

Ken Kelley's Curriculum Vitae

Ken Kelley
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Contact Information

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UNIVERSITY

Department of Management
Mendoza College of Business
University of Notre Dame
Notre Dame, Indiana 46556
574-631-1459

Academic Positions

UNIVERSITY OF NOTRE DAME

- Viola D. Hank Associate Professor of Management; September 2011 – Present.
- Associate Professor with Tenure, Department of Management; July 2011 – Present.
- Assistant Professor, Department of Management; July 2008 – June 2011.

INDIANA UNIVERSITY – BLOOMINGTON

- Adjunct Assistant Professor, Department of Statistics; November 2006 – July 2008.
- Assistant Professor, Inquiry Methodology Program, Department of Counseling and Educational Psychology; August 2005 – July 2008.

Education

UNIVERSITY OF NOTRE DAME

- Doctoral degree (Ph.D.), quantitative psychology; earned May 2005. Dissertation title: *Estimating nonlinear change models in heterogeneous populations when class membership is unknown: Defining and developing the latent classification differential change model*. Thesis advisors: Scott E. Maxwell and Ke-Hai Yuan.
- Master's degree, quantitative psychology; earned August 2003. Thesis title: *Delineating the average rate of change and consequences of fitting an incorrect growth model*. Thesis advisor: Scott E. Maxwell.

UNIVERSITY OF CINCINNATI

- Bachelors degree, psychology; earned July 2000. Graduated with *high honors* from the department and *cum laude* from the university. Senior honors thesis title: *95 Million t tests: The empirical findings when the assumption of independence is violated in the two-sample t test*. Thesis advisor: Richard S. Melton.

Accreditation

- Accredited Professional Statistician™ (PStat®) by the American Statistical Association.

Awards

- Awarded the *Eli J. and Helen Shaheen Graduate School Research Award in Social Science*, May 2005, University of Notre Dame.
- Awarded a Society of Multivariate and Experimental Psychology *Dissertation Research Award*, March 2004.
- Awarded a *Dissertation Fellowship*, August 2004–May 2005, Department of Psychology, University of Notre Dame.
- Awarded the *Clare E. Hubert Senior Man of the Year*, June 2000, Department of Psychology, University of Cincinnati.
- Awarded the *Community and University Service Award*, April 2000, Cincinnati Psychological Association.
- Awarded an *Outstanding Achievement* scholarship from the Scholarship and Awards Committee of the College of Arts and Sciences, University of Cincinnati, May 1999.

Scholarly Work

PEER REVIEWED JOURNAL ARTICLES

* Denotes a student with whom I collaborated.

–Citation information (ISI Web of Science) <http://www.researcherid.com/rid/C-7322-2009>.

–Citation information (Google Scholar) <http://scholar.google.com/citations?user=G9JDRkUAAAAJ&hl>.

Kelley, K., & Preacher, K. J. (in press). On effect size. *Psychological Methods*.

Alexander, J., Johnson, K. E., & Kelley, K. (in press). Longitudinal analysis of the relations between opportunities to learn about science and the development of interests related to science. *Science Education*.

Lai, K*. & Kelley, K. (in press). Accuracy in parameter estimation for ANCOVA and ANOVA contrasts: Sample size planning via narrow confidence intervals. *British Journal of Mathematical and Statistical Psychology*.

Terry, L. J*. & Kelley, K. (in press). Sample size planning for composite reliability coefficients: Accuracy in parameter estimation via narrow confidence intervals. *British Journal of Mathematical and Statistical Psychology*.

Kelley, K. & Cheng, Y. (2012). Estimation and confidence interval formation for reliability coefficients of homogeneous measurement instruments. *Methodology*, 8, 39–50.

Warren, J*. Stoerger, S. M.*, & Kelley, K. (2012). Longitudinal gender and age bias in a prominent amateur new media community. *New Media & Society*, 14, 7–27.

Kelley, K., & Rausch, J. R. (2011). Sample size planning for longitudinal models: Accuracy in parameter estimation for polynomial change parameters. *Psychological Methods*, 16, 391–405.

Holden, J. E., Finch, W. H., & Kelley, K. (2011). A comparison of two-group classification methods. *Educational and Psychological Measurement*, 71, 870–901.

