nisha gottfredson

Summary of Professional Experience

Nisha Gottfredson is a Research Public Health Analyst with RTI’s Substance Use, Prevention, Evaluation & Research Program with more than 10 years of experience in leading National Institutes of Health (NIH)-funded research to develop and apply sophisticated modeling approaches to studying substance use disorders and related health outcomes. Dr. Gottfredson integrates her expertise in quantitative methods and developmental science to study etiology of health behaviors and outcomes. She is interested in applying knowledge about developmental etiology to prevent the onset or recurrence of substance use disorders and related mental and behavioral health problems, particularly for adolescents. She has recently received funding from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) to develop and pilot test a universal intervention for parents of 11-year-olds to prevent early-onset alcohol use. This intervention will be delivered by pediatric providers during well-child visits and will include a wrap-around mobile health component for parents. Dr. Gottfredson collaborates with Dr. Ty Ridenour on similar provider-based preventive interventions for identifying level of youth risk and delivering targeted family-based interventions. Dr. Gottfredson is also currently Multiple Principal Investigator (MPI) of a National Institute on Drug Abuse (NIDA)-funded longitudinal study that is following a large sample of rural North Carolinians from age 11 through 35. The purpose of this study is to measure structural racism within communities, neighborhoods, schools, and peer networks; to model the long-term effects of exposure to each type of structural racism on mental and behavioral health outcomes; and to identify potential leverage points that could buffer these negative effects. Dr. Gottfredson also collaborates on numerous projects to provide statistical support. She has expertise in generalized latent variable models, including item factor analysis and structural equation modeling, multilevel models, and mixture models. She is particularly interested in techniques for analyzing longitudinal data and psychometric analysis.

Education

Postdoctoral Training, Transdisciplinary Prevention Research Center and Center for Development Epidemiology, Duke University, Durham, NC, 2013.

PhD, Psychology (Quantitative), University of North Carolina at Chapel Hill (UNC), Chapel Hill, NC, 2011.

MA, Psychology (Quantitative), University of North Carolina at Chapel Hill (UNC), Chapel Hill, NC, 2008.

BA, Psychology, Mathematics, Pitzer College, Claremont, CA, 2006. Graduated cum laude.

Certifications and Licenses

Behavior Change Technique (BCT) Taxonomy, BCT Coding Competence, University College of London Health Psychology Research Group, 2021

Selected Project Experience

***Measuring the Impact of Structural Racism and Discrimination During Adolescence on Substance Use, Psychological Distress, and Criminal Justice Outcomes in Adulthood*** (2022 to date)—*Principal Investigator.* Project for NIDA. Structural racism and discrimination (SRD) places rural Black Americans at the highest risk for virtually every adverse health outcome. The study will measure the short- and long-term consequences of adolescent SRD exposure and gather evidence on structural leverage points that will enable future interventions to have the greatest impact. Responsible for overseeing scientific and administrative aspects of the project, analyzing data, and writing manuscripts.

***Developing a Brief Intervention for Parental Alcohol Socialization to be Delivered by Pediatric Providers: A Feasibility Study*** (2021 to date)—*Principal Investigator*. Project for NIAAA. This project will develop an intervention based on evidence that alcohol socialization occurs early, within the family context. The intervention approach capitalizes on high levels of parental trust in pediatric health care professionals to develop a low-cost, high-reach, and sustainable intervention to prevent early onset alcohol use. Responsible for overseeing scientific and administrative aspects of the study, including message development, study design, and dissemination.

***Building a Reinforcement Learning Tool for Individually Tailoring Just-in-Time Adaptive Interventions: Extending the Reach of mHealth Technology for Improved Weight Loss Outcomes***(2021 to date)—*Principal Investigator*. Project for the National Cancer Institute (NCI). The objective of this project is to develop a tool that will make it easier for behavioral interventionists to implement reinforcement learning, a type of machine learning, into adaptive mobile (mHealth) interventions, specifically those intended to promote weight control. Widespread use of this tool will result in more efficient and effective adaptive mHealth interventions, ultimately leading to a lower burden of obesity-linked disease, including cancer. Responsible for overseeing and integrating development of the statistical tool with an existing mHealth intervention and pilot-testing the new tool.

***Program Project: Improving Provider Announcement Communication Training (IMPACT)*** (2021 to 2022)—*Data Co-Lead*. Project for NCI. The Program Project’s goal is to improve HPV vaccine communication and coverage in health care systems, a critically important opportunity for cancer prevention. It will create a package of intervention modules to accelerate improvements in HPV vaccine communication and uptake in health care systems. Responsible for overseeing data core.

***A Micro-Randomized Trial of JITAI Messaging to Improve Adherence to Multiple Weight Loss Behaviors in Young Adults*** (2021 to date)—*Co-Investigator*. Project for NCI. Digital, mobile-delivered obesity interventions have the potential to impact a wider population than traditional in-person programs but to date have not resulted in similar weight losses. Newer digital approaches called just-in-time-adaptive interventions (JITAIs) offer adaptive, personalized feedback “when needed” and in “real time,” but there has been no examination of what types of support are needed for weight loss, for whom, and in what behavioral contexts. This study uses a micro-randomized trial to systematically test the effects of behavior change techniques on achievement of daily behavioral goals to optimize message delivery in a comprehensive weight loss JITAI. Responsible for assisting with study design and data analysis.

***Impact of E-Cigarette Prevention Messages on Adolescents*** (2020 to date)—*Co-Investigator*. Project for NIDA. The current epidemic of e-cigarette use among adolescents is of great concern, as e-cigarette use can lead to nicotine addiction and associated negative consequences. The current project will develop and test prevention messages that aim to effectively discourage adolescents from using e-cigarettes. This research will contribute to decreased e-cigarette use and a reduction in associated negative consequences among adolescents. Responsible for consulting on study design, data analysis, and manuscript preparation.

***Activating Treatment as Prevention through Community Mobilization in South Africa*** (2020 to 2021)—*Co-Investigator*. Project for the National Institute of Mental Health (NIMH). Significant improvement in uptake of HIV testing and linkage to and retention in HIV care are critical to turning the tide on the HIV epidemic—community mobilization has tremendous potential to address the major social barriers to successful participation in the HIV care cascade. This project implemented and evaluated a community-level, theory-based mobilization intervention to decrease undiagnosed infections and improve linkage and retention in care in a high prevalence setting in South Africa. Was responsible for analyzing data, advising junior researchers, and writing manuscripts.

***Advancing Perceived Message Effectiveness: A New Measure for Youth Prevention Media Campaigns*** (2019 to 2022)—*Co-Investigator*. Project for NCI. This study developed and tested a new youth-targeted measure to gauge the potential effectiveness of tobacco education advertisements. This measure will help campaign designers select more effective ads, thereby increasing the public health impact of tobacco education campaigns targeted to youth. Was responsible for consulting on study design, advising junior researchers, analyzing data, and writing manuscripts.

***Mood, Mother, and Child: The Psychobiology of Dyadic Resilience*** (2018 to 2023)—*Co-Investigator*. Project for the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD). This study identifies psychobiological underpinnings of resilience among mother-child dyads exposed to maternal depression, a common and morbid condition that impacts the health of more than 400,000 mother-infant dyads every year. Responsible for advising junior researchers, analyzing data, and writing manuscripts.

***The Impact of Affect Regulatory Mechanisms and Binge Eating on Drug Recovery*** (2014 to 2020)—*Principal Investigator*. Project for NIDA. Many individuals recovering from drug addiction learn to regulate negative affect induced by drug cravings with replacement behaviors such as binge eating. Neurobiological evidence suggests that this practice may lead to “spiraling dysregulation” and to faster and more probable relapse. This study examined the potentially deleterious and mutually perpetuating association between opiate addiction and binge eating. Was responsible for overseeing scientific and administrative aspects of the study, including study design, survey development, data analysis, and writing manuscripts.

***Peer Mechanisms in the Internalizing Pathway to Substance Use*** (2014 to 2018)—*Co-Investigator*. Project for NIDA. This study examined how peers impact the development of adolescent substance use that is related to emotional distress, a model that is termed the internalizing pathway to substance use and disorder. Analyses of more than 6,500 adolescents assessed from middle through high school tested how distressed youth may be vulnerable to selecting friends and being influenced by friends who use substances and how these friendship effects may each play a role in the development of substance use as a way to cope with distress. Was responsible for data analysis and manuscript writing.

