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Quantitative Psychology Program
L.L. Thurstone Psychometric Laboratory
Department of Psychology and Neuroscience
University of North Carolina at Chapel Hill
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EDUCATION

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

PROFESSIONAL EXPERIENCE

Employment

- 7/17-present Director, L.L. Thurstone Psychometric Laboratory and Quantitative Psychology Graduate Program, University of North Carolina at Chapel Hill.
- 7/13-present Professor of Quantitative Psychology, L.L. Thurstone Psychometric Laboratory, Department of Psychology and Neuroscience, University of North Carolina at Chapel Hill.
- 1/17-6/17 Acting Director, Center for Developmental Science, University of North Carolina at Chapel Hill.
- 7/08-6/13 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.

Affiliations

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

HONORS

- 2016 Distinguished Teaching Award for Post-Baccalaureate Instruction, University of North Carolina at Chapel Hill
- 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).

GRANTS AND FELLOWSHIPS

- 2010-2021 Co-Principal Investigator: *Human development: Interdisciplinary research training*
NICHD T32 HD007376
Andrea Hussong, PI, University of North Carolina at Chapel Hill.
- 2015-2020 Co-Investigator: *Multilevel biomarkers for suicidal behavior: From interpersonal stress to gene expression in a longitudinal study of adolescent girls*
NIMH: R01 MH107479; \$3,911,935 total costs
Mitchell Prinstein, PI, University of North Carolina at Chapel Hill
- 2016-2018 Co-Investigator: *Teen dating violence: identifying heterogeneity using person-centered approaches*
NICHD: R21 HD087781; \$374,727 total costs
Heathe Luz McNaughton Reyes, PI, University of North Carolina at Chapel Hill
- 2014-2018 Principal Investigator: *Harmonizing substance use and disorder measures to facilitate multistudy analyses (Diversity Research Supplement)*.
NIDA: R01 DA034636-02S1; \$184,425.66 total costs.
Daniel Bauer, PI, University of North Carolina at Chapel Hill
- 2014-2018 Principal Investigator: *Harmonizing substance use and disorder measures to facilitate multistudy analyses (Administrative Supplement)*.
NIDA: R01 DA034636-01A1S1; \$148,990.40 total costs.
Daniel Bauer, PI, University of North Carolina at Chapel Hill
- 2013-2018 Principal Investigator: *Harmonizing substance use and disorder measures to facilitate multistudy analyses*.
NIDA: R01 DA034636; \$2,553,540 total costs.
Daniel Bauer, PI, University of North Carolina at Chapel Hill
- 2015-2017 Sponsor: *Mixture modeling of patterns of substance use: Taking into account measurement bias*
NIDA: F31 DA040334; \$75,148 total costs
Veronica Cole, Pre-Doctoral Fellow, University of North Carolina at Chapel Hill.
- 2012-2013 Co-Investigator: *Substance use and dating aggression: whether, when, and for whom are they related*.
NIDA: R03 DA033420; \$114,000 total costs.
Heathe Luz Reyes, PI, University of North Carolina at Chapel Hill

- 2010-2014 Co-Investigator/Statistician: *Understanding peer influence of adolescent health risk behaviors*
 NICHD: R01 HD055342; \$3,303,406 total costs
 Mitchell Prinstein, PI, University of North Carolina at Chapel Hill
- 2009-2014 Co-Investigator/Statistician: *Stress responses as prospective predictors of girls' suicidality and self-injury*
 NIMH: R01 MH085505; \$2,535,751 total costs
 Mitchell Prinstein, PI, University of North Carolina at Chapel Hill
- 2011-2013 Co-Sponsor: *Promoting well-being in mid-life adults through positive valuation.*
 NIA: F31 AG039132; \$63,243 total costs
 Lahna Catalino, Pre-Doctoral Fellow; Barbara Fredrickson, Sponsor, University of North Carolina
- 2009-2013 Co-Investigator: *Internalizing pathway to substance use disorders*
 NIDA: R01 DA015398; \$1,323,111 total costs
 [Administrative Supplement: \$125,703 total costs]
 Andrea Hussong, PI, University of North Carolina at Chapel Hill.
- 2007-2013 Co-Investigator: *Integrated research activities for developmental science (IRADS)- child development research collaborative*
 NSF: BCS-0720660; \$1,401,664 total costs
 Martha Cox, PI, University of North Carolina at Chapel Hill
- 2009-2012 Co-Investigator: *Antisocial behavior, genetics, and the life course*
 NICHD: R21 HD050261; \$404,375 total costs
 Michael Shanahan, PI, University of North Carolina at Chapel Hill.
- 2009-2011 Sponsor: *Modeling non-random missingness in experience sampling research on substance use*
 NIDA: F31 DA026686; \$62,942 total costs
 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*
 NICHD: F32 HD059318; \$101,812 total costs (completed early)
 Sharon Christ, Post-Doctoral Fellow, University of North Carolina at Chapel Hill.
- 2007-2010 Sponsor: *Longitudinal comorbidity: modeling symptom, syndrome, and impairment change*
 NIMH: F31 MH080494; \$86,814 total costs
 Sonya Sterba, Pre-Doctoral Fellow, University of North Carolina at Chapel Hill.
- 2007-2009 Principal Investigator: *Diagnosing and estimating nonlinear effects in latent variable models*
 NSF: SES-0716555; \$140,000 total costs
 Daniel J. Bauer, PI, University of North Carolina
- 2007-2009 Co-Investigator: *Integrated Research Activities for Developmental Science (IRADS)- Child Development Research Collaborative*
 NSF: BCS-0720660; \$2,500,000 total costs
 Martha Cox & Peter Ornstein, PIs, University of North Carolina at Chapel Hill
- 2002-2008 Co-Investigator: *Stress and children of alcoholic parents*
 NIDA: R01 DA015398; \$1,271,382 total costs
 Andrea Hussong, PI, University of North Carolina at Chapel Hill

