

## Alyssa Counsell

Department of Psychology, JOR 926  
Ryerson University, 350 Victoria Street  
Toronto, ON, M5B 2K3, Canada  
Telephone: 416-979-5000 x 6499  
Email: [a.counsell@ryerson.ca](mailto:a.counsell@ryerson.ca)  
Website: [www.alyssacounsell.com](http://www.alyssacounsell.com)

---

### CURRENT POSITION

**2018- present** Assistant Professor (tenure-track), Quantitative Psychology  
Department of Psychology, Ryerson University

### EDUCATION

**PhD** **Psychology, York University, 2017**  
Area: Quantitative Methods  
Supervisor: Dr. Robert Cribbie  
Dissertation: *Evaluating Equivalence Testing Methods for Measurement Invariance*

**MA** **Psychology, York University, 2013**  
Area: Quantitative Methods  
Supervisor: Dr. Robert Cribbie  
Thesis: *Equivalence Testing Methods for Comparing Independent Regression and Correlation Coefficients*

**BA (Hon)** **Psychology, University of Regina, 2010**  
Supervisor: Dr. Heather Hadjistavropoulos  
Thesis: *Assessing for Trauma Symptoms in Individuals with Multiple Sclerosis*

**Other** **French as a Second Language Certificate, University of Regina, 2011**

### RESEARCH SUMMARY

Articles Published in Refereed Journals:	<b>13</b>
Submitted Manuscripts	<b>2</b>
Manuscripts being Prepared:	<b>2</b>
Non-refereed Presentations:	<b>7</b>
Presentations in Refereed Conferences:	<b>15</b>
Posters in Refereed Conferences:	<b>8</b>

## RESEARCH FUNDING

### External

#### Insight Development Grant

2019-2021

Social Sciences and Humanities Research Council (SSHRC)

Role: Principal Investigator

Title: Do Attitudes toward Statistics and Statistical Software Relate to Better Research Practices?

Amount: \$53,177

#### Foundation Grant

2019-2026

Canadian Institute for Health Research (CIHR)

Role: Co-investigator

Title: A Program of Study on Posttraumatic Stress Disorder Treatment: Development, Testing, and Knowledge Transfer

Amount: \$1.7 million

### Internal

#### Learning and Teaching Grant

2019-2020

Ryerson University, Learning and Teaching Office

Title: Building Competence with Statistical Software in Social Science Students

Role: Principal Investigator

Amount: \$5000

#### Special Events Grant

2019-2020

Ryerson University, Faculty of Arts

Role: New Faculty Writing Group Organizer

Amount: \$500

## PUBLICATIONS

\* indicates coauthor was a student when the research was conducted

**Counsell, A.**, Cribbie, R. A., & Flora, D. (2019). Evaluating equivalence testing methods for measurement invariance. *Multivariate Behavioral Research*. Advance online publication.

**Counsell, A.**, Cribbie, R. A., & \*Chalmers, R. P. (in press). Comparing means under heteroscedasticity and nonnormality: Further exploring robust means modeling. *Journal of Modern Applied Statistical Methods*.

Vanwalleghe, S., Miljkovitch, R., **Counsell, A.**, Atkinson, L., & Vinter, A. (2019). Validation of the Intention Attribution Test for Children (IAC). *Assessment*. Advance online publication.