***Harmonizing Substance Use and Disorder Measures to Facilitate Multistudy Analyses: Supplement to Analyze Seek-Test-Treat-Retain Data from Multiple Criminal Justice Samples*** (2013 to 2018)—*Statistician*. Project for NIDA. This study developed and evaluated psychometric models for harmonizing substance use outcomes assessed in varying ways across independent studies, permitting the pooling of data for integrative data analysis. Integrative data analysis provides one approach to address perennial challenges in the field of substance use such as the need to obtain sufficient sample sizes to test low-base rate behaviors; compare findings across a wide array of substance use measures and diagnostic instruments, which may even rely on different raters; and evaluate the generalizability of findings across the highly heterogeneous population of substance users (e.g., subgroup comparisons). Responsibilities included data analysis and manuscript writing.

***Modeling Non-Random Missingness in Experience Sampling Research on Substance Use*** (2009 to 2011)—*Principal Investigator*. F31 individual National Research Service Award (NRSA) postdoctoral fellowship from NIDA. This project measured the effects that day-to-day emotional fluctuations have on substance use behaviors and the role of potential risk and protective factors in this process. In doing so, a novel model for handing non-randomly missing data was developed. Was responsible for all aspects of the study including design, analysis, and dissemination.

Professional Experience

2022 to date. RTI International, Research Triangle Park, NC.

***Research Public Health Analyst***. Obtains grant funding for, leads, and collaborates on research studies relating to etiology and prevention of substance use and related mental and behavioral health outcomes. Consults on experimental design and statistical analysis.

2006 to date. University of North Carolina at Chapel Hill (UNC), Chapel Hill, NC.

***Adjunct Associate Professor, Dept. of Health Behavior, Gillings School of Public Health*** (2022 to date). Mentors doctoral students and serve on dissertation committees.

***Associate Professor (with tenure), Dept. of Health Behavior, Gillings School of Public Health*** (2021 to 2022). Maintained an NIH-funded program of research, taught doctoral-level courses, and served on a variety of departmental and institutional committees.

***Faculty Affiliate, Carolina Consortium on Human Development*** (2015 to 2022). Mentored pre- and post-doctoral students.

***Assistant Professor, Dept. of Health Behavior, Gillings School of Public Health*** (2015 to 2021). Maintained an NIH-funded program of research, taught doctoral-level courses, and served on a variety of departmental and institutional committees.

***Senior Investigator, Center for Developmental Science (now Carolina Consortium on Human Development)*** (2014 to 2015). Led and conducted NIH-funded research and provided statistical consultation.

***Research Assistant Professor, Dept. of Psychology and Neuroscience*** (2013 to 2015). Mentored undergraduate students and taught doctoral courses.

***Statistician/Investigator, Frank Porter Graham Child Development Institute*** (2013 to 2014). Statistician for federally funded projects.

2006 to 2007. Pacific Institute for Research and Evaluation, Chapel Hill, NC.

***Research Associate***. Conducted program evaluation for school-based substance use prevention programs.

Honors and Awards

Faculty Member, Delta Omega Honorary Public Health Society (Theta division), 2019

Junior Faculty Development Award, UNC Committee on Faculty Research and Study Leave, 2016

Lyle V. Jones Award, UNC L. L. Thurstone Psychometric Laboratory, 2010

Tanaka Award, Society for Multivariate Experimental Psychology, 2009

Keck Summer Research Fellowship, Claremont Colleges Joint Sciences Department, 2006

Sigma Xi Research Honors Society, 2005

Psi Chi Psychology Honors Society, 2005

Professional Associations

Training Committee Member, Society for Prevention Research

Quantitative and Qualitative Methods Division (Div. 5) and Society for Addiction Psychology (Div. 50), American Psychological Association

Study Section Member, National Institutes of Health

Reviewer

*Addictive Behaviors*

*Abnormal Psychology*

*American Journal of Preventive Medicine*

*Annals of Behavioral Medicine*

*Behavior Research Methods,*

*British Journal of Mathematical and Statistical Psychology*

*Child Development*

*Clinical Psychological Science*

*Criminology*

*Cultural Diversity and Ethnic Minority Psychology*

*Drug and Alcohol Dependence*

*Drug and Alcohol Review*

*European Child & Adolescent Psychiatry*

*European Eating Disorders Review*

*Health Psychology*

*International Journal of Epidemiology*

*Journal of Affective Disorders*

*Journal of Consulting and Clinical Psychology*

*Journal of Research in Personality*

*Journal of Statistical Computation and Simulation*

*Journal of Studies on Alcohol and Drugs*

*Multivariate Behavioral Research*

*Pediatrics*

*PLoS One*

*Prevention Science*

*Psychology of Addictive Behaviors*

*Psychological Assessment*

*Psychological Methods*

*Psychometrika*

*Structural Equation Modeling: An Interdisciplinary Journal*

Editorial

Guest Editor for Special Issue, *Psychology of Addictive Behaviors*

Consulting Editor, *Psychology of Addictive Behaviors*

Editorial Board Member, *Journal of Adolescent Health*

Professional Service

Doctoral Admissions Committee, Department of Health Behavior, UNC Gillings School of Global Public Health, 2021 to 2022

Consulting advisor, Campus and Community Coalition: Chapel Hill Downtown Partnership, 2020 to date

Doctoral Advisory Committee, Department of Health Behavior, UNC Gillings School of Global Public Health, 2017 to date

Action Group member, Building Community to Promote an Antiracist and Inclusive Community Environment, UNC Department of Health Behavior, 2021 to 2022

Junior faculty social support pod organizer, Department of Health Behavior, UNC Gillings School of Global Public Health, 2020

Conference abstract reviewer, Society for Behavioral Medicine/Society for Prevention Research, 2019

Capstone selection committee member, Department of Health Behavior, UNC Gillings School of Global Public Health, 2018 to 2019

Organizing committee member, Studying heterogeneity in development consortium series, Carolina Consortium for Human Development, Spring 2017

Methodology curriculum revision committee member, Department of Health Behavior, UNC Gillings School of Global Public Health, 2015 to 2017

Search committee member, PhD-level statistician, UNC Center for Developmental Science, 2015 to 2016

Quantitative methodology representative, Science Student Council, American Psychological Association, 2009 to 2011

Seminars and Courses Taught

Modeling Nested Cross-Sectional and Longitudinal Data (Module 2 instructor), UNC Dept. of Health Behavior, 2017 to 2022

Applied Generalized Linear Models (Module 1 instructor), UNC Dept. of Health Behavior, 2017 to 2022

MPH Capstone (Faculty mentor), UNC Dept. of Health Behavior, Spring 2016 to 2022

Research Intensive Undergraduate Seminar (Instructor), UNC Dept. of Psychology/Dept. of Health Behavior, 2015 to date

Advanced Research Methods (Measurement Module instructor), UNC Dept. of Health Behavior, 2016

Grant Writing (Guest lecturer/statistical consultant), UNC Dept. of Health Behavior, 2016

Multivariable Regression (Instructor), UNC Dept. of Psychology and Neuroscience, 2013

Multilevel Modeling (Instructor), Duke University Dept. of Psychology, 2012

Mentoring

Current Committees

Chair/committee member, Blythe Rhodes, Health Behavior, University of North Carolina

Committee member, Deborah Baron, Health Behavior, University of North Carolina

Committee member, Lex Hurley, Health Behavior, University of North Carolina

Committee member, Wei Yei Kong, Health Behavior, University of North Carolina

Committee member, Adams Sibley, Health Behavior, University of North Carolina

Pre- and Postdoctoral Mentoring

F31 NRSA Co-mentor, Deborah Baron, Health Behavior, 2021 to date

Mentor, Patrece Joseph, Health Behavior, Carolina Postdoctoral Program for Faculty Diversity, 2021 to 2022

