Veronica T. Cole

Department of Psychology Wake Forest University 428 Greene Hall P.O. Box 7778 Reynolda Station Winston-Salem, NC 27109 colev@wfu.edu

Academic Positions

WAKE FOREST UNIVERSITY – Winston-Salem, NC Assistant Professor, Department of Psychology

2019-Present

CENTER FOR DEVELOPMENTAL SCIENCE - Chapel Hill, NC

Postdoctoral Research Associate

Mentor: Andrea M. Hussong

2017-2019

Education

UNIVERSITY OF NORTH CAROLINA - Chapel Hill, NC

2014-2017

Ph.D., Quantitative Psychology; Minor: Biostatistics

Dissertation title: Mixture Modeling of Patterns of Substance Use: Taking into Account Measurement Bias

Advisor: Dr. Daniel J. Bauer

UNIVERSITY OF NORTH CAROLINA - Chapel Hill, NC

2011-2014

M.A., Quantitative Psychology

Thesis title: Modeling Complex Longitudinal Data from Heterogeneous Samples Using Longitudinal

Latent Profile Analysis Advisor: Dr. Daniel J. Bauer

WELLESLEY COLLEGE - Wellesley, MA

2005-2009

B.A., Psychology

Summa cum laude; Departmental honors in Psychology.

Grant Funding

Institutional NRSA Post-Doctoral Fellowship

2018-2019

Human Development: Interdisciplinary Research Training (T32 HD007376).

Mentor: Andrea M. Hussong

Individual NRSA Pre-Doctoral Fellowship

2015-2017

Mixture Modeling of Patterns of Substance Use: Taking into Account Measurement Bias (F31 DA04033401).

Sponsor: Daniel J. Bauer.

Publications

Manuscripts published or in press:

Cole. V. T., Bauer, D. J. (in press). Assessing the Robustness of Mixture Models to Measurement Non-Invariance. *Multivariate Behavioral Research*.

- Hussong, A. M., Ennett, S. T., McNeish, D. M., **Cole, V. T.,** Gottfredson, N. C., Rothenberg, W. A., & Faris, R. J. (in press). Social Network Interactions as Mediators of Depression-Substance Use Associations across Adolescence. *Development and Psychopathology*.
- **Cole, V. T.**, Hussong, A. M., Faris, R. W., Rothenberg, W. A., Gottfredson, N. C., & Ennett, S. T. (2018). A Latent Variable Approach to Modeling Social Dynamics in Adolescence. *Journal of Research on Adolescence*.
- Hussong, A. M., Ennett, S. T., McNeish, D. M., Rothenberg, W. A., Cole, V. T., Gottfredson, N. C., & Faris, R. J. (2018.) Teen Social Networks and Depressive Symptoms-Substance Use Associations: Developmental and Demographic Variation. *Journal of Studies on Alcohol and Drugs*, 79(5), 770-780.
- Ennett, S. T., Faris, R. W., Hussong, A. M., Gottfredson, N., & Cole, V. (2018). Depressive symptomology as a moderator of friend selection and influence on substance use involvement: estimates from grades 6 to 12 in six longitudinal school-based social networks. *Journal of Youth and Adolescence*, *47*(11), 2337-2352.
- Gottfredson, N. C., Cole, V. T., Giordano, M. L., Bauer, D. J., Hussong, A. M., & Ennett, S. T. (2018). Simplifying the implementation of modern scale scoring methods with an automated R package: Automated moderated nonlinear factor analysis (aMNLFA). *Addictive behaviors*.
- Isbell, E., Calkins, S. D., Cole, V. T., Swingler, M. M., & Leerkes, E. M. (2018). Longitudinal associations between conflict monitoring and emergent academic skills: An event related potentials study. *Developmental psychobiology*.
- Curran, P. J., **Cole, V. T.**, Bauer, D. J., Rothenberg, W. A., & Hussong, A. M. (2018). Recovering Predictor-Criterion Relations Using Covariate-Informed Factor Score Estimates. *Structural Equation Modeling: A Multidisciplinary Journal*, *25*(6), 860-875.
- Curran, P. J., **Cole, V. T.**, Giordano, M. L., Georgeson, A. R., Hussong, A. M., & Bauer, D. J. (2018). Advancing the Study of Adolescent Substance Use Through the Use of Integrative Data Analysis. *Evaluation and the Health Professions, 41*(2), 216-245.
- Cole, V. T., 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(2), 159-179.
- Curran, P. J., **Cole, V. T.**, 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(6), 827-844.
- **Cole, V. T.,** Bauer, D. J. (2016). A note on the use of mixture models for individual prediction. *Structural Equation Modeling: A Multidisciplinary Journal*, 23 (4), 615-631.
- Bauldry, S., Shanahan, M. J., Macmillan, R., Miech, R. A., Boardman, J. D., Dean, D. O., & **Cole, V. T.** (2016). Parental and adolescent health behaviors and pathways to adulthood. *Social Science Research*, *58*, 227-242.
- Ennett, S. T., Jackson, C., **Cole, V. T.**, Haws, S., Foshee, V. A., Reyes, H. L. M., Burns, A. R., Cox, M. J., & Cai, L. (2016). A Multidimensional Model of Mothers' Perceptions of Parent Alcohol Socialization and Adolescent Alcohol Misuse. *Psychology of Addictive Behaviors, 30*(1), 18-28.
- Dean, D. O., **Cole, V. T.**, Bauer, D. J. (2015). Delineating prototypical patterns of substance use initiations over time. *Addiction*, *110*(4), 585-594.

