UDI ALTER

























Expected 2025

2016

EDUCATION

PhD, Quantitative Methods, Psychology (in progress)

York University, Toronto, Ontario Supervisor: Dr. Robert A. Cribbie

2021 MA, Psychology

Ryerson University, Toronto, Ontario

Supervisor: Dr. Alyssa Counsell

Thesis: Equivalence testing for multiple regression

BSc, Specialized Honours, Psychology

York University, Toronto, Ontario Supervisor: Dr. Gary R. Turner

PUBLICATIONS

Thesis: The effects of cardio-respiratory fitness, physical activity, and sex differences

on brain structure and executive functioning in older adults

Graduated Summa Cum Laude

AWARDS, HONOURS, AND SCHOLARSHIPS

Jim Rankin Award for the Best Student Presentation in Psychology of Data Visualization	\$100	2022
Canadian Psychological Association's Scientific Affairs Committee Student Research Grant	\$1,500	2022
Student Travel Award, Quantitative Methods Section of the Canadian Psychological Association	\$100	2021
Joseph-Armand Bombardier Canada Graduate Scholarship, SSHRC, Doctoral (York University)	\$105,000	2021-2024
Ontario Graduate Scholarship (Ryerson University; declined)	\$15,000	2021-2022
Ryerson Graduate Scholarship (Ryerson University)	\$15,000	2020-2021
Joseph-Armand Bombardier Canada Graduate Scholarship, SSHRC, Master's (Ryerson University)	\$17,500	2019-2020
Joseph-Armand Bombardier Canada Graduate Scholarship, SSHRC, Master's (York University; declined)	\$17,500	2019-2020
Ontario Graduate Scholarship, Master's (York University; declined)	\$15,000	2019-2020
Dean's Honour Roll Membership with Distinction (York University)	NA	2012-2016
Continuing Student Scholarship (York University)	\$1,000	2012, 2014
Dr. Percy and Bernice Singer Award (York University)	\$1,000	2013

Spreng, R. N., Setton, R., Alter, U., Cassidy, B. N., Darboh, B., DuPre, E., Kantarovich, K., Lockrow, A. W., Mwilambwe-Tshilobo, L., Luh, W., Kundu, P., & Turner, G. R. (2022). Neurocognitive aging data release with behavioral, structural and multi-echo functional MRI measures. Scientific Data, 9(1), 119. https://doi.org/10.1038/s41597-022-01231-7

- Farmus, L., Beribisky, N., Martinez Gutierrez, N., Alter, U., Panzarella, E., & Cribbie, R. A. (2022). *Effect Size Reporting and Interpretation in Social Personality Research*. Current Psychology. https://doi.org/10.1007/s12144-021-02621-7
- Beribisky, N., **Alter, U.**, & Cribbie, R. A. (2021). A multi-faceted mess: A review of statistical power analysis in psychology journal articles [in press]. Meta-Psychology.

SUBMITTED MANUSCRIPTS

Alter, U., Dang, C., Kunicki, Z., & Counsell, A. (2021). *Psychometric evaluation of attitudes toward SPSS measure* [Manuscript submitted for publication]. Department of Psychology, Ryerson University.

PREPRINTS

- Alter, U., & Counsell, A. (2021). Equivalence Testing for Multiple Regression. PsyArXiv. https://doi.org/10.17605/osf.io/w96xe
- Farmus, L., Beribisky, N., Martinez Gutierrez, N., **Alter, U.**, Panzarella, E., & Cribbie, R. A. (2020). *Effect Size Reporting and Interpretation in Social Personality Research*. PsyArXiv. https://doi.org/10.31234/osf.io/nvczj
- Beribisky, N., **Alter, U.**, & Cribbie, R. A. (2019). *A multi-faceted mess: A review of statistical power analysis in psychology journal articles*. PsyArXiv. https://doi.org/10.31234/osf.io/3bdfu

PROFESSIONAL WORKSHOPS

- **Alter, U.,** & Martinez Gutierrez, N. (2022, June 17-19). *Introduction to R*. [Workshop accepted]. Canadian Psychological Association 83rd Annual National Convention, Calgary, AB, Canada.
- Adkins, M. C., **Alter, U.**, Beribisky, N., Chalmers, R. P., & Wang, Y. A. (2021, June 23). *Understanding and Incorporating Data Simulation into the Research Pipeline: A Practical Guide for the Novice Simulator* [workshop]. Society for the improvement of psychological science annual conference, virtual/remote. https://osf.io/43zfq/
- Adkins, M. C., **Alter, U.**, Beribisky, N., & Chalmers, R. P. (2021, February 19). *So, you want to be a SimDesign(er)?* [workshop]. ouR coding club workshop series, virtual/remote, https://osf.io/tc6ga/