F31 NRSA Co-mentor, Christine Schalkoff, Health Behavior, 2020 to 2022

F31 NRSA Co-mentor, Amanda Kong, Health Behavior, 2019 to 2020

T32 Postdoctoral Training Grant Co-mentor, Mairin Augustine, Carolina Consortium on Human Development, 2016 to 2018

F31 NRSA Co-mentor, Rebeccah Sokol, Health Behavior, 2016 to 2018

Completed Dissertations

Committee member, Christine Schalkoff*, Understanding the Opioid Epidemic in Rural Ohio: A Mixed-Methods Analysis of Moral Values, Stigma, and Medication for Opioid Use Disorder (MOUD)*, Health Behavior, 2022, University of North Carolina

Committee member, Caroline Chandler, *Supporting strong starts: Associations between service receipt and developmental outcomes among infants and toddlers involved with Child Protective Services*, Maternal and Child Health, 2022, University of North Carolina

Committee member, Julianne Power, *Promoting Engagement in Digital Weight Loss Interventions,* Health Behavior, 2022, University of North Carolina

Committee member, Emily Mangone, *Development and Assessment of Contraceptive Ideational Profiles among Urban Women of Reproductive Age in Senegal: Implications for Family Planning Communication Programming*, Health Policy and Management, 2021, University of North Carolina

Committee member, Ida Griesemer, *A Mixed Methods Study of an Organizational Change Intervention to Increase Racial Equity in Cancer Care*, Health Behavior, 2021, University of North Carolina

Committee member, Natalie Blackburn, *An Economic Evaluation of an Alcohol Reduction Intervention in the HIV Clinic Setting in Vietnam*, Health Behavior, 2020, University of North Carolina

Committee member, Amanda Kong, *Associations of Tobacco Retailer Density with Neighborhood Sociodemographics, Individual Smoking Behavior, and COPD Hospital Discharge Rates: A Spatial Health Approach*, Health Behavior, 2020, University of North Carolina

Committee member, Alison Swiatlo, *Latent Contraceptive Dynamics and Pregnancy Experiences among a National Sample of U.S. Women*, Maternal and Child Health, 2020, University of North Carolina

Committee member, Anna Austin, *Assessing Heterogeneity in Risk and Protection among Alaskan Children*, Maternal and Child Health, 2019, University of North Carolina

Committee member, Sarah Treves-Kagan, *Identifying Individual, Partner, Household, and Neighborhood Predictors of Intimate Partner Violence among Poor Ecuadorian and Colombian Refugee Women: A Multi-Level Analysis*, Health Behavior, 2019, University of North Carolina

Committee member, May Chen, *The Relationship between the Family Context and Adolescent Dating Violence among Youth Exposed to Interparental Violence: A Person-Centered Analysis*, Health Behavior, 2019, University of North Carolina

Committee member, Deshira Wallace, *Stress Makes it Difficult to Live a Healthy Life: The Relationship between Stress and Dietary Behaviors among Latinos*, Health Behavior, 2019, University of North Carolina

Committee member, Sarah Kowitt, *How, Why, and for Whom do Neighborhood Characteristics Matter? Using Multilevel Modeling to Examine Associations among Neighborhood Context and Health Outcomes*, Health Behavior, 2018, University of North Carolina

Committee member, Leslie Adams, *A Mixed Methods Examination of Depressive Symptomatology and Usual Sources of Care among Black Men*, Health Behavior, 2018, University of North Carolina

Committee member, Kamden Hayashi, *Time Preference and HIV Risk Behavior in Kenya and Malawi*, Health Behavior, 2018, University of North Carolina

Committee member, Nivedita Bhushan, *Social Influence and Contraceptive Use among Adolescent Girls and Young Women in Malawi*, Health Behavior, 2018, University of North Carolina

Committee member, Rebeccah Sokol, *Child Maltreatment and Body Mass Index: Measurement Considerations and the Role of Social Support and Stress Responses*, Health Behavior, 2018

Committee member, Sabeeh Baig, *Examining Perceived Message Effectiveness as a Marker for the Impact of Brief Health Behavior Interventions*, Health Behavior, 2018, University of North Carolina

Committee member, Allison Schmidt, *Psychological Health and Smoking in Young Adulthood: Smoking Trajectories and Responsiveness to State Cigarette Excise Taxes*, Health Behavior, 2017, University of North Carolina

Committee member, Lauren Hill, *Mental Health and Sexual Risk Behaviors among Social Networks of Young Tanzanian Men*, Health Behavior, 2017, University of North Carolina

Committee member, Sarah Claesen Wyckoff, *Sexuality Patterns, Transitions, and Program Effects: An Application of Latent Class and Latent Transition Analysis to a Parent-Based Sexual Risk Prevention Program for African American Adolescents*, Health Behavior, 2017, University of North Carolina

Committee member, Rebecca Boyd Naumann, *Assessing Sustained and Differential Impact of North Carolinas Medicaid Lock-in Program*, Epidemiology, 2017, University of North Carolina

Committee member, Tamara Taggart, *Religiosity, Racial Identity, and Sexual Initiation among Black American Adolescents*, Health Behavior, 2016, University of North Carolina

Committee member, Kathleen Day Malley, *Validations of the SCALE: A Measure of Middle School Students Transition Experiences*, Department of Education, 2014, University of North Carolina

Completed Thesis Supervision

Committee member, Pei-Tzu (Angelina) Tsai, *Diagnostic Accuracy of the Child and Adolescent Symptom Inventory (CASI- 4R) Substance Use Subscale in Detecting Substance Use Disorders in Youths*, Department of Psychology (Clinical Master’s Thesis), 2021, University of North Carolina

Committee member, Lizzie Wilson, *The Effect of Blue-Light-Blocking Amber Glasses on Sleep and Affect*, Department of Psychology (undergraduate), 2020, University of North Carolina

Committee member/Research supervisor, Lindsey Freeman, *Using Ecological Momentary Assessment (EMA) to Study the Impact of Colored Glasses on Sleep and Mood*, Department of Psychology (undergraduate), 2016, University of North Carolina

Special Courses

From Awareness to Action: Confronting Weight Stigma to Promote Public Health, UNC Department of Nutrition, 2021

Phase I, Racial Equity Institute, 2021

Groundwater Training, Racial Equity Institute, 2020

Mental Health First Aid, UNC Chapel Hill School of Social Works Behavioral Health Springboard, 2017

Being Better Faculty Research Mentors, UNC Center for Faculty Excellence, 2016

Safe Zone Training, UNC LGBTQ Center, 2015

Computer Skills

LaTeX, Mplus, R/ R Studio, SAS, SPSS

Software

Cole, V. T., Gottfredson, N. C., & Gioradano, M. (2022). aMNLFA: Automated moderated nonlinear factor analysis (R package) (version 1.1.2). [Computer software]. [https://cran.r-project.org/web/packages/aMNLFA/index.html](https://cran.r-project.org/web/packages/aMNLFA/index.html%20%20)

Country Experience

Darjeeling, India, and Kathmandu, Nepal, 2005 to 2006

Books, Book Chapters, and Monographs

**Gottfredson, N. C.**, Stucky, B. D., & Panter, A. T. (in press). Item-level factor analysis. In H. Cooper, M. N. Coutanche, L. M. McMullen, & A. T. Panter (Eds.), *APA handbook of research methods in psychology* (2nd ed., Vol. 1). APA Books.

Hoyle, R. H., & **Gottfredson, N. C.** (in press). Structural equation modeling with latent variables. In H. Cooper, M. N. Coutanche, L. M. McMullen, & A. T. Panter (Eds.), *APA handbook of research methods in psychology* (2nd ed., Vol. 2). APA Books.