Lai, K.*, & Kelley, K. (2011). Accuracy in parameter estimation for targeted effects in structural equation modeling: Sample size planning for narrow confidence intervals. *Psychological Methods*, 16, 127–148.

Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: Quantitative strategies for communicating indirect effects. *Psychological Methods*, 16, 93–115.

- Kelley, K. & Lai, K*. (2011). Accuracy in parameter estimation for the root mean square error of approximation: Sample size planning for narrow confidence intervals. *Multivariate Behavioral Research*, 46, 1–32.
- Angst, C. M., Agarwal, R., Sambamurthy, V., & Kelley, K. (2010). Social contagion and information technology diffusion: The adoption of electronic medical records in U.S. hospitals. *Management Science*, 56, 1219–1241.
- Holden, J. E.* & Kelley, K. (2010). The effects of initially misclassified data on the effectiveness of discriminant function analysis and finite mixture modeling. *Educational and Psychological Measurement*, 70, 36–55.
- Kelley, K. (2009). The average rate of change for continuous time models. *Behavior Research Methods*, 41, 268–278.
- Rausch, J. R. & Kelley, K. & (2009). A comparison of linear and mixture models for discriminant analysis under nonnormality. *Behavior Research Methods*, 41, 85–98.
- Kelley, K. (2008). Sample size planning for the squared multiple correlation coefficient: Accuracy in parameter estimation via narrow confidence intervals. *Multivariate Behavioral Research*, 43, 524–555.
- Yuan, K-H., Kouros, C. D., & Kelley, K. (2008). Diagnosis for covariance structure models by analyzing the path. *Structural Equation Modeling*, 15, 564–602.
- Kelley, K. (2008). Nonlinear change models in populations with unobserved heterogeneity. *Methodology*, 4, 97–112.
- Kelley, K., & Maxwell, S. E. (2008). Delineating the average rate of change in longitudinal models. *Journal of Educational and Behavioral Statistics*, 33, 307–332.
- Agarwal, R., Metiku, T., Tegegne, G. G., Light, R. P., Bunaye, Z., Bekele, D. M., & Kelley, K. (2008). Diagnosing hypertension by intradialytic blood pressure recordings. *Clinical Journal of the American Society of Nephrology*, 3, 1364–1372.
- Singh, A. K., Kelley, K., & Agarwal, R. (2008). Interpreting results of clinical trials: A conceptual framework. *Clinical Journal of the American Society of Nephrology*, 3, 1246–1252.
- Anderson, J. A. Wright, E. R, Kelley, K., & Kooreman, H. E. (2008). Patterns of clinical functioning over time for young people served in a system of care. *Journal of Emotional and Behavioral Disorders*, 16, 90–104.
- Holden, J. E.* , Kelley, K., & Agarwal, R. (2008). Analyzing change: A primer on multilevel models with applications to nephrology. *American Journal of Nephrology*, 28, 792–801.
- Alexander, J. M., Johnson, K. E., Leibham, M. E., & Kelley, K. (2008). The development of conceptual interests in young children. *Cognitive Development*, 23, 324–334.
- Stright, A. D., Gallagher, K. C., & Kelley, K. (2008). Infant temperament moderates relations between maternal parenting in early childhood and children’s adjustment in first grade, *Child Development*, 79, 186–200.
- Agarwal, R., Kelley, K., & Light, R. L. (2008). Diagnostic utility of blood volume monitoring in hemodialysis patients. *American Journal of Kidney Diseases*, 51, 242–254.
- Maxwell, S. E., Kelley, K., & Rausch, J. R. (2008). Sample size planning for statistical power and accuracy in parameter estimation. *Annual Review of Psychology*, 59, 537–563.
- Kelley, K. (2007). Sample size planning for the coefficient of variation from the accuracy in parameter estimation approach. *Behavior Research Methods*, 39, 755–766.

