

Daniel J. Bauer
(919) 962-4020
dbauer@email.unc.edu
L.L. Thurstone Psychometric Laboratory
Department of Psychology
University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-3270

EDUCATION

- 12/00-8/02 University of North Carolina, Chapel Hill
Odum Institute for Research in Social Science
Individual NRSA Post-Doctoral Fellowship in Quantitative Methodology
- 8/96-12/00 University of North Carolina, Chapel Hill
Ph.D., Developmental Psychology; Concentration: Quantitative Psychology
- 8/91-12/94 Trinity University, San Antonio
B.A., Psychology; Minors: Mathematics and History; Concentration: Computer Science

POSITIONS HELD

- 7/08- Associate Professor of Quantitative Psychology, L.L. Thurstone Psychometric Laboratory, Department of Psychology, University of North Carolina at Chapel Hill.
- 7/04-6/08 Assistant Professor of Quantitative Psychology, L.L. Thurstone Psychometric Laboratory, Department of Psychology, University of North Carolina at Chapel Hill.
- 8/02-6/04 Assistant Professor of Quantitative and Developmental Psychology, Department of Psychology, North Carolina State University, Raleigh.
- 2/95-7/96 Research Coordinator of the Mood Disorders and Psychopharmacology Research Program, Psychiatry Department, Baylor College of Medicine, Houston.

AWARDS

- 2009 American Psychological Association (APA) Distinguished Scientific Award for Early Career Contributions to Psychology (Area of Individual Differences).
- 2006 Tanaka Award for most outstanding paper published in *Multivariate Behavioral Research* in 2005. Awarded by the Society for Multivariate Experimental Psychology (SMEP).
- 2004 Raymond B. Cattell Award for outstanding early-career contributions to multivariate experimental psychology. Awarded by the Society for Multivariate Experimental Psychology (SMEP).

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- 2004-present Elected Member, Society for Multivariate Experimental Psychology (SMEP)
- 2003-present Member, Mentor Faculty, Center for Developmental Science, Chapel Hill.
- 1997-present Member, American Psychological Association; American Psychological Society; Society for Research in Child Development; Psychometric Society.
- 2004-2005 Faculty Associate, Statistical and Applied Mathematical Sciences Institute (SAMSI); Leader, Multilevel Latent Variable Models working group.

Associate Editor: *Psychological Methods* (2010-present)

Editorial Boards: *Psychological Assessment* (2004-present), *Psychological Methods* (2005-present), *Journal of Educational and Behavioral Statistics* (2010-present)

Consulting Editor: *Multivariate Behavioral Research* (2006-present)

Ad-hoc Reviewer: *Addiction; British Journal of Mathematical and Statistical Psychology; Development and Psychopathology; Developmental Psychology; Journal of Abnormal Psychology; Journal of Consulting and Clinical Psychology; Journal of Educational and Behavioral Statistics; Journal of Marriage and Family; Journal of Personality; Journal of Research on Adolescence; Multivariate Behavioral Research; Merrill-Palmer Quarterly; Neuropsychopharmacology, Psychological Methods; Psychopathology and Behavioral Assessment; Prevention Science; Sage Publications; Sociological Methods & Research; Statistics in Medicine; Structural Equation Modeling.*