Hussong, A. M., Cole, V. T., Curran, P. J., Bauer, D. J., & **Gottfredson, N. C.** (2020). Integrative data analysis and the study of global health. In X. Chen & D-G. Chen (Eds.), *Statistical methods for global health and epidemiology: Principles, methods and applications* (pp. 121–158). Springer. <http://dx.doi.org/10.1007/978-3-030-35260-8_5>

Stucky, B. D., **Gottfredson, N. C.**, & Panter, A. T. (2012). Item-level factor analysis. In H. Cooper, P. Camic, K. Sher, A. T. Panter, D. Long, & D. Rindskopf (Eds.), *APA handbook of research methods in psychology* (1st ed., Vol. 1, pp. 683–697). APA Books. <https://psycnet.apa.org/doi/10.1037/13619-036>

Peer-Reviewed Journal Articles

*\*student or mentee*

†*senior author*

Cole, V. T., Hussong, A. M., **Gottfredson, N. C.**, Bauer, D. J., & Curran, P. J. (2022). Informing harmonization decisions in integrative data analysis: Exploring the measurement multiverse. *Prevention Science,* e-pub ahead of print*.* <https://doi.org/10.1007/s11121-022-01466-1>

Cole, V. T., Hussong, A. M., McNeish, D. M., Ennett, S. T., Rothenberg, W. A.\*, **Gottfredson, N. C.**, & Faris, R. W. (2022). The role of social position within peer groups in distress-motivated smoking among adolescents. *Journal of Studies on Alcohol and Drugs*, *83*(3), 420–429. <https://doi.org/10.15288/jsad.2022.83.420>

Daugherty, J., Treves-Kagan, S., **Gottfredson, N. C.**, Miedema, S., & Haarbauer-Krupa, J. (2022). Does binge drinking mediate the relationship between four adverse childhood experiences and adult traumatic brain injury? Results from the National Longitudinal Survey of Youth 1979 Cohort. *Injury Prevention.* Online ahead of print. <https://doi.org/10.1136/ip-2022-044710>

**Gottfredson, N. C.**, Bhushan, N. L., Reyes, H. L. M.., Pettifor, A. E., & Kahn, K. (2022). Effects of early social bonds on adolescent trajectories of sexual risk behaviors among South African girls. *AIDS and Behavior, 26,* 1173–1182. <https://doi.org/10.1007/s10461-021-03472-w>

Kowitt, S. D.\*, Sheldon, J. M., Vereen, R. N.\*, Kurzman, R. T.\*, **Gottfredson, N. C.**, Hall, M. G., Brewer, N. T., & Noar, S. M. (2022). The impact of *The Real Cost* vaping and smoking ads across tobacco products. *Nicotine & Tobacco Research*. Online ahead of print*.* <https://doi.org/10.1093/ntr/ntac206>

Kurtzman, R. T.\*, Vereen, R. N.\*, Sheldon, J. M., Adams, E. T., Hall, M. G., Brewer, N. T., **Gottfredson, N. C.**, & Noar, S. M. (2022). Adolescents’ understanding of smoking and vaping risk language: Cognitive interviews to inform scale development. *Nicotine & Tobacco Research, 24*(11), 1741–1747. <https://doi.org/10.1093/ntr/ntac127>

Noar, S. M., **Gottfredson, N. C.**, Kieu, T., Rohde, J. A., Hall, M. G., Ma, H., Fendinger, N. J., & Brewer, N. T. (2022). Impact of vaping prevention advertisements on US adolescents: A randomized clinical trial. *JAMA Network Open, 5*(10).<https://doi.org/10.1001/jamanetworkopen.2022.36370>

Noar, S. M., **Gottfredson, N. C.**, Vereen, R. N.\*, Kurtzman, R.\*, Sheldon, J. M., Adams, E.\*, Hall, M. G., & Brewer, N. T. (2022). Development of the UNC Perceived Message Effectiveness Scale for youth. *Tobacco Control.* Online ahead of print. <https://doi.org/10.1136/tobaccocontrol-2021-056929>

Peddireddy, S. R.\*, Austin, A. E., & **Gottfredson, N. C.**† (2022). Factors contributing to level and type of child welfare involvement following prenatal substance exposure: A scoping review. *Child Abuse & Neglect, 125*. <https://doi.org/10.1016/j.chiabu.2022.105484>

Shapiro, G. K., **Gottfredson, N.**, Leask, J., Wiley, K., Gantner-Restrepo, F. E., Jones, S. P., Menning, L., & Brewer, N. T. (2022). COVID-19 and missed or delayed vaccination in 26 middle- and high-income countries: An observational study. *Vaccine, 40*(6), 945–952. <https://doi.org/10.1016/j.vaccine.2021.12.041>

Treves-Kagan, S.\*, Peterman, A., **Gottfredson, N. C.**, Villaveces, A., Moracco, K. E., & Maman, S. (2022). Equality in the home and in the community: A multilevel longitudinal analysis of intimate partner violence on the Ecuadorian-Colombian border. *Journal of Family Violence*, *37*, 1–14. <https://doi.org/10.1007/s10896-020-00218-5>

Adams, L. B.\*, Baxter, S. L. K., Lightfoot, A. F., **Gottfredson, N.**, Golin, C., Jackson, L. C., … Powell, W. (2021). Refining Black men’s depression measurement using participatory approaches: A concept mapping study. *BMC Public Health*, *21*(1), 1194. <https://doi.org/10.1186/s12889-021-11137-5>

Baig, S. A.\*, Noar, S. M., **Gottfredson, N. C.**, Lazard, A. J., Ribisl, K. M., & Brewer, N. T. (2021). Message perceptions and effects perceptions as proxies for behavioral impact in the context of anti-smoking messages. *Preventive Medicine Reports*, *23*. <https://doi.org/10.1016/j.pmedr.2021.101434>

Baig, S. A.\*, Noar, S. M., **Gottfredson, N. C.**, Lazard, A. J., Ribisl, K. M., & Brewer, N. T. (2021). Message perceptions and effects perceptions as proxies for impact in the context of anti-smoking messages. *Preventive Medicine Reports*, *23*. <https://doi.org/10.1016/j.pmedr.2021.101434>

Baig, S. A.\*, Noar, S. M., **Gottfredson, N. C.**, Lazard, A. J., Ribisl, K. M., & Brewer, N. T. (2021). Incremental criterion validity of message perceptions and effects perceptions in the context of anti-smoking messages. *Journal of Behavioral Medicine*, *44*(1), 74–83. <https://doi.org/10.1007/s10865-020-00163-0>

Bhushan, N. L.\*, Fisher, E. B., **Gottfredson, N. C.**, Maman, S., Speizer, I. S., Phanga, T., … Rosenberg, N.E. (2021). The mediating role of partner communication on contraceptive use among adolescent girls and young women participating in a small-group intervention in Malawi: A longitudinal analysis. *Global Public Heath*, *17*(7), 1392–1405. <https://doi.org/10.1080/17441692.2021.1924823>

Blackburn, N. A.\*, Go, V. F., Bui, Q., Hutton, H., Tampi, R. P., Sripaipan, T., … **Gottfredson, N.C.**, & Dowdy, D. (2021). The cost-effectiveness of adapting and implementing a brief intervention to target frequent alcohol use among persons with HIV in Vietnam. *AIDS and Behavior*, *25*(7), 2108–2119. <https://doi.org/10.1007/s10461-020-03139-y>

Ellis, K. R., Cuthberson, C. C., Carthron, D., Rimmler, S., **Gottfredson N. C.**, Bahorski, S. G., … Rini, C. (2021). A longitudinal observational study of multimorbidity and partner support for physical activity among people with osteoarthritis. *International Journal of Behavioral Medicine*, *28*(6), 746–758. <https://doi.org/10.1007/s12529-021-09985-x>

**Gottfredson, N. C.**, Bhushan, N. L., McNaughton-Reyes, H. L., Pettifor, A. E., & Kahn, K. (2021). Effects of early social bonds on adolescent trajectories of sexual risk behaviors among South African girls. *AIDS and Behavior*, *26*(4), 1173–1182. <https://doi.org/10.1007/s10461-021-03472-w>

**Gottfredson, N. C.**, McNaughton-Reyes, H. L., & Wu, J.\* (2021). Predictive associations between adolescent profiles of violent and nonviolent deviant behaviors with convictions in adulthood. *Journal of Interpersonal Violence*, *37*(13-14), NP12207–NP12237. <https://doi.org/10.1177/0886260521997453>

Kong, A. Y.\*, Delamater, P. L., Gottfredson, N. C., Ribisl, K. M., Baggett, C. D., & Golden, S. D. (2021). Neighborhood inequities in tobacco retailer density and the presence of tobacco-selling pharmacies and tobacco shops. *Health Education & Behavior*, *49*(3), 478–487. <https://doi.org/10.1177/10901981211008390>