OPEN-ACCESS TOOLS

Alter, U. (2021). reg.equiv & reg.equiv.fd: Using equivalence testing to evaluate negligible predictors in multiple regression. R functions. https://github.com/udialter/equivalence-testing-multiple-regression

SOFTWARE DEVELOPMENT

Cribbie, R. A., **Alter, U.**, Beribisky, N., Chalmers, R. P., Counsell, A., Farmus, L., Martinez Gutierrez, N., Ng, V. (2022). negligible: R package for negligible effect/equivalence testing. https://cran.r-project.org/web/packages/negligible/index.html

REFEREED PRESENTATIONS

- Martinez Gutierrez, N., **Alter, U.**, Beribisky, N., Farmus, L. & Cribbie, R. A. (2022, June 17-19). *An R Package for Negligible Effect Testing: Graphing a Novel Effect Size Measure*. [Paper within a symposium accepted]. Canadian Psychological Association 83rd Annual National Convention, Calgary, AB, Canada.
- **Alter, U.,** Farmus, L., & Counsell, A. (2021, June 7-25). *A psychometric evaluation of the statistical software experiences scale.* [Poster presentation]. Association for Psychological Science 2021 Virtual Convention.
- Dang, C., **Alter, U.**, Kunicki, Z., & Counsell, A. (2021, June 7-25). Attitudes toward spss scale: a psychometric evaluation to help facilitate student learning. [Poster presentation]. Association for Psychological Science 2021 Virtual Convention.
- **Alter, U.,** & Counsell, A. (2021, June 7-11). Equivalence testing for multiple regression. [Poster presentation]. Canadian Psychological Association 82nd Annual National Convention, virtual conference.

- Counsell, A., Kunicki, Z., & **Alter, U.** (2020, June 25-26). *Hypothesis testing is not enough! Revamping the undergraduate statistics course curricula in psychology.* [Conference session]. A Meeting of Methodologies: Advancing Methods Development, Application, and Teaching in Psychology, the Behavioural, and Social Sciences 1st Annual International Convention, Burnaby, BC, Canada, http://www.sfu.ca/content/dam/sfu/psychology/research/mml/AMOM 2020 program.pdf
- Kunicki, Z., Counsell, A., & **Alter, U.** (2020, June 25-26). *The only constant is change: How do we encourage the use of recommended statistical methods as they become available?* [Conference session]. A Meeting of Methodologies: Advancing Methods Development, Application, and Teaching in Psychology, the Behavioural, and Social Sciences 1st Annual International Convention, Burnaby, BC, Canada, http://www.sfu.ca/content/dam/sfu/psychology/research/mml/AMOM 2020 program.pdf
- **Alter, U.,** & Counsell, A. (2020, May 27-30). *Equivalence testing for multiple regression*. [Poster presentation]. Canadian Psychological Association 81st Annual National Convention, Montréal, QC, Canada. (Conference cancelled due to COVID-19)
- Counsell, A., Campbell, L., **Alter, U.**, & Adkins, M. (2020, June 21-23). *Increasing awareness and adoption of Open Science practices*. [Conference session]. Society for the Improvement of Psychological Science 5th Annual International Meeting, Victoria, BC, Canada, https://www.improvingpsych.org/SIPS2020/ (Conference cancelled due to COVID-19)
- Chiacchia, D. J., **Alter, U.**, & Cribbie, R. A. (2021, July 18-23). *The prevalence and magnitude of misleading visualizations in social and personality psychology*. [Poster presentation]. 32nd International Congress of Psychology, Prague, Czech Republic.
- Beribisky, N., Panzarella, E., Martinez Gutierrez, N., Farmus, L., **Alter, U.**, & Cribbie, R. A. (2020, May 27-30). Comparing effect size reporting and interpretation practices across social-personality journals. [Poster presentation]. Canadian Psychological Association 81st Annual National Convention, Montréal, QC, Canada, https://eventmobi.com/cpa2020/agenda/00000000-0000-0000-0000-4147454e4441/d835677a-efb3-4d3a-bfcb-7a8d024c38c2
- Beribisky, N., **Alter, U.**, & Cribbie, R. A. (2019, May 31-June 2). A review of traditional a-priori power analysis. In R. Cribbie (Chair), Modern Issues in Transitioning from NHST to Estimation-Based Statistics, [Symposium], Canadian Psychological Association 80th Annual National Convention, Halifax, NS, Canada. https://cpa.ca/docs/File/Convention/2019/CPA-2019-Full_Program_Abstracts-DIGITAL_FINAL.pdf
- Beribisky, N., **Alter, U.**, & Cribbie, R. A. (2018, May 24-27). *A review of statistical power analysis in psychology journal articles*. [Poster presentation] Association for Psychological Science Annual Convention, San Francisco, CA, United States.
- Alter, U., van den Brink, C., & Turner, G. R. (2016, May 12). Sex differences in the influence of aspects of physical health on neurocognitive aging. [Poster presentation]. YU-CARE & Canadian Association on Gerontology-Student Connection Symposium: Multidisciplinary Perspectives in Aging Research, Toronto, ON, Canada, https://yucare.info.yorku.ca/files/2016/05/Conference Program May12 2016.pdf?x95179
- Alter, U., & Turner, G. R. (2016, May 6). The effects of cardio-respiratory fitness, physical activity, and sex differences on brain structure and executive functioning in older adults. [Conference session]. The Annual Ontario Psychology Undergraduate Thesis Conference at Wilfrid Laurier University, Waterloo, ON, Canada.

