

VITA
James Algina

PERSONAL INFORMATION

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EDUCATION

B.A. University of Rhode Island, 1971
Major: Psychology
Minor: English
Ed.D. University of Massachusetts, 1976
Major: Psychometrics, Statistics
Minor: Educational Psychology

PROFESSIONAL EXPERIENCE

Emeritus Professor of Education, School of Human Development and Organizational Studies in Education, College of Education, University of Florida, June 2013-present.

Professor of Education, School of Human Development and Organizational Studies in Education, College of Education, University of Florida, August 2009-June 2013.

Acting Director, School of Human Development and Organizational Studies in Education, College of Education, University of Florida, November 2009-June 2010.

Professor of Education, Department of Educational Psychology, College of Education, University of Florida, July 1999-August 2009.

University of Florida Research Foundation Professor (2001-2003)

Acting Chair, Foundations of Education Department, College of Education, University of Florida, July 1997-June 1998

Chair, Foundations of Education Department, College of Education, University of Florida, August 1983-August 1995.

Professor of Education, Foundations of Education Department, College of Education, University of Florida, September 1985-June 1999.

Associate Professor of Education, Foundations of Education Department, College of Education, University of Florida, September 1980-August 1985.

Assistant Professor of Education, Foundations of Education Department, College of Education, University of Florida, September 1978-August 1980.

Assistant Professor of Education, Program in Educational Research Methodology, School of Education; Center Associate, Learning Research and Development Center, University of Pittsburgh, 1977-August, 1978.

Assistant Professor of Medical Education, Center for Educational Development, University of Illinois at the Medical Center, Chicago, 1975-1977.

PROFESSIONAL AFFILIATIONS

American Educational Research Association
 American Psychological Association
 American Statistical Association
 National Council on Measurement in Education

PROFESSIONAL SERVICE

Co-Editor, *American Educational Research Journal*, Section on Teaching, Learning, and Human Development, 1996-1998.

Editor, *Journal of Educational Measurement*, 1990-1992.

Advisory Editor, *Journal of Educational Measurement*, 1986-1989, 1996-2013

Board of Cooperating Editors, *Educational and Psychological Measurement*, 1995-2010

Consulting Editor, *Journal of Experimental Education*, 1996-

Editorial Board, *Contemporary Educational Psychology*,

1996-2014

Editorial Board, *Psychological Methods*, 1999-

Editorial Board, *Psychological Bulletin*, 1994-1996.

Advisory Editor, *Journal of Educational Psychology*, 1980-1989.

Chair, Nominating Committee, Division D, AERA, 1995-1996.

Member, Publications Committee, National Council on Measurement in Education, 1993-1997.

Member, Nominating Committee, Division D, AERA, 1994-1995.

Occasional Reviewer, *Applied Educational Measurement*, *Applied Psychological Measurement*, *British Journal of Mathematical and Statistical Psychology*, *Multivariate Behavioral Research*, *Psychometrika*, *Journal of Educational and Behavioral Statistics*.

President, Educational Statisticians, A Special Interest Group of AERA, 1984-1985.

Program Chair and President Elect, Educational Statisticians, A Special Interest Group of AERA, 1983-1984.

Secretary-Treasurer, Educational Statisticians, A Special Interest Group of AERA, 1979-1981.

COMPLETED STUDIES

(a) Dissertation

Algina, J. (1976). *A generalized longitudinal factor model for the analysis of change*. Unpublished doctoral dissertation, University of Massachusetts, 1976.

(b) Books

Legg S. M., & Algina, J. (Eds). (1990). *Cognitive assessment of educational outcomes*. Norwood, NJ: Ablex.

Crocker, L. M., & Algina, J. (1986). *Introduction to classical and modern test theory*. New York: Holt, Rinehart, & Winston.

(c) Book Chapters

- Algina, J. & Swaminathan H. (2011). Centering in two-level nested designs. In J. Hox & J. K. Roberts (Eds.), *The handbook of advanced multilevel analysis* (pp. 285-312). New York: Routledge
- Algina J. & Penfield, R. D. (2009). Classical test theory. In R. E. Millsap & A. Maydeu-Olivares (Eds.), *Handbook of quantitative methods in psychology*. Thousand Oaks, CA: Sage Publications
- Keselman, H. J., Algina, J., Boik, R. J., & Wilcox, R. R. (1999). New approaches to the analysis of repeated measurements. In B. Thompson (Ed.), *Advances in social science methodology*, (Vol. 5) (pp. 251-268). Greenwich, CT: Jai.
- Algina, J., & Coombs, W. T. (1996). A review of selected parametric solutions to the Behrens-Fisher problem. In B. Thompson (Ed.), *Advances in social science methodology*, (Vol. 4) (pp. 137-171). Greenwich, CT: Jai. **1559387726**
- Keselman, H. J., & Algina, J. (1996). The analysis of higher-order repeated measures designs. In B. Thompson (Ed.), *Advances in social science methodology*, (Vol. 4) (pp. 45-70). Greenwich, CT: Jai.
- Algina, J. (1989). Elements of classical reliability theory and generalizability theory. In B. Thompson (Ed.), *Advances in Social Science Methodology* (Vol. 1) (pp. 137-169). Greenwich, CT: Jai.
- Algina, J. & Legg, S. M. (1987). Technical issues. In L. M. Rudner (Ed.), *What's happening in teacher testing: An analysis of state teacher testing programs* (pp. 135-138). Washington, D. C.: Office of Educational Research and Improvement.
- Hambleton, R. K., Swaminathan, H., & Algina, J. (1976). Some contributions to the theory and practice of criterion-referenced testing. In D. N. M. de Gruijter, L. J. Th. van der Kamp, & A. F. Crombag (Eds.), *Perspectives in psychological and educational measurement*. New York: Wiley.
- (d) Encyclopedia Articles
- Algina, J. & Swaminathan, H. (2015) Psychometrics: Classical Test Theory. In J. D. Wright (Ed.), *International Encyclopedia of social and Behavioral Sciences*.

