

# Nedim Yel, PhD

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<b>EDUCATION</b>	<b>Strategic Data Fellow</b> 2022 Center for Education and Policy Research Harvard University, Cambridge, Massachusetts
	<b>Business Analytics</b> 2018 <i>Executive Certificate</i> Kelley School of Business Indiana University, Bloomington, Indiana
	<b>Measurement, Statistics, &amp; Methodological Studies (Psychometrics)</b> 2016 <b>Doctor of Philosophy (Ph.D.) in Educational Psychology</b> Arizona State University, Tempe, Arizona Advisor: Roy Levy, Ph.D. Research areas: Multilevel Modeling, Bayesian Methods, IRT Modeling Dissertation Title: Determining appropriate sample sizes and their effects on key parameters in Longitudinal Three-Level Models
	<b>Global Technology &amp; Development</b> 2010 <i>Master of Science (M.S. Tech)</i> Arizona State University, Tempe, Arizona Advisor: Gary Grossman, Ph.D. Research areas: Role of education in economic development
	<b>Technical Communication &amp; Rhetoric</b> 2006 <i>Master of Arts (M.A.)</i> Texas Tech University, Lubbock, Texas Minor: Instructional Media Design Advisor: Miles Kimball, Ph.D. Research areas: Visual Communication
	<b>Physics</b> 2003 <i>Master of Science (M.S.) and Bachelor of Science (B.S.) specialization in Teaching</i> Bogazici University, Istanbul, Turkey

## MANUSCRIPT UNDER REVIEW

Ψ indicates the co-author was a student during part or all of the work.

Sanetti, L. M. H., Yel, N., Long, A. C. J., Neugebauer, S. R., Collier-Meek, M. A. & Kratochwill, T. R. (2022). Assessing Teachers' Intervention-Related Expectations and Self-Efficacy: An Examination of the Factor Structure of the Implementation Beliefs Assessment.

Wilkins-Yel, K. G., Grasty, K.<sup>Ψ</sup>, Anantharaman, A.<sup>Ψ</sup>, Sista, A.<sup>Ψ</sup>, Delaney, T.<sup>Ψ</sup>, Gamio Cuervo, Á.<sup>Ψ</sup>, & **Yel, N.** (Revise & Resubmit). *Gendered-Racial Role Strain: A Mixed-Method Examination of the Effects of the COVID-19 Pandemic and Systemic Racism on Graduate Women of Color in STEM.*

Farra, A.<sup>Ψ</sup>, Anantharaman, A.<sup>Ψ</sup>, Swanson, S. E.<sup>Ψ</sup>, Wilkins-Yel, K. G., Bekki, J. M., **Yel, N.**, Randall, A. K., & Bernstein, B. (Under Review). *Examining the Role of Institutional Support on International Doctoral Women's STEM Persistence and Mental Health*

\*Swanson, S. E.<sup>Ψ</sup>,\*Anantharaman, A.<sup>Ψ</sup>,\*Farra, A.<sup>Ψ</sup>, Wilkins-Yel, K. G., Bekki, J. M., **Yel, N.**, Randall, A. K., & Bernstein, B. (Under Review). *Examining how Gendered Racism affects Mental Health and STEM Persistence among Graduate Women of Color and Gender Diverse Students of Color*

Anantharaman, A.<sup>Ψ</sup>, Swanson, S. E.<sup>Ψ</sup>, Farra, A.<sup>Ψ</sup>, Wilkins-Yel, K. G., Bekki, J. M., **Yel, N.**, Randall, A. K., & Bernstein, B. (Under Review). *Centering the Margins: Examining how Gendered Racism affects Graduate Women of Color's Mental Health and STEM Persistence Intentions.*

Freiburger, E.<sup>Ψ</sup>, Quintanilla, V. D., Hugenberg, K., Erman, S., Walton, G., **Yel, N.**, Kim, A., & Murphy, M. (2022). *The impact of the COVID-19 pandemic on first-generation women test-takers: Magnifying adversities, stress, and consequences for bar exam performance.* Revise and Resubmit.

Wilkins-Yel, K. G., Grasty, K.<sup>Ψ</sup>,Anantharaman, A.<sup>Ψ</sup>, Sista, A.<sup>Ψ</sup>, Delaney, T.<sup>Ψ</sup>, Cuervo, A. G.<sup>Ψ</sup>, & **Yel, N.** (2022). *Gendered-Racial Role Strain: A Mixed-Method Examination of the Effects of the COVID-19 Pandemic and Systemic Racism on Graduate Women of Color in STEM.* Manuscript Under Review.

Elliott, S. N., Kurz, A.,Tindall, G., Stevens, J. J., & **Yel, N.** (2022). *Mathematics achievement gaps for elementary and secondary students: The influence of opportunity to learn and special education status.* Manuscript Under Review.

**JOURNAL  
ARTICLES  
(N=15)**

Ψ indicates the co-author was a student during part or all of the work.

Liu, Y., Levy, R., **Yel, N.**, & Schulte, A. C. (2022). A comparison of methods for evaluating schools with respect to growth of students in subpopulations in three level models. *School Effectiveness and School Improvement.* doi:https://doi.org/10.1080/09243453.2022.2071950.

Horne, S. G., Johnson, T., **Yel, N.**, Maroney, M. R.<sup>Ψ</sup>, & McGinley, M.<sup>Ψ</sup>(2021). Unequal rights between LGBTQ parents living in the U.S.: The association of minority stress to relationship satisfaction and parental stress. *Couple and Family Psychology: Research and Practice.* doi:https://doi.org/10.1037/cfp0000192.