- Kelley, K. (2007). Methods for the Behavioral, Educational, and Social Sciences: An R Package. *Behavior Research Methods*, *39*, 979–984.
- Kelley, K., Aricak, O. T., Light, R. L., & Agarwal, R. (2007). Proteinuria is a determinant of quality of life in diabetic nephropathy: Modeling lagged effects with path analysis. *American Journal of Nephrology*, *27*, 488–494.
- Kelley, K., Light, R. L., & Agarwal, R. (2007). Trended cosinor change model for analyzing hemodynamic rhythm patterns in hemodialysis patients. *Hypertension*, *50*, 143–150.
- Kelley, K. (2007). Confidence intervals for standardized effect sizes: Theory, application, and implementation. *Journal of Statistical Software*, *20*(8), 1–24.
- Kelley, K., & Rausch, J. R. (2006). Sample size planning for the standardized mean difference: Accuracy in parameter estimation via narrow confidence intervals. *Psychological Methods*(4), *11*, 363–385.†
- †Reprinted in Vogt, W. P. (Ed). (2009). *Selecting research methods* (Vol. 2, pp. 113–147). Thousand Oaks, CA: Sage.
- Kelley, K. (2005). The effects of nonnormal distributions on confidence intervals around the standardized mean difference: Bootstrap and parametric confidence intervals. *Educational and Psychological Measurement*, *65*, 51–69.
- Kelley, K. (2004). Assessing the assumption of symmetric proximity measures in the context of multidimensional scaling. *Journal of Applied Measurement*, *5*, 419–429.
- Kelley, K. & Maxwell, S.E. (2003). Sample size for multiple regression: Obtaining regression coefficients that are accurate, not simply significant. *Psychological Methods*, *8*, 305–321.
- Kelley, K., Maxwell, S.E., & Rausch, J.R. (2003). Obtaining power or obtaining precision: Delineating methods of sample-size planning. *Evaluation and the Health Professions*, *26*, 258–287.
- Rausch, J. R., Maxwell, S.E., & Kelley, K. (2003). Analytic methods for questions pertaining to a randomized pretest, posttest, follow-up design. *Journal of Clinical Child and Adolescent Psychology*, *32*, 467–486.

BOOK CHAPTERS

* Denotes a student with whom I collaborated.

- Kelley, K., & Holden, J. E. (in press). Multiple regression. In T. Teo (Ed.) *Handbook of quantitative methods for educational research*. Sense Publishers.
- Kelley, K. (in press). Effect size and sample size planning. In T. Little (Ed.) *Oxford handbook of quantitative methods*. New York, NY: Oxford University Press.
- Kelley, K. & Maxwell, S. E. (in press). Sample size planning. In H. Cooper (Ed.) *APA handbook of research methods in psychology*. Washington, DC: American Psychological Association.
- Maxwell, S. E., & Kelley (2011). Sample size planning and ethics. In A. T. Panter & S. K. Sternberg (Eds.) *Handbook of Ethics in Quantitative Methodology* (pp. 159–184). New York, NY: Routledge.
- Kelley, K. & Maxwell, S. E. (2010). Multiple Regression. In G. R. Hancock & R. O. Mueller (Eds.) *The reviewer's guide to quantitative methods in the social sciences* (pp. 281–298). New York, NY: Routledge.
- Kelley, K. Lai, K.*, & Wu, P-J.* (2008). Using R for data analysis: A best practice for research. In J. Osbourne (Ed.) *Best practices in quantitative methods* (pp. 535–572). Newbury Park, CA: Sage.

Kelley, K. & Maxwell, S. E. (2008). Sample Size Planning with applications to multiple regression: Power and accuracy for omnibus and targeted effects. In P. Alasuuta, J. Brannen, & L. Bickman (Eds.) *The Sage handbook of social research methods* (pp. 166–192). Newbury Park, CA: Sage.

ENCYCLOPEDIAS AND GLOSSARIES

Kelley, K. (2010). Sample size planning. In I. B. Weiner & W. E. Craighead (Eds.), *The Corsini Encyclopedia of Psychology* (4th ed., Vol. 4, pp. 1490–1491). Hoboken, NJ: Wiley.

Kelley, K. (2010). Accuracy in parameter estimation (AIPE). In N. J. Salkind, D. M. Dougherty, & B. Frey (Eds.), *Encyclopedia of research design* (Vol. 1, pp. 2–4). Thousand Oaks, CA: Sage.

Kelley, K. (2010). A priori Monte Carlo simulation. In N. J. Salkind, D. M. Dougherty, & B. Frey (Eds.), *Encyclopedia of research design* (Vol. 1, pp. 37–38). Thousand Oaks, CA: Sage.