GRANTS AND FELLOWSHIPS

- 2010-2014 Co-Investigator/Statistician: *Stress responses as prospective predictors of girls' suicidality and self-injury* (NIMH R01 MH085505), Mitchell Prinstein, PI, University of North Carolina at Chapel Hill
- 2009-2014 Co-Investigator/Statistician: *Understanding peer influence of adolescent health risk behaviors* (NICHD R01-HD055342), Mitchell Prinstein, PI, University of North Carolina at Chapel Hill
- 2009-2012 Co-Investigator: *Internalizing pathway to substance use disorders* (NIDA R01 DA015398), Andrea Hussong, PI, University of North Carolina at Chapel Hill.
- 2009-2012 Sponsor: *Modeling non-random missingness in experience sampling research on substance use* (NRSA F31 DA026686), Nisha C. Gottfredson, Pre-Doctoral Fellow, University of North Carolina at Chapel Hill.
- 2009-2011 Sponsor: *Evaluating maltreatment effects on adolescent well-being using advanced modeling* (F32-HD059318), Sharon Christ, Post-Doctoral Fellow, University of North Carolina at Chapel Hill.
- 2009-2011 Co-Investigator: *Antisocial behavior, genetics, and the life course* (NICHD R21 HD050261), Michael Shanahan, PI, University of North Carolina at Chapel Hill.
- 2007-2010 Sponsor: *Longitudinal comorbidity: modeling symptom, syndrome, and impairment change* (NRSA F31 MH080494), Sonya K. Sterba, Pre-Doctoral Fellow, University of North Carolina at Chapel Hill.
- 2007-2009 PI: *Diagnosing and estimating nonlinear effects in latent variable models* (NSF SES-0716555), awarded by the National Science Foundation.
- 2007-2009 Co-Investigator: *Integrated research activities for developmental science (IRADS)- child development research collaborative* (NSF BCS-0720660), Marth Cox, PI, University of North Carolina at Chapel Hill
- 2007 PI: *Multilevel latent variable models*
IBM Fund Award (Junior Faculty Development Award), awarded by the University of North Carolina at Chapel Hill
- 2005-2010 Co-Investigator. *The national longitudinal study of adolescent health.* (R01), Kathleen Harris, PI, University of North Carolina at Chapel Hill.
- 2005-2008 Co-Investigator. *Stress and children of alcoholic parents.* (R01 DA015398), Andrea Hussong, PI, University of North Carolina at Chapel Hill.
- 2004-2006 Subcontract. *Research to practice: an indicated prevention program.* Parent Grant: R01 DA13666, Denise Hallfors, PI, Pacific Institute for Research and Evaluation, Chapel Hill, NC.
- 2003-2005 Subcontract. *HIV in young adulthood: pathways and prevention.* Parent Grant: R01 DA14496, Denise Hallfors, PI, Pacific Institute for Research and Evaluation, Chapel Hill, NC.
- 2000-2002 Individual NRSA Post-Doctoral Fellowship, *Extending growth mixture models to the study of drug use* (F32 DA06062), awarded by NIDA, sponsored by Kenneth Bollen.

- 1999-2000 Institutional NRSA Pre-Doctoral Training Fellowship (NICHD T32 HD07376), awarded by the Carolina Consortium on Human Development at the Center for Developmental Science.
- 1999 Travel Award, awarded by NICHD/NIMH, to present at the 32nd annual meeting of the International Society for Developmental Psychobiology.
- 1999 Travel Grant, awarded by the Graduate School of the University of North Carolina, to present at the annual convention of the American Psychological Association.
- 1997 Instructional Technology Grant, awarded by the University of North Carolina to support the incorporation of new technology into the teaching of research methods in psychology.

PUBLICATIONS AND PRESENTATIONS

Listed in reverse chronological order; *Indicates current or former graduate student co-author or post-doctoral fellow co-author.