- 2007 Principal Investigator: *Multilevel latent variable models*
UNC IBM Fund Award (Junior Faculty Development Award); \$7500 total costs
Daniel J. Bauer, PI, University of North Carolina
- 2002-2007 Subcontractor/Co-Investigator: *HIV in young adulthood: Pathways and prevention*
NIDA: R01 DA14496; \$1,265,620 total costs
Denise Hallfors, PI, Pacific Institute for Research and Evaluation
- 2001-2007 Subcontractor/Co-Investigator: *Research to practice: An indicated prevention program*
NIDA: R01 DA13666; \$4,012,309 total costs
Denise Hallfors, PI, Pacific Institute for Research and Evaluation
- 2000-2003 Individual NRSA Post-Doctoral Fellowship: *Extending growth mixture models to the study of drug use*
NIDA: F32 DA06062; \$100,848 total costs (completed early)
Kenneth Bollen, Sponsor, University of North Carolina at Chapel Hill
- 1999-2000 Institutional NRSA Pre-Doctoral Training Fellowship
NICHD: T32 HD07376
Carolina Consortium on Human Development, Sponsor, University of North Carolina at Chapel Hill.

BIBLIOGRAPHY

*Indicates a co-author who was a graduate student or post-doctoral fellow at the time the research was initiated.

Refereed Articles

- *Burns, A.R., Hussong, A.M., *Solis, J.M., Curran, P.J., *McGinley, J.S., **Bauer, D.J.**, Chassin, L., & Zucker, R.A. (in press). Examining cohort effects in developmental trajectories of substance use. *International Journal of Behavioral Development*. Advance Online Publication: DOI:10.1177/0165025416651734
- *Dean, D., **Bauer, D.J.**, & Prinstein, M.J. (in press). Friendship dissolution within social networks modeled through multilevel event history analysis. *Multivariate Behavioral Research*. Advanced Online Publication: DOI: 10.1080/00273171.2016.1267605
- *Giletta, M., Hastings, P.D., Rudolph, K.D., **Bauer, D.J.**, Nock, M.K., & Prinstein, M.J. (in press). Suicide ideation among high-risk adolescent females: Examining the interplay between parasympathetic regulation and friendship support. *Development and Psychopathology*. Advanced Online Publication: DOI: 10.1017/S0954579416001218
- Bauer, D.J.** (2017). A more general model for testing measurement invariance and differential item functioning. *Psychological Methods*, 22, 507-526. DOI: 10.1037/met0000077
- *Cole, V., **Bauer, D.J.**, Hussong, A.M. & Giordano, M.L. (2017). An empirical assessment of the sensitivity of mixture models to changes in measurement. *Structural Equation Modeling: A Multidisciplinary Journal*, 24, 159-179, DOI: 10.1080/10705511.2016.1257354
- *Cole, V & **Bauer, D.J.** (2016). A note on the use of mixture models for individual prediction. *Structural Equation Modeling: A Multidisciplinary Journal*, 23, 615-631, DOI: 10.1080/10705511.2016.1168266.
- Curran, P.J., *Cole, V., **Bauer, D.J.**, Hussong, A.M., & Gottfredson, N. (2016). Improving factor score estimation through the use of observed background characteristics. *Structural Equation Modeling: A Multidisciplinary Journal*, 23, 827-844. DOI: 10.1080/10705511.2016.1220839