Kelley, K. (2010). MBESS. In N. J. Salkind, D. M. Dougherty, & B. Frey (Eds.), *Encyclopedia of research design* (Vol. 2, pp. 778–779). Thousand Oaks, CA: Sage.

Kelley, K. (2010). Monte Carlo Simulation Study. In N. J. Salkind, D. M. Dougherty, & B. Frey (Eds.), *Encyclopedia of research design* (Vol. 2, pp. 830–832). Thousand Oaks, CA: Sage.

Kelley, K. (2010). Sample size planning. In N. J. Salkind, D. M. Dougherty, & B. Frey (Eds.), *Encyclopedia of research design* (Vol. 3, pp. 1301–1302). Thousand Oaks, CA: Sage.

Kelley, K. (2009). Estimation (point and interval). In L. E. Sullivan, R. B. Johnson, C. C. Mercado & K. J. Terry (Eds.), *The SAGE glossary of the social and behavioral sciences* (p. 184). Thousand Oaks, CA: Sage.

SOFTWARE

Kelley, K. & Lai, K. (2010–2011). MBESS (Version 3.0.0) [computer software and manual], Accessible from <http://cran.r-project.org>. Note: K. Lai became second author of the MBESS package.

Kelley, K. (2007–2008). MBESS (Version 2.0.0) [computer software and manual], Accessible from <http://cran.r-project.org>. Note: With Version 2.0.0, the Methods for the Behavioral, Educational, and Social Sciences R package was renamed MBESS.

Kelley, K. (2006–2008). Methods for the Behavioral, Educational, and Social Sciences (Version 0.0.1–1.0.1) [computer software and manual], Accessible from <http://cran.r-project.org>. Note: A package for the R statistics language and environment to implement selected advanced and nonstandard quantitative methods.

RESEARCH FUNDING

Kelley, K. (June 2007 – August 2007). Accuracy in parameter estimation for standardized effect sizes related to means and ANOVAs. Proffitt Fellowship for Educational Research at Indiana University; \$10,000 direct costs. Role: Principal Investigator.

Agarwal, R. (April 2007 – March 2008). Pathobiology of kidney disease: Role of iron. National Institutes of Health (1 R01 DK071633-01A2); \$270,000 direct cost. Role: Statistician.

Kelley, K. (July 2006 – June 2008). Sample size planning for effect sizes and an R package for implementation: Designing educational studies for accurate parameter estimates, Proffitt Endowment for Educational Research at Indiana University; \$40,000 direct costs. Role: Principal Investigator.

PEER REVIEWED CONFERENCE PRESENTATIONS

* *Denotes a student with whom I collaborated.*

† *Denotes an invited talk.*

- Gallagher, K. C., Stright, A. D., & Kelley, K. (2012, June). The Role of Differential Susceptibility in Infancy on the Cognitive, Behavioral and Psychosocial Outcomes of Young Children. Meeting of the International Conference on Infant Studies, Minneapolis, MN.
- Finch, W. H., Holden, J., Starling, J. M.* , & Kelley, K. (2012, April). Classification in the presence of heterogeneous groups: A Monte Carlo comparison of several statistical methods. Annual meeting of the American Educational Research Association, Vancouver, British Columbia, Canada.
- Kelley, K. (2011, August). Accuracy in parameter estimation for omnibus or targeted effects in structural equation modeling: Sample size planning for narrow confidence intervals. A talk given at the annual meeting of the American Psychological Association, Washington, DC.†
- Kelley, K., & Pornprasertmanit, S.* (2011, July). An evaluation of confidence intervals for composite reliability coefficients. A talk given at the Joint Statistical Meetings, Miami, FL.
- Kelley, K., & Lai, K.* (2010, August). Sample size planning to obtain narrow confidence intervals for the RMSEA. A talk given at the Joint Statistical Meetings, Vancouver, British Columbia, Canada
- Lai, K.* and Kelley, K. (2010, July). Sample size planning for targeted effects in SEM: Obtaining narrow confidence intervals. A talk given at the International Meeting of the Psychometric Society, Athens, GA.
- Kelley, K., & Lai, K.* (2010, July). Sample size, the root mean square error of approximation, and an approach to planning sample size. A talk given at the International Meeting of the Psychometric Society, Athens, GA.
- Kelley, K., & Rausch, J. R. (2009, August). Accuracy in parameter estimation for group effects in longitudinal models: Sample size planning for narrow confidence intervals. A talk given at the Joint Statistical Meetings, Washington, DC.
- Kelley, K. (2008, November). Accuracy in parameter estimation for the RMSEA. A talk given at the annual meeting of the Psychonomic Society, Chicago, IL.
- Kelley, K. (2008, June). The average rate of change in longitudinal models. A talk given at the International Meeting of the Psychometric Society, Durham, NH.†
- Holden, J.* & Kelley, K. (2008, March). Effects of misclassified data on two methods of classification analysis: A Monte Carlo simulation study. A paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Kelley, K. (2007, August). Accuracy in parameter estimation for omnibus and targeted effects in analysis of variance. Poster presented at the annual convention of the American Psychological Association, San Francisco, CA.
- Terry, L. J.* & Kelley, K. (2007, August). Accuracy in parameter estimation for composite reliability coefficients. Poster presented at the annual convention of the American Psychological Association, San Francisco, CA.
- Kelley, K. (2007, April). Accuracy in parameter estimation for standardized means, mean differences, and contrasts. Poster presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Kelley, K. & Stright, A. D. (2007, March). Temperament and parenting across early childhood: Growth mixture modeling using the NICHD Study of early child care. Poster presented at the Society for Research in Child Development meeting, Boston, MA.