Peer-Reviewed Papers

- *Pek, J., *Losardo, D. & Bauer, D.J. (in press). Confidence intervals for a semiparametric approach to modeling nonlinear relations among latent variables. *Structural Equation Modeling: A Multidisciplinary Journal*.
- Curran, P.J. & Bauer, D.J. (in press). The disaggregation of within-person and between-person effects in longitudinal models of change. *Annual Review of Psychology*.
- *McNaughton Reyes, H. L., Foshee, V. A., Bauer, D. J., & Ennett, S. T. (in press). The role of heavy alcohol use in the developmental process of desistance in dating aggression during adolescence. *Journal of Abnormal Child Psychology*.
- Bauer, D.J. & *McNaughton Reyes, H.L. (2010). Modeling variability in individual development: Differences of degree or kind? *Child Development Perspectives*, 4, 114-122.
- Richman, L.S., *Pek, J., Pascoe, E., & Bauer, D.J. (2010). The effects of perceived discrimination on ambulatory blood pressure and affective responses to interpersonal stress modeled over 24 hours. *Health Psychology*, 29, 403-411.
- *Sterba, S.K. & Bauer, D.J. (2010a). Matching method with theory in person-oriented developmental psychopathology research [Keynote Article]. *Development and Psychopathology*, 22, 239–254.
- *Sterba, S.K. & Bauer, D.J. (2010b). Statistically evaluating person-oriented principles revisited [Response to Commentaries]. *Development and Psychopathology*, 22, 287–294.
- Bauer, D.J. & Hussong, A.M (2009). Psychometric approaches for developing commensurate measures across independent studies: traditional and new models. *Psychological Methods*, 14, 101-125.
- Bauer, D.J. (2009). A note on comparing the estimates of models for cluster-correlated or longitudinal data with binary or ordinal outcomes. *Psychometrika*, 74, 97-105.
- Bauer, D.J. & *Cai, L. (2009). Consequences of unmodeled nonlinear effects in multilevel models. *Journal of Educational and Behavioral Statistics*, 34, 97-114.
- *Pek, J., *Sterba, S.K., *Kok, B.E. & Bauer, D.J. (2009). Estimating and visualizing nonlinear relations among latent variables: a semiparametric approach. *Multivariate Behavioral Research*, 44, 407-436.
- Bauer, D.J., *Sterba, S.K. & Hallfors, D.D. (2008). Evaluating group-based interventions when control participants are ungrouped. *Multivariate Behavioral Research*, 43, 210-236.
- Hussong, A., Bauer, D.J. & Chassin, L. (2008). Telescoped trajectories from alcohol initiation to disorder in children of alcoholic parents. *Journal of Abnormal Psychology*, 117, 63-78.
- Hussong, A.M., Bauer, D.J., *Huang, W., Chassin, L., Sher, K.J., & Zucker, R.A. (2008). Characterizing the life stressors of children of alcoholic parents. *Journal of Family Psychology*, 22, 819-832.

- *Johnson, D.P., Penn, D.L., Bauer, D.J., Meyer, P., Evans, E. (2008). Predictors of therapeutic alliance in group therapy for individuals with treatment-resistant auditory hallucinations. *British Journal of Clinical Psychology, 47*, 171-183.
- Kamata, A. & Bauer, D.J. (2008). A note on the relationship between factor analytic and item response theory models. *Structural Equation Modeling: A Multidisciplinary Journal, 15*, 136-153.
- Bauer, D.J. (2007). Observations on the use of growth mixture models in psychological research. *Multivariate Behavioral Research, 42*, 757-786.
- Curran, P.J., & Bauer, D.J. (2007). A path diagramming framework for multilevel models. *Psychological Methods, 12*, 283-297.
- Hallfors, D.D., Iritani, B., Miller, W.C. & Bauer, D.J. (2007). Sexual and drug behavior patterns and HIV/STD racial disparities: the need for new directions. *American Journal of Public Health, 97*, 125-132.
- Hussey, J.M., Hallfors, D.D., Waller, M.W., Iritani, B.J., Halpern, C.T. & Bauer, D.J. (2007). Sexual behavior and drug use among Asian and Latino adolescents: association with immigrant status. *Journal of Immigrant and Minority Health, 9*, 85-94.
- Iritani, B.J., Hallfors, D.D., & Bauer, D.J. (2007). Crystal methamphetamine use among young adults in the United States. *Addiction, 102*, 1102-1113.
- Meade, A.W. & Bauer, D.J. (2007). Power and precision in confirmatory factor analytic tests of measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal, 14*, 611-635.
- Bauer, D.J., *Preacher, K.J. & Gil, K.M. (2006). Conceptualizing and testing random indirect effects and moderated mediation in multilevel models: new procedures and recommendations. *Psychological Methods, 11*, 142-163.
- Hallfors, D., Cho, H., Sanchez, V., Khatapoush, S., Kim, H., Bauer, D. (2006). Efficacy versus effectiveness trial results in an indicated "model" substance abuse program: implications for public health. *American Journal of Public Health, 96*, 2254-2259.
- *Hipp, J. & Bauer, D.J. (2006). Local solutions in the estimation of growth mixture models. *Psychological Methods, 11*, 36-53.
- *Preacher, K.J., Curran, P.J., & Bauer, D.J. (2006). Computational tools for probing interaction effects in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics, 31*, 437-448.
- Bauer, D.J. (2005). The role of nonlinear factor-to-indicator relationships in tests of measurement equivalence. *Psychological Methods, 10*, 305-316.
- Bauer, D.J. (2005). A semiparametric approach to modeling nonlinear relations among latent variables. *Structural Equation Modeling: A Multidisciplinary Journal, 4*, 513-535.
- Bauer, D.J. & Curran, P.J. (2005). Probing interactions in fixed and multilevel regression: Inferential and graphical techniques. *Multivariate Behavioral Research, 40*, 373-400.
- Boskovic, R., Wade, R., Wolpin, J., Bauer, D.J. and Koren, G. (2005). The reproductive effects of beta interferon therapy in pregnancy: a longitudinal cohort. *Neurology, 65*, 807-811.
- Hallfors, D.D., Waller, M.A., Bauer, D., Ford, C.A., Halpern, C.T. (2005) Which comes first in adolescence: sex and drugs or depression? *American Journal of Preventive Medicine, 29*, 163-170.
- *Hipp, J., Bauer, D.J. & Bollen, K.A. (2005). Conducting tetrad tests of model fit and contrasts of tetrad-nested models: a new SAS macro. *Structural Equation Modeling: A Multidisciplinary Journal, 12*, 76-93.
- Shanahan, M.J., *Erickson, L.D., & Bauer, D.J. (2005). One hundred years of knowing: the changing science of adolescence, 1904 and 2004. *Journal of Research on Adolescence, 15*, 383-394.