Kong, A. Y.\*, Delameter, P. L., **Gottfredson, N. C.**, Ribisl, K. M., Baggett, C. D., & Golden, S. D. (2021). Sociodemographic inequities in tobacco retailer density: Do neighboring places matter? *Health & Place*, *71*. <https://doi.org/10.1016/j.healthplace.2021.102653>

Kong, A. Y.\*, **Gottfredson, N. C.**, Ribisl, K. M., Baggett, C. D., Delamater, P. L., & Golden, S. D. (2021). Associations of county tobacco retailer availability with U.S. adult smoking behaviors, 2014–2015. *American Journal of Preventive Medicine*, *61*(3), E139–E147. <https://doi.org/10.1016/j.amepre.2021.03.015>

Kong, A.Y.\*, Baggett, C. D., **Gottfredson, N. C.**, Ribisl, K.M., Delamater, P. L., & Golden, S. D. (2021). Associations of tobacco retailer availability with chronic obstructive pulmonary disease related hospital outcomes, United States, 2014. *Health & Place*, *67*. <https://doi.org/10.1016/j.healthplace.2020.102464>

Schmidt, A. M.\*, Golden, S. D., **Gottfredson, N. C.**, Ennett, S. T., Aiello, A. E., & Ribisl, K. M. (2021). Psychological health and smoking in young adulthood. *Emerging Adulthood*, *9*(4), 320–329. <https://doi.org/10.1177/2167696819858812>

Treves-Kagan, S.\*, Peterman, A., **Gottfredson, N. C.**, Villaveces, A., Moracco, K. E., & Maman, S. (2021). Love in the time of war: Identifying neighborhood-level predictors of intimate partner violence from a longitudinal study in refugee-hosting communities. *Journal of Interpersonal Violence*, *37*(11-12), NP10170–NP10195. <https://doi.org/10.1177/0886260520986267>

Wallace, D. D.\*, Barrington, C., Albrecht, S., **Gottfredson, N.**, Carter-Edwards, L., & Lytle, L. A. (2021). The role of stress responses on engagement in dietary and physical activity behaviors among Latino adults living with prediabetes. *Ethnicity & Health*, *27*(6), 1395–1406. <https://doi.org/10.1080/13557858.2021.1880549>

Austin, A. E.\*, **Gottfredson, N. C.**, Halpern, C. T., Zolotor, A. J., Marshall, S. W., Parrish, J. W., & Shanahan, M. E. (2020). Patterns of risk and protective factors among Alaska children: Association with maternal and child well-being. *Child Development*, *91*(5), 1650–1662. <https://doi.org/10.1111/cdev.13356>

Austin, A. E.\*, **Gottfredson, N. C.**, Marshall, S. W., Halpern, C. T., Zolotor, A. J., Parrish, J. W., & Shanahan, M. E. (2020). Heterogeneity in risk and protection among Alaska Native/American Indian and non-Native children. *Prevention Science*, *21*(1), 86–97. <https://doi.org/10.1007/s11121-019-01052-y>

Austin, A. E.\*, **Gottfredson, N. C.**, Zolotor, A. J., Halpern, C. T., Marshall, S. W., Parrish, J. W., & Shanahan, M. E. (2020). Preconception and prenatal predictors of early experiences of risk and protection among Alaska children. *Maternal and Child Health Journal*, *24*(1), 82–89. <https://doi.org/10.1007/s10995-019-02823-3>

Blackburn, N. A.\*, Go, V. F., Bui, Q., Hutton, H., Tampi, R. P., Sripaipan, T., … **Gottfredson, N. C.**, & Dowdy, D. W. (2020). Implementation of two alcohol reduction interventions among persons with hazardous alcohol use who are living with HIV in Thai Nguyen, Vietnam: A micro-costing analysis. *Global Health Action*, *13*(1). <https://doi.org/10.1080/16549716.2020.1814035>

Cole, V. T., Hussong, A. M., Faris, R. W., Rothenberg, W. A., **Gottfredson, N. C.**, & Ennett, S. T. (2020). A latent variable approach to measuring social dynamics in adolescence. *Journal of Research on Adolescence*, *30*(S1), 238–254. <https://doi.org/10.1111/jora.12466>

Hershow, R. B.\*, **Gottfredson, N. C.**, Ha, T. V., Chu, V. A., Lancaster, K. E., Quan, V. M., … Go, V. F. (2020). Longitudinal analysis of depressive symptoms, perceived social support, and alcohol use among HIV-infected men who inject drugs in northern Vietnam. *Substance Use & Misuse*, *55*(8), 1237–1245. <https://doi.org/10.1080/10826084.2020.1732422>

Hussong, A. M., Ennett, S. T., McNeish, D. M., Cole, V. T., **Gottfredson, N. C.**, Rothenberg, W. A., & Faris, R. W. (2020). Social network isolation mediates associations between risky symptoms and substance use in the high school transition. *Development and Psychopathology*, *32*(2), 615–630. <https://doi.org/10.1017/s095457941900049x>

Kowitt, S. D.\*, Aiello, A. E., Callahan, L. F., Fisher, E. B., **Gottfredson, N. C.**, Jordan, J. M., & Muessig, K. E. (2020). Associations among neighborhood poverty, perceived neighborhood environment, and depressed mood are mediated by physical activity, perceived individual control, and loneliness. *Health & Place*, *62*. <https://doi.org/10.1016/j.healthplace.2019.102278>

McNaughton-Reyes, L. H., Foshee, V. A., **Gottfredson, N. C.**, Ennett, S. T., & Chen, M. (2020). Codevelopment of delinquency, alcohol use, and aggression toward peers and dates: Multitrajectory patterns and predictors. *Journal of Research on Adolescence*, *30*(4), 1025–1038. <https://doi.org/10.1111/jora.12577>

Rhodes, B. E.\*, & **Gottfredson, N. C.** (2020). Effects of tobacco on affect and craving during opioid addiction and recovery: An ecological momentary assessment study. *Addictive Behaviors*, *106*. <https://doi.org/10.1016/j.addbeh.2020.106358>

Sokol, R. L.\*, **Gottfredson, N. C.**, Poti, J. M., Shanahan, M. E., Halpern, C. T., Fisher, E. B., & Ennett, S. T. (2020). Sensitive periods for the association between childhood maltreatment and BMI. *American Journal of Preventive Medicine*, *57*(4), 495–502. <https://doi.org/10.1016/j.amepre.2019.05.016>

Whitley, J., Wouk, K., Bauer, A. E., Grewen, K., **Gottfredson, N. C.**, Meltzer-Brody, S., … Stuebe, A. (2020). Oxytocin during breastfeeding and maternal mood symptoms. *Psychoneuroendocrinology*, *113*. <https://doi.org/10.1016/j.psyneuen.2019.104581>

Adams, L. B.\*, **Gottfredson, N.**, Lightfoot, A. F., Corbie-Smith, G., Golin, C., & Powell, W. (2019). Factor analysis of the CES-D 12 among a community sample of black men. *American Journal of Men’s Health*, *13*(2). <https://doi.org/10.1177/1557988319834105>

Austin, A. E.\*, **Gottfredson, N. C.**, Zolotor, A. J., Halpern, C. T., Marshall, S. W., Naumann, R. B., & Shanahan, M. E. (2019). Trajectories of child protective services contact among Alaska Native/American Indian and non-Native children. *Child Abuse & Neglect*, *95*. <https://doi.org/10.1016/j.chiabu.2019.104044>

Baig, S. A.\*, Noar, S. M., **Gottfredson, N. C.**, Boynton, M. B., Ribisl, K. M., & Brewer, N. T. (2019). UNC perceived message effectiveness: Validation of a brief scale. *Annals of Behavioral Medicine*, *53*(8), 732–742. <https://doi.org/10.1093/abm/kay080>

**Gottfredson N. C.** (2019). A straightforward approach for coping with unreliability of person means when parsing within-person and between-person effects in longitudinal studies. *Addictive Behaviors*, *94*, 156–161. <https://doi.org/10.1016/j.addbeh.2018.09.031>