- Kelley, K. (2006, June). Sample size planning for the squared multiple correlation coefficient: Accuracy in Parameter Estimation via narrow confidence intervals. A talk given at the International Meeting of the Psychometric Society, Montreal, Canada.
- Kelley, K. (2006, May). Nonlinear change models in heterogeneous populations: The latent classification differential change model. A talk given at the International Conference on Development and Learning, Bloomington, IN.
- Stright, A. D., Gallagher, K. C., & Kelley, K. (2006, April). Children's temperament moderates the relations between maternal parenting and children's adjustment to school. A poster presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Kelley, K. (2004, October). Estimating nonlinear growth models in heterogeneous populations when class membership is unknown: Defining and developing the latent classification differential change model. A talk given at the annual meeting of the Society of Multivariate Experimental Psychology, Fort Myers, FL.
- Lapsley, D.K., Daytner, K., Kelley, K. & Maxwell, S.E. (2002, April). Teacher aides, class size and academic achievement: An evaluation of Indiana's Prime Time. A paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Kelley, K. (2000, May). 95 Million t tests: The empirical findings when the assumption of independence is violated in the two-sample t test. A poster presented at the annual Midwestern Psychological Association meeting, Chicago, IL.

OTHER PRESENTATIONS

† *Denotes an invited talk.*

- Kelley, K. (2010, February). Heterogeneity in nonlinear change models: Developing the nonlinear change mixture model. A talk given to the Quantitative Studies Group, University of Notre Dame, Notre Dame, IN.
- Kelley, K. (2009, January). Sample Size Planning for Accurate Estimates of Standardized Effect Sizes. A talk given to the Quantitative Studies Group, University of Notre Dame, Notre Dame, IN.
- Kelley, K. (2008, December). Heterogeneity in nonlinear change models: Developing the nonlinear change mixture model. A talk given in the Department of Management's Seminar Series, University of Notre Dame, Notre Dame, IN.
- Kelley, K. (2007, September). Sample size planning for accurate estimates of standardized effect sizes. A talk given in the Department of Management's Seminar Series, University of Notre Dame, Notre Dame, IN.
- Kelley, K. (2007, August). Sample size planning for accurate estimates of standardized effect sizes. A talk given in the Columbus Childrens Hospitals Continuing Medical Education Program, Columbus, OH.†
- Kelley, K. (2007, April). Sample size planning for accurate estimates of standardized effect sizes. A talk given in the Indiana University School of Medicine, Division of Biostatistics, Colloquium Series, Indianapolis, IN.†
- Kelley, K. (2007, April). Accuracy in parameter estimation for standardized effect sizes. A talk given in the Indiana University Department of Statistics Colloquium Series, Bloomington, IN.†
- Kelley, K. (2006, May). Modeling and understanding change. A talk and workshop given to the Department of Psychology, Indiana State University, Terre Haute, IN.†