- Bauer, D.J. & Curran, P.J. (2004). The integration of continuous and discrete latent variable models: Potential problems and promising opportunities. *Psychological Methods, 9*, 3-29.
- Bollen, K.A. & Bauer, D.J. (2004). Automating the selection of model implied instrumental variables. *Sociological Methods and Research, 32*, 425-452.
- Curran, P.J., Bauer, D.J. & Willoughby, M.T. (2004). Testing main effects and interactions in latent curve analysis. *Psychological Methods, 9*, 220-237.
- Halpern, C., Hallfors, D., Bauer, D.J., Iritani, B., Waller, M.W. & Cho, S. (2004). STI/HIV implications of race and sex differences in patterns of adolescent risk behavior. *Perspectives on Reproductive and Sexual Health, 36*, 239-247.
- *Hipp, J., Bauer, D.J., Curran, P.J. & Bollen, K.A. (2004). Crimes of opportunity or crimes of emotion? Testing two explanations of seasonal change in crime. *Social Forces, 82*, 1333-1372.
- Shanahan, M.J. & Bauer, D.J. (2004). Developmental properties of transactional models: the case of life-events and mastery from adolescence to young adulthood. *Development and Psychopathology, 16*, 1095-1117.
- Bauer, D.J. (2003). Estimating multilevel linear models as structural equation models. *Journal of Educational and Behavioral Statistics, 28*, 135-167.
- Bauer, D.J. (2003). The scaling of latent and observed variables in state-trait models. *Measurement: Interdisciplinary Research and Perspectives, 1*, 207-211.
- Bauer, D.J. & Curran, P.J. (2003a). Distributional assumptions of growth mixture models: Implications for over-extraction of latent trajectory classes. *Psychological Methods, 8*, 338-363.
- Bauer, D.J. & Curran, P.J. (2003b). Over-extracting latent trajectory classes: Much ado about nothing? Reply to Rindskopf (2003), Muthén (2003), and Cudeck and Henly (2003). *Psychological Methods, 8*, 384-393.
- Bauer, D.J., Goldfield, B.A. & Reznick, J.S. (2002). Alternative approaches to analyzing individual differences in the rate of early vocabulary development. *Applied Psycholinguistics, 23*, 313-315.
- Pungello, E.P. & Bauer, D.J. (2002). Day Care. In N.J. Salkind (Ed.), *Macmillan Psychology Reference Series: Vol 1. Child Development* (pp. 110-113). New York: Macmillan Reference, USA.
- Bauer, D.J. & Gariépy, J.-L. (2001). The functions of freezing in the social interactions of juvenile high- and low-aggressive mice. *Aggressive Behavior, 27*, 463-475.
- Gariépy, J.-L., Bauer, D.J. & Cairns, R.B. (2001). Selective breeding for differential aggression in mice provides evidence for heterochrony in social behaviors. *Animal Behaviour, 61*, 933-947.

