacock 321C, 855 Sherbrooke St W
Montreal, QC H3A 2T7
nicolas.gendron-carrier@mcgill.ca

QUANTITATIVE & PROGRAMMING SKILLS

Python (8+ years), R (6+ years), Stata, SQL, Bash/Unix/Linux, Git, Matlab, Julia (learning); Machine Learning & NLP (BERT, topic modelling, unsupervised learning, time-series forecasting); Docker, PostGIS/RDBMS, LaTeX