

## Comprehensive Curriculum Vita

W. Holmes Finch  
George and Frances Ball Distinguished Professor of Educational Psychology  
Department of Educational Psychology  
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Faculty Affiliate  
Learning and Performance Research Center  
Washington State University  
College of Education

Faculty Affiliate  
Fisher Institute of Health and Well-Being  
Ball State University  
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### Education

Ph.D. Educational Psychology and Research, University of South Carolina, 2002

Major area: Statistics and measurement

Dissertation: Comparison of the performance of NOHARM and conditional covariance methods of dimensionality assessment: Type I, power and item dimension clustering

M.Ed. Educational Research, University of South Carolina, 1990

Major area: Statistics and measurement

B.A. History (Magna cum laude), University of South Carolina, 1987

### Professional experience:

August, 2014-Present, George and Frances Ball Distinguished Professor of Educational Psychology, Department of Educational Psychology, Ball State University.

November, 2018-Present, Faculty Research Affiliate, Fisher Institute of Health and Well-Being, Ball State University.

August, 2010-2014, Professor, Department of Educational Psychology, Ball State University – Teach courses in statistics, measurement and research methodology.

August, 2008-2010, Associate Professor, Department of Educational Psychology, Ball State University – Teach courses in statistics, measurement and research methodology.

August, 2003-2008, Assistant Professor, Department of Educational Psychology, Ball State University – Teach courses in statistics, measurement and research methodology.

September, 2002-August, 2003, Statistician, Early Alliance Project, Department of Psychology, USC – Provided statistical analysis services to principal investigators and graduate assistants working on the Early Alliance Project.

June, 2002-September, 2002, Consultant, Arcadia Analytics – Conducted statistical analyses of product sales data using time series analysis, including standard ARIMA models, as well as nonparametric models.

August, 1990-June, 2002, Manager, Statistical Laboratory, Department of Statistics, USC - Provided statistical consulting services within the university and, under contract, to state agencies and local industries.

September, 1989-August, 1990, Research Analyst in the South Carolina State Department of Education - Designed studies to evaluate programs created by the Education Improvement Act, conducted secondary analysis of statistical data and standardized test scores associated with these programs, wrote reports of these studies.

### **Professional Affiliations**

American Educational Research Association (1999-present)

Educational Statisticians SIG of AERA (1999-present)

Structural Equation Modeling SIG of AERA (2004-present)

Multiple Linear Regression SIG of AERA (2006-present)

Hierarchical Linear Modeling SIG of AERA (2008-present)

National Council of Measurement in Education (2000-present)

Psychometric Society (2001-present)

American Statistical Association (1995-present)

Institute of Mathematical Statistics (2004-present)

Affiliate, Purdue University Psychometric Investigation Laboratory (2005-present)

American Psychological Association, Division 5 (2004-present)

Midwestern Psychological Association (2006-present)

Indiana Academy of Science (2005-present)

### **Professional Recognition & Awards**

Outstanding Service Award from the Structural Equation Modeling Special Interest Group of the American Educational Research Association (2019).

Outstanding Research Award, Teachers' College, Ball State University (2016).

Best paper of the year award (2013), International Studies Special Interest Group, American Educational Research Association. “Student, School, and Country: The Relationship of Socioeconomic Status and Inequality to Achievement”, with Gregory Marchant.

The Outstanding Faculty Research award, Ball State University (2012)

Most downloaded manuscript by SAGE publications in 2009-2010. “Item Parameter Estimation for the MIRT Model: Bias and Precision of Confirmatory Factor Analysis--Based Models” published in *Applied Psychological Measurement*.

Recipient of the American Psychological Association, Division 5 Anne Anastasi Early Career Award (2009).

Outstanding Junior Faculty Award, Ball State University (2007).

Outstanding Teaching Award, Teachers’ College, Ball State University (2007).

Staff member of the Year Award, College of Science and Mathematics, University of South Carolina (2001).

## **Publications**

### **Books**

Finch, W.H., Hernández Finch, M.E., & Hazelwood, A. (under contract). *Applied Single Subjects Research for School Psychologists and Educators*.

Finch, W.H. (under contract). *Exploratory Factor Analysis*. Thousand Oaks, CA: Sage.

Finch, W.H., Holden, J.E., & Kelley, K. (2019). *Multilevel modeling using R, 2<sup>nd</sup> edition*. Boca Raton, FL: CRC Press.

Finch, W.H. & French, B.F. (2018). *Educational and Psychological Measurement*. New York, NY: Routledge. Expected publication.

Finch, W.H. & Bolin, J.E. (January, 2017). *Multilevel modeling using Mplus*. Boca Raton, FL: CRC Press.

Finch, W.H., French, B.F. & Immekus, J. (June, 2016). *Applied psychometrics using SPSS*. Greenwich, CT: Information Age Publishing. Expected publication, 2016.

Finch, W.H., & French, B.F. (June, 2015). *Latent variable models in R*. New York, NY: Routledge.

Finch, W.H., Holden, J.E., & Kelley, K. (June, 2014). *Multilevel modeling using R*. Boca Raton, FL: CRC Press.

Finch, W.H., French, B.F. & Immekus, J. (July, 2014). *Applied psychometrics using SAS*. Greenwich, CT: Information Age Publishing. Expected publication, 2014.

### **Publications in refereed journals**

#### **In Press**

French, B.F., Finch, W.H., & Immekus, J.C. (in press). Multilevel Generalized Mantel-Haenszel For Differential Item Functioning Detection. *Frontiers in Quantitative*

- Psychology.
- Finch, W.H. (in press). Estimation of Nonlinear Structural Equation Models with Dichotomous Indicator Variables: A Monte Carlo Comparison of Methods. *International Journal of Quantitative Research in Education*.
- Finch, W.H. & Hernández Finch, M.E. (in press). Modeling of Self-Report Behavior Data using the Generalized Covariates in a Uniform and Shifted Binomial Mixture Model: An Empirical Example and Monte Carlo Simulation. *Psychological Methods*.
- Finch, W.H. & Miller, J.E. (in press). The Use of Informative Priors in the Estimation of MIMIC Model Parameters with Small Sample Sizes. *Structural Equation Modeling*.
- Finch, W.H. & French, B.F. (in press). Equivalence Testing for Factor Invariance Assessment with Categorical Indicators. *New Developments in Quantitative Psychology*.
- Imboden, M.T., Harber, M.P., Whaley, M.H., Finch, W.H., Bishop, D.A., Fleenor, B.S., & Kaminsky, L.A. (in press). The Influence of Change in Cardiorespiratory Fitness with Short-Term Exercise Training on Mortality Risk from the Ball State Adult Fitness Longitudinal Lifestyle Study. *Mayo Clinic Proceedings*.

#### **Year 2019**

- Imboden, M.T., Harber, M.P., Whaley, M.H., Finch, W.H., Bishop, D.L., Fleenor, B.S., & Kaminsky, L.A. (2019). The Association Between the Change in Directly Measured Cardiorespiratory Fitness across Time and Mortality Risk. *Progress in Cardiovascular Disease, 62*(2), 157-162.
- Finch, W.H. & French, B.F. (2019). A Comparison of Estimation Techniques for IRT Models with Small Samples. *Applied Measurement in Education, 32*(2), 77-96.
- Finch, W.H., French, B.F., & Hernández Finch, M.E. (2019). Quantifying Item Invariance for the Selection of the Least Biased Assessment. *Journal of Applied Measurement, 20*(1), 13-26.
- Finch, W.H. (2019). Comparison of Measurement Invariance Testing using Penalized Likelihood and Maximum Likelihood Estimators: A Monte Carlo Simulation Study. *General Linear Model Journal, 44*(2), 20-33.
- Finch, W.H. (2019). A Monte Carlo Simulation Study Assessing the Performance of a Bayesian Approach for Identifying Differences in Change Point Location for Two Time Series. *Journal of Statistical and Econometric Methods, 8*(3), 49-63.

#### **Year 2018**

- Finch, W.H., Hernández Finch, M.E., French, B.F., McIntosh, D.E., & Moss, L. (2018). Methods for the Comparison of Differential Item Functioning Across Assessments. *Journal of Applied Measurement, 19*(1), 26-40.
- Finch, W.H., Hernández Finch, M.E., McIntosh, C.E., & Braun, C. (2018). The use of Topic Modeling with Latent Dirichlet Analysis with Open-Ended Survey Items. *Translational Issues in Psychology, 4*(4), 403-424.
- Bolin, J.E., Finch, W.H., & Stenger, R. (2018). Estimation of Random Coefficient Multilevel Models in the Context of Small Numbers of Level-2 Clusters. *Educational and Psychological Measurement, 79*(2), 217-248.
- Mucherah, W., Finch, H., White, T., & Thomas, K. (2018). The Relationship of

- School Climate, Teacher Defending and Friends on Students' Perceptions of Bullying in High School. *Journal of Adolescence*, 62, 128-139.
- Finch, W.H. (2018). Modeling High Dimensional Multilevel Data using the LASSO Estimator: A Simulation Study. *Journal of Statistical and Econometric Modeling*, 7(1), 51-75.
- Kelly, E., Imboden, M.T., Harber, M.P., Finch, H., Kaminsky, L.A., & Whaley, M.H. (2018). Cardiorespiratory Fitness is Inversely Associated with Clustering of Metabolic Syndrome Risk Factors: The Ball State Adult Fitness Program Longitudinal Lifestyle Study. *Mayo Clinic Proceedings: Innovations, Quality & Outcomes*, 2(2), 155-164.
- Finch, W.H. & Hernández Finch, M.E. (2018). A Simulation Study Evaluating the Generalized Additive Model for Assessing Intervention Effects with Small Samples. *Journal of Experimental Education*, 86(4), 652-670.
- Gries, K., Raue, U., Perkins, R., Lavin, K., Overstreet, B., D'Aquisto, L., Graham, B., Finch, H., Kaminsky, L., Trappe, T., & Trappe, S. (2018). Cardiovascular and Skeletal Muscle Health with Lifelong Exercise. *Journal of Applied Physiology*, 125, 1636-1645.
- Imboden, M.T., Harber, M.P., Whaley, M.H., Finch, W.H., Bishop, D.L., & Kaminsky, L.A. (2018). Cardiorespiratory Fitness Measured from Cardiopulmonary Exercise Testing for Predicting Mortality in Healthy Men and Women. *Journal of the American College of Cardiology*, 72(19), 2283-92.
- Finch, W.H. & French, B.F. (in press). A Simulation Investigation of the Performance of Invariance Assessment using Equivalence Testing Procedures. *Structural Equation Modeling*, 25(5), 673-686.
- Thomas, C., Cassidy, J.C. & Finch, W.H. (2018). Identifying Severity Standards on the Cognitive Test Anxiety Scale: Cutscore Determination Using Latent Class and Cluster Analysis. *Journal of Psychoeducational Assessment*, 36(5), 492-508.
- Finch, W.H., French, B.F., & Hernández Finch, M.E. (2018). Comparison of Methods for Factor Invariance Testing of a 1-Factor Model with Small Samples and Skewed Latent Traits. *Frontiers in Quantitative Psychology and Measurement*, 9.
- Edwards, J.E. & Finch, W.H. (2018). Recursive Partitioning Methods for Data Imputation in the Context of Item Response Theory: A Monte Carlo Simulation. *Psicologia*, 39, 88-117.
- Finch, W.H. & Shim, S. (2018). A Comparison of Methods for Estimating Relationships in the Change Between Two Time Points for Latent Variables. *Educational and Psychological Measurement*, 78(2), 232-252.
- Wang, L. & Finch, W.H. (in press). Motivation Variables Mediate the Relationship between Socioeconomic Status and Academic Achievement. *Psychology and Education: An Interdisciplinary Journal*, 55(1).
- Wang, L., Ester, D., & Finch, W.H. (in press). Spatial Abilities and Visual Memory among Education, Mathematics, and Music Majors. *Psychology and Education: An Interdisciplinary Journal*, 55(2).

**Year 2017**

- Callan, G., Finch, W.H., Marchant, G.E., & Flegge, L. (2017). Student and School SES, Gender, Strategy Use, and Achievement. *Psychology in the Schools, 54*(9), 1106-1122.
- Imboden, M., Harber, M., Finch, W.H., & Kaminsky, L. (2017). Reference standards for body fat measures using GE dual energy x-ray absorptiometry in Caucasian adults. *PLOS ONE, 12*(4).
- Imboden, M., Harber, M., Finch, W.H., & Kaminsky, L. (2017). Reference standards for lean mass measures using GE dual energy x-ray absorptiometry in Caucasian adults. *PLOS ONE, 12*(4), 1-13.
- Finch, W.H. (2017). Investigation of parameter Estimation Accuracy for Growth Curve Modeling with Categorical Indicators. *Methodology, 13*(3), 98-112.
- Finch, W.H. (2017). Structural Equation Modeling Recursive Partitioning Algorithms for Invariance Assessment. *International Journal of Quantitative Research in Education, 4*(1/2), 72-93.
- Finch, W.H. & Hernández Finch, M.E. (2017). Multivariate Regression with Small Samples: A Comparison of Estimation Methods. *General Linear Model Journal, 43*(1), 16-30.
- Ozemek, C., Whaley, M., Kaminski, L., & Finch, W.H. (2017). Maximal heart rate declines linearly with age independent of cardiorespiratory fitness levels. *European Journal of Sports Science, 1*-8.
- Finch, W.H. (2017). Multilevel Modeling in the Presence of Outliers: A Comparison of Robust Estimation Methods. *Psicologica, 38*, 57-92.

