



EDUCATION

PhD, Quantitative Methods, Psychology (in progress)

E(2025)

York University, Toronto, Ontario

Supervisor: Dr. Robert A. Cribbie

Dissertation (working title): A Bayesian Solution to a Frequentist Problem: Revisiting the Multiplicity Problem with Bayesian Hierarchical Modelling

MA, Psychology

2021

Toronto Metropolitan University, Toronto, Ontario

Supervisor: Dr. Alyssa Counsell

Thesis: Equivalence testing for multiple regression

BSc, Specialized Honours, Psychology

2016

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

Ontario Graduate Scholarship	\$15,000	2024-2025
Joseph-Armand Bombardier Canada Graduate Scholarship, SSHRC, Doctoral	\$105,000	2021-2024
Academic Excellence Fund (York University)	\$150	2023
Faculty of Health's Graduate Student Conference Travel Award (York University)	\$500	2023
Michael Friendly Award for Quantitative Methodology Research (York University)	\$200	2022
Mirka Ondrack Award for Outstanding Contributions to the Statistical Consulting Service	NA	2022
Academic Excellence Fund (York University)	\$1,000	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

PEER-REVIEWED PUBLICATIONS ($n = 11$)

underlined names indicate a co-supervised student coauthor when the research was conducted

Camilleri, C., **Alter, U.**, Cribbie, R. A. (in press). Identifying Influential Observations in Multiple Regression. *The Quantitative Methods in Psychology*.

Alter, U., Dang, C., Kunicki, Z., & Counsell, A. (in press). The VSSL Scale: A Brief Instructor Tool for Assessing Students' Perceived Value of Software to Learning Statistics. *Teaching Statistics*.

Beribisky, N., **Alter, U.**, & Cribbie, R. A. (in press). A multi-faceted mess: A review of statistical power analysis in psychology journal articles. *Meta-Psychology*. Advanced online publication. <https://doi.org/10.31234/osf.io/3bdfu>

D'Amico, D., **Alter, U.**, Laurin, D., Ferland, G., & Fiocco, A. J. (2024). Examining a healthy lifestyle as a moderator of the relationship between psychological distress and cognitive decline among older adults in the NuAge study. *Gerontology*. 1-11. Online ahead of print. <https://doi.org/10.1159/000535978>

Lohmann, A., Luijken, K., **Alter, U.**, Claramunt Gonzalez, J., Clouth, F., Fossum, J.L., Heslen, 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. (2024). Replicability of Simulation Studies for the Investigation of Statistical Methods: The RepliSims Project. *Royal Society Open Science*. 11: 231003. <http://doi.org/10.1098/rsos.231003>

Alter, U., & Counsell, A. (2023). Determining Negligible Association in Regression. *The Quantitative Methods in Psychology*. 19(1): 59-83. <https://doi.org/10.20982/tqmp.19.1.p059>

D'Amico, D., **Alter, U.**, & Fiocco, A. J. (2023). Cumulative stress exposure and cognitive function among older adults: The moderating role of a healthy lifestyle. *The Journals of Gerontology, Series B: Psychological Sciences*, 78(12), 1983-1991. <https://doi.org/10.1093/geronb/gbad116>

Di Bartolomeo, A., **Alter, U.**, Olson, D. A., Cooper, M. B., Boritz, T., & Westra, H. A. (2023). *Predicting Resistance Management Skill from Psychotherapy Experience, Intellectual Humility and Emotion Regulation*. [in press]. *Psychotherapy Research*. <https://doi.org/10.1080/10503307.2023.2280240>

Terry, J., Ross, R. M., Nagy, T., Salgado, M., Garrido-Vásquez, P., Sarfo, J. O., ... **Alter, U.**, ... Field, A. P. (2023). Data from an International Multi-Centre Study of Statistics and Mathematics Anxieties and Related Variables in University Students (the SMARVUS Dataset). *Journal of Open Psychology Data* 11: 8, 1–25. <https://doi.org/10.5334/jopd.80>

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>

SUBMITTED MANUSCRIPTS ($n = 2$)

Alter, U., Too, M. A., & Cribbie, R. A. (2023). *Navigating the Bayes Maze: The Psychologist's Guide to Bayesian Statistics, a Hands-On Tutorial with R Code* [Revise and resubmit]. Special Issue of the International Journal of Psychology: Tutorials on Quantitative Methods for Applied Psychological Researchers.

Too, M. A., **Alter, U.**, & Flora, D. B. (2023). *Modelling Count Data in Psychological Research: An Applied Tutorial*. [Manuscript submitted for publication]. Special Issue of the International Journal of Psychology: Tutorials on Quantitative Methods for Applied Psychological Researchers.