- \*Hoyda, J. J., **Counsell, A.**, & Cribbie, R. A. (2019). Traditional and Bayesian approaches for testing mean equivalence and a lack of association. *The Quantitative Methods for Psychology*, 15, 12–24. doi:10.20982/tqmp.15.1.p012
- Taube-Schiff, M., El Morr, C., **Counsell, A.**, Mehak, A., & Gollan, J. K. (2018). The Checklist of Unit Behaviors (CUB): Validation within a Canadian outpatient day hospital program. *Journal of Psychiatric and Mental Health Nursing*, 25, 217–227. Doi: 10.1111/jpm.12451
- Counsell, A.**, \*Furtado, M., Iorio, C., \*Anand, L., \*Canzonieri, A., \*Fine, A., ... & Katzman, M. A. (2017). Intolerance of uncertainty, social anxiety, and generalized anxiety: Differences by diagnosis and symptoms. *Psychiatry Research*, 252, 63–69. Doi: 10.1016/j.psychres.2017.02.046
- Counsell, A.**, & Cribbie, R. A. (2017). Using the errors-in-variables method in two-group pretest-posttest designs. *Methodology*, 13, 1–8. Doi: 10.1027/1614-2241/a000122
- Counsell, A.**, & Harlow, L. L. (2017). Reporting practices and use of quantitative methods in Canadian journal articles in psychology. *Canadian Psychology*, 58, 140–147. Doi: 10.1037/cap0000074
- Counsell, A.**, Cribbie, R. A., & Harlow, L. L. (2016). Increasing literacy in quantitative methods: The key to the future of Canadian psychology. *Canadian Psychology*, 57, 193–201. Doi: 10.1037/cap0000056
- Cribbie, R. A., \*Ragoonanan, C., & **Counsell, A.** (2016). Testing for negligible interaction: A coherent and robust approach. *British Journal of Mathematical and Statistical Psychology*, 69, 159–174. Doi: 10.1111/bmsp.12066
- \*Chalmers, R. P., **Counsell, A.**, & Flora, D. (2016). It might not make a big DIF: Improved statistics for Differential Test Functioning. *Educational and Psychological Measurement*, 76, 114–140. Doi: 10.1177/0013164415584576
- Counsell, A.**, & Cribbie, R. A. (2015). Equivalence tests for comparing correlation and regression coefficients. *British Journal of Mathematical and Statistical Psychology*, 68, 292–309. Doi: 10.1111/bmsp.12045
- Counsell, A.**, Hadjistavropoulos, H. D., \*Kehler, M. D., & Asmundson, G. J. G. (2013). Posttraumatic stress disorder symptoms in individuals with multiple sclerosis. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5, 448–452. Doi: 10.1037/a0029338

## SUBMITTED MANUSCRIPTS

**Counsell, A.**, & Cribbie, R. A. Student attitudes toward learning statistics with R. *Psychology Teaching Review*.

Kunicki, Z., **Counsell, A.**, & Harlow, L. L. Psychometric evaluations of eight attitudes towards quantitative methods measures. *Scholarship of Teaching and Learning in Psychology*.

## MANUSCRIPTS IN PREPARATION

**Counsell, A.** (in prep). Issues in testing configural invariance with unequal group sample sizes. *Advances in Methods and Practices in Psychological Science*.

Piran, N., Teall, T., & **Counsell, A.** (in prep). The experience of embodiment scale: development and psychometric evaluation. *Body Image*.

## REFEREED PRESENTATIONS

\* indicates student coauthor when the research was conducted/presented

† indicates equal presentation contribution

†**Counsell, A.**, †\*Crumwell, S, †McKibban, A, & †Steltenpohl, C. (2019, July). Open science considerations for researchers working with qualitative data. Presentation accepted to the Society for the Improvement of Psychological Science convention, Rotterdam, Netherlands.

**Counsell, A.**, & Howard, A. (2019, June). Strategies for Improving your Multiple Regression Analysis. Workshop presented at the convention of the Canadian Psychological Association, Halifax, NS.

**Counsell, A.** (2018, June). Introduction to Measurement Invariance. Workshop presented at the International Congress of Applied Psychology Convention, Montreal, QC.

Piran, N., Teall, T., & **Counsell, A.** (2018, April). Beyond Teasing and Harassment: The Effect of the Quality of Relational Experiences on Body Esteem, Experience of Embodiment, Objectified Body Consciousness, and Alexithymia. Paper presented at the International Conference on Eating Disorders, Chicago, IL.

\*Hoyda, J., **Counsell, A.**, & Cribbie, R. (2017, June). Bayesian Alternatives for Testing a Lack of Association. Poster presented at the convention of the Canadian Psychological Association, Toronto, ON.

**Counsell, A.**, \*Beribisky, N., \*Farmus, L., & Cribbie, R. A. (2017, May) Positive Attitudes Toward Using R in Psychology Statistics Courses: Differences Between Graduate and Undergraduate Students. Poster presented at the Association for Psychological Science Convention, Boston, MA.

**Counsell, A., & Cribbie, R. A.** (2017, May). Applying Equivalence Testing to Measurement Invariance. Poster presented at the Modern Modeling Methods convention, Storrs, CT.

\*Chalmers, R. P., Flora, D., & **Counsell, A.** (2016, July). Large-sample Hypothesis Tests and Confidence Intervals for Two Differential Test Functioning Measures. Paper presented at the International Meeting of the Psychometric Society, Asheville, North Carolina.

