# Lidia Dobria, Ph.D.

Professor of Mathematics
Wilbur Wright College
Chicago, Illinois
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### **EDUCATION**

2011 Ph.D., Educational Psychology – Measurement, Evaluation, Statistics, and Assessment

University of Illinois at Chicago

- Dissertation: Longitudinal Rater Modeling with Splines
- Dissertation co-chairs: Dr. George Karabatsos & Dr. Carol Myford
- Dean's Merit Award

1993 M.S., Mathematics

University of Illinois at Chicago

1990 B.S., Mathematics and Computer Science

University of Illinois at Chicago

### **TEACHING EXPERIENCE**

2013 – Present Wilbur Wright College, Chicago, IL, Department of Mathematics

Full Professor

Associate Professor (2002 – 2013) Assistant Professor (1998 – 2002)

*Instructor* (1995 – 1998)

 Courses taught: Special Topics in Mathematics: Advanced Statistical Methods, Differential Equations, Calculus & Analytic Geometry I & II, Business Calculus, Precalculus, Algebra, Introductory Statistics.

2011 – 2019 **University of Illinois at Chicago,** Department of Educational Psychology *Adjunct Assistant Professor* 

 Courses taught: Advanced Analysis of Variance in Educational Research, Multiple Regression in Educational Research; Data and Interpretation in Educational Inquiry; Approaches to Analyzing Rating Data (co-taught with Dr. Carol Myford).

2007 – 2010 **University of Illinois at Chicago,** Department of Educational Psychology *Graduate Teaching Assistant* 

 Courses taught: Analysis of Variance in Educational Research, Special Topics in Educational Psychology: Analyzing Rating Data (co-taught with Dr. Carol Myford).

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### **RESEARCH EXPERIENCE**

## 2007 - Present

Research Consultant, Chicago, IL

- Provide consulting services in psychometrics, assessment, and statistics in academic and fast-paced commercial environments.
- Services rendered include research study design, psychometric evaluation of instruments, forensic investigations of testing data, data analysis, interpretation of results, report writing, and presentation of findings.
- Manage projects and interface with clients and research teams.
- Use statistical software packages (SPSS, R, Facets, Winsteps, ConQuest) to conduct a wide range of statistical analyses.

#### 2003 - 2006

University of Illinois at Chicago, Measurement, Evaluation, Statistics &

Assessment (MESA) Laboratory

Graduate Research Assistant

 Provided measurement and statistical analysis services to College of Education faculty and students.

## 2002 - 2004

# Wilbur Wright College, Chicago, IL

Research Statistician – Special Assignment

- Analyzed data and prepared reports for the Fund for the Improvement of Postsecondary Education (FIPSE) and National Endowment for Humanities (NEH) grants.
- Assessed the reliability and validity of exit examinations for General Education courses.
- Investigated impact of differential rater severity on student ability measures for the English Composition competency examinations.
- Analyzed college-wide student and employee satisfaction data.

## 2001 - 2003

# American Society for Clinical Pathology, Chicago, IL

*Research Analyst*, (2002 – 2003)

Measurement Consultant (2001 – 2002)

- Reviewed quality control data for licensure and certification examination items.
- Investigated differential item functioning for practice analysis surveys.
- Performed rating scale, differential item functioning, and longitudinal analyses of Prospective Study survey scales (job satisfaction, job diagnostic, burnout, and career commitment).
- Maintained database, wrote technical reports, and presented results at research conferences.

# 2001 - 2003

# **University of Illinois at Chicago,** Department of Educational Psychology *Graduate Research Assistant*

- Analyzed Illinois State Board of Education Social Science ISAT data, evaluated differential item functioning, and investigated the impact of local dependence on test items and person measures.
- Wrote research reports and presented results at conferences.

## **RESEARCH EXPERIENCE – Continued**

2001 - 2004

**University of Illinois at Chicago,** Department of Occupational Therapy *Graduate Research Assistant* 

- Analyzed the psychometric properties of the Occupational Performance History Interview rating scales.
- Developed diagnosis keyforms for the Occupational Performance History Interview and Occupational Self Assessment rating scales.
- Analyzed occupational role study data for stroke and cancer patients.
- Wrote research reports and presented findings to Occupational Therapy faculty and graduate students.