- **Cole, V. T.**, Apud, J. A., Weinberger, D. R., & Dickinson, D. (2012). Using latent class growth analysis to form trajectories of premorbid adjustment in schizophrenia. *Journal of Abnormal Psychology*, 121(2), 388.
- **Cole, V. T.**, Weinberger, D. R, and Dickinson, D. (2011). Intra-Individual Variability Across Neuropsychological Tasks in Schizophrenia: Its Relationship to Disease Status and Functioning. *Schizophrenia Research*, *129* (1), 91-93.

Manuscripts in preparation or under review:

- **Cole, V. T.**, Hussong, A. M., McNeish, D. M., Ennett, S. T., Rothenberg, W. A., Gottfredson, N. C., Faris, R. W. The Self-Medication Pathway to Smoking for Adolescents: Interactions between Depressive Symptoms, Coping Motives for Smoking, and Social Standing. To be submitted to *Journal of Youth and Adolescence*.
- Bauer, D. J., Belzak, W., **Cole, V. T.** Simplifying the Assessment of Measurement Invariance over Multiple Background Variables: Using Moderated Nonlinear Factor Analysis to Detect Differential Item Functioning. Under review at *Structural Equation Modeling: A Multidisciplinary Journal*.
- **Cole, V. T.**, Hussong, A. M. An Exploratory Analysis of Psychosocial Functioning and College Students' Misuse of Prescription Stimulants. Under review at *Addictive Behaviors*.

Published Abstracts

Cole. V. T. (in press at *Multivariate Behavioral Research*). Adapting Latent Profile Analysis to Take into Account Measurement Non-Invariance. ABSTRACT.

Presentations and Conferences (first author only)

- Cole, V. T., Bauer, D. J., Curran, P. J., & Hussong, A. M. Latent Variable-Based Methods for Harmonizing Data across Studies: Findings in Integrative Data Analysis. Presented at the Society for Prevention Research meeting. Washington, DC. June 2018.
- **Cole. V. T.**, Masyn, K. E., & Bauer, D. J. Regression-Based Approaches to DIF Detection in Latent Class Models. Presented at the Modern Modeling Methods (M3) meeting. Storrs, CT. May 2017.
- Cole. V. T., Masyn, K. E., & Bauer, D. J. Unmodeled Differential Item Functioning (DIF) in Latent Class Analysis: A Monte Carlo Simulation. Presented at the Modern Modeling Methods (M3) meeting. Storrs, CT. May 2017.
- **Cole. V. T.** Adapting Latent Profile Analysis to Take into Account Measurement Non-Invariance. Presented at the meeting of the Society for Multivariate Experimental Psychology, poster session, Richmond, VA. October 2016.
- **Cole. V. T.** Adapting Latent Profile Analysis to Take into Account Measurement Non-Invariance. Presented at the meeting of the Society for Multivariate Experimental Psychology, poster session, Richmond, VA. October 2016.
- **Cole, V. T.**, Bauer, D. J. Adapting latent profile analysis to semiparametrically capture individual differences in change over time. Presented at the International Meeting of the Psychometric Society, poster session, Madison, WI. July 2014.
- Cole, V. T. and Bauer, D. J. Recovery of Individual Trajectories in Heterogeneous Samples Using Longitudinal Latent Profile Analysis (LLPA). Presented at the Modern Modeling Methods (M3) meeting. Storrs, CT. May 2013.

- **Cole, V. T.**, Apud, J. A., Weinberger, D. R, and Dickinson, D. Using Latent Class Growth Analysis to Form Trajectories of Premorbid Adjustment in Schizophrenia. Presented at the International Congress on Schizophrenia Research, poster session, Colorado Spring, CO. April 2011.
- **Cole, V. T.**, Weinberger, D. R, and Dickinson, D. Intra-Individual Variability Across Neuropsychological Tasks in Schizophrenia: Its Relationship to Disease Status and Functioning. Presented at the Society of Biological Psychiatry Annual Meeting, poster session, New Orleans, LA. May 2010.

Instructional Experience

UNC CHAPEL HILL PSYCHOLOGY DEPARTMENT – Chapel Hill, NC Teaching Assistant, Statistical Methods for Psychology I and II

2013-2014

Average instructor ratings on student evaluations (1 = worst; 5 = best):

4.85/5 (Spring 2013); 4.91/5 (Fall 2014); 4.71/5 (Spring 2014, second half of semester).

SOCIETY FOR RESEARCH ON ADOLESCENCE – Baltimore, MD Integrative Data Analysis Workshop Co-Leader

March 2016

micgrative bata Analysis Workshop oo Leader

GILLINGS SCHOOL OF GLOBAL PUBLIC HEALTH - Chapel Hill, NC

October 2013

Mixture Modeling Workshop Developer and Leader

Consulting Experience

CURRAN-BAUER ANALYTICS - Chapel Hill, NC

2016-2017

Statistical Consultant

THE ODUM INSTITUTE – Chapel Hill, NC Statistical Consultant

2012-2013

Computing Skills

STATISTICAL COMPUTING SKILLS

Proficient in R, SAS, Mplus; some familiarity with Stata and SPSS.

PROGRAMMING SKILLS

Python for data management, Rcpp for estimation.

Honors and Awards

Lyle V. Jones Award for outstanding scholarship and citizenship as a graduate student in the L.L. Thurstone Psychometric Laboratory. University of North Carolina at Chapel Hill, fall 2016.

Departmental Honors in Psychology. Wellesley College, spring 2009.

Phi Beta Kappa. Wellesley College, fall 2008;

Psi Chi Psychology Honors Society. Wellesley College, fall 2008.

Service

Ad-hoc reviewer: Prevention Science, Structural Equation Modeling: A Multidisciplinary Journal, Social Science Research.

Representative to APA of Graduate Students (APAGS), APA Division 5, academic year 2014-2015.