- Algina, J. & Keselman, H. J. (2010). Semi-Partial Correlation Coefficient (Part Correlation Coefficient). In N. J. Salkind, B. Frey, & D. M. Dougherty (Eds.), *Encyclopedia of Research Design*. Thousand Oaks, CA: Sage Publications. Oxford, GB: Elsevier Ltd.
- Keselman, H. J. & Algina, J. (2010). Student's t Statistic. In N. J. Salkind, B. Frey, & D. M. Dougherty (Eds.), *Encyclopedia of Research Design*. Thousand Oaks, CA: Sage Publications.
- Algina (2008). Behrens-Fisher Problem-Update and Extensions. In S. Kotz, C. B. Read, & D. L. Banks (Eds.), *Encyclopedia of Statistical Sciences Online*. (11 pages, internet). New York: John Wiley.
- Algina, J. (1999). Behrens-Fisher Problem-Update and Extensions. In S. Kotz, C. B. Read, & D. L. Banks (Eds.), *Encyclopedia of Statistical Science*. New York: John Wiley.
- Algina, J. (1998). The Aspin-Welch test. In Armitage, P., & Colton, T. (Eds.), *Encyclopedia of Biostatistics*, (Vol 1). (pp.201-202). London: John Wiley.
- Algina, J. (1992). Reliability of Measurement. In M. C. Alkin (Ed.), *Encyclopedia of Educational Research* (pp. 1090-1093). New York: Macmillan.
- (e) Refereed Publications
- Grapin, S., Kranzler, J., Waldron, N. Joyce, D., & Algina, J. (in press). Developing local oral reading fluency cut scores for predicting high-stakes test performance. *Psychology in the Schools*.
- Griffin, C.C, Dana, N.F., Pape, S., Algina, J., Bae, J., & Prosser, S. (in press). Prime Online: Exploring teacher professional development for creating inclusive elementary mathematics classrooms. *Teacher Education and Special Education*
- Marshik, T., Ashton, P.T, & Algina, J. (in press). Teachers' and students' needs for autonomy, competence, and relatedness as predictors of students' achievement. *Social Psychology of Education*.
- McLaughlin, T.E., Snyder, P.A., & Algina, J. (in press). Using generalizability theory to examine the dependability of scores from the learning target rating scale. *Topics in Early Childhood Special Education*.
- Wang, F., Algina, J., Snyder, P.A., & Cox, M. J. (in press). Children's task engagement during a challenging parent-child interaction task in toddlerhood and preschool. *Merrill-Palmer Quarterly*.

- Smith, S. W., Daunic, A. P., Algina, J., Pitts, D. L., Merrill, K. L., Cumming, M. M., & Allen, C. (in press). Self-regulation for students with emotional and behavioral disorders: Preliminary effects of the *I Control* curriculum. *Journal of Emotional and Behavioral Disorders*
- Brownell, M.T., Kiely, M.T., Hager, D., Boardman, A. G., Corbett, N., Algina, J. Urbach, .J, & Dingle, M.P. (2017). Literacy learning cohorts: Content-focused approach to improving special education teachers' reading instruction. *Exceptional Children*, 83, 143-164
- Aydin, B., Leite, W., & Algina, J. (2016). The effects of including observed means or latent means as covariates in multilevel models for cluster randomized trials. *Educational and Psychological Measurement*, 76, 803-823.
- Hemmeter, M.L., Snyder, P. A., Fox, L., & Algina, J. (2106). Evaluating the implementation of the Pyramid Model for promoting social-emotional competence in early childhood classrooms. *Topics in Early Childhood Special Education*. 36, 133-146.
- Koo, N., Leite, W., & Algina, J. (2016). Mediated effects with the parallel process latent growth model: An evaluation of methods for testing mediation in the presence of non-normal data. *Structural Equation Modeling*, 23, 302-303.
- Conroy, M. A., Sutherland, K. S., Algina, J. J. Wilson, R. E., Martinez, J. R., & Whalon, K. J. (2015). Measuring teacher implementation of the Best in Class intervention program and corollary child outcomes. *Journal of Emotional and Behavioral Disorders*, 23 144–155.
- McLaughlin, T. E, Snyder, P. A., & Algina, J. (2015). Characterizing early childhood disabilities in a nationally representative sample using functional profiles. *Exceptional Children*, 81, 471-488.
- Huggins, A.C., & Algina, J. (2015). The partial credit model and generalized partial credit model as constrained nominal response models, with application in *Mplus*. *Structural Equation Modeling*, 22, 308-318.
- Pape, S. J., Prosser, S. K., Griffin, C. C., Dana, N. F., Algina, J., & Bae, J. (2015). Prime online: Developing grades 3-5 teachers' content knowledge for teaching mathematics in an online professional development program. *Contemporary Issues in Technology and Teacher Education*, 15(1), 14-43.

- Aydin, B., Leite, W., & Algina, J. (2014). The consequences of ignoring variability in measurement occasions within data collection waves in latent growth models. *Multivariate Behavioral Research*, *49*, 149-160
- Peters, C. D., Kranzler, J. H., Algina, J., Smith, S. W., & Daunic, A. P. (2014) Understanding disproportionate representation in special education by examining group differences in behavior ratings. *Psychology in the Schools*, *51*(5), 452-465.
- Shepperd, J. A., Miller, W. A., Smith, C. T., & Algina, J. (2014). Does religion offer worldviews that dissuade adolescent substance abuse? *Psychology of Religion and Spirituality*, *6*, 292-301.
- Zhang, I., Jin, R., Leite, W., & Algina, J. (2014). Additive models for MTMM data with a multiplicative trait-method relationship: a simulation study. *Structural Equation Modeling*, *21*, 68-80
- Henry, G., & Algina, J., & Kaya, Y. (2013) Use of the Color Trails Test as an Embedded measure of Performance Validity. *The Clinical Neuropsychologist*, *27*, 864-876.
- Henry, G., Heilbronner, R., Algina, J., & Kaya, Y. (2013) Derivation of the MMPI-2-RF Henry-Heilbronner Index-r (HHI-r) Scale. *The Clinical Neuropsychologist*, *27*, 509-513.
- Othman, A. R., Yin, T. S., Keselman, H. J., Wilcox, R. R., & Algina, J. (2012). Robust Modifications of the Levene and O'Brien Tests for Spread. *Journal of Modern Applied Statistical Methods*, *11*, 54-68.
- Peters, C. D. Smith, S. W. Algina, J., & Daunic, A. P. (2012). Factorial validity of the behavior rating inventory of executive function (BRIEF) teacher form. *Child Neuropsychology*. *18*, 168-181.
- VanDerHeyden, A., McLaughlin, T., Algina, J., & Snyder, P. (2012). Randomized evaluation of a supplemental grade-wide mathematics intervention. *American Educational Research Journal*, *49*, 1251-1284..
- Oakland, T. D., & Algina, J. (2011). Adaptive behavior assessment system-II parent/primary caregiver form: Ages 0-5: Its factor structure and other implications for practice. *Journal of Applied School Psychology*, *27*, 103-117.
- Zhang, G., & Algina, J. (2011). Coverage performance of the non-central F -based and percentile bootstrap confidence intervals for root mean square standardized effect size in one-way fixed-effects ANOVA. *Journal of Modern Applied Statistical Methods*, *10* 77-96.