- *McKim, T.H., **Bauer, D.J.**, Boettiger, C.A. (2016) Addiction history associates with a propensity to form habits. *Journal of Cognitive Neuroscience*, 28, 1024-1038, DOI: 10.1162/jocn_a_00953.
- *Dean, D.O., *Cole, V., & **Bauer, D.J.** (2015). Delineating prototypical patterns of substance use initiations over time. *Addiction*, 110, 585-594, DOI:10.1111/add.12816.
- Reyes, H.L.M., Foshee, V.A., Tharp, A.T., Ennett, S.T., & **Bauer, D.J.** (2015). Substance use and physical dating violence: The role of contextual moderators. *American Journal of Preventive Medicine*, 49, 467-475.
- Curran, P.J., *McGinley, J.S., **Bauer, D.J.**, Hussong, A.M., *Burns, A., Chassin, L., Sher, K., Zucker, R. (2014). A moderated nonlinear factor model for the development of commensurate measures in integrative data analysis. *Multivariate Behavioral Research*, 49, 214-231, DOI: 10.1080/00273171.2014.889594.
- *Dean, D.O., **Bauer, D.J.** & Shanahan, M.J. (2014). A discrete-time multiple event process survival mixture (MEPSUM) model. *Psychological Methods*, 19, 251-264, DOI: 10.1037/a0034281.
- *Gottfredson, N.C., **Bauer, D.J.** & Baldwin, S.A. (2014). Modeling change in the presence of non-randomly missing data: evaluating a shared parameter mixture model. *Structural Equation Modeling: A Multidisciplinary Journal*, 21, 196-209. DOI: 10.1080/10705511.2014.882666.
- *Gottfredson, N.C., **Bauer, D.J.**, Baldwin, S.A., & Okiishi, J. (2014). Using a shared parameter mixture model to estimate change during treatment when treatment termination is related to recovery speed. *Journal of Consulting and Clinical Psychology*, 82, 813-827. DOI: 10.1037/a0034831
- Reyes, H. L. M., Foshee, V. A., Bauer, D. J., & Ennett, S. T. (2014). Proximal and time-varying effects of cigarette, alcohol, marijuana and other hard drug use on adolescent dating aggression. *Journal of Adolescence*, 37, 281-289. DOI: 10.1016/j.adolescence.2014.02.002
- *Sterba, S.K. & **Bauer, D.J.** (2014). Predictions of individual change recovered with latent class or random coefficient growth models. *Structural Equation Modeling: A Multidisciplinary Journal*, 21, 1-19. DOI: 10.1080/10705511.2014.915189
- Bauer, D.J.**, *Gottfredson, N.C., *Dean, D. & Zucker R.A. (2013). Analyzing repeated measures data on individuals nested within groups: accounting for dynamic group effects. *Psychological Methods*, 18, 1-14. DOI: 10.1037/a0030639. PMID: PMC3638804
- Bauer, D.J.**, *Howard, A.L., *Baldasaro, R.E., Curran, P.J., Hussong, A.M., Chassin, L., Zucker, R.A. (2013). A trifactor model for integrating ratings across multiple informants. *Psychological Methods*, 18, 475-493. DOI: 10.1037/a0032475. PMID: PMC3964937
- *Baldasaro, R.E., Shanahan, M.J. & **Bauer, D.J.** (2013). Psychometric properties of the mini-IPIP in a large, nationally representative sample of young adults. *Journal of Personality Assessment*, 95, 74-84. DOI: 10.1080/00223891.2012.700466
- Hussong, A.M., Curran, P.J., & **Bauer, D.J.** (2013). Integrative data analysis in clinical psychology research. *Annual Review of Clinical Psychology*, 9, 61-89. DOI: 10.1146/annurev-clinpsy-050212-185522. PMID: PMC3924786
- Bauer, D.J.**, *Baldasaro, R. & *Gottfredson, N.C. (2012). Diagnostic procedures for detecting nonlinear relationships between latent variables. *Structural Equation Modeling: A Multidisciplinary Journal*, 19, 157-177. DOI: 10.1080/10705511.2012.659612
- *Reyes, H.L.M., Foshee, V.A., **Bauer, D.J.**, & Ennett, S.T. (2012). Developmental associations between adolescent alcohol use and dating aggression. *Journal of Research on Adolescence*, 22,526-541. DOI 10.1111/j.1532-7795.2012.00799.x PMID: PMC3625033

- *Reyes, H. L. M., Foshee, V. A., **Bauer, D. J.**, & Ennett, S. T. (2012). Heavy alcohol use and dating violence perpetration during adolescence: family, peer, and neighborhood violence as moderators. *Prevention Science, 13*, 340-349. DOI: 10.1007/s11121-011-0215-8. PMCID: PMC3906046
- *Sterba, S.K., *Baldasaro, R.E. & **Bauer, D.J.** (2012). Factors affecting the adequacy and preferability of semiparametric groups-based approximations of continuous growth trajectories. *Multivariate Behavioral Research, 47*, 590-634. DOI: 10.1080/00273171.2012.692639
- Baldwin, S.A., **Bauer, D.J.**, Stice, E. & Rohde, P. (2011). Evaluating models for partially clustered designs. *Psychological Methods, 16*, 149-165. DOI: 10.1037/a0023464
- Bauer, D.J.** (2011). Evaluating individual differences in psychological processes. *Current Directions in Psychological Science, 20*, 115-118. DOI: 10.1177/0963721411402670
- Bauer, D.J.** & *Sterba, S.K. (2011). Fitting multilevel models with ordinal outcomes: performance of alternative specifications and methods of estimation. *Psychological Methods, 16*, 373-390. DOI: 10.1037/a0025813 PMCID: PMC3252624
- Curran, P.J., & **Bauer, D.J.** (2011). The disaggregation of within-person and between-person effects in longitudinal models of change. *Annual Review of Psychology, 62*, 583-619. DOI: 10.1146/annurev.psych.093008.100356 PMCID: PMC3059070
- *Pek, J., *Losardo, D. & **Bauer, D.J.** (2011). Confidence intervals for a semiparametric approach to modeling nonlinear relations among latent variables. *Structural Equation Modeling: A Multidisciplinary Journal, 18*, 537-553. DOI: 10.1080/10705511.2011.607072
- *Reyes, H. L.M., Foshee, V. A., **Bauer, D. J.**, & Ennett, S. T. (2011). The role of heavy alcohol use in the developmental process of desistance in dating aggression during adolescence. *Journal of Abnormal Child Psychology, 39*, 239-250. DOI: 10.1007/s10802-010-9456-4 PMCID: PMC3049904
- Bauer, D.J.** & *Reyes, H.L.M. (2010). Modeling variability in individual development: Differences of degree or kind? *Child Development Perspectives, 4*, 114-122. DOI:10.1111/j.1750-8606.2010.00129.x
- 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. DOI: 10.1037/a0019045
- *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. DOI: 10.1017/S0954579410000015
- *Sterba, S.K. & **Bauer, D.J.** (2010b). Statistically evaluating person-oriented principles revisited [Response to Commentaries]. *Development and Psychopathology, 22*, 287-294. DOI: 10.1017/S0954579410000064
- 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. DOI:10.1007/s11336-008-9080-1
- Bauer, D.J.** & *Cai, L. (2009). Consequences of unmodeled nonlinear effects in multilevel models. *Journal of Educational and Behavioral Statistics, 34*, 97-114. DOI: 10.3102/1076998607310504
- 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. DOI: 10.1037/a0015583 PMCID: PMC2780030
- *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. DOI: 10.1080/00273170903103290