SOFTWARE DEVELOPMENT ($n = 1$)

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>

TEACHING EXPERIENCE

GRADUATE

- Teaching Assistant, Multilevel Modeling** **Spring 2023**
York University, Toronto, Ontario
- 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)** **Fall 2021**
York University, Toronto, Ontario
- Teaching Assistant, Statistics and Research Design II** **Winter 2021**
Toronto Metropolitan University, Toronto, Ontario
- Teaching Assistant, Statistics and Research Design I** **Fall 2020**
Toronto Metropolitan University, Toronto, Ontario

UNDERGRADUATE

- Teaching Assistant, Statistical Methods I and II** **Fall 2023-Winter 2024**
York University, Toronto, Ontario
- Tutorial Lead, Statistical Methods II** **Winter 2023**
York University, Toronto, Ontario
- Tutorial Lead, Statistical Methods I and II** **Fall 2021-Winter 2022**
York University, Toronto, Ontario
- Teaching Assistant, Fundamentals of Regression short course (QMWS)** **Fall 2021**
York University, Toronto, Ontario
- Teaching Assistant, Psychology of Sports** **Fall 2019**
Toronto Metropolitan University, Toronto, Ontario

PROFESSIONAL WORKSHOPS ($n = 3$)

- 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/>
- 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/>

CONFERENCE PRESENTATIONS AND POSTERS (*n* = 34)

- Elmadbak, R., Boritz, T., **Alter, U.**, Eubanks, C., Euler, S., Babl, A., & McMain, S. (2024, June 26-29). *Investigating the Relationship Between Defenses and the Therapeutic Alliance in Dialectical Behaviour Therapy for Borderline Personality Disorder*. [Poster Presentation]. Society for Psychotherapy Research 55th International Annual Meeting, Ottawa, ON, Canada.
- Cooper, M.B., Di Bartolomeo, A. A., Westra, H.A., **Alter, U.**, Olson, D. A., & Boritz, T. (2024, June 26-29). *Examining effects of therapist experience, training, and clinical activities on Facilitative Interpersonal Skills (FIS) performance*. [Paper presentation accepted]. Society for Psychotherapy Research (SPR) 55th Annual International Conference, Ottawa, Canada.
- Truong, M., S., Crone, G., **Alter, U.**, & Choi, J. (2024, June 21-23). *Planting Decision Trees: Human-Friendly Interpretation of Monte Carlo Simulations, Multiverse Analyses and Multivariate Posterior Distributions*. [Poster presentation accepted]. The Modern Modeling Methods 10th Annual Convention, Storrs, CT, United States.
- Alter, U.** & Chalmers, R. P. (2024, June 21-23). *IWEAP for Theta: A Robust Method for Latent Trait Estimation in Item Response Theory*. [Paper presentation accepted]. Canadian Psychological Association 85th Annual National Convention, Ottawa, ON, Canada.
- Celio, V. M., **Alter, U.**, Martin, J. (2024, June 21-23). *Comparing Approaches to Teaching Introductory Statistics in Psychology*. [Poster presentation accepted]. Canadian Psychological Association 85th Annual National Convention, Ottawa, ON, Canada.
- Truong, M., S., Crone, G., **Alter, U.**, & Choi, J. (2024, June 21-23). *Planting Decision Trees: Human-Friendly Interpretation of Monte Carlo Simulations, Multiverse Analyses and Multivariate Posterior Distributions*. [Poster presentation accepted]. Canadian Psychological Association 85th Annual National Convention, Ottawa, ON, Canada.
- Cooper, M., Di Bartolomeo, A. A., Westra, H. **Alter, U.**, Olson, D. A., Bortiz, T. (2024, June 21-23). *Investigating the Relationship between Psychotherapists' Difficulties in Emotion Regulation and Facilitative Interpersonal Skills (FIS)*. [Snapshot presentation accepted]. Canadian Psychological Association 85th Annual National Convention, Ottawa, ON, Canada.
- Celio, V. M., **Alter, U.**, Martin, J. (2024, May 10). *Comparing Approaches to Teaching Introductory Statistics in Psychology*. [Poster presentation accepted]. Conference for Undergraduate Health Research (CUHR) 2024, Toronto, ON, Canada.
- Smith, O. E., Boritz, T. Z., **Alter, U.**, Eubanks, C. F., & McMain, S. F. (2024, April 11-12). *The Effects of Therapist Mindfulness on the Therapeutic Alliance and Patient Outcome in Dialectical Behaviour Therapy For Borderline Personality Disorder*. [Poster presentation]. The Society for the Exploration of Psychotherapy Integration 40th Annual Meeting, the Summit on the Future of Psychotherapy Integration, Virtual.
- D'Amico, D., **Alter, U.**, & Fiocco, A. (2023, October 26-28). *Psychological stress, healthy lifestyle behaviours, and cognitive health among older adults: Findings from two longitudinal cohort studies*. [Presentation accepted]. Canadian Association on Gerontology 53rd Annual Scientific and Educational Meeting, Toronto, ON, Canada.
- Luijken, K., Lohmann, A., **Alter, U.**, Claramunt Gonzalez, J., Clouth, F., Fossum, J.L., Heslen, 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. (2023, August 27-31). *Replicability of Simulation Studies for the Investigation of Statistical Methods: The RepliSims Project*. [Poster presentation]. 44th Annual Conference of the International Society for Clinical Biostatistics, Milan, Italy.
- Martinez Gutierrez, N., DeSouza, J., Beribisky, N., **Alter, U.**, Farmus, L. & Cribbie, R. A. (2023, June 27-29). *Evaluating the Multiplicity Control Practices of Psychology Researchers*. [Poster presentation]. The Modern Modeling Methods 9th Annual Convention, Storrs, CT, United States.