Chapters

- Bollen, K. A., Bauer, D. J., Christ, S. L., & Edwards, M. C. (in press). An overview of structural equations models and recent extensions. In S. Kolenikov, D. Steinley, & L. Thombs, *Recent Developments in Social Science Statistics*. New York: Wiley.
- Kamata, A., Bauer, D.J. & Miyazaki, Y. (2008). Multilevel measurement models. In A. O'Connell & B. McCoach (Eds.) *Multilevel Analysis of Educational Data* (pp. 345-388). Charlotte, NC: Information Age Publishing.
- Bauer, D.J. & Shanahan, M.J. (2007). Modeling complex interactions: Person-centered and variable-centered approaches. Little, T.D., Bovaird, J.A. & Card, N.A. (Eds.). *Modeling ecological and contextual effects in longitudinal studies of human development* (pp. 255-283). Mahwah, NJ: LEA.
- Curran, P.J., Bauer, D.J. & Willoughby, M.T. (2006). Testing and probing interactions in hierarchical linear growth models. In C.S. Bergeman & S.M. Boker (Eds.), *The Notre Dame Series on Quantitative Methodology, Volume 1: Methodological Issues in Aging Research*, (pp. 99-129). Mahwah, NJ: Lawrence Erlbaum Associates.

Published Research Abstracts

- *Sterba, S.K., *Mathiowetz, R.E. & Bauer, D.J. (2008). Adequacy of semiparametric approximations for growth models with nonnormal random effects. *Multivariate Behavioral Research*, 43, 658-659
- Bauer, D.J. & Estell, D.B. (2001). Cluster analysis of developmental profiles: Relationships between trajectories of aggression and popularity over adolescence. In L.M. Collins & A.G. Sayer (Eds.), *New Methods for the Analysis of Change* (pp. 385-387). Washington, D.C: American Psychological Association.
- Mills-Koonce, R. & Bauer, D.J. (2001). Experiential modification of phenotypes produced by selective breeding. *Developmental Psychobiology*, 37, 208.
- Nehrenberg, D.L., Gariépy, J.-L. & Bauer, D.J. (2001). Selective breeding for behavioral traits: Relationships between stabilizing and directional effects. *Developmental Psychobiology*, 37, 209.
- Bauer, D.J. & Gariépy, J.-L. (2000). The regulation of social dominance in high and low aggressive mouse lines. *Developmental Psychobiology*, 36, 236.