- 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. DOI: 10.1080/00273170802034810 PMID: PMC2853949
- 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. DOI: 10.1037/0021-843X.117.1.63 PMID: PMC2842006
- 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. DOI: 10.1037/a0013704 PMID: PMC2765873
- *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. DOI: 10.1348/014466507X241604
- 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. DOI: 10.1080/10705510701758406
- Bauer, D.J.** (2007). Observations on the use of growth mixture models in psychological research. *Multivariate Behavioral Research*, 42, 757-786. DOI: 10.1080/00273170701710338
- Curran, P.J., & **Bauer, D.J.** (2007). Building path diagrams for multilevel models. *Psychological Methods*, 12, 283-297. DOI: 10.1037/1082-989X.12.3.283
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- 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. DOI: 10.1080/10705510701575461
- 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. DOI: 10.1037/1082-989X.11.2.142
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- Bauer, D.J.** (2005). The role of nonlinear factor-to-indicator relationships in tests of measurement equivalence. *Psychological Methods*, 10, 305-316. DOI: 10.1037/1082-989X.10.3.305

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- Bauer, D.J.** & Curran, P.J. (2005). Probing interactions in fixed and multilevel regression: Inferential and graphical techniques. *Multivariate Behavioral Research*, 40, 373-400. DOI: 10.1207/s15327906mbr4003_5
- Boskovic, R., Wade, R., Wolpin, J., **Bauer, D.J.** & Koren, G. (2005). The reproductive effects of beta interferon therapy in pregnancy: a longitudinal cohort. *Neurology*, 65, 807-811. DOI: 10.1212/01.wnl.0000180575.77021.c4
- 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. DOI:10.1016/j.amepre.2005.06.002
- *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. DOI:10.1207/s15328007sem1201_4
- 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. DOI: 10.1111/j.1532-7795.2005.00103.x
- 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. DOI: 10.1037/1082-989X.9.1.3
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- Curran, P.J., **Bauer, D.J.** & *Willoughby, M.T. (2004). Testing main effects and interactions in latent curve analysis. *Psychological Methods*, 9, 220-237. DOI: 10.1037/1082-989X.9.2.220
- Halpern, C., Hallfors, D., **Bauer, D.J.**, Iritani, B., *Waller, M.W. & Cho, S. (2004). Implications of racial and gender differences in patterns of adolescent risk behavior for HIV and other sexually transmitted diseases. *Perspectives on Reproductive and Sexual Health*, 36 (6), 239-247. DOI: 10.1363/3623904
- *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. DOI: 10.1353/sof.2004.0074
- 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. DOI: 10.1017/S0954579404040155
- Bauer, D.J.** (2003). Estimating multilevel linear models as structural equation models. *Journal of Educational and Behavioral Statistics*, 28, 135-167 DOI: 10.3102/10769986028002135
- Bauer, D.J.** (2003). The scaling of latent and observed variables in state-trait models. *Measurement: Interdisciplinary Research and Perspectives*, 1, 207-211. DOI: 10.1207/S15366359MEA0103_02
- 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. DOI: 10.1037/1082-989X.8.3.338
- Bauer, D.J.** & Curran, P.J. (2003b). Overextraction of latent trajectory classes: Much ado about nothing? Reply to Rindskopf (2003), Muthén (2003), and Cudeck and Henly (2003). *Psychological Methods*, 8, 384-393. DOI: 10.1037/1082-989X.8.3.384

- 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. DOI: 10.1017/S0142716402003016
- 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. DOI: 10.1002/ab.1030
- 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. DOI:10.1006/anbe.2000.1700

Book Chapters

- Bauer, D.J.** & Curran, P.J. (2015). The discrepancy between measurement and modeling in longitudinal data analysis. In J.R. Harring, L.M. Stapleton & S.N. Beretvas (Eds.), *Advances in Multilevel Modeling for Educational Research*. Information Age Publishing.
- Bollen, K. A., **Bauer, D. J.**, Christ, S. L., & Edwards, M. C. (2010). Overview of structural equations models and recent extensions. In S. Kolenikov, D. Steinley & L. Thombs (Eds.), *Statistics in the Social Sciences: Current Methodological Developments* (pp. 37-80). New York: Wiley. DOI: 10.1002/9780470583333.ch2
- 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.
- 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.