- Stright, A. D., Gallagher, K. C., & Kelley, K. (2006, June). Children's differential susceptibility to the effects of parenting: Relations between maternal parenting and children's adjustment to school for difficult vs. easy temperaments. A poster presented at the annual meeting of the Family Research Consortium, Spokane, WA.
- Kelley, K. (2006, May). Modeling and understanding change. A talk given at the Center for Urban and Multicultural Education, Indiana University - Purdue University Indianapolis, Indianapolis, IN.[†]
- Kelley, K. (2004, February). Confidence intervals for reliability coefficients: Bootstrap techniques versus asymptotic theory. A talk given to the Quantitative Studies Group, University of Notre Dame, Notre Dame, IN.
- Kelley, K. (2003, October). Delineating the average rate of change and consequences of fitting an incorrect growth model. A talk given to the Quantitative Studies Group, University of Notre Dame, Notre Dame, IN.
- Kelley, K. (2003, February). The effects of nonnormal distributions on confidence intervals around the standardized mean difference: Bootstrapping as an alternative to parametric confidence intervals. A talk given to the Quantitative Studies Group, University of Notre Dame, Notre Dame, IN.
- Kelley, K. & Rausch, J.R. (2002, September). Methods of statistical inference: The Bayesian, the frequentist, and the compromise. A talk given to the Quantitative Studies Group, University of Notre Dame, Notre Dame, IN.
- Kelley, K. (2002, April). Discerning the average rate of change and consequences of fitting the incorrect model. A talk given to the Quantitative Studies Group, University of Notre Dame, Notre Dame, IN.
- Kelley, K. (2001, September). Sample Size for Multiple Regression: Obtaining regression coefficients that are accurate, not simply significant. A talk given to the Quantitative Studies Group, University of Notre Dame, Notre Dame, IN.
- Kelley, K. (2001, April). Analyzing data from nested structures: The beauty and utility of hierarchical linear models. A talk given to the Quantitative Studies Group, University of Notre Dame, Notre Dame, IN.
- Kelley, K. (2000, November). The empirical findings when the assumption of independence is violated in the two-sample t test. A talk given to the Quantitative Studies Group, University of Notre Dame, Notre Dame, IN.
- Kelley, K. (2000, April). 95 Million t tests: The empirical findings when the assumption of independence is violated in the two-sample t test. Poster presented at the Cincinnati Psychological Association annual meeting, Cincinnati, OH.
- Kelley, K. (2000, May). 95 Million t tests: The empirical findings when the assumption of independence is violated in the two-sample t test. Poster presented at *Research Day*, University of Cincinnati, Cincinnati, OH.
- OTHER SCHOLARLY WORK Kelley, K. (2012, May). Petitions requested for new section. *Amstat News*: The membership magazine of the American Statistical Association, (419), 9. Note: This call went out to all members of the American Statistical Association to assess the level of interest among members for a section titled Statistics and Measurement in Psychology and Education.
- Wright, E. R., Anderson, J. A., Kelley, K. & Kooreman, H. (2007, July). Longitudinal impact of family functioning on children served in systems of care. A project funded by with a report submitted to ORC Macro, Calverton, MD.

Kelley, K., & Rausch, J.R. (2004; 2005). *DesigningExperiments.Com*. A web site to accompany the book *Designing experiments and analyzing data: A model comparison perspective* (Maxwell, S.E., & Delaney, H.D. [2004, 2nd ed.], Lawrence Erlbaum Associates, Inc.), accessible from www.DesigningExperiments.Com. Note: This is an instructional web site that explains how selected univariate and multivariate statistical methods can be obtained using the computer programs SAS and SPSS.

Lapsley, D.K., Daytner, K., Kelley, K. & Maxwell, S.E. (2002, February). Instructional assistance, class size and academic achievement: An evaluation of Indiana's Prime Time. A project funded by with a report submitted to the Indiana Department of Education, Indianapolis, IN.

Research assistant in Dr. Joel S. Warm's vigilance laboratory; June 1998–March 1999.

