Daniel Katz

UCSB katzdanb@gmail.com Gevirtz Graduate School of Education (310) 800-8354

https://dbkatz.com/

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 and Explanatory Item Response Theory Models Causal Inference and Program Evaluation Fairness and Ethics in Human Measurement Philosophy of Measurement Literacy Constructing Measures

RELEVANT EXPERIENCE

2019-Present:

University of Florida, Virtual Learning Lab – IES Grant R305C160004

Supervisor: Anne Corinne Manley

Role: Graduate Student Extern – IRT/Simulation focus

2018-Present:

UCSB Center for Innovative Teaching, Research, and Learning (CITRAL)

Supervisor: Linda Adler-Kassner

Role: Graduate Student Researcher in Assessment and Evaluation

Summer 2018:

New York City Department of Education: Assessment, Design, and Evaluation

Supervisor: Ronli Diakow

Role: Graduate Student Psychometrics Intern – Applying IRT and Explanatory IRT Models

2016-2019:

California Dropout Research Project (CDRP)

Get Focused Stay Focused Program Evaluation

PI: Russell Rumberger

Role: Graduate Student Researcher

2016-2018:

UCSB Office of Institutional Research

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

- Clairmont, A. & Katz, D. (April, 2021). Using Rasch Measurement Theory for Responsive Program Evaluation. Paper presented at the American Educational Research Association Annual Meeting (AERA). To be held Virtually
- **Katz, D**, Huggins-Manley, A. C., & Leite, Walter(July, 2020). Technology-Enhanced Learning Platforms, Opportunity to Learn, and Test Fairness. Paper to be presented at the International Meeting of the Psychometric Society (IMPS). To be presented at IMPS 2021.
- **Katz, D** and Clairmont A. (April, 2020). Should Psychometricians Make Claims About Test Fairness? Paper to be presented at the National Council on Measurement in Education (NCME) (Postponed due to COVID).
- **Katz, D.** and Diakow, R. (April, 2019). 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

- Katz, D., Maul A., Clairmont, A (2021) Tools from philosophy of language for increasing transparency in psychological measurement"
- Wilton, M., **Katz D.**, Clairmont, A. (2020) Improving academic performance and retention of first year biology students through a scaleable, soft skills peer-mentorship program. To be submitted to *Educational Researcher*
- 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.** Reconsidering fairness in educational assessment: using tools from ethics, causal inference, and psychometrics
- **Katz D.** 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 Workshops

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

Teaching Assistant

Fall 2020: Education 217C, Constructing Measures

Spring 2018: Education 214C, Linear Models for Data Analysis (and categorical data analysis)

Winter 2018: Education 214B, Inferential Statistics

Fall 2017: Education 214A, Introductory Statistics

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

 \mathbf{R}

Commonly used stats packages: TAM, mirt, lme4, Lavaan, plm

Other packages: tidyverse, Rmarkdown, xaringan

Stan/rstan (Basic Knowledge)

Mplus

Stata (Basic Knowledge)

Tableau (Basic Knowledge)

Git and Gitub (Basic Knowledge)

Dedoose (Beginner)