Conference Papers and Presentations

- Bauer, D.J.**, Sheridan, M.A., & Cohen, J.R. (October, 2017). *Growth modeling: An overview and a developmental neuroscience application*. Presentation at Developmental Seminar in the Department of Psychology and Neuroscience, University of North Carolina at Chapel Hill.
- Curran, P., *Cole, V., **Bauer, D.**, *Rothenberg, A., Hussong, A. (October, 2017). *Recovering predictor-criterion relations using covariate-informed factor score estimates*. Presentation at the meeting of the Society for Multivariate Experimental Psychology, Minneapolis, MN.
- Masyn, K., *Cole, V. & **Bauer, D.** (October, 2017). *Measurement invariance in multi-group and longitudinal mixture models*. Presentation at the meeting of the Society for Multivariate Experimental Psychology, Minneapolis, MN.
- Bauer, D.J.**, Hussong, A.M., Curran, P.J. (April, 2017). *How integrative data analysis can advance the study of child development*. Paper presented at the biennial meeting of the Society for Research in Child Development, Austin, TX.
- Bauer, D.J.** (October, 2016). *A more general model for testing measurement invariance and differential item functioning*. Paper presented at the meeting of the Society for Multivariate Experimental Psychology, Richmond, VA.

- Bauer, D.J.** (July, 2016). *A more general model for testing measurement invariance and differential item functioning*. Paper presented at the International Meeting of the Psychometric Society, Asheville, NC.
- *Giordano, M.L., **Bauer, D.J.**, Hussong, A.M., Curran, P.J. (July, 2016). *An evaluation of IRT scores using a within-subjects design with a young adult sample*. Poster presented at the International Meeting of the Psychometric Society, Asheville, NC.
- *Markiewitz, N., **Bauer, D.J.** (July, 2016). *A novel method for the modeling of ordinal count items*. Poster presented at the International Meeting of the Psychometric Society, Asheville, NC.
- Curran, P.J. & **Bauer, D.J.** (April, 2016). *Introduction to growth curve modeling: an overview and recommendations for practice*. Invited workshop presentation, Society for Research on Adolescence, Baltimore, MD.
- Curran, P.J., **Bauer, D.J.**, & Hussong, A.M. (March, 2016). *Promises and challenges in the psychometric assessment of low base-rate behaviors using integrative data analysis*. Invited presentation, Pathways to Prevention Workshop: Advancing Research to Prevent Youth Suicide, National Institutes of Health Office of Disease Prevention, Rockville, MD.
- Bauer, D.J.**, Curran, P.J. & Hussong, A.M. (October, 2015). *Progress in validating scoring methods for integrative data analysis*. Paper presented at the meeting of the Society for Multivariate Experimental Psychology, Los Angeles, CA.
- Curran, P.J., **Bauer, D.J.**, & Hussong, A.M. (September, 2015). *The Application of Integrative Data Analysis in Substance Use Research*. Invited Webinar Colloquium, Society for Research on Nicotine and Tobacco, Disparities and Treatment Networks.
- Curran, P.J., Hussong, A.M., & **Bauer, D.J.** (March, 2015). *Advances in Integrative Data Analysis with Applications to the Study of Child and Adolescent Substance Use*. Invited Colloquium, Department of Psychology and Neurosciences and the Center for Study of Adolescent Risk and Resilience, Duke University, Durham, NC.
- *Giletta, M., Hastings, P., Rudolph, K., **Bauer, D.**, Nock, M. & Prinstein, M. (March, 2015). *Suicide ideation among high-risk adolescent females: The interplay between parasympathetic regulation and friendship support*. Paper presented at the 2015 Biennial Meeting of the Society for Research on Child Development, Philadelphia, PA.
- Curran, P.J., **Bauer, D.J.**, & Hussong, A.M. (February, 2014). *Separating Person-Specific & Time-Specific Components of Developmental Change*. Invited Workshop for the Center for Developmental Science, University of North Carolina at Chapel Hill.
- Curran, P.J., Hussong, A.M., & **Bauer, D.J.** (December, 2014). *Integrative data analysis: A novel methodological framework for data harmonization and pooling*. Invited colloquium, Department of Psychology, University of North Carolina at Wilmington.
- Bauer, D.J.** & Curran, P.J. (November, 2014). *The disjoint between measurement and modeling in longitudinal research*. Invited presentation at Advances in Multilevel Modeling for Educational Research: Addressing Practical Issues Found in Real-World Applications, University of Maryland, College Park, MD.
- Bauer, D.J.**, *Cole, V.T., Gottfredson, N.C., Curran, P.J., & Hussong, A.M. (October, 2014). *Constructing common measures for integrative data analysis: score performance*. Paper presented at the meeting of the Society for Multivariate Experimental Psychology, Nashville, TN.
- Curran, P.J., Gottfredson, N.C., *Cole, V.T., **Bauer, D.J.**, & Hussong, A.M. (October, 2014). *Constructing common measures for integrative data analysis: model performance*. Paper presented at the meeting of the Society for Multivariate Experimental Psychology, Nashville, TN.