- Alter, U.** & Chalmers, R. P. (2023, June 27-29). *Item-Weighted Expected a Posteriori Method for Improved Latent Trait Estimation in Item Response Theory*. [Poster presentation]. The Modern Modeling Methods 9th Annual Convention, Storrs, CT, United States.
- 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*. in A. Counsell (Chair), Attitudes, Barriers, and Training in Open Science Research Practices [Symposium], Canadian Psychological Association 84th Annual National Convention, Toronto, ON, Canada.
- Camilleri, C., Crone, G., **Alter, U.**, Counsell, A. (2023, June 22-25). *Statistics Attitudes, Research Practices, and Barriers to Engaging in Open Science*. in A. Counsell (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]. Canadian Psychological Association 84th Annual National Convention, Toronto, ON, Canada.
- Camilleri, C., **Alter, U.**, Cribbie, R. A. (2023, June 22-25). *Identifying Influential Observations in Multiple Regression*. [Poster presentation], Canadian Psychological Association 84th Annual National Convention, Toronto, ON, Canada.
- Beribisky, N., **Alter, U.**, & Cribbie, R. A. (2023, May 3). *The Earth is Not Round, $p > .05$: Equivalence Testing in Statistics Education*. Researchers of Statistics Education Network Virtual Conference. <https://www.rose-network.org/events/rose-2023>
- Alter, U.**, & Martinez Gutierrez, N. (2022, June 17-19). *Introduction to R*. [Conference 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.
- Farmus, L., **Alter, U.**, Beribisky, N., Martinez Gutierrez, N., Panzarella, E., & Cribbie, R. A. (2020, May 27-30). Adherence to effect size reporting practices in current psychological research. in A. Richard (Chair), Effect sizes and confidence intervals: Current practices and recommendations for improvement [Symposium], Canadian Psychological Association 81st Annual National Convention, Montréal, QC, Canada, <https://eventmobi.com/cpa2020/agenda/00000000-0000-0000-0000-4147454e4441/33339274-884b-4d6c-ae8c-3f94575a4c45>
- 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 ($n = 10$)

- Alter, U.** & Chalmers, R. P. (2024, April 1). *Unveiling IWEAP: A Robust Ability Estimation Approach in Item Response Theory*. [Paper presentation]. Quantitative Methods Area Forum, York University, Toronto, ON, Canada. [Recording link](#).
- Alter, U.** (2023, November 17). *Bayesian Solutions to Measurement Error and Missing Data*. York University Statistical Consulting Service (SCS) Forum.
- Beribisky, N., **Alter, U.**, & Cribbie, R. A. (2023, May 3). *The Earth is Not Round, $p > .05$: Equivalence Testing in Statistics Education*. Researchers of Statistics Education Network Virtual Conference. <https://www.rose-network.org/events/rose-2023>.
- Cribbie, R. A., Camilleri, C., & **Alter, U.** (2023, March 27). *Identifying Influential Observations in Multiple Regression*. [Paper presentation]. Quantitative Methods Area Forum, York University, Toronto, ON, Canada.
- Alter, U.** & Friendly, M. (2023, January 23). *Raising the bar graph: incorporating interactive dynamic data visualizations in psychology*. [Paper presentation]. Quantitative Methods Area Forum, York University, Toronto, ON, Canada.
- 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 ($n = 8$)