Teaching Experience

UNIVERSITY OF NOTRE DAME (AUGUST 2008 – PRESENT)

- Instructor, *Statistics in Business*, required course at the sophomore level (Mendoza College of Business).
- Instructor, *Advanced Statistical Methods for Managers*, elective course for MBA students (Mendoza College of Business).
- Instructor, *Advanced MBA Statistics*, elective course for MBA students (Mendoza College of Business).

INDIANA UNIVERSITY (JUNE 2005 – MAY 2008)

- Instructor, *Multilevel Modeling*, elective course at the Ph.D. level (Inquiry Methodology Program & Department of Statistics, joint listing).
- Instructor, *Research on Statistical Issues in the Behavioral and Educational Sciences*, elective seminar at the Ph.D. level (Inquiry Methodology Program).
- Instructor, *Longitudinal Data Analysis for the Behavioral and Educational Sciences*, elective seminar at the Ph.D. level (Inquiry Methodology Program).
- Instructor, *Multivariate Statistical Methods*, elective course at the Ph.D. level (Inquiry Methodology Program).
- Instructor, *Intermediate Statistics*, required course at the Ph.D. level (Inquiry Methodology Program).

UNIVERSITY OF NOTRE DAME (AUGUST 2000 – MAY 2005)

- Co-instructor, *Computing for the Social Sciences*, (Laboratory for Social Research on behalf of the College of Arts and Letters).
- Laboratory instructor and teaching assistant for the graduate experimental design class, Ph.D. level (Department of Psychology).
- Laboratory instructor and teaching assistant for the graduate statistics class, Ph.D. level (Department of Psychology).
- Teaching assistant for the undergraduate introductory psychology class (Department of Psychology).

UNIVERSITY OF CINCINNATI (SEPTEMBER 1999 – JULY 2000)

- Co-teaching assistant for the two-quarter undergraduate statistics sequence; (Department of Psychology).
- Teaching assistant for the three-quarter graduate statistics sequence (Department of Psychology).
- Co-teaching assistant for the two-quarter undergraduate statistics sequence; (Department of Psychology).

DOCTORAL & MASTER'S THESES

Dissertation Chaired

Holden, J. E. (2009). The effects of misclassified training data on the classification accuracy of supervised and unsupervised classification techniques. Doctoral dissertation, Indiana University. Dr. Holden is now an assistant professor at Ball State University, Department of Educational Psychology.[†]

[†] Modified and published as Holden & Kelley (2010; *Educational and Psychological Measurement*).

Dissertation Committee Member

- Served on 12 completed dissertation committees.

Master's Thesis, Acting Chair

Lai, K. (2010). Accuracy in parameter estimation for targeted effects in structural equation modeling: Sample size planning for narrow confidence intervals. Master's thesis, University of Notre Dame.[†]

[†] Modified and published as Lai & Kelley (2011; *Psychological Methods*).

Service Activities

ELECTED POSITIONS

- Elected *Chair* of the Science Student Council of the Science Directorate, American Psychological Association, February 2003 – November 2004.
- Elected *Quantitative Representative* of the Science Student Council of the Science Directorate, American Psychological Association, October 2002 – February 2005.
- Twice elected *Quantitative Representative to the Faculty*, Department of Psychology, University of Notre Dame, August 2001 – August 2003.
- Elected *President of Psi Chi*, The National Honors Society for Psychology, University of Cincinnati Chapter, June 1999–June 2000.

COMMITTEE MEMBERSHIPS

- Member (of a committee of 22), *College Council*, Mendoza College of Business, University of Notre Dame. May, 2011 – Present.
- Member (of a committee of five), *Committee on Undergraduate Business Statistics Requirements*, Mendoza College of Business, University of Notre Dame, January 2011 – Present.
- Member (of a committee of 17), *Center for Research Computing Advisory Committee*, October, 2009 – Present, University of Notre Dame.
- Chair (of a committee of three), *Quantitative Methods Professional Specialist Search Committee*, Department of Management, University of Notre Dame, 2011.