- Algina, J., & Keselman, H. J. (2010). Confidence Intervals for Squared Semipartial Correlation Coefficients: The Effect of Nonnormality. *Educational and Psychological Measurement*, 70, 926-940.
- Liu, F., Black, E.W., Algina, J, Cavanaugh, C., & Dawson, K. (2010). Involvement in virtual schooling: The validation of an instrument to measure parental involvement mechanisms. *Journal of Interactive Online Learning*, 9(2), 105-132
- Shi, Y., Leite, W., & Algina, J. (2010). The impact of omitting the interaction between cross classified factors in cross-classified random effects modeling. *British Journal of Mathematical and Statistical Psychology*, 63,1-15.
- Algina, J., & Keselman, H. J. (2008). Population validity and cross validity: Applications of distribution theory for testing hypotheses, setting confidence intervals and determining sample size. *Educational and Psychological Measurement*, 68, 233-242.
- Algina, J., Keselman, H.J., & Penfield, R. D. (2008). Confidence intervals for the squared multiple semipartial correlation coefficient. *Journal of Modern Applied Statistical Methods*, 7, 2-19.
- Algina, J., Keselman, H.J., & Penfield, R. D. (2008). Note on a confidence interval for the squared semi-partial correlation coefficient. *Educational and Psychological Measurement*, 68, 734-741.
- Keselman, H.J., Algina, J., Lix, L., Wilcox, R. R, & Deering, K. (2008). A generally robust approach for testing hypotheses and setting confidence intervals for effect sizes. *Psychological Methods*, 13, 110-129.
- Keselman, H. J., Wilcox, R. R., Algina, J., Othman, A. R., & Fradette, K. (2008). A comparative study of robust tests of spread: Asymmetric trimming strategies. *British Journal of Mathematical and Statistical Psychology*, 61, 235–253.
- Rossen, E., Kranzler, J., & Algina, J. (2008). Confirmatory Factor Analysis of the Mayer-Salovey-Caruso Emotional Intelligence Test V2.0 (MSCEIT). *Personality and Individual Differences*, 44, 1258-1269.
- Wei, Y., Oakland, T. D., & Algina, J. (2008). Multigroup confirmatory factor analysis for the parent form, ages 5-21, of the Adaptive Behavior Assessment System-II. *American Journal on Mental Retardation*, 113, 178-186.
- Algina, J., Keselman, H.J., & Penfield, R. D. (2007). Confidence intervals for an effect size measure in multiple linear regression. *Educational and Psychological Measurement*, 67, 207-218.

- Keselman, H. J., Wilcox, R. R., Lix, L.M., Algina, J., & Fradette, K. (2007). Adaptive robust estimation and testing. *British Journal of Mathematical and Statistical Psychology*, **60**, 267-294.
- Padilla, M. A., & Algina, J. (2007). Type I Error Rates of the Kenward-Roger Adjusted Degree of Freedom F -test for a Split-Plot Design with Missing Values. *Journal of Modern Applied Statistical Methods*, **6**, 66-80.
- Wehry, S., & Algina, J. (2007) Analyses of unbalanced groups-versus-individual research designs using three alternative approximate degrees of freedom tests: test development and Type I error rates. *Journal of Modern Applied Statistical Methods*, **6**, 53 – 65
- Algina, J., Keselman, H.J., & Penfield, R. D. (2006). Confidence interval coverage for Cohen's effect size statistic. *Educational and Psychological Measurement*, **66**, 945-960.
- Algina, J., Keselman, H.J., & Penfield, R. D. (2006). Confidence intervals for an effect size when variances are not equal. *Journal of Modern Applied Statistical Methods*, **5**, 2-13.
- Kowalchuk, R., Keselman, H. J., Wilcox, R. Algina, J. (2006). Multiple Comparison Procedures, Trimmed Means, and Transformed Statistics, *Journal of Modern Applied Statistical Methods*, **5**, 43-64.
- Penfield, R., & Algina, J. (2006). A generalized dif effect variance estimator for measuring unsigned differential test functioning in mixed format tests. *Journal of Educational Measurement*, **43**. 295-312
- Misangi, V. F. LePine, J. A., Algina, J., & Goeddeke, F. (2006). The adequacy of repeated measures regression for multilevel research designs. *Organizational Research Methods*, **9**, 5-26.
- Werba, B. E., Eyberg, S. M. Boggs, S. R. & Algina, J. (2006). Predicting outcome in parent-child interaction therapy: success and attrition. *Behavior Modification*, **30**, 618-646.
- Algina, J., Keselman, H.J., & Penfield, R. D. (2005). An alternative to Cohen's standardized mean difference effect size: a robust parameter and confidence interval in the two independent groups case. *Psychological Methods*, **10**, 317-328.
- Algina, J., Keselman, H.J., & Penfield, R. D. (2005). Effect Sizes and Their Intervals: The Two-Groups Correlated Case. *Educational and Psychological Measurement*, **65**, 241-258.
- Keselman, H. J., Algina, J., & Fradette, K. (2005). Robust confidence intervals for effect size in the two-group case. *Journal of Modern Applied Statistical Methods*, **4**, 353-371.

- Algina, J., & Keselman, H. J. (2004). Assessing treatment effects in randomized longitudinal two-group designs with missing observations. *Journal of Modern Applied Statistical Methods*, 3, 271-287.
- Algina, J., & Keselman, H. J. (2004). A comparison of methods for longitudinal analysis with missing data. *Journal of Modern Applied Statistical Methods*, 3, 13-26.
- Gill, M. G., Ashton, P., & Algina, J. (2004). Authoritative schools: A test of a model to resolve the school effectiveness debate. *Contemporary Educational Psychology*, 29, 389-409.
- Gill, M. G., Ashton, P., & Algina, J. (2004). Changing preservice teachers' epistemological beliefs about teaching and learning in mathematics: An intervention study. *Contemporary Educational Psychology*, 29, 164-185.
- Keselman, H. J., Wilcox, R. R., Algina, J., Fradette, K., and Othman, A. R. (2004). A power comparison of robust test statistics based on adaptive estimators. *Journal of Modern Applied Statistical Methods*, 3, 27-3.
- King, T. Z., Fennell, E.B., Williams, L., Algina, J., Boggs, S., Crosson, B., & Leonard C. (2004). Verbal memory abilities of children with brain tumors. *Child Neuropsychology*, 10 (2), 76-88.
- Kowalchuk, R., Keselman, H. J., Algina, J., & Wolfinger, R. D. (2004). The analysis of repeated measurement with mixed-model adjusted *F* tests. *Educational and Psychological Measurement*, 64, 224-242.
- Padilla, M. A., & Algina, J. (2004). Type I Error Rates for a One Factor Within-Subjects Design with Missing Values. *Journal of Modern Applied Statistical Methods*, 3, 406-416
- Tekewe, C. D., Carter, R. K., Ma, C-X., Algina, J., Lucas, M. E., Roth, J., Ariet, M. Fisher, T., & Resnick, M. (2004). An empirical comparison of statistical models for value-added assessment of school performance. *Journal of Educational and Behavioral Statistics*, 29, 11-36.
- Algina, J., & Keselman, H. J. (2003). Approximate confidence intervals for effect sizes. *Educational and Psychological Measurement*, 63, 537-553.
- Algina, J., Keselman, H. J., & Othman, A. R. (2003). Analyzing group by time effects in longitudinal two-group randomized trial designs with missing data. *Journal of Modern Applied Statistical Methods*, 2, 50-72.
- Algina, J. & Olejnik, S. (2003). Conducting power analyses for ANOVA and ANCOVA in between-subjects designs. *Evaluation and the Health Professions*, 26, 288-314.