**Counsell, A., & Cribbie, R.** (2016, June). Attitudes towards statistics and statistical software in psychology: Implications for teaching and student success. Paper presented at the Canadian Psychological Association Convention. Victoria, BC.

Flora, D. B., \*Chalmers, R. P., & **Counsell, A.** (2016, April). Because it might not make a big DIF: Improved differential test functioning measures. Paper presented at the American Educational Research Association convention. Washington, DC.

**Counsell, A.,** Harlow, L. L., & Duerr, S. (2015, August). A meta-view of research methods in Canadian APA journals. Poster presented at the American Psychological Association Convention. Toronto, ON.

**Counsell, A.,** Harlow, L. L., & Duerr, S. (2015, June). Are we providing enough information in the results section? Paper presented at the Canadian Psychological Association Convention. Ottawa, ON.

**Counsell, A.,** Cribbie, R. A., & \*Ng, V. (2015, May). Comparing Traditional and Bayesian Approaches for Testing Mean Equivalence. Poster accepted for presentation at the Modern Modeling Methods convention, Storrs, CT.

Flora, D., \*Chalmers, R. P., & **Counsell, A.** (2015, May). Because it might not make a big DIF: Improved Differential Test Functioning measures. Paper accepted for presentation at the Modern Modeling Methods convention, Storrs, CT.

†\*Cheung, S, †\*Collins, K., & †**Counsell, A.,** (2014, June). Structural equation modeling: Made easy with free software! Workshop presented at the convention of the Canadian Psychological Association, Vancouver, BC.

**Counsell, A.,** \*Ragoonanan, C., & Cribbie, R. A. (2014, May). Tests for negligible interaction in factorial independent groups designs. Poster presented at the Modern Modeling Methods convention, Storrs, CT.

**Counsell, A. L.,** Cribbie, R. A., Jamieson, J., & \*Smith, C. E. (2013, August). Group Change with nontrivial Pretest Differences: Investigating the Errors in Variables Method. Poster presented at the convention of the American Psychological Association, Honolulu, HI.

**Counsell, A., & Cribbie, R. A.** (2013, June). Equivalence Testing: Extending Methods to the Similarity of Dependent Correlations. Paper presented at the convention of the Canadian Psychological Association, Quebec City, QC.

**Counsell, A.,** \*Sigal, M., \*Chalmers, P., & Cribbie, R. A. (2013, May). Extending the Robust Means Modeling Framework. Paper presented at the Modern Modeling Methods convention, Storrs, CT.

\*Relkov, T., **Counsell, A.**, Greenglass, G., & Buchwarld, P. (2012, July). Coping with financial threat: Factors in psychological well-being. Paper presented at the convention of the Stress and Anxiety Research Society, Palma de Mallorca, Spain.

**Counsell, A.**, & Cribbie, R. A. (2012, June). New methods for evaluating the equivalence of regression and correlation coefficients. Paper presented at the convention of the Canadian Psychological Association, Halifax, NS.

\*Relkov, T., & **Counsell, A.** (2012, June). Personal resources and financial threat: Predictors of psychological well-being. Paper presented at the convention of the Canadian Psychological Association, Halifax, NS.

\*Mara, C. A., \*Katter, J. K. Q., Greenglass, E., & **Counsell, A.** (2012, June). Financial threat and anxiety: The importance of proactive coping and practical social support. Paper presented at the convention of the Canadian Psychological Association, Halifax, NS.

**Counsell, A.**, \*Kehler, M., & Hadjistavropoulos, H. D. (2010, June). Correlates of PTSD symptoms in individuals with multiple sclerosis. Poster presented at the convention of the Canadian Psychological Association, Winnipeg, MB.

### NON-REFEREED PRESENTATIONS

Measurement Invariance Using Equivalence Testing: An Introduction and Applied Example. January 23, 2017. Presented at York University's Quantitative Methods Forum.

Psychology Undergraduates' Attitudes Towards Statistics and Using the Statistical Software Program R. March 28, 2016. Presented at York University's Quantitative Methods Forum.

Bayesian versus Traditional Approaches for Testing Mean Equivalence. April 13, 2015. Presented at York University's Quantitative Methods Forum.

Cultural Bias on the General Self-Efficacy Scale -- An Applied Introduction to Item Response Theory and Differential Item Functioning. November 20, 2014. Presented at University of Rhode Island's Research Methodology Focus Area Forum.