**Gottfredson, N. C.**, & Sokol, R. L.\* (2019). Explaining excessive weight gain during early recovery from addiction. *Substance Use & Misuse*, *54*(5), 769–778. <https://doi.org/10.1080/10826084.2018.1536722>

**Gottfredson, N. C.**, Cole, V. T., Giordano, M. L., Bauer, D. J., Hussong, A. M., & Ennett S. T. (2019). Simplifying the implementation of modern scale scoring methods with an automated R package: Automated moderated nonlinear factor analysis (aMNLFA). *Addictive Behaviors*, *94*, 65–73. <https://doi.org/10.1016/j.addbeh.2018.10.031>

**Gottfredson, N. C.**, Rhodes, B. E., & Ennett, S. T. (2019). Demographic moderation of the prediction of adolescent alcohol involvement trajectories. *Prevention Science*, *20*, 811–823. <https://doi.org/10.1007/s11121-018-0946-x>

Hill, L. M.\*, Golin, C. E., **Gottfredson, N. C.**, Pence, B. W., DiPrete, B., Carda-Auten, J., … Flynn, P. M. (2019). Drug use mediates the relationship between depressive symptoms and adherence to ART among recently incarcerated people living with HIV. *AIDS and Behavior*, *23*, 2037–2047. <https://doi.org/10.1007/s10461-018-2355-3>

Hussong, A. M., **Gottfredson, N. C.**, Bauer, D. J., Curran, P. J., Haroon, M., Chandler, R., … Springer, S. A. (2019). Approaches for creating comparable measures of alcohol use symptoms: Harmonization with eight studies of criminal justice populations. *Drug and Alcohol Dependence*, *194*, 59–68. <https://doi.org/10.1016/j.drugalcdep.2018.10.003>

Kowitt, S. D.\*, Aiello, A. E., Callahan, L. F., Fisher, E. B., **Gottfredson, N. C.**, Jordan, J. M., & Muessig, K. E. (2019). How are neighborhood characteristics associated with mental and physical functioning among older adults with radiographic knee osteoarthritis? *Arthritis Care & Research*, *73*(3), 308–317. <https://doi.org/10.1002/acr.24125>

Naumann, R. B.\*, Marshall, S. W., **Gottfredson, N. C.**, Lund, J. L., Ringwalt, C. L., & Skinner, A. C. (2019). Trajectories of dispensed prescription opioids among beneficiaries enrolled in a Medicaid controlled substance “lock-in” program. *Pharmacoepidemiology & Drug Safety*, *28*(1), 16–24. <https://doi.org/10.1002/pds.4445>

Naumann, R. B.\*, Marshall, S. W., Lund, J. L., Skinner, A. C., Ringwalt, C., & **Gottfredson, N. C.** (2019). Health care utilization and comorbidity history of North Carolina Medicaid beneficiaries in a controlled substance “lock-in” program. *North Carolina Medical Journal*, *80*(3), 135–142. <https://doi.org/10.18043/ncm.80.3.135>

Sokol, R. L.\*, Ennett, S. T., **Gottfredson, N. C.**, Shanahan, M. E., Poti, J. M., Halpern, C. T., & Fisher, E. B. (2019). Child maltreatment and body mass index over time: The roles of social support and stress responses. *Child and Youth Services Review*, *100*, 214–220. <https://doi.org/10.1016/j.childyouth.2019.03.006>

Sokol, R. L.\*, Ennett, S. T., Shanahan, M. E., **Gottfredson, N. C.**, Poti, J. M., Halpern, C. T., & Fisher, E. B. (2019). Maltreatment experience in childhood and average excess body mass from adolescence to young adulthood. *Child Abuse & Neglect*, *96*. <https://doi.org/10.1016/j.chiabu.2019.104070>

Sokol, R. L.\*, **Gottfredson, N. C.**, Poti, J. M., Halpern, C. T., Shanahan, M. E., Fisher, E. B., & Ennett, S. T. (2019). Does a parsimonious measure of complex body mass index trajectories exist? *International Journal of Obesity*, *43*(5), 1113–1119. <https://doi.org/10.1038/s41366-018-0194-y>

Taggart, T.\*, Powell, W., **Gottfredson, N.**, Ennet, S., Eng, E., & Chatters, L. M. (2019). A person-centered approach to the study of Black adolescent religiosity, racial identity, and sexual initiation. *Journal of Research on Adolescence*, *29*(2), 402–-413. <https://doi.org/10.1111/jora.12445>

Wouk, K.\*, Bauer, A. E., & **Gottfredson, N. C.** (2019). How to implement directed acyclic graphs to reduce bias in addiction research. *Addictive Behaviors*, *94*, 109–116. <https://doi.org/10.1016/j.addbeh.2018.09.032>

Wouk, K.\*, **Gottfredson, N. C.**, Tucker, C., Pence, B. W., Meltzer-Brody, S., Zvara, B., Grewen, K., & Stuebe, A. M. (2019). Positive emotions during infant feeding and postpartum mental health. *Journal of Women’s Health*, *28*(2), 194–202. <https://doi.org/10.1089/jwh.2017.6889>

Yilmaz, Z., **Gottfredson, N. C.**, Zerwas, S. C., Bulik, C. M., & Micali, N. (2019). Developmental premorbid body mass index trajectories of adolescents with eating disorders in a longitudinal population cohort. *Journal of the American Academy of Child & Adolescent Psychiatry*, *58*(2), 191–199. <https://doi.org/10.1016/j.jaac.2018.11.008> (The first two authors contributed equally)

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. <https://doi.org/10.1007/s10964-018-0915-5>

Freeman, L. K.\*, & **Gottfredson, N. C.** (2018). Using ecological momentary assessment to assess the temporal relationship between sleep quality and cravings in individuals recovering from substance use disorders. *Addictive Behaviors*, *83*, 95–101. <https://doi.org/10.1016/j.addbeh.2017.11.001>

Hill, L. M.\*, **Gottfredson, N. C.**, Kajula, L. J., Pence, P. W., Go, V. F., Moody, J., & Maman, S. (2018). Changes in anxiety and depression symptoms predict sexual risk behaviors among young men living in Dar es Salaam, Tanzania. *AIDS and Behavior*, *22*(5), 1435–1445. <https://doi.org/10.1007/s10461-017-1991-3>

Hill, L. M.\*, Moody, J., **Gottfredson, N. C.**, Kajula, L. J., Pence, B. W., Go, V. F., & Maman, S. (2018). Peer norms moderate the association between mental health and sexual risk behaviors among young men living in Dar es Salaam, Tanzania. *Social Science & Medicine*, *196*, 77–85. <https://doi.org/10.1016/j.socscimed.2017.10.030>

Hussong, A. M., Ennett, S. T., McNeish, D., Rothenberg, W. A., Cole, V., **Gottfredson, N. C.**, & Faris, R. W. (2018). Teen social networks and depression symptoms-substance use associations: Developmental and demographic variation. *Journal of Studies on Alcohol and Drugs*, *79*(5), 770–780. <https://doi.org/10.15288/jsad.2018.79.770>

McNaughton-Reyes, H. L., Foshee, V. F., Chen, M. S., **Gottfredson, N. C.**, & Ennett, S. T. (2018). Consequences of involvement in distinct patterns of adolescent peer and dating violence. *Journal of Youth and Adolescence*, *47*(11), 2371–2383. <https://doi.org/10.1007/s10964-018-0902-x>

Naumann, R. B.\*, Marshall, S. W., Lund, J. L., **Gottfredson, N. C.**, Ringwalt, C. L., & Skinner, A. C. (2018). Evaluating short- and long-term impacts of a Medicaid “lock-in” program on opioid and benzodiazepine prescriptions dispensed to beneficiaries. *Drug and Alcohol Dependence*, *182*, 112–119. <https://doi.org/10.1016/j.drugalcdep.2017.10.001>

Rhodes, B. E.\*, **Gottfredson, N. C.**, & Hill, L.\* (2018). Desistance and treatment seeking among women with substance use disorders. *Qualitative Health Research*, *28*(8), 1330–1341. <https://doi.org/10.1177/1049732318767637>