- Algina, J. & Olejnik, S. F. (2003). Sample size tables for correlation analysis with applications in partial correlation and multiple regression analysis. *Multivariate Behavioral Research*, 38, 309-324.
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- Kowalchuk, R., Keselman, H. J., & Algina, J. (2003). Repeated measures interaction test with aligned ranks. *Multivariate Behavioral Research*, 38, 433-462.
- Lix, L., Algina, J. & Keselman, H. J. (2003). Analyzing multivariate repeated measures designs: a comparison of two approximate degrees of freedom procedures. *Multivariate Behavioral Research* 38, 403-432.
- Olejnik, S. F. & Algina, J. (2003). Generalized eta and omega squared statistics: Measures of effect size for some common research designs. *Psychological Methods*, 8, 434-447.
- Penfield, R., & Algina, J. (2003). Applying the Liu-Agresti estimator of the cumulative odds ratio to DIF detection in polytomous items. *Journal of Educational Measurement*, 40, 353-370.
- Wehry, S. & Algina, J. (2003). Type I Error Rates of Four Methods for Analyzing Data Collected in a Groups-Versus-Individuals Design. *Journal of Modern Applied Statistical Methods*, 2, 400-413
- Algina, J., Moulder, B. C., & Moser, B. K. (2002). Sample size requirements for accurate estimation of squared semi-partial correlation coefficients. *Multivariate Behavioral Research*, 37, 37-57.
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- Mouder, B. C., & Algina, J. (2002). Comparison of methods for estimating and testing latent variable interactions. *Structural Equation Modeling*, *9*, 1-19.
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- Algina, J., & Olejnik, S. (2000). Determining sample size for accurate estimation of the squared multiple correlation coefficient. *Multivariate Behavioral Research*, *35*, 119-136.
- Keselman, H. J., Algina, J., Wilcox, R. R., & Kowalchuk, R. (2000). Testing repeated measure hypotheses when covariance matrices are heterogeneous: Revisiting the robustness of the Welch-James test again. *Educational and Psychological Measurement*, *60*, 925-938.
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Algina, J. (1993). Review of Devore, J., & Peck, R. *Statistics: The exploration and analysis of data. Educational and Psychological Measurement, 53*, 855-859.

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Algina, J., & Webb, R. (1979). Review of Solomon, D. & Kendall, A. J. *Children in classrooms. Sociology: Reviews of New Books, 7*, 6-7.

Algina, J., & Swaminathan, H. (1975). Review of Frank, H. *Introduction to probability and statistics: Concepts and principles. Educational and Psychological Measurement, 35*, 203-211.

PAPERS PRESENTED AT CONFERENCES

- Huggins,-Manley, A. C., Zhou, S., & Algina, J. (November, 2016). *The semi-PCM and semi-GPCM for non-responses in measurement data*. Presented at the 2016 Annual meeting of the Florida Educational Research Association, Lakeland, FL
- Conroy, M., Sutherland K. & Algina, J. (June, 2016). Disruptive behavior problems in early childhood: examining impacts on costly child outcomes and effects of intervention efforts targeting these behaviors. The Society for Prevention Research Annual Meeting, San Francisco, CA
- Sutherland K., Conroy, M. & Algina, J. (June, 2016). Improving teacher-child relationships and interactions within a tier-2 program in preschool classrooms. The Society for Prevention Research Annual Meeting, San Francisco, CA
- Conroy, M., Sutherland K. & Algina, J. (June, 2016). Teacher and child outcomes of the Best in CLASS efficacy trial. The Society for Prevention Research Annual Meeting, San Francisco, CA
- Bae, J., Griffin, C. G., & Algina, J. (April, 2016). Capturing mathematics instruction with a person-oriented methodological approach: use of latent class analysis. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Wang, F., Algina, J., Snyder, P., Cox, M. & the FLP Key Investigators (March, 2015). Child, parent, and family predictors of parental responsiveness to and acceptance of the child at home. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Philadelphia, PA.
- Wang, F., Conroy, M., Algina, J. & Sutherland, K. (March, 2015). Investigating the influence of a classroom-based intervention on the experiences of preschoolers with chronic problem behavior. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Philadelphia, PA.
- Bishop, C., Snyder, P. & Algina, J. (September, 2014). Exploring measurement invariance for the ECERS-R and the Arnett Caregiver Interaction Scale: Findings from the Early Childhood Longitudinal Study, Birth Cohort. Laptop presentation at the Society of Research Educational Effectiveness Conference, Washington, DC.
- Clark C., Warner TD, Algina J., Snyder P., Eyler F.D. & Behnke, M. (May, 2014) Home environment, family social support, and cognitive and motor development of infants and toddlers of mothers with multiple risks: Parallel process latent growth curve analysis. Pediatric Academic Societies, Vancouver, Canada.

- Conroy, M., Sutherland, K., Algina, J., Barnes, T., Wang, F. & Ladwig, C. (May, 2014). The relationship between teacher-child interactions and young children's problem behavior: Preliminary findings. Poster presented at the Society for Prevention Research 22nd Annual Meeting, Washington, DC.
- Aydin, B., Algina, J., & Leite, W. L. (April, 2015). Methods to detect treatment effect in cluster randomized trials. Paper presented at the Annual Meeting of the American Educational Research Association, Philadelphia, PA.
- Griffin, C.G., Dana, N. F., Pape, S. J., Bae, J. Prosser, S. & Algina, J. (April, 2015). Prime Online: Teacher professional development for inclusive elementary mathematics classrooms. Paper presented at the Annual Meeting of the American Educational Research Association, Philadelphia, PA.
- Hemmeter, M.L., Snyder, P., Fox, L. & Algina, J. (April, 2014). Research on the Pyramid Model: Current findings and implications. Presentation at the 11th annual National Training Institute on Effective Practices, St. Petersburg, FL.
- Bishop, C., Snyder, P. & Algina, J. (February, 2014). Exploring Measurement Invariance for the ECERS-R and the Arnett Caregiver Interaction Scale: Findings from the Early Childhood Longitudinal Study, Birth Cohort. Poster presented at the 9th biennial Conference on Research Innovations in Early Intervention, San Diego, CA.
- Clark, C., Algina, J., Warner, T. & Snyder, P. (February, 2014) Exploration of quality of the home environment, family social supports, and cognitive and motor development for infants and toddlers from families with multiple risks: A parallel process growth curve analysis. Poster presented at the 9th biennial Conference on Research Innovations in Early Intervention, San Diego, CA.
- Conroy, M., Sutherland, K., Algina, J., Barnes, T., Wang, F., Martinez, J. & Ladwig, C. (February, 2014). A preventative classroom-based intervention model for ameliorating problem behaviors in young children. Poster presented at the 9th biennial Conference on Research Innovations in Early Intervention, San Diego, CA.
- McLaughlin, T., Snyder, P. & Algina, J., (February, 2014). Using Generalizability Theory to examine the dependability of scores from the learning target rating scale. Poster presented at the 9th biennial Conference on Research Innovations in Early Intervention, San Diego, CA.
- Wang, F., Algina, J., Snyder, P. & Cox, M. (February, 2014). Using qualitative rating methodology and latent class analysis to identification of young rural children with vulnerabilities and strengths. Poster presented at the 9th biennial Conference on Research Innovations in Early Intervention, San Diego, CA.