#### **Year 2016**

- Finch, W.H. & Hernandez Finch, M.E. (2016). Fitting Exploratory Factor Analysis Models with High Dimensional Psychological Data. *Journal of Data Science, 14*(3), 519-537.
- Callan, G., Marchant, G.J., Finch, W.H., & German, R.L. (2016). Metacognition, Strategies, Achievement, and Demographics: Relationships Across Countries. *Educational Sciences: Theory and Practice, 16*(5).
- Finch, W.H. & French, B.F. (2016). Quantifying the Influence of Partial Factorial Invariance on Mean Comparisons: Two Proposed Effect Sizes. *International Journal of Quantitative Research in Education, 3*(4), 292-313.
- Finch, W.H. (2016). Comparison of Multivariate Means across Groups with Ordinal Dependent Variables: A Monte Carlo Simulation Study. *Frontiers in Applied Mathematics and Statistics 2*(2).
- French, B. F., Finch, W. H., & Valdivia Vazquez, J. A. (2016). Predicting Differential Item functioning on Mathematics Items using multilevel SIBTEST. *Psychological Test and Assessment Modeling, 58*, 471-483.
- Finch, W.H. & Edwards, J.M. (2016). Rasch Model Parameter Estimation in the Presence of a Nonnormal Latent Trait using a Nonparametric Bayesian Approach. *Educational and Psychological Measurement, 74*(4), 662-684.
- Finch, W.H., Hernandez Finch, M.E., & Singh, M. (2016). Data Imputation Algorithms for Mixed Variable Types: An Application in Large Scale Educational Assessment. *International Journal of Quantitative Research in Education, 3*(3), 129-153.
- French, B.F. & Finch, W.H. (2016). Factorial Invariance Testing under Different Levels of Partial Loading Invariance within a Multiple Group Confirmatory

- Factor analysis Model. *Journal of Modern Applied Statistical Methods*, 15(1), 511-538.
- Davis, A.S., Finch, W.H., Nogin, R., Moss, L.E., Drapeau, C.W., & Moore, B. (2016). Predicting Verbal Fluency using Word Reading: Implications for Premorbid Functioning. *Applied Neuropsychology: Adult*.
- Finch, W.H. & Hernandez Finch, M.E. (2016). Regularization Methods for Fitting Linear Models with Small Sample Sizes: Fitting the Lasso Estimator using R. *Practical Assessment, Research & Evaluation*, 21(7), 1-13.
- Marchant, G.J. & Finch, W.H. (2016). Student, School, and Country: The Relationship of SES and Inequality to Achievement. *Journal of Global Research in Education and Social Sciences*, 6(4), 187-196.
- Ozemek, C., Whaley, M.H., Finch, W.H., & Kaminsky, L.A. (2016). High Cardiorespiratory Fitness Levels Slow the Decline in Peak Heart Rate with Age. *Medicine & Science in Sports & Exercise*, 48(1), 73-81.
- Finch, W.H. (2016). Detection of Differential Item Functioning for more than Two Groups: A Monte Carlo Comparison of Methods. *Applied Measurement in Education*, 29(1), 30-45.
- Finch, W.H. (2016). Missing Data and Multiple Imputation in the Context of Multivariate Analysis of Variance. *Journal of Experimental Education*, 84(2), 356-372.
- Finch, W.H., Hernandez Finch, M.E., & French, B.F. (2016). Recursive Partitioning to Identify Potential Causes of Differential Item Functioning in Cross-National Data. *International Journal of Testing*, 16(1), 21-53.
- Marchant, G.J. & Finch, W.H. (2016). Does a Rising Tide Lift all Boats? International Relative and Absolute SES and Achievement. *Journal of Global Research in Education and Social Science*, 7(3), 168-174.
- Finch, W.H. & Jeffers, H. (2016). A Q<sub>3</sub> Based Permutation Test for Assessing Local Independence. *Applied Psychological Measurement*, 40(2), 157-160.
- Finch, W.H., Cassady, J.C., & Jones, J. (2016). Investigation of the latent structure for the Learning and Study Strategies Inventory. *Journal of Psychoeducational Assessment*, 34(1), 73-84.
- Finch, W.H. (2016). Recursive Partitioning in the Presence of Multilevel Data. *General Linear Model Journal*, 41(2), 30-44.
- French, B.F., Finch, W.H., Randel, B., Hand, B., & Gotch, C. (2016). Measurement Invariance Techniques to Enhance Measurement Sensitivity. *International Journal of Quantitative Research in Education*, 3(1) 79-93.

### **Year 2015**

- Cassady, J.C. & Finch, W.H. (2015). Using Factor Mixture Modeling to Identify Dimensions of Cognitive Test Anxiety. *Learning and Individual Differences*, 41, 14-20.
- Finch, W.H. & French, B.F. (2015). Logistic Regression and Model Based Recursive Partitioning for Item Evaluation. *General Linear Model*, 41(1), 1-11.
- Boesek, J.J., Davis, A.S., Cassady, J.C., Finch, W.H., Gelder, B.C. (2015). Cognitive and Adaptive Skill Profile Differences in Children with Attention-Deficit/Hyperactivity Disorder with and without Comorbid Fetal Alcohol

- Spectrum Disorder. *Applied Neuropsychology-Child*, 4(4), 230-236.
- Hernandez Finch, M.E., Maughn, E., Finch, W.H., McIntosh, C., & Thomas, C. (2015). Enhancing Collaboration between School Nurses and School Psychologists when Providing a Continuum of Care for Children with Medical Needs. *Psychology in the Schools*, 52(7), 635-647.
- Davis, A.S., Williams, R.N., Gupta, A.S., Finch, W.H., & Randolph, C. (2015). Evaluating Neurocognitive Deficits in Patients with Multiple Sclerosis via a Brief Neuropsychological Approach. *Applied Neuropsychology: Adult*, 22(5), 381-387.
- Finch, W.H. & French, B.F. (2015). Modeling of Nonrecursive Structural Equation Models with Categorical Indicators. *Structural Equation Modeling*, 2(3), 416-428.
- Finch, W.H. (2015). Review of *Analyzing of Spatial Models of Choice and Judgment in R*. *Journal of Educational Measurement*, 52(2), 252-255.
- French, B.F. & French, W.H. (2015). Transforming SIBTEST to Account for Multilevel Data Structures. *Journal of Educational Measurement*, 52(2), 159-180.
- Finch, W.H. (2015). A Comparison of Statistics for Assessing Model Invariance in Latent Class Analysis. *Open Journal of Statistics*, 5, 191-210.
- Finch, W.H., Hernandez Finch, M.E., & Moss, L. (2015). Dimension Reduction Regression Techniques for High Dimensional Data. *Multiple Linear Regression Viewpoints*, 40(2), 1-15.
- Fletcher, K.L. & Finch, W.H. (2015). The Role of Book Familiarity and Book Type on Mothers' Reading Strategies and Toddlers' Responsiveness. *Journal of Early Child Literacy*, 15, 73-96.

#### **Year 2014**

- Shim, S. & Finch, W.H. (2014). Academic and Social Achievement Goals and Adjustment in Middle School: A Latent Class Approach. *Learning and Individual Differences*, 30, 98-105.
- Finch, W.H. & French, B.F. (2014). Multilevel Latent Class Analysis: Parametric and Nonparametric Models. *The Journal of Experimental Education*, 82(3), 307-333.
- Finch, W.H. (2014). Modeling nonlinear structural equation models: A comparison of the 2-stage Generalized Additive Model and the finite mixture structural equation model. *Structural Equation Modeling*.
- Finch, H. (2014). A Comparison of Methods for Prediction with High Dimensional Data. *Journal of Modern Applied Statistical Methods*, 13(2), 84-105.
- Bolin, J.E. & Finch, W.H. (2014). Supervised Classification in the Presence of Misclassified Training Data: A Monte Carlo Simulation Study in the Three Group Case. *Frontiers in Quantitative Psychology*, 5(118).
- Beaver, J.L., French, B.F., Finch, W.H., & Ullrich-French, S. (2014). Sex Differential Item Functioning in the Inventory of Early Development III Social-Emotional Skills. *Journal of Psychoeducational Assessment*, 32(8), 775-780.
- Cassady, J.C. & Finch, W.H. (2014). Confirming the Factor Structure of the Cognitive Test Anxiety Scale: Comparing the Utility of Three Solutions. *Educational Assessment Journal*, 19(3), 229-242.
- Mucherah, W., Ambrose-Stahl, D., Finch, W.H., & Smith, V. (2014). Exploring the



- Relationship between Classroom Climate, Reading Motivation, and Achievement: A Look into 7th Grade Classrooms. *International Journal of Learning, Teaching and Educational Research*, 8(1).
- Finch, W.H. (2014). Recursive partitioning methods for prediction in education: Application to the identification of students at-risk for academic failure. *International Journal of Quantitative Research in Education*, 2(2), 133-153.
- Finch, W.H. & Finch, M.H. (2014). Differential Item Functioning Analysis using a Multilevel Rasch Mixture Model: Investigating the impact of disability status and receipt of testing accommodations. *Journal of Applied Measurement*, 15(2), 133-151.
- Bolin, J.E., Edwards, J.M., Finch, W.H., & Cassady, J.C. (2014). Application of Cluster Analysis to the Creation of Perfectionism Profiles: A Comparison of Two Clustering Profiles. *Frontiers in Quantitative Psychology*, 5, 343-352.
- Finch, W.H., Davis, A., & Dean, R.S. (2014). Identification of Individuals with ADHD using the Dean-Woodcock Sensory Motor Battery and a Boosted Tree Algorithm. *Behavioral Research Methods*,
- Finch, W.H., Bolin, J.E., & Kelly, K. (2014). Group Membership Prediction when Known Groups Consist of Unknown Subgroups: A Monte Carlo Comparison of Methods. *Frontiers in Quantitative Psychology and Measurement*, 5, 1-12.
- Finch, W.H. & Cassady, J.C. (2014). Use of the probit model to estimate school performance in student attainment of achievement testing standards. *Educational Assessment, Evaluation, and Accountability*, 26(2), 177-201.
- Finch, W.H. & French, B.F. (2014). The impact of group pseudo-guessing parameter differences on the detection of uniform and nonuniform DIF. *Psychological Test and Assessment Modeling*, 56(1), 25-44.
- Ball, C.R., Finch, W.H., & Gettinger, M. (2014). Classroom level effects on the reading and behavior of at-risk Kindergartners. *Preventing School Failure*, 58(2), 80-89.
- Chang, M., Paulson, S., Finch, W.H., McIntosh, D.E., & Rothlisberg, B. (2014). Joint Confirmatory Factor Analysis of the Woodcock-Johnson tests of cognitive abilities –third edition, and the Stanford-Binet intelligence scales – fifth edition with a normative preschool population. *Psychology in the Schools*, 51(1), 32-57.

### **Year 2013**

- Finch, W.H. & French, B.F. (2013). A Monte Carlo Comparison of Robust MANOVA Test Statistics. *Journal of Modern Applied Statistical Methods*, 12(2), 4.
- French, B.F. & Finch, W.H. (2013). Extensions of Mantel-Haenszel for Multilevel DIF Detection. *Educational and Psychological Measurement*, 73, 648-671.
- Finch, W.H. & French, B.F. (2013). Bayesian modeling of differential item functioning: Type I error and power rates in the presence of nonnormal ability distributions, impact, and anchor set contamination. *International Journal of Quantitative Research in Education*, 1(4), 341-363..
- Finch, W.H. & Finch, M.H. (2013). Investigation of Specific Learning Disability and

- Testing Accommodations based Differential Item Functioning using a Multilevel Multidimensional Mixture Item Response Theory Model. *Educational and Psychological Measurement*, 73(6), 973 - 993.
- Finch, W.H. & Marchant, G.J. (2013). Application of multilevel latent class analysis to identify achievement and socio-economic typologies in the 20 wealthiest countries. *Journal of Educational and Developmental Psychology*, 3(1), 201-221.
- McConnell, J.M., Dixon, D.N., & Finch, W.H. (2013). An alternative model for self-Forgiveness. *Journal of Social & Psychological Sciences*, 5(2).

## **Year 2012**

- Finch, W.H. & French, B.F. (2012). Parameter estimation with Mixture Item Response Theory Models: A Monte Carlo comparison of Maximum Likelihood and Bayesian method. *Journal of Modern Applied Statistical Methods*, 11(1), 167-178.
- Finch, W.H. (2012). Distribution of variables by method of outlier detection. *Frontiers in Quantitative Psychology*, 3, 1-12.
- Finch, W.H. (2012). The MIMIC model as a tool for differential bundle functioning detection. *Applied Psychological Methods*, 36(1), 40-59.
- Finch, W.H., & French, B.F. (2012). A Comparison of Methods for Estimating Confidence Intervals for Omega Squared Effect Size. *Educational and Psychological Measurement*, 72(1), 68-77.
- Mucherah, W., Finch, W.H., & Keaikitse, S. (2012). Differential Bundle Functioning analysis of the Self Descriptive Questionnaire self concept scale for Kenyan female and male students using the MIMIC model. *International Journal of Testing*, 12, 78-99.
- Kilmann, P. R., Finch, H., Downer, J. T., & Parnell, M. M. (2012). Partner attachment and interpersonal characteristics. *Journal of Sex and Marital Therapy*, 38, 1-16.
- Finch, W.H. & French, B.F. (2012). The impact of factor noninvariance on observed composite score variances. *International Journal of Research and Reviews in Applied Sciences*, 1, 1-13.
- McConnell, J.M., Dixon, D.N., & Finch, W.H. (2012). An alternative model for self-forgiveness. *The New School Psychology Bulletin*, 9(2), 35-51.
- Higdon, N., Finch, W.H., Leib, D., & Dugan, E. (2012). Effects of 18 Holes of Simulated Golf on the Performance of Recreational Golfers. *Sports Biomechanics*, 1, 1-7.

## **Year 2011**

- Finch, W.H., Chang, M., Davis, A., Holden, J.E., Rothlisberg, B., & McIntosh, D.E. (2011). The prediction of intelligence in preschool children using alternative models to regression. *Behavioral Research Methods*, 43, 942-952.
- Finch, W.H., Chang, M., Davis, A.S. (2011). The Application of CART, Neural Networks and Generalized Additive Models: A Case Study. *Multivariate Regression Viewpoints*, 37(1).
- Aurah, C., Keaikitse, S., Isaacs, C. E., & Finch, W. H. (2011). The role of metacognition in problem solving among primary school students in Kenya. *Problems of Research in the Twenty First Century*, 30, 9-21.