- Hussong, A.M., Gottfredson, N., Haroon, M., **Bauer, D.B.**, & Curran, P.J. (October, 2014). *Integrative Data Analysis for the NIDA STTR Projects*. Invited Presentation at the National Institute on Drug Abuse STTR-HIV 2014 Status Update Meeting, Rockville, MD.
- Curran, P.J., Hussong, A.M., & **Bauer, D.J.** (August, 2014). *Integrative data analysis: A novel methodological framework for data harmonization and pooling*. Invited paper presented at the 2014 meeting of the American Psychological Association, Washington, DC.
- *Howard, A.L., *Bainter, S., Hussong, A.M., Curran, P.J., **Bauer, D.J.**, Chassin, L. & Sher, K. (March, 2014). *Testing a developmental cascade hypothesis in integrative data analysis*. Paper presented at the 15th Biennial Meeting of the Society for Research on Adolescence, Austin, TX.
- Hussong, A.M., Curran, P.J. & **Bauer, D.J.** (March, 2014). *An overview of integrative data analysis*. Paper presented at the 15th Biennial Meeting of the Society for Research on Adolescence, Austin, TX.
- *Cole, V. & **Bauer, D.J.** (July, 2014). *Adapting latent profile analysis to semiparametrically capture individual differences in change over time*. Psychometric Society Meeting, Madison, WI.
- *Cole, V.T. & **Bauer, D.J.** (May, 2014). *Recovery of Individual Trajectories in Heterogeneous Samples Using Longitudinal Latent Profile Analysis (LLPA)*. Modern Modeling Methods Conference (M³), Neag School of Education, University of Connecticut, Storrs, CT.
- Jackson, K. & **Bauer, D.J.** (May, 2014). *Characterizing the developmental course and turning points for alcohol consumption, heavy drinking, and marijuana use*. Modern Modeling Methods Conference (M³), Neag School of Education, University of Connecticut, Storrs, CT.
- Bauer, D.J.**, Curran, P.J., & Hussong, A.M. (October, 2013). *Evaluating approaches for synthesizing a common measure from different instruments to facilitate multi-study integrative data analyses of substance use and disorder*. Meeting of the Society for Multivariate Experimental Psychology, St. Petersburg, FL.
- Curran, P.J., *Bainter, S., Hussong, A.M., **Bauer, D.J.**, & *Howard, A. (October, 2013). *A nonlinear bifactor model of polysubstance use*. Meeting of the Society for Multivariate Experimental Psychology, St. Petersburg, FL.
- Bauer, D.J.** (August, 2013). *Longitudinal Data Analysis*. Workshop presented at the Young Researcher's Meeting sponsored by The Jacob's Foundation, Marbach Castle, Öhningen, Germany.
- Bauer, D.J.** (August, 2013). *Missing Data Analysis*. Workshop presented at the Young Researcher's Meeting sponsored by The Jacob's Foundation, Marbach Castle, Öhningen, Germany.
- Bauer, D.J.** (August, 2013). *Principles of Measurement*. Workshop presented at the Young Researcher's Meeting sponsored by The Jacob's Foundation, Marbach Castle, Öhningen, Germany.
- Curran, P.J., Hussong, A.M., & **Bauer, D.J.** (May, 2013). *Integrative Data Analysis: Past, Present, and Future*. Invited presentation sponsored by the National Cancer Institute, Behavioral Research Program, Science of Research and Technology Branch, Bethesda, MD.
- Bauer, D.J.**, *Cole, V. & MacCallum, R.C. (2012, October). *Modeling individual change over time with minimal assumptions*. Meeting of the Society for Multivariate Experimental Psychology. Vancouver, Canada.
- Hussong, A. M., *McGinley, J., Curran, P. J., **Bauer, D. J.**, Chassin, L., & Zucker, R. A. (2012, October). *Disentangling levels and rates of externalizing symptoms as predictors of alcohol use patterns in emerging adulthood*. A paper presented at the SRCD Themed Meeting, Transition to Adulthood in Tampa, FL.
- MacCallum, R.C. & **Bauer, D.J.** (2012, October). *Uncertainty and functional form in modeling change*. Meeting of the Society for Multivariate Experimental Psychology, Vancouver, Canada.