Selected Presentations

- Bauer, D.J., Curran, P.J., & Hussong, A.M. (2010, September). *Measurement in heterogeneous populations: beyond multiple groups*. Meeting of the Society for Multivariate Experimental Psychology, Atlanta, Georgia.
- Coovert, M.D., Walvoord, A.A.G., Bauer, D.J., White, M., & Mottern, J. (2010, October). *The prediction of first term attrition and reenlistment*. Meeting of the Society for Multivariate Experimental Psychology, Atlanta, Georgia.
- Woods, C. & Bauer, D.J. (2010, October). *Comparison of Ramsay curve IRT and factor mixture models*. Meeting of the Society for Multivariate Experimental Psychology, Atlanta, Georgia.
- *Gottfredson, N. & Bauer, D.J. (2010, June). *Evaluating latent pattern mixture model performance with non-randomly missing longitudinal data*. Meeting of the Psychometric Society, Athens, Georgia.
- *Mathiowetz, R., Shanahan, M. & Bauer, D.J. (2010, June). *Comparing direct and indirect approaches for identifying classes of personality traits*. Meeting of the Psychometric Society, Athens, Georgia. Winner of the Best Poster Award.
- Bauer, D.J., Curran, P.J. & Hussong, A.M. (2010, March). *Toward a cumulative psychological science: integrative data analysis*. Colloquium given at Brigham-Young University, Utah.
- Bauer, D.J., *Mathiowetz, R., *Gottfredson, N., *Pek, J. & *Losardo, D. (2009, July). *Modeling nonlinear relationships among latent variables via mixtures of linear structural equations*. Meeting of the Psychometric Society, Cambridge, England.
- *Gottfredson, N. & Bauer, D.J. (2009, July). *Exploring the efficacy of latent class pattern mixture models for handling non-randomly missing data*. Meeting of the Psychometric Society, Cambridge, England.
- Bauer, D.J. *Pek, J.J., *Sterba, S.K. & *Kok, B.E. (2008, September). *Visualizing nonlinear relationships among latent variables using mixtures: an R package and online utility*. Meeting of the Society for Multivariate Experimental Psychology in Montreal, Quebec.
- *Sterba, S.K., *Mathiowetz, R.E. & Bauer, D.J. (2008, September). *Adequacy of semiparametric approximations for growth models with nonnormal random effects*. Meeting of the Society for Multivariate Experimental Psychology in Montreal, Quebec.
- Hussong, A.M., Bauer, D., *Serrano, D., Curran, P.J., Chassin, L., Sher, K.J., & Zucker, R.A. (2008, July). *Externalizing, not internalizing, symptoms identify periods and persons at risk for alcohol use in high-risk family contexts: A cross-study analysis*. Meeting for the Research Society on Alcoholism in Washington, DC.
- *Serrano, D., Bauer, D.J., Hussong, A.M. & Curran, P.J. (2008, February). *Prediction of alcohol use trajectories by internalizing and externalizing behavior: Simultaneous analysis of three longitudinal*