- French, B. F., & Finch, W. H. (2011) Multi-Group confirmatory factor analysis: Parameter bias and non-invariant referents. *Soonchunhyang Journal of Humanities*, 29, 351-385.
- Finch, W.H. (2011). A comparison of factor rotation methods for dichotomous data. *Journal of Modern Applied Statistical Methods*, 10(2) , 549-570.
- French, B.F. & Finch, W.H. (2011). Model Misspecification and Invariance Testing Via Confirmatory Factor Analytic Procedures. *Journal of Experimental Education*, 79, 404-428. [One of top ten most cited articles for the Journal of Experimental Education between 2011-2015.]
- Finch, W.H. (2011). The use of Multiple Imputation for missing data in uniform DIF analysis: Power and Type I error rates. *Applied Measurement in Education*, 24, 281-301.
- Holden, J.E., Finch, W.H. & Kelley, K. (2011). A comparison of two-group classification methods. *Educational and Psychological Measurement*, 71(5), 870-901.
- Finch, W.H. (2011). The impact of missing data on the detection of nonuniform differential item functioning. *Educational and Psychological Measurement*, 71, 4, 663-683.
- Finch, W.H. & Pierson, E.E. (2011). A mixture IRT analysis of risky youth behavior. *Frontiers in Quantitative Psychology*, 2, 1-10..
- Kilmann, P.R., Finch, H., Carranza, L.V., & Parnell, M.M.(2011). Partner characteristics in distressed marriages.
- Davis, A.S., Pierson, E.E. & Finch, W.H. (2011). A Canonical Correlation Analysis of Intelligence and Executive Functioning. *Applied Neuropsychology*, 18, 61-68.
- Finch, W.H. & French, B.F. (2011). Estimation of MIMIC model parameters with multilevel data. *Structural Equation Modeling*, 18(2), 229.
- Finch, W.H. (2011). Multidimensional Item Response Theory Parameter Estimation with non-simple structure items. *Applied Psychological Measurement*, 35(1), 67-82.
- Finch, W.H. & Bronk, K.C. (2011). Conducting Confirmatory Latent Class Analysis using MPlus. *Structural Equation Modeling*, 18(1),132-151.
- Year 2010**
- Bronk, K. C., Finch, W. H., & Talib, T. (2010). Purpose in Life among High Ability Adolescents. *High Ability Studies*, 21(2), 133-145.
- French, B.F. & Finch, W.H. (2010). Hierarchical logistic regression: Accounting for multilevel data in DIF detection. *Journal of Educational Measurement*, 47(3), 299-317.
- Finch, W.H. & Holden, J.E. (2010). Prediction accuracy: A Monte Carlo comparison of several methods in the continuous variable case. *Multiple Linear Regression Viewpoints*, 26(2).
- Bell, R., Whittaker, Z., & Finch, W. (2010). Duration of pre-performance routines and outcomes of divers. *The Sport Journal*, 13, 4.
- Bell, R., Cox, K., & Finch, W. (2010). Pre-putt routines of collegiate golfers and putting outcomes. *Journal of Sport Behavior*, 33,239-257
- Cross, J.R., Cross, T.L. & Finch, W. H. (2010). Maximizing Student Potential

- Versus Building Community: An Exploration of Right-Wing Authoritarianism, Social Dominance Orientation, and Preferred Practice Among Supporters of Gifted Education. *Roepers Review*, 32(4), 235-250.
- Finch, W.H. (2010). Imputation methods for missing categorical questionnaire data: A comparison of methods. *Journal of Data Science*, 8(3), 361-378.
- Mucherah, W. & Finch, W.H. (2010). The Structural Equivalence of the Self-concept Scale on High School Students in Kenya. *International Journal of Testing*, 10(2), 166-184.
- Finch, W.H. & French, B.F. (2010). Detecting Differential Item Functioning of a course satisfaction instrument in the presence of multilevel data. *Journal of the First Year and Students in Transition*, 22(1), 27-48.
- Finch, W.H. (2010). Using item response theory to understand gender differences in opinions on women in politics. *Chance*, 23(2), 19-24.
- Bronk, K.C. & Finch, W.H. (2010). Adolescent Characteristics by Type of Long-term Aim in Life. *Applied Developmental Science*, 14(1), 35-44.
- Finch, W.H. (2010). Item parameter estimation for the MIRT model: Bias and precision of Confirmatory factor analysis-based models. *Applied Psychological Measurement*, 34(1), 10-26.
- Finch, W.H., Davis, A.S., & Dean, R.S. (2010). Factor invariance assessment of the Dean Woodcock Sensory Motor Battery for patients with ADHD versus non-clinical subjects. *Educational and Psychological Measurement*, 70(1), 161-173.
- Finch, W.H. (2010). Identification of variables associated with group separation in Descriptive Discriminant Analysis: Comparison of methods for interpreting Structure Coefficients. *Journal of Experimental Education*, 78(1), 26-52.

### **Year 2009**

- Bronk, K.C., Hill, P.L., Lapsley, D.K., Talib, N. & Finch, W.H. (2009). The Relationship Among Purpose, Hope, and Life Satisfaction. *Journal of Positive Psychology*, 4(6), 500-510.
- Finch, W.H., Lapsley, D.K., & Baker-Boudissa, M.E. (2009). A Survival Analysis of Student Mobility and Retention in Indiana Charter Schools. *Educational Policy Analysis Archives*, 17(18), 1-15.
- Finch, W.H., Barton, K.E. & Meyer, J.P. (2009). Differential Item Functioning Analysis for accommodated versus Non-accommodated students. *Educational Assessment* 14(1), 38-56.
- Davis, A.S., Pass, L.A., Finch, W.H., & Dean, R.S. (2009). The canonical relationship between sensory-motor functioning and cognitive processing in children with Attention-Deficit/Hyperactivity Disorder. *Archives of Clinical Neuropsychology*, 24, 273-286.
- Finch, W.H. & Davenport, T.L. (2009). Comparison of parametric and exact test MANOVA in the presence of small samples and violations of assumptions. *Methodology*, 5(2), 60-70.

### **Year 2008**

- Finch, W.H. & French, B.F. (2008). Comparing factor loadings in exploratory factor analysis: A new randomization test. *Journal of Modern Applied Statistical*

- Methods*, 7(2), 376-384.
- Finch, W.H. & French, B.F. (2008). Using Exploratory Factor Analysis for Locating Invariant Referents in Factor Invariance Studies. *Journal of Modern and Applied Statistical Methods*, 7(1), 223-233.
- Finch, W.H. & Laking, T. (2008). Evaluation of the use of standardized weights for interpreting results from a descriptive discriminant analysis. *Multiple Linear Regression Viewpoints*, 34(1), 19-34.
- Fletcher, K.L., Cross, J.R., Tanney, A.L., Schneider, M., & Finch, W.H. (2008). Predicting language development in children at-risk: The effects of quality and frequency of caregiver reading. *Early Education and Development*, 19(1), 89-111.
- Finch, W.H. & French, B.F. (2008). Anomalous Type I error rates for identifying one type of DIF in the presence of the other. *Educational and Psychological Measurement*, 68(5), 742-759.
- Finch, W.H. (2008). Estimation of Item Response Theory Parameters Values in the Presence of Missing Data. *Journal of Educational Measurement*, 45, 225-246.
- Finch, H. & Monahan, P. (2008). A Bootstrap Generalization of Modified Parallel Analysis for IRT Dimensionality Assessment. *Applied Measurement in Education*, 21, 119-140.
- French, B.F. & Finch, W.H. (2008). Multi-group confirmatory factor analysis: Locating the invariant referent. *Structural Equation Modeling*, 15(1), 96-113.
- Finch, W.H., Stage, K.A. & Monahan, P. (2008). Comparison of Factor Simplicity Indices for Dichotomous Data: DETECT R, Bentler's Simplicity Index and the Loading Simplicity Index. *Applied Measurement in Education*, 21, 41-64.
- Bazett-Jones, D.M., Finch, W.H., and Dugan, E.L. (2008). Comparing the Effects of Different Whole-Body Vibration Intensities on Counter-Movement Jump Performance. *Journal of Sports Science and Medicine*, 7, 144-150.

### **Year 2007**

- Monahan, P., Stump, T., Finch, H., & Hambleton, R.K. (2007). Bias of exploratory and cross-validated DETECT index under unidimensionality. *Applied Psychological Measurement*, 31(6), 483-503.
- Lapsley, D.K., Finch, W.H. & Baker-Boudissa, M. (2007). A longitudinal assessment of academic achievement in Indiana charter elementary schools. *Charter School Review*, 1(2), 3-16.
- Finch, W.H. & French, B.F. (2007). Detection of crossing differential item functioning: A comparison of four methods. *Educational and Psychological Measurement*, 67(4), 565-582.
- Finch, H. & Habing, B. (2007). Performance of DIMTEST- and NOHARM- based statistics for testing unidimensionality. *Applied Psychological Measurement*, 31(4), 292-307.

- Finch, H. & Schneider, M.K. (2007). Classification Accuracy of Neural Networks vs. Discriminant Analysis, Logistic Regression and Classification and Regression Trees: Three and Five Groups cases. *Methodology*, 3(2), 47-57.
- Finch, W.H. (2007). Performance of the Roy-Bargmann Stepdown procedure as a follow up to a significant MANOVA. *Multiple Linear Regression Viewpoints*, 33(1), 12-22.
- Sanders, S., McIntosh, D.E., Dunham, M., Rothlisberg, B. & Finch, W.H. (2007). Joint confirmatory factor analysis of the Differential Ability Scales and the Woodcock-Johnson Tests of Cognitive Abilities-Third Edition. *Psychology in the Schools*, 44, 119-138.

### **Year 2006**

- Davis, A. S., Finch, W. H., Trinkle, J., & Dean, R. S. (2006). Classification and regression tree analysis of a neurologically impaired and normal sample using sensory-motor tasks. *International Journal of Neuroscience*, 117, 11-23.
- Davis, A. S., Finch, W. H., Dean, R. S., & Woodcock, R. W. (2006). Cortical and subcortical constructs of the Dean-Woodcock Sensory Motor Battery: A construct validity study. *International Journal of Neuroscience*, 116, 1-15.
- French, B.F. & Finch, W.H. (2006). Confirmatory Factor Analytic Procedures for the Determination of Measurement Invariance. *Structural Equation Modeling*, 13, 378-402.

- Speirs Neumeister, K. & Finch, H. (2006). Perfectionism in Gifted Students: Relational precursors and influences on achievement motivation. *Gifted Child Quarterly*, 50(3), 238-251.
- Finch, H. & Schneider, M.K. (2006). Misclassification rates for four methods of group classification: Impact of predictor distribution, covariance inequality, effect size, sample size and group. *Educational and Psychological Measurement*, 66(2), 240-257.
- Robertson, T.H. & Finch, W.H. (2006). Assessment of Large General Education Astronomy Classes using Student Evaluations. *Astronomy Education Review*, 4(2), 1-25.
- Finch, H. (2006). Comparison of the Performance of Varimax and Promax Rotations: Factor Structure Recovery for Dichotomous Items. *Journal of Educational Measurement*, 43(1), 39-52.

### **Year 2005**

- Habing, B., Finch, H. & Roberts, J. (2005). A Q3 Statistic for Unfolding Item Response Theory Models. *Applied Psychological Measurement*, 29(6), 457-471.
- Finch, H. (2005). The MIMIC model as a method for detecting DIF: Comparison with Mantel-Haenszel, SIBTEST and the IRT Likelihood Ratio. *Applied Psychological Measurement*, 29(4), 278-295.
- Finch, H. and Habing, B. (2005). Comparison of NOHARM and DETECT: Counting Dimensions and Allocating Items, *Journal of Educational Measurement*, 42(2), 149-170.

Finch, H. (2005). Comparison of the Performance of Nonparametric and Parametric MANOVA under Violations of the Assumptions of Normality and Homogeneity of Variance. *Methodology*, 1, 27-38.

Finch, H. (2005). Comparison of Distance Measures in Cluster Analysis with Dichotomous Data. *Journal of Data Science*, 3, 85-100.

#### **Year 2004**

Krivitski, E., McIntosh, D.E., Rothlisberg, B. and Finch, H. (2004). Profile Analysis of Deaf Children using the Universal Nonverbal Intelligence Test. *Journal of Psychoeducational Assessment*, 22, 338-350.

#### **Years 1999-2002**

Holmes, G.R., Wright, H., Yakano, Y., Galeazzi, A., Franceschina, E., Finch, H. & Brown, M., (2002). Comparison of Italian and American Early Adolescents' Responses to the Social Support Behavioral Inventory (SSBI). *Psicoterapia Cognitiva e Comportamentale*, 8(1).

Rhoades, D.R., McFarland, K. W. Finch, H. & Johnson, A.O. (2001). Speaking and Interruptions During Primary Care Office Visits. *Family Medicine*, 33(7), 528-532.

McFarland, K., Rhoades, D.R., Campbell, J. & Finch, H. (2001). Meaning of Illness and Health Outcomes in Type I Diabetes. *Endocrine Practice*, 7(4).

Harvey, A.L., Gerard, W.C., Rice, G.F. & Finch, H. (1999). Actual versus Perceived EMS Response Time. *Prehospital Emergency Care*, 3(1).

#### **Book chapters**

##### **Year 2016**

French, B.F. & Finch, W.H. (2016). Detecting Differential Item Functioning. In K. Schweizer and C. DiStefano, (Eds.). *Principles and Methods of Test Construction: Standards and Recent Advances*. Gottingen, Germany: Hogrefe Publishing.

##### **Year 2015**

Finch, W.H. (2015). A Comparison of Factor Rotation Methods for Dichotomous Data. In: Babones, S. (Ed.). *Latent Variables and Factor Analysis*. Thousand Oaks, CA: Sage Publications, pp. 549-570.

##### **Year 2014**

Finch, W.H. (2014). Measurement Invariance. In: Michalos AC (Ed.). *Encyclopedia of Quality of Life and Well-Being Research*. Springer, Dordrecht, Netherlands: Springer, pp 3909-3912.

##### **Year 2013**

Finch, W.H. (2013). Exploratory Factor Analysis. In T. Teo (Ed.), *Handbook of Quantitative Methods for Educational Research*. Rotterdam: Sense Publishers.

Finch, W.H. (2013). Measurement invariance. In A. C. Michalos (Ed.), *Encyclopedia of Quality of Life Research*. New York: Springer.

##### **Year 2011**

Finch, W.H. & French, B.F. (2011). Student Achievement and Adequate Yearly

Progress within the Indiana Charter School System. In J. Bovaird , & K. Geisinger, C. Buchendahl. *Assessment and psychometrics in the age of accountability*. Washington, DC: American Psychological Association.

#### **Year 2007**

- Finch, W.H. & Davis, A.S. (2007). Action research. In A.M. Bursztyrn (Ed.), *The Praeger Handbook of Special Education* (pp. 175-176). Westport, CT: Praeger.
- Finch, W.H. & Davis, A.S. (2007). Quantitative research. In A.M. Bursztyrn (Ed.), *The Praeger Handbook of Special Education* (pp. 184-186). Westport, CT: Praeger.

#### **Festschrift**

##### **Year 2007**

- Finch, H. & Jameson, M.M. (2007). Prior statistics coursework and student expectations of a graduate statistics class. In *Festschrift in honor of Mir Masoom Ali* (pp. 185-189). Muncie, IN: Ball State University.

#### **Test Reviews**

##### **Year 2010**

- Davis, A. S., & Finch, W. H. (2010). Review of Western Aphasia Battery-Revised. In K. F. Geisinger, R. A. Spies, J. F. Carlson, & K. F. Geisinger (Eds.), *The Eighteenth Mental measurements Yearbook* (713-715). Lincoln, NE: Buros Institute of Mental Measurements.
- Davis, A. S., & Finch, W. H. (2010). Review of Differential Ability Scales-Second Edition. In K. F. Geisinger, R. A. Spies, J. F. Carlson, & K. F. Geisinger (Eds.), *The Eighteenth Mental measurements Yearbook* (195-199). Lincoln, NE: Buros Institute of Mental Measurements.