- *Dean, D., **Bauer, D.J.** & Shanahan, M.J. (2012, October). *Viewing the multidimensional nature of the life course with a multiple event process survival mixture model*. 2012 SRCD Themed Meeting: Transitions from Adolescence to Adulthood. Tampa, FL.
- Bauer, D.J.**, & *Bainter, S.A. (2012, May). *Harmonizing Classification Variables in Integrative Data Analysis*. Invited workshop at the annual meeting of the Association for Psychological Science, Chicago, IL.
- Curran, P.J., **Bauer, D.J.**, & Hussong, A.M. (2012, May). *Longitudinal measurement modeling in integrative data analysis*. Paper presented at the annual meeting of the Association for Psychological Science, Chicago, IL.
- Curran, P.J., Hussong, A.M., & **Bauer, D.J.** (2012, May). *Integrative data analysis: The simultaneous analysis of multiple independent data sets*. Paper presented at the annual meeting of the Association for Psychological Science, Chicago, IL.
- Curran, P.J., Hussong, A.M., & **Bauer, D.J.** (2012, April). *The application of integrative data analysis to the study of adolescent substance use*. Invited presentation for Center of Alcohol and Addiction Studies, Brown University.
- *Howard, A.L., **Bauer, D.J.**, *Baldasaro, R., Curran, P.J., & Hussong, A.M. (2012, March). *Combining mother and father reports of children's negative affect using integrative data analysis*. Paper presented at the 14th Biennial Meeting of the Society for Research on Adolescence, Vancouver, B.C.
- Bauer, D.J.** (2012, February). *Groups change too: analyzing repeated measures on individuals embedded within dynamic groups*. Invited presentation for the Department of Psychology, Northwestern University.
- Bauer, D.J.**, Curran, P.J., & Hussong, A.H. (2012, February). *Integrative Data Analysis*. Society for Research in Child Development, Developmental Methodology Conference, Tampa.
- Curran, P.J., **Bauer, D.J.**, & Hussong, A.M. (2012, February). *Integrative data analysis: The simultaneous analysis of multiple data sets*. Invited presentation for the National Cancer Institute, Division of Cancer Control and Population Sciences.
- Bauer, D.J.** (2012, January). *Approaches for statistically evaluating individual differences in psychological processes*. Invited presentation at the Center for Cognitive Neuroscience, Duke University, Durham, North Carolina.
- Bauer, D.J.** (2012, January). *How mixture models can and cannot further developmental science*. Invited presentation at the Center for Developmental Science, University of North Carolina at Chapel Hill.
- Bauer, D.J.**, Curran, P.J., & Hussong, A.H. (2011, June). *Integrative Data Analysis*. Florida Mental Health Institute, University of South Florida, Tampa.
- Bauer, D.J.** (2011, December). *Uses of structural equation mixture models in psychological research*. Invited presentation to the Department of Psychology, Ohio State University.
- *McGinley, J.S., *Mathiowitz, R., **Bauer, D.J.**, Curran, P.J., & Hussong A.M. (2011, June). *Using longitudinal integrative data analysis to score internalizing symptomatology from three independent data sets*. Presented at the Society for Prevention Research's 19th Annual Meeting, Washington DC.
- Hussong, A.M., Curran, P.J., & **Bauer, D.J.** (2011, April). *Using integrative data analysis to study child development*. An invited paper presented at biennial meeting of the Society for Research on Child Development in Methodological Issues in Developmental Science (Antonio Morgan-Lopez, Chair). Montreal, Canada.
- Hussong, A.M., Curran, P.J., **Bauer, D.J.** (2011, February). *Studying the development of drug abuse through integrative data analysis*. An invited presentation to the National Institute on Drug Abuse, Bethesda, MD.

- 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.
- 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.
- *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.
- Hussong, A.M., Curran, P.J., **Bauer, D.**, Price, L.N. (2010, June). *Implications of Research on Parental Alcoholism for Earlier Prevention Efforts*. In L. Price (Chair), Parent Psychopathology and Risk for Child Mental Health and Substance Use Disorders: Opportunities for Prevention and Intervention. A paper presented at the annual meeting for the Society for Prevention Research in Denver, CO.
- *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, D.J.** (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.** & Rodriguiz, 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 Developmental Science, Chapel Hill, NC.

Published Research Abstracts

- *Baldasaro, R.E. & **Bauer, D.J.** (2011). Comparing semiparametric and parametric methods for modeling interactions among latent variables. *Multivariate Behavioral Research*, 46, 1007-1008.
DOI: 10.1080/00273171.2011.636691
- Hussong, A.M., **Bauer, D.**, Serrano, D., Curran, P.J., Chassin, L., Sher, K.J., & Zucker, R.A. (2008). Externalizing, not internalizing, symptoms identifies periods and persons at risk for alcohol use in high-risk family contexts: A cross-study analysis. *Alcoholism: Clinical and*

Experimental Research, 32, 237. DOI: 10.1037/a0024519. PMCID: PMC3178003

*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. DOI: 10.1080/00273170802640509

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. DOI:10.1080/00273170802640509

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.

TEACHING AND DISSEMINATION ACTIVITIES

“Office Hours” Videos

Patrick Curran and I have produced a series of 10-20 minute free online videos addressing commonly asked questions concerning quantitative methods in the behavioral, health, and social sciences.

Available at: <https://www.youtube.com/channel/UC7kcXN1Xoj4PzMIKPHJ5m7Q>

Videos produced by me include:

- *What’s the difference between mixture modeling and cluster analysis* (Feb 23, 2017; 681 views)
- *Why use a structural equation model?* (March 21, 2017; 576 views)
- *How many clusters do I need to fit a multilevel model?* (March 28, 2017; 239 views)
- *Introduction to latent class/profile analysis* (April 14, 2017; 1010 views)
- *Regression Episode 1: Introduction to Linear Regression* (August 1, 2017, 61 views)
- *Regression Episode 2: Ordinary Least Squares Explained* (August 1, 2017, 26 views)
- *Regression Episode 3: Testing the Model* (August 1, 2017, 21 views)
- *Regression Episode 4: Inferences About Specific Parameters* (August 1, 2017, 29 views)
- *Regression Episode 5: Multiple Regression* (August 25, 2017, 19 views)

