# Daniel Katz

Graduate Student

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## EDUCATION

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

**PhD** (2021): Education - Quantitative Research Methods and Philosophy of Measurement
  Thesis: Fairness and Uncertainty in Academic Testing
  Advisor: Andrew Maul

**M.A.** (2017) Education - Quantitative Research Methods
  Thesis: Validating a Multidimensional Measure of Reading Strategy Use

**BA** (2011), Political Science, Minor in History

## RESEARCH INTERESTS

  The Rasch Model
  Fairness and Ethincs
  Measurement Invariance
  Explanatory Item Response Models
  Philosophy of Measurement, Language, and Probability
  Causal Inference

## RELEVANT EXPERIENCE

**University of Florida, Virtual Learning Lab – IES Funded Grant** (2019-Present)
  Supervisor: Anne Corinne Manley    Role: Graduate Student Extern – IRT/Simulation focus

**UCSB Center for Innovative Teaching, Research, and Learning (CITRAL)** (2018-Present)
  Supervisor: Linda Adler-Kassner
  Role: Graduate Student Researcher in Assessment and Evaluation

**New York City Department of Education: Assessment, Design, and Evaluation** (Summer 2018)
  Supervisor: Ronli Diakow
  Role: Graduate Student Psychometrics Intern – Applying IRT and Explanatory IRT Models

**California Dropout Research Project (CDRP); Get Focused Stay Focused Evaluation** (2016-2019)
  PI: Russell Rumberger
  Role: Graduate Student Researcher

**UCSB General Education Assessment Project, Office of Institutional Research** (2016-2018)
  PI: Linda Adler-Kassner, Co-Interim Dean of UCSB Undergraduate Education
  Role: Graduate Student Researcher

## PUBLISHED WORK

Arya, Diana, Clairmont, A. **Katz, D** & Maul, A. (2020) Measuring Reading Strategy Use, *Educational Assessment*, 25:1, 5-30, DOI: 10.1080/10627197.2019.1702464

Maul, A. and **Katz, D**. (2018). Internal Validity. In B. Frey (Editor), The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation. Thousand Oaks, CA: SAGE.

**Katz, D.** (2017, May). An Update: The Narrowing California High School Graduation Gap between Black, Latino, and White Students. (CDRP Statistical Brief No. 24). Retrieved from http://cdrpsb.org/pubs_statbriefs.htm

**Katz, D.** (2017, March). The Narrowing California High School Graduation Gap between Black, Latino, and White Students. (CDRP Statistical Brief No. 23). Retrieved from http://cdrpsb.org/pubs_statbriefs.htm. The Narrowing California High School Graduation Gap between Black, Latino, and White Students


## CONFERENCE PRESENTATIONS

**Katz, D.** and Diakow, R. (2019, April). Using Explanatory Item Response Theory Models to Re-Examine Fairness in Psychometrics. Paper to be presented at the National Council on Measurement in Education (NCME) April 4-8, 2019. Toronto.

**Katz, D.**, Nylund-Gibson, K., Furlong, M. (2019, April). Is One Item Enough? Examining Affect-Laden Survey Items Using Mixture Modelling with Distal Outcomes. Paper presented at American Educational Research Association Annual Meeting, April 5-9, 2019. Toronto.
**Best Graduate Student Paper in the AERA Survey Special Interest Group Sig**

**Katz, D.**, Clairmont, A., Arya, D., & Maul, A., (2018, April). Measuring Reading Strategy Use in a Multilingual Context. Paper presented at American Educational Research Association Annual Meeting, April 13-17, 2018. New York.

**Katz, D.**, Clairmont, A., Arya, D. & Maul, A. (2018, April). Measuring Reading Strategy Use in a Multidimensional, Multilingual Context. Paper presented at the International Objective Measurement Workshop (IOMW), April 10-12, 2018. New York.


## SELECT IN PROGRESS WORK

Clairmont, A. & Katz D. (in preperation) Using Rasch Measurement Theory for Program Evaluation: A Methods Note. To be submitted to *American Journal of Evaluation*

Katz, D., Maul A., Clairmont, A (2021) Tools from philosophy of language for increasing transparency in psychological measurement"

Reconsidering fairness in educational assessment: using tools from ethics, causal inference, and psychometrics

Measuring subjective well-being and other constructs in positive psychology using mixture modelling approaches (with an emphasis on educational settings)

## TEACHING EXPERIENCE

**Instructor**
   One Day Workshop: UCSB Methods U - An Introduction to R: Data Cleaning, Wrangling, and Visualizing    Implementing Explanatory IRT via the R package, TAM

**Teaching Assistant**    Education 214C, Linear Models for Data Analysis (and categorical data analysis), Spring 2018    Education 214B, Inferential Statistics, Winter 2018    Education 214A, Introductory Statistics, Fall 2017

## ORGANIZATION & COMMITTEE MEMBERSHIPS

   Graduate Student Representative – NCME Committee on informing assessment policy and practice    American Educational Research Association    National Council on Measurement in Education    Society for the Improvement of Psychological Sciences

## STATISTICAL SOFTWARE

   R    Commonly used stats packages: TAM, mirt, lme4, Lavaan, plm    Other packages: tidyverse, Rmarkdown, xaringan    Mplus    Stata (Basic Knowledge)
   Tableau (Basic Knowledge)
   Git and Gitub (Basic Knowledge)
   Stan/rstan (Beginner)
   Dedoose (Beginner)