- Celio, V. M., **Alter, U.**, Martin, J. (in prep.). Comparing Approaches to Teaching Introductory Statistics in Psychology. Target outlet: TBD.
- Smith, O., Boritz, T., **Alter, U.**, Eubanks, C. F., & McMain, S. (in prep.). The Effects of Therapist Mindfulness on the Therapeutic Alliance and Patient Outcome in Dialectical Behaviour Therapy for Borderline Personality Disorder. Target outlet: TBD.
- Too, M., **Alter, U.**, Cheng, J. T. (in prep.). The Relationship between Humility and Prestige at Zero Acquaintance RAPM. Target outlet: TBD.
- Alter, U.** & Chalmers, R. P. (in prep.). Item-Weighted Expected a Posteriori Method for Improved Latent Trait Estimation in Item Response Theory. Target outlet: TBD
- Alter, U.**, Crone, G., Camilleri, C., & Counsell, A. (in prep.). How Do Early Career Researchers and Senior Researchers Differ on Open Science Attitudes and Practices in Canada and the U.S.? Target outlet: TBD
- LaBrish, C., **Alter, U.**, Kleindienst, N., Blacher, A., & McMain, S. (in prep.). IRT analysis of the borderline symptom list 23 (BSL-23) in both German and Canadian samples. Target outlet: TBD
- LaBrish, C., **Alter, U.**, & McMain, S. (in prep.). Psychometric evaluation of the difficulty in emotion regulation (DERS) among patients suffering from borderline personality disorder (BPD). Target outlet: TBD
- Crone, G., **Alter, U.**, & Counsell, A. (in prep.). How do North American researchers engage with statistical content? Perceptions of utility and necessity of various statistics resources. Target outlet: Canadian Psychology

ACADEMIC AND RESEARCH EXPERIENCE

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

Research Assistant

2019 - Present

[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

Junior Statistician**2021 - 2023**[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

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

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

AD HOC REVIEWER

- Journal of Statistics and Data Science Education
- Canadian Psychological Association, Quantitative Methods Section (Convention abstract submissions)

ACADEMIC SERVICE**EXTERNAL****Equity, Diversity, and Inclusion (EDI) Committee Member****2023 - Present**[Researchers of Statistics Education Network \(RoSE\)](#)

- Responsible for actioning RoSE EDI strategy and initiatives, working closely with the EDI Co-Director
- Working with other RoSE committee members to ensure all aspects of RoSE are equitable, diverse, and inclusive at the practical level and implementing change (e.g., making sure there are no barriers to attending events, ensuring marketing materials are accessible, advising research teams on language of demographic questions etc.)
- Scope to focus on a particular demographic (e.g., be the EDI rep for LGBTQIA2S+, race/ethnicity, etc.)
- Other ad-hoc tasks relating to EDI for the RoSE Network

Conference Permanent Committee Member**2023 - Present**[Researchers of Statistics Education Network \(RoSE\)](#)

- Assisted Committee Chairs with the organization, running, and hosting of RoSE conferences on an ongoing basis

Cofounder and Coordinator **2020 - 2023**

[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

Social Media and Outreach Committee **2021 - 2022**

[Society for the Improvement of Psychological Science \(SIPS\)](#)

- Served as a committee member

CPA Student Representative (Graduate Program) at York University **2021 - 2023**

[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

Graduate Student Representative, Cyclical Program Review (CPR) **2024**

Department of Psychology, York University, Toronto, ON

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

Graduate Student Representative, Tenure and Promotion Adjudication Committee **2023**

Department of Psychology, York University, Toronto, ON

Undergraduate Thesis Poster Competition Judge, Specialized Honours Program **2023**

Department of Psychology, York University, Toronto, ON

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**2020***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 Symposia 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

MARKUP LANGUAGES

LaTeX

HTML (basic skills)

CSS (basic skills)

ANALYTICAL SOFTWARE, PACKAGE MANAGEMENT, RENDERING, OR SOURCE-CODE EDITORS

RStudio/Posit/Quarto

Anaconda

Jupyter notebook

Visual Studio Code

SPSS

JASP

Jamovi

Git/GitHub/GitKraken/GitLab

G*Power

GRAPHICAL DESIGN SOFTWARE

Adobe Photoshop

Adobe Illustrator

Inkscape

RECENT PROFESSIONAL DEVELOPMENT

Introduction to Overleaf

Quantitative Methods Workshop Series (QMWS), York University

Artificial Intelligence in Education

Teaching Commons, York University

Data Analytics and Machine Learning Using R

Quantitative Methods Workshop Series (QMWS), York University

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 - 2024

[*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

[*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

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