Courses Taught at the University of North Carolina at Chapel Hill

Fall 2017	Psyc 846: Multilevel Modeling, 33 students
Spring 2017	Psyc 781: Carolina Consortium on Human Development (<i>Modeling heterogeneous patterns and pathways in development: what have we learned?</i>), 16 students (+ 5 postdoctoral fellows)
	Psyc 395: Independent Research in Psychology, 2 students
Spring 2016	Psyc 831: Statistical Methods in Psychology II, 29 students
Fall 2015	Psyc 846: Multilevel Modeling, 34 students (+ 2 postdoctoral fellows)
Spring 2015	Psyc 831: Statistical Methods in Psychology II, 30 students
Spring 2014	Psyc 831: Statistical Methods in Psychology II, 35 students
Fall 2013	Psyc 846: Multilevel Modeling, 35 students

Fall 2011	Psyc 533: The General Linear Model in Psychology, 32 students
Spring 2011	Psyc 846: Multilevel Modeling, 29 students
Fall 2009	Psyc 846: Multilevel Modeling, 35 students
Spring 2009	Psyc 215: Statistical Principles in Psychological Research, 32 students
Fall 2008	Psyc 215: Statistical Principles in Psychological Research, 30 students Psyc 859: Seminar in Quantitative Psychology (<i>Cluster Analysis and Mixture Modeling</i>), 10 students
Fall 2007	Psyc 215: Statistical Principles in Psychological Research, 25 students Psyc 846: Multilevel Modeling, 30 students
Fall 2006	Psych 215: Statistical Principles in Psychological Research, 26 students
Spring 2006	Psyc 330: Seminar in Quantitative Psychology (<i>Multilevel Modeling</i>), 18 students
Fall 2005	Psyc 281: Statistical Methods in Psychology I, 21 students
Spring 2005	Psych 30c: Statistical Principles in Psychological Research, 32 students
Fall 2004	Psyc 281: Statistical Methods in Psychology I, 12 students

Courses Taught at North Carolina State University

Spring 2004	Psy 710: Special Topics in Psychology: Quantitative Methods in Psychology, 15 students
Fall 2003	Psy 710: Special Topics in Psychology: Multivariate Methods in Psychology, 20 students
Spring 2003	Psy 710: Special Topics in Psychology: Quantitative Methods in Psychology, 11 students
Fall 2002	Psy 710: Special Topics in Psychology: Multivariate Methods in Psychology, 8 students

PROFESSIONAL SERVICE

Service to Discipline

2010-present	Editorial Board Member, <i>Journal of Educational and Behavioral Statistics</i>
2010-present	Dissertation Grant Committee Chair, Society for Multivariate Experimental Psychology
2006-present	Consulting Editor, <i>Multivariate Behavioral Research</i>
2005-present	Editorial Board Member, <i>Psychological Methods</i>
2004-present	Editorial Board Member, <i>Psychological Assessment</i>
2007-2010	Dissertation Award Committee Member, Society for Multivariate Experimental Psychology
2011-2012	Panel chair and reviewer for SRCD Conference on Developmental Methodology
2010-2013	Associate Editor, <i>Psychological Methods</i>
2008-2009	Ad hoc grant proposal reviewer for the Institute of Educational Sciences

Ad-hoc Reviewer: *Addiction*; *British Journal of Mathematical and Statistical Psychology*; *Clinical Psychological Science*; *Development and Psychopathology*; *Developmental Psychology*; *JAMA Psychiatry*; *Journal of Abnormal Psychology*; *Journal of Consulting and Clinical Psychology*; *Journal of Marriage and Family*; *Journal of Personality*; *Journal of Research on Adolescence*; *Journal of the American Statistical Association*; *Merrill-Palmer Quarterly*; *Neuropsychopharmacology*;

Psychopathology and Behavioral Assessment; Prevention Science; Sage Publications; Sociological Methodology; Sociological Methods & Research; Statistics in Medicine; Structural Equation Modeling.

Service to Department

2017-present Director, Quantitative Psychology graduate program
2009-present Member, faculty and lecturer reappointment and promotion committees
2008-present Member, Personnel Committee
2016-2017 Member, Neuroscience Major Exploration Committee
2009-2017 Co-Chair, Colloquium Committee / Distinguished Alumnus Committee
2015-2016 Chair, Developmental Faculty Search Committee
2015-2016 Member, Architectural Review Committee
2010-2016 Member, Undergraduate Studies Committee
2015 Member, Merit Review Committee
2013-2014 Member, BA/BS Curriculum Review Committee
2007-2009 Faculty Coordinator, Quantitative Forum (weekly seminar series)
2005-2007 Faculty Adviser, Zetas (quantitative psychology graduate student group)
2007 Member, Local Organizing Committee, Society for Multivariate Experimental Psychology Conference in Chapel Hill
2005 Member, Smith Grant Selection Committee
2004-2005 Member, Advisory Committee

Service to University

2017 (spring) Acting Director, Center for Developmental Science, University of North Carolina.
2000-2002 Chair of the Board, Victory Village Day Care, managing organization of the University Child Care Center, Chapel Hill, NC
1999-2002 Board Member, Victory Village Day Care, managing organization of the University Child Care Center, Chapel Hill, NC