##### **Year 2007**

- Davis, A. S., & Finch, W. H. (2007). Review of the BRIGANCE Diagnostic Inventory of Early Development--II. In K. F. Geisinger, R. A. Spies, J. F. Carlson, & B. S. Plake (Eds.), *17th Buros mental measurements yearbook* (pp. 157-161). Lincoln, NE: Buros Institute of Mental Measurements.
- Davis, A. S., & Finch, W. H. (2007). Review of The Rivermead Behavioural Memory Test—Extended Version. In K. F. Geisinger, R. A. Spies, J. F. Carlson, & B. S. Plake (Eds.), *17th Buros mental measurements yearbook* (pp. 722-725). Lincoln, NE: Buros Institute of Mental Measurements.

##### **Year 2005**

- Davis, A. S., & Finch, H. (2005). Review of Children's Color Trails Test. In B. S. Plake, J. C. Impara, & R. A. Spies (Eds.), *16th Buros Mental Measurement Yearbook*. Lincoln, NE: Buros Institute of Mental Measurements.
- Davis, A. S., & Finch, H. (2005). Review of Ruff Neurobehavioral Inventory. In B. S. Plake, J. C. Impara, & R. A. Spies (Eds.), *16th Buros Mental Measurement Yearbook*. Lincoln, NE: Buros Institute of Mental Measurements.



### **Nonrefereed publications**

- Marchant, G. & Finch, W.H. (2018). Beating the Odds: Trees to Success in Different Countries. ERIC Database.
- Finch, H. (2000). Client Perceived Pitfalls in Statistical Consulting: An Ethnographic Study. *The Statistical Consultant*, 18(1).
- Finch, H. (1999). Client Expectations in a University Statistical Consulting Lab, *The Statistical Consultant*, 16(3).

### **Training Presentations**

#### **Year 2016**

- Finch, W.H. & French, B.F. (2016). A Didactic Introduction to Latent Variable Modeling in R. Training Session at the annual meeting of the American Educational Research Association, Washington, D.C.

#### **Year 2015**

- French, B.F. & Finch, W.H. (2015). Latent Variable Modeling for Sports Psychologists. Training Session at the annual meeting of the Association for Sports Psychology, Portland, OR.
- French, B.F. & Finch, W.H. (2015). Introduction to Latent Variable Modeling. Training Session at the Universidad Autonoma De Madrid, Madrid, Spain.

### **Presentations at Professional Meetings**

#### **Year 2019**

- McIntosh, C., Brelage, P., Hernandez Finch, M.E., Thomas, C., Hulse, A., & Finch, W.H. (2019). Evaluating Self-Efficacy and Personality Differences of Nursing Students in ASD Clinical Simulations. Paper presented at the annual meeting of the National Association of School Nursing.
- Thomas, J. M., Rubenstein, L. D., Finch, W. H., Speirs Neumeister, K. L., & Hernández Finch, M. E. (2019, May). Creativity positively correlates with academic achievement but not academic growth. Paper accepted for the American Psychological Society (APS) Conference, Washington, D.C.
- Ballenger, E., Rubenstein, L. D., Finch, W. H., & Hernández-Finch, M. E. (2019, May). Using sentiment analysis to unlock the power of open-ended responses. Paper accepted for the American Psychological Society (APS) Conference, Washington, D.C.
- Finch, W.H., French, B.F., & Hernández Finch, M.E. (2019). Comparison of Multidimensional Models for Extreme Response Styles. Presentation at the annual meeting of the National Council for Measurement on Education. Toronto, CA, April.
- Smith, V.A., Hernández Finch, M.E., & Finch, W.H. (2019). Intersectional Examination of Teachers' Gifted Referral Decision Making for Diverse Students. Presentation at the meeting of the National Association of School Psychologists. Atlanta, GA, February.
- Finch, W.H., Hernández Finch, M.E., & Hazelwood, A. (2019). Applied Data Analysis for Single Subject Designs using Excel. Presentation at the meeting of the National Association of School Psychologists. Atlanta, GA, February.
- Ridgley, L. M., Rubenstein, L. D., & Finch, W. H. (2019). Better than apples to

- oranges: Using SIGS to directly compare student and teacher creativity perceptions. Toronto, CA, April.
- Mangino, A. A., Finch, W. H., Bolin, J. H., Pierson, E. E. (2019). Applied Supervised Classification of Highly Unequal Group Sizes in Suicide Data. Poster presented at American Psychological Association Annual Convention, Chicago, Illinois.
- Miller, J.E., Finch, W.H. & Ballenger, E. (2019, August) An examination of the impact of incorrect informative priors on parameter estimation for structural equation models. Poster presented at American Psychological Association Annual Convention, Chicago, Illinois.
- Finch, W.H. & Hernandez Finch, M.E. (2019). Modeling of Self-Report Behavior Data using the Generalized Covariates in a Uniform and Shifted Binomial Mixture Model. Poster presented at American Psychological Association Annual Convention, Chicago, Illinois.
- Moore, B.M., Davis, A.S., Finch, W.H., & Sander, J. (2019). Factor analysis of the MACI with a court-ordered adolescent sample. Paper presented at the annual meeting of American Association of Pediatric Neuropsychology, Las Vegas, NV, April.
- Moore, B.M., Davis, A.S., Sander, J., & Finch, W.H. (2019). The MMPI-A and MACI: Complimentary or Redundant Measures? Paper presented at the annual meeting of American Association of Pediatric Neuropsychology, Las Vegas, NV, April.
- Moore, B. M., Davis, A. S., Finch, W. H., & Sander, J. (2019). *Factor Analysis of the MMPI-A with a Court-Ordered Adolescent Sample*. Paper presented at the Annual Conference of the American Academy of Pediatric Neuropsychology.

### ***Year 2018***

- Mullins, C., Tonarelli, S., Finch, W.H., Davis, A.S., Sandoval, H., & Kaufman, N.K. (2018). History of Mild Traumatic Brain Injury Predicts Trying Substances in Clinical Youth Sample. Paper presented at MCA, May.
- Finch, W.H. & Edwards, J.E. (2018). Missing Data Imputation Methods for Multilevel Item Response Theory: A Monte Carlo Simulation Study. Paper presented at the annual meeting of the International Psychometric Society, New York, July.
- Finch, W.H. & French, B.F. (2018). An Equivalence Test for Assessing Factor Invariance with Categorical Indicator Variables. Paper presented at the annual meeting of the International Psychometric Society, New York, July.
- Finch, W.H. & Hernandez Finch, M.E. (2018). Modeling of Self-Report Behavior Data using the Generalized Covariates in a Uniform and Shifted Binomial Mixture Model. Paper presented at the Modern Modeling Methods Conference, Storrs, CT May.
- Finch, W.H., Hernandez Finch, M.E., Walls, J., & Hall, S. (2018). Using Text Mining to Identify Themes in Focus Group Data. Paper presented at the Modern Modeling Methods Conference, Storrs, CT May.
- Wang, L. & Finch, W.H. (2018). Motivation Variables Mediate the Relationship between Socioeconomic Status and Academic Achievement. Paper presented at the annual meeting of the Association of Psychological Science, May.

- Drapeau, C.W., Hernandez Finch, M.E., Finch, W.H., & Nadroff, M. (2018). Sleep Duration and Suicide Risk in Adolescents. Paper presented at the annual meeting of the National Association of School Psychology.
- Hulse, A. R., Hernández Finch, M. E., Finch, W. H., Deal, W. P., Young-Jones, A. D. (2018, February). Empathic vs educational training interventions on the ABS. Poster session to be presented at the National Association of School Psychologists Annual Convention, 2018, Chicago, Illinois.
- Hulse, A. R., Hernández Finch, M. E., Finch, W. H., Deal, W. P., Young-Jones, A. D. (2018, February). Impact of close relationships on beliefs about individuals with ASD. Poster session to be presented at the National Association of School Psychologists Annual Convention, 2018, Chicago, Illinois.
- Cintron, D., Montross-Moorehead, B., & Finch, W.H. (2018). Proof of Concept: Topic Modeling as a Method for Focusing an Evaluation Design. Paper to be presented at the annual meeting of the American Educational Research Association, New York, April.
- Mucherah, W., Finch, W.H., & White, T. (2018). The Effects of School Climate, Teacher Involvement, and Friends on Adolescents' Perceptions of Bullying in High School in Kenya. Paper presented at the annual meeting of the Society for Research of Adolescence, April, Minneapolis, MN.
- Elam, N. & Finch, W.H. (2018). Examining the Relationship Between Teacher Performance Ratings and District in Ohio. Annual meeting of the Midwestern Educational Research Association, Cincinnati, OH, October.

### *Year 2017*

- Finch, W.H., Hernandez Finch, M.E., & McIntosh, C. (2017). Using Text Mining to Characterize School Personnel Attitudes towards School Policy on Student Self-Injurious Behavior. Paper presented at the Modern Modeling Methods Conference, Storrs, CT, May.
- Finch, W.H., Marchant, G.J., & Hazleton, A. (2017). Use of Item Response Theory to Understand Congressional Voting Behavior. Paper presented at the Modern Modeling Methods Conference, Storrs, CT, May.
- Mucherah, W., Finch, W.H., White, T.A., Thomas, K.J., & Wilson, A. (2017). Exploring the Relationship Between School Climate and Bullying: A Look into Three Different High Schools in Kenya. Paper presented at the annual meeting of the Association of Psychological Science, Boston, MA, May.
- Shim, S. & Finch, W.H. (2017). Teacher Need Satisfaction and Frustration Predict Job Satisfaction and Flow Experience. Paper presented at the annual meeting of the American Psychological Association, August, Washington, D.C.
- Shim, S. & Finch, W.H. (2017). Home-School Dissonance Among College Students: An Insight From Regression Mixture Modeling. Paper presented at the annual meeting of the American Psychological Association, August, Washington, D.C.
- Callan, G., Marchant, G., Finch, W.H., & Flegge, L. (2017). How Strategies Relate to SES, Gender, and Achievement. Paper presented at the annual meeting of the National Association of School Psychologists, San Antonio, TX, February.

- Marchant, G. & Finch, W.H. (2017). Beating the Odds: Trees to Success in Different Countries. Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX, April.
- Finch, W.H. & Hernandez Finch, M.E. (2017). Multivariate Regression with Small Samples: A Comparison of Estimation Methods. Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX, April.
- French, W.H., Montesinos, M.D.H., & Finch, W.H. (2017). Differential Item Functioning Effect Size Use for Validity Information. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX, April.
- Finch, W.H., Edwards, J.M., French, B.F., & Strobl, C. (2017). Performance of Raschtree for Uniform DIF Detection with Continuous Covariates. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX, April.
- Moss, L.E., Davis, A.S., Finch, W.H., Hernandez Finch, M.E., Perrone-McGovern, K.M., & Holtgraves, T. (2017). The Impact of Culture and Language on Executive Functioning in Bilingual Adults: Implications for Pediatric. Poster presented at the Annual Conference of the American Academy of Pediatric Neuropsychology, Las Vegas, NV.

### ***Year 2016***

- The Aging Athlete: Cardiovascular Fitness with Exercise Intensity. Paper presented at the annual meeting of the American Physiological Association.
- The Aging Athlete: General Health and Exercise Profile. Paper presented at the annual meeting of the American Physiological Association.
- French, B.F., Finch, W.H., & Hernandez Finch, M.E. (2016). Comparison of GSCA and Maximum-Likelihood for Small Sample Invariance Assessment. Paper presented at the annual meeting of the Psychometric Society, Asheville, NC, July.
- Finch, W.H. & Shim, S. (2016). Estimating Relationships in Change for Latent Variables using Difference Factors. Paper presented at the annual meeting of the Psychometric Society, Asheville, NC, July.
- Rubenstein, L., Finch, W.H., Pierson, E., & Drapeau, C. (2016). Using the Person-Environment Fit Framework to Explore Academic Challenge. Paper presented at the annual meeting of the National Association for Gifted Children, Orlando, FL, November.
- Hitchcock, J.H., Newman, D., Walker, D., Smith, T., Finch, W.H., & Brooks, G. (2016). What if Null Hypothesis Significance Tests were Banned? An Interactive Discussion of Implications for General Linear Modeling. Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., April.
- Smith, V.A., Hernandez Finch, M.E., & Finch, W.H. (2016). Exploring the Relationship between Cognitive Abilities and Development of Reality Perceptions in Preschool Children. Paper presented at the annual meeting of the Association for Psychological Science, Chicago, IL, April.

- Hernandez Finch, M.E., Finch, W.H., McIntosh, D.E., Hall, J.D., Harris, N., & Glass, M.I. (2016). Relationships Between Executive Functioning and Personality in Adults with ASD. Paper presented at the annual meeting of the Association for Psychological Science, Chicago, IL, April.
- Trinkle, J., Davis, A.S., Finch, W.H., Gaither, G., Bernat, D.J., & Fillmore, M. (2016). Predicting High-Stakes State Test Results with CHC Factors. Poster presented at the Annual Conference of the American Academy of Pediatric Neuropsychology, Las Vegas, NV, April.
- Allen, R., Mion, A.M., Davis, A.S., Finch, W.H., Bowman, S., & Bernat, D.J. (2016). The Relationship between Executive Functioning, Intelligence, Stress, and Life Satisfaction. Poster presented at the Annual Conference of the American Academy of Pediatric Neuropsychology, Las Vegas, NV, April.
- Martynowicz, M., Cassady, J.C., & Finch, W.H. (2016). Curvilinear Relationships among Test Anxiety, Motivation, and Self-Regulation: Evidence for a Control Theory. Paper presented at the annual meeting of the Association for Psychological Science, Chicago, IL, April.
- Callan, G., Finch, W.H., & Marchant, G.J. (2016). Relationships Between Metacognitive Strategies and Academic Achievement: A Mixture Mediation Model. Paper presented at the annual meeting of the American Psychological Association, Denver, CO, August.
- Reed, A., Shim, S. & Finch, W.H. (2016). Changes in Classroom Environment and Student School Adjustment: Self-Determination Theory Perspective. Paper presented at the annual meeting of the American Psychological Association, Denver, CO, August.
- Thomas, C., Finch, W.H., & Cassady, J.C. (2016). Using Latent Class and Cluster Analysis to Determine Cutscores for the Cognitive Test Anxiety Scale-Revised. Paper presented at the annual meeting of the Association for Psychological Science, Chicago, IL, April.
- Hernandez Finch, M.E., McIntosh, D.E., Finch, W.H., Freeman Floyd, E., & Cowan, K.B. (2016). Relationship of Executive Functioning and Memory to Autism Symptomatology and Adaptive Functioning. Paper presented at the annual meeting of the American Psychological Association, Denver, CO, August.
- Hernandez Finch, M.E., McIntosh, C., Finch, W.H., Wilmoth, C.E., Matteson, S.D., & Satmare, G.S. (2016). School Support Personnel Roles, Collaboration, and Efficacy when Assisting Non-Suicidal Self-Injuries. Paper presented at the annual meeting of the American Psychological Association, Denver, CO, August.
- Drapeau, C.W., Pierson, E.E., Finch, W.H., & Davis, A.S. (2016). Comparing Two Models of Suicide Ideation: Psychological Pain and the Interpersonal-Psychological Theory of Suicidal Behavior. Paper presented at the annual meeting of the American Association of Suicidology, Chicago, IL, March.
- Finch, W.H. (2016). Comparison of Multivariate Means across Groups with Ordinal Dependent Variables: A Monte Carlo Simulation Study. Paper presented at the annual meeting of the American Psychological Association, Denver, CO, August.
- Finch, W.H., Callan, G., & Marchant, G.J. (2016). The Mediating Effects of Metacognitive and Learning Strategies on Relationships between SES and Achievement. Paper presented at the annual meeting of the Association for

