Gaining Skills in Quantitative Methods for Psychology

Introduction

- The Department of Psychology offers a number of courses in Quantitative Methods, and provides a reasonable amount of training in measurement/statistics for Psychology
- However, depending on your research area, career aspirations, etc. often you will need/want more advanced training in methods

Resources for Acquiring Training in Quantitative Methods for Psychology

- Online Courses
- Courses at York (outside of the Psychology Department)
- Courses at GTA institutions
- Local and External Workshops
- Workshops at Conferences

Online Courses

- Coursera
  - There are courses on most topics of interest in quantitative methods, and often taught by experts in the field
  - Most courses are free or for minimal cost
  - Several students recommend 'R Programming' from Johns Hopkins University
  - Cathy LaBrish recommends 'Machine Learning' by Andrew Ng
  - QM students have taken courses on Bayesian Data Analysis, Multilevel Modeling, etc.
- EdX
- Udemy

Quantitative Methods Courses Outside of York Psychology

- Department of Mathematics and Statistics at York
  - Undergraduate Courses in Algebra, Calculus, Data Mining, Monte Carlo Methods, Regression, Generalized Linear Models, etc.
  - Graduate Courses in Statistical Consulting, etc.
- Other Departments at York
  - E.g., Kinesiology, Business/Economics
- University of Toronto, Ryerson, etc. Psychology Department Courses

- Note: Graduate courses at Ontario universities are free to students registered in a graduate program in Ontario

Local/External Workshops

- Enabyltics
  - Offer courses in the GTA on a variety of Quantitative Methods Related Topics
    - Alyssa recently took a course on Growth Modeling
- Curran and Bauer Analytics
  - Dan Bauer and Patrick Curran offer courses on SEM, MLM, growth mixture modeling, etc. at UNC Chapel Hill.
    - Review: "Pricey, but they do offer discounts for grad students, and you get 40 hours of instruction and absolutely terrific course notes".
- Bengt Muthen's SEM (MPlus) Workshops
  - www.statmodel.com
  - Two-day workshops that are very inexpensive at Johns Hopkins University. "The seminars generally cover the hottest stuff in SEM".
- Todd Little's Stats Camps
  - A variety of courses in workshops all around North American and the World
- The Data Incubator
  - Training PhDs and near PhDs to be Data Scientists – Free Fellowships if you are accepted

- Note: Many workshops now have an "online" registration option

Workshops at Conferences

- Methodological Workshops on a Variety of Topics at Psychology/Education Conferences

  - Association for Psychological Science
  - American Psychological Association
  - American Educational Research Association
  - Psychometric Society
  - American Statistical Association
    - Conference on Statistical Practice