Horne, S. G., McGinley, M.<sup>Ψ</sup>, **Yel, N.**, & Maroney, M. R.<sup>Ψ</sup> (2021). The stench of bathroom bills: Mental health impact on transgender, nonbinary, and cisgender people. *Journal of Counseling Psychology.* doi:https://doi.org/10.1037/cou0000558

- Chickerella, R.<sup>Ψ</sup>, Schuyler, S.<sup>Ψ</sup>, McGinley, M.<sup>Ψ</sup>, Horne, S. G., **Yel, N.**, & Whitehouse, A. (2021)<sup>Ψ</sup>. Katy Perry vs. Janelle Monáe: Depiction of Bisexuality and Relationship to Depression and Stigma. *Journal of Bisexuality*. doi:<https://doi.org/10.1080/15299716.2021.1874586>
- Kurz, A., Reichenberg, R., N., & **Yel, N.**, Elliott, S. (2020). Opportunity-to-Learn performance levels and student achievement gain for students with and without disabilities. *Teaching and Teacher Education*. doi:<https://doi.org/10.1016/j.tate.2020.103092>
- Kroeper, K. M.<sup>Ψ</sup>, Quintanilla, V. D., Frisby, M.<sup>Ψ</sup>, **Yel, N.**, Applegate, A. G., Sherman, S. J., & Murphy, M C (2020). Underestimating the Unrepresented: Cognitive Biases Disadvantage Pro Se Litigants in Family Law Cases. *Psychology, Public Policy, and Law*, 26(2), 198-212. doi:<http://dx.doi.org/10.1037/law0000229>
- Elliott, S. N., Kurz, A., & **Yel, N.** (2019). Opportunity to learn what is on the test: The performance of students with and without disabilities on mathematics items aligned or not aligned with instruction. *Journal of Special Education*, 53(2), 76-84. doi:<http://dx.doi.org/10.1177/0022466918802465>
- Hanauer, M.<sup>Ψ</sup> and **Yel, N.** (2018). A decision-making framework for response to intervention (RTI): combining mixed methods and Bayesian analysis. *Research in the Schools*.
- Wilkins-Yel, K. G., Roach, C. M. L., Tracey, T. J. G., & **Yel, N.** (2018). The effects of career adaptability on intended academic persistence: The mediating role of academic satisfaction. *Journal of Vocational Behavior*. doi:<http://dx.doi.org/10.1016/j.jvb.2018.06.006>
- Davies, M., Elliott, S. N., Sin, K. F., Yan, Z., & **Yel, N.** (2017). Using Adjustments to Support the Learning and Assessment Needs of Students with Disabilities: Macao and Mainland China Teachers' Reports. *International Journal of Disability, Development and Education*. doi:<http://dx.doi.org/10.1080/1034912X.2017.1346238>
- Kemer, G., Borders, L. D., **Yel, N.** (2017). Expert Supervisors' Priorities When Working with Easy and Challenging Supervisees. *Counselor Education and Supervision*, 56: 50-64. doi:<http://doi.org/10.1002/ceas.12059>
- Elliott, S. N., Kurz, A., Tindal, G., **Yel, N.** (2016). Influence of Opportunity to Learn Indices and Education Status on Students' Mathematics Achievement Growth. *Remedial and Special Education*, 37(5), 144-158. doi:<http://doi.org/10.1177/0741932516663000>
- Green, S. B., Lai, K., Levy, R., Xu, Y., **Yel, N.**, Thompson, M. S., Eggum-Wilkens, N. D., Kunze, K. L., Iida, M., Reichenberg, R., & Zhang, L. (2016). Assessing model similarity in structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*. doi:10.1080/10705511.2016.1154464.
- Levy, R., Xu, Y., **Yel, N.** & Svetina, D. (2015). A standardized generalized dimensionality discrepancy measure and a standardized model-based covariance for dimensionality assessment for multidimensional item response models. *Journal of Educational Measurement*, 52(2), 144-158. doi:<http://doi.org/10.1111/jedm.12070>

Kurz, A., Elliott, S. N., Kettler, R. J., & **Yel, N.** (2014). Assessing students' opportunity to learn the intended curriculum using an online teacher log: Initial validity evidence. *Educational Assessment*, 19(3), 159–184. doi:<http://doi.org/10.1080/10627197.2014.934606>.

**MANUSCRIPT  
IN PREP.**

Wilkins-Yel, K. G., **Yel, N.**, \*Zounlome, N. O. O., \*Schuyler, S., & \*Briseño, J., (Forthcoming). *Examining the Impact of Minority Status Stress, Advisor Alliance, and Belonging on STEM Persistence Among Graduate Women of Color*.

Wilkins-Yel, K. G., **Yel, N.**, \*Zounlome, N. O. O., \*Schuyler, S., \*Briseño, J., & Lewis, J. (Forthcoming). *The STEM Gendered Racial Microaggression Scale: Scale Development and Psychometric Properties*.

**Yel, N.**, Xu, Y., & Levy, R. Dimensionality assessment for multidimensional item response models accommodating polytomous and missing data.

**Yel, N.** Exploratory Factor Analysis of Academic Self-Efficacy Scale: Shortened Turkish Version.

**Yel, N.**, Levy, R., Lu, Y., & Schulte, A. C.. *Assessing school level performance with differing data points in cohorts*.

**EVALUATION  
REPORTS**

**Yel, N.**, Sugimoto, T. & Ruddy, A. M. (2017). New Jersey Charter School Fiscal Analysis. Center for Evaluation and Education Policy at Indiana University Bloomington

Sugimoto, T., **Yel, N.** & Ruddy, A. M. (2017). New Jersey Charter School Analysis. Center for Evaluation and Education Policy at Indiana University Bloomington

**TECHNICAL  
REPORTS (N =  
5)**

Schulte, A. C., Nese, J. F. T., Stevens, J. J., **Yel, N.**, Tindall, G., Anderson, D., & Elliott, S. N. (2018). A Comparison of Alternative Models for Estimating School Performance in Mathematics and Reading/Language Arts in Four State Accountability Systems: North Carolina Results.  
[http://www.ncaase.com/docs/NC\\_TechReport\\_NCAASE\\_2018.pdf](http://www.ncaase.com/docs/NC_TechReport_NCAASE_2018.pdf)

Schulte, A. C., Nese, J. F. T., Stevens, J. J., **Yel, N.**, Tindall, G., Anderson, D., & Elliott, S. N. (2018). A Comparison of Alternative Models for Estimating School Performance in Mathematics and Reading/Language Arts in Four State Accountability Systems: Arizona Results.  
[http://www.ncaase.com/docs/AZ\\_TechReport\\_NCAASE\\_2018.pdf](http://www.ncaase.com/docs/AZ_TechReport_NCAASE_2018.pdf)