- Psychological Science, Chicago, IL, April.
- Finch, W.H., Hernandez Finch, M.E., French, B.F., & McIntosh, D.E. (2016). Methods for the Comparison of DIF across Assessments. Paper presented at the Third International Conference of the Center for Culturally Responsive Evaluation and Assessment (CREA, Chicago, IL, April.
- Finch, W.H. (2016). Multilevel Modeling in the Presence of Outliers: A Comparison of Robust Estimation Methods. Paper presented at the annual meeting of the Association for Psychological Science, Chicago, IL, May.
- Finch, W.H. & French, B.F. (2016). A Comparison of Estimation Techniques for IRT Models with Small Samples. Paper presented at the annual meeting of the National Council for Measurement in Education, Washington, D.C.
- Rubenstein, L.M., Finch, W.H., Pierson, E.E., & Drapeau, C.W. (2016). Conditional Effects of Need for Cognition on College Students. Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C.
- Edwards, J.M. & Finch, W.H. (2016). Methods for DIF Detection based on Multivariate Outlier Detection. Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C.
- Hernandez Finch, M.E. & Finch, W.H. (2016). Ethnic Difference in the Impact of Special Education Placement on Academic Growth Trajectories. Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C.
- Finch, W.H. & Hernandez Finch, M.E. (2016). A Simulation Study Evaluating the Generalized Additive Model for Assessing Intervention Effects with Small Samples. Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C.
- Davis, A. S., Finch, W. H., Mion, A. M., Moore, B. M., Fogle, K. L., Miller, G. E., Pierson, E. E., & Cassady, J. (to be presented February, 2016). Exploring the Factor Structure of the PAI with the CTAR. Poster to be presented at the Annual Convention of the National Association of School Psychologists, New Orleans, Louisiana.

### ***Year 2015***

- Edwards, J.M. & Finch, W.H. (2015). Assessment of the Multivariate Outlier Approach for Differential Item Functioning Detection: A Monte Carlo Simulation Study. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL, April.
- Finch, W.H. & Edwards, J.M. (2015). Item Response Theory Parameter Estimation in the Presence of a Nonnormal Latent Trait. Paper presented at the annual meeting of the Association for Psychological Science, May, New York, NY.
- Finch, W.H., French, B.F., Hernandez Finch, M.E., & McIntosh, D.E. (2015). Fitting Exploratory Factor Analysis Models with High Dimensional Psychological Data. Paper presented at the annual meeting of the American Psychological Association, August, Toronto, ON, CA.
- Moore, B., Davis, A., Finch, H., Sander, J.B., & DeBoth, K. (2015). Boosted Tree Analysis Differentiating Conduct Disorder and ADHD Using the MMPI-A. Paper presented at the annual meeting of the American Psychological Association,

- August, Toronto, ON, CA.
- DeBoth, K., Davis, A., Finch, H., Sander, J.B., & Moore, B. (2015). Boosted Tree Analysis Differentiating Conduct Disorder and Attention Deficit Hyperactivity Disorder using the MACI. Paper presented at the annual meeting of the American Psychological Association, August, Toronto, ON, CA.
- Hernandez Finch, M.E., Cook, A., Finch, W.H., Rice, V., & Pierson, E.E. (2015). WPPSI-IV General Ability Index Criterion Validity for Preschool Gifted Screening. Paper presented at the annual meeting of the American Psychological Association, August, Toronto, ON, CA.
- Smith, V., Hernandez Finch, M.E., Finch, W.H., & Smith, V. (2015). Looking back: A meta-analytic review of gifted personality. Paper presented at the annual meeting of the American Psychological Association, August, Toronto, ON, CA.
- Edwards, J.E. & Finch, W.H. (2015). Comparison of Advanced Methods for Data Imputation in the Context of Item Response Theory: A Monte Carlo Study. Paper presented at the Modern Modeling Methods Conference, May, Storrs, CT.
- Finch, W.H., Hernandez Finch, M.E., & French, B.F. (2015). Methods for the Comparison of DIF Across Assessments. Paper presented at the Modern Modeling Methods Conference, May, Storrs, CT.
- Finch, W.H., Hernandez Finch, M.E., & Singh, M. (2015). Data Imputation Algorithms for Mixed Variable Types: An Application in Large Scale Educational Assessment. Paper presented at the annual meeting of the American Educational Research Association, April, Chicago, IL.
- Hernandez Finch, M.E., Drapeau, C., & Finch, W.H. (2015). Enhancing Pre-Service Educators Suicide Prevention Gatekeeper Training with Culturally Responsive Motivational Interviewing Foundational Skills. Paper presented at the annual meeting of the American Educational Research Association, April, Chicago, IL.
- Finch, W.H., French, B.F., & Hernandez Finch, M.E. (2015). Quantifying Item Invariance for the Selection of the Least Biased Assessment. Paper presented at the annual meeting of the American Educational Research Association, April, Chicago, IL.
- French, B.F. & Finch, W.H. (2015). Quantifying the Influence of Partial Factorial Invariance on Reliability: A Proposed Effect Size. Paper presented at the annual meeting of the American Educational Research Association, April, Chicago, IL.
- Finch, W.H. & French, B.F. (2015). Logistic Regression and Model Based Recursive Partitioning for Item Evaluation. Paper presented at the annual meeting of the American Educational Research Association, April, Chicago, IL.
- Hernandez Finch, M.E. & Finch, W.H. (2015). Using the New General Ability Index for Preschool Gifted Screening. Paper presented at the annual meeting of the American Educational Research Association, April, Chicago, IL.

***Year 2014***

- Ozemek, C., Whaley, M.H., Finch, W.H., & Kaminsky, L.A. (2014). Cardiorespiratory Fitness Affects the Rate of Decline of Maximal Heart Rate with Age. Paper presented at the annual meeting of the American Heart Association, November.
- Davis, A.S., Finch, W.H., Moore, B.M., Fogle, K.L., & Gelder, B. (2014). The Factor

- Structure of the WISC-IV for Children with FASD. Paper presented at the annual meeting of the American Academy of Pediatric Neuropsychology, Chicago, IL, September.
- Murach, K., Trappe, S., Raue, C.R., Minchev, K., & Finch, W.H. (2014). Number of Individual Muscle Fibers Suitable for Determining Fiber Type Distribution in Highly Trained Athletes. Presented at the American Council of Sports Medicine Conference on Integrative Physiology of Exercise, Miami Beach, FL, September.
- Finch, W.H. & French, B.F. (2014). Effect size estimator for invariance assessment in confirmatory factor analysis. Paper presented at the International Meeting of the Psychometric Society, Madison, WI, July.
- Jeffers, H.M., Finch, W.H., & French, B.F. (2014). The Raschtree approach for assessing uniform differential item functioning: A Monte Carlo Study. Paper presented at the International Meeting of the Psychometric Society, Madison, WI, July.
- Cassady, J.C., Finch, W.H., Heller, M.L., Blankenship, M.W., & Jones, J. (2014). Learning and motivation profiles that differentiate among “types” of test anxious learners. Poster presentation at Association of Psychological Science Annual Meeting, San Francisco, CA.
- Finch, W.H. & French, B.F. (2014). A Monte Carlo investigation into the performance of Structural Equation Modeling Trees. Paper presented at the Joint Statistical Meetings, Boston, MA, August.
- French, B. F., & Finch, W. H. (2014, April). *Quantifying the influence of partial factorial invariance on reliability: A proposed effect size*. Paper presented at the American Educational Research Association conference, Philadelphia, PA.
- Cassady, J.C., Heller, M.L., Finch, W.H., & Jones, J. (2014). Learning and Motivation Profiles that Differentiate Among Types of Test Anxious Learners. Presentation at the annual meeting of the Association for Psychological Science, San Francisco, May.
- Edwards, J.M., Finch, W.H., & Bolin, J.E. (2014). A Monte Carlo Comparison of Clustering Accuracy: A Comparison of Two Clustering Techniques. Presentation at the annual meeting of the Association for Psychological Science. San Francisco, May.
- Drapeau, C.W., Pierson, E.E., & Finch, W.H. (2014). Classifying Adolescent Suicide Attempters Using the Youth Risk Behavior Survey. Presentation at the 47th Annual Conference of the American Association of Suicidology, Los Angeles, CA, April.
- Davis, A. S., Finch, W. H., Miller, G., Williams, R. N., Gupta, A. J. & Randolph, C. (2014). Identification of multiple sclerosis via a boosted trees methodology. Presentation at the annual conference of the American Psychological Association, Washington, D.C., August.
- Sander, J.B, Bishop, J.A., Deboth, K., Klauser, B. & Finch, W.H, (2014). Adolescent Residential Treatment: Subgroups, Patterns of Cognitive Functioning, and Implications. Paper presented at the annual meeting of the American Psychological Association, Washington, D.C.
- Vazquez, J., French, B.F., & Finch, W.H. (2014). Predicting Differential Item functioning on Mathematics Items using multilevel SIBTEST. Paper presented at



- the annual meeting of the National Council on Measurement in Education, Philadelphia, PA, April.
- Sander, J.B., Bishop, J.A., Klausner, B., Grelle, J., Finch, W.H., & Peak, L. (2014). CHC Cognitive Profiles and Academic-Behavior Patterns in Juvenile Justice. Paper presented at the National meeting of the National Association of School Psychologists. Washington, D.C., February.
- Finch, W.H. (2014). Modeling Nonlinear Structural Equation Models: A comparison of the 2-stage Generalized Additive Model and the Finite Mixture Model. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA, April.
- Finch, W.H. & French, B.F. (2014). Measurement invariance assessment with a Bi-factor model. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA, April.
- French, B.F. & Finch, W.H. (2014). Crossing SIBTEST in a Multilevel Data Environment. Paper presented at the annual meeting of the National Council on Measurement in Education, Philadelphia, PA, April.
- Finch, W.H., Hernandez Finch, M.E., & French, B.F. (2014). Recursive Partitioning to Identify Potential Causes of Differential Item Functioning. Paper presented at the annual meeting of the National Council on Measurement in Education, Philadelphia, PA, April.
- Cappaert, K. & Finch, W.H. (2014). Simultaneous Uniform and Non-Uniform DBF Detection: A MIMIC Model Approach. Paper presented at the annual meeting of the National Council on Measurement in Education, Philadelphia, PA, April.
- Hernandez Finch, M.E., Singh, M., & Finch, W.H. (2014). Relationship between Hernandez Finch, M.E., Singh, M., Finch, W.H. (2014). Self-Efficacy, Motivation, and Choosing College, Moderated by Income in a Diverse Sample. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA, April.
- Marchant, G. & Finch, W.H. (2014). Does a Rising Tide Lift All Boats? International Relative and Absolute SES and Achievement. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA, April.

### ***Year 2013***

- Davis, A. S., Finch, W. H., Piehl, J. J., Moss, L. E., Nogin, R. M. & Dean, R. S. (October, 2013). Differentiation of Children with and without ADHD Using the DWSMB via A Boosted Tree Methodology. Poster presented at the 33<sup>rd</sup> Annual Convention of the National Academy of Neuropsychology, San Diego, CA.
- Finch, W.H. & French, B.F. (2013). Model Invariance Testing under Different Levels of Invariance. Paper presented at the Modern Modeling Conference, Storrs, CT, May.
- Finch, W.H. & Hernandez Finch, M.E. (2013). Data analysis strategies for high dimensional social science data: What to do when there are more variables than subjects. Paper presented at the Modern Modeling Conference, Storrs, CT, May.
- French, B.F. & Finch, W.H. (2013). Multilevel Generalized Mantel-Haenszel For

- Differential Item Functioning Detection. 12th European Conference on Psychological Assessment, San Sebastian, Spain.
- French, B.F., Finch, W.H., & Ulrich, S. (2013). Detection of Sex Differential Item Functioning in the Inventory of Early Development. Paper proposal accepted to be presented at the 2013 annual convention of the American Psychological Association, Honolulu, HI.
- Marchant, G.J., Finch, W.H., & German, R. (2013). Metacognition, Strategies, Achievement, and Demographics: Relationships Across Countries. Paper proposal accepted to be presented at the 2013 annual convention of the American Psychological Association, Honolulu, HI.
- Shim, S. & Finch, W.H. (2013). Academic and Social Achievement Goals and Early Adolescents' Adjustment: A Latent Class Approach. Paper proposal accepted to be presented at the 2013 annual convention of the American Psychological Association, Honolulu, HI.
- Finch, M.H., Finch, W.H., Singh, M., & McIntosh, D.E. (2013). Effect of parent education level on young children's item-level performance on the Woodcock-Johnson-III-NU. Paper proposal accepted to be presented at the 2013 annual convention of the American Psychological Association, Honolulu, HI.
- Finch, W.H., French, B.F., & Jeffers, H.M. (2013). Assessment of differential item functioning of a reading interest inventory using multilevel SIBTEST. Paper proposal accepted to be presented at the 2013 annual convention of the American Psychological Association, Honolulu, HI.
- Chang, M., Finch, W.H., Paulson, S. E., McIntosh, D. E., & Rothlisberg, B. A. (2013, February). *Joint Construct Validity of Cognitive Ability Measures with Preschool Children*. Paper proposal accepted to be presented at the 2013 Annual Convention of the National Association of School Psychologists, Seattle, WA.
- Koloi, S., Marchant, G., & Finch, W.H. (2013). Canonical Relationship between Teachers Perceived Skill and Use of Classroom Assessments Practices. Paper proposal accepted to be presented at the 2013 meeting of the Midwestern Psychological Association, Chicago, IL.
- Koloi, S., Marchant, G., & Finch, W.H. (2013). Detecting Response Patterns on Teachers Perceived Skills about Classroom Assessment Practices Using IRT Models. Paper proposal accepted to be presented at the 2013 meeting of the Midwestern Psychological Association, Chicago, IL.
- Marchant, G. & Finch, W.H. (2013). Student, School, and Country: The Relationship of SES and Inequality to Achievement. Paper proposal accepted to be presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Holden, J.E. & Finch, W.H. (2013). Supervised Classification in the Presence of Misclassified Training Data: A Monte Carlo Simulation Study. Paper proposal accepted to be presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Finch, W.H. & French, B.F. (2013). Transforming SIBTEST to Account for Multilevel Data Structures. Paper proposal accepted to be presented at the 2013 meeting of the American Educational Research Association, San Francisco, CA
- Finch, W.H. & Hernandez Finch, M.E. (2013). Investigating specific learning disability

- and testing accommodations based differential item functioning analysis using a multilevel multidimensional mixture item response theory model. Paper proposal accepted to be presented at the annual meeting of the National Council for Measurement in Education, San Francisco, CA.
- French, B.F., Finch, W.H., Randall, B., Gotch, C., & Hand, B. (2013). Measurement Invariance Techniques to Enhance Measurement Sensitivity. Paper proposal accepted to be presented at the annual meeting of the National Council for Measurement in Education, San Francisco, CA.