- Member (of a committee of three), *Quantitative Methods Professional Specialist Search Committee*, Department of Management, University of Notre Dame, 2010.
- Member (of a committee of five), *New Members Committee*, Research Methods Division of the Academy of Management, 2008 – 2010.
- Chair (of a committee of three), *Dissertation Awards Committee*, Department of Counseling and Educational Psychology, Indiana University - Bloomington, 2006 – 2008.
- Member (on a committee of six), *Dissertation of the Year Award Committee*, School of Education, Indiana University - Bloomington, 2006 – 2007.
- Member (on a committee of five), *Faculty Search Committee* (Inquiry Methodology Program), Department of Counseling and Educational Psychology, Indiana University - Bloomington, 2006.
- Graduate student representative for the *Colloquium Committee*, Department of Psychology, University of Notre Dame, 2001.
- Undergraduate representative (on a committee of nine), *Department-head Search Committee*, Department of Psychology, University of Cincinnati, 1998 – 1999.

EDITORIAL BOARDS

- Consulting editor, *Psychological Methods*, 2010 – Present.
- Review editor, *Frontiers in Quantitative Psychology and Measurement*, 2010 – Present.
- Editorial board member, *Psychological Methods*, 2009.

AD HOC REVIEWER

Journals

—*Journals are listed in alphabetical order within category.*

Methodology

Behavior Research Methods / British Journal of Mathematical and Statistical Psychology / Computational Statistics and Data Analysis / Communications in Statistics – Simulation and Computation / Journal of Educational and Behavioral Statistics / Journal of Statistical Software / Methodology / Multivariate Behavioral Research / Psychological Methods / Psychological Assessment / Psychometrika / Statistics in Medicine / Structural Equation Modeling

Psychology

Review of General Psychology / Journal of Consulting and Clinical Psychology

Management

Management Science / Production and Operations Management

Grants

- Institute of Education Sciences of the U.S. Department of Education, Various Panels, Reviewer & Rotating Panel Member (2010-Present).
- Institute of Education Sciences of the U.S. Department of Education, Statistics and Modeling Scientific Review Panel, Reviewer & Principal Panel Member (2010-Present).

- Institute of Education Sciences of the U.S. Department of Education, Statistics and Modeling Scientific Review Panel, Reviewer & Rotating Panel Member (2009).
- National Science Foundation, Reviewer, Methodology, Measurement, and Statistics Program (2011).
- Swiss National Science Foundation, Interdisciplinary Programme, Reviewer (2009).
- Research Foundation – Flanders (FWO; formerly National Fund for Scientific Research, Belgium), Reviewer (2009).

Conferences

- Division of Evaluation, Measurement, and Statistics (Division 5) of the American Psychological Association Annual Conference (2007 & 2008).
- Division of Measurement and Research Methodology (Division D) of the American Educational Research Association Annual Conference (2007).
- Research Methods Division of the Academy of Management Annual Conference (2008 & 2009).

CONFERENCE ORGANIZATION

- Organizer and Chair of the “Psychological Statistics and Psychometrics” contributed session at the Joint Statistical Meetings, Vancouver, Canada (2010).

Memberships

PROFESSIONAL ASSOCIATIONS

—*Associations are listed in alphabetical order.*

- American Statistical Association, 2001–Present.
- Association for Psychological Science, 2009–Present.
- Division of Evaluation, Measurement, and Statistics (Division 5) of the American Psychological Association (as well as APA part of this time), 2001–Present.
- Division of Measurement and Research Methodology (Division D) of the American Educational Research Association (as well as AERA), 2005–Present.
- European Association of Methodology, 2008–Present.
- Psychometric Society, 2004–Present.
- Psychonomic Society (membership requires nomination and then election), 2008–Present.
- Research Methods Division of the Academy of Management (as well as AOM), 2007–Present.
- Society for Industrial & Organizational Psychology, 2009–Present.

Research Interests

My research involves the development, improvement, and evaluation of quantitative methods, especially as they relate to statistical issues in applied research. More specifically, my research focuses primarily on the design of research studies and longitudinal data analysis.

Relevant Previous Positions

ACADEMIC

- Statistician, Center for Adolescent and Family Studies, Indiana University-Bloomington; July 2007 – July 2008.
- Dissertation Fellow, Department of Psychology, University of Notre Dame; August 2004 – May 2005.
- Statistical Consultant, Laboratory for Social Research, College of Arts and Letters, University of Notre Dame; August 2003 – August 2004.
- Statistical Consultant, Department of Psychology, University of Notre Dame; August 2002 – August 2003.

NONACADEMIC

- RDI Marketing Services, Inc., Ended employment as lead supervisor & data processor; 1995 – 2000.