

Min Seo

Pronouns: they/them
mse011231@gmail.com
+1 (782) 234-9792
www.linkedin.com/in/min-seo

EDUCATION

University of Waterloo, ON, Canada

Bachelor of Arts (Honours)

Sep 2020 – Aug 2024

Psychology, Honours
Mathematics, Joint Honours

RESEARCH INTERESTS

- Designing Accessible K-12 Mathematics Curriculum
- Reasoning & Decision-Making Processes in Mathematical Learning
- Examining the Roles of Self-esteem and Self-efficacy of Students in Learning Mathematics
- Teacher Education: Transferrable Impressions of Mathematics
- Supporting Students with Various Learning Needs in Mathematics Education

RESEARCH EXPERIENCES

Social Development Lab, UWaterloo – *Directed Studies Student*

Dec 2023 – Current

Work with Serena McDiarmid, Ph.D. student, and Dr. Heather Henderson, Principal Investigator, at the Social Development Lab (SDL).

Reasoning and Decision Making Lab, UWaterloo – *Research Assistant*

Jun 2022 – Current

Work with Kaiden M Stewart, Ph.D. candidate, and Dr. Jonathan Fugelsang, Principal Investigator, at the Reasoning and Decision Making Lab (RDML).

Faculty of Education, Wilfrid Laurier University – *Research Assistant*

Jun 2022 – Current

Work with Dr. Jennifer Holm in the field of mathematics education.

PROJECTS

Validation of Waterloo Region Belonging Survey – Middle Childhood version, SDL, UWaterloo

Dec 2023 – Current

WRBS-Middle is designed to measure children's (ages 8 to 13) sense of belonging in non-school contexts. This study aims to evaluate the psychometric properties of the WRBS-Middle by examining the internal consistency, validity, and factor structure of the survey for use with children aged 8 to 13 years old. Once validated, the WRBS-Middle could be implemented by community organizations to empower program facilitators to effectively assess and improve the sense of belonging among their participants for the targeted age group.

Learning & Teaching of Mathematics – Coordinator, Founder**Nov 2023 – Current**

Collaborate with other coordinators to create an online platform for learning & teaching of K-12 mathematics to reduce students' learning barriers and equip teachers better to guide students with additional learning challenges.

Bet on Yourself, RDML, UWaterloo**Jan 2023 – Current**

BOY is an in-person study that investigates how people process information. A series of logical problems were presented for each participant to solve, and they were asked to “bet on themselves” by rating their confidence level on each response.

- Recruited and provided participation credits to participants on SONA (psychology research experiences online platform).
- Oriented research participants to the study setting for data collection.
- Participated in data cleaning & data analysis online session using R.
- Proofread and reviewed the study before running the experiment.

Thinking in Action, RDML, UWaterloo**Jan 2023 – Nov 2023**

TIA is an in-person study investigating how people process information when reasoning and making decisions.

- Recruited and provided participation credits to participants on SONA.
- Oriented research participants to the study setting for data collection.
- Proofread the study information.

Teachers' Use of Mathematics Apps, WLU**Sep 2022 – Mar 2023**

This qualitative study aimed to examine teachers' experiences using math apps, mainly *Dreambox* and *Prodigy*, in their classrooms.

- Conducted a literature search and drafted an informal report of the results.
- Participated in research design meetings.

Cueing Confidently, RDML, UWaterloo**Sep 2022 – Dec 2022**

CC is an in-person study examining how people think and reason.

- Participated in SONA researcher training.
- Recruited and provided participation credits to participants on SONA.
- Oriented research participants to the study setting for data collection.

TEACHING INTERESTS

- Introductory Psychology
- Mathematics Education
- Basic Research Methods
- Mathematical Logic
- Calculus & Introductory Real Analysis
- Introductory Algebra & Linear Algebra

- Elementary Number Theory

AWARDS & HONOURS & GRANTS

Sameer Ahuja Perseverance Award (\$3,000)	2024
WMCTF Mathematics Teaching Fellowship (\$500)	2023
Piquard Family Award (\$1,200)	2022
Kay and Stuart Nicol Scholarship (\$2,500)	2022
University of Waterloo Merit Scholarship (\$1,000)	2021

TECHNICAL SKILLS

-
- Programming Languages: C, Python, Racket, Scheme, R, LaTeX, Turing, Java
 - Languages: English, Korean
 - Data Analysis Tools: PowerBI, SPSS, RStudio

CONFERENCES & SEMINARS & TALKS ATTENDED

-
- Mathematics and Mathematical Thinking for Society, 2024
 - Journal For Research in Mathematics Education (JRME) Talks, 2023-2024
 - #Frayme2023
 - Journal For Research in Mathematics Education (JRME) Talks, 2022-2023
 - Trans Math Day, 2022
 - Canadian Mathematics Education Study Group, 2021
 - Gender Equity in the Mathematical Study (GEMS) of Combinatorics, 2021
 - Mathematical Summer in Paris, 2021

PROFESSIONAL DEVELOPMENT

-
- Certification of Completion in the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS 2: CORE)
 - Certification in Standard First Aid with CPR-C
 - Certification in Trauma-Informed Care (TIC)
 - Certification in Personal Health Information Privacy Training (PHIPA)

PROFESSIONAL MEMBERSHIPS & AFFILIATIONS

-
- Member of the Canadian Mathematics Education Study Group (CMESG)
 - Member of the International Group for the Psychology of Mathematics Education (PME)
 - Student Affiliate of the Canadian Psychological Association (CPA)
 - Student Member of the Canadian Mathematical Society (CMS)
 - Associate Member of the Korean Psychological Association (KPA)
 - Member of the Psychology Equity, Diversity, and Inclusion (EDI) Working Group at the University of Waterloo
 - Member of Spectra, the Association for LGBT Mathematicians

INDUSTRY EXPERIENCES

Math Maestro – Director, Founder Jan 2024 – Current
Designed and delivered math instructions & lessons for groups and individuals.

Safer Use Program, House of Friendship – Harm Reduction Worker Nov 2023 – Current
Encourage safer use practices. Share harm reduction information with participants who regularly use substances. Facilitate a judgement-free environment by practicing trauma-informed care. Provide verbal and medical interventions such as injectable naloxone during incidents of accidental drug poisoning.

Mathematics Tutor Oct 2019 – Current
Provided tutoring for curriculum-based and competition mathematics for students ranging from grade 7 to first-year university in-person and online; developed lesson materials and mock tests to fit each student's learning needs. Offering free/pay-what-you-can tutoring for students with financial and learning challenges.

Centre for Education in Mathematics and Computing – Math Circles Assistant Sep 2022 – Dec 2022
Designed, assisted, and delivered CEMC Math Circles in-person and online for grade 6, 7, and 8 students to enrich their skills and interests in mathematics.

Global Affairs Canada – Technical Advisor, Data Innovation Nov 2021 – Dec 2021
Moved GAC's data action plan forward by actively developing a SharePoint naming convention and a thematic list to bridge data across various departments in the government.

LEADERSHIP & COMMUNITY INVOLVEMENTS

University of Waterloo Orchestra – Violist Jan 2024 – Current
Participate in weekly rehearsals to prepare for an end-of-the-term concert.

CAMH National Youth Action Council – NYAC Member Jun 2021 – Current
Participate in research, service planning and education opportunities at the Centre for Addiction and Mental Health.

Lift Youth Experts Collective – Youth Advisor Sep 2021 – Nov 2023
Participated in monthly virtual meetings to advise services and research project designs; drafted youth-friendly materials to explain the research project and to train youth hubs & research staff on the education/employment support program so youth across Canada have better access to youth-specific services that support mental health, work, and education.

The Glow Centre for Sexual and Gender Diversity – Trans Equity Director Jan 2023 – Aug 2023
Ensured that trans* students' voices were heard, advocated for resolution to issues trans* students faced, and maintained the Trans Resource Library.

Waterloo Ready Mentorship, Math Orientation – Peer Mentor, Leader Jun 2021 – Aug 2021

Facilitated weekly hangouts for 30 first-year math students to help them transition smoothly into their first year at the University of Waterloo.

The Women's Centre, UWaterloo – Volunteer

Sep 2020 – Apr 2021

Received training to provide peer support for marginalized individuals, organized and supported events, and provided feedback on trans* inclusion.

The Glow Centre for Sexual and Gender Diversity, UWaterloo – Volunteer

Sep 2020 – Jan 2021

Received training to provide peer support for 2SLGBTQ+ students.

Youth Committee, Friends of Ruby – Committee Member

Feb 2020 – Jan 2021

Attended staff training and meetings to obtain general information about the organization.

Organized bi-weekly meetings to develop & manage programs for 2SLGBTQ+ youth. Participated in discussions with head directors of the organization around ways to support youth, communicated with youth to hear their needs, and documented outcomes of projects and future suggestions in an annual report.

Montgomery's Inn Culinary Arts Projects – Youth Mentor

Oct 2019 – Feb 2020

Mentored 20 high school students; provided support with safety training & tours around the inn; managed a pollinator garden, and guided students to follow cooking instructions for full-course meals.

Homework Club at Etobicoke CI – Volunteer Tutor

Sep 2017 – Jan 2020

Provided tutoring for all STEM subjects for high school students, including math, biology, chemistry, physics, computer science, and kinesiology.

Youth-Police Dialogues, The 519 – Volunteer

Oct 2019 – Dec 2019

Participated in weekly sessions with a group of 15 2SLGBTQ+ youth and two queer police officers to learn about the laws and the police system. Actively discussed the impacts of the police force on marginalized communities and provided feedback to the chief of police officers as a trans & nonbinary youth.

Mathletes, Etobicoke Collegiate Institute – Club President

Sep 2017 – Jun 2019

Provided lessons twice a week for 20 junior and senior high school students to enrich their interests in mathematics. Designed a curriculum based on the contests held by the Center for Education in Mathematics and Computing (CEMC).

Runnymede Healthcare Centre – Volunteer

Jan 2018 – Jan 2019

Communicated effectively with patients to provide physical & emotional support. Assisted activation therapists to run weekly patient activation programs. Provided support to receptionists with any needs of the healthcare centre. Contributed to restricting visits in cases of epidemics. Delivered Korean-English translation when requested by patients.