INVITED TALKS

- **Alter, U.** & Counsell, A. (2021, October 18). *Equivalence testing for multiple regression*. [Paper presentation]. Quantitative Methods Area Forum, York University, Toronto, ON, Canada.
- Alter, U., (2021, July 5). Considerations for Applying and Choosing a Canadian Graduate Program in Psychology. [10-min talk]. Borderline Personality Disorder Clinic's Lunch & Learn Series, Centre for Addiction and Mental Health (CAMH), Toronto, ON, Canada.

- Alter, U. & Counsell, A. (2020, October 6). *Identifying the Reasons Behind Poor Research Practices Among Canadian Psychology Researchers and the Effects of Voluntary Training on Adherence to Methodological Recommendations*. [Area talk]. Social Area Meeting of the Psychology Department, Ryerson University, Toronto, ON, Canada.
- Alter, U. & Counsell, A. (2020, March 1). Evaluating Equivalence Testing Methods for Identifying Practically Negligible Predictors in Multiple Regression. [Area talk]. Social Area Meeting of the Psychology Department, Ryerson University, Toronto, ON, Canada.
- Cribbie, R. A., Panzarella, E., Farmus, L., Martinez Gutierrez, N., Beribisky, N., & **Alter, U.** (2020, February 24). *Effect Size Reporting in Social-Personality Research: The Good, the Bad, and the Ugly.* [Paper presentation]. Quantitative Methods Area Forum, York University, Toronto, ON, Canada.
- **Alter, U.,** van den Brink, C., & Turner, G. R. (2016, April). Sex differences in the influence of aspects of physical health on neurocognitive aging. [10-min talk]. The Undergraduate Psychology Thesis Presentation Conference at York University, Toronto, ON, Canada.

MANUSCRIPTS IN PREPARATION

- LaBrish, C., Alter, U., Kleindienst, N., Blacher, A., & McMain, S. (2022). IRT analysis of the borderline symptom list 23 (BSL-23) in both German and Canadian samples. Borderline Personality Disorder Clinic, the Centre for Addiction and Mental Health.
- **Alter, U.,** & Counsell, A. (2022). *Equivalence testing for multiple regression* [Manuscript in preparation]. Department of Psychology, Ryerson University. https://doi.org/10.17605/osf.io/w96xe
- Lohmann, A., Montoya, A., Huizing, A., Penning de Vries, B. B. L., Clouth, F., Fossum, J., Ketelaar, J., Claramunt Gonzalez, J., Luijken, K., Hesen, L., Nab, L., Nijman, R., Tibbe, T., Wang, Y. A., Alter, U. Groenwold, R. H. H. (2022). *Replicability of Simulation Studies for the investigation of statistical methods: The RepliSims Project*. Department of Clinical Epidemiology, Leiden University Medical Centre, Leiden, The Netherlands. https://replisims.org/
- LaBrish, C., Alter, U., & McMain, S. (2022). Psychometric evaluation of the difficulty in emotion regulation (DERS) among patients suffering from borderline personality disorder (BPD). Borderline Personality Disorder Clinic, the Centre for Addiction and Mental Health.