## **PUBLICATIONS**

- Talbott, E., Fleming, J., Karabatsos, G., & Dobria, L. (2011). Making sense of minority student classification into special education: School context matters. *International Journal of Special Education*, 26, 3.
- Kielhofner, G., Dobria, L., Forsyth, K., & Kramer, J. (2010). The occupational self-assessment: Stability and the ability to detect change over time. *OTJR: Occupation, Participation and Health, 30*(1), 23-32.
- Yuen, M., Smith, E.V. Jr., Dobria, L., & Fu, Q. (2009). The study skills self-efficacy scale for use with Chinese students. *Journal of Applied Measurement*, *10*(3), 266-280.
- Wolfe, E.W., & Dobria, L. (2008). Applications of the multi-faceted Rasch model. In J. Osborne (Ed.), *Best practices in quantitative methods* (pp. 71-85), Thousand Oaks, CA: Sage.
- Kielhofner, G., Dobria, L., Forsyth, K., & Basu, S. (2005). The construction of keyforms for obtaining instantaneous measures from the Occupational Performance History Interview rating scales. *OTJR: Occupation, Participation and Health, 25*(1), 23-32.
- Blau, G., Tatum, D.S., Ward-Cook, K., Dobria, L., & McCoy, K. (2005). Testing for time-based correlates of perceived gender discrimination. *Journal of Allied Health*, *34*(3), 130-137.
- Blau, G., Surges-Tatum, D., McCoy, K., Dobria, L., & Ward-Cook, K. (2003). Job loss, human capital job feature, and work condition job feature as distinct job insecurity constructs. *Journal of Allied Health*, 33(1), 31-41.

## **PRESENTATIONS**

- Sares, T. & Dobria, L. (2022, October). *Follow-up Analysis of Score Anomalies*. Paper presented at the 11<sup>th</sup> Annual Conference on Test Security, Princeton, NJ.
- Roberts, E. & Dobria, L. (2019, April). *Mixed-Design ANOVA Approaches to Investigating Change*. Paper presented at the 5<sup>th</sup> Annual Wright Research and Creative Scholarship Colloquium, Chicago, IL.

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## **PRESENTATIONS – Continued**

- Dobria, L. (2018, February). *Measuring Grit and Its Impact on Student Performance in Mathematics*. Paper presented at the Wright Center for Teaching Excellence, Chicago, IL.
- Jiang, A., Morote, J., & Dobria, L. (2017, April). *Measuring the Impact of Rater Severity on Student Performance Measures.* Poster presented at the Chicago Area Undergraduate Research Symposium, Chicago, IL.
- Martinez, M. & Dobria, L. (2017, April). *On the Psychometric Properties of the Perceived Stress Scale.*Poster presented at the Chicago Area Undergraduate Research Symposium, Chicago, IL.
- Al Aabed, A., Norlander, S. & Dobria, L. (2016, April). *An Item Response Theory Analysis of the Revised Mathematics Anxiety Scale*. Poster presented at the Chicago Area Undergraduate Research Symposium, Chicago, IL.
- Dobria, L. (2012, April). *On the Multilevel Facets Model for the Analysis of Rating Data*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, Canada.
- Dobria, L. (2012, April). A semiparametric approach to modeling rater severity drift. Paper presented at the annual meeting of the National Council of Measurement in Education, Vancouver, Canada.
- Dobria, L. (2009, April). *Monitoring rater severity drift with a longitudinal mixed-effects model.* Poster session presented at the annual Graduate Research Forum, University of Illinois at Chicago.
- Dobria, L. (2008, April). *Monitoring rater performance with a hierarchical generalized linear model.* Poster session presented at the annual Graduate Research Forum, University of Illinois at Chicago.
- Dobria, L., Karabatsos, G., & Myford, C. (2007, April). *Monitoring Rater Performance with a Hierarchical Generalized Linear Model*. Paper presented at the conference of the National Council of Measurement in Education, Chicago, IL.
- Dobria, L. (2007, April). *Judging the judges: A hierarchical approach to modeling judge performance*. Poster session presented at the annual Graduate Research Forum, University of Illinois at Chicago.
- Dobria, L. (2006, January). *Measuring student competency at the completion of developmental mathematics courses*. Paper presented at the annual meeting of the Joint Mathematics Meeting, San Antonio, TX.
- Dobria, L., Smith, E. V. Jr., & Myford, C. (2005, May). *Measuring the impact of rater severity drift on student ability measures*. Paper presented at the biannual meeting of the Midwest Objective Measurement Seminar, Chicago, IL.
- Qiong, F., Mantak, Y., Dobria, L., & Smith, E. V. Jr. (2005, May). *Study skills self-efficacy of secondary school students in Hong Kong*. Paper presented at the biannual Midwest Objective Measurement Seminar, Chicago.