Bishop, C., Snyder, P., & Algina, J. (October, 2013). Examining child care quality for young children with special needs. Poster presented at the 2013 annual meeting of the Division for Early Childhood, San Francisco, CA.

Rong, J., & Algina, J. (April, 2013). Variables Influencing Factor Recovery in Exploratory Factor Analysis With Ordinal Data. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Aydin, B., & Algina, J. (November, 2012). Methods to Detect Treatment Effect in Cluster Randomized Trials with Small Level-1 Sample Sizes. Presented at the 2012 Annual meeting of the Florida Educational Research Association, Gainesville, FL

McLaughlin, T., Snyder, P., & Algina, J. (November, 2012). Functional ability profiles and young children's social competence: Exploring relationships in the pre-elementary education longitudinal study data set. Poster session presented at the International Division for Early Childhood, Minneapolis, MN.

McLaughlin, T., Snyder, P., Algina, J. (April, 2012). Functional ability profiles and young Children's social competence: exploring relationships in the Pre-elementary Education Longitudinal Study data set. Presented at the Conference on Research Innovations in Early Intervention, San Diego, CA.

Snyder, P., Hemmeter, M. L., Sandall, S., Mclean, M., McLaughlin, T & Algina, J. (February, 2012). Impact of professional development on preschool teachers use of embedded-instruction practices. Presented at the Conference on Research Innovations in Early Intervention, San Diego, CA

Gao, M., & Algina, J. Investigating context effect in a simulation study: a multilevel latent model. (November, 2011). Paper presented at the Annual Meeting of the Florida Educational Research Association, Orlando, FL.

Hemmeter, M.L., Snyder, P., Fox, L., & Algina, J. (May, 2011) Professional development related to the teaching pyramid model for addressing the social emotional development and challenging behaviors of young children. Paper presented at the 2011 International Society on Early Intervention Conference, New York, NY.

Aydin, B., Leite, W., & Algina, J. (April, 2011). Comparison of latent growth models with different time coding strategies in the presence of inter-individually varying time points of measurement. Presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.

- Koo, N., Leite, W. L., & Algina, J. (April, 2011). Impact of ignoring time series processes in error structure in growth mixture modeling. Presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Marshik, T. T., Ashton, P. T., Algina, J. (April, 2011). Teachers' and students' psychological need satisfaction as predictors of students' academic achievement. Presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Zhang, L., Jin, & Leite, W. L., & Algina J. (April, 2011). Additive models for multitrait-multimethod data assuming a multiplicative trait-method relationship: A simulation study. Presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Aydin, B., Leite, W., & Algina, J. (November, 2010). Comparison of latent growth models with different time coding strategies in the presence of inter-individually varying time points of measurement. Paper presented at the Annual Meeting of the Florida Educational Research Association, Orlando, FL.
- Zhang, L. Jin. R. Leite, W. L., & Algina, J. (November, 2010). Additive models for multitrait-multimethod data assuming a multiplicative trait-method relationship: A simulation study. Presented at the Annual Meeting of the Florida Educational Research Association, Orlando, FL.
- Cordell-McNulty, K, Ashton, P. T., & Algina, J. (May, 2010). Predictors of college success and retention in a bio-ecological framework. Annual Meeting of American Educational Research Association, Denver, CO.
- Liu, F., Black, E.W., & Algina, J. (May, 2010), Parental involvement in virtual schooling: Using confirmatory factor analysis and exploratory factor analysis for instrument validation. Annual Meeting of American Educational Research Association, Denver, CO.
- Peters, C. D., Kranzler, J. K., Algina, J., Smith, S. W., & Daunic, A. P. (March, 2010). Disproportionality of minority students identified with EBD. Presented at the National Association of School Psychologists, Chicago, IL.
- McLaughlin, T., Algina, J., & Snyder, P. (February, 2010). Using hierarchical multivariate linear modeling with the pre-elementary longitudinal study data: Preliminary analysis of social skills and problem behavior ratings. Presented at the Conference on Research Innovations in Early Intervention, San Diego, CA.
- Behnke, M., Eyler, F.D. Duckworth Warner, T., Leite, W.L. & Algina, J. (May, 2009). Precursors of delinquency and drug use in youth with prenatal cocaine. Presented at the Pediatric Academic Society, Baltimore, MD.
- Liu, F., Black, E.W., & Algina, J. (November, 2009). Involvement in virtual schooling: the

- validation of an instrument to measure parental involvement mechanisms using confirmatory factor analysis. Presented at the Annual Conference of American Evaluation Association , Orlando, FL.
- Marshik, T., Ashton, P. T., & Algina, J. (2008). Predictors of self-control and GPA in college students. Presented at the Annual Meeting of the American Psychological Association, New York.
- Zhang, G., Algina, J, & Padilla, M.. (2008). Performance of confidence intervals for root mean square standardized effect size in one-way fixed-effects ANOVA. Presented at the Annual Meeting of the American Educational Research Association, New York.
- Brownell, M., Algina, J, & Blair, M. (2007). Improving our understanding of contextual influences in special education research. Presented at the IES Research Conference, Washington, DC.
- Shi, Y., Leite, W., & Algina, J. (2007). The impact of omitting the interaction between cross classified factors in CCREM. Presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Gill, M. G. & Algina, J. (2006). Promoting conceptual change in preservice teachers' mathematics beliefs via text-based instruction: affective and cognitive factors. Presented at the American Educational Research Association, San Francisco.
- Padilla, M, & Algina J. (2006). Kenward-Roger Type I error rates in a between-by-within subjects split-plot design with missing values. Presented at the American Educational Research Association, San Francisco, CA.
- Jordan, C.B., Belar, C.D., & Algina, J. (2005). Predictors of negative affect in female infertility clinic patients. Poster presented at the Sixth Annual Women's Health Research Day, Center for Women's Health Research: Chapel Hill, NC, March 2005.
- Fradette, K.H., Keselman, H.J., Wilcox, R. R., Lix, L. M., Algina, J. (2005). Adaptive Robust Estimation and Testing. Paper presented at the annual meeting of the American Educational Research Association, San Diego.
- Kowalchuk, R. K., Keselman, H. J., Wilcox, R. R., & Algina J. (2005). Multiple Comparison Procedures, Trimmed Means and Transformed Statistics. Paper presented at the annual meeting of the American Educational Research Association, San Diego.