ACADEMIC AND RESEARCH EXPERIENCE

Junior Statistician 2021 - Present

Borderline Personality Disorder Clinic, Centre for Addiction and Mental Health (CAMH), Toronto, ON

- Conducted statistical and data analyses
- Conveyed and reported analyses results and interpretations in preparation of manuscripts

Research Associate 2018 - Present

Robust Statistics Lab, York University, Toronto ON

- Assisted planning novel research investigations
- Participated in data collection, systematic reviews
- Synthesized large bodies of data and collaborated on analyses and interpretations of results
- Created recommendations for best research and statistical practices
- Designed statistical functions and R packages

Practicum Student 2020 - 2021

Borderline Personality Disorder Clinic, Centre for Addiction and Mental Health (CAMH), Toronto, ON

- Conducted literature reviews for ongoing projects
- Performed statistical and data analysis for validating psychometric measures

Research Associate 2019 - 2021

Psychology and Statistics Education Research (PASER) lab, Ryerson University, Toronto, ON

- Conducted literature reviews, data collection and analyses, and worked on multiple projects
- Wrote statistical functions for R suers
- Assisted with planning studies in equivalence testing and sample size calculations

Joint Lab Manager

2016 - 2018

Cognitive Neuroscience & Neurointervention (C.N.N.) Lab and

Cognition & Aging Neuroscience (C.A.N.) Lab, York University, Toronto, ON

- Took part in heading an international, multi-site cognitive and neuroimaging collaboration study (Goal-D)
- Directed data collection of several simultaneously ongoing lab studies
- Led a team of 6 graduate students, 3 undergraduate students, 2 staff positions, and numerous volunteers
- Coordinated staff and participant scheduling
- Recruited and screened incoming lab candidates, and trained volunteers and staff on lab protocols
- Managed lab servers and oversaw all incoming and outgoing communications of the lab
- Oversaw data processing: Behavioural, neuropsychological, MRI, and fMRI database management and analysis

Research Assistant 2017 - 2018

Cognition & Aging Neuroscience (C.A.N.) Lab, York University, Toronto, ON

- Administered and scored various cognitive tests and measures
 - Managed participant pool recruitment, communication, progress tracking, and ongoing tech support for a neurofeedback pilot study

Research Associate 2014 - 2018

Cognitive Neuroscience and Neuro-intervention (C.N.N.) Lab, York University, Toronto, ON

- Administered various neuropsychological tests and measures
- · Scored psychological and cognitive measures, and processed data which enabled ongoing publications
- Conducted data and statistical analysis on large scale datasets of behavioural measures, neuropsychological tests, and MRI/fMRI imaging

TEACHING EXPERIENCE

GRADUATE

Teaching Assistant, Introduction to Systematic Reviews and Meta-Analysis (Quantitative Methods Workshop Series)

Winter 2022

York University, Toronto, Ontario

Teaching Assistant, Introduction to R (Quantitative Methods Workshop Series)

Teaching Assistant, Fundamentals of Regression (Quantitative Methods Workshop Series)

Fall 2021

York University, Toronto, Ontario

York University, Toronto, Ontario

Fall 2021

Tork University, Toronto, Uniario

Teaching Assistant, Statistics and Research Design II

Winter 2021

Ryerson University, Toronto, Ontario

Teaching Assistant, Statistics and Research Design I

Fall 2020

Ryerson University, Toronto, Ontario

UNDERGRADUATE

Tutorial Lead, Statistical Methods I and II

Fall 2021-Winter 2022

York University, Toronto, Ontario

Teaching Assistant, Psychology of Sport

Fall 2019

ACADEMIC SERVICE

EXTERNAL

Cofounder and Coordinator

2020 - Present

ouR Coding Club!

- ouR coding club is a free, low-risk, social, and supportive environment for students and researchers at any level who wish to learn and share R code, a popular syntax-based statistical software
- ouR coding club teaches and emphasizes open science and transparent research practices above all
- Sessions include tackling and sharing technical issues and questions, learning from one another, and different workshops

Student Representative, Quantitative Methods Executive Committee

2020 - Present

Quantitative Methods Section of the Canadian Psychological Association (CPA)

- Disseminated information to student members regarding activities of the section
- Represented student members by bringing important student issues to the attention of the Executive Committee
- Performed duties assigned by the Chairperson or requested by the Executive Committee or the general membership

Social Media and Outreach Committee

2021 - Present

Society for the Improvement of Psychological Science (SIPS)

• Served as a committee member

CPA Student Representative (Graduate Program) at York University

2021 - Present

Canadian Psychological Association (CPA)

