UDI ALTER

























Expected 2025

2016

EDUCATION

PhD, Quantitative Methods, Psychology (in progress)

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

Dissertation (working title): Multiplicity control from a Bayesian multilevel modelling perspective

2021 MA, Psychology

Toronto Metropolitan 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

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

| Joseph-Armand Bombardier Canada Graduate Scholarship, SSHRC, Doctoral (York University) | \$105,000 | 2021-2024 |
|--|-----------|------------|
| Academic Excellence Fund (York University) | \$1,675 | 2022 |
| Faculty of Health's Graduate Student Conference Travel Award (York University) | \$1,000 | 2022 |
| Jim Rankin Award for Best Student Presentation in Psychology of Data Visualization (York University) | \$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 |
| Ontario Graduate Scholarship (TMU; declined) | \$15,000 | 2021-2022 |
| Toronto Metropolitan Graduate Scholarship (TMU) | \$15,000 | 2020-2021 |
| Joseph-Armand Bombardier Canada Graduate Scholarship, SSHRC, Master's (TMU) | \$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.,** & Counsell, A. (2022). *Determining Negligible Association in Regression*. [Manuscript submitted for publication]. Department of Psychology, Toronto Metropolitan University. https://doi.org/10.17605/osf.io/w96xe
- Alter, U., Dang, C., Kunicki, Z., & Counsell, A. (2022). A Psychometric Exploration of The Attitudes Toward SPSS Scale (ATSPSS) in Educational Settings. [Manuscript submitted for publication]. Statistics Education Research Journal.
- Lohmann, A., Luijken, K., **Alter**, U., Claramunt Gonzalez, J., Clouth, F., Fossum, J.L., Hesen, L., Huizing, A., Ketelaar, J., Montoya, A.K., Nab, L., Nijman, R.C.C., Penning de Vries, B.B.L., Tibbe, T.D., Wang, Y.A., Groenwold, R.H.H. (2022). *Replicability of Simulation Studies for the Investigation of Statistical Methods: The RepliSims Project*. [Manuscript submitted for publication]. Advances in Methods and Practices in Psychological Science. https://replisims.org/
- Terry, J., Ross, R. M., Nagy, T., Salgado, M., Garrido-Vásquez, P., Sarfo, J. O., ... Alter, U., ... Field, A. P. (2022, October 10). Data from an International Multi-Centre Study of Statistics and Mathematics Anxieties and Related Variables in University Students (the SMARVUS Dataset). [Manuscript submitted for publication]. Journal of Open Psychology Data.

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

PREPRINTS

- Terry, J., Ross, R. M., Nagy, T., Salgado, M., Garrido-Vásquez, P., Sarfo, J. O., ... Alter, U., ... Field, A. P. (2022, October 10). Data from an International Multi-Centre Study of Statistics and Mathematics Anxieties and Related Variables in University Students (the SMARVUS Dataset). PsyArXiv. https://psyarxiv.com/au9vp/
- **Alter, U.,** & Counsell, A. (2021). *Determining Negligible Associations in 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/nvczi
- 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

TEACHING EXPERIENCE

GRADUATE

Course Director, Introduction to R short course (QMWS)

Spring 2022

York University, Toronto, Ontario

Teaching Assistant, Introduction to Systematic Reviews and Meta-Analysis short course (QMWS) Winter 2022 *York University, Toronto, Ontario*

Teaching Assistant, Introduction to R short course (QMWS)

York University, Toronto, Ontario

Fall 2021

Teaching Assistant, Statistics and Research Design II

Toronto Metropolitan University, Toronto, Ontario

Winter 2021

Teaching Assistant, Statistics and Research Design I

Toronto Metropolitan University, Toronto, Ontario

Fall 2020

UNDERGRADUATE

Tutorial Lead, Statistical Methods II

York University, Toronto, Ontario

Winter 2023

Tutorial Lead, Statistical Methods I and II

York University, Toronto, Ontario

Fall 2021-Winter 2022

Teaching Assistant, Fundamentals of Regression short course (QMWS)

York University, Toronto, Ontario

Fall 2021

Teaching Assistant, Psychology of Sports

Toronto Metropolitan University, Toronto, Ontario

Fall 2019

PROFESSIONAL WORKSHOPS

- Alter, U., & Martinez Gutierrez, N. (2022, June 17-19). *Introduction to R*. [Workshop]. 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/43zfg/
- 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/

CONFERENCE PRESENTATIONS AND POSTERS

- Alter, U., Crone, G., Camilleri, C., Counsell, A. (2023, June 22-25). The perceived utility and necessity of statistics training outside of Ph.D. programs [submitted]. in R. A. Cribbie (Chair), Attitudes, Barriers, and Training in Open Science Research Practices [Symposium], Canadian Psychological Association 84th Annual National Convention, Toronto, ON, Canada.
- **Alter, U.,** Friendly, M. (2023, June 22-25). *Raising the bar graph: upgrading to interactive dynamic data visualizations in psychology* [conference presentation submitted]. Canadian Psychological Association 84th Annual National Convention, Toronto, ON, Canada.
- Alter, U., & Martinez Gutierrez, N. (2022, June 17-19). *Introduction to R*. [Workshop]. Canadian Psychological Association 83rd Annual National Convention, Calgary, AB, Canada. https://osf.io/6g4js/
- 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, Toronto Metropolitan 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, Toronto Metropolitan 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.
- 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.
- Crone, G., **Alter, U.**, Camilleri, C., & Counsell, A. (in prep). Resources and barriers related to voluntary statistics training and tools for psychology researchers. Target outlet: Canadian Psychology
- Camilleri, C., Crone, G., **Alter, U.**, & Counsell, A. (in prep). The relationship between statistics attitudes and questionable research practices. Target outlet: TBD

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 in planning novel research investigations
- Participated in data collection and 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

U. Alter | 6 of 9

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, Toronto Metropolitan University, Toronto, ON

- Conducted literature reviews, data collection and analyses, and worked on multiple projects
- Wrote statistical functions for R users
- 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

PEER REVIEWER

Canadian Psychological Association, Quantitative Methods Section (Convention abstract submissions)

2020 - Present

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 - 2022

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

2021 - 2022

Social Media and Outreach Committee

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 - 2021

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 Toronto Metropolitan 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, Toronto Metropolitan 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

Department of Psychology, Toronto Metropolitan 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)

2020

PROGRAMMING LANGUAGES

R

Python

LaTeX

HTML (basic skills)

CSS (basic skills)

ANALYTICAL SOFTWARE

RStudio

Anaconda

Jupyter notebook

Visual Studio Code

SPSS

JASP

Git/GitHub/GitKraken/GitLab

G*Power

GRAPHICAL DESIGN SOFTWARE

Adobe Photoshop

Adobe Illustrator

Inkscape

RECENT PROFESSIONAL DEVELOPMENT

Introduction to Bayesian Analysis

Quantitative Methods Workshop Series (QMWS), York University

Learning and Teaching in Higher Education I

Centre for Excellence in Learning and Teaching, Toronto Metropolitan University

Introduction to Monte Carlo Simulation Experiments

Quantitative Methods Workshop Series (QMWS), York University

COMMUNITY ENGAGEMENT

PUMP Mentor 2021 - Present

<u>Psychology Undergraduate Mentorship Program (PUMP)</u> at York University, Toronto, Ontario

provided mentorship to undergraduate students interested in graduate studies in Psychology

2018 - 2020

Homework Club Tutor and Mentor

Family Resource Centre, 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