Nese, J. F. T., Stevens, J. J., Schulte, A. C., Tindall, G., **Yel, N.**, Anderson, D., Matta, T., & Elliott, S. N. (2018). A Comparison of Alternative Models for Estimating School Performance in Mathematics and Reading/Language Arts in Four State Accountability Systems: Pennsylvania Results.  
[http://www.ncaase.com/docs/PA\\_TechReport\\_NCAASE\\_2018.pdf](http://www.ncaase.com/docs/PA_TechReport_NCAASE_2018.pdf)

Stevens, J. J., Nese, J. F. T., Schulte, A. C., Tindall, G., **Yel, N.**, Anderson, D., Matta, T., & Elliott, S. N. (2018). A Comparison of Alternative Models for Estimating School Performance in Mathematics and Reading/Language Arts in Four State Accountability Systems: Oregon Results.  
[http://www.ncaase.com/docs/OR\\_TechReport\\_NCAASE\\_2018.pdf](http://www.ncaase.com/docs/OR_TechReport_NCAASE_2018.pdf)

Stevens, J. J., Nese, J. F. T., Schulte, A. C., Tindall, G., **Yel, N.**, Anderson, D., Matta, T., & Elliott, S. N. (2016). A Comparison of Alternative Models for Estimating School Performance in Mathematics and Reading/Language Arts in a State Accountability System, Part A School Performance Estimates.  
[http://www.ncaase.com/docs/ModelComparisonsTechReport\\_Part\\_A.pdf](http://www.ncaase.com/docs/ModelComparisonsTechReport_Part_A.pdf)

**RESEARCH  
BRIEF**

Elliott, S. N., Kurz, A., Tindall, G., Stevens, J., & **Yel, N.** (2018). Mathematics Achievement Gaps for Elementary and Secondary Students: The Influence of Opportunity to Learn and Special Education Status.

**BOOK  
CHAPTER**

Quintanilla, V. D., Hugenberg, K., Hagan, M. D., Gonzales, A. & **Yel, N.** (2022) Digital Inequities and Access to Justice: Dialing into Zoom Court Unrepresented. In D. Engstrom (Editor), *Legal Tech and Future of Civil Justice* In Press.

Behrens, J. T., DiCerbo, K. E., **Yel, N.**, & Levy, R. (2012). Exploratory data analysis. In I. B. Weiner, J. A. Schinka, & W. F. Velicer (Eds.), *Handbook of Psychology, Research Methods in Psychology* 2nd ed., Vol.2, pp.34–70. Hoboken, New Jersey: Wiley. doi: 10.1002/9781118133880.hop202002.

**CONFERENCE  
PRESENTATION  
(N = 23)**

Farra, A.Ψ, Swanson, S. E.Ψ, Anantharaman, A.Ψ, Wilkins-Yel, K. G., Bekki, J. M., **Yel, N.**, Randall, A. K., & Bernstein, B. (August, 2022). *Examining How Belonging, Support, and Advisor Alliance Affect STEM Persistence and Mental Health among International Doctoral Women in STEM*. Poster presented at the annual meeting of the American Psychological Association, Minneapolis, MN.

Anantharaman, A.Ψ, Swanson, S. E.Ψ, Farra, A.Ψ, Wilkins-Yel, K. G., Bekki, J. M., **Yel, N.**, Randall, A. K., & Bernstein, B. (August, 2022). *Centering the Margins: Examining how Gendered Racism affects Graduate Women of Color's Mental Health and STEM Persistence Intentions*. Poster presented at the annual meeting of the American Psychological Association, Minneapolis, MN.

Spence, C. M., Acar, S., Blasco, P., Rooks-Ellis, D., Brown, K., Childress, D., Floyd, K., Scholtes, R., Dye, K., Griffin, R., & **Yel, N.** (April, 2021). *Substance-Exposed Infants and their Families: Early Interventionists' Knowledge and Practices*. Poster presentation at the Conference on Research Innovations in Early Intervention, San Diego, CA..

Freiburger, E.Ψ, Quintanilla, V. D., Hugenberg, K., Erman, S., Walton, G., **Yel, N.**, Kim, A., & Murphy, M. (2021, October). *The impact of the COVID-19 pandemic on first-generation women test-takers: Magnifying adversities, stress, and consequences for bar exam performance*. Poster presentation at the Graduate Research Symposium, Bloomington, IN..

Jones, C.Ψ, **Yel, N.**, & Murphy, M.C. (April, 2021). *Gender Segregation in STEM Classes Cues Identity Threat Among Women*. Poster presentation at the annual meeting of Midwestern Psychological Association.

Williams, H. E.Ψ, Quintanilla, V. D., Erman, S., Walton, G. M., **Yel, N.**, Dehrone, T. A.Ψ, Bodamer, E., Brady, S. T., Green, D. J., Carter, E. R., & Murphy, M.C. (March, 2021). *A situated-stress mindset intervention improves bar passage rates among people of color and first-generation college students*. Presentation at the Society of American Law Teachers

Jones, C.Ψ, **Yel, N.**, & Murphy, M.C. (February, 2021). *Gender Segregation as a Cue to Identity Threat for Women in STEM Classes*. Poster presentation at the annual meeting of the Society for Personality and Social Psychology.

Quintanilla, V. D., Erman, S., **Yel, N.**, & Frisby, M.Ψ (January, 2021). *Disrupted Gatekeeping: An Empirical Look at How Gatekeeping Influences Access to Legal Education and the Legal Profession & How This Decision-Making Has Been Impacted By COVID-19*. Paper presentation at the annual meeting of the Association of American Law Schools, San Francisco, CA.

Wilkins-Yel, K. G., **Yel, N.**, Zounlome, N. O. O.Ψ, Lees, O. J.Ψ, Barutcu-Yildirim, F. & Reed, A.. (August, 2018). *The STEM Gender-Racial Microaggression Scale: Development, Validation, and Reliability*. Poster presented at the annual meeting of the American Psychological Association, San Francisco, CA.