- Padilla, M. A., & Algina, J. (2004). Type I Error Rates for a One Factor Within-Subjects Design with Missing Values. Paper presented at the annual meeting of the American Educational Research Association, San Diego.
- Grande, L. Bauer, R, Crosson, B. Dede, D., Algina, J., & Heilman, K. (2003) Attentional inhibition for spatial location in Parkinson's disease. Paper presented at the annual meeting of the Cognitive Science Association for Interdisciplinary Learning, Hood River, Oregon.
- Lix, L. M., Algina, J., & Keselman, H. J. (2003, June). A comparison of procedures for the analysis of multivariate longitudinal data. Paper presented at the bi-annual meeting of the Canadian Society for Epidemiology and Biostatistics, Halifax, NS.
- Jordan, C., Algina, J., & Belar, C.D. (October 2002). *Predictors of negative affect in female infertility clinic patients*. Paper presented at Dartmouth-Hitchcock Medical Center, Division of Reproductive Endocrinology and Infertility.
- Gregoire, M., Ashton, P, & Algina, J. (2001). The Role of Prior and Perceived Ability in Influencing the Relationship of Goal Orientation to Cognitive Engagement and Academic Achievement: An Explanatory Model. Paper presented at the annual meeting of the American Educational Research Association, Seattle.
- Algina, J., & Moulder, B. M. (2000). An Empirical Comparison of Methods for Estimating Latent Variable Interaction. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Gregoire, M., & Algina, J. (2000). The relationship between school climate and middle school students academic achievement and engagement in learning: A multilevel analysis. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Olejnik, S., & Algina, J. (2000). Measures of Effect Size for Comparative Studies: Applications, Interpretations, and Limitations. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Brestan, E. V., Eyberg, S. M., Algina, J., Johnson, S. B., Boggs, S. R., & Johnson, J.H. (1998). How annoying is it? Defining parental tolerance for child misbehavior. Poster presented at the annual meeting of the American Psychological Association, San Francisco.
- Lix, L. M., Keselman, H. J., & Algina, J. (1997). Trimmed means in split-plot repeated measurement designs. Paper presented at the annual meeting of the American Educational Research Association, Chicago.
- Oltman, D. O., Coombs, W. T., & Algina, J. (1996). A comparison of Type I error rates and power levels of selected multivariate analysis of variance procedures. Paper presented at

the annual meeting of the American Statistical Association.

Seraphine, A. E., & Algina, J. (1996). Centering latent ability distributions: A power study of the Stout T procedure. Paper presented at the annual meeting of the American Educational Research Association, New York.

Algina, J. (1995). A review of approximate tests for analyzing data in the unbalanced split-plot design. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Seraphine, A. E., Algina, J., & Miller, M. D. (1995). Three procedures for the assessment of unidimensionality: A power study. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Coombs, W. T., & Algina, J. (1994). A rule of thumb for using the Johansen test. Paper presented at the annual meeting of the Psychometric Society, Champaign, IL.

Algina, J., Oshima, T. C., & Lin, W-Y. (1993). Type I error rates for Welch's test and James's second-order test under nonnormality and inequality of variance when there are two groups. Paper presented at the annual meeting of the American Educational Research Association, Atlanta.

Oshima, T. C. & Algina, J. (1992). Type I error rates for James's second-order test and Wilcox's Hm test under heteroscedasticity and non-normality. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Coombs, W. T., & Algina, J. (1992). Four new solutions to the multivariate G-sample Behrens-Fisher problem. Paper presented at the annual meeting of the Psychometric Society, Columbus, OH.

Tang, K. L. & Algina, J. (1991). Performance of four univariate tests under variance-covariance heteroscedasticity. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Algina, J., & Oshima, T. C. (1990). The robustness of Yao's, James', and Johansen's tests under variance-covariance heteroscedasticity and nonnormality. Paper presented at the annual meeting of the American Educational Research Association, Boston.

Algina, J. & Oshima, T. C. (1989). Robustness of independent samples Hotelling's T^2 to variance-covariance heteroscedasticity when sample sizes are unequal and in small ratios. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Olejnik, S. F., & Algina, J. (1988). Contrast analysis for scale differences. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.

- Olejnik, S. F., & Algina, J. (1987). Bootstrap estimation and testing for variance equality. Paper presented at the annual meeting of the American Educational Research Association, Washington, D. C.
- Buhr, D., & Algina, J. (1986). A comparison of item parameter estimates and ability parameter estimates obtained by different methods implemented by BILOG. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Olejnik, S. F., & Algina, J. (1986). Tests of variance equality when distributions differ in form, shape, and location. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Olejnik, S. F., & Algina, J. (1985). Type I error rate and power of the rank transform ANOVA when populations are non-normal and have unusual variances. Paper presented at the annual meeting of the American Educational Research Association, Chicago.
- Olejnik, S. F., & Algina, J. (1985). Power analysis of selected parametric and nonparametric tests for heterogeneous variances in non-normal distributions. Paper presented at the annual meeting of the American Educational Research Association, Chicago.
- Olejnik, S. F., & Algina, J. (1984). A review of nonparametric alternatives to parametric analysis of covariance. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Olejnik, S. F., Algina, J., & Abdel-Fattah, A. (1984). An analysis of statistical power curves for parametric ANCOVA and rank transform ANCOVA. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Seaman, S. L., Algina, J., & Olejnik, S. F. (1984). Robustness and power of the rank transform and parametric ANCOVA procedures. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Larrivee, B., & Algina, J. (1983). Identification of teaching behaviors which predict success for mainstreamed students. Paper presented at the annual meeting of the American Educational Research Association, Montreal.
- Olejnik, S. F., & Algina, J. (1983). Parametric ANCOVA vs. rank transform ANCOVA when the assumptions of conditional normality and homoscedasticity are violated. Paper presented at the annual meeting of the American Educational Research Association, Montreal.
- Algina, J., & Olejnik, S. F. (1982). Analysis of data obtained in a multiple group time series design. Paper presented at the annual meeting of the American Educational Research Association, New York.