***Year 2012***

- McIntosh, C.E., McIntosh, D.E., Pierson, E.E., Campbell, E. H. Finch, & Ward, K.. (2012). Levels of ADOS Performance From a School Based Sample. National Association of School Psychologists Annual Convention. Philadelphia, PA, February.
- Finch, W.H. & French, B.F. (2012). Latent variable model parameter invariance testing under a variety of invariance conditions: A Monte Carlo study. Presented at the annual meeting of the International Meeting of the Psychometric Society, Lincoln NE, July..
- Pierson, E.E., Finch, W.H., Connolly, S.C., & McCormick, C. (2012). The identification and measurement of impression management by adolescent responders on the Youth Risk Behavior Survey. Presented at the annual meeting of the National Association of School Psychology, Philadelphia, PA, February.
- Malm, S.P., Finch, W.H., Lutz, J., & Dean, R.S. (2012). Applying the Generalized Graded Unfolding Model to the Mood Factor of the Neuropsychological Symptom Scale. Paper presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL, May.
- Singh, M., Hernandez Finch, M.E., & Finch, W.H. Psychological Predictors of Postsecondary Enrollment for Diverse High School Students. Paper presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL, May.
- Jeffers, H.M. & Finch, W.H. Multidimensional Investigation of the Link between Parenting Style and Attachment. Paper presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL, May.
- Drapeau, C.W., Pierson, E.E., & Finch, W.H. (2012). Protective factors preventing at-risk adolescent students from attempting suicide. Paper presented at the annual meeting of the American Association of Suicidology, April.
- Finch, W.H. & Hernandez Finch, M.E. (2012). Differential item functioning analysis using a multilevel mixture model. Paper presented at the Modern Modeling Conference, Storrs, CT, May.
- Finch, W.H. & French, B.F. (2012). Modeling of nonrecursive structural equation models with categorical indicators. Paper presented at the Modern Modeling Conference, Storrs, CT, May.
- Finch, W.H., Holden, J.E., Kelly, K., & Starling, J.M. (2012). Classification in the Presence of Heterogeneous Groups: A Monte Carlo Comparison of Several Statistical Methods. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC, April.

- Hernandez Finch, M.E., Dale, B.A., Finch, W.H., McIntosh, D.E., & Rothlisberg, B.A. (2012). Profile Analysis of the Woodcock Johnson III Tests of Cognitive Abilities With Diverse Preschoolers. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC, April.
- French, B.F. & Finch, W.H. (2012). Extensions of the Mantel-Haenszel test for DIF (differential item functioning) detection. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC, April.
- Finch, W.H. & Marchant, G.J. (2012). School spirit: Clustering schools and students in the 20 richest countries. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC, April.
- Finch, W.H. & French, B.F. (2012). Bayesian modeling of differential item functioning: Type I error and power rates in the presence of nonnormal ability distributions, impact, and anchor set contamination. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC, April.

***Year 2011***

- Finch, W.H. & French, B.F. (2011). Parameter estimation for Item Response Mixture Models. Paper presented at the Joint Statistical Meetings, Miami, FL, August.
- French, B.F. & Finch, W.H. (2011). The use of omnibus SIBTEST for assessing both types of DIF. Paper presented at the annual meeting of the National Council for Measurement in Education, New Orleans, LA, April.
- Finch, W.H. & French, B.F. (2011). The impact of group pseudo-guessing parameter differences on the detection of uniform and nonuniform DIF. Paper to be presented at the annual meeting of the National Council for Measurement in Education, New Orleans, LA, April.
- Finch, W.H. & Pierson, E.E. (2011). A mixture IRT analysis of risky youth behavior. Paper to be presented at the Modern Modeling Methods Conference, Storrs, CT, May.
- Chang, M., Finch, W.H. & Davis, A.S. (2011). Predicting intelligence using alternative models to regression. Paper to be presented at the annual meeting of the American Educational Research Association, New Orleans, LA, April.
- Finch, W.H. & French, B.F. (2011). Multilevel latent class analysis: Parametric and nonparametric models. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA, April.
- Holden, J.E. & Finch, W.H. (2011). A comparison of alternative methods for prediction of categorical data: A Monte Carlo simulation study. Paper to be presented at the annual meeting of the American Educational Research Association, New Orleans, LA, April.
- Koloi, S., Finch, W.H., & Mucherah, W. (2011). Differential item functioning of the SDQIII. Paper presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL, May.
- Pierson, E.E. & Finch, W.H. (2011). The prediction of adolescents at-risk for attempting suicide using Tree based statistical models. Paper presented at the annual meeting of the American Psychological Association, San Diego, CA, August.
- Finch, M.E., Finch, W.H., & Davis, A.S. (2011). Sensory-motor functioning and reading ability predictors in a preschool sample. Paper presented at the annual meeting of

- the Midwestern Psychological Association, Chicago, IL, May.
- Koloi, S., Cassady, J., & Finch, W.H. (2011). Overcoming the Methods Effect in Assessing Cognitive Test Anxiety. Paper presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL, May.
- Finch, W.H., Holden, J.E., & Ardaye, C. An investigation of the relationship between mate selection and cultural values. Paper presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL, May.
- McCormick, C., Pierson, E.E., Connolly, S.C., & Finch, W.H. (2011). Predicting Romeo but not Juliet: Suicide prediction models work better for males. Paper presented at the annual meeting of the Association for Psychological Science, Washington, DC, May.
- McConnell, J.M., Dixon, D.N., & Finch, W.H. (2011). Confirming a Model of Self-Forgiveness. Paper presented at the annual meeting of the Great Lakes Psychological Association, Bloomington, IN, April.
- McIntosh, C.E., McIntosh, D.E., Pierson, E.E., Campbell, E.M., Finch, W.H. & Morgan, K. (2011). Comparison of BASC-2 Ratings of Children With Autism, Asperger's, and Pervasive Developmental Disorder-NOS. Annual meeting of the American Psychological Association, Washington, D.C., August.
- Pierson, E.E. & Finch, W.H. (2011). The Prediction of Adolescents At-Risk for Attempting Suicide Using Tree-Based Statistical Models. Annual meeting of the American Psychological Association, Washington, D.C., August.

#### ***Year 2010***

- Finch, W.H. & French, B.F. (2010). Multilevel Mantel-Haenszel: Accounting for multilevel data in DIF detection. Paper presented at the annual meeting of the Psychometric Society, Athens, GA, July.
- Finch, W.H. & French, B.F. (2010). A Monte Carlo Comparison of Robust MANOVA Test Statistics. Paper presented at the annual Joint Statistical Meetings, Vancouver, BC, August.
- Finch, W.H. & French, B.F. (2010). A Comparison of Methods for Estimating Confidence Intervals for Eta and Omega Squared Effect Sizes. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO, April.
- French, B.F. & Finch, W.H. (2010). Latent Growth Curve Models: A Comparison of Missing Data Techniques. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO, April.
- Mucherah, W.W., Dixon, F., & Finch, W.H. (2010). Self-concept and academic performance in gifted high school students in Kenya: A cluster analysis. Paper presented at the annual meeting of the National Association for Gifted Children, Atlanta, GA, November 11-14.

#### ***Year 2009***

- Davis, A.S., Finch, W.H., Chang, M., Rothlisberg, B.A., McIntosh, D.E., & Paulson, S.E. (2009). Demographic Variables, Premorbid Functioning, and CHC Ability on the Woodcock-Johnson Tests of Cognitive Abilities for Preschoolers. Paper presented at the 29th Annual Meeting of NAN in New Orleans, LA, November.
- Davis, A. S., Finch, W.H., Skierkiewicz, A.L., Rothlisberg, B.A. & McIntosh, D.E.

- (2009). Using Demographic Variables to Estimate Premorbid Functioning in Preschool Children using the Stanford-Binet-Fifth Edition. Paper presented at the 29th Annual Meeting of NAN in New Orleans, LA, November.
- Bell, R. Cox, K., & Finch, W.H. (2009). Pre-putt routines and putting outcomes of collegiate golfers. Poster presented at the annual meeting of the Association of Applied Sport Psychology. Salt Lake City, UT, August.
- Finch, W.H. (2009). On the need for multilevel Item Response Theory Models. Paper presented at the annual meeting of the American Psychological Association, Toronto, ON, August.
- Finch, W.H. (2009). Using podcasts for instruction in an introductory statistics course. Poster presented at the bi-annual meeting of the United States Conference on Teaching Statistics, Columbus, OH, June.
- Bronk, K.C. & Finch, W.H. (2009). Purpose, hope, and life satisfaction among adolescents. Poster presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL, May
- French, B.F., Randel, B. & Finch, H. (2009). Measurement Sensitivity for Randomized Control Trials: When Differential Item Functioning is a Good Thing. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA, April.
- French, B.F. & Finch, H. (2009). Hierarchical logistic regression: Accounting for multilevel data in DIF detection. Paper presented at the annual meeting of the National Council for Measurement in Education, San Diego, CA, April.
- Finch, H. & French, B.F. (2009). Estimation of MIMIC model parameters with multilevel data. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA, April.
- Slonaker, A. R., Mucherah, W. M., & Finch, W. H. (2009). School Psychologists' Training in Neuropsychological Assessment. Poster presented at the Annual meeting of the International Neuropsychological Society, Atlanta, GA, February.

### ***Year 2008***

- Williams, K., Huffman, L. & Finch, H. (2008). Investigating the influence of parental factors on the postsecondary educational attainment aspirations of rural middle and high school students. Paper presented at the Hawaii International Conference on Education. Honolulu, HI, January.
- French, B.F. & Finch, W.H. (2008). When Under the Influence of Non-invariant Factor Loadings, Does Computation Method of the Factor Score Matter? Paper presented at the Annual meeting of the American Educational Research Association. New York, NY, March.
- Finch, W.H. & French, B.F. (2008). Using a Hierarchical MIMIC Model for Uniform DIF Assessment in the Presence of Nested Data. Paper presented at the Annual meeting of the National Council for Measurement in Education. New York, NY, March.

- French, B.F. & Finch, W.H. (2008). Model Misspecification and Invariance Testing Via Confirmatory Factor Analytic Procedures. Paper presented at the Annual meeting of the American Educational Research Association. New York, NY, March.
- Finch, W.H., Lapsley, D.K. & Baker, M.E. (2008). Predictors of Student Mobility and Retention in Indiana Charter Schools: 2003 to 2006. Paper presented at the Annual meeting of the American Educational Research Association. New York, NY, March.
- Jameson, M.E., & Finch, W.H. (2008). Latent Markov chain analysis of the development of item responses in an authentic mathematics assessment. Poster presented at the Annual meeting of the Association of Psychological Science. Chicago, IL, May.
- Finch, W.H., French, B.F., & Trotter, J.S. (2008). Missing data and dimensionality assessment for item response data: A Monte Carlo comparison of methods. Paper presented at the Fordham Council on Applied Psychometrics. Fordham University, New York, NY, June.
- Finch, W.H. & French, B.F. (2008). Testing the null hypothesis of no group mean vector difference: A comparison of MANOVA and SEM. Paper presented at the Annual meeting of the Psychometric Society, Durham, NH, June.
- French, B.F. & Finch, W.H. (2008). Multigroup Confirmatory Factor Analysis: Parameter Bias and Noninvariant Referents. Paper presented at the Joint Statistical Meetings, Denver, CO, August.
- Finch, W.H. & Laking, T.L. (2008). Evaluation of methods for interpreting results from a discriminant analysis. Poster presented at the Annual meeting of the Midwestern Psychological Association, Chicago, IL, May.
- Pierson, E.E. & Finch, W.H. (2008).  $P_{rep}$ : Not your daddy's p-value. Poster presented at the Annual meeting of the Midwestern Psychological Association, Chicago, IL, May.
- Davis, A. S., Finch, W. H., Boseck, J., & Dean, R. S. (2008). Classification and Regression Tree Analysis of Cognitive Processing Abilities in the Differentiation of ADHD Subtypes. Poster presented at the 28<sup>th</sup> Annual Meeting of the National Academy of Neuropsychology, New York, NY, October.
- Finch, W.H. & MarGraff, M. (2008). Imputation of Categorical Missing Data: A comparison of Multivariate Normal and Multinomial Methods. Paper presented at the Midwestern Sas Users Group, Indianapolis, IN, October.
- Finch, W.H., Lapsley, D.K. & Baker-Boudissa, M.E. (2008). Teacher Influence on Student Achievement and the "Negative New School Transition Effect" in Indiana Charter Schools. Paper presented at the Conference on Teacher Effects, Notre Dame University, November.
- Bronk, K. C., Finch, H., & Tasneem, N. (2008). Purpose, Hope, and Life Satisfaction among Adolescents. Paper presented at the annual meeting of the Association for Moral Education, Notre Dame University, November.

### **Year 2007**

- Cross, J.R., Cross, T.L. & Finch, W.H. (2007). Influence of social dominance

- orientation and right-wing authoritarianism in gifted education. Poster presented at the National Association for Gifted Children Annual Convention, Minneapolis, MN, November 7-11, 2007.
- Davis, A.S., Finch, W.H., Dean, R., Hiller, & Hall, J. The Factor Invariance of the Dean-Woodcock Sensory-Motor Battery for Patients with ADHD. Poster presented at the National Academy of Neuropsychology. Scottsdale, AZ, November, 14-18.
- Davis, A. S., Finch, W. H., Williams, R. N., Gupta, A. S., Randolph, C., Pass, L. A., & Whited, A. R. (2007). Classification and regression tree analysis of neurocognitive functioning in patients with and without multiple sclerosis. Poster presented at the 21<sup>st</sup> Annual Meeting of the Consortium of Multiple Sclerosis Centers, Washington, D.C..
- Davis, A. S., Finch, W. H., Williams, R. N., Gupta, A. S., Randolph, C., Whited, A. R., & Pass, L. A. (2007). Evaluating the Neurocognitive Differences in Patients with and without Multiple Sclerosis. Poster presented at the 21<sup>st</sup> Annual Meeting of the Consortium of Multiple Sclerosis Centers, Washington, D.C..
- Finch, W.H. & French, B.F. (2007). Comparing factor loadings in exploratory factor analysis: A new randomization test. Paper presented at the Joint statistical meetings. Salt Lake City, UT, August.
- Finch, W.H. & French, B.F. (2007). Student Achievement and Adequate Yearly Progress within the Indiana Charter School System. Poster presented at the conference on Contemporary issues in high stakes testing. Lincoln, NE, May.
- Finch, W.H. & Laking, T.L. (2007). Comparison of parametric and exact test MANOVA in the presence of small samples and violations of assumptions. Paper presented at the Annual meeting of the Midwestern Psychological Association, Chicago, IL, May.
- Finch, W.H. & French, B.F. (2007). Using Exploratory Factor Analysis for Locating Invariant Referents in Factor Invariance Studies. Paper presented at the Annual meeting of the American Educational Research Association, Chicago, IL, April.
- Finch, W.H. (2007). Item parameter estimation for the MIRT model: Accuracy, bias and precision of four factor analysis based models. Paper presented at the Annual meeting of the National Council for Measurement in Education, Chicago, IL, April.
- Finch, W.H. (2007). Interpreting structure coefficients in discriminant analysis: A comparison of several methods. Paper presented at the Annual meeting of the American Educational Research Association, Chicago, IL, April.
- Jameson, M. & Finch, W.H. (2007). The Development and Validation of the Statistics Anxiety Measure. Paper presented at the Annual meeting of the American Educational Research Association, Chicago, IL.