An Introduction to Equivalence Testing for Research in Health and Psychology. November 5, 2014. Presented at University of Rhode Island's CPRC seminar.

Is Item-Level Non-Invariance Always Important? March 24, 2014. Presented at York University's Quantitative Methods Forum.

Robust Means Modeling with k-Independent Groups. April 8, 2013. Presented at York University's Quantitative Methods Forum.

## **TEACHING**

\* indicates new course prepared

### **Course Director**

#### ***Graduate Level***

PS 8101 Statistics and Research Design I  
Ryerson University, Fall 2019\*

PS 8102 Statistics and Research Design II  
Ryerson University, Winter 2019\*

PS 8513, Multivariate Statistical Analysis  
Ryerson University, Fall 2018\*; Fall 2019

#### ***Undergraduate Level***

PSYC 3031, Intermediate Statistics Laboratory  
York University, Winter 2016\*

### **Short Course/Workshop Instructor**

Introduction to SPSS for Windows Short Course  
Institute for Social Research, York University, Fall 2015 & 2016, Winter 2016 & 2018

Introduction to R Short Course  
Institute for Social Research, York University, Summer 2015\*

### **Teaching Assistant**

#### ***Graduate Level***

PSYC 6132, Univariate Analysis II: Regression (two sections)  
York University, Winter 2017

PSYC 5414, Structural Equation Modeling (online course)  
Carleton University, Fall 2015

***Undergraduate Level***

PSYC 2022, Statistical Methods II  
York University, Fall 2011

PSYC 406, History of Psychology  
University of Regina, Fall 2010

***Other***

Introduction to Structural Equation Modeling Workshop  
Canadian Psychological Association Convention, Summer 2014

Introduction to SPSS for Windows Short Course  
Institute for Social Research, York University, Summer 2012, Fall 2012

**STATISTICAL CONSULTING**

Founder and Statistical Consultant, 2016-present  
Stats Verify

Research Methodologist, 2015-2017  
START Clinic for the Mood and Anxiety Disorders

Statistical Consultant, 2012-2017  
Institute for Social Research, York University

**SUPERVISION**

**Graduate Students**

MA – Primary Supervisor  
Psychology, Ryerson University  
Udi Alter (2019 – present)

MA – Supervisory Committee Member  
Psychology, Ryerson University  
Olivia Provost-Walker (2019 – present)

MA – Committee Member  
Psychology, Ryerson University  
Lilach Dahoa-Halevi (2019)

MA – Practicum Supervisor  
Psychology, Ryerson University  
Carmen Dang (2019)



## **Undergraduate Students**

BA Hon – Co-supervisor (with Dr. Robert Cribbie)  
Psychology, York University  
Joseph Hoyda (2016-2017)

## **SERVICE**

### **Departmental**

Statistical Consulting, 2018-present  
Psychology, Ryerson University

Psychological Science Committee Member, 2018-present  
Psychology, Ryerson University

Ontario Graduate Scholarship Application Reviewer, 2019  
Psychology, Ryerson University

Student Coordinator Quantitative Methods Forum, 2015-2016  
Psychology, York University

Undergraduate Research Participant Pool Coordinator, 2012-2013  
Psychology, York University

### **External**

Faculty Representative (Ryerson University), 2019-present  
Canadian Psychological Association

Secretary/Treasurer (Quantitative Methods Section), 2019-present  
Canadian Psychological Association

Student Presentation Rater (Quantitative Methods Section), 2019  
Canadian Psychological Association Convention

Conference Submission Reviewer (Quantitative Methods Section), 2014, 2016  
Canadian Psychological Association

Student Representative (Quantitative Methods Section), 2013-2015  
Canadian Psychological Association

### **Ad Hoc Manuscript Reviewer**

British Journal of Mathematical and Statistical Psychology  
Leisure Sciences  
Collabra: Psychology  
Royal Society Open Science

### **PROFESSIONAL ASSOCIATION MEMBERSHIP**

American Educational Research Association (Division D: Measurement/Research Methodology)  
American Psychological Association (Division 5: Evaluation, Measurement, and Statistics)  
American Statistical Association  
Association for Psychological Science (Quantitative Methods)  
Canadian Psychological Association (Quantitative Methods)  
International Association of Applied Psychology  
Society for Improving Psychological Science  
Statistical Society of Canada

### **ANALYTICAL SOFTWARE**

R/RStudio  
SPSS  
Mplus  
SAS  
JASP  
Jamovi