- Algina, J., & Lomax, R. G. (1979). A comparison of two procedures for analyzing multitrait multimethod matrices. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Algina, J., & Swaminathan, H. (1979). Application of growth curve methodology to the analysis of interrupted time series designs. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Bond, L., & Algina, J. (1979). On the use of two common measures of importance in linear causal models. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Swaminathan, H., & Algina, J. (1979). Issues in the analysis of time series designs. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Gross, L., & Algina, J. (1978). Single versus multiple cut-off scores for decision-making in basic medical sciences examinations. Paper presented at the annual meeting of the American Educational Research Association, Toronto.
- Noe, M. J., & Algina, J. (1977). An investigation of a single administration estimate of a criterion-referenced reliability index. Paper presented at the annual meeting of the American Educational Research Association, New York.
- Coulson, D. B., Swaminathan, H., & Algina, J. (1977). Inferring treatment effects in quasi-experimental time-series designs. Paper presented at the annual meeting of the American Educational Research Association, New York.
- Swaminathan, H., & Algina, J. (1976). Multivariate procedures for the analysis of quasi-experimental time-series designs. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Swaminathan, H., & Algina, J. (1976). Scale invariance in factor analysis. Paper presented at the annual meeting of the Psychometric Society, Murray Hill, New Jersey.
- Swaminathan, H., & Algina, J. (1976). An oblique factor model for the analysis of change. Paper presented at the annual meeting of the American Psychological Association, Washington, DC.

Algina, J. (1975). A review of selected psychometric issues pertaining to criterion-referenced testing and measurement. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.

Algina, J., & Swaminathan, H. (1975). Statistical procedures for the analysis of quasi-experimental time-series designs. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.

Algina, J., & Swaminathan, H. (1974). A generalized factor model for the analysis of change. Paper presented at the annual meeting of the American Psychological Association, New Orleans.

Swaminathan, H., Hambleton, R. K., & Algina, J. (1974). Reliability of criterion-referenced tests. Paper presented at the annual meeting of the American Psychological Association, New Orleans.

Swaminathan, H., Hambleton, R. K., & Algina, J. (1973). A decision theoretic approach to issues in criterion-referenced tests. Paper presented at the annual meeting of the Northeastern Educational Research Association, Ellenville, New York.

AWARDED CONTRACTS AND GRANTS

Evaluating a Social-emotional Learning Curriculum for K-1 Children at Risk for Emotional/behavioral Disorders. US Office of Education, Institute of Educational Sciences. 7/1/16 – 6/30/20. PI: Ann Daunic. \$3,500,000. CO-PI

Impact of Professional Development on Preschool Teachers' Use of Embedded-Instruction Practices: An Efficacy Trial of Tools for Teachers, US Office of Education, Institute of Educational Sciences. 7/1/15 – 6/30/19. PI: Patricia Snyder. \$3,500,000. CO-PI

Development and Validation of Treatment Integrity Measures of Classroom-Based Instructional Interventions in Early Childhood Settings, US Office of Education, Institute of Educational Sciences. 7/15/14 – 6/30/18. PI: B. McLeod. Investigator.

Examining the Efficacy of a Classroom-Wide Model for Promoting Social Emotional Development and Addressing Challenging Behavior in Preschool Children, US Office of Education, Institute of Educational Sciences. 3/1/2012 - 2/29/2016. PI: Patricia Snyder. \$1,261,595. CO-PI.

Postdoctoral Research Training Fellowship in Early Intervention and Early Learning in Special Education at the University of Florida, US Office of Education, Institute of Educational Sciences. 07/01/2012—06/30/2015. PI: Patricia Snyder. \$642,840. CO-PI.

Development of I Control: An executive function based intervention to foster self-regulation and improve social/emotional outcomes for middle school students with emotional & behavioral disorders, US Office of Education, Institute of Educational Sciences. 8/16/2010-8/15/2014 PI: Stephen Smith. \$1,487,494. Investigator.

Prime Online: Teacher Pedagogical Content Knowledge and Research-based Practice, US Office of Education, Institute of Educational Sciences. PI: Cynthia Griffin. 8/16/2010-8/15/2013, \$ 1,457,086. Investigator

Religiosity and Adolescent Risk Behavior, John Templeton Foundation. PI James Sheppard. 01/01/10 to 12/31/13, \$665,000. CO-PI

The Influence of Collaborative Professional Development Groups and Coaching on the Literacy Instruction of Upper Elementary Special Education Teachers. PI: Mary Brownell. 7/01/2007-6/30/2010, \$2,049,920. Institutes of Educational Sciences. Investigator.

An Innovative Science-based Head Start Literacy Curriculum: Expansion and Evaluation of *Marvelous Explorations through Science and Stories (MESS)*. 10/01/2005-9/30/2006, \$397,143, Administration for Children and Families, Investigator

Subcontract to Creation of an educational data warehouse for assessing student gains, teacher effectiveness, and school accountability. 6/99-6/00, \$45,760. Florida Department of Education, Principal Investigator.

American Educational Research Journal. 1/96-12/98, \$48,000. American Educational Research Association, Co-principal investigator.

Parent-child interaction therapy with preschool children, 7/92-6/95. PI: Sheila Eyberg \$798,992. Public Health Service, United States Department of Health and Human Services. Co-investigator.

Journal of Educational Measurement, 1/90-12/92, \$24,000. National Council on Measurement in Education. Principal investigator.

Statistical methods for comparing schools and school districts, 6/86-3/87. \$17,507. State of Florida Department of Education. Principal investigator.

New directions in educational measurement, 1/85-5/86. \$50,000. State of Florida Department of Education. Principal investigator.

Investigation of joint maximum likelihood and marginal maximum likelihood procedures. 6/85-5/86. \$18,000. State of Florida Department of Education. Principal investigator.

Item preparation for Florida Teacher Certification Examination, 1/83-5/83. \$10,500. State of

Florida Department of Education. Principal investigator.

Item review for Florida Teacher Certification Examination, 5/82-5/83. \$6,200. State of Florida Department of Education. Principal investigator.

UNIVERSITY GOVERNANCE AND SERVICE

University

Member, Social/Behavioral Review Panel—Research Opportunity Fund, 2008

Member, Graduate Council—2001-2004

Member, Faculty Advisory Committee—Dean Search, 1999-2000

Member, Faculty Senate, 1994-1995

Member, Peer Observation Task Force, 1995

Member, University Council on Teacher Education 1983-1995, 1997-1998

Member, Institute for School Assessment and Evaluation Policy Board, 1985-1989

Member, Faculty Evaluation Committee, 1987-89

Member, Graduate Council Fellowships Committee, 1986-1987

Member, Florida Educational Policy Group, 1986-1987.

Member, Faculty Senate, 1984-85

College

Member, SESPECS Search Committee, 2012-2013

Member, Dean's Search Committee, 2011

Member, Faculty Policy Council, 2008-2011

Member, Budgetary Affairs Committee, 2008-2009

Co-chair, Budget and Reorganization Task Force, 2007

Member, Tenure and Promotion Committee, 2006

Member, Tenure and Promotion Committee, 2005

Chair, Search Committee for the Director of the Office of Educational Research and Inquiry, 2004

Member, Tenure and Promotion Committee, 2004

Member, Research Advisory Committee, 2003-2004

Member, Tenure and Promotion Committee, 2003

Chair, Tenure and Promotion Committee, 2001

Member, Search Committee—Department of Educational Psychology Chair Search, 1999-2000

Member, Honors Committee, 1998-1999

Member, Cost Accounting Standards, A subcommittee to the Research Advisory Committee, 1997-1998.