### **PRESENTATIONS – Continued**

- Dobria, L. (2004, December). *Monitoring sources of variability within the English writing competency examinations*. Paper presented at the biannual meeting of the Midwestern Objective Measurement Seminar, Chicago, IL.
- Gans, B. & Dobria, L. (2004, November). Assessment report on the Wright College Great Books Curriculum: Documenting a new model for raising academic skills and achievement levels of minority and non-traditional community college students. Poster session presented at the annual FIPSE Project Directors' Meeting, Washington, D.C.
- Dobria, L. (2004, May). *Measuring change over four time points*. Paper presented at the biannual meeting of the Midwestern Objective Measurement Seminar, Chicago, IL.
- Dobria, L. (2002, May). *Evaluating student-teacher trust in the Chicago public school system.* Paper presented at the biannual meeting of the Midwestern Objective Measurement Seminar, Chicago, IL.
- Dobria, L. & Tatum, D. S. (2002, April). ASCP Board of Registry prospective study: Burnout scale. Paper presented at the Eleventh International Objective Measurement Workshop, New Orleans, LA.
- Dobria, L. (2001, October). *Job diagnostic survey: Changes over time.* Paper presented at the International Conference for Objective Measurement, Chicago, IL.

#### TRAINING SEMINARS

- Myford, C.M., & Dobria, L. (2018, August). Analyzing Rating Data Using Many-Facet Rasch Measurement and Multilevel Rater Modeling Approaches. National Research University, Higher School of Economics, St. Petersburg, Russia.
- Myford, C.M., & Dobria, L. (2006, August). Analyzing Rating Data Using a Many-Facet Rasch Measurement Approach. Columbia Teachers College, New York, NY.
- Myford, C.M., & Dobria, L. (2006, January). Analyzing Rating Data Using a Many-Facet Rasch Measurement Approach. University of Illinois at Chicago.
- Myford, C.M., & Dobria, L. (2005, July). Analyzing Rating Data Using a Many-Facet Rasch Measurement Approach. University of Illinois at Chicago.

## **PH.D. COMMITTEES**

- Tara McNaughton (Ph.D., 2018). Rater Stability in a High-Stakes Performance Assessment: A Longitudinal Investigation, University of Illinois at Chicago.
- Maria Incrocci (Ph.D., 2015). Assessing Potential Predictors of Rater Fit Measures, University of Illinois at Chicago.
- Heather Blackburn (Ph.D., 2013). Comparison of parent-child interaction and teaching behaviors of Caucasian-, African-, and Hispanic-American Caregivers and their preschool children, University of Oklahoma.

## **PROFESSIONAL MEMBERSHIPS**

- American Educational Research Association (Division D)
- National Council on Measurement in Education
- Mathematical Association of America

## **AWARDS**

- Golden Apple Award, Phi Theta Kappa Honor Society, 2013
- Second Place, Graduate Research Forum, University of Illinois at Chicago, 2009
- Third Place, Graduate Research Forum, University of Illinois at Chicago, 2008
- Second Place, Graduate Research Forum, University of Illinois at Chicago, 2007
- Graduate College Travel Award, University of Illinois at Chicago, 2002
- Graduate Student Council Award, University of Illinois at Chicago, 2002