Sokol, R. L.\*, **Gottfredson, N. C.**, Shanahan, M. E., & Halpern, C. T. (2018). Relationship between child maltreatment and adolescent body mass index trajectories. *Children and Youth Services Review*, *93*, 196–202. <https://doi.org/10.1016/j.childyouth.2018.07.024>

Taggart, T.\*, **Gottfredson, N.**, Powell, W., Ennett, S., Chatters, L. M., Carter-Edwards, L., & Eng, E. (2018). The role of religious socialization and religiosity in African American and Caribbean Black adolescents’ sexual initiation. *Journal of Religion and Health*, *57*(5), 1889–1904. <https://doi.org/10.1007/s10943-018-0605-3>

**Gottfredson, N. C.**, Hussong, A. M., Ennett, S.T., & Rothenberg, W. A. (2017). The role of parental engagement in the intergenerational transmission of smoking behavior and identity. *Journal of Adolescent Health*, *60*(5), 599–605. <https://doi.org/10.1016/j.jadohealth.2016.11.004>

**Gottfredson, N. C.**, Sterba, S. K., & Jackson, K. M. (2017). Explicating the conditions under which multilevel multiple imputation mitigates bias resulting from random coefficient-dependent missing longitudinal data. *Prevention Science*, *18*(1), 12–19. <https://doi.org/10.1007/s11121-016-0735-3>

Sokol, R.\*, Ennett, S., **Gottfredson, N.**, & Halpern, C. (2017). Variability in self-rated health trajectories from adolescence to young adulthood by demographic factors. *Preventive Medicine*, *105*, 73–76. <https://doi.org/10.1016/j.ypmed.2017.08.015>

Willoughby, M. T., **Gottfredson, N. C.**, Stifler, C. A., & The Family Life Project Investigators. (2017). Observed temperament from ages 6 to 36 months predicts parent- and teacher-reported attention-deficit/hyperactivity disorder symptoms in first grade. *Development and Psychopathology*, *29*(1), 107–120. <https://doi.org/10.1017/s0954579415001236>

Curran, P. J., Cole, V., Bauer, D. J., Hussong, A. M., & **Gottfredson, N. C.** (2016). Improving factor score estimation through the use of observed background characteristics. *Structural Equation Modeling: A Multidisciplinary Journal*, *23*(6), 827–824. <https://doi.org/10.1080/10705511.2016.1220839>

Foshee, V. A., **Gottfredson, N. C.**, McNaughton-Reyes, H. L., Chen, M. S., David-Ferdon, C., Latzman, N. E., Tharp, A. T., & Ennett, S. T. (2016). Developmental outcomes of using physical violence against dates and peers. *Journal of Adolescent Health*, *58*(6), 665–671. <https://doi.org/10.1016/j.jadohealth.2016.03.002>

**Gottfredson, N. C.**, Foshee, V. A., Ennett, S. T., Haberstick, B., & Smolen, A. (2015). Genetic heterogeneity in adolescents’ depressive symptoms in response to victimization. *Journal of Clinical Child & Adolescent Psychology*, *44*(5), 762–774. <https://doi.org/10.1080/15374416.2014.910787>

Hopkin, C. R.\*, Hoyle, R. H., & **Gottfredson, N. C.** (2015). Maximizing the yield of small samples in prevention research: A review of general strategies and best practices. *Prevention Science*, *16*(7), 950–955. <https://doi.org/10.1007/s11121-014-0542-7>

Hoyle, R. H., & **Gottfredson, N. C.** (2015). Sample size considerations in prevention research applications of multilevel modeling and structural equation modeling. *Prevention Science*, *16*(7), 987–996. <https://doi.org/10.1007/s11121-014-0489-8>

Sterba, S. K., & **Gottfredson, N. C.** (2015). Diagnosing global case influence on MAR versus MNAR model comparisons. *Structural Equation Modeling: A Multidisciplinary Journal*, *22*(2), 294–307. <https://doi.org/10.1080/10705511.2014.936082>

Willoughby, M. T., Mills-Koonce, W. R., Waschbusch, D. A., **Gottfredson, N. C.**, & The Family Life Project Investigators. (2015). An examination of the parent report version of the Inventory of Callous-Unemotional Traits in a community sample of first-grade children. *Assessment*, *22*(1), 76–85. <https://doi.org/10.1177/1073191114534886>

Willoughby, M. T., Stifler, C. A., **Gottfredson, N. C.**, & The Family Life Project Investigators. (2015). The epidemiology of observed temperament: Factor structure and demographic group differences. *Infant Behavior and Development*, *39*, 21–34. <https://doi.org/10.1016/j.infbeh.2015.02.001>

**Gottfredson, N. C.**, Bauer, D. J., & Baldwin, S. A. (2014). Modeling change in the presence of nonrandomly missing data: Evaluating a shared parameter mixture model. *Structural Equation Modeling: A Multidisciplinary Journal*, *21*(2), 196–209. <https://doi.org/10.1080/10705511.2014.882666>

**Gottfredson, N. C.**, Bauer, D. J., Baldwin, S. A., & Okiishi, J. C. (2014). Using a shared parameter mixture model to estimate change during treatment when termination is related to recovery speed. *Journal of Consulting and Clinical Psychology*, *82*(5), 813–827. <https://psycnet.apa.org/doi/10.1037/a0034831>

Willoughby, M. T., Mills-Koonce, W. R., **Gottfredson, N. C.**, & Wagner, N. J. (2014). Measuring callous unemotional behaviors in early childhood: Factor structure and prediction of stable aggression in middle childhood. *Journal of Psychopathology and Behavioral Assessment*, *36*(1), 30–42. <https://doi.org/10.1007/s10862-013-9379-9>

Zerwas, S., Von Holle, A., Watson, H., **Gottfredson, N.**, & Bulik, C. M. (2014). Childhood anxiety trajectories and adolescent disordered eating: Findings from the NICHD study of early child care and youth development. *International Journal of Eating Disorders*, *47*(7), 784–792. <https://doi.org/10.1002/eat.22318>

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), 1–14. <https://psycnet.apa.org/doi/10.1037/a0030639>

Foshee, V. A., McNaughton-Reyes, H. L., **Gottfredson, N. C.**, Chang, L-Y., & Ennett, S. T. (2013). A longitudinal examination of psychological, behavioral, academic, and relationship consequences of adolescent dating abuse victimization among a primarily rural sample of adolescents. *Journal of Adolescent Health*, *53*(6), 723–729. <https://doi.org/10.1016/j.jadohealth.2013.06.016>

**Gottfredson, N. C.**, & Hussong, A. M. (2013). Drinking to dampen affect variability: Findings from a college student sample. *Journal of Studies on Alcohol and Drugs*, *74*(4), 576-583. <https://doi.org/10.15288/jsad.2013.74.576>

Bauer, D. J., Baldasaro, R. E., & **Gottfredson, N. C.** (2012). Diagnostic procedures for detecting nonlinear relationships between latent variables. *Structural Equation Modeling: A Multidisciplinary Journal*, *19*(2), 157–177. <https://doi.org/10.1080/10705511.2012.659612>

Giles, S. M., Pankratz, M. M., Ringwalt, C., Jackson-Newsom, J., Hansen, W. B., Bishop, D., Dusenbury, L., & **Gottfredson, N.** (2012). The role of teacher communicator style in the delivery of a middle school substance use prevention program. *Journal of Drug Education*, *42*(4), 393–411. <https://doi.org/10.2190/DE.42.4.b>

Buchler, N. G., Faunce, P., Light, L. L., **Gottfredson, N.**, & Reder, L. M. (2011). Effects of repetition on associative recognition in young and older adults: Item and associative strengthening. *Psychology and Aging*, *26*(1), 111–126. <https://psycnet.apa.org/doi/10.1037/a0020816>

**Gottfredson, N. C.**, & Hussong, A. M. (2011). Parental involvement protects against self-medication behaviors during the high school transition. *Addictive Behaviors*, *36*, 1246–1252. <https://doi.org/10.1016/j.addbeh.2011.07.035>