### ***Year 2006***

- Finch, W.H. & Lee, T, -M. (2006). The relationship between prior statistics course work and student expectations for a graduate statistics course. Paper presented at the 122<sup>nd</sup> annual meeting of the Indiana Academy of Science, Muncie, IN, November.
- Davis, A. S., Shunk, A.W., Finch, W. H., Dean, R. S., & Woodcock, R. W. (2006). Confirmatory Factor Analysis of the CHC Theory for Individuals with TBI. Poster presented at the 26<sup>th</sup> Annual Conference of the National Academy of



- Neuropsychology, San Antonio, TX, November.
- Davis, A. S., Shunk, A.W., Finch, W. H., Dean, R. S., & Woodcock, R. W. (2006). Confirmatory Factor Analysis of the CHC Theory for Individuals with ADHD. Poster presented at the 26<sup>th</sup> Annual Conference of the National Academy of Neuropsychology, San Antonio, TX, November.
- Finch, W.H. (2006). Comparison of M-estimator and non-robust Roy-Bargmann stepdown follow-up to a significant MANOVA. Paper presented at the Joint Statistical Meetings, Seattle, WA, August.
- Davis, A. S., Pass, L. A., Finch, W. H., Dean, R. S., & Woodcock, R. W. (2006). The Relationship between Sensory-Motor Skills and Achievement in Children with ADHD. Poster presented at the 113<sup>th</sup> Annual Convention of the American Psychological Association, New Orleans, LA, August.
- Davis, A. S., Pass, L. A., Finch, W. H., Dean, R. S., & Woodcock, R. W. (2006). The Relationship between Sensory-Motor Skills and Cognitive Processing in ADHD. Poster presented at the 113<sup>th</sup> Annual Convention of the American Psychological Association, New Orleans, LA, August.
- French, B.F. & Finch, W.H. (2006). Locating the Invariant Referent in Multi-Group Confirmatory Factor Analysis. Paper presented at the International Meeting of the Psychometric Society, June.
- Finch, W.H. & French, B.F. (2006). Type I error rate for one type of DIF detection in the presence of the other type: A Monte Carlo study. Paper presented at the International Meeting of the Psychometric Society, June.
- Finch, W.H. & French, B.F. (2006). Detection of crossing differential item functioning: A comparison of four methods. Paper presented at the annual meeting of the National Council on Measurement in Education, April.
- Finch, W.H., Barton, K. & Meyer, J.P. (2006). Differential item function analysis for accommodated versus not accommodated students. Paper presented at the annual meeting of the American Educational Research Association, April.
- Speirs Neumeister, K. & Finch, W.H. (2006) Perfectionism in Gifted Students: Relational precursors and influences on achievement motivation. Paper presented at the annual meeting of the American Educational Research Association, April.
- Davis, A. S., Finch, W. H., Dean, R. S., & Woodcock, R. W. (2006). The canonical relationship between sensory-motor skills and academic achievement in children with ADHD. Poster presented at the 34<sup>th</sup> Annual Meeting of the International Neuropsychological Society, Boston, MA, March.

### *Year 2005*

- Stage, K.A., Davis, A.S., Finch, W.H., Trinkle, J.M., & Dean, R. (2005). Predicting cognitive processing abilities using construction tasks from a neurologically impaired sample. Poster presented at the annual convention of the National Academy of Neuropsychology, Tampa, FL, November.
- Stage, K.A., Davis, A.S., Finch, W.H., Trinkle, J.M., & Dean, R.S. (2005). Classification and Regression Tree Analysis of Individuals with ADHD. Poster presented at the annual meeting of the National Academy of Neuropsychology, Tampa, FL, November.

- Davis, A.S., Finch, W.H., Dean, R.S. & Woodcock, R.W. (2005). Confirmatory Factor Analysis of CHC theory with a neurologically impaired sample. Poster presented at the annual meeting of the American Psychological Association, Washington, DC, October.
- Stage, K., Finch, W.H. & Robertson, T. (2005). Gender differences in satisfaction with a university Astronomy course: Application of differential item functioning. Paper presented at the annual meeting of the Indiana Academy of Science, Saint Mary of the Woods College, IN, October.
- Schneider, M.K. & Finch, W.H. (2005). Suggested Sample-Size-to-Variable Ratios for Discriminant Analysis. Paper presented at the annual Joint Statistical Meetings of the American Statistical Association, August.
- Finch, H., Stage, K. & Monahan, P. (2005). Comparison of the performance of simple structure indices: The DETECT r-ratio, Bentler's Simplicity Index and the Loading Simplicity Index. Paper presented at the annual Joint Statistical Meetings of the American Statistical Association, Minneapolis, MN, August.
- Noggle, C.A., Dean, R. & Finch, W.H. (2005). Differential diagnosis of dementia and depression using the Dean-Woodcock. Poster presented at the annual meeting of the American Psychological Association, Washington, DC, August.
- Perkins, A., Monahan, P., Finch, H., Chorney, C.M., Stump, T. & Hambleton, R.K. (2005). Bias of exploratory and cross-validated DETECT index under null hypothesis of unidimensionality. Paper presented at the annual convention of the American Education Research Association, Montreal, QC, April.
- Finch, W.H. & Schneider, M.K. (2005). Performance of five methods of group membership prediction: 3 and 5 groups cases. Paper presented at the annual convention of the American Education Research Association, Montreal, QC, April.
- Finch, W.H. & Monahan, P. (2005). Dimensionality assessment: Comparison of bootstrap Modified Parallel Analysis with Parallel Analysis and DETECT. Paper presented at the annual convention of the National Council for Measurement in Education, Montreal, QC, April.
- Davis, A. S., Finch, W. H., & Dean, R. S. (2005). The canonical relationship between sensory-motor functioning and cognitive processing. Poster presented at the 37<sup>th</sup> Annual Convention of the National Association of School Psychologists, Atlanta, GA, March.
- Davis, A. S., Finch, W. H., & Dean, R. S. (2005). Constructs underlying the Dean-Woodcock Sensory Motor System. Poster presented at the 37<sup>th</sup> Annual Convention of the National Association of School Psychologists, Atlanta, GA, March.
- Davis, A. S., Trinkle, J. M., Finch, W. H., & Dean, R. S. (2005). Classification and regression tree analysis of the Dean-Woodcock Sensory-Motor Battery with neurologically impaired and normal individuals. Poster presented at the 33<sup>rd</sup> Annual Convention of the International Neuropsychological Society, St. Louis, MO, March.

*Year 2004*

- Noggle, C.A., Davis, A.S., Reese, T., Finch, H. & Dean, R.S. (2004). The Construct Validity of the Dean-Woodcock Sensory Motor Battery with a Neurologically Impaired Sample. Poster presented at the Annual Convention of the National Academy of Neuropsychology, Seattle, WA, November.
- Reese, T.R., Davis, A.S., Trinkle, J.M., Finch, H. & Dean, R.S. (2004). The Canonical Relationship Between Sensory-Motor Functioning and Achievement. Poster presented at the Annual Conference of the National Academy of Neuropsychology, Seattle, WA, November.
- Trinkle, J., Davis, A. S., Noggle, C. A., Finch, W. H., & Dean, R. S. (2004). Evaluating the construct validity of the Dean-Woodcock Sensory Motor Battery. Poster presented at the Annual Conference of the National Academy of Neuropsychology, Seattle, WA, November.
- Finch, W.H. (2004). Comparison of the performance of rotation methods for IRT based factor analysis. Paper presented at the Joint Statistical Meetings of the American Statistical Association, Toronto, ON, August.
- Finch, W.H. & Habing, B. (2004). NOHARM goodness of fit statistic anomalies. Paper presented at the National Council for Measurement in Education meetings, San Diego, CA, April.
- Barton, K. & Finch, W.H. (2004). Testing assumptions of unidimensionality across groups of students with disabilities, with accommodations and English language learners. Poster presented at the National Council for Measurement in Education meetings, San Diego, CA, April.
- Finch, W.H. & Schneider, M.K. (2004). A comparison of the predictive accuracy of Classification and Regression Trees with Discriminant Analysis and Logistic Regression. Poster presented at the American Educational Research Association meetings, San Diego, CA, April.
- Davis, A. S., Finch, W. H., & Dean, R. S. (2004). The canonical relationship between sensory-motor functioning and cognitive processing. Poster presented at the 37th Annual Convention of the National Association of School Psychologists, Atlanta, GA, March.
- Davis, A. S., Finch, W. H., & Dean, R. S. (2004). Constructs underlying the Dean-Woodcock Sensory Motor System. Poster presented at the 37th Annual Convention of the National Association of School Psychologists, Atlanta, GA, March.

### ***Year 2003***

- Dixon, F, Hanchon, T., Finch, W.H. & Lapsley, D.K. (2003). Perfectionism in Gifted Adolescents: Teachers' Perspectives. Paper presented at the annual meeting of the National Association of Gifted Children, Indianapolis, IN, November.
- Schneider, M.K. & Finch, W.H. (2003). Using Multiple Linear Regression in counseling research: A guided tour. Poster presented at the Southern Association of Counselor Education Schools Conference, Chattanooga, TN, September.
- Finch, W.H. (2003). Fear and loathing in the Statlab: Lessons learned from listening to clients. Presentation at the Joint Statistical Meetings of the American Statistical Association, San Francisco, CA, August.
- Finch, W.H., Habing, B. & Huynh, H. (2003). Comparison of NOHARM and

- Conditional Covariance Methods of Dimensionality Assessment. Poster presented at the American Educational Research Association meetings, Chicago, IL, April.
- Finch, W.H. (2003). Comparison of Performance of Nonparametric and Parametric MANOVA under a Variety of Conditions. Paper presented at the American Educational Research Association meetings, Chicago, IL, April.
- Finch, W.H., Habing, B. & Huynh H.H. (2003). Comparison of NOHARM and DETECT: Counting Dimensions and Allocating Items. Paper presented at the National Council for Measurement in Education meetings, Chicago, IL, April.

***Year 2002***

- Finch, W.H. (2002). Distance consulting in a university setting: Two case studies. Paper presented at the American Statistical Association Joint Meetings, New York, NY, August.
- Finch, W.H., Habing, B., Roberts, J., & Nandakumar, R. (2002). A Q3 Statistic for Unfolding Item Response Theory Models. Paper presented at the American Educational Research Association meetings, New Orleans, LA, April.
- Shelton, A., Kaczmarek, M., Finch, W.H., DesChamps, & M., Silk, D. (2002). Comparison of Prehospital Providers and Medical Control Physicians' Opinion of DNR Care. Paper presented at the Society for Emergency Medicine, Atlanta, GA, March.

***Years 1997- 2001***

- Horger III, E.O., Finch, W.H. & Vincent, V.E. (2001). A Single Physician's Experience with 4600 Genetic Amniocenteses. Paper presented at the annual meeting of the South Atlantic Association of Obstetricians and Gynecologists, Myrtle Beach, SC, October.
- Finch, W.H. (2000). Clients Telling Their Stories: An Ethnographic Analysis of First Meetings Between Statistical Consultants and Their Clients. Joint Meetings of the American Statistical Association, Indianapolis, IN, August.
- Huynh, H. & Finch, W.H. (2000). Robust/resistant statistical procedures with applications to multiple regression analysis and analysis of variance". Professional development and training, American Educational Research Association, New Orleans, LA, April.
- Finch, W.H. & Huynh H. (2000). Comparison of Similarity Measures in Cluster Analysis with Binary Data. Presentation at the American Educational Research Association annual meetings, New Orleans, LA, April.
- Parnell, M., Kilmann, P., Finch, W.H., Carranza, L. & Blumenstiel, B. (2000). Personal and interpersonal characteristics linked with adult attachment patterns. Poster presentation, Southeastern Psychological Association annual meeting, Savannah, GA, March.
- Finch, W.H. (1999). A Qualitative Analysis of Client Expectations in a Statistical Computing Laboratory. Joint Meetings of the American Statistical Association, Baltimore, MD, August.

- Grego, J. & Finch, W.H. (1997). Improvements in the Quality of Consulting in a Statistical Laboratory. South Carolina Statewide Quality Conference, Myrtle Beach, SC, October.
- Finch, H. (1997). The Use of SAS to Construct Horvitz-Thompson Type Estimators for Safety Belt Compliance. Annual meeting of the South East SAS Users Group annual meeting, Jacksonville, FL, September.

### **Invited Addresses to Professional Groups**

- Finch, W.H. (2019). Longitudinal Data Analysis. Presented at the research colloquium sponsored by the University of Kentucky Department of Family Studies.
- Finch, W.H. (2019). Network Analysis as a Tool for understanding Psychological Phenomena. Presented to the Speaker Series by the Department of Psychological Sciences, Ball State University.
- Raes, M.L. & Finch, W.H. (2018). Textual Data Visualization in R. Presented as a workshop at the Ball State University Digital Scholarship Lab.
- Finch, W.H. (2017). Growth Curve Modeling. Presented at the research colloquium sponsored by the University of Kentucky Department of Family Studies.
- Finch, W.H. (2017). Multilevel Modeling. Presented at the research colloquium sponsored by the Northern Illinois University Department of Psychology.
- Finch, W.H. (2016). The LASSO for Multivariate Regression: A Comparison of Methods. Presented at the research colloquium sponsored by the Ball State University R User's Group.
- Finch, W.H. (2015). Item Response Theory modeling using R software. Presented at the research colloquium sponsored by the Ball State University R User's Group.
- Finch, W.H. (2014). Identifying typologies of academic achievement among charter schools using a multilevel latent class model. Presented at the research colloquium of the Department of Statistics. The University of South Carolina.
- Finch, W.H. (2014). Methods for Differential Item Functioning Detection for more than two groups. Presented at the research colloquium of the Department of Biostatistics. Indiana University School of Medicine.
- Finch, W.H. (2013). Generalized Additive Structural Equation Modeling. Presented at the research colloquium of the Department of Psychology. Notre Dame University.
- Finch, W.H. (2012). The Practical Application of Item Response Theory to Psychological Research. Continuing education presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL, May.
- Finch, W.H. (2011). Invariance testing in latent class analysis: A comparison of statistics. Presented at the research colloquium of the Department of Educational Psychology, University of Nebraska, Lincoln.
- Finch, W.H. (2009). Introduction to the practice of structural equation modeling. Continuing education presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL, May.
- Finch, W.H. (2005). The Generalized Graded Unfolding Model: An introduction. Presented to the Measurement Club at Purdue University, October.