- studies via the generalized linear mixed model*. Developmental Psychopathology Conference. Chapel Hill, NC.
- Bauer, D.J. & *Sterba, S. (2007, October). *When bias and RMSE don't agree*. Meeting of the Society for Multivariate Experimental Psychology, Chapel Hill, NC.
- Bauer, D.J. & *Sterba, S. (2007, August). *Multilevel models for ordinal outcomes in longitudinal and clustered data*. Meeting of the American Psychological Association, San Francisco, CA.
- Bauer, D.J. & *McNaughton, L. (2007, May). *An evaluative comparison of random coefficient growth models for individual development*. Invited presentation at the meeting of the Association for Psychological Science, Washington DC.
- Bauer, D.J. (2007, February). *Developing commensurate measures for cross-study analyses via a moderated nonlinear factor analysis model*. 3rd Conference on Emerging Adulthood, Tuscon, AZ.
- Bauer, D.J. (2006, October). *Comparing the estimates of mixed models for binary or ordinal data*. Meeting of the Society for Multivariate Experimental Psychology, Lawrence, KS.
- Bauer, D.J. (2005, November). *Multilevel linear models with latent variables*. Invited presentation at the Statistical and Applied Mathematical Sciences Institute (SAMSI) closing workshop on Latent Variable Models in the Social Sciences, Research Triangle Park, NC.
- *Sterba, S., Prinstein, M.J., Bauer, D.J., & Cox, M.J. (2005, November). *Heterogeneity in latent trajectories of internalizing problems across early childhood: gender divergence over time*. Meeting of the Association for the Advancement of Cognitive and Behavioral Therapy, Washington, D.C.
- *Sterba, S., Prinstein, M.J., Bauer, D.J., & Cox, M.J. (2005, November). *Unpacking heterotypic continuity: gender and developmental factors differentiating latent trajectories of homotypic versus heterotypic symptoms from 2-11 years*. Meeting of the Association for the Advancement of Cognitive and Behavioral Therapy, Washington, D.C.
- Bauer, D.J. (2005, October). *Incongruence between the statistical theory and substantive application of growth mixture models in psychological research*. Cattell Award address presented at the annual meeting of the Society for Multivariate Experimental Psychology, Lake Tahoe, CA.
- Hallfors, D., Iritani, B., Bauer, D., Miller, W.C. (2005, October). *Do sex and drug behavior patterns account for HIV/STD racial disparities? Bridging science & culture to improve drug abuse research in minority communities* (Sponsored by the National Institute on Drug Abuse), Atlanta, GA.
- Hallfors, D., Iritani, B., Bauer, D., Miller, W.C. (2005, October). *Racial disparities in STDs and HIV*. Meeting of the minds conference at the Pacific Institute for Research and Evaluation; Dallas, TX.
- *Sterba, S.K., Bauer, D.J. & Cox, M.J. (2005, August). *Comparing growth mixture and correlative methods for identifying symptom covariation*. Poster presented at the annual meeting of the American Psychological Association, Washington, DC.
- Bauer, D.J. (2005, February). *The intersection of quantitative methodology and developmental science*. Invited presentation at the Center for Developmental Science, Chapel Hill, NC.
- Bauer, D.J. (2004, September). *Multilevel models with latent variables*. Invited presentation at the Statistical and Applied Mathematical Sciences Institute (SAMSI) opening workshop on Latent Variable Models in the Social Sciences, Research Triangle Park, NC.
- Bauer, D.J. (2004, October). *Nonlinear Latent Variable Models: A Finite Mixture Approach*. Paper presented at the annual meeting of the Society for Multivariate Experimental Psychology, Fort Meyers, FL.
- Bollen, K.A. & Bauer, D.J. (2004, August). *Dissecting chi-squares in testing structural equation models*. Paper presented at the Amsterdam Workshop on Model Selection, Amsterdam, The Netherlands.
- Bauer, D.J. & Shanahan, M.J. (2004, March). *A person-centered approach to modeling complex interactions*. Paper presented at the Merrill Center Conference, Modeling Developmental Processes in Ecological Context, Tempe, AZ.