**Yel, N.**, Levy, R., Elliott, S. N., Schulte, A. C., & Iida, M. (April, 2018). *Determining appropriate sample sizes and their effects on key parameters in longitudinal three-level models*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

Prime, D., Bernstein, B. B., Wilkins, K. G., Bekki, J. M., & **Yel, N.** (August, 2015). *A Model of barriers to persistence for women in STEM programs and careers*. Poster presented at the annual meeting of the American Psychological Association Conference, Toronto, Canada.

**Yel, N.**, Levy, R., Liu, Y., & Schulte, A. C. (April, 2015). *Assessing school level performance with differing data points in cohorts*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

**Yel, N.** (April, 2015). *Comparison of IRTPRO, Mplus, and WinBUGS: Bayesian item parameter recovery*. Poster presented at the annual meeting of the National Council of Measurement in Education, Chicago, IL.

Reichenberg, R., **Yel, N.**, & Kurz, A. (April, 2015). *Setting Opportunity-to-Learn standards for effective teaching: Relative importance of assessing time, content, and quality*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Liu, Y., Levy, R., **Yel, N.**, & Schulte, A. C. (April, 2015). *Evaluating schools with respect to growth of students in subpopulations*. Poster presented at the annual meeting of the National Council of Measurement in Education, Chicago, IL.

Elliott, S. N., Kurz, A., Tindall, G., Stevens, J. J., & **Yel, N.** (April, 2015). *Year 2: Opportunity to learn and students with disabilities' mathematical achievement*. Paper presented at the annual meeting of the National Council of Measurement in Education, Chicago, IL.

Kemer, G. & **Yel, N.** (June, 2014). *Expert supervisors' thoughts: commonalities on priorities*. Paper presented at the Tenth International Interdisciplinary Conference on Clinical Supervision, Garden City, NY.

**Yel, N.** (April, 2014). *Automation of any graphical user interface (GUI) software for simulation studies*. Poster presented at the annual meeting of the National Council of Measurement in Education, Philadelphia, PA.

Elliott, S. N., Kurz, A., Tindall, G., & Yel, N. (April, 2014). *Year 1: Opportunity to learn and students with disabilities' Mathematical achievement*. Paper presented at the annual meeting of the National Council of Measurement in Education, Philadelphia, PA.

Green, S. B., Lai, K., Levy, R., Xu, Y., Yel, N., Thompson, M. S., Eggum-Wilkens, N. D., Kunze, K. L., Iida, M., Reichenberg, R., & Zhang, L. (April, 2014). *Assessing model similarity in structural equation modeling*. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.

Yel, N., Xu, Y., & Levy, R. (April, 2013). *Dimensionality assessment for multidimensional item response models accommodating polytomous and missing data*. Paper presented for the annual meeting of the National Council of Measurement in Education, San Francisco, CA.

Barragan, B., Restrepo, M. A., Yel, N., Gray, S., & Gorin, J. S. (June, 2013). *Spanish sentence repetition task for screening LI in bilingual Spanish-English speaking children*. Poster presented at the annual meeting of the Symposium on Research in Child Language Disorders, Madison, WI.

Turkan, S. & Yel, N. (January, 2007). *Attitudes of undergraduates studying at Texas Tech University towards their non-native English-Speaking university professors or teaching assistants*. Poster presented for the annual meeting of the Hawaii International Conference on Arts & Humanities, Honolulu, HI.

**INVITED PRESENTATIONS** Yel, N. (October, 2018). *Power Analysis Using R*. Presented at Social Psychology Graduate Seminar, Indiana University, Bloomington, IN.

Yel, N. (March, 2018). *Introduction to R for Social Psychologist*. Presented at Murphy Graduate Lab, Indiana University, Bloomington, IN.

Yel, N. (March, 2013). *Using IRTPRO 2.1 in simulation studies*. Presented at the Quantitative Brownbag Series of Measurement and Statistical Analysis program, Arizona State University, Tempe, AZ.

Yel, N. (May, 2012). *Handling missing data with SPSS: A short introduction*. Presented for Research and Development Team at Arizona Department of Education, Phoenix, AZ.

Yel, N. (August, 2011). *Introduction and applications of Item Response Theory*. Presented for the Center for the Study of Religion and Conflict Research Team at Arizona State University, Tempe, AZ.

**DOCTORAL COMMITTEES - CURRENT**

Madison W. Natarajan, Member of Doctoral Dissertation Committee  
Chia Po Cheng, Member of Doctoral Dissertation Committee

**DOCTORAL COMMITTEES - GRADUATED**

Rachel Chickerella, Ph.D.  
Lindsey White, Ph.D.

May 2022  
August 2022

<b>GRANTS &amp; FELLOWSHIPS</b>	<b>Institute of Education Sciences (IES)</b>	2021 to 2026
	Role: Co-PI	
	Project Title: Project PRIME2: Planning Realistic Intervention implementation and Maintenance by Educators	
	Amount: \$3,769,253 ( <i>Funded</i> )	
	<b>US Department of Education</b>	2021 to 2022
	Role: Project Evaluator	
	Project Title: Project Teachers Learning with Counselors	
	Amount: \$1,215,363 ( <i>Funded</i> )	
	<b>Laura and John Arnold Foundation</b>	2018 to 2019
	Role: Methodologist and Faculty Statistician	
Project Title: Randomized Controlled Trials to Evaluate Social Programs Whose Delivery Will Be Funded by Government or Other Entities: Invited Application to assess the Impacts of the Educational Liaison Model in Youth Foster Care		
Amount: \$498,908 ( <i>Funded</i> )		
<b>Michael and Susan Dell Foundation</b>	2018 to 2019	
Role: Methodologist and Faculty Statistician		
Project Title: INSITE: Indiana Student Information to Empower (Develop an Ed-Fi Powered Statewide District Data Collaborative)		
Amount: \$200,000 ( <i>Funded</i> )		
<b>New Jersey Education Association</b>	2016 to 2017	
Role: Co-PI		
Project Title: New Jersey Charter School Fiscal Analysis		
Amount: \$35,132 ( <i>Funded</i> )		
<b>Goodwill Industries of Central Indiana</b>	2016 to 2017	
Role: PI		
Project Title: An assessment of the effectiveness of the Excel Center		
Amount: \$7,616 ( <i>Funded</i> )		
<b>Institute of Education Sciences (IES): Special Education Research</b>	2017	
Role: Co-PI		
Project Title: Malleable School Factors That Predict Improved Reading Achievement for 4th Grade Students with Emotional Disturbance: Lessons from The National Assessment of Educational Progress (NAEP)		
Amount: \$597,790 ( <i>Unfunded</i> )		
<b>Institute of Education Sciences (IES): Science Education Research</b>	2017	
Role: Methodologist and Faculty Statistician		
Project Title: Center for the Study of Elementary Science Education		
Amount: \$5,000,000 ( <i>Unfunded</i> )		
<b>Institute of Education Sciences (IES): Education Research</b>	2017	
Role: Methodologist and Faculty Statistician		
Project Title: Educational Liaisons: How a Specialized Role within Court Appointed Special Advocates Supports Highly Mobile Students to Achieve Academic Success		
Amount: \$1,385,387 ( <i>Unfunded</i> )		