Stucky, B. D., **Gottfredson, N. C.**, Panter, A. T., Daye, C. E., Allen, W. R., & Wightman, L. F. (2011). An item factor analysis and item response theory-based revision of the Everyday Discrimination Scale. *Cultural Diversity & Ethnic Minority Psychology*, *17*(2), 175–185. <https://psycnet.apa.org/doi/10.1037/a0023356>

**Gottfredson, N. C.** (2010). Abstract: Evaluating shared parameter mixture models for longitudinal analysis with missing data. *Multivariate Behavioral Research*, *45*(6), 1025–1026. <https://doi.org/10.1080/00273171.2010.534379>

Ringwalt, C. L., Pankratz, M. M., Jackson-Newsom, J., **Gottfredson, N. C.**, Hansen, W. B., Giles, S. M., & Dusenbury, L. (2010). Three-year trajectory of teachers’ fidelity to a drug prevention curriculum. *Prevention Science*, *11*(1), 67–76. <https://doi.org/10.1007/s11121-009-0150-0>

**Gottfredson, N. C.**, Panter, A. T., Daye, C. E., Allen, W. F., & Wightman, L. F. (2009). The effects of educational diversity in a national sample of law students: Fitting multilevel latent variable models in data with categorical indicators. *Multivariate Behavioral Research*, *44*(3), 305–331. <https://doi.org/10.1080/00273170902949719>

Ringwalt, C., Pankratz, M., **Gottfredson, N.**, Jackson-Newsom, J., Dusenbury, L., Giles, S., Curry, D., & Hansen, B. (2009). The effects of students’ curriculum engagement, attitudes toward their teachers, and perception of their teachers’ skills on school-based prevention curriculum outcomes. *Journal of Drug Education*, *39*(3), 223–237. <https://doi.org/10.2190/DE.39.3.a>

**Gottfredson, N. C.**, Panter, A. T., Daye, C. E., Allen, W. A., Wightman, L. F., & Deo, M. E. (2008). Does diversity at undergraduate institutions influence student outcomes? *Journal of Diversity in Higher Education*, *1*(2), 80–94. <https://psycnet.apa.org/doi/10.1037/1938-8926.1.2.80>

**Gottfredson, N. C.**, Panter, A. T., Daye, C. E., Allen, W. T., Wightman, L. F., & Deo, M. E. (2008). Identifying predictors of law student life satisfaction. *Journal of Legal Education*, *58*(4), 520–530.

Gottfredson, G. D., Gottfredson, D. C., Payne, A. A., & **Gottfredson, N. C.** (2005). School climate predictors of school disorder: Results from a National Study of Delinquency Prevention in Schools. *Journal of Research in Crime and Delinquency*, *42*(4), 412–444. <https://doi.org/10.1177/0022427804271931>

Selected Presentations and Proceedings

**Gottfredson, N. C.** (Invited). (2020). *Identifying multivariate trajectories of HIV risk behaviors for adolescent and young women in South Africa*. Presented to the annual Social Determinants of Health HPTN 068 meeting (online due to COVID).

**Gottfredson, N. C.** (2020). *Predicting convictions during adulthood from patterns of teen dating violence perpetration and contextual moderators*. Paper presented at the annual meeting of the Society for Prevention Research (online due to COVID).

**Gottfredson, N. C.**, & Rhodes, B. E.\* (Invited). (2018). *Findings from the electronic study of affect regulation: A report back to community participants*. Presented to patients and staff at UNC Horizons Clinic, Carrboro, NC.

Rhodes, B. E.\*, & **Gottfredson, N. C.** (2018). *Ecological momentary assessment methods for relapse reporting.* Poster presented at the annual meeting of the Society for Prevention Research, Washington, DC.

Freeman, L. K.\*, & **Gottfredson, N. C.** (2017). *Using ecological momentary assessment to assess sleep quality and cravings in those recovering from addiction*. Poster presented at the annual meeting of the Society for Behavioral Medicine, San Diego, CA.

**Gottfredson, N. C.** (2017). *Assessing for reactivity to an ecological momentary assessment protocol using data from individuals recovering from addiction*. Poster presented at the annual meeting of the Society for Behavioral Medicine, San Diego, CA.

**Gottfredson, N. C.** (Invited). (2017). *On the problem of unreliability when parsing within- and between-person effects in longitudinal growth models*. Workshop presented at the annual meeting of the Society for Research on Alcoholism, Denver, CO.

Tuttle, H. M.\*, & **Gottfredson, N. C.** (2017). *Does primary substance type predict unhealthy eating patterns during recovery?* Poster presented at the annual meeting of the American Public Health Association, Atlanta, GA.

Tuttle, H. M.\*, & **Gottfredson, N. C.** (2017). *The role of stress and negative affect in food consumption for individuals with comorbid addiction to food and illicit substances*. Poster presented at the annual meeting of the Society for Behavioral Medicine, San Diego, CA.

**Gottfredson, N. C.** (Invited). (2016). *Nutritional and behavioral correlates of food addiction*. Presented to the Center for Excellence in Eating Disorders, Chapel Hill, NC.

**Gottfredson, N. C.** (2016). *Reducing bias and increasing precision in the measurement of health disparities*. Paper presented at the annual meeting of the Society for Prevention Research, San Francisco, CA.

**Gottfredson, N. C.** (Invited). (2016). *Statistical modeling of trajectories of human health and behavior*. Presented at the Child Wellbeing Meeting for Doris Duke Fellows, Duke University, Durham, NC.

Tuttle, H. M.\*, & **Gottfredson, N. C.** (2016). *Effects of stress on nutritional patterns in people recovering from addiction*. Poster presented at the annual meeting of the American Public Health Association, Denver, CO.

**Gottfredson, N. C.** (Invited). (2015). *Relaxing assumptions about missing waves of data in longitudinal studies within a mixed regression modeling framework*. Presented at the UNC Quantitative Psychology forum, Chapel Hill, NC.

**Gottfredson, N. C.** (2015). *Relaxing the MAR assumption with a multiple imputation model for longitudinal data*. Paper presented at the annual meeting of the Society for Prevention Research, Washington, DC.

**Gottfredson, N. C.**, Davisson, E. K., & Hoyle, R. H. (2013). *Re-conceptualizing reactivity to ecological momentary assessment procedures*. Poster presented at the annual meeting of The Society for Personality and Social Psychology, New Orleans, LA.

**Gottfredson, N. C.** (2012) *Modeling change in the presence of non-randomly missing data*. Paper presented at a symposium on indirect applications of mixture models at the Modern Modeling Methods Meeting, Storrs, CT.

**Gottfredson, N. C.** (2010). *Evaluating latent pattern mixture models for handing non-ignorably missing data*. Paper presented at the Society for Multivariate and Experimental Psychology meeting, Atlanta, GA.

**Gottfredson, N. C.**, & Bauer, D.J. (2010). *Evaluating latent pattern mixture model performance with non-randomly missing longitudinal data*. Paper presented at the Psychometrics Society meeting, Athens, GA.

**Gottfredson, N. C.**, & Bauer, D.J. (2009). *Exploring the efficacy of latent class pattern mixture models for handling non-randomly missing data*. Poster presented at the Psychometrics Society meeting, Cambridge, England.

**Gottfredson, N. C.**, Stucky, B. D., Panter, A. T., Daye, C. E., Allen, W. A. & Wightman, L. F. (2008). *Local dependence in the Everyday Discrimination Scale: Findings and suggestions*. Poster presented at the Association for Psychological Science, Chicago, IL.

**Gottfredson, N. C.** (2006). *Age differences in the ability to flexibly shift memory criterion for old-new judgments*. Poster presented at the Joint Sciences Department Annual Symposium for Summer Student Research, Claremont, CA.

**Gottfredson, N. C.** (2004). *After school program participation and delinquency: A replication study*. Paper presented at annual meeting of the American Society of Criminology, Nashville, TN.

Technical Reports

World Health Organization. (2022, May). *Understanding the behavioral and social drivers of vaccine uptake: WHO position paper.* Geneva, Switzerland: World Health Organization Weekly Epidemiological Record. Contributor.

World Health Organization. (2022). *Behavioral and social drivers of vaccination: Tools and practical guidance for achieving high uptake.* Geneva, Switzerland.