Member, College Development Committee, 1997-2001

Member, College Curriculum Committee, 1996-1997

Chair, Student Evaluation Task Force, 1994

Member, Research Advisory Committee, 1996-1999

Member, Tenure and Promotion Committee, 1995

Member, Curriculum Committee 1995-1997

Member, Search Committee-School Psychology, 1991

Member, Pre-Commencement Convocation Committee, 1987-1991

Chair, Search Committee-Chair of Special Education, 1987

Member, Graduate Committee, 1982-83

Member, Computer Advisory Committee, 1980-1981
Department

Chair, Search Committee-Research and Evaluation Methodology, 2011-2012

Chair, Research and Evaluation Methodology Admissions Committee 1995-2007, 2009-present

Chair, Search Committee-Research and Evaluation Methodology, 2004-2005

Chair, Search Committee-Research and Evaluation Methodology, 2000-2001

Chair, Search Committee-Research and Evaluation Methodology, 1999-2000

Chair, Search Committee-Research and Evaluation Methodology, 1998-1999

Chair, Search Committee-Research and Evaluation Methodology, 1996-1997

Member, Ad Hoc Committee on Evaluation, 2008

Member, Planning Committee, 1995-1996

Member, Faculty Evaluation Committee, 1995-1996

Member, Search Committee-School Psychology, 1992

Member, Educational Research Admissions Committee, 1986-1994

Chair, Search Committee-School Psychology, 1988-1989

Chair, Search Committee-Research and Evaluation Methodology, 1988-1989

Member, Doctoral Admissions Committee, 1979-1984.

Member, Ad Hoc Committee on Faculty Evaluation, 1981-82

GRADUATE STUDENT ADVISING

(a) Supervision of Doctoral Students

Jin, R. (2012). Sample size in exploratory factor analysis with ordinal data.

Koo, N. (2012). Accuracy of estimates, empirical type i error rates, and statistical power rates for testing mediation in latent growth modeling in the presence of nonnormal data.

Min, Y. (2008). Robustness in Confirmatory Factor Analysis: The effect of sample size, degree of non-normality, model, and estimation method on size on accuracy of estimation for standard errors.

- Wei, Y. H. (2008). Robustness of four multidimensional IRT scale linking methods.
- Zhang, G. (2005). Confidence intervals for root mean square standardized effect size in one-way fixed-effects ANOVA.
- Padilla, M. A. (2005). Type I error rates of the Kenward-Roger adjusted degree of freedom F -test for a split-plot design with missing values.
- Wehry, S. A. (2001). Statistical methods for the analysis of designs including treatments delivered to groups and to individuals: an analytic and Monte Carlo study.
- Mouder, B. C. (2000). An empirical investigation of methods for estimating latent variable interactions.
- Chirembo, A. M. (1995). Direct versus indirect methods for the estimation of variance-covariance matrices and regression parameters when data are skewed and incomplete.
- Kim, H. (1995). Robustness and power of procedures for pairwise multiple comparisons of repeated measures means in split-plot designs.
- Nthangeni, M. E. (1995). Robustness and power of some alternative methods to the independent samples t -test when a difference in means is accompanied by a difference in variances.
- Coombs, W. T. (1992). Solutions to the multivariate G -sample Behrens-Fisher problem based on generalizations of the Brown-Forsythe F^* and Wilcoxon H_m tests.
- Lin, W-Y. (1991). Robustness of two multivariate tests to variance-covariance heteroscedasticity and nonnormality when total sample-size-to-variable-ratio is small.
- Shaw, S. R. (1991). Identifying processing deficits in learning-disabled children using reaction-time methodology.
- Fendick F. (1990). The correlation between teacher clarity of communication and student achievement gains: a meta analysis.
- Abdel-Fattah, A-F. (1990). Accuracy of item response theory parameter estimates using maximum likelihood and Bayesian procedures as implemented in LOGIST and BILOG.
- Tang, K. L. (1989). Robustness of four multivariate tests under variance-covariance heteroscedasticity.
- West, G. K. (1988). The construct validity of holistic writing score: An analysis of the essay subtest of the College-level Academic Skills Test.

Feliciano, S. (1986). Comparison of males and females item performance: Analysis of response patterns.

Seaman, S. L. (1984). Type I error probabilities and power of the rank transform and parametric ANCOVA procedures.

(b) Co-Supervision (Co-chair) of Doctoral Students

Zhang, O. Observed score and true score equating for multidimensional item response theory under nonequivalent group anchor test design.

Cooper, L. A. (2007). The impact of nonnormality on the asymptotic confidence interval for an effect size measure in multiple regression.

Gregoire, M. (2002) Effects of augmented activation, refutational text, efficacy beliefs, epistemological beliefs, and systematic processing on conceptual change.

Seraphine, A. (1994). A power study of three procedures for the assessment of unidimensionality.

Oshima, T. C. (1989). The effect of multidimensionality on item bias detection based on item response theory.

Dixon, J. (1985). Assessing the unidimensionality of tests.

(c) Supervision of masters students

Evran, D. (2012). Assessing measurement invariance: multiple group confirmatory factor analysis for differential item functioning detection in polytomous measures of Turkish and American students

Padilla, M. A. (2001). Type I Error Rates for a One Factor Within-Subjects Design with Missing Values

Chung, S. K. (1999). The power of Welch's t test when inequality in means is accompanied by inequality in variance

Sedesse, B. L. (1997). The accuracy of small sample power analyses in selecting the more powerful tests in simple repeated measures designs.

Yoo, M. S. (1994). Testing equality of dependent correlation coefficients.

(d) Service on doctoral supervisory committees

I have served on the supervisory committees for 198 graduated UF doctoral students in 22 doctoral programs and for 44 graduated UF masters students in 5 masters programs.

Courses Taught (* denotes a course that I developed.)

EDF 6401 Educational Statistics

EDF 6403 Quantitative Foundations of Educational Research (Measurement, statistics, and computers)

EDF 6481 Quantitative Methods in Educational Research (ANOVA)*

EDF 6436 Theory of Measurement

EDF 7405 Advanced Quantitative Foundations of Educational Research (Regression)

EDF 7412 Structural Equation Models*

EDF 7432 Advanced Psychometric Theory

EDF 7439 Item Response Theory

EDF 7474 Multilevel Models*

EDF 7486 Methods of Educational Research

EDF 7931 Seminar in Educational Research: Bayesian Analysis*

EDF 7932 Multivariate Analysis in Educational Research*