**One8 Foundation** 2017  
 Role: Methodologist and Faculty Statistician  
 Project Title: Project Lead the Way Impact Evaluation  
 Amount: \$499,305 (*Unfunded*)

**Institute of Education Sciences (IES): Early Phase Education Innovation and Research Program** 2017  
 Role: Methodologist and Faculty Statistician  
 Project Title: Redesigning the Pipeline – Kankakee & South Cook County College & Career Initiative  
 Amount: \$400,000 (*Unfunded*)

**Graduate Research Grant, GPSA** 2012, 2015  
 Amount: \$2,295 (*Funded*)

**Travel Grant, Graduate College at Arizona State University** 2015  
 Amount: \$350 (*Funded*)

**Travel Grant, Graduate & Professional Student Association** 2012,2013, 2014, 2015  
 Amount: \$3,800 (*Funded*)

**Travel Grant, Source: Mary Lou Fulton Teachers College** 2012, 2013, 2014,2015  
 Amount: \$1,800 (*Funded*)

**University Grant Fellowship, MLFTC** 2013  
 Amount: \$2,500 (*Funded*)

**TECHNICAL SKILLS**

**Statistical Analysis Software:** R, SAS, SQL, SPSS, Latent Gold, Mplus, EQS, WinBUGS, BiLOG-MG,PARSCALE, IRTPRO, WINSTEPS, Python  
**Other Programming:** Python, Visual Basic Macro for Microsoft Excel, Excel Macro, L<sup>A</sup>T<sub>E</sub>X  
**Visualisation Software:** Tableau, PowerBI, ggplot2  
**Scripts:** JavaScript  
**Currently Learning:** Stata  
**Application Software:** Adobe Creative Suite  
**Online Teaching Tools:** Canvas, Blackboard, and WebCT

**GRADUATE  
LEVEL  
STATISTICS  
AND  
MODELING  
COURSEWORK**

List of selected graduate level statistics courses that I have taken during my doctoral training:

- Test and Scale Construction, Dr. Joanna Gorin
- Missing Data Analysis, Dr. Craig Enders
- Applied Sampling Methods, Dr. Sharon Lohr
- Psychometric Methods, Dr. Roger Millsap
- Mediation Analysis, Dr. David Mackinnon
- Multilevel Modeling, Dr. Craig Enders
- Large Scale Assessment, Dr. Stephen Elliott
- Longitudinal Growth Modeling, Dr. Craig Enders
- Introduction to Item Response Theory, Dr. Joanna Gorin
- Bayesian Analysis in the Social Sciences, Dr. Roy Levy
- Latent Class Modeling, Dr. Christian Geiser
- Categorical Data Analysis, Dr. Jeffrey R. Wilson
- Structural Equation Modeling, Dr. Marilyn Thompson and Dr. Stephen West
- Advanced Regression and Statistical Graphics, Dr. Stephen West
- Analysis of Multivariate Data, Dr. Leona Aiken
- Multivariate Procedures in Data Analysis, Dr. Samuel Green
- Multiple Regression and Correlation Methods, Dr. Roy Levy
- Analysis of Variance Methods, Dr. Samuel Green
- Regression Models-Multi-Level & Non-Normal Data, Dr. Masumi Iida
- Social Networks Analysis, Dr. Dawn DeLay
- Analyses of Small Group Data, Dr. Masumi Iida
- Power Analysis and Sample Size, Dr. Keke Lai
- Structural Equation Modeling - Longitudinal Data, Dr. Natalie Wilkens-Eggum

**TRAINING &  
WORKSHOPS  
ATTENDED**

List of selected training and workshops that I have attended to complement my quantitative training:

**An Introduction to Multiple Imputation for Educational Research** by Craig Enders, University of California - Los Angeles. AERA Professional Development Course. Toronto, Canada. April 4, 2019.

**An Introduction to Multiple Imputation for Educational Research** by Craig Enders, University of California - Los Angeles. AERA Professional Development Course. Toronto, Canada. April 4, 2019.

**Analyzing Intensive Longitudinal Data: A Guide to Diary, Experience Sampling, and Ecological Momentary Assessment Methods** by Niall Bolger, Columbia University and Jean-Philippe Laurenceau, University of Delaware. ICPSR Summer Program in Quantitative Methods of Social Research. Amherst, MA. June 25 - June 29, 2018.

**National Assessment of Educational Progress (NAEP) Training Workshop** by Institute of Education Sciences (IES) and American Institutes for Research. Washington, DC. June 18 - June 20, 2018.

**Hierarchical Linear Modeling with Large-Scale International Databases** by David C. Miller, American Institutes for Research; Francis Howard Lim Huang, University of Missouri; Sakiko Ikoma, American Institutes for Research; Sabine Meinck, IEA Data Processing and Research Center; Bitnara Jasmine Park, American Institutes for Research; Austin Lasseter, Summit Consulting LLC; Yuan Zhang, University of Pittsburgh. Annual Meeting of the American Educational Research Organization. San Antonio, TX. April 27, 2017.

**Accessing and Exploring National Center for Education Statistics (NCES) Data** by Stephen Quin Cornman, U.S. Department of Education; Emmanuel Sikali, U.S. Department of Education; Andrew A. White, National Center for Education Statistics; Gigi Jones, U.S. Department of Education; Douglas E. Gevert, U.S. Census Bureau; Sarah Kathryn Grady, National Center for Education Statistics; Stephanie R. Miller, National Center for Education Statistics. Annual Meeting of the American Educational Research Organization. San Antonio, TX. April 29, 2017.

**Using NAEP Data on the Web for Educational Policy Research** by Debra Kline, Educational Testing Service; Edward M. Kulick, Educational Testing Service; Emmanuel Sikali, U.S. Department of Education. Annual Meeting of the American Educational Research Organization. San Antonio, TX. April 28, 2017.

**Data rich, Information Poor: Navigating Data Use in a Balanced Assessment System** by Caroline Wylie, ETS; Christine Lyon, ETS. Annual Meeting of the National Council on Measurement in Education. San Antonio, TX. April 26, 2017.

**Vertical Scaling Methodologies, Applications and Research** by Ye Tong, Pearson; Michael Kolen, University of Iowa. Annual Meeting of the National Council on Measurement in Education. San Antonio, TX. April 26, 2017.

**Exploratory Data Mining** by George A. Marcoulides, University of California, Santa Barbara; Gitta Lubke, University of Notre Dame and Kevin J. Grimm, Arizona State University. American Psychological Association Advanced Training Institute. Tempe, AZ. June 5-10, 2016.

**Using IRT for Standard Setting in Performance Based Assessments** by Boaz Shulruf and Phil Jones, University of New South Wales. Annual Meeting of the National Council on Measurement in Education. Chicago, IL. April 16, 2015.

**flexMIRT®: Flexible Multilevel Multidimensional Item analysis and test scoring** by Li Chai, University of California Los Angeles and Carrie Houts, Vector Psychometric Group, LLC. Annual Meeting of the National Council on Measurement in Education. Chicago, IL. April 15, 2015.

**Multidimensional Item Response Theory: Theory and Applications using BMIRT, LinkMIRT, and SimuMIRT Software** by Lihua Yao, Defense Manpower Data Center, Mark Reckase, Michigan State University. Annual Meeting of the National Council on Measurement in Education. San Francisco, CA. April 26, 2013.

**Using Visual Displays to Inform Assessment Design and Development** by Brett P. Foley, Alpine Testing Solutions; Chad W. Buckendahl, Alpine Testing Solutions. Annual Meeting of the National Council on Measurement in Education. San Francisco, CA. April 27, 2013.

**An Introduction to the Measurement and Analysis of Video Game Interaction Data** by Greg Chung, UCLA. Rebecca Buchang, UCLA. Deirdre Kerr, UCLA. Danny Parks, UCLA. Annual Meeting of the National Council on Measurement in Education. San Francisco, CA. April 27, 2013.

**Introduction to Social Network Analysis for Educational Researchers** by Brian V. Carolan, Montclair State University Alan J. Daly, University of California, San Diego Nienke Moolenaar, University of California, San Diego and University of Twente, the Netherlands. Annual Meeting of the American Educational Research Organization. San Francisco, CA. April 27, 2013.

**Introduction to Meta-Analysis** by Joshua R. Polanin, Loyola University Chicago; David C. Ensminger, Loyola University Chicago; Therese D. Pigott, Loyola University Chicago. Annual Meeting of the American Educational Research Organization. San Francisco, CA. April 28, 2013.

**Cognitive Diagnosis Modeling: A General Framework Approach** by Jimmy de la Torre, Rutgers, The State University of New Jersey; Chia-Yi Chiu, Rutgers, The State University of New Jersey; Jinsong Chen, Rutgers, The State University of New Jersey. Annual Meeting of the National Council on Measurement in Education. Vancouver, BC, Canada. April 12, 2012.

**Application of Evidence-Centered Design (ECD) in Large-Scale Assessment** by Kristen Huff, Regents Research Fund; Maureen Ewing, The College Board; Amy Hendrickson, The College Board; Pamela Kaliski, The College Board; Sheryl Packman, Consultant. Annual Meeting of the National Council on Measurement in Education. Vancouver, BC, Canada. April 12, 2012.

**Using the International Databases From Large-Scale Education Studies for Secondary Analysis** by Plamen Vladkov Mirazchiyski, IEA Data Processing and Research Center; Daniel H. Caro, IEA Data Processing and Research Center. Annual Meeting of the American Educational Research Organization. Vancouver, BC, Canada. April 14, 2012

**Propensity Score Matching Using R** by Haiyan Bai, University of Central Florida; Wei Pan, University of Cincinnati; Ning Rui, Research for Better Schools. Annual Meeting of the American Educational Research Organization. Vancouver, BC, Canada. April 15, 2012.

**Bayesian Networks in Educational Assessment** by Duanli Yan, Educational Testing Service; Robert J. Mislevy, Educational Testing Service; Russell G. Almond, Florida State University; David M. Williamson, Educational Testing Service. Annual Meeting of the National Council on Measurement in Education. New Orleans, LA. April 8, 2011.

**Bayesian Analysis of Item Response Models: Theory and Methods** by Yanyan Sheng, Southern Illinois University, Carbondale; Sun-Joo Cho, Vanderbilt University. Annual Meeting of the National Council on Measurement in Education. New Orleans, LA. April 7, 2011.

**A Practitioner's Introduction to Linking and Equating** by Joseph Ryan, PhD, Professor Emeritus, Arizona State University. Annual Meeting of the Arizona Educational Research Organization. November 3rd, 2010.

**POSITIONS  
HELD**

**Principal Research Statistician,  
Company: Data Analysis & Statistical Solutions**

Oct 2019 – Current

Help clients with the following aspects of their projects:

- Data management
- Statistical analysis
- Study design and planning
- Teaching and Training

**Researcher/Lecturer, University of Massachusetts Boston, Sep 2019 – Aug 2022**

Unit: Counseling and School Psychology

I taught the following courses:

- Research Methods & Evaluation in Psychology
- Intermediate Statistics
- Advanced Statistics

**Senior Statistician (Remote), Indiana University,**

Sep 2017 – May 2022

Unit: Psychology and Brain Sciences

Lab: Mind and Identity in Context Lab

Supervisor: Dr. Mary Murphy

I provide statistical, methodological, and data support for the following projects:

- Designing Mindset Interventions that Promote Achievement in Bar Exam Preparation and Performance
- CAREER: Creating Equitable STEM Environments: A Multi-Method Contextual Approach to Mitigating Social Identity Threat Among Women in STEM
- A Multi-Method Investigation of the Situational Cues and Contexts Inhibiting Women in STEM Settings
- Rethinking School Discipline: A Randomized Social Psychological Intervention to Decrease Adverse Disciplinary Outcomes

Software Used: R, SPSS, Tableau, Mplus, HLM, IRTPRO

**Research Scientist, Indiana University,**

Aug 2016 – Jun 2018

Unit: Center for Evaluation and Education Policy (CEEP)

Supervisor: Dr. John Hitchcock

Projects: I provided statistical, methodological, and data support for the following projects:

- Comprehensive Evaluation of the Fulbright Distinguished Awards in Teaching Program
- New Jersey Charter School Evaluation
- New Jersey Charter School Fiscal Analysis

Software Used: IRTPRO, R, SPSS, SAS, WINSTEPS, Tableau, Mplus, HLM

**Graduate Research Associate,** Aug 2012 – Aug 2016  
Supervisors: Drs. Steve Elliott, Ann Schulte, and Roy Levy  
Project: National Center on Assessment & Accountability for Special Education

- Responsibilities includes data analysis, data management, data cleaning, maintaining large-scale longitudinal data from North Carolina and Oregon. Datasets included de-identified raw data for every students from grade 3-8 for the years between 2007 and 2012. I am actively using Mplus, HLM, SPSS, SAS and R for the purposes listed.

**Courtesy Research Associate,** Sep 2013 – Aug 2016  
Behavioral Research and Teaching Program, University of Oregon  
Project: National Center on Assessment and Accountability for Special Education

- Responsibilities included conducting statistical analysis such as longitudinal growth modeling and multilevel modeling.

**Statistical Consultant,** May 2015 – Aug 2015  
Supervisor: Bianca L. Bernstein, Ph.D.  
Project: CareerWISE, Arizona State University, Tempe, AZ

- Responsibilities included leading the research team during the statistical analysis part of the project. Conducted exploratory data analysis, exploratory and confirmatory factor analysis, as well as structural equation modeling and lead the discussions.

**Courtesy Research Associate,** Sep 2012 – Aug 2014  
North Carolina State University  
Project: National Center on Assessment and Accountability for Special Education

- Responsibilities included conducting statistical analysis such as longitudinal growth modeling and multilevel modeling.

**Research Collaboration,** Aug 2012 – Jan 2013  
State of Black Arizona, Arizona State University, Tempe, AZ  
Supervisor: Kimberly A. Scott, Ph.D., Executive Director  
Project: Diversifying STEM Education & Workforce Participation

- Responsibilities included preparing and analyzing large-scale data sets for statistical analysis. Used exploratory data analysis and linear models for data analysis.

**Graduate Research Assistant,** May 2012 – Aug 2012  
Arizona State University, Tempe, AZ  
Supervisor: Dr. Joanna Gorin  
Project: Spanish Screener for Language Impairment in Children

- Responsibilities included helping develop the Spanish screener for easy administration children who are at risk of language impairment. Modeled item response data using both classical true-score theory and Item response theory. Conducted data analysis (SEM, measurement invariance, response operating curves).

**Graduate Research Associate,** Aug 2010 – Jun 2012  
Arizona State University, Tempe, AZ  
Supervisor: Dr. Roy Levy  
Project: Generalized Dimensionality Assessment for Multidimensional Psychometric Models

- Conducted literature review on multidimensional item response theory models (MIRT) (discrepancy measures, parameter estimations, MCMC in IRT, missing data handling).
- Analyzed NAEP data using PARSCALE and WinBUGS.
- Compared Multidimensional IRT software packages to use in a simulation study.
- Wrote code in R and ran simulations using R and Mplus.

**Graduate Research Assistant,** May 2011 – Aug 2011  
Arizona State University, Tempe, AZ  
Supervisor: Dr. Joanna Gorin  
Project: Examining New Measures of Reading Comprehension for K-12 Students

- Responsibilities included data collection using eye-trackers, and analysis of the data. Additionally, created instructions for using the eye tracker equipment..

**Graduate Research Assistant,** Feb 2010 – Aug 2010  
Arizona State University, Vice President Office for Educational Partnership  
Supervisor: Dr. Dali Ozturk

- Conducted literature reviews on evaluation research. Analyzed, manipulated, and interpreted collected data. Created reports and managed databases related to the participant school level and student-level data. Developed Visual Basic macros to automate mundane tasks in Microsoft Excel.

## CERTIFICATES

- **R Programmer** (Link) 2018  
– I have been using R since 2010 but decided to get the certificate very recently.
- **Data Scientist** (Link) 2016
- **Tableau Essential Training** (Link) 2016

## TEACHING EXPERIENCE

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**Instructor,** University of Massachusetts, Boston, MA Sep 2019 – Current

- **Research and Evaluation in Psychology** (Master students)
- **Intermediate Statistics** (Doctoral students)
- **Advanced Statistics,** (Doctoral students)

**Instructor,** Arizona State University, Tempe, AZ Sep 2007 – May 2010

**Academic Success,** Instructor of record  
Supervisor: Mary Dawes, Ph.D.  
Student Level: Freshman undeclared major

- Helped students develop academic success skills. Taught topics such as effective reading, note-taking, and use campus resources.

**Major and Career Exploration**, Instructor of record

Supervisor: Mary Dawes, Ph.D.

Student Level: Freshman undeclared major

- Used Kuder career assessment to help students explore potential majors. Administered MBTI Personality Assessment. Most of my students declared their major at the end of the course.

**Fundamentals of Technical Communication**, Instructor of record

Supervisor: Barry Maid, PhD

Student Level: Seniors

- Taught basic information design principles for producing effective technical communication, including rhetorical and audience analysis, as well as common workplace genres.

**General Principles of Multimedia Writing**, Instructor of record

Supervisor: Barry Maid, Ph.D.

Student Level: Juniors

- Taught foundational concepts and technologies of writing for a variety of digital media such as websites and video production tools.

**Instructor**, Canyon Rose Academy, Tucson, AZ

Jan 2007 – Aug 2007

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**Mathematics**

Supervisor: Katherine Kinghorn

Student Level: High school students (9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> graders)

- Taught mathematics at-risk high school students using a computer-based, individualized curriculum. Designed, implemented, and created activities to stimulate student learning.

**Science**

Supervisor: Katherine Kinghorn

Student Level: High school students (9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> graders)

- Taught Earth/Space and Physical Science to at-risk high school students using a computer-based, individualized curriculum. Designed, implemented, and created activities to stimulate student learning.

**Instructor**, Bogazici University, Istanbul, Turkey

Jun 2006 – Aug 2006

Jun 2005 – Aug 2005

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**Planning and Evaluation of Instruction**. Instructor of record

Student Level: Sophomore

- Taught conceptual analysis of the principles of instructional planning, curriculum development methodologies, and strategies of learning-teaching processes. Helped students develop instructional designs related to their subject matter areas.

**Science, Society and Technology Course**. Instructor of record

Student Level: Junior

- Taught information explosion, advancement of technology, economics of knowledge, and their educational reflections.



**Essentials of College Rhetoric**, Online Instructor

Supervisor: Miles Kimball, Ph.D.

Student Level: Freshman

- Taught rhetorical elements of reader, writer, text, and place emphasis on writing as communication with self and others. Taught students how to interact with other students in order to understand and negotiate the elements of effective writing; and develop fluency and effectiveness in their own writing.

**Advanced College Rhetoric**, Online Instructor

Supervisor: Miles Kimball, Ph.D.

Student Level: Freshman

- Taught students how to identify, describe, and analyze the rhetorical situation in different genres. Guided students to develop and adapt invention strategies to discover and evaluate questions, working hypotheses, and theses. Assigned homework to extract, critically interpret, and synthesize information from sources for the purpose of writing.

**Introduction to Technical Writing**, Instructor of record

Supervisor: Miles Kimball, Ph.D.

Student Level: Sophomore

- Helped students develop the writing ability required in their profession such as reports and letters for business, industry, and technology-related fields.

**Instructor**, Yuzyl Isil High School, Istanbul, Turkey

Sep 2003 – Aug 2004

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**Laboratory Teacher and Assistant**,

Supervisor: Sibel Almas

Student Level: High school students (9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> graders)

- Created, prepared and implemented lesson plans for science courses. Maintained laboratory equipment, supervised student activities, and provided safe laboratory facilities for the performance of tasks taught in physical processes, life and living beings, matter and change and science process skills.

**INTERNSHIP**

**Research & Evaluation Intern**,

Jan 2012 – May 2012

Arizona Department of Education, Phoenix, AZ

Supervisors: Dr. Rebecca Bolnick, Director of Research

Dr. Carrie Giovannone, Deputy Associate Superintendent

- Helped to adapt Arizona School Accountability System to the Federal Accountability System.
- Helped design and implementation of the Statewide School Satisfaction Survey.
- Helped staff members with data analysis questions.
- Rewrote an SPSS syntax to be used in R.

**HONORS &  
AWARDS**

Winner of Cover Graphic Competition

for the *Educational Measurement: Issues and Practice (EM:IP)*.

Apr 2014

	Scholar of Excellence Award, Global Technology & Development Arizona State University, Tempe, AZ	Apr 2007
	Dean's Special Award, College of Education, Bogazici University, Istanbul, Turkey For outstanding contributions to the Student body at College of Education.	Jun 2003
<b>SERVICE &amp; LEADERSHIP</b>	<b>Proposal Reviewer</b> , National Council on Measurement in Education Conference	2012 – 2018
	<b>Proposal Reviewer</b> , Graduate and Professional Students Association, Arizona State University	2012 – 2016
	<b>Director of Graduate Research</b> , Graduate & Professional Student Association, Arizona State University	Jul 2014 – Jun 2015
	<ul style="list-style-type: none"> <li>• Managing Research Grants and Award Programs <ul style="list-style-type: none"> <li>– Graduate Student Research Support Program.</li> <li>– JumpStart Research Program.</li> <li>– Athletics Research Grant.</li> <li>– Teaching Excellence Awards.</li> <li>– Built and managed volunteer database.</li> <li>– Trained grant reviewers.</li> <li>– Modeling and analyzing reviewer responses to different proposals to improve the accountability of the grant programs.</li> </ul> </li> </ul>	
	<b>Assembly Member</b> , Arizona State University Mary Lou Fulton Teacher's College Student Representative at the Graduate and Professional Student Association.	2013 – 2014
	<b>Conference Organization Committee Member</b> , National Council on Measurement in Education	2012
	<b>Committee Member</b> , Global Technology and Development Online Master's Degree Creation Focus Group	2012
	<b>Video Team Coordinator</b> , Council for Programs in Technical and Scientific Communication Conference Texas Tech University Lubbock, Texas	2006
	<b>Web designer</b> , Texas Tech University Turkish Student Association	2004 – 2006
	<b>Elected President</b> , Education and Research Club Bogazici University, Istanbul, Turkey	2001 – 2003
<b>Elections Coordinator</b> , Faculty of Education, Students Representative Bogazici University, Istanbul, Turkey	2003	
<b>Student Representative</b> , Faculty of Education, Bogazici University Secondary School Science & Math Education	2000 – 2002	

**PROFESSIONAL AFFILIATIONS** **American Educational Research Association (AERA)**, Washington, DC  
Member 2010 – Present  
**National Council on Measurement in Education (NCME)**,  
Member 2010 – Present  
**American Statistical Association (ASA)**, Alexandria, VA  
Student member 2012 – 2016  
**American Psychological Association (APA)**, Washington, DC  
Student member 2013 – 2014

**LANGUAGES** English and Turkish

**INTERESTS** Digital photography, programming, swimming, hiking, basketball, and soccer.