- Shanahan, M.J. & Bauer, D.J. (2004, March). *Life-events and mastery from adolescence to young adulthood: A growth curve analysis of selection and causation*. Paper presented at the Biennial Meeting of the Society for Research in Adolescence, Baltimore, MD.
- *Waller, M.W., Iritani, B., Hallfors, D., Halpern, C.T. & Bauer, D.J. (2004, March). *Risk behavior patterns associated with experiencing and perpetrating forced sex*. Poster presented at the biennial meeting of the Society for Research in Adolescence, Baltimore, MD.
- Bauer, D. J. (2003, October). *Finite mixture growth models: problems and opportunities*. Invited presentation at the Statistics Seminar of the University of Michigan, Ann Arbor, MI.
- Bauer, D. J. (2003, April). *Using growth mixture models to examine developmental heterogeneity in reading achievement from 1st to 7th grade*. Paper presented at the biennial meeting of the Society for Research in Child Development, Tampa, FL.
- *Vandergrift, N.A., Curran, P.J. & Bauer (2002, August). *Methods for modeling nonlinearity in latent curve models*. Poster presented at the annual meeting of the American Psychological Association, Chicago IL.
- Bauer, D.J. & Curran, P.J. (2002, June). *Estimating multilevel linear models as structural equation models*. Paper presented at the meeting of the Psychometric Society, Chapel Hill, NC.
- Bauer, D.J. (2002, May). *Growth modeling in heterogeneous populations*. Invited presentation at the 5th Annual International Developmental Science Institute, The Penn State University, State College, PA.
- Bauer, D.J. (2001, October). *Identifying discrete clusters of growth trajectories (even when none actually exist)*. Invited colloquium presentation to the Applied Statistics Working Group at the Odum Institute for Research in Social Science, University of North Carolina at Chapel Hill.
- Bauer, D.J., Curran, P.J. & Bollen, K.A. (2001, June). *On the use of confidence bands in latent trajectory models*. Paper presented at the meeting of the Psychometric Society, King of Prussia, PA.
- Bauer, D.J. & Curran, P.J. (2001, April). *The impact of model misspecification in clustered and continuous growth modeling*. Poster presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Carrig, M. & Bauer, D.J. (2001, April). *A comparison of cluster analysis and growth mixture modeling in the recovery of developmental trajectory classes*. Poster presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Bauer, D.J. & Pelphrey, K.A. (1999, August). *On Memory Traces and Developmental Trends*. Poster presented at the Annual Convention of the American Psychological Association, Boston, MA.
- Bauer, D.J. & Rodriguez, R.M. (1999, April). *Self-regulation of reactivity and the organization of social interactions*. Poster presented at the biennial meeting of the Society for Research in Child Development, Albuquerque, NM.
- Pelphrey, K.A., Staneck, C.H., Bauer, D.J., Gramzow, E.F., Agosto, C.D., Baker-Ward, L. & Ornstein, P.A. (1999, February). *On knowledge and long-term retention: Examining relations among knowledge, trace strength, and recall features of a pediatric examination over a six-month delay*. Poster presented to the North Carolina Cognition Group, Raleigh, NC.
- Estell, D.B. & Bauer, D.J. (1998, October). *Cluster analysis of developmental profiles: Relationships between trajectories of aggression and popularity over adolescence*. Poster presented at New Methods for the Analysis of Change, State College, PA.
- Bauer, D.J. (1998, June). *Freezing as a behavioral regulator of social stress in mice*. Poster presented at the First International Institute for Social Science, Chapel Hill, NC.

TEACHING

Graduate Courses

Statistical Methods in Psychology I: UNC: Fall, 2004, Fall 2005

Quantitative Methods in Psychology: NCSU: Spring 2003, Spring 2004

Multivariate Methods in Psychology: NCSU: Fall 2002, Fall 2003

Multilevel Modeling: UNC: Spring 2006, Fall 2007, Fall 2009

Cluster Analysis and Mixture Modeling: UNC: Fall 2008

Undergraduate Courses

Introduction to Statistics in Psychology: UNC, Spring 2005, Fall 2006, Fall 2007, Fall 2008, Spring 2009

Research Methods: UNC: Fall 1996; Spring 1997

Child Development: UNC: Fall 1997; Spring 1998; Summer 1998; Fall 1998; Summer 1999; Carolina Courses Online: Fall 2000; Spring 2001

Introductory Psychology: UNC: Spring 1999

Workshops / Short Courses

Bauer, D.J. & Curran, P.J. (2009). *Multilevel modeling*. Chapel Hill, Curran-Bauer Analytics.

Bauer, D.J. (2008, October). *An Introduction to Multilevel Models: A Statistics Workshop*. 3-C Institute for Social Development and FPG Child Development Institute, Chapel Hill, NC.

Bauer, D.J. (2008, October). *Multilevel Models for Hierarchically or Longitudinally Clustered Data in Health Research*. Center for Drug Abuse Research Translation, Workshop on Statistical Methods in Drug Abuse and Health-Related Research, Lexington, KY.

Bauer, D.J. (2008, September). *Multilevel modeling in SAS*. Boston Area SAS User's Group, Boston, MA.

Bauer, D.J. & Curran, P.J. (2006-2008). *Multilevel modeling of hierarchical and longitudinal data in SAS*. SAS Institute, Business Knowledge Series.

Bauer, D.J. (2005, November). *Multilevel modeling in SAS and SPSS*. Department of Behavioral Science, M.D. Anderson Cancer Center, Houston, Texas.

Bauer, D.J. (2005, July). *Multilevel modeling of clustered and longitudinal data in SPSS and HLM*. Department of Psychology, Yale University, New Haven, Connecticut.

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