## Grants and evaluation projects

**Evaluation of Science Ambassadors Program PI. (Funded).** Dow Chemical Company, \$6,000.

**Enhancing the Prognostic Resolution of Cardiopulmonary Exercise Testing (CPX) by Examining the Association among Variables Obtained During Submaximal and Maximal Exertion, C-PI. (Funded).** American Heart Association, \$10,000.

**Performance-Based Assessment for Skills for success in Middle School, 2017, Co-PI. (Not funded).** Institute for Educational Sciences.

**A Mixed-Method Study of African American High School Students' Experiences with Classroom Discussions About Race, consultant.** Internal grant, \$10,000.

**Performance-Based Assessment for Skills for success in Middle School, 2016, Co-PI. (Not funded).** Institute for Educational Sciences.

**An Empirical Examination of Two Methods for Adjusting Data for Cultural Response Styles, 2016, Co-PI. (Not funded).** National Science Foundation.

**Performance-Based Assessment for Skills for success in Middle School, 2016, Co-PI. (Not Funded).** Institute for Educational Sciences.

**Development of an online multi-dimensional math motivation intervention program for early adolescents, 2016, Co-PI. (Under Review).** Institute for Educational Sciences.

**Development of an Assessment Tool for the Skills for Success Program, 2016, Co-PI. (Under Review).** Institute for Educational Sciences.

**Development of effect size measures for measurement invariance assessment, 2015, PI. (Not Funded).** National Science Foundation. \$250,000.

**Development of effect size measures for measurement invariance assessment, 2015, PI. (Not Funded).** Institute of Educational Sciences. \$250,000.

**Applications of Measurement Invariance Techniques to Enhance Measurement Sensitivity, 2014, PI. (Not Funded).** National Science Foundation. \$294,611. Principal Investigator.

**Investigating the moderation by immigration status, language spoken in the home, and nation of residence, on the impact of family resources, school context, and**

**learning strategies on science, math, and reading achievement, 2014, PI. (Not funded).** American Educational Research Association. \$20,000.

**Making Multilevel Latent Variable Modeling Implementation Easy with R (Not funded), 2013, PI.** National Science Foundation. \$337,694.

**Increased Accuracy in the Detection of Differential Item Functioning through Multilevel Analysis (Funded 2011-2014), PI.** Institute of Educational Sciences. \$153,071. Principal Investigator.

**Comparative Public School Funding: Policies that produce equity and investments that lead to student achievement (Funded 2008-2010), PI.** The Walton Foundation. \$252,080. Principal Investigator.

**The influence of psychological orientation on practice in gifted education (2007).** Joseph and Marcella Hollis Fund. \$1,500.

**Indiana General Supervision Enhancement Grant (2006-2008).** Dr. Larry Smith, Elementary Education. Served as the statistical consultant to the project, providing advice on sample selection, data analysis and data management.

**Evaluation and data analysis (2003-2008).** Indiana Charter Schools. Conducted data analysis, advised in report writing and data collection and conducted a workshop for charter school principals in data analysis and reporting of students' academic progress.

**Evaluation (2005-2006).** South Carolina State Department of Education. Conducted a dimensionality assessment of the statewide mathematics proficiency test for 8<sup>th</sup> graders.

**Evaluation (2005-2006).** Muncie Community Schools. Conducted a quantitative evaluation of the Title IID EET mathematics program for 8<sup>th</sup> grade students.

**Interrater reliability study (2005).** Teachers College, Ball State University. Conducted a study to determine the interrater reliability of the rubric for assessing Teacher Education majors' electronic portfolios.

**Reliability and validity study (2005).** History Department, Ball State University. Conducted study to determine reliability and validity of the department's Decision Point 2 examination for social studies education majors.

**Reliability and validity study (2005).** Muncie Central High School. Conducted study to determine reliability and validity of the school's Mathematics Competency Exam.

**S.E.E.T. New Faculty Grant (2005).** Internal Ball State University grant to investigate the performance of multiple statistical tools for assessing the dimensionality of test items.

**Interrater reliability study (2004).** Teachers College, Ball State University. Conducted a study to determine the interrater reliability of the Interstate New Teacher Assessment and Support Consortium (INTASC) for the Office of Educational Field Experiences at Ball State University.

## **Professional Service**

### **Methods in Psychology**

Editor in Chief (2019)

### **African Americans Living Abroad Research Program**

Advisory Committee (2017)

### **Statistics Without Borders (initial year)**

Functional Consultant (2016)

### **ITEMS editor**

National Council on Measurement in Education (2012-2016)

### **ITEMS Advisory Board (initial year)**

National Council on Measurement in Education (2016)

### **Review Editor (initial year)**

Journal of Educational Measurement (2013)

### **Associate Editor (initial year)**

Frontiers in Quantitative psychology and measurement (2010)

### **Statistical Methodology Editor (initial year)**

Journal of the First Year Experience and Students in Transition (2005)

Journal of Pediatric Neuropsychology (2014-2019)

### **Statistical Methodology Consultant (initial year)**

Journal of Cardiopulmonary Rehabilitation and Prevention (2019)

### **Advisory Editor**

Journal of Educational Measurement (2011-2019)

### **Editorial Board (Initial year)**

Interdisciplinary Education and Psychology (2017)

Educational Psychology (2016)

Archives of Scientific Psychology (2016)

Educational and Psychological Measurement (2008)

The Teacher Educator (2010)

International Journal of Quantitative Research in Education (2012)



International Scholarly Research Network – Education (2012)  
The Asia-Pacific Education Researcher (2012)  
Psychological Assessment (2013)  
Journal of Experimental Education (2014)  
Multiple Linear Regression Viewpoints (2014)  
Educational Research Quarterly (2014)  
Journal of Global Education and Research (2017)

**Technical Report Reviewer**

Educational Testing Service (2014)

**Professional Journal Review ad hoc (Initial year as reviewer)**

Applied Psychological Measurement (2005)  
British Journal of Mathematical and Statistical Psychology (2005)  
Journal of General Internal Medicine (2005)  
Roeper Review (2005)  
Psychological Methods (2004)  
Psychological Assessment (2006)  
Personality and Individual Differences (2006)  
Computational Statistics and Data Analysis (2006)  
Journal of Educational Measurement (2006)  
Personality and Individual Differences (2006)  
Journal for the Education of the Gifted (2007)  
Astronomy Education Review (2007)  
Journal of Charter School Research (2007)  
Educational and Psychological Measurement (2007)  
Structural Equation Modeling (2007)  
Educational Assessment (2008)  
Psychological Assessment (2008)  
Journal of Classification (2008)  
Educational Measurement: Issues and Practice (2009)  
Behavior Research Methods (2009)  
Journal of Experimental Education (2010)  
Journal of Statistical Computation and Simulation (2010)  
Journal of Psychoeducational Assessment (2010)  
European Journal of Psychological Assessment (2010)  
Brazilian Journal of Probability and Statistics (2012)  
BMJ (2012)

**Textbook Reviews**

Keller, S. (2008). The Tao of validity.  
Hogan, T.P. (2005). Educational Assessment: A practical introduction.  
Summers, C.R. (2005). Statistics for the Behavioral Sciences: A comparison approach.

**Service to Professional Organizations**

**American Educational Research Association**

Member at large for Educational Statistician SIG governing board, 2017-2018  
Appointed to proposal review committee for NCME, 2016  
Appointed to proposal review committee for AERA Division D SIG, 2016  
Appointed to proposal review committee for AERA Educational Statistician SIG, 2016.  
Appointed to proposal review committee for AERA Validity SIG, 2016.  
Appointed to proposal review committee for NCME, 2015.  
Appointed to proposal review committee for AERA Division D SIG, 2015  
Appointed to proposal review committee for AERA Educational Statistician SIG, 2015.  
Program chair, Structural Equation Modeling Special Interest Group, 2015-2017  
Chairperson, Multiple Linear Regression Special Interest Group, 2014-2017  
Chairperson, Educational Statisticians Special Interest Group, 2014-2015  
Program chair, Educational Statisticians Special Interest Group, 2013-2014  
Appointed to proposal review committee for AERA Educational Statistician SIG, 2014.  
Appointed to proposal review committee for NCME, 2014.  
Appointed to proposal review committee for AERA Division D SIG, 20124  
Appointed to proposal review committee for AERA Validity Assessment SIG, 2014.  
Appointed to proposal review committee for AERA Division D SIG, 2012.  
Appointed to proposal review committee for AERA Validity Assessment SIG, 2013.  
Appointed to proposal review committee for AERA Multilevel Modeling SIG, 2013.  
Appointed to proposal review committee for AERA Rasch SIG, 2013.  
Appointed to proposal review committee for AERA Educational Statistician SIG, 2013.  
Appointed to proposal review committee for AERA Multiple Regression SIG, 2013.  
Elected Member at large to Educational Statistician SIG governing board, 2012-2013.  
Appointed to proposal review committee for AERA Multiple Regression SIG, 2012.  
Appointed to proposal review committee for AERA Multiple Regression SIG, 2009.  
Appointed to proposal review committee for AERA Hierarchical Linear Modeling SIG,  
2009.  
Discussant, Division D, Quantitative methods and statistical modeling, Session 16.021.  
Annual meeting, 2009.  
Discussant, Division D, Quantitative methods and statistical modeling, Session 39.029.  
Annual meeting, 2009.  
Discussant, Division D, Quantitative methods and statistical modeling, Session 31.028.  
Annual meeting, 2008.  
Discussant, Division D, Multidimensional Item Response Theory, Session 19.030.  
Annual meeting, 2007.  
Discussant for 2004 Annual Meeting for Section D-15.029  
Outstanding Dissertation Award selection committee, Division D, 2007 and 2008.  
Presidential nomination review Board for 2006, Educational Statisticians SIG.  
Review for Annual Meeting for Division D, Structural Equation Modeling SIG, Multiple  
linear regression SIG and Educational Statisticians SIG, 1999 - 2010.

### **National Council on Measurement in Education**

Alicia Cascallar Outstanding Research Award, 2014-2016.  
Discussant for 2012 Annual Meeting, Missing data across measurement contexts  
Discussant for 2009 Student Poster presentation

Discussant for 2008 Annual Meeting, Issues in the Assessment of Dimensionality/Local Dependence, Session C3

Discussant for 2008 Annual Meeting, Analyses of Differential Item Functioning, Session C3

Discussant for 2008 Student Poster presentation

Moderator for 2007 Annual Meeting, Advances in Modeling, Session D5

Discussant for 2007 Student Poster presentation

Discussant for 2006 Student Poster presentation

Chair for 2005 Annual Meeting, Session G3

Review for 2005 - 2010 Annual Meeting

### **Psychometric Society**

Member of Elections Committee, 2017-2018

Session chair for 2006 Annual Meeting, Session FAC 1

### **American Psychological Association, Division 5**

Panel Member, Graduate Student Career Seminar, 2015

Review for 2007 - 2016 Annual Meeting

### **National Science Foundation (NSF)**

Grant proposal peer review board (beginning 2009)

### **Institute of Educational Science (IES)**

Grant proposal peer review board panel (2010-2017)

### **Social Sciences and Humanities Research Council of Canada**

Grant proposal peer review panel (beginning 2010)

### **Netherlands Organization for Scientific Research review panelist**

Research proposal peer review panel (beginning 2014)

### **State Service**

Appointed to the Governor's Working Group on Teacher Preparation, 2008 - present.

Provided a sampling plan to the Office of Research and Evaluation in the Indiana

Department of Education, 2008

### **University Service (Ball State University)**

University Representative, Faculty Special Assigned Leave Committee

Search committee for statistician position in University Computing Services, 2009

University Grade Appeals, 2017

### **Graduate Student Development Conference**

Presentation "Evaluating students' work", August 18, 2008

Presentation "Evaluating students' work", August 13, 2007

Presentation “Evaluating students’ work”, August 14, 2006

Teachers College representative to the University Grade Appeals Committee, 2009-2011

Office of Teaching and Learning Advancement, Seminar on test item writing, Fall, 2008

Institute for Entrepreneurial School Leadership, Presentation “Increasing Student Achievement”, October 14, 2006

### **Office of Charter Schools Research**

Director of Research, Office of Charter Schools Research, 2007-Present

Presentation to the Thomas Fordham Foundation, November 10, 2006

### **Office of Charter Schools**

Member of committee to develop recommendations for procedures to identify ineffective charter schools for possible closure, 2008.

### **Department of Educational Psychology, Ball State University**

Personnel Selection Committee: 2004-2008

Chair of faculty search for position on statistics and research methods, 2007-2008

Promotion and Tenure Committee: 2005-2008

Salary Appeal Committee: 2004-2010

Advanced Graduate Studies Committee: 2005-2008

Curriculum Planning and Review Committee: 2004-2006, 2009-2010

Policy and planning Committee: 2009-2010

Educational Psychology Core, 2008-2010

Chair, Curriculum Planning and Review Committee, 2009-2010

Department Assessment Coordinator, 2009-2010

Secretary, Promotion and Tenure Committee, 2008-2009

## **Teaching**

### **Graduate and Undergraduate Courses Taught**

#### **Ball State University (2003-present)**

Introduction to Educational Measurement: undergraduate (EDPSY 345)

Research Methodology (EDPSY 640)

Introduction to Statistical Methodology (EDPSY 641)

Intermediate Statistics (EDPSY 642)

Topics in Advanced Research Methods as independent study (EDPSY 645)

Introduction to Educational Measurement (EDPSY 646)

Item Response Theory (EDPSY 698)

Categorical Data Analysis (EDPSY 740)

Seminar in Nonparametric statistics (EDPSY 730)

Seminar in Structural Equation Modeling (EDPSY 744)

Regression analysis (EDPSY 741)

Multivariate Statistics (EDPSY 742)  
Factor Analysis (EDPSY 743)  
Theory of Measurement (EDPSY 746)  
**University of South Carolina (1997-2003)**  
Introduction to Statistics (STAT 201)