Promoted the services and benefits that the CPA offers to students in psychology graduate programs

Methodology and Statistics Advisor

2020 - Present

Free Our Knowledge Platform

- Assisted in preparing the methodological and statistical plan for several studies
- Participated in several pre-registration projects

CPA Student Representative (Graduate Program) at Ryerson University

2020 - 2021

Canadian Psychological Association (CPA)

Promoted the services and benefits that the CPA offers to students in psychology graduate programs

DEPARTMENTAL

Co-Treasurer, Psychology Graduate Student Association (PGSA)

2021 - Present

Department of Psychology, York University, Toronto, ON

- Prepared the budget for the Graduate Student Association
- Maintained accurate banking and accounting records and disbursements of PGSA funds
- Acted as the PGSA cheque-signing authority for funding requests and fundraising efforts

Cohort Representative, Graduate Student Anti-Racism Initiative (GSARI)

2020 - 2021

Department of Psychology, Ryerson University, Toronto, ON

- Communicated cohort needs and concerns to the executive team
- Relayed policy decisions and updates to all cohort members

Surveying Subgroup Member, Equity, Diversity, and Inclusion (EDI) Task Force

2020

Department of Psychology, Ryerson University, Toronto, ON

- Assisted in surveying department faculty
- Conducted qualitative data analyses and visualizations
- Prepared and communicated results for presentation

YU-CARE Committee 2016 - 2017

York University Centre for Aging Research and Education (YU-CARE), York University, Toronto, ON

- Served as a committee member
- Assisted in organizing annual Aging Symposiums at York University

STATISTICAL CONSULTING

Statistical Consultant 2021 - Present Statistical Consulting Service (SCS), York University, Toronto, ON PROFESSIONAL ASSOCIATION MEMBERSHIP Association for Psychological Science (Student Member) Canadian Psychological Association (Quantitative Methods; Student Affiliate) Society for Improving Psychological Sciences (Student Member) Statistical Society of Canada (Student Member) **PROGRAMMING LANGUAGES** R Python HTML (basic skills) CSS (basic skills) ANALYTICAL SOFTWARE **RStudio** Anaconda Jupyter notebook Visual Studio Code SPSS **JASP** Git/GitHub/GitKraken/GitLab G*Power LaTex (basic skills) **GRAPHICAL DESIGN SOFTWARE** Adobe Photoshop Adobe Illustrator

RECENT PROFESSIONAL DEVELOPMENT

Learning and Teaching in Higher Education I

Inkscape

Centre for Excellence in Learning and Teaching, Ryerson University

Remote Learning Certificate

Centre for Excellence in Learning and Teaching, Ryerson University

COMMUNITY ENGAGEMENT

PUMP Mentor 2021 - Present

Psychology Undergraduate Mentorship Program (PUMP) at York University, Toronto, Ontario

provided mentorship to undergraduate students interested in graduate studies in Psychology

Homework Club Tutor and Mentor

2018 - 2020

<u>Family Resource Centre</u>, Vaughan, Ontario

- Assisted with homework, school projects, assessments, and test preparation to students in elementary and high school
- Provided mentorship for numerous students

Art Program Lead 2018 - 2019

Reena, Vaughan, Ontario

• Led a weekly art program for a group of 20 individuals with developmental disabilities

Café Europa Community Program Volunteer

2018 - 2019

Jewish Family & Child Services, Vaughan, Ontario

• Facilitated and assisted in bi-weekly social events for Holocaust survivors

Math and Statistics Tutor 2013 - 2018

Thornhill Community, Vaughan, Ontario

• Assisted with math and statistics homework, assignments, and test preparation for colleagues' and acquaintances' children and their friends in my community

Volunteer, Community Outreach & Engagement Program

2010

JCC, New York, NY

- Facilitated arts and crafts projects, as well as athletic activity for children in the community
- Provided individual support to students who had difficulty with their school assignments
- Participated in classroom activities with 20 children between the ages of 6 and 8

Head Counsellor 2006 - 2009

"ILAN" Israeli Foundation, Kfar-Blum, Israel

- Served as the Head Counsellor for mentally and physically differently-abled children in a summer camp
- Initiated, recruited, trained and led a team of 10 soldiers diagnosed with PTSD who served as personal instructors for 10 children between the ages of 7 and 12
- Ensured that all staff and children had the necessary provisions, equipment, and nutrition to maintain the effective operations of the camp

